



**“ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA FACTIBILIDAD Y  
LOS ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN SAN CRISTÓBAL,  
EN BOGOTÁ D.C.”**

**CONTRATO DE CONSULTORÍA No. 1630 DE 2020**

**ALCALDÍA MAYOR  
DE BOGOTÁ D.C.**

**MOVILIDAD  
INF-EST--CASC-155-21**

**MEMORIA DE CÁLCULO MASTILES // ESTACION ALTAMIRA**

**CONSORCIO CS**



**BOGOTÁ, 2021 – Febrero - 07**

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

## PRODUCTO DOCUMENTAL

INF-EST-CASC-155-21

### MEMORIA DE CÁLCULO MASTILES // ESTACION ALTAMIRA

#### CONTROL DE VERSIONES

| Versión    | Fecha      | Descripción de la Modificación | Folios |
|------------|------------|--------------------------------|--------|
| Versión 00 | 01/12/2021 | Emisión Inicial                | 62     |
| Versión 01 | 20/12/2021 | Observaciones Interventoría    | 71     |
| Versión 02 | 07/02/2022 | Emisión Inicial                | 645    |

#### EMPRESA CONTRATISTA

| VALIDADO POR:                                                                                                                          | REVISADO POR:                                                                                                                          | APROBADO POR:                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| <b>Carlos Augusto Salguero Tuiran</b><br>Firmado digitalmente por Carlos Augusto Salguero Tuiran<br>Fecha: 2022.05.09 14:56:00 -05'00' | <b>Carlos Augusto Salguero Tuiran</b><br>Firmado digitalmente por Carlos Augusto Salguero Tuiran<br>Fecha: 2022.05.09 14:57:30 -05'00' | <b>Mario Ernesto Vacca Gamez</b><br>Firmado digitalmente por Mario Ernesto Vacca Gamez<br>Fecha: 2022.05.06 12:28:31 -05'00' |
| Ing. Carlos A. Salguero Taurin<br>Especialista en Estructuras Lineales                                                                 | Ing. Carlos A. Salguero Taurin<br>Especialista en Estructuras Lineales                                                                 | Ing. Mario Ernesto Vacca G.<br>Director de Consultoría                                                                       |

#### EMPRESA INTERVENTORA

| REVISADO POR:                                                                                                                                                                                      | AVALADO POR:                                                                                                                       | APROBADO POR:                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Ing. Alirio Soacha Sánchez<br>Especialista en estructuras lineales<br><b>SOACHA SANCHEZ ALIRIO</b><br>Firmado digitalmente por SOACHA SANCHEZ ALIRIO<br>Fecha: 2022.05.13 14:56:16 -05'00'         | <b>ROZO GARZON WILMER ALEXANDER</b><br>Firmado digitalmente por ROZO GARZON WILMER ALEXANDER<br>Fecha: 2022.05.13 14:35:01 -05'00' | <b>OSCAR ANDRES RICO GOMEZ</b><br>Firmado digitalmente por OSCAR ANDRES RICO GOMEZ<br>Fecha: 2022.05.13 14:31:51 -05'00' |
| Ing. Alirio Soacha Sánchez<br>Especialista en estructuras de edificaciones<br><b>SOACHA SANCHEZ ALIRIO</b><br>Firmado digitalmente por SOACHA SANCHEZ ALIRIO<br>Fecha: 2022.05.13 15:02:00 -05'00' | Ing. Wilmer Alexander Rozo<br>Coordinador de Interventoría                                                                         | Ing. Oscar Andrés Rico Gómez<br>Director de Interventoría                                                                |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

## TABLA DE CONTENIDO

### CONTENIDO

|        |                                                          |    |
|--------|----------------------------------------------------------|----|
| 1      | GENERALIDADES .....                                      | 5  |
| 2      | DESCRIPCION DE LA ESTRUCTURA .....                       | 5  |
| 3      | SISTEMA ESTRUCTURAL .....                                | 7  |
| 4      | MATERIALES.....                                          | 9  |
| 5      | CARGAS .....                                             | 10 |
| 6      | PARAMETROS SISMICOS .....                                | 16 |
| 7      | REGLAMENTOS Y NORMAS DE DISEÑO .....                     | 19 |
| 8      | ANALISIS ESTRUCTURAL .....                               | 20 |
| 9      | DISEÑO ESTRUCTURAL .....                                 | 22 |
| 10     | DISEÑO DE CIMENTACION.....                               | 23 |
| 10.1   | Reacciones a nivel desplante de las pilas, mástil 2..... | 25 |
| 10.2   | Capacidades de carga de pilas .....                      | 32 |
| 10.3   | Diseño de pilas .....                                    | 33 |
| 10.3.1 | Diseño a flexo compresión .....                          | 33 |
| 10.4   | Diseño de mástil .....                                   | 34 |
| 10.4.1 | Diseño a flexo compresión .....                          | 34 |
| 10.4.2 | Elementos mecánicos, mástil 2 .....                      | 35 |
| 10.5   | Diseño de trabe de liga.....                             | 47 |
| 10.5.1 | Diseño a flexión .....                                   | 47 |
| 10.5.2 | Elementos mecánicos, trabe de liga.....                  | 48 |
| 10.6   | Diseño de losa de cimentación.....                       | 70 |
| 10.6.1 | Resistencia a fuerza cortante por fricción.....          | 70 |
| 10.6.2 | Revisión por penetración.....                            | 71 |
| 10.6.3 | Revisión a flexión .....                                 | 72 |
| 11     | CONCLUSIONES .....                                       | 73 |
| 12     | ANEXO A.....                                             | 74 |
| 13     | ANEXO B.....                                             | 78 |

ALCALDÍA MAYOR  
DE BOGOTÁ D.C.  
MOVILIDAD  
Instituto de Desarrollo Urbano

### ÍNDICE DE FIGURAS

|                    |                                                            |    |
|--------------------|------------------------------------------------------------|----|
| <b>FIGURA 2.1</b>  | – TRAZO CABLE AÉREO.....                                   | 6  |
| <b>FIGURA 2.2</b>  | – PLANTA DISTRIBUCIÓN DE MÁSTILES, ESTACIÓN ALTAMIRA ..... | 7  |
| <b>FIGURA 3.1</b>  | – ELEVACIÓN MARCO PLANO EN EL SENTIDO X .....              | 8  |
| <b>FIGURA 3.2</b>  | – PLANTA CIMENTACIÓN MÁSTILES .....                        | 9  |
| <b>FIGURA 6.1</b>  | – ESPECTRO SÍSMICO DE DISEÑO .....                         | 18 |
| <b>FIGURA 8.1</b>  | – PLANTA CIMENTACIÓN MÁSTIL 2 .....                        | 20 |
| <b>FIGURA 8.2</b>  | – ELEVACIÓN MODELO DE ANÁLISIS SAP2000.....                | 21 |
| <b>FIGURA 10.1</b> | – PLANTA CIMENTACIÓN DESCARGA MÁXIMA .....                 | 24 |
| <b>FIGURA 10.2</b> | – DIAGRAMA DE INTERACCIÓN PILAS .....                      | 33 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                                                                     |    |
|-------------------------------------------------------------------------------------|----|
| <b>FIGURA 10.3</b> – DIAGRAMA DE INTERACCIÓN MÁSTIL .....                           | 34 |
| <b>FIGURA 12.1</b> – CARGAS PERMANENTES (PESO ESTACIÓN), KN .....                   | 75 |
| <b>FIGURA 12.2</b> – CARGAS VARIABLES (VIENTO LATERAL FUERA DE OPERACIÓN), KN ..... | 76 |
| <b>FIGURA 12.3</b> – CARGAS ACCIDENTALES (SISMO DIRECCIÓN X), KN .....              | 77 |

## LISTA DE TABLAS

|                                                                                            |    |
|--------------------------------------------------------------------------------------------|----|
| <b>TABLA 5.1</b> CARGAS APLICADAS EN EL MÁSTIL A1 .....                                    | 11 |
| <b>TABLA 5.2</b> CARGAS APLICADAS EN EL MÁSTIL A2 .....                                    | 12 |
| <b>TABLA 5.3</b> CARGAS APLICADAS EN EL MÁSTIL A3 .....                                    | 13 |
| <b>TABLA 5.4</b> CONDICIONES Y COMBINACIONES DE CARGA .....                                | 15 |
| <b>TABLA 6.1</b> – PARÁMETROS DE DISEÑO SÍSMICO .....                                      | 17 |
| <b>TABLA 6.2</b> – PARÁMETROS DE DISEÑO SÍSMICO, SEGÚN CÓDIGO COLOMBIANO .....             | 17 |
| <b>TABLA 10-1.</b> VALORES DE MÓDULOS DE REACCIÓN HORIZONTAL Y VERTICAL PARA PILONAS ..... | 23 |
| <b>TABLA 10-2</b> REACCIONES MÁSTIL 2.....                                                 | 31 |
| <b>TABLA 10-3</b> RESUMEN DE VALORES DE CARGA AXIAL ADMISIBLE Y POR TRACCIÓN (ELR) .....   | 32 |
| <b>TABLA 10-4</b> ELEMENTOS MECÁNICOS MÁSTIL 2.....                                        | 46 |
| <b>TABLA 10-5</b> ELEMENTOS MECÁNICOS TRABE DE LIGA .....                                  | 69 |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

## 1 GENERALIDADES

Se proyecta la construcción de 3 mástiles(columnas) ubicados en la estación Altamira, perteneciente al sistema teleférico Cable Aéreo en San Cristóbal, en Bogotá D.C.

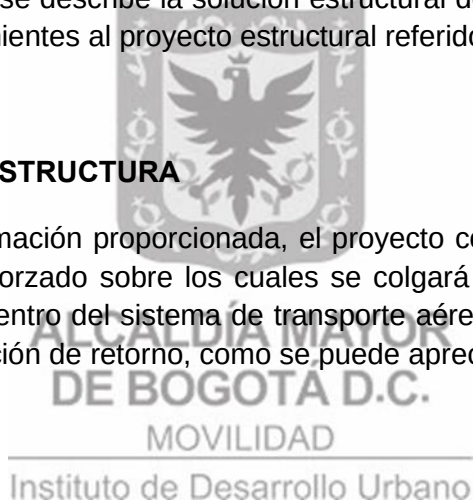
La clasificación de los mástiles por su geometría y uso es la siguiente:

- Mástil A1
- Mástil A2
- Mástil A3

En la presente memoria se describe la solución estructural de estos mástiles, así como las bases de diseño concernientes al proyecto estructural referido.

## 2 DESCRIPCION DE LA ESTRUCTURA

De acuerdo con la información proporcionada, el proyecto contempla la construcción de 3 mástiles de concreto reforzado sobre los cuales se colgará el cable que transporta a las cabinas del teleférico. Dentro del sistema de transporte aéreo, a la estación Altamira se le cataloga como una estación de retorno, como se puede apreciar en la figura 2.1:



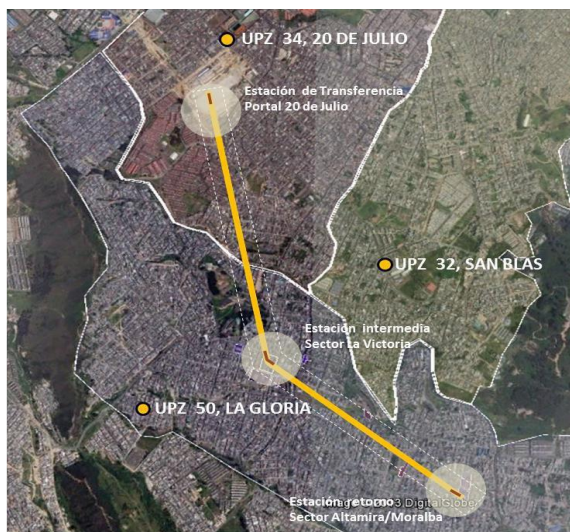


**Figura 2.1 – Trazo cable aéreo**

Los mástiles se encuentran alojados dentro de la estación Altamira, sin embargo, están convenientemente separados estructuralmente del edificio de la estación. En la figura 2, se puede apreciar la distribución en planta de los mástiles, así como sus dimensiones:



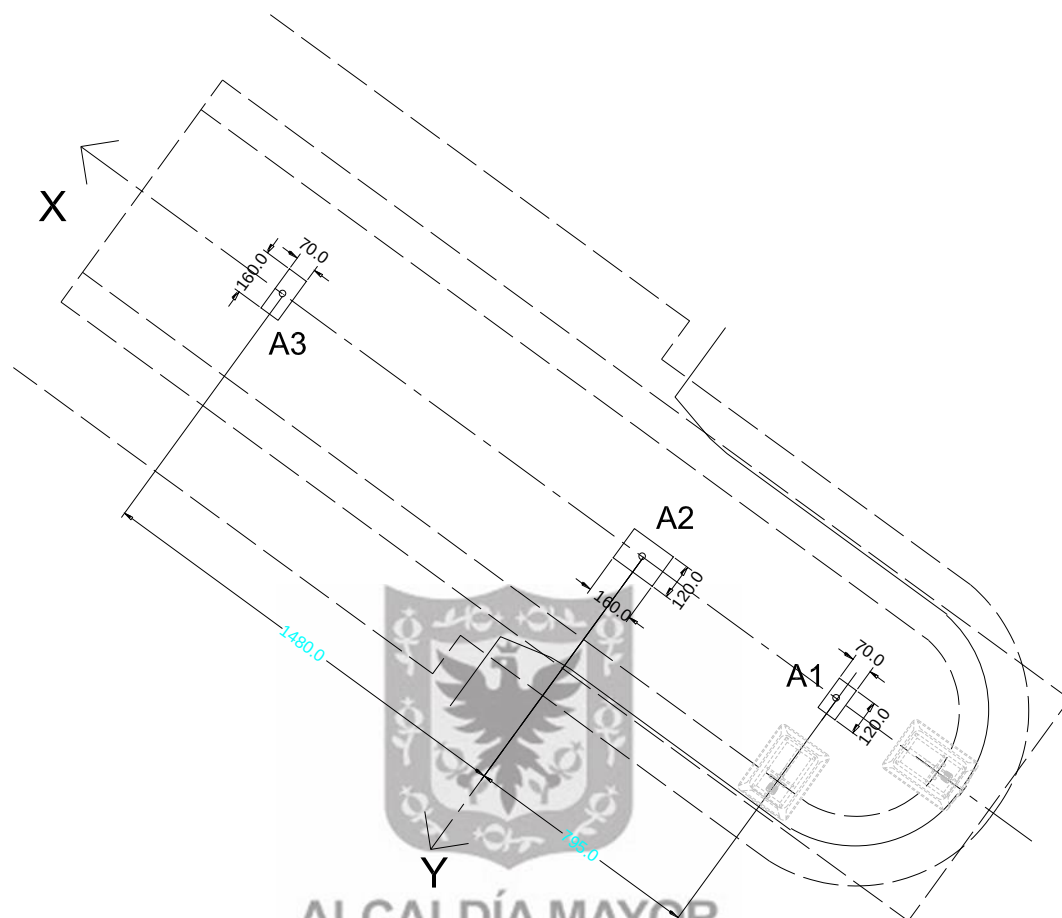


**Figura 2.2** – Planta Distribución de mástiles, estación Altamira

### 3 SISTEMA ESTRUCTURAL



La estructura de los mástiles se conformará por un sistema de marcos planos rígidos formados por columnas y trabes de concreto, pero solo en el sentido X, en el Y, el comportamiento será de un péndulo invertido.

Las columnas o mástiles serán de concreto reforzado colado en sitio y tendrán una sección transversal diferentes entre sí, el mástil A1 tendrá una sección transversal rectangular de 70cmx120cm, el mástil A2 de 120cmx160cm y el mástil A3 de 70cmx160cm. Para la formación de marco plano en el sentido X, se coloca una trabe de sección rectangular de dimensiones 100cmx150cm que conecta a los tres mástiles, como se puede apreciar en la figura 3.1:

### ESTACION ALTAMIRA

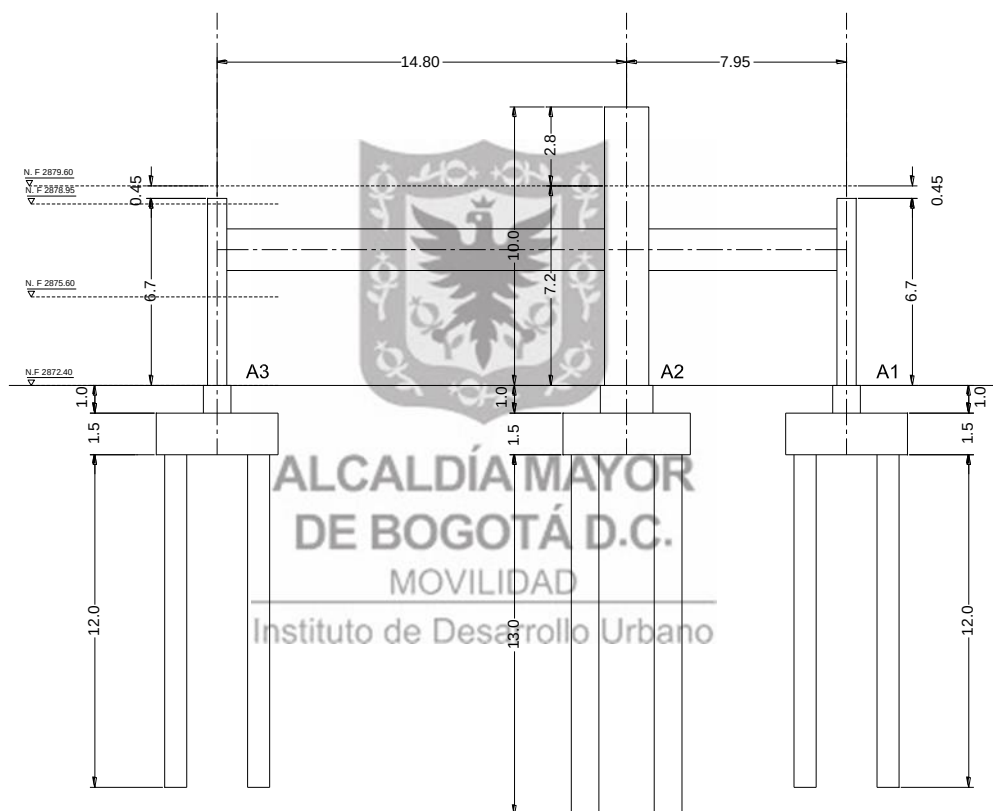


**Figura 3.1 – Elevación Marco plano en el sentido X**

La cimentación de los mástiles está formada por una zapata cuadrada apoyada en pilas circulares y dependiendo del mástil, variaran las dimensiones de la zapata, el número de pilas, el diámetro y la profundidad de desplante de estas. Cuatro pilas de 80cm de diámetro



para los mástiles A1 y A3 y para el A2 serán 5 pilas de 100cm de diámetro. Los demás parámetros se pueden observar en las figuras 3.1 y 3.2:

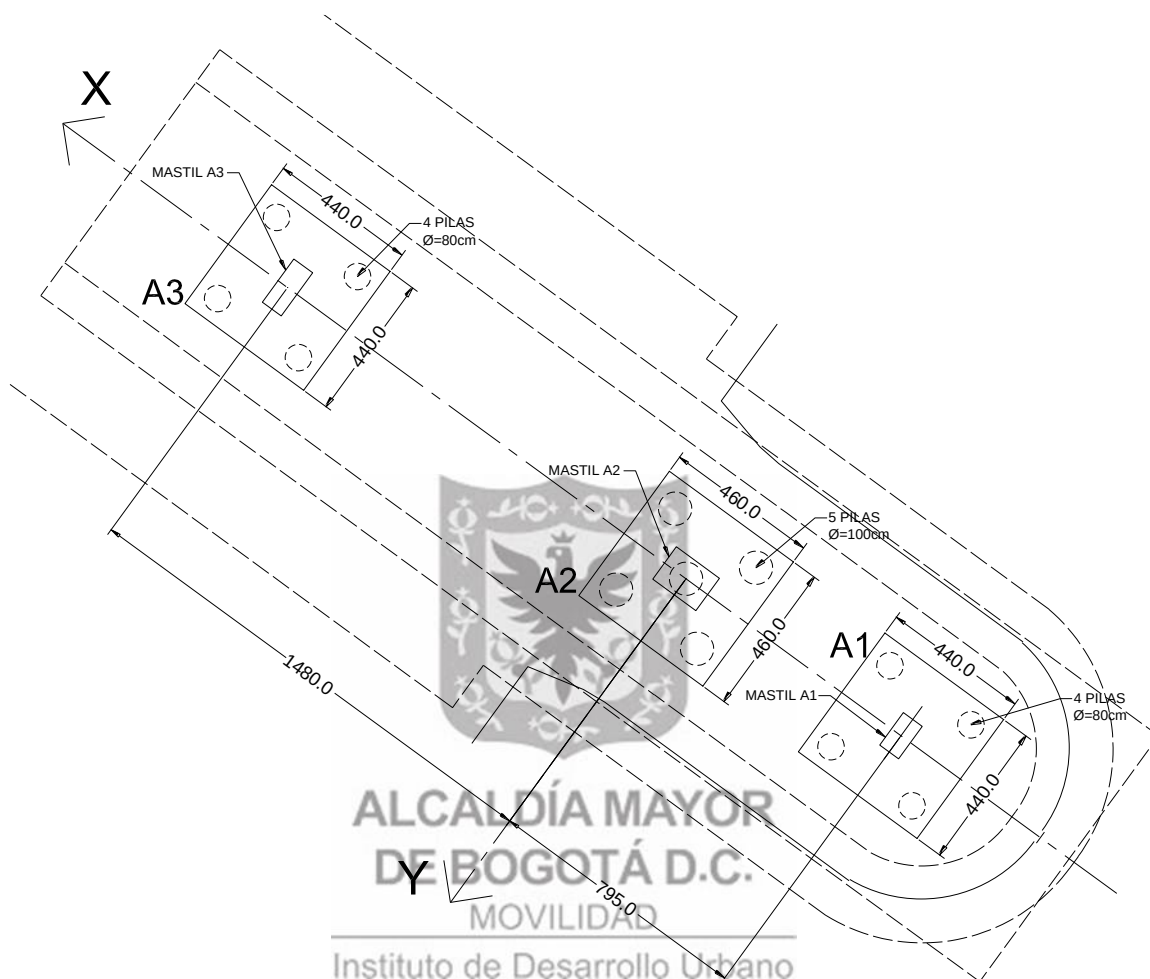


**Figura 3.2 – Planta cimentación mástiles**

## 4 MATERIALES

 Columnas, traveses, muros y losas TT

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                   |         |                        |                    |
|-----------------------------------|---------|------------------------|--------------------|
| Concreto clase I                  | $f'c =$ | 300                    | kg/cm <sup>2</sup> |
| Peso volumétrico                  | $>$     | 2.40                   | ton/m <sup>3</sup> |
| Masa por unidad de Volumen        | $g =$   | 0.24                   |                    |
| Propiedades Isotrópicas           |         |                        |                    |
| Módulo de elasticidad             | $E_c =$ | $4800 \cdot f'c^{0.5}$ | MPa                |
|                                   | $E_c =$ | 265,440.607            | kg/cm <sup>2</sup> |
| Módulo de Poisson                 | $u =$   | 0.2                    |                    |
| Coefficiente de Expansión Térmica | $A =$   | 0.0000099              |                    |
| Módulo de Cortante                | $G =$   | 100,600.25             | kg/cm <sup>2</sup> |

#### Acero de Refuerzo R-42

|                                   |         |             |                    |
|-----------------------------------|---------|-------------|--------------------|
| Esfuerzo de fluencia del acero    | $f_y =$ | 4,200       | kg/cm <sup>2</sup> |
|                                   | $f_u =$ | 6,330       | kg/cm <sup>2</sup> |
| Peso volumétrico                  | $g =$   | 7.85        | ton/m <sup>3</sup> |
| Masa por unidad de Volumen        | $g =$   | 0.8002      |                    |
| Propiedades Isotrópicas           |         |             |                    |
| Módulo de elasticidad             | $E_c =$ | 2,038,901.9 | kg/cm <sup>2</sup> |
| Módulo de Poisson                 | $u =$   | 0.3         |                    |
| Coefficiente de Expansión Térmica | $A =$   | 0.0000117   |                    |
| Módulo de Cortante                | $G =$   | 784,193     | kg/cm <sup>2</sup> |



## 5 CARGAS

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Son las proporcionadas por el proveedor del sistema electromecánico, y se enlistan a continuación en las siguientes tablas:

### **ESTACIÓN ALTAMIRA**

| En <b>A1</b> - pie posterior de estación (en kN y kNm): | Fx                    | Fy  | Fz  | Mx   | My  | Mz |
|---------------------------------------------------------|-----------------------|-----|-----|------|-----|----|
| Peso estación                                           |                       |     | 280 |      |     |    |
| Carro en posición adelantada                            |                       |     | -20 |      |     |    |
| Carro en posición atrás                                 |                       |     | -15 |      |     |    |
| Deflexión del cable                                     | 35                    |     | -35 |      | -60 |    |
| Tensión multiconductor                                  | 10                    |     | -10 |      |     |    |
| Viento lateral en operación                             |                       |     |     |      |     |    |
| Viento lateral fuera de operación                       |                       | ±10 |     | ±100 |     |    |
| Vehículos en estación (en operación)                    |                       |     | 140 | ±460 |     |    |
| Cargas sísmicas                                         | según normativa local |     |     |      |     |    |

**Tabla 5.1** Cargas aplicadas en el mástil A1

MOVILIDAD  
Instituto de Desarrollo Urbano

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

| En <b>A2</b> – apoyo central<br>(en kN y kNm): | Fx                    | Fy  | Fz  | Mx   | My   | Mz  |
|------------------------------------------------|-----------------------|-----|-----|------|------|-----|
| Peso estación                                  |                       |     | 270 | ±10  |      |     |
| Carro en posición adelantada                   |                       |     | 120 |      |      |     |
| Carro en posición atrás                        |                       |     | 225 |      |      |     |
| Tensión del cable                              | 700                   |     |     |      | 1050 |     |
| Tensión multiconductor                         | 100                   |     | -20 |      | -65  |     |
| Viento lateral en operación                    |                       | ±10 |     | ±35  |      | ±20 |
| Viento lateral fuera de operación              |                       | ±50 |     | ±150 |      | ±85 |
| Viento longitudinal en operación               | ±20                   |     |     |      |      |     |
| Viento longitudinal fuera de operación         | ±55                   |     |     |      |      |     |
| Vehículos en estación (en operación)           |                       |     | 90  | ±100 |      |     |
| Cargas sísmicas                                | según normativa local |     |     |      |      |     |

**Tabla 5.2** Cargas aplicadas en el mástil A2

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

| En <b>A3</b> – pie delantero de estación (en kN y kNm): | Fx                    | Fy  | Fz  | Mx    | My   | Mz |
|---------------------------------------------------------|-----------------------|-----|-----|-------|------|----|
| Peso estación                                           |                       |     | 350 |       |      |    |
| Carro en posición adelantada                            |                       |     | 140 |       |      |    |
| Carro en posición atrás                                 |                       |     | 30  |       |      |    |
| Deflexión del cable                                     | 30                    |     | 80  | ±100  | -400 |    |
| Tensión multiconductor                                  |                       |     | 30  |       | -60  |    |
| Viento lateral en operación                             |                       | ±15 |     | ±320  |      |    |
| Viento lateral fuera de operación                       |                       | ±70 |     | ±1300 |      |    |
| Vehículos en estación (en operación)                    |                       |     | 60  | ±240  |      |    |
| Cargas sísmicas                                         | según normativa local |     |     |       |      |    |

**Tabla 5.3** Cargas aplicadas en el mástil A3

- Sistema de ejes locales

X: en dirección del eje del teleférico (hacia estación opuesta)

Y: perpendicular a la línea

Z: vertical hacia abajo

Los puntos de contacto entre el órgano electromecánico y la estructura de soporte son 3: A1, A2 y A3.

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

➤ Combinaciones de carga y factores de carga

La seguridad de una estructura deberá verificarse para el efecto combinado de todas las acciones que tengan una probabilidad no despreciable de ocurrir simultáneamente, considerándose dos categorías de combinaciones.

- Para las combinaciones que incluyan acciones permanentes y acciones variable.
- Para las combinaciones que incluyan acciones permanentes, variables y accidentales.

En ambos tipos de combinación los efectos de todas las acciones deberán multiplicarse por los factores de carga apropiados.

En la siguiente tabla se enlistan las combinaciones de diseño:



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                                                                      | Load case in operation                                 |                                               |                                               | Load case out of operation                             |                                                            |                                |                                               |                                               |
|--------------------------------------------------------------------------------------|--------------------------------------------------------|-----------------------------------------------|-----------------------------------------------|--------------------------------------------------------|------------------------------------------------------------|--------------------------------|-----------------------------------------------|-----------------------------------------------|
|                                                                                      | Persistent design situations for ultimate limit states | Combinations for accidental design situations | Combinations for the seismic design situation | Persistent design situations for ultimate limit states | Design situation construction condition (w/o rope tension) | Design situation assembly case | Combinations for accidental design situations | Combinations for the seismic design situation |
| <b>Constant loads</b>                                                                |                                                        |                                               |                                               |                                                        |                                                            |                                |                                               |                                               |
| Peso estación                                                                        | 1.35                                                   | 1.1                                           | 1.1                                           | 1.35                                                   | 1.35                                                       | 1.35                           | 1.1                                           | 1.1                                           |
| <b>Variable loads</b>                                                                |                                                        |                                               |                                               |                                                        |                                                            |                                |                                               |                                               |
| Carro en posición adelantada o Carro en posición atrás                               | 1.5                                                    | 1.1                                           | 1.1                                           | 1.5                                                    | 1.5                                                        | 1.5                            | 1.1                                           | 1.1                                           |
| Tensión del cable y deflexión del cable                                              | 1.5                                                    | -                                             | 1.1                                           | 1.5                                                    | -                                                          | -                              | -                                             | 1.1                                           |
| Tensión multiconductor                                                               | -                                                      | -                                             | -                                             | -                                                      | -                                                          | 1.5                            | -                                             | -                                             |
| Viento lateral en operación o Viento longitudinal en operación o ninguno             | 1.5                                                    | 1.1                                           | 1.1                                           | -                                                      | -                                                          | -                              | -                                             | -                                             |
| Viento lateral fuera de operación o Viento longitudinal fuera de operación o ninguno | -                                                      | -                                             | -                                             | 1.5                                                    | 1.5                                                        | 1.5                            | 1.1                                           | 1.1                                           |
| Vehículos en estación (en operación)                                                 | 1.5                                                    | 1.1                                           | 1.1                                           | -                                                      | -                                                          | -                              | -                                             | -                                             |
| <b>Exceptional loads</b>                                                             |                                                        |                                               |                                               |                                                        |                                                            |                                |                                               |                                               |
| Cargas sísmicas                                                                      | -                                                      | -                                             | 1.1                                           | -                                                      | -                                                          | -                              | -                                             | 1.1                                           |

**Tabla 5.4** Condiciones y combinaciones de carga



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

## 6 PARAMETROS SISMICOS

- Criterios de diseño. Consideraciones de análisis y diseño.

Las estructuras se analizarán bajo la acción de dos componentes horizontales ortogonales y la componente vertical actuando simultáneamente. Las deformaciones y fuerzas internas que resulten se combinarán entre sí como lo especifican las Normas de referencia, y se combinarán con los efectos de fuerzas gravitacionales y de las otras acciones que correspondan, según los criterios que establecen las Normas aplicables.

Los espectros de diseño con efectos de sitio se construirán a partir de espectros de peligro uniforme en roca y de propiedades dinámicas del suelo modelado como un medio estratificado. Los efectos de sitio se tomarán en cuenta en forma explícita con criterios que permitan considerar las amplificaciones dinámicas del terreno en forma rigurosa.

Los espectros de diseño con efectos de sitio deben ser envolventes de espectros de respuesta, elástica e inelástica, para todo periodo estructural.

Los espectros de diseño deben ser transparentes, es decir, elásticos y no estar modificados por factores como sobre resistencia, ductilidad o redundancia.

Se usarán espectros de diseño para los estados límite de servicio y colapso para estructuras tipo edificio.

- Tipos de espectros de diseño sísmico

Se obtendrán espectros de diseño sísmico siguiendo los enfoques probabilista y determinista, dependiendo de la importancia de la estructura.

El espectro de respuesta determinista está asociado a la acción de una fuente sísmica.

Se usa el espectro elástico que se obtuvo del análisis de riesgo sísmico específico del sitio.

- Coeficiente sísmico.

El coeficiente sísmico,  $c$ , es el cociente de la fuerza cortante horizontal que debe considerarse que actúa en la base de la edificación por efecto del sismo,  $V_o$ , entre el peso de la estructura sobre dicho nivel  $W_o$ .

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

➤ Espectro de diseño sísmico.

Para el diseño de las estaciones de transferencia, intermedia y retorno, se utilizará la microzonificación sísmica de Bogotá. En ese orden, las estaciones Portal 20 de Julio, La Victoria, Altamira y Juan Rey se encuentran ubicadas en las zonas Piedemonte A y Depósito de Ladera.

En la siguiente tabla, se muestran los parámetros para construir el espectro sísmico de respuesta usado para el diseño sísmico de la estructura:

| Estación                         | Zona            | Aceleración Horizontal<br>Ao_475 | Coefficiente de amplificación<br>Fa | Coefficiente de amplificación<br>Fv |
|----------------------------------|-----------------|----------------------------------|-------------------------------------|-------------------------------------|
| Portal 20 de Julio               | Piedemonte A    | 0.22                             | 1.65                                | 2.00                                |
| La Victoria, Altamira y Juan Rey | Depósito Ladera | 0.22                             | 1.65                                | 1.70                                |

Fuente: Microzonificación sísmica de Bogotá

**Tabla 6.1 – Parámetros de diseño sísmico**

Para las pilonas, se utilizará lo dispuesto en el Código Colombiano de Puentes CCP-14 en donde la caracterización sísmica depende del perfil del suelo. Con el fin de clasificar el tipo de suelo, se utilizaron los resultados obtenidos de las líneas de refracción sísmica ejecutados para la campaña de exploración geotécnica en fase de factibilidad (ver Anexo N y numeral 1). En este sentido, se obtuvo, para todos los tramos, un perfil de suelo tipo C con velocidad media de onda cortante entre 360 m/s y 760 m/s, cuyos parámetros se resumen a continuación:

| Tipo de suelo | PGA  | Ss  | S1  | F <sub>PGA</sub> | Fa   | Fv  |
|---------------|------|-----|-----|------------------|------|-----|
| C             | 0.25 | 0.6 | 0.3 | 1.15             | 1.16 | 1.5 |

Fuente: CCP-14

**Tabla 6.2 – Parámetros de diseño sísmico, según Código Colombiano**

El espectro sísmico resultante, es el que se describe en la figura 6.1:

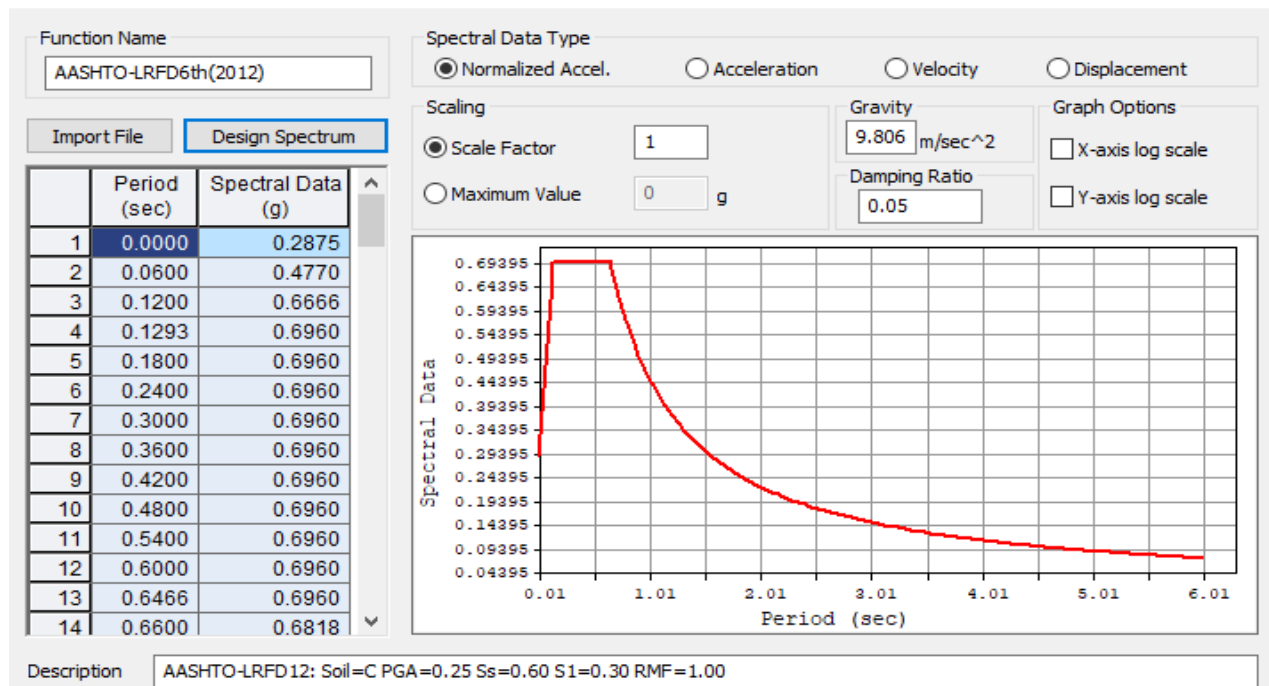


**Figura 6.1 – Espectro sísmico de diseño**

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

## 7 REGLAMENTOS Y NORMAS DE DISEÑO

Para el análisis y diseño de todos los elementos que integran la subestructura y superestructura, se realizó de acuerdo con los requisitos estipulados en los siguientes reglamentos y normas:

### AMERICAN CODES (ACI, AISC, AWS, ETC)

- ACI American Concrete Institute
  - ACI 318-19 Building Code Requirements for Structural Concrete
  - ACI 315-99 Details and Detailing of Concrete Reinforcement
  - ACI 224R-01 Control of Cracking in Concrete Structures
- AISC American Institute of Steel Construction
  - AISC 325 17 Steel Construction Manual AISC 15th Ed.
  - ANSI-AISC 360-16 Specification for Structural Steel Buildings
  - AISC Specifications for Structural Joints Using High Strength Bolt (Research Council on Structural Connections) Aug 2014
- AWS American Welding Society
  - AWS D1.1/D1.1M-2015 Structural Welding Code - Steel
- AASHTO-LRFD 6th (2012)

ALCALDIA MAYOR  
DE BOGOTÁ D.C.  
MOVILIDAD  
Instituto de Desarrollo Urbano

## 8 ANALISIS ESTRUCTURAL

La estructura de la cimentación fue modelada en el programa de análisis estructural SAP2000 v.23. El modelo está constituido de elementos barra conectadas rígidamente a la cimentación.

Los elementos estructurales que componen a la cimentación del mástil 2 de la estación Altamira son una zapata cuadrada de 150cm de espesor y 4.60m de dimensiones, para su idealización en el modelo de análisis, se usaron elementos Shell; las 5 pilas de 100cm de diámetro, fueron modeladas con elementos barra, las cuales fueron divididas a cada metro hasta llegar a la profundidad de desplante de la pila; para la idealización del terreno circundante a la pila se usó el módulo de reacción horizontal dado por el estudio de mecánica de suelos.

Del modelo analítico se obtuvieron únicamente las reacciones producidas por las cargas descritas anteriormente y las combinaciones de carga más desfavorables de acuerdo con la normativa autorizada.

Las siguientes secciones componen los elementos estructurales, éstas fueron obtenidas de la librería del programa de análisis y se utilizaron para la obtención de los elementos mecánicos al utilizar sus propiedades geométricas.

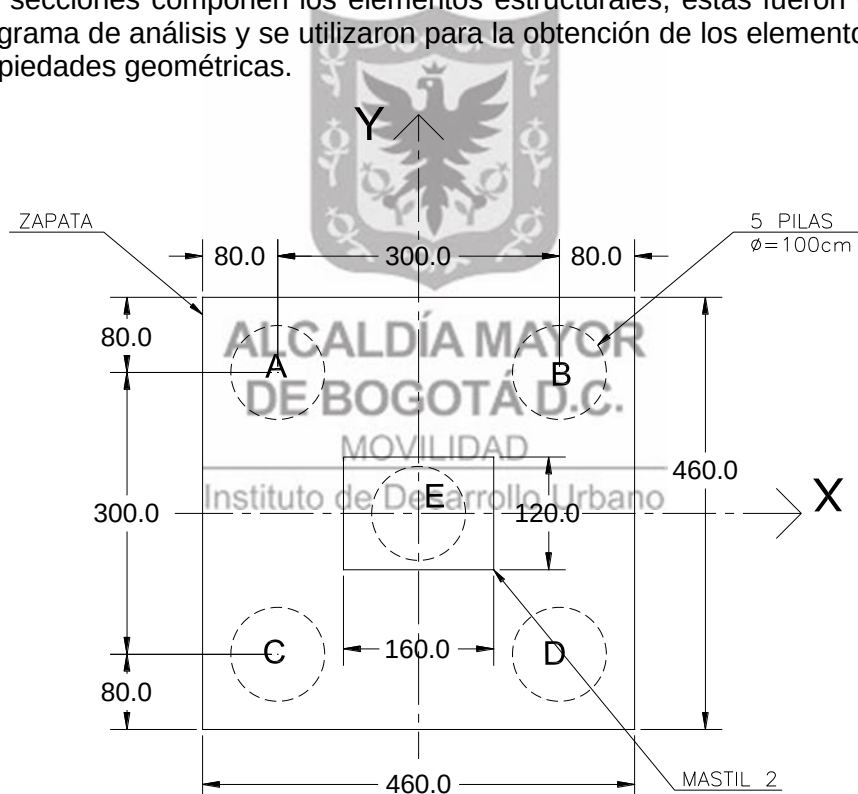


**Figura 8.1 – Planta cimentación mástil 2**

Se realiza el modelo de análisis estructural, el cual se muestra esquemáticamente en la siguiente figura:

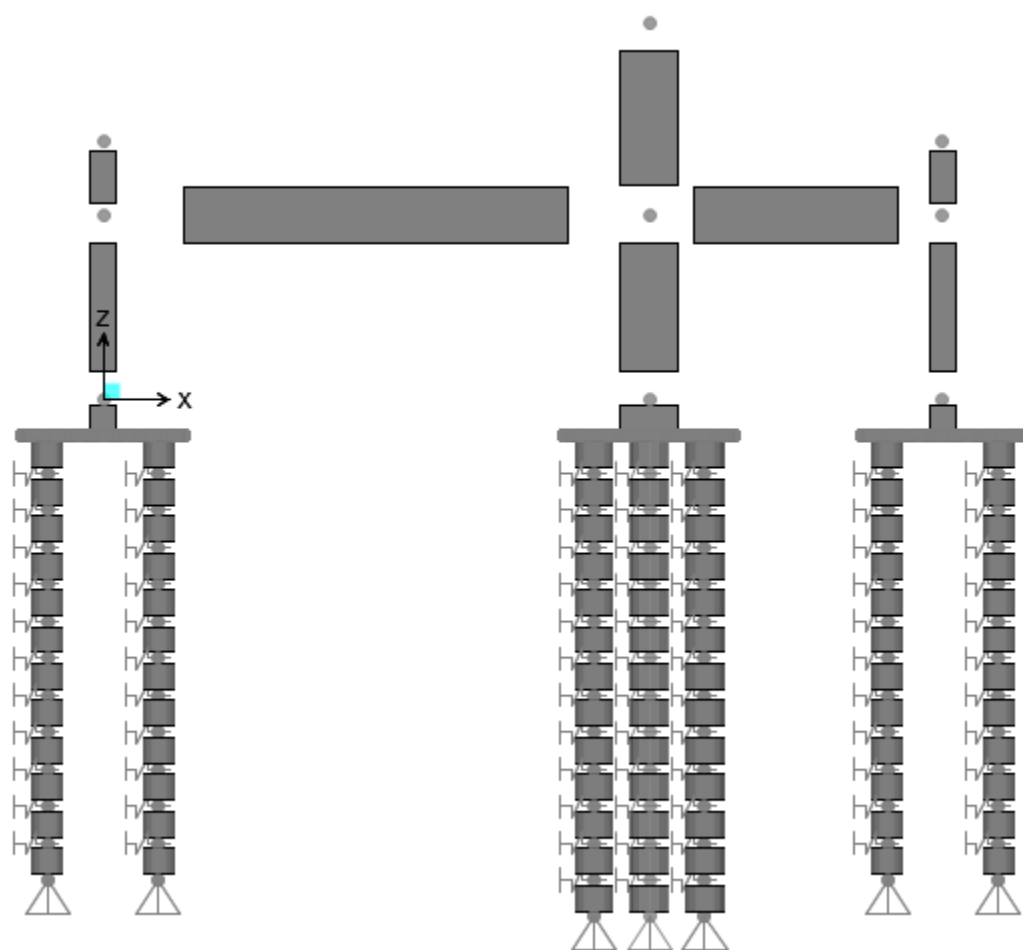


**Figura 8.2** – Elevación modelo de análisis SAP2000

Los nodos 1, 2 y 3 representan los puntos de aplicación de las cargas correspondientes a los mástiles 1, 2 y 3, respectivamente.

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

## 9 DISEÑO ESTRUCTURAL

Como siguiente etapa en la elaboración del proyecto estructural se tiene el diseño, cuyo objetivo es determinar con base en los resultados del análisis los niveles de seguridad en cuanto a los estados límite de falla y de servicio, es decir, que la estructura ante la combinación de acciones o cargas más desfavorable no rebase esos límites para que no afecten tanto su resistencia y estabilidad como su adecuado funcionamiento.

Para la revisión de desplazamientos horizontales para seguridad contra colapso las diferencias entre los desplazamientos laterales de pisos consecutivos producidos por las fuerzas cortantes sísmicas de entrepiso, calculadas para las ordenadas espectrales modificadas, según corresponda, multiplicadas por sus respectivos factores y divididas por la diferencia de elevaciones correspondiente, no excederán las distorsiones de entrepiso igual a 0.012, según el sistema estructural empleado.

El planteamiento de estados límite antes citado conduce en forma directa a lo que se llama un criterio por resistencia en el cual, en términos generales, el diseño consiste en comprobar que se cumpla que la resistencia sea mayor o igual que la acción de diseño.



## 10 DISEÑO DE CIMENTACION

A continuación, se muestran las descargas obtenidas del modelo de análisis por pila, con la combinación más desfavorable, considerando los módulos de reaccion descritos en la tabla siguiente:

**Tabla 10-1.** Valores de módulos de reacción horizontal y vertical para pilonas

| Longitud<br>(m) | Diámetro = 0.8 m        |                         | Diámetro = 1.0 m        |                         | Diámetro = 1.2 m        |                         |
|-----------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
|                 | kh (kN/m <sup>3</sup> ) | kv (kN/m <sup>3</sup> ) | kh (kN/m <sup>3</sup> ) | kv (kN/m <sup>3</sup> ) | kh (kN/m <sup>3</sup> ) | kv (kN/m <sup>3</sup> ) |
| 1               | 26139                   | 30752                   | 20912                   | 24602                   | 17426                   | 20502                   |
| 2               | 26139                   | 30752                   | 20912                   | 24602                   | 17426                   | 20502                   |
| 3               | 93795                   | 110347                  | 75036                   | 88278                   | 62530                   | 73565                   |
| 4               | 93795                   | 110347                  | 75036                   | 88278                   | 62530                   | 73565                   |
| 5               | 156837                  | 184515                  | 125470                  | 147612                  | 104558                  | 123010                  |
| 6               | 156837                  | 184515                  | 125470                  | 147612                  | 104558                  | 123010                  |
| 7               | 156837                  | 184515                  | 125470                  | 147612                  | 104558                  | 123010                  |
| 8               | 156837                  | 184515                  | 125470                  | 147612                  | 104558                  | 123010                  |
| 9               | 156837                  | 184515                  | 125470                  | 147612                  | 104558                  | 123010                  |
| 10              | 227567                  | 267727                  | 182054                  | 214182                  | 151712                  | 178485                  |
| 11              | 227567                  | 267727                  | 182054                  | 214182                  | 151712                  | 178485                  |
| 12              | 227567                  | 267727                  | 182054                  | 214182                  | 151712                  | 178485                  |
| 13              | 227567                  | 267727                  | 182054                  | 214182                  | 151712                  | 178485                  |
| 14              | 227567                  | 267727                  | 182054                  | 214182                  | 151712                  | 178485                  |
| 15              | 227567                  | 267727                  | 182054                  | 214182                  | 151712                  | 178485                  |
| 16              | 227567                  | 267727                  | 182054                  | 214182                  | 151712                  | 178485                  |
| 17              | 227567                  | 267727                  | 182054                  | 214182                  | 151712                  | 178485                  |
| 18              | 227567                  | 267727                  | 182054                  | 214182                  | 151712                  | 178485                  |
| 19              | 227567                  | 267727                  | 182054                  | 214182                  | 151712                  | 178485                  |
| 20              | 227567                  | 267727                  | 182054                  | 214182                  | 151712                  | 178485                  |
| 21              | 227567                  | 267727                  | 182054                  | 214182                  | 151712                  | 178485                  |
| 22              | 227567                  | 267727                  | 182054                  | 214182                  | 151712                  | 178485                  |
| 23              | 227567                  | 267727                  | 182054                  | 214182                  | 151712                  | 178485                  |
| 24              | 227567                  | 267727                  | 182054                  | 214182                  | 151712                  | 178485                  |
| 25              | 227567                  | 267727                  | 182054                  | 214182                  | 151712                  | 178485                  |



Dicha reacción se da en el nivel de desplante de la pila:

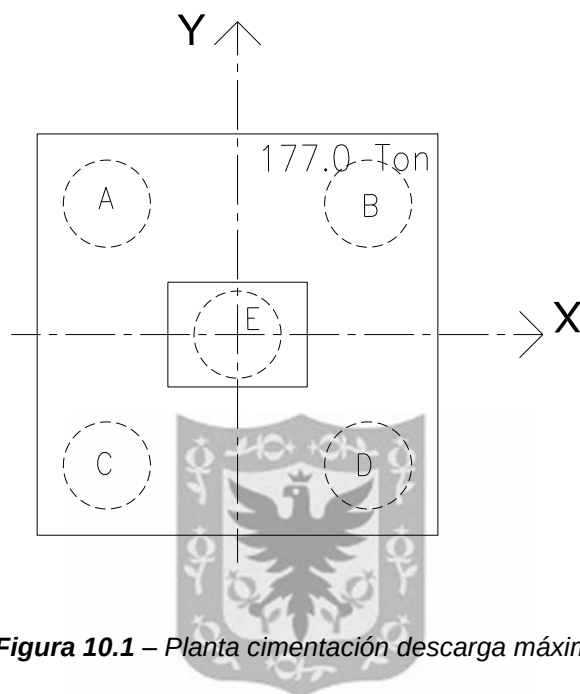


**Figura 10.1 – Planta cimentación descarga máxima**

## 10.1 Reacciones a nivel desplante de las pilas, mástil 2

**TABLE: Joint Reactions**

| Joint | OutputCase | CaseType    | F1    | F2    | F3     | M1     | M2     | M3     |
|-------|------------|-------------|-------|-------|--------|--------|--------|--------|
| Text  | Text       | Text        | Tonf  | Tonf  | Tonf   | Tonf-m | Tonf-m | Tonf-m |
| 6365  | COMB1      | Combination | -0.54 | -0.14 | 36.63  | 0.00   | 0.00   | 0.00   |
| 6365  | COMB2      | Combination | -0.55 | 0.28  | -1.06  | 0.00   | 0.00   | 0.00   |
| 6365  | COMB3      | Combination | 0.35  | -0.15 | 97.65  | 0.00   | 0.00   | 0.00   |
| 6365  | COMB4      | Combination | 0.34  | 0.26  | 59.95  | 0.00   | 0.00   | 0.00   |
| 6365  | COMB5      | Combination | -0.22 | -0.63 | 101.97 | 0.00   | 0.00   | 0.00   |
| 6365  | COMB6      | Combination | -0.25 | 0.76  | -23.68 | 0.00   | 0.00   | 0.00   |
| 6365  | COMB7      | Combination | 0.05  | -0.63 | 120.27 | 0.00   | 0.00   | 0.00   |
| 6365  | COMB8      | Combination | 0.02  | 0.75  | -5.38  | 0.00   | 0.00   | 0.00   |
| 6365  | COMB9      | Combination | -0.54 | -0.14 | 38.65  | 0.00   | 0.00   | 0.00   |
| 6365  | COMB10     | Combination | -0.55 | 0.28  | 0.95   | 0.00   | 0.00   | 0.00   |
| 6365  | COMB11     | Combination | 0.35  | -0.15 | 99.66  | 0.00   | 0.00   | 0.00   |
| 6365  | COMB12     | Combination | 0.34  | 0.26  | 61.97  | 0.00   | 0.00   | 0.00   |
| 6365  | COMB13     | Combination | -0.22 | -0.63 | 103.98 | 0.00   | 0.00   | 0.00   |
| 6365  | COMB14     | Combination | -0.25 | 0.76  | -21.67 | 0.00   | 0.00   | 0.00   |
| 6365  | COMB15     | Combination | 0.05  | -0.63 | 122.29 | 0.00   | 0.00   | 0.00   |
| 6365  | COMB16     | Combination | 0.02  | 0.75  | -3.36  | 0.00   | 0.00   | 0.00   |
| 6365  | COMB17-M2  | Combination | -0.87 | -0.14 | 7.55   | 0.00   | 0.00   | 0.00   |
| 6365  | COMB18-M2  | Combination | -0.88 | 0.28  | -30.15 | 0.00   | 0.00   | 0.00   |
| 6365  | COMB19-M2  | Combination | 0.02  | -0.15 | 68.56  | 0.00   | 0.00   | 0.00   |
| 6365  | COMB20-M2  | Combination | 0.01  | 0.27  | 30.87  | 0.00   | 0.00   | 0.00   |
| 6365  | COMB21-M2  | Combination | -0.55 | -0.63 | 72.88  | 0.00   | 0.00   | 0.00   |
| 6365  | COMB22-M2  | Combination | -0.58 | 0.76  | -52.77 | 0.00   | 0.00   | 0.00   |
| 6365  | COMB23-M2  | Combination | -0.28 | -0.63 | 91.18  | 0.00   | 0.00   | 0.00   |
| 6365  | COMB24-M2  | Combination | -0.31 | 0.75  | -34.46 | 0.00   | 0.00   | 0.00   |
| 6365  | COMB25-M2  | Combination | -0.87 | -0.14 | 9.56   | 0.00   | 0.00   | 0.00   |
| 6365  | COMB26-M2  | Combination | -0.88 | 0.28  | -28.13 | 0.00   | 0.00   | 0.00   |
| 6365  | COMB27-M2  | Combination | 0.02  | -0.15 | 70.58  | 0.00   | 0.00   | 0.00   |
| 6365  | COMB28-M2  | Combination | 0.01  | 0.26  | 32.88  | 0.00   | 0.00   | 0.00   |
| 6365  | COMB29-M2  | Combination | -0.55 | -0.63 | 74.90  | 0.00   | 0.00   | 0.00   |
| 6365  | COMB30-M2  | Combination | -0.58 | 0.76  | -50.75 | 0.00   | 0.00   | 0.00   |
| 6365  | COMB31-M2  | Combination | -0.28 | -0.63 | 93.20  | 0.00   | 0.00   | 0.00   |
| 6365  | COMB32-M2  | Combination | -0.31 | 0.75  | -32.45 | 0.00   | 0.00   | 0.00   |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|      |           |             |       |       |        |      |      |      |
|------|-----------|-------------|-------|-------|--------|------|------|------|
| 6365 | COMB33-M2 | Combination | -0.88 | -0.14 | 6.81   | 0.00 | 0.00 | 0.00 |
| 6365 | COMB34-M2 | Combination | -0.89 | 0.28  | -30.88 | 0.00 | 0.00 | 0.00 |
| 6365 | COMB35-M2 | Combination | 0.01  | -0.15 | 67.83  | 0.00 | 0.00 | 0.00 |
| 6365 | COMB36-M2 | Combination | 0.00  | 0.27  | 30.14  | 0.00 | 0.00 | 0.00 |
| 6365 | COMB37-M2 | Combination | -0.56 | -0.63 | 72.15  | 0.00 | 0.00 | 0.00 |
| 6365 | COMB38-M2 | Combination | -0.59 | 0.76  | -53.50 | 0.00 | 0.00 | 0.00 |
| 6365 | COMB39-M2 | Combination | -0.29 | -0.63 | 90.45  | 0.00 | 0.00 | 0.00 |
| 6365 | COMB40-M2 | Combination | -0.32 | 0.75  | -35.20 | 0.00 | 0.00 | 0.00 |
| 6365 | COMB41-M2 | Combination | -0.88 | -0.14 | 8.83   | 0.00 | 0.00 | 0.00 |
| 6365 | COMB42-M2 | Combination | -0.89 | 0.28  | -28.86 | 0.00 | 0.00 | 0.00 |
| 6365 | COMB43-M2 | Combination | 0.01  | -0.15 | 69.85  | 0.00 | 0.00 | 0.00 |
| 6365 | COMB44-M2 | Combination | 0.00  | 0.27  | 32.15  | 0.00 | 0.00 | 0.00 |
| 6365 | COMB45-M2 | Combination | -0.56 | -0.63 | 74.16  | 0.00 | 0.00 | 0.00 |
| 6365 | COMB46-M2 | Combination | -0.59 | 0.76  | -51.49 | 0.00 | 0.00 | 0.00 |
| 6365 | COMB47-M2 | Combination | -0.29 | -0.63 | 92.47  | 0.00 | 0.00 | 0.00 |
| 6365 | COMB48-M2 | Combination | -0.32 | 0.75  | -33.18 | 0.00 | 0.00 | 0.00 |
| 6378 | COMB1     | Combination | -0.56 | -0.15 | 103.08 | 0.00 | 0.00 | 0.00 |
| 6378 | COMB2     | Combination | -0.55 | 0.27  | 65.38  | 0.00 | 0.00 | 0.00 |
| 6378 | COMB3     | Combination | 0.32  | -0.14 | 56.30  | 0.00 | 0.00 | 0.00 |
| 6378 | COMB4     | Combination | 0.33  | 0.27  | 18.60  | 0.00 | 0.00 | 0.00 |
| 6378 | COMB5     | Combination | -0.26 | -0.63 | 130.68 | 0.00 | 0.00 | 0.00 |
| 6378 | COMB6     | Combination | -0.23 | 0.75  | 5.03   | 0.00 | 0.00 | 0.00 |
| 6378 | COMB7     | Combination | 0.00  | -0.63 | 116.65 | 0.00 | 0.00 | 0.00 |
| 6378 | COMB8     | Combination | 0.03  | 0.75  | -9.00  | 0.00 | 0.00 | 0.00 |
| 6378 | COMB9     | Combination | -0.56 | -0.15 | 105.16 | 0.00 | 0.00 | 0.00 |
| 6378 | COMB10    | Combination | -0.55 | 0.26  | 67.46  | 0.00 | 0.00 | 0.00 |
| 6378 | COMB11    | Combination | 0.32  | -0.14 | 58.38  | 0.00 | 0.00 | 0.00 |
| 6378 | COMB12    | Combination | 0.33  | 0.27  | 20.68  | 0.00 | 0.00 | 0.00 |
| 6378 | COMB13    | Combination | -0.26 | -0.63 | 132.76 | 0.00 | 0.00 | 0.00 |
| 6378 | COMB14    | Combination | -0.23 | 0.75  | 7.11   | 0.00 | 0.00 | 0.00 |
| 6378 | COMB15    | Combination | 0.00  | -0.63 | 118.73 | 0.00 | 0.00 | 0.00 |
| 6378 | COMB16    | Combination | 0.03  | 0.75  | -6.92  | 0.00 | 0.00 | 0.00 |
| 6378 | COMB17-M2 | Combination | -0.89 | -0.16 | 123.33 | 0.00 | 0.00 | 0.00 |
| 6378 | COMB18-M2 | Combination | -0.88 | 0.26  | 85.63  | 0.00 | 0.00 | 0.00 |
| 6378 | COMB19-M2 | Combination | -0.01 | -0.15 | 76.55  | 0.00 | 0.00 | 0.00 |
| 6378 | COMB20-M2 | Combination | 0.00  | 0.26  | 38.85  | 0.00 | 0.00 | 0.00 |
| 6378 | COMB21-M2 | Combination | -0.59 | -0.64 | 150.93 | 0.00 | 0.00 | 0.00 |
| 6378 | COMB22-M2 | Combination | -0.56 | 0.74  | 25.28  | 0.00 | 0.00 | 0.00 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|      |           |             |       |       |        |      |      |      |
|------|-----------|-------------|-------|-------|--------|------|------|------|
| 6378 | COMB23-M2 | Combination | -0.33 | -0.64 | 136.90 | 0.00 | 0.00 | 0.00 |
| 6378 | COMB24-M2 | Combination | -0.30 | 0.74  | 11.25  | 0.00 | 0.00 | 0.00 |
| 6378 | COMB25-M2 | Combination | -0.89 | -0.16 | 125.41 | 0.00 | 0.00 | 0.00 |
| 6378 | COMB26-M2 | Combination | -0.88 | 0.25  | 87.71  | 0.00 | 0.00 | 0.00 |
| 6378 | COMB27-M2 | Combination | -0.01 | -0.15 | 78.63  | 0.00 | 0.00 | 0.00 |
| 6378 | COMB28-M2 | Combination | 0.00  | 0.26  | 40.93  | 0.00 | 0.00 | 0.00 |
| 6378 | COMB29-M2 | Combination | -0.59 | -0.64 | 153.01 | 0.00 | 0.00 | 0.00 |
| 6378 | COMB30-M2 | Combination | -0.56 | 0.74  | 27.36  | 0.00 | 0.00 | 0.00 |
| 6378 | COMB31-M2 | Combination | -0.33 | -0.64 | 138.98 | 0.00 | 0.00 | 0.00 |
| 6378 | COMB32-M2 | Combination | -0.30 | 0.74  | 13.33  | 0.00 | 0.00 | 0.00 |
| 6378 | COMB33-M2 | Combination | -0.90 | -0.16 | 124.09 | 0.00 | 0.00 | 0.00 |
| 6378 | COMB34-M2 | Combination | -0.89 | 0.26  | 86.39  | 0.00 | 0.00 | 0.00 |
| 6378 | COMB35-M2 | Combination | -0.02 | -0.15 | 77.31  | 0.00 | 0.00 | 0.00 |
| 6378 | COMB36-M2 | Combination | -0.01 | 0.26  | 39.61  | 0.00 | 0.00 | 0.00 |
| 6378 | COMB37-M2 | Combination | -0.60 | -0.64 | 151.69 | 0.00 | 0.00 | 0.00 |
| 6378 | COMB38-M2 | Combination | -0.57 | 0.74  | 26.04  | 0.00 | 0.00 | 0.00 |
| 6378 | COMB39-M2 | Combination | -0.34 | -0.64 | 137.66 | 0.00 | 0.00 | 0.00 |
| 6378 | COMB40-M2 | Combination | -0.31 | 0.75  | 12.01  | 0.00 | 0.00 | 0.00 |
| 6378 | COMB41-M2 | Combination | -0.90 | -0.16 | 126.17 | 0.00 | 0.00 | 0.00 |
| 6378 | COMB42-M2 | Combination | -0.89 | 0.26  | 88.47  | 0.00 | 0.00 | 0.00 |
| 6378 | COMB43-M2 | Combination | -0.02 | -0.15 | 79.39  | 0.00 | 0.00 | 0.00 |
| 6378 | COMB44-M2 | Combination | -0.01 | 0.26  | 41.69  | 0.00 | 0.00 | 0.00 |
| 6378 | COMB45-M2 | Combination | -0.60 | -0.64 | 153.77 | 0.00 | 0.00 | 0.00 |
| 6378 | COMB46-M2 | Combination | -0.57 | 0.74  | 28.12  | 0.00 | 0.00 | 0.00 |
| 6378 | COMB47-M2 | Combination | -0.34 | -0.64 | 139.74 | 0.00 | 0.00 | 0.00 |
| 6378 | COMB48-M2 | Combination | -0.31 | 0.74  | 14.09  | 0.00 | 0.00 | 0.00 |
| 6391 | COMB1     | Combination | -0.55 | -0.13 | 13.93  | 0.00 | 0.00 | 0.00 |
| 6391 | COMB2     | Combination | -0.54 | 0.28  | 51.63  | 0.00 | 0.00 | 0.00 |
| 6391 | COMB3     | Combination | 0.34  | -0.12 | 74.95  | 0.00 | 0.00 | 0.00 |
| 6391 | COMB4     | Combination | 0.35  | 0.29  | 112.64 | 0.00 | 0.00 | 0.00 |
| 6391 | COMB5     | Combination | -0.24 | -0.61 | -8.69  | 0.00 | 0.00 | 0.00 |
| 6391 | COMB6     | Combination | -0.22 | 0.77  | 116.96 | 0.00 | 0.00 | 0.00 |
| 6391 | COMB7     | Combination | 0.02  | -0.61 | 9.61   | 0.00 | 0.00 | 0.00 |
| 6391 | COMB8     | Combination | 0.05  | 0.77  | 135.26 | 0.00 | 0.00 | 0.00 |
| 6391 | COMB9     | Combination | -0.55 | -0.13 | 15.95  | 0.00 | 0.00 | 0.00 |
| 6391 | COMB10    | Combination | -0.54 | 0.28  | 53.64  | 0.00 | 0.00 | 0.00 |
| 6391 | COMB11    | Combination | 0.34  | -0.12 | 76.96  | 0.00 | 0.00 | 0.00 |
| 6391 | COMB12    | Combination | 0.35  | 0.30  | 114.66 | 0.00 | 0.00 | 0.00 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|      |           |             |       |       |        |      |      |      |
|------|-----------|-------------|-------|-------|--------|------|------|------|
| 6391 | COMB13    | Combination | -0.24 | -0.61 | -6.68  | 0.00 | 0.00 | 0.00 |
| 6391 | COMB14    | Combination | -0.22 | 0.77  | 118.97 | 0.00 | 0.00 | 0.00 |
| 6391 | COMB15    | Combination | 0.02  | -0.61 | 11.63  | 0.00 | 0.00 | 0.00 |
| 6391 | COMB16    | Combination | 0.05  | 0.77  | 137.28 | 0.00 | 0.00 | 0.00 |
| 6391 | COMB17-M2 | Combination | -0.88 | -0.15 | -16.33 | 0.00 | 0.00 | 0.00 |
| 6391 | COMB18-M2 | Combination | -0.87 | 0.27  | 21.37  | 0.00 | 0.00 | 0.00 |
| 6391 | COMB19-M2 | Combination | 0.01  | -0.13 | 44.69  | 0.00 | 0.00 | 0.00 |
| 6391 | COMB20-M2 | Combination | 0.02  | 0.28  | 82.38  | 0.00 | 0.00 | 0.00 |
| 6391 | COMB21-M2 | Combination | -0.57 | -0.63 | -38.95 | 0.00 | 0.00 | 0.00 |
| 6391 | COMB22-M2 | Combination | -0.55 | 0.76  | 86.70  | 0.00 | 0.00 | 0.00 |
| 6391 | COMB23-M2 | Combination | -0.31 | -0.62 | -20.64 | 0.00 | 0.00 | 0.00 |
| 6391 | COMB24-M2 | Combination | -0.28 | 0.76  | 105.01 | 0.00 | 0.00 | 0.00 |
| 6391 | COMB25-M2 | Combination | -0.88 | -0.15 | -14.31 | 0.00 | 0.00 | 0.00 |
| 6391 | COMB26-M2 | Combination | -0.87 | 0.27  | 23.38  | 0.00 | 0.00 | 0.00 |
| 6391 | COMB27-M2 | Combination | 0.01  | -0.13 | 46.70  | 0.00 | 0.00 | 0.00 |
| 6391 | COMB28-M2 | Combination | 0.02  | 0.28  | 84.40  | 0.00 | 0.00 | 0.00 |
| 6391 | COMB29-M2 | Combination | -0.57 | -0.63 | -36.93 | 0.00 | 0.00 | 0.00 |
| 6391 | COMB30-M2 | Combination | -0.55 | 0.76  | 88.72  | 0.00 | 0.00 | 0.00 |
| 6391 | COMB31-M2 | Combination | -0.31 | -0.62 | -18.63 | 0.00 | 0.00 | 0.00 |
| 6391 | COMB32-M2 | Combination | -0.28 | 0.76  | 107.02 | 0.00 | 0.00 | 0.00 |
| 6391 | COMB33-M2 | Combination | -0.89 | -0.15 | -17.37 | 0.00 | 0.00 | 0.00 |
| 6391 | COMB34-M2 | Combination | -0.88 | 0.27  | 20.33  | 0.00 | 0.00 | 0.00 |
| 6391 | COMB35-M2 | Combination | 0.00  | -0.13 | 43.65  | 0.00 | 0.00 | 0.00 |
| 6391 | COMB36-M2 | Combination | 0.01  | 0.28  | 81.34  | 0.00 | 0.00 | 0.00 |
| 6391 | COMB37-M2 | Combination | -0.59 | -0.63 | -39.99 | 0.00 | 0.00 | 0.00 |
| 6391 | COMB38-M2 | Combination | -0.56 | 0.76  | 85.66  | 0.00 | 0.00 | 0.00 |
| 6391 | COMB39-M2 | Combination | -0.32 | -0.62 | -21.69 | 0.00 | 0.00 | 0.00 |
| 6391 | COMB40-M2 | Combination | -0.29 | 0.76  | 103.96 | 0.00 | 0.00 | 0.00 |
| 6391 | COMB41-M2 | Combination | -0.89 | -0.15 | -15.35 | 0.00 | 0.00 | 0.00 |
| 6391 | COMB42-M2 | Combination | -0.88 | 0.27  | 22.34  | 0.00 | 0.00 | 0.00 |
| 6391 | COMB43-M2 | Combination | 0.00  | -0.13 | 45.66  | 0.00 | 0.00 | 0.00 |
| 6391 | COMB44-M2 | Combination | 0.01  | 0.28  | 83.36  | 0.00 | 0.00 | 0.00 |
| 6391 | COMB45-M2 | Combination | -0.59 | -0.63 | -37.98 | 0.00 | 0.00 | 0.00 |
| 6391 | COMB46-M2 | Combination | -0.56 | 0.76  | 87.67  | 0.00 | 0.00 | 0.00 |
| 6391 | COMB47-M2 | Combination | -0.32 | -0.62 | -19.67 | 0.00 | 0.00 | 0.00 |
| 6391 | COMB48-M2 | Combination | -0.29 | 0.76  | 105.98 | 0.00 | 0.00 | 0.00 |
| 6404 | COMB1     | Combination | -0.56 | -0.12 | 80.37  | 0.00 | 0.00 | 0.00 |
| 6404 | COMB2     | Combination | -0.57 | 0.29  | 118.07 | 0.00 | 0.00 | 0.00 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|      |           |             |       |       |        |      |      |      |
|------|-----------|-------------|-------|-------|--------|------|------|------|
| 6404 | COMB3     | Combination | 0.33  | -0.13 | 33.59  | 0.00 | 0.00 | 0.00 |
| 6404 | COMB4     | Combination | 0.32  | 0.29  | 71.29  | 0.00 | 0.00 | 0.00 |
| 6404 | COMB5     | Combination | -0.24 | -0.61 | 20.02  | 0.00 | 0.00 | 0.00 |
| 6404 | COMB6     | Combination | -0.27 | 0.78  | 145.67 | 0.00 | 0.00 | 0.00 |
| 6404 | COMB7     | Combination | 0.03  | -0.61 | 5.99   | 0.00 | 0.00 | 0.00 |
| 6404 | COMB8     | Combination | 0.00  | 0.77  | 131.64 | 0.00 | 0.00 | 0.00 |
| 6404 | COMB9     | Combination | -0.56 | -0.12 | 82.45  | 0.00 | 0.00 | 0.00 |
| 6404 | COMB10    | Combination | -0.57 | 0.29  | 120.15 | 0.00 | 0.00 | 0.00 |
| 6404 | COMB11    | Combination | 0.33  | -0.13 | 35.67  | 0.00 | 0.00 | 0.00 |
| 6404 | COMB12    | Combination | 0.32  | 0.29  | 73.37  | 0.00 | 0.00 | 0.00 |
| 6404 | COMB13    | Combination | -0.24 | -0.61 | 22.10  | 0.00 | 0.00 | 0.00 |
| 6404 | COMB14    | Combination | -0.27 | 0.78  | 147.75 | 0.00 | 0.00 | 0.00 |
| 6404 | COMB15    | Combination | 0.03  | -0.61 | 8.07   | 0.00 | 0.00 | 0.00 |
| 6404 | COMB16    | Combination | 0.00  | 0.77  | 133.72 | 0.00 | 0.00 | 0.00 |
| 6404 | COMB17-M2 | Combination | -0.88 | -0.12 | 99.45  | 0.00 | 0.00 | 0.00 |
| 6404 | COMB18-M2 | Combination | -0.89 | 0.29  | 137.15 | 0.00 | 0.00 | 0.00 |
| 6404 | COMB19-M2 | Combination | 0.00  | -0.13 | 52.67  | 0.00 | 0.00 | 0.00 |
| 6404 | COMB20-M2 | Combination | -0.01 | 0.28  | 90.37  | 0.00 | 0.00 | 0.00 |
| 6404 | COMB21-M2 | Combination | -0.56 | -0.61 | 39.10  | 0.00 | 0.00 | 0.00 |
| 6404 | COMB22-M2 | Combination | -0.59 | 0.77  | 164.75 | 0.00 | 0.00 | 0.00 |
| 6404 | COMB23-M2 | Combination | -0.30 | -0.61 | 25.07  | 0.00 | 0.00 | 0.00 |
| 6404 | COMB24-M2 | Combination | -0.33 | 0.77  | 150.72 | 0.00 | 0.00 | 0.00 |
| 6404 | COMB25-M2 | Combination | -0.88 | -0.12 | 101.53 | 0.00 | 0.00 | 0.00 |
| 6404 | COMB26-M2 | Combination | -0.89 | 0.29  | 139.23 | 0.00 | 0.00 | 0.00 |
| 6404 | COMB27-M2 | Combination | 0.00  | -0.13 | 54.75  | 0.00 | 0.00 | 0.00 |
| 6404 | COMB28-M2 | Combination | -0.01 | 0.28  | 92.45  | 0.00 | 0.00 | 0.00 |
| 6404 | COMB29-M2 | Combination | -0.56 | -0.61 | 41.18  | 0.00 | 0.00 | 0.00 |
| 6404 | COMB30-M2 | Combination | -0.59 | 0.77  | 166.83 | 0.00 | 0.00 | 0.00 |
| 6404 | COMB31-M2 | Combination | -0.30 | -0.61 | 27.15  | 0.00 | 0.00 | 0.00 |
| 6404 | COMB32-M2 | Combination | -0.33 | 0.77  | 152.80 | 0.00 | 0.00 | 0.00 |
| 6404 | COMB33-M2 | Combination | -0.89 | -0.12 | 99.90  | 0.00 | 0.00 | 0.00 |
| 6404 | COMB34-M2 | Combination | -0.90 | 0.29  | 137.60 | 0.00 | 0.00 | 0.00 |
| 6404 | COMB35-M2 | Combination | -0.01 | -0.13 | 53.12  | 0.00 | 0.00 | 0.00 |
| 6404 | COMB36-M2 | Combination | -0.02 | 0.28  | 90.82  | 0.00 | 0.00 | 0.00 |
| 6404 | COMB37-M2 | Combination | -0.57 | -0.61 | 39.55  | 0.00 | 0.00 | 0.00 |
| 6404 | COMB38-M2 | Combination | -0.60 | 0.77  | 165.20 | 0.00 | 0.00 | 0.00 |
| 6404 | COMB39-M2 | Combination | -0.31 | -0.61 | 25.52  | 0.00 | 0.00 | 0.00 |
| 6404 | COMB40-M2 | Combination | -0.34 | 0.77  | 151.17 | 0.00 | 0.00 | 0.00 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|      |           |             |       |       |        |      |      |      |
|------|-----------|-------------|-------|-------|--------|------|------|------|
| 6404 | COMB41-M2 | Combination | -0.89 | -0.12 | 101.98 | 0.00 | 0.00 | 0.00 |
| 6404 | COMB42-M2 | Combination | -0.90 | 0.29  | 139.68 | 0.00 | 0.00 | 0.00 |
| 6404 | COMB43-M2 | Combination | -0.01 | -0.13 | 55.20  | 0.00 | 0.00 | 0.00 |
| 6404 | COMB44-M2 | Combination | -0.02 | 0.29  | 92.90  | 0.00 | 0.00 | 0.00 |
| 6404 | COMB45-M2 | Combination | -0.57 | -0.61 | 41.63  | 0.00 | 0.00 | 0.00 |
| 6404 | COMB46-M2 | Combination | -0.60 | 0.77  | 167.28 | 0.00 | 0.00 | 0.00 |
| 6404 | COMB47-M2 | Combination | -0.31 | -0.61 | 27.60  | 0.00 | 0.00 | 0.00 |
| 6404 | COMB48-M2 | Combination | -0.34 | 0.77  | 153.25 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB1     | Combination | -0.44 | -0.07 | 135.18 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB2     | Combination | -0.44 | 0.11  | 135.18 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB3     | Combination | 0.26  | -0.07 | 167.40 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB4     | Combination | 0.26  | 0.11  | 167.40 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB5     | Combination | -0.20 | -0.29 | 146.46 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB6     | Combination | -0.20 | 0.33  | 146.46 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB7     | Combination | 0.02  | -0.29 | 156.12 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB8     | Combination | 0.02  | 0.33  | 156.12 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB9     | Combination | -0.44 | -0.07 | 144.45 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB10    | Combination | -0.44 | 0.11  | 144.45 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB11    | Combination | 0.26  | -0.07 | 176.66 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB12    | Combination | 0.26  | 0.11  | 176.66 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB13    | Combination | -0.20 | -0.29 | 155.72 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB14    | Combination | -0.20 | 0.33  | 155.72 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB15    | Combination | 0.02  | -0.29 | 165.39 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB16    | Combination | 0.02  | 0.33  | 165.39 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB17-M2 | Combination | -0.65 | -0.07 | 112.54 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB18-M2 | Combination | -0.65 | 0.11  | 112.54 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB19-M2 | Combination | 0.06  | -0.07 | 144.75 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB20-M2 | Combination | 0.06  | 0.11  | 144.75 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB21-M2 | Combination | -0.40 | -0.29 | 123.81 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB22-M2 | Combination | -0.40 | 0.33  | 123.81 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB23-M2 | Combination | -0.19 | -0.29 | 133.48 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB24-M2 | Combination | -0.19 | 0.33  | 133.48 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB25-M2 | Combination | -0.65 | -0.07 | 121.81 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB26-M2 | Combination | -0.65 | 0.11  | 121.81 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB27-M2 | Combination | 0.06  | -0.07 | 154.02 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB28-M2 | Combination | 0.06  | 0.11  | 154.02 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB29-M2 | Combination | -0.40 | -0.29 | 133.08 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB30-M2 | Combination | -0.40 | 0.33  | 133.08 | 0.00 | 0.00 | 0.00 |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|      |           |             |       |       |        |      |      |      |
|------|-----------|-------------|-------|-------|--------|------|------|------|
| 6417 | COMB31-M2 | Combination | -0.19 | -0.29 | 142.75 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB32-M2 | Combination | -0.19 | 0.33  | 142.75 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB33-M2 | Combination | -0.65 | -0.07 | 111.90 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB34-M2 | Combination | -0.65 | 0.11  | 111.90 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB35-M2 | Combination | 0.05  | -0.07 | 144.11 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB36-M2 | Combination | 0.05  | 0.11  | 144.11 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB37-M2 | Combination | -0.41 | -0.29 | 123.17 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB38-M2 | Combination | -0.41 | 0.33  | 123.17 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB39-M2 | Combination | -0.20 | -0.29 | 132.84 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB40-M2 | Combination | -0.20 | 0.33  | 132.84 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB41-M2 | Combination | -0.65 | -0.07 | 121.16 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB42-M2 | Combination | -0.65 | 0.11  | 121.16 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB43-M2 | Combination | 0.05  | -0.07 | 153.38 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB44-M2 | Combination | 0.05  | 0.11  | 153.38 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB45-M2 | Combination | -0.41 | -0.29 | 132.44 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB46-M2 | Combination | -0.41 | 0.33  | 132.44 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB47-M2 | Combination | -0.20 | -0.29 | 142.10 | 0.00 | 0.00 | 0.00 |
| 6417 | COMB48-M2 | Combination | -0.20 | 0.33  | 142.10 | 0.00 | 0.00 | 0.00 |

**Tabla 10-2 Reacciones mástil 2**

**ALCALDÍA MAYOR  
DE BOGOTÁ D.C.**  
MOVILIDAD  
Instituto de Desarrollo Urbano



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

## 10.2 Capacidades de carga de pilas

**Tabla 10-3** Resumen de valores de carga axial admisible y por tracción (ELR)

| LONGITUD<br>m | Carga axial admisible ELR (kN) |         |        | Carga admisible por tracción ELR (kN) |         |         |
|---------------|--------------------------------|---------|--------|---------------------------------------|---------|---------|
|               | D=0.8m                         | D= 1.0m | D=1.2m | D=0.8m                                | D= 1.0m | D=1.2m  |
| 0             |                                |         |        |                                       |         |         |
| 1             | 108.5                          | 160.1   | 221.6  | 78.23                                 | 101.49  | 126.23  |
| 2             | 174.4                          | 253.7   | 347.5  | 156.47                                | 202.98  | 252.45  |
| 3             | 298.3                          | 429.3   | 582.9  | 296.76                                | 382.04  | 471.77  |
| 4             | 388.6                          | 552.3   | 742.8  | 437.05                                | 561.11  | 691.08  |
| 5             | 500.3                          | 702.2   | 934.8  | 624.92                                | 799.64  | 981.76  |
| 6             | 581.3                          | 804.0   | 1057.6 | 812.78                                | 1038.17 | 1272.43 |
| 7             | 662.3                          | 905.8   | 1180.5 | 1000.65                               | 1276.70 | 1563.11 |
| 8             | 737.7                          | 998.8   | 1290.6 | 1188.52                               | 1515.23 | 1853.78 |
| 9             | 812.5                          | 1090.9  | 1399.4 | 1376.39                               | 1753.77 | 2144.46 |
| 10            | 1125.4                         | 1498.9  | 1909.2 | 1628.17                               | 2072.20 | 2531.02 |
| 11            | 1257.3                         | 1663.8  | 2107.2 | 1879.96                               | 2390.64 | 2917.58 |
| 12            | 1389.3                         | 1828.8  | 2305.2 | 2131.75                               | 2709.07 | 3304.14 |
| 13.00         | 1521.3                         | 1993.8  | 2503.1 | 2383.54                               | 3027.51 | 3690.70 |
| 14            | 1653.3                         | 2158.7  | 2701.1 | 2635.33                               | 3345.94 | 4077.26 |
| 15            | 1785.2                         | 2323.7  | 2899.0 | 2887.12                               | 3664.38 | 4463.82 |
| 16            | 1917.2                         | 2488.7  | 3097.0 | 3138.91                               | 3982.81 | 4850.38 |
| 17            | 2049.2                         | 2653.6  | 3295.0 | 3390.70                               | 4301.25 | 5236.94 |
| 18            | 2181.2                         | 2818.6  | 3492.9 | 3642.49                               | 4619.68 | 5623.50 |
| 19            | 2313.1                         | 2983.6  | 3690.9 | 3894.28                               | 4938.12 | 6010.06 |
| 20            | 2445.1                         | 3148.5  | 3888.9 | 4146.07                               | 5256.55 | 6396.62 |
| 21            | 2577.1                         | 3313.5  | 4086.8 | 4397.86                               | 5574.99 | 6783.18 |
| 22            | 2709.1                         | 3478.5  | 4284.8 | 4649.65                               | 5893.42 | 7169.74 |
| 23            | 2841.0                         | 3643.5  | 4482.8 | 4901.44                               | 6211.86 | 7556.30 |
| 24            | 2973.0                         | 3808.4  | 4680.7 | 5153.23                               | 6530.29 | 7942.86 |
| 25            | 3105.0                         | 3973.4  | 4878.7 | 5405.02                               | 6848.73 | 8329.42 |

## 10.3 Diseño de pilas

### 10.3.1 Diseño a flexo compresión

Las combinaciones con los elementos mecánicos máximos son los siguientes:

COMB34 : Pu = -144.15 Ton V2 = 24.0 V3 = -12.71 Ton M2 = 20.6 Ton-m M3 = -43.43 Ton-m

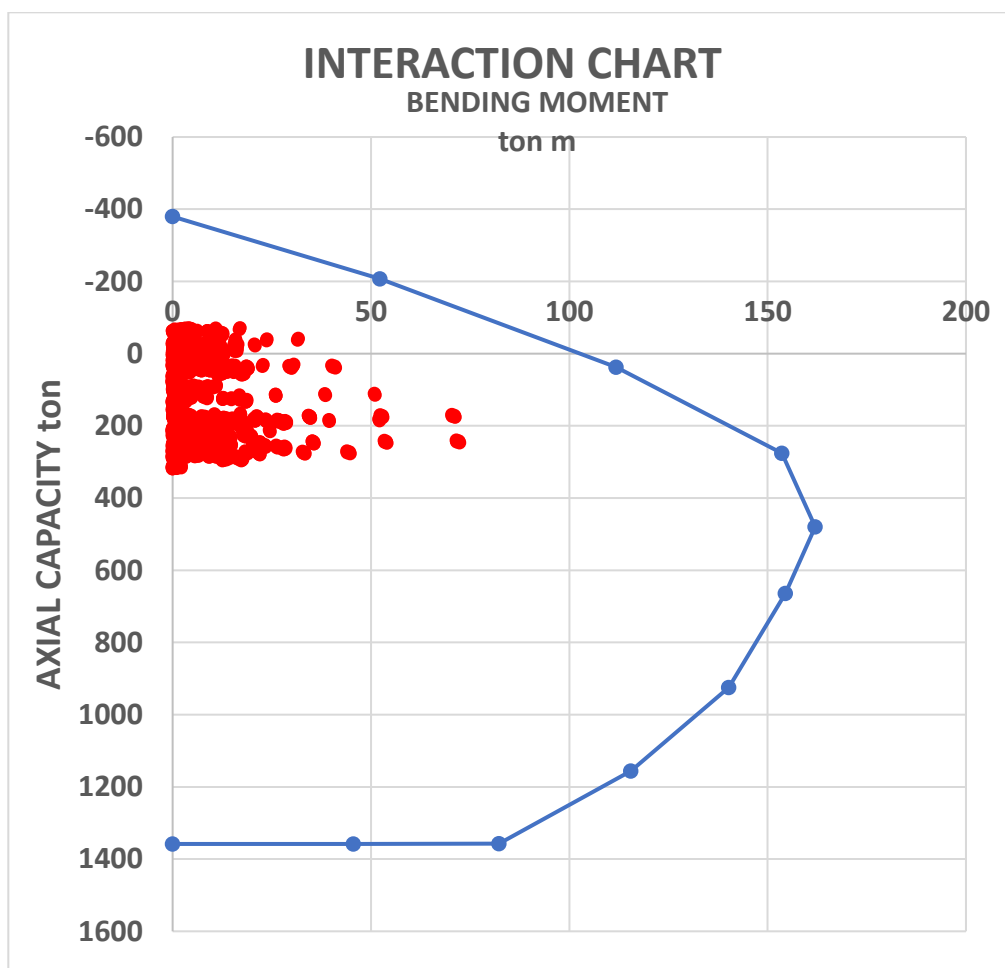


**Figura 10.2 – Diagrama de interacción pilas**

## 10.4 Diseño de mástil

### 10.4.1 Diseño a flexo compresión

Las combinaciones con los elementos mecánicos máximos son los siguientes:

COMB43 :  $P_u = 38.3.0 \text{ Ton}$   $V_2 = 146.9$   $V_3 = -1.4 \text{ Ton}$   $M_2 = -26.2 \text{ Ton-m}$   $M_3 = 934.5 \text{ Ton-m}$

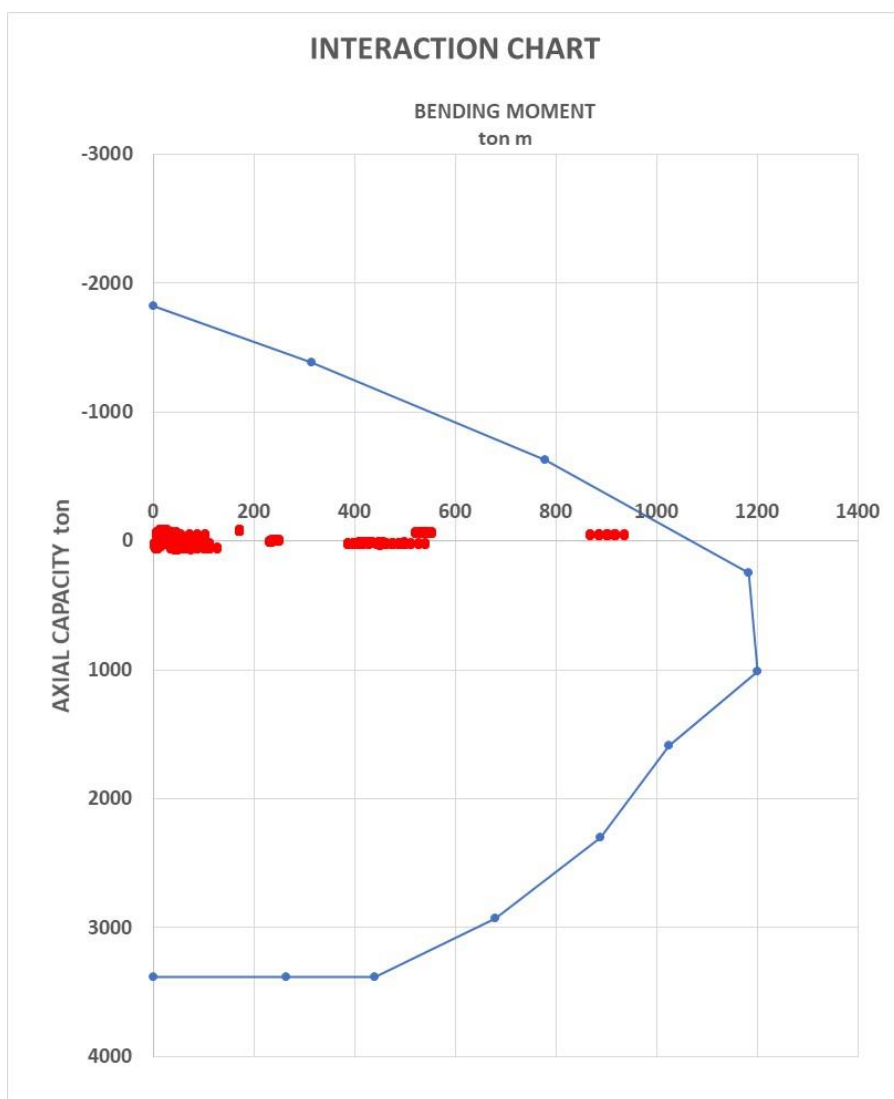


**Figura 10.3 – Diagrama de interacción mástil**

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

## 10.4.2 Elementos mecánicos, mástil 2

| TABLE: Element Forces - Frames |         |            |             |       |       |       |        |        |        |
|--------------------------------|---------|------------|-------------|-------|-------|-------|--------|--------|--------|
| Frame                          | Station | OutputCase | CaseType    | P     | V2    | V3    | T      | M2     | M3     |
| Text                           | m       | Text       | Text        | Tonf  | Tonf  | Tonf  | Tonf-m | Tonf-m | Tonf-m |
| 3                              | 0.00    | COMB1      | Combination | 38.25 | 22.05 | 3.15  | 3.47   | -8.57  | 103.37 |
| 3                              | 2.60    | COMB1      | Combination | 56.24 | 22.05 | 3.15  | 3.47   | -16.75 | 46.05  |
| 3                              | 5.20    | COMB1      | Combination | 74.24 | 22.05 | 3.15  | 3.47   | -24.93 | -11.27 |
| 3                              | 0.00    | COMB2      | Combination | 38.25 | 22.05 | 0.32  | 3.47   | -23.27 | 103.37 |
| 3                              | 2.60    | COMB2      | Combination | 56.24 | 22.05 | 0.32  | 3.47   | -24.10 | 46.05  |
| 3                              | 5.20    | COMB2      | Combination | 74.24 | 22.05 | 0.32  | 3.47   | -24.93 | -11.27 |
| 3                              | 0.00    | COMB3      | Combination | 38.25 | 12.62 | 3.15  | 3.47   | -8.57  | 54.38  |
| 3                              | 2.60    | COMB3      | Combination | 56.24 | 12.62 | 3.15  | 3.47   | -16.75 | 21.55  |
| 3                              | 5.20    | COMB3      | Combination | 74.24 | 12.62 | 3.15  | 3.47   | -24.93 | -11.27 |
| 3                              | 0.00    | COMB4      | Combination | 38.25 | 12.62 | 0.32  | 3.47   | -23.27 | 54.38  |
| 3                              | 2.60    | COMB4      | Combination | 56.24 | 12.62 | 0.32  | 3.47   | -24.10 | 21.55  |
| 3                              | 5.20    | COMB4      | Combination | 74.24 | 12.62 | 0.32  | 3.47   | -24.93 | -11.27 |
| 3                              | 0.00    | COMB5      | Combination | 38.25 | 18.75 | 6.44  | 3.47   | 8.58   | 86.22  |
| 3                              | 2.60    | COMB5      | Combination | 56.24 | 18.75 | 6.44  | 3.47   | -8.18  | 37.48  |
| 3                              | 5.20    | COMB5      | Combination | 74.24 | 18.75 | 6.44  | 3.47   | -24.93 | -11.27 |
| 3                              | 0.00    | COMB6      | Combination | 38.25 | 18.75 | -2.98 | 3.47   | -40.42 | 86.22  |
| 3                              | 2.60    | COMB6      | Combination | 56.24 | 18.75 | -2.98 | 3.47   | -32.67 | 37.48  |
| 3                              | 5.20    | COMB6      | Combination | 74.24 | 18.75 | -2.98 | 3.47   | -24.93 | -11.27 |
| 3                              | 0.00    | COMB7      | Combination | 38.25 | 15.92 | 6.44  | 3.47   | 8.58   | 71.53  |
| 3                              | 2.60    | COMB7      | Combination | 56.24 | 15.92 | 6.44  | 3.47   | -8.18  | 30.13  |
| 3                              | 5.20    | COMB7      | Combination | 74.24 | 15.92 | 6.44  | 3.47   | -24.93 | -11.27 |
| 3                              | 0.00    | COMB8      | Combination | 38.25 | 15.92 | -2.98 | 3.47   | -40.42 | 71.53  |
| 3                              | 2.60    | COMB8      | Combination | 56.24 | 15.92 | -2.98 | 3.47   | -32.67 | 30.13  |
| 3                              | 5.20    | COMB8      | Combination | 74.24 | 15.92 | -2.98 | 3.47   | -24.93 | -11.27 |
| 3                              | 0.00    | COMB9      | Combination | 56.45 | 22.05 | 3.15  | 3.47   | -8.57  | 103.37 |
| 3                              | 2.60    | COMB9      | Combination | 74.45 | 22.05 | 3.15  | 3.47   | -16.75 | 46.05  |
| 3                              | 5.20    | COMB9      | Combination | 92.44 | 22.05 | 3.15  | 3.47   | -24.93 | -11.27 |
| 3                              | 0.00    | COMB10     | Combination | 56.45 | 22.05 | 0.32  | 3.47   | -23.27 | 103.37 |
| 3                              | 2.60    | COMB10     | Combination | 74.45 | 22.05 | 0.32  | 3.47   | -24.10 | 46.05  |
| 3                              | 5.20    | COMB10     | Combination | 92.44 | 22.05 | 0.32  | 3.47   | -24.93 | -11.27 |
| 3                              | 0.00    | COMB11     | Combination | 56.45 | 12.62 | 3.15  | 3.47   | -8.57  | 54.38  |
| 3                              | 2.60    | COMB11     | Combination | 74.45 | 12.62 | 3.15  | 3.47   | -16.75 | 21.55  |

|  |      | ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br>SAN CRISTÓBAL, EN BOGOTÁ D.C. |             |       |        |       |  |        |        |
|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------|-------|--------|-------|-------------------------------------------------------------------------------------|--------|--------|
| 3                                                                                 | 5.20 | COMB11                                                                                                                                  | Combination | 92.44 | 12.62  | 3.15  | 3.47                                                                                | -24.93 | -11.27 |
| 3                                                                                 | 0.00 | COMB12                                                                                                                                  | Combination | 56.45 | 12.62  | 0.32  | 3.47                                                                                | -23.27 | 54.38  |
| 3                                                                                 | 2.60 | COMB12                                                                                                                                  | Combination | 74.45 | 12.62  | 0.32  | 3.47                                                                                | -24.10 | 21.55  |
| 3                                                                                 | 5.20 | COMB12                                                                                                                                  | Combination | 92.44 | 12.62  | 0.32  | 3.47                                                                                | -24.93 | -11.27 |
| 3                                                                                 | 0.00 | COMB13                                                                                                                                  | Combination | 56.45 | 18.75  | 6.44  | 3.47                                                                                | 8.58   | 86.22  |
| 3                                                                                 | 2.60 | COMB13                                                                                                                                  | Combination | 74.45 | 18.75  | 6.44  | 3.47                                                                                | -8.18  | 37.48  |
| 3                                                                                 | 5.20 | COMB13                                                                                                                                  | Combination | 92.44 | 18.75  | 6.44  | 3.47                                                                                | -24.93 | -11.27 |
| 3                                                                                 | 0.00 | COMB14                                                                                                                                  | Combination | 56.45 | 18.75  | -2.98 | 3.47                                                                                | -40.42 | 86.22  |
| 3                                                                                 | 2.60 | COMB14                                                                                                                                  | Combination | 74.45 | 18.75  | -2.98 | 3.47                                                                                | -32.67 | 37.48  |
| 3                                                                                 | 5.20 | COMB14                                                                                                                                  | Combination | 92.44 | 18.75  | -2.98 | 3.47                                                                                | -24.93 | -11.27 |
| 3                                                                                 | 0.00 | COMB15                                                                                                                                  | Combination | 56.45 | 15.92  | 6.44  | 3.47                                                                                | 8.58   | 71.53  |
| 3                                                                                 | 2.60 | COMB15                                                                                                                                  | Combination | 74.45 | 15.92  | 6.44  | 3.47                                                                                | -8.18  | 30.13  |
| 3                                                                                 | 5.20 | COMB15                                                                                                                                  | Combination | 92.44 | 15.92  | 6.44  | 3.47                                                                                | -24.93 | -11.27 |
| 3                                                                                 | 0.00 | COMB16                                                                                                                                  | Combination | 56.45 | 15.92  | -2.98 | 3.47                                                                                | -40.42 | 71.53  |
| 3                                                                                 | 2.60 | COMB16                                                                                                                                  | Combination | 74.45 | 15.92  | -2.98 | 3.47                                                                                | -32.67 | 30.13  |
| 3                                                                                 | 5.20 | COMB16                                                                                                                                  | Combination | 92.44 | 15.92  | -2.98 | 3.47                                                                                | -24.93 | -11.27 |
| 3                                                                                 | 0.00 | COMB17-M2                                                                                                                               | Combination | 38.25 | 143.39 | 3.15  | 3.47                                                                                | -8.57  | 916.39 |
| 3                                                                                 | 2.60 | COMB17-M2                                                                                                                               | Combination | 56.24 | 143.39 | 3.15  | 3.47                                                                                | -16.75 | 543.57 |
| 3                                                                                 | 5.20 | COMB17-M2                                                                                                                               | Combination | 74.24 | 143.39 | 3.15  | 3.47                                                                                | -24.93 | 170.75 |
| 3                                                                                 | 0.00 | COMB18-M2                                                                                                                               | Combination | 38.25 | 143.39 | 0.32  | 3.47                                                                                | -23.27 | 916.39 |
| 3                                                                                 | 2.60 | COMB18-M2                                                                                                                               | Combination | 56.24 | 143.39 | 0.32  | 3.47                                                                                | -24.10 | 543.57 |
| 3                                                                                 | 5.20 | COMB18-M2                                                                                                                               | Combination | 74.24 | 143.39 | 0.32  | 3.47                                                                                | -24.93 | 170.75 |
| 3                                                                                 | 0.00 | COMB19-M2                                                                                                                               | Combination | 38.25 | 133.97 | 3.15  | 3.47                                                                                | -8.57  | 867.40 |
| 3                                                                                 | 2.60 | COMB19-M2                                                                                                                               | Combination | 56.24 | 133.97 | 3.15  | 3.47                                                                                | -16.75 | 519.07 |
| 3                                                                                 | 5.20 | COMB19-M2                                                                                                                               | Combination | 74.24 | 133.97 | 3.15  | 3.47                                                                                | -24.93 | 170.75 |
| 3                                                                                 | 0.00 | COMB20-M2                                                                                                                               | Combination | 38.25 | 133.97 | 0.32  | 3.47                                                                                | -23.27 | 867.40 |
| 3                                                                                 | 2.60 | COMB20-M2                                                                                                                               | Combination | 56.24 | 133.97 | 0.32  | 3.47                                                                                | -24.10 | 519.07 |
| 3                                                                                 | 5.20 | COMB20-M2                                                                                                                               | Combination | 74.24 | 133.97 | 0.32  | 3.47                                                                                | -24.93 | 170.75 |
| 3                                                                                 | 0.00 | COMB21-M2                                                                                                                               | Combination | 38.25 | 140.09 | 6.44  | 3.47                                                                                | 8.58   | 899.24 |
| 3                                                                                 | 2.60 | COMB21-M2                                                                                                                               | Combination | 56.24 | 140.09 | 6.44  | 3.47                                                                                | -8.18  | 535.00 |
| 3                                                                                 | 5.20 | COMB21-M2                                                                                                                               | Combination | 74.24 | 140.09 | 6.44  | 3.47                                                                                | -24.93 | 170.75 |
| 3                                                                                 | 0.00 | COMB22-M2                                                                                                                               | Combination | 38.25 | 140.09 | -2.98 | 3.47                                                                                | -40.42 | 899.24 |
| 3                                                                                 | 2.60 | COMB22-M2                                                                                                                               | Combination | 56.24 | 140.09 | -2.98 | 3.47                                                                                | -32.67 | 535.00 |
| 3                                                                                 | 5.20 | COMB22-M2                                                                                                                               | Combination | 74.24 | 140.09 | -2.98 | 3.47                                                                                | -24.93 | 170.75 |
| 3                                                                                 | 0.00 | COMB23-M2                                                                                                                               | Combination | 38.25 | 137.27 | 6.44  | 3.47                                                                                | 8.58   | 884.55 |
| 3                                                                                 | 2.60 | COMB23-M2                                                                                                                               | Combination | 56.24 | 137.27 | 6.44  | 3.47                                                                                | -8.18  | 527.65 |
| 3                                                                                 | 5.20 | COMB23-M2                                                                                                                               | Combination | 74.24 | 137.27 | 6.44  | 3.47                                                                                | -24.93 | 170.75 |
| 3                                                                                 | 0.00 | COMB24-M2                                                                                                                               | Combination | 38.25 | 137.27 | -2.98 | 3.47                                                                                | -40.42 | 884.55 |

|  |      | ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br>SAN CRISTÓBAL, EN BOGOTÁ D.C. |             |       |        |       |  |        |        |
|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------|-------|--------|-------|-------------------------------------------------------------------------------------|--------|--------|
| 3                                                                                 | 2.60 | COMB24-M2                                                                                                                               | Combination | 56.24 | 137.27 | -2.98 | 3.47                                                                                | -32.67 | 527.65 |
| 3                                                                                 | 5.20 | COMB24-M2                                                                                                                               | Combination | 74.24 | 137.27 | -2.98 | 3.47                                                                                | -24.93 | 170.75 |
| 3                                                                                 | 0.00 | COMB25-M2                                                                                                                               | Combination | 56.45 | 143.39 | 3.15  | 3.47                                                                                | -8.57  | 916.39 |
| 3                                                                                 | 2.60 | COMB25-M2                                                                                                                               | Combination | 74.45 | 143.39 | 3.15  | 3.47                                                                                | -16.75 | 543.57 |
| 3                                                                                 | 5.20 | COMB25-M2                                                                                                                               | Combination | 92.44 | 143.39 | 3.15  | 3.47                                                                                | -24.93 | 170.75 |
| 3                                                                                 | 0.00 | COMB26-M2                                                                                                                               | Combination | 56.45 | 143.39 | 0.32  | 3.47                                                                                | -23.27 | 916.39 |
| 3                                                                                 | 2.60 | COMB26-M2                                                                                                                               | Combination | 74.45 | 143.39 | 0.32  | 3.47                                                                                | -24.10 | 543.57 |
| 3                                                                                 | 5.20 | COMB26-M2                                                                                                                               | Combination | 92.44 | 143.39 | 0.32  | 3.47                                                                                | -24.93 | 170.75 |
| 3                                                                                 | 0.00 | COMB27-M2                                                                                                                               | Combination | 56.45 | 133.97 | 3.15  | 3.47                                                                                | -8.57  | 867.40 |
| 3                                                                                 | 2.60 | COMB27-M2                                                                                                                               | Combination | 74.45 | 133.97 | 3.15  | 3.47                                                                                | -16.75 | 519.07 |
| 3                                                                                 | 5.20 | COMB27-M2                                                                                                                               | Combination | 92.44 | 133.97 | 3.15  | 3.47                                                                                | -24.93 | 170.75 |
| 3                                                                                 | 0.00 | COMB28-M2                                                                                                                               | Combination | 56.45 | 133.97 | 0.32  | 3.47                                                                                | -23.27 | 867.40 |
| 3                                                                                 | 2.60 | COMB28-M2                                                                                                                               | Combination | 74.45 | 133.97 | 0.32  | 3.47                                                                                | -24.10 | 519.07 |
| 3                                                                                 | 5.20 | COMB28-M2                                                                                                                               | Combination | 92.44 | 133.97 | 0.32  | 3.47                                                                                | -24.93 | 170.75 |
| 3                                                                                 | 0.00 | COMB29-M2                                                                                                                               | Combination | 56.45 | 140.09 | 6.44  | 3.47                                                                                | 8.58   | 899.24 |
| 3                                                                                 | 2.60 | COMB29-M2                                                                                                                               | Combination | 74.45 | 140.09 | 6.44  | 3.47                                                                                | -8.18  | 535.00 |
| 3                                                                                 | 5.20 | COMB29-M2                                                                                                                               | Combination | 92.44 | 140.09 | 6.44  | 3.47                                                                                | -24.93 | 170.75 |
| 3                                                                                 | 0.00 | COMB30-M2                                                                                                                               | Combination | 56.45 | 140.09 | -2.98 | 3.47                                                                                | -40.42 | 899.24 |
| 3                                                                                 | 2.60 | COMB30-M2                                                                                                                               | Combination | 74.45 | 140.09 | -2.98 | 3.47                                                                                | -32.67 | 535.00 |
| 3                                                                                 | 5.20 | COMB30-M2                                                                                                                               | Combination | 92.44 | 140.09 | -2.98 | 3.47                                                                                | -24.93 | 170.75 |
| 3                                                                                 | 0.00 | COMB31-M2                                                                                                                               | Combination | 56.45 | 137.27 | 6.44  | 3.47                                                                                | 8.58   | 884.55 |
| 3                                                                                 | 2.60 | COMB31-M2                                                                                                                               | Combination | 74.45 | 137.27 | 6.44  | 3.47                                                                                | -8.18  | 527.65 |
| 3                                                                                 | 5.20 | COMB31-M2                                                                                                                               | Combination | 92.44 | 137.27 | 6.44  | 3.47                                                                                | -24.93 | 170.75 |
| 3                                                                                 | 0.00 | COMB32-M2                                                                                                                               | Combination | 56.45 | 137.27 | -2.98 | 3.47                                                                                | -40.42 | 884.55 |
| 3                                                                                 | 2.60 | COMB32-M2                                                                                                                               | Combination | 74.45 | 137.27 | -2.98 | 3.47                                                                                | -32.67 | 527.65 |
| 3                                                                                 | 5.20 | COMB32-M2                                                                                                                               | Combination | 92.44 | 137.27 | -2.98 | 3.47                                                                                | -24.93 | 170.75 |
| 3                                                                                 | 0.00 | COMB33-M2                                                                                                                               | Combination | 38.25 | 146.86 | 1.41  | 0.00                                                                                | -11.52 | 934.42 |
| 3                                                                                 | 2.60 | COMB33-M2                                                                                                                               | Combination | 56.24 | 146.86 | 1.41  | 0.00                                                                                | -15.19 | 552.59 |
| 3                                                                                 | 5.20 | COMB33-M2                                                                                                                               | Combination | 74.24 | 146.86 | 1.41  | 0.00                                                                                | -18.86 | 170.75 |
| 3                                                                                 | 0.00 | COMB34-M2                                                                                                                               | Combination | 38.25 | 146.86 | -1.41 | 0.00                                                                                | -26.21 | 934.42 |
| 3                                                                                 | 2.60 | COMB34-M2                                                                                                                               | Combination | 56.24 | 146.86 | -1.41 | 0.00                                                                                | -22.54 | 552.59 |
| 3                                                                                 | 5.20 | COMB34-M2                                                                                                                               | Combination | 74.24 | 146.86 | -1.41 | 0.00                                                                                | -18.86 | 170.75 |
| 3                                                                                 | 0.00 | COMB35-M2                                                                                                                               | Combination | 38.25 | 137.44 | 1.41  | 0.00                                                                                | -11.52 | 885.43 |
| 3                                                                                 | 2.60 | COMB35-M2                                                                                                                               | Combination | 56.24 | 137.44 | 1.41  | 0.00                                                                                | -15.19 | 528.09 |
| 3                                                                                 | 5.20 | COMB35-M2                                                                                                                               | Combination | 74.24 | 137.44 | 1.41  | 0.00                                                                                | -18.86 | 170.75 |
| 3                                                                                 | 0.00 | COMB36-M2                                                                                                                               | Combination | 38.25 | 137.44 | -1.41 | 0.00                                                                                | -26.21 | 885.43 |
| 3                                                                                 | 2.60 | COMB36-M2                                                                                                                               | Combination | 56.24 | 137.44 | -1.41 | 0.00                                                                                | -22.54 | 528.09 |
| 3                                                                                 | 5.20 | COMB36-M2                                                                                                                               | Combination | 74.24 | 137.44 | -1.41 | 0.00                                                                                | -18.86 | 170.75 |

|  |      | ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br>SAN CRISTÓBAL, EN BOGOTÁ D.C. |             |        |        |       |  |        |        |
|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------|--------|--------|-------|-------------------------------------------------------------------------------------|--------|--------|
| 3                                                                                 | 0.00 | COMB37-M2                                                                                                                               | Combination | 38.25  | 143.56 | 4.71  | 0.00                                                                                | 5.63   | 917.27 |
| 3                                                                                 | 2.60 | COMB37-M2                                                                                                                               | Combination | 56.24  | 143.56 | 4.71  | 0.00                                                                                | -6.62  | 544.01 |
| 3                                                                                 | 5.20 | COMB37-M2                                                                                                                               | Combination | 74.24  | 143.56 | 4.71  | 0.00                                                                                | -18.86 | 170.75 |
| 3                                                                                 | 0.00 | COMB38-M2                                                                                                                               | Combination | 38.25  | 143.56 | -4.71 | 0.00                                                                                | -43.36 | 917.27 |
| 3                                                                                 | 2.60 | COMB38-M2                                                                                                                               | Combination | 56.24  | 143.56 | -4.71 | 0.00                                                                                | -31.11 | 544.01 |
| 3                                                                                 | 5.20 | COMB38-M2                                                                                                                               | Combination | 74.24  | 143.56 | -4.71 | 0.00                                                                                | -18.86 | 170.75 |
| 3                                                                                 | 0.00 | COMB39-M2                                                                                                                               | Combination | 38.25  | 140.74 | 4.71  | 0.00                                                                                | 5.63   | 902.57 |
| 3                                                                                 | 2.60 | COMB39-M2                                                                                                                               | Combination | 56.24  | 140.74 | 4.71  | 0.00                                                                                | -6.62  | 536.66 |
| 3                                                                                 | 5.20 | COMB39-M2                                                                                                                               | Combination | 74.24  | 140.74 | 4.71  | 0.00                                                                                | -18.86 | 170.75 |
| 3                                                                                 | 0.00 | COMB40-M2                                                                                                                               | Combination | 38.25  | 140.74 | -4.71 | 0.00                                                                                | -43.36 | 902.57 |
| 3                                                                                 | 2.60 | COMB40-M2                                                                                                                               | Combination | 56.24  | 140.74 | -4.71 | 0.00                                                                                | -31.11 | 536.66 |
| 3                                                                                 | 5.20 | COMB40-M2                                                                                                                               | Combination | 74.24  | 140.74 | -4.71 | 0.00                                                                                | -18.86 | 170.75 |
| 3                                                                                 | 0.00 | COMB41-M2                                                                                                                               | Combination | 56.45  | 146.86 | 1.41  | 0.00                                                                                | -11.52 | 934.42 |
| 3                                                                                 | 2.60 | COMB41-M2                                                                                                                               | Combination | 74.45  | 146.86 | 1.41  | 0.00                                                                                | -15.19 | 552.59 |
| 3                                                                                 | 5.20 | COMB41-M2                                                                                                                               | Combination | 92.44  | 146.86 | 1.41  | 0.00                                                                                | -18.86 | 170.75 |
| 3                                                                                 | 0.00 | COMB42-M2                                                                                                                               | Combination | 56.45  | 146.86 | -1.41 | 0.00                                                                                | -26.21 | 934.42 |
| 3                                                                                 | 2.60 | COMB42-M2                                                                                                                               | Combination | 74.45  | 146.86 | -1.41 | 0.00                                                                                | -22.54 | 552.59 |
| 3                                                                                 | 5.20 | COMB42-M2                                                                                                                               | Combination | 92.44  | 146.86 | -1.41 | 0.00                                                                                | -18.86 | 170.75 |
| 3                                                                                 | 0.00 | COMB43-M2                                                                                                                               | Combination | 56.45  | 137.44 | 1.41  | 0.00                                                                                | -11.52 | 885.43 |
| 3                                                                                 | 2.60 | COMB43-M2                                                                                                                               | Combination | 74.45  | 137.44 | 1.41  | 0.00                                                                                | -15.19 | 528.09 |
| 3                                                                                 | 5.20 | COMB43-M2                                                                                                                               | Combination | 92.44  | 137.44 | 1.41  | 0.00                                                                                | -18.86 | 170.75 |
| 3                                                                                 | 0.00 | COMB44-M2                                                                                                                               | Combination | 56.45  | 137.44 | -1.41 | 0.00                                                                                | -26.21 | 885.43 |
| 3                                                                                 | 2.60 | COMB44-M2                                                                                                                               | Combination | 74.45  | 137.44 | -1.41 | 0.00                                                                                | -22.54 | 528.09 |
| 3                                                                                 | 5.20 | COMB44-M2                                                                                                                               | Combination | 92.44  | 137.44 | -1.41 | 0.00                                                                                | -18.86 | 170.75 |
| 3                                                                                 | 0.00 | COMB45-M2                                                                                                                               | Combination | 56.45  | 143.56 | 4.71  | 0.00                                                                                | 5.63   | 917.27 |
| 3                                                                                 | 2.60 | COMB45-M2                                                                                                                               | Combination | 74.45  | 143.56 | 4.71  | 0.00                                                                                | -6.62  | 544.01 |
| 3                                                                                 | 5.20 | COMB45-M2                                                                                                                               | Combination | 92.44  | 143.56 | 4.71  | 0.00                                                                                | -18.86 | 170.75 |
| 3                                                                                 | 0.00 | COMB46-M2                                                                                                                               | Combination | 56.45  | 143.56 | -4.71 | 0.00                                                                                | -43.36 | 917.27 |
| 3                                                                                 | 2.60 | COMB46-M2                                                                                                                               | Combination | 74.45  | 143.56 | -4.71 | 0.00                                                                                | -31.11 | 544.01 |
| 3                                                                                 | 5.20 | COMB46-M2                                                                                                                               | Combination | 92.44  | 143.56 | -4.71 | 0.00                                                                                | -18.86 | 170.75 |
| 3                                                                                 | 0.00 | COMB47-M2                                                                                                                               | Combination | 56.45  | 140.74 | 4.71  | 0.00                                                                                | 5.63   | 902.57 |
| 3                                                                                 | 2.60 | COMB47-M2                                                                                                                               | Combination | 74.45  | 140.74 | 4.71  | 0.00                                                                                | -6.62  | 536.66 |
| 3                                                                                 | 5.20 | COMB47-M2                                                                                                                               | Combination | 92.44  | 140.74 | 4.71  | 0.00                                                                                | -18.86 | 170.75 |
| 3                                                                                 | 0.00 | COMB48-M2                                                                                                                               | Combination | 56.45  | 140.74 | -4.71 | 0.00                                                                                | -43.36 | 902.57 |
| 3                                                                                 | 2.60 | COMB48-M2                                                                                                                               | Combination | 74.45  | 140.74 | -4.71 | 0.00                                                                                | -31.11 | 536.66 |
| 3                                                                                 | 5.20 | COMB48-M2                                                                                                                               | Combination | 92.44  | 140.74 | -4.71 | 0.00                                                                                | -18.86 | 170.75 |
| 6                                                                                 | 0.00 | COMB1                                                                                                                                   | Combination | -63.98 | 32.04  | -0.20 | -4.49                                                                               | -41.21 | 126.76 |
| 6                                                                                 | 0.50 | COMB1                                                                                                                                   | Combination | -60.52 | 32.04  | -0.20 | -4.49                                                                               | -41.11 | 110.74 |



|  |      | <b>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</b> |             |        |       |  |       |         |        |
|-----------------------------------------------------------------------------------|------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------|-------|-------------------------------------------------------------------------------------|-------|---------|--------|
| 6                                                                                 | 1.00 | COMB1                                                                                                                                            | Combination | -57.06 | 32.04 | -0.20                                                                               | -4.49 | -41.01  | 94.72  |
| 6                                                                                 | 0.00 | COMB2                                                                                                                                            | Combination | -63.98 | 32.04 | -3.17                                                                               | -5.85 | -73.13  | 126.76 |
| 6                                                                                 | 0.50 | COMB2                                                                                                                                            | Combination | -60.52 | 32.04 | -3.17                                                                               | -5.85 | -71.55  | 110.74 |
| 6                                                                                 | 1.00 | COMB2                                                                                                                                            | Combination | -57.06 | 32.04 | -3.17                                                                               | -5.85 | -69.96  | 94.72  |
| 6                                                                                 | 0.00 | COMB3                                                                                                                                            | Combination | -68.80 | 13.84 | -0.20                                                                               | -4.49 | -41.21  | 48.21  |
| 6                                                                                 | 0.50 | COMB3                                                                                                                                            | Combination | -65.34 | 13.84 | -0.20                                                                               | -4.49 | -41.11  | 41.29  |
| 6                                                                                 | 1.00 | COMB3                                                                                                                                            | Combination | -61.88 | 13.84 | -0.20                                                                               | -4.49 | -41.01  | 34.37  |
| 6                                                                                 | 0.00 | COMB4                                                                                                                                            | Combination | -68.80 | 13.84 | -3.17                                                                               | -5.85 | -73.13  | 48.21  |
| 6                                                                                 | 0.50 | COMB4                                                                                                                                            | Combination | -65.34 | 13.84 | -3.17                                                                               | -5.85 | -71.55  | 41.29  |
| 6                                                                                 | 1.00 | COMB4                                                                                                                                            | Combination | -61.88 | 13.84 | -3.17                                                                               | -5.85 | -69.96  | 34.37  |
| 6                                                                                 | 0.00 | COMB5                                                                                                                                            | Combination | -65.67 | 25.67 | 3.26                                                                                | -2.91 | -3.97   | 99.27  |
| 6                                                                                 | 0.50 | COMB5                                                                                                                                            | Combination | -62.21 | 25.67 | 3.26                                                                                | -2.91 | -5.60   | 86.43  |
| 6                                                                                 | 1.00 | COMB5                                                                                                                                            | Combination | -58.75 | 25.67 | 3.26                                                                                | -2.91 | -7.23   | 73.60  |
| 6                                                                                 | 0.00 | COMB6                                                                                                                                            | Combination | -65.67 | 25.67 | -6.63                                                                               | -7.43 | -110.37 | 99.27  |
| 6                                                                                 | 0.50 | COMB6                                                                                                                                            | Combination | -62.21 | 25.67 | -6.63                                                                               | -7.43 | -107.06 | 86.43  |
| 6                                                                                 | 1.00 | COMB6                                                                                                                                            | Combination | -58.75 | 25.67 | -6.63                                                                               | -7.43 | -103.74 | 73.60  |
| 6                                                                                 | 0.00 | COMB7                                                                                                                                            | Combination | -67.11 | 20.21 | 3.26                                                                                | -2.91 | -3.97   | 75.70  |
| 6                                                                                 | 0.50 | COMB7                                                                                                                                            | Combination | -63.65 | 20.21 | 3.26                                                                                | -2.91 | -5.60   | 65.60  |
| 6                                                                                 | 1.00 | COMB7                                                                                                                                            | Combination | -60.19 | 20.21 | 3.26                                                                                | -2.91 | -7.23   | 55.49  |
| 6                                                                                 | 0.00 | COMB8                                                                                                                                            | Combination | -67.11 | 20.21 | -6.63                                                                               | -7.43 | -110.37 | 75.70  |
| 6                                                                                 | 0.50 | COMB8                                                                                                                                            | Combination | -63.65 | 20.21 | -6.63                                                                               | -7.43 | -107.06 | 65.60  |
| 6                                                                                 | 1.00 | COMB8                                                                                                                                            | Combination | -60.19 | 20.21 | -6.63                                                                               | -7.43 | -103.74 | 55.49  |
| 6                                                                                 | 0.00 | COMB9                                                                                                                                            | Combination | -45.97 | 32.02 | -0.20                                                                               | -4.49 | -41.21  | 126.65 |
| 6                                                                                 | 0.50 | COMB9                                                                                                                                            | Combination | -42.51 | 32.02 | -0.20                                                                               | -4.49 | -41.11  | 110.64 |
| 6                                                                                 | 1.00 | COMB9                                                                                                                                            | Combination | -39.05 | 32.02 | -0.20                                                                               | -4.49 | -41.01  | 94.63  |
| 6                                                                                 | 0.00 | COMB10                                                                                                                                           | Combination | -45.97 | 32.02 | -3.17                                                                               | -5.85 | -73.13  | 126.65 |
| 6                                                                                 | 0.50 | COMB10                                                                                                                                           | Combination | -42.51 | 32.02 | -3.17                                                                               | -5.85 | -71.55  | 110.64 |
| 6                                                                                 | 1.00 | COMB10                                                                                                                                           | Combination | -39.05 | 32.02 | -3.17                                                                               | -5.85 | -69.96  | 94.63  |
| 6                                                                                 | 0.00 | COMB11                                                                                                                                           | Combination | -50.79 | 13.81 | -0.20                                                                               | -4.49 | -41.21  | 48.10  |
| 6                                                                                 | 0.50 | COMB11                                                                                                                                           | Combination | -47.33 | 13.81 | -0.20                                                                               | -4.49 | -41.11  | 41.19  |
| 6                                                                                 | 1.00 | COMB11                                                                                                                                           | Combination | -43.87 | 13.81 | -0.20                                                                               | -4.49 | -41.01  | 34.28  |
| 6                                                                                 | 0.00 | COMB12                                                                                                                                           | Combination | -50.79 | 13.81 | -3.17                                                                               | -5.85 | -73.13  | 48.10  |
| 6                                                                                 | 0.50 | COMB12                                                                                                                                           | Combination | -47.33 | 13.81 | -3.17                                                                               | -5.85 | -71.55  | 41.19  |
| 6                                                                                 | 1.00 | COMB12                                                                                                                                           | Combination | -43.87 | 13.81 | -3.17                                                                               | -5.85 | -69.96  | 34.28  |
| 6                                                                                 | 0.00 | COMB13                                                                                                                                           | Combination | -47.66 | 25.65 | 3.26                                                                                | -2.91 | -3.97   | 99.16  |
| 6                                                                                 | 0.50 | COMB13                                                                                                                                           | Combination | -44.20 | 25.65 | 3.26                                                                                | -2.91 | -5.60   | 86.33  |
| 6                                                                                 | 1.00 | COMB13                                                                                                                                           | Combination | -40.74 | 25.65 | 3.26                                                                                | -2.91 | -7.23   | 73.51  |
| 6                                                                                 | 0.00 | COMB14                                                                                                                                           | Combination | -47.66 | 25.65 | -6.63                                                                               | -7.43 | -110.37 | 99.16  |



|  |      | <b>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</b> |             |        |       |  |       |         |        |
|-----------------------------------------------------------------------------------|------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------|-------|-------------------------------------------------------------------------------------|-------|---------|--------|
| 6                                                                                 | 0.50 | COMB14                                                                                                                                           | Combination | -44.20 | 25.65 | -6.63                                                                               | -7.43 | -107.06 | 86.33  |
| 6                                                                                 | 1.00 | COMB14                                                                                                                                           | Combination | -40.74 | 25.65 | -6.63                                                                               | -7.43 | -103.74 | 73.51  |
| 6                                                                                 | 0.00 | COMB15                                                                                                                                           | Combination | -49.10 | 20.18 | 3.26                                                                                | -2.91 | -3.97   | 75.59  |
| 6                                                                                 | 0.50 | COMB15                                                                                                                                           | Combination | -45.64 | 20.18 | 3.26                                                                                | -2.91 | -5.60   | 65.50  |
| 6                                                                                 | 1.00 | COMB15                                                                                                                                           | Combination | -42.18 | 20.18 | 3.26                                                                                | -2.91 | -7.23   | 55.40  |
| 6                                                                                 | 0.00 | COMB16                                                                                                                                           | Combination | -49.10 | 20.18 | -6.63                                                                               | -7.43 | -110.37 | 75.59  |
| 6                                                                                 | 0.50 | COMB16                                                                                                                                           | Combination | -45.64 | 20.18 | -6.63                                                                               | -7.43 | -107.06 | 65.50  |
| 6                                                                                 | 1.00 | COMB16                                                                                                                                           | Combination | -42.18 | 20.18 | -6.63                                                                               | -7.43 | -103.74 | 55.40  |
| 6                                                                                 | 0.00 | COMB17-M2                                                                                                                                        | Combination | -28.69 | 80.99 | -0.05                                                                               | -5.32 | -38.36  | 527.63 |
| 6                                                                                 | 0.50 | COMB17-M2                                                                                                                                        | Combination | -25.23 | 80.99 | -0.05                                                                               | -5.32 | -38.34  | 487.14 |
| 6                                                                                 | 1.00 | COMB17-M2                                                                                                                                        | Combination | -21.77 | 80.99 | -0.05                                                                               | -5.32 | -38.31  | 446.64 |
| 6                                                                                 | 0.00 | COMB18-M2                                                                                                                                        | Combination | -28.69 | 80.99 | -3.02                                                                               | -6.68 | -70.28  | 527.63 |
| 6                                                                                 | 0.50 | COMB18-M2                                                                                                                                        | Combination | -25.23 | 80.99 | -3.02                                                                               | -6.68 | -68.77  | 487.14 |
| 6                                                                                 | 1.00 | COMB18-M2                                                                                                                                        | Combination | -21.77 | 80.99 | -3.02                                                                               | -6.68 | -67.26  | 446.64 |
| 6                                                                                 | 0.00 | COMB19-M2                                                                                                                                        | Combination | -33.51 | 62.79 | -0.05                                                                               | -5.32 | -38.36  | 449.08 |
| 6                                                                                 | 0.50 | COMB19-M2                                                                                                                                        | Combination | -30.05 | 62.79 | -0.05                                                                               | -5.32 | -38.34  | 417.69 |
| 6                                                                                 | 1.00 | COMB19-M2                                                                                                                                        | Combination | -26.59 | 62.79 | -0.05                                                                               | -5.32 | -38.31  | 386.29 |
| 6                                                                                 | 0.00 | COMB20-M2                                                                                                                                        | Combination | -33.51 | 62.79 | -3.02                                                                               | -6.68 | -70.28  | 449.08 |
| 6                                                                                 | 0.50 | COMB20-M2                                                                                                                                        | Combination | -30.05 | 62.79 | -3.02                                                                               | -6.68 | -68.77  | 417.69 |
| 6                                                                                 | 1.00 | COMB20-M2                                                                                                                                        | Combination | -26.59 | 62.79 | -3.02                                                                               | -6.68 | -67.26  | 386.29 |
| 6                                                                                 | 0.00 | COMB21-M2                                                                                                                                        | Combination | -30.38 | 74.62 | 3.41                                                                                | -3.74 | -1.12   | 500.14 |
| 6                                                                                 | 0.50 | COMB21-M2                                                                                                                                        | Combination | -26.92 | 74.62 | 3.41                                                                                | -3.74 | -2.83   | 462.83 |
| 6                                                                                 | 1.00 | COMB21-M2                                                                                                                                        | Combination | -23.46 | 74.62 | 3.41                                                                                | -3.74 | -4.53   | 425.52 |
| 6                                                                                 | 0.00 | COMB22-M2                                                                                                                                        | Combination | -30.38 | 74.62 | -6.47                                                                               | -8.26 | -107.52 | 500.14 |
| 6                                                                                 | 0.50 | COMB22-M2                                                                                                                                        | Combination | -26.92 | 74.62 | -6.47                                                                               | -8.26 | -104.28 | 462.83 |
| 6                                                                                 | 1.00 | COMB22-M2                                                                                                                                        | Combination | -23.46 | 74.62 | -6.47                                                                               | -8.26 | -101.04 | 425.52 |
| 6                                                                                 | 0.00 | COMB23-M2                                                                                                                                        | Combination | -31.82 | 69.16 | 3.41                                                                                | -3.74 | -1.12   | 476.57 |
| 6                                                                                 | 0.50 | COMB23-M2                                                                                                                                        | Combination | -28.36 | 69.16 | 3.41                                                                                | -3.74 | -2.83   | 441.99 |
| 6                                                                                 | 1.00 | COMB23-M2                                                                                                                                        | Combination | -24.90 | 69.16 | 3.41                                                                                | -3.74 | -4.53   | 407.41 |
| 6                                                                                 | 0.00 | COMB24-M2                                                                                                                                        | Combination | -31.82 | 69.16 | -6.47                                                                               | -8.26 | -107.52 | 476.57 |
| 6                                                                                 | 0.50 | COMB24-M2                                                                                                                                        | Combination | -28.36 | 69.16 | -6.47                                                                               | -8.26 | -104.28 | 441.99 |
| 6                                                                                 | 1.00 | COMB24-M2                                                                                                                                        | Combination | -24.90 | 69.16 | -6.47                                                                               | -8.26 | -101.04 | 407.41 |
| 6                                                                                 | 0.00 | COMB25-M2                                                                                                                                        | Combination | -10.68 | 80.96 | -0.05                                                                               | -5.32 | -38.36  | 527.52 |
| 6                                                                                 | 0.50 | COMB25-M2                                                                                                                                        | Combination | -7.22  | 80.96 | -0.05                                                                               | -5.32 | -38.34  | 487.04 |
| 6                                                                                 | 1.00 | COMB25-M2                                                                                                                                        | Combination | -3.76  | 80.96 | -0.05                                                                               | -5.32 | -38.31  | 446.55 |
| 6                                                                                 | 0.00 | COMB26-M2                                                                                                                                        | Combination | -10.68 | 80.96 | -3.02                                                                               | -6.68 | -70.28  | 527.52 |
| 6                                                                                 | 0.50 | COMB26-M2                                                                                                                                        | Combination | -7.22  | 80.96 | -3.02                                                                               | -6.68 | -68.77  | 487.04 |
| 6                                                                                 | 1.00 | COMB26-M2                                                                                                                                        | Combination | -3.76  | 80.96 | -3.02                                                                               | -6.68 | -67.26  | 446.55 |

|  |      | ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br>SAN CRISTÓBAL, EN BOGOTÁ D.C. |             |        |       |       |  |         |        |
|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------|--------|-------|-------|-------------------------------------------------------------------------------------|---------|--------|
| 6                                                                                 | 0.00 | COMB27-M2                                                                                                                               | Combination | -15.50 | 62.76 | -0.05 | -5.32                                                                               | -38.36  | 448.96 |
| 6                                                                                 | 0.50 | COMB27-M2                                                                                                                               | Combination | -12.04 | 62.76 | -0.05 | -5.32                                                                               | -38.34  | 417.58 |
| 6                                                                                 | 1.00 | COMB27-M2                                                                                                                               | Combination | -8.58  | 62.76 | -0.05 | -5.32                                                                               | -38.31  | 386.21 |
| 6                                                                                 | 0.00 | COMB28-M2                                                                                                                               | Combination | -15.50 | 62.76 | -3.02 | -6.68                                                                               | -70.28  | 448.96 |
| 6                                                                                 | 0.50 | COMB28-M2                                                                                                                               | Combination | -12.04 | 62.76 | -3.02 | -6.68                                                                               | -68.77  | 417.58 |
| 6                                                                                 | 1.00 | COMB28-M2                                                                                                                               | Combination | -8.58  | 62.76 | -3.02 | -6.68                                                                               | -67.26  | 386.21 |
| 6                                                                                 | 0.00 | COMB29-M2                                                                                                                               | Combination | -12.37 | 74.59 | 3.41  | -3.74                                                                               | -1.12   | 500.02 |
| 6                                                                                 | 0.50 | COMB29-M2                                                                                                                               | Combination | -8.91  | 74.59 | 3.41  | -3.74                                                                               | -2.83   | 462.73 |
| 6                                                                                 | 1.00 | COMB29-M2                                                                                                                               | Combination | -5.45  | 74.59 | 3.41  | -3.74                                                                               | -4.53   | 425.43 |
| 6                                                                                 | 0.00 | COMB30-M2                                                                                                                               | Combination | -12.37 | 74.59 | -6.47 | -8.26                                                                               | -107.52 | 500.02 |
| 6                                                                                 | 0.50 | COMB30-M2                                                                                                                               | Combination | -8.91  | 74.59 | -6.47 | -8.26                                                                               | -104.28 | 462.73 |
| 6                                                                                 | 1.00 | COMB30-M2                                                                                                                               | Combination | -5.45  | 74.59 | -6.47 | -8.26                                                                               | -101.04 | 425.43 |
| 6                                                                                 | 0.00 | COMB31-M2                                                                                                                               | Combination | -13.81 | 69.13 | 3.41  | -3.74                                                                               | -1.12   | 476.46 |
| 6                                                                                 | 0.50 | COMB31-M2                                                                                                                               | Combination | -10.35 | 69.13 | 3.41  | -3.74                                                                               | -2.83   | 441.89 |
| 6                                                                                 | 1.00 | COMB31-M2                                                                                                                               | Combination | -6.89  | 69.13 | 3.41  | -3.74                                                                               | -4.53   | 407.33 |
| 6                                                                                 | 0.00 | COMB32-M2                                                                                                                               | Combination | -13.81 | 69.13 | -6.47 | -8.26                                                                               | -107.52 | 476.46 |
| 6                                                                                 | 0.50 | COMB32-M2                                                                                                                               | Combination | -10.35 | 69.13 | -6.47 | -8.26                                                                               | -104.28 | 441.89 |
| 6                                                                                 | 1.00 | COMB32-M2                                                                                                                               | Combination | -6.89  | 69.13 | -6.47 | -8.26                                                                               | -101.04 | 407.33 |
| 6                                                                                 | 0.00 | COMB33-M2                                                                                                                               | Combination | -27.70 | 82.75 | -1.08 | -8.24                                                                               | -41.10  | 539.17 |
| 6                                                                                 | 0.50 | COMB33-M2                                                                                                                               | Combination | -24.24 | 82.75 | -1.08 | -8.24                                                                               | -40.56  | 497.79 |
| 6                                                                                 | 1.00 | COMB33-M2                                                                                                                               | Combination | -20.78 | 82.75 | -1.08 | -8.24                                                                               | -40.02  | 456.42 |
| 6                                                                                 | 0.00 | COMB34-M2                                                                                                                               | Combination | -27.70 | 82.75 | -4.05 | -9.59                                                                               | -73.02  | 539.17 |
| 6                                                                                 | 0.50 | COMB34-M2                                                                                                                               | Combination | -24.24 | 82.75 | -4.05 | -9.59                                                                               | -70.99  | 497.79 |
| 6                                                                                 | 1.00 | COMB34-M2                                                                                                                               | Combination | -20.78 | 82.75 | -4.05 | -9.59                                                                               | -68.97  | 456.42 |
| 6                                                                                 | 0.00 | COMB35-M2                                                                                                                               | Combination | -32.52 | 64.54 | -1.08 | -8.24                                                                               | -41.10  | 460.61 |
| 6                                                                                 | 0.50 | COMB35-M2                                                                                                                               | Combination | -29.06 | 64.54 | -1.08 | -8.24                                                                               | -40.56  | 428.34 |
| 6                                                                                 | 1.00 | COMB35-M2                                                                                                                               | Combination | -25.60 | 64.54 | -1.08 | -8.24                                                                               | -40.02  | 396.07 |
| 6                                                                                 | 0.00 | COMB36-M2                                                                                                                               | Combination | -32.52 | 64.54 | -4.05 | -9.59                                                                               | -73.02  | 460.61 |
| 6                                                                                 | 0.50 | COMB36-M2                                                                                                                               | Combination | -29.06 | 64.54 | -4.05 | -9.59                                                                               | -70.99  | 428.34 |
| 6                                                                                 | 1.00 | COMB36-M2                                                                                                                               | Combination | -25.60 | 64.54 | -4.05 | -9.59                                                                               | -68.97  | 396.07 |
| 6                                                                                 | 0.00 | COMB37-M2                                                                                                                               | Combination | -29.39 | 76.37 | 2.37  | -6.66                                                                               | -3.86   | 511.67 |
| 6                                                                                 | 0.50 | COMB37-M2                                                                                                                               | Combination | -25.93 | 76.37 | 2.37  | -6.66                                                                               | -5.05   | 473.49 |
| 6                                                                                 | 1.00 | COMB37-M2                                                                                                                               | Combination | -22.47 | 76.37 | 2.37  | -6.66                                                                               | -6.24   | 435.30 |
| 6                                                                                 | 0.00 | COMB38-M2                                                                                                                               | Combination | -29.39 | 76.37 | -7.51 | -11.17                                                                              | -110.26 | 511.67 |
| 6                                                                                 | 0.50 | COMB38-M2                                                                                                                               | Combination | -25.93 | 76.37 | -7.51 | -11.17                                                                              | -106.50 | 473.49 |
| 6                                                                                 | 1.00 | COMB38-M2                                                                                                                               | Combination | -22.47 | 76.37 | -7.51 | -11.17                                                                              | -102.75 | 435.30 |
| 6                                                                                 | 0.00 | COMB39-M2                                                                                                                               | Combination | -30.83 | 70.91 | 2.37  | -6.66                                                                               | -3.86   | 488.11 |
| 6                                                                                 | 0.50 | COMB39-M2                                                                                                                               | Combination | -27.37 | 70.91 | 2.37  | -6.66                                                                               | -5.05   | 452.65 |

|  |      | <b>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</b> |             |        |       |       |  |         |        |
|-----------------------------------------------------------------------------------|------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------|-------|-------|-------------------------------------------------------------------------------------|---------|--------|
| 6                                                                                 | 1.00 | COMB39-M2                                                                                                                                        | Combination | -23.91 | 70.91 | 2.37  | -6.66                                                                               | -6.24   | 417.19 |
| 6                                                                                 | 0.00 | COMB40-M2                                                                                                                                        | Combination | -30.83 | 70.91 | -7.51 | -11.17                                                                              | -110.26 | 488.11 |
| 6                                                                                 | 0.50 | COMB40-M2                                                                                                                                        | Combination | -27.37 | 70.91 | -7.51 | -11.17                                                                              | -106.50 | 452.65 |
| 6                                                                                 | 1.00 | COMB40-M2                                                                                                                                        | Combination | -23.91 | 70.91 | -7.51 | -11.17                                                                              | -102.75 | 417.19 |
| 6                                                                                 | 0.00 | COMB41-M2                                                                                                                                        | Combination | -9.69  | 82.72 | -1.08 | -8.24                                                                               | -41.10  | 539.05 |
| 6                                                                                 | 0.50 | COMB41-M2                                                                                                                                        | Combination | -6.23  | 82.72 | -1.08 | -8.24                                                                               | -40.56  | 497.69 |
| 6                                                                                 | 1.00 | COMB41-M2                                                                                                                                        | Combination | -2.77  | 82.72 | -1.08 | -8.24                                                                               | -40.02  | 456.33 |
| 6                                                                                 | 0.00 | COMB42-M2                                                                                                                                        | Combination | -9.69  | 82.72 | -4.05 | -9.59                                                                               | -73.02  | 539.05 |
| 6                                                                                 | 0.50 | COMB42-M2                                                                                                                                        | Combination | -6.23  | 82.72 | -4.05 | -9.59                                                                               | -70.99  | 497.69 |
| 6                                                                                 | 1.00 | COMB42-M2                                                                                                                                        | Combination | -2.77  | 82.72 | -4.05 | -9.59                                                                               | -68.97  | 456.33 |
| 6                                                                                 | 0.00 | COMB43-M2                                                                                                                                        | Combination | -14.51 | 64.51 | -1.08 | -8.24                                                                               | -41.10  | 460.50 |
| 6                                                                                 | 0.50 | COMB43-M2                                                                                                                                        | Combination | -11.05 | 64.51 | -1.08 | -8.24                                                                               | -40.56  | 428.24 |
| 6                                                                                 | 1.00 | COMB43-M2                                                                                                                                        | Combination | -7.59  | 64.51 | -1.08 | -8.24                                                                               | -40.02  | 395.98 |
| 6                                                                                 | 0.00 | COMB44-M2                                                                                                                                        | Combination | -14.51 | 64.51 | -4.05 | -9.59                                                                               | -73.02  | 460.50 |
| 6                                                                                 | 0.50 | COMB44-M2                                                                                                                                        | Combination | -11.05 | 64.51 | -4.05 | -9.59                                                                               | -70.99  | 428.24 |
| 6                                                                                 | 1.00 | COMB44-M2                                                                                                                                        | Combination | -7.59  | 64.51 | -4.05 | -9.59                                                                               | -68.97  | 395.98 |
| 6                                                                                 | 0.00 | COMB45-M2                                                                                                                                        | Combination | -11.38 | 76.35 | 2.37  | -6.66                                                                               | -3.86   | 511.56 |
| 6                                                                                 | 0.50 | COMB45-M2                                                                                                                                        | Combination | -7.92  | 76.35 | 2.37  | -6.66                                                                               | -5.05   | 473.38 |
| 6                                                                                 | 1.00 | COMB45-M2                                                                                                                                        | Combination | -4.46  | 76.35 | 2.37  | -6.66                                                                               | -6.24   | 435.21 |
| 6                                                                                 | 0.00 | COMB46-M2                                                                                                                                        | Combination | -11.38 | 76.35 | -7.51 | -11.17                                                                              | -110.26 | 511.56 |
| 6                                                                                 | 0.50 | COMB46-M2                                                                                                                                        | Combination | -7.92  | 76.35 | -7.51 | -11.17                                                                              | -106.50 | 473.38 |
| 6                                                                                 | 1.00 | COMB46-M2                                                                                                                                        | Combination | -4.46  | 76.35 | -7.51 | -11.17                                                                              | -102.75 | 435.21 |
| 6                                                                                 | 0.00 | COMB47-M2                                                                                                                                        | Combination | -12.82 | 70.89 | 2.37  | -6.66                                                                               | -3.86   | 487.99 |
| 6                                                                                 | 0.50 | COMB47-M2                                                                                                                                        | Combination | -9.36  | 70.89 | 2.37  | -6.66                                                                               | -5.05   | 452.55 |
| 6                                                                                 | 1.00 | COMB47-M2                                                                                                                                        | Combination | -5.90  | 70.89 | 2.37  | -6.66                                                                               | -6.24   | 417.11 |
| 6                                                                                 | 0.00 | COMB48-M2                                                                                                                                        | Combination | -12.82 | 70.89 | -7.51 | -11.17                                                                              | -110.26 | 487.99 |
| 6                                                                                 | 0.50 | COMB48-M2                                                                                                                                        | Combination | -9.36  | 70.89 | -7.51 | -11.17                                                                              | -106.50 | 452.55 |
| 6                                                                                 | 1.00 | COMB48-M2                                                                                                                                        | Combination | -5.90  | 70.89 | -7.51 | -11.17                                                                              | -102.75 | 417.11 |
| 12                                                                                | 0.00 | COMB1                                                                                                                                            | Combination | -57.06 | 32.04 | -0.20 | -4.49                                                                               | -41.01  | 94.72  |
| 12                                                                                | 2.50 | COMB1                                                                                                                                            | Combination | -39.76 | 32.04 | -0.20 | -4.49                                                                               | -40.50  | 14.61  |
| 12                                                                                | 5.00 | COMB1                                                                                                                                            | Combination | -22.46 | 32.04 | -0.20 | -4.49                                                                               | -40.00  | -65.50 |
| 12                                                                                | 0.00 | COMB2                                                                                                                                            | Combination | -57.06 | 32.04 | -3.17 | -5.85                                                                               | -69.96  | 94.72  |
| 12                                                                                | 2.50 | COMB2                                                                                                                                            | Combination | -39.76 | 32.04 | -3.17 | -5.85                                                                               | -62.05  | 14.61  |
| 12                                                                                | 5.00 | COMB2                                                                                                                                            | Combination | -22.46 | 32.04 | -3.17 | -5.85                                                                               | -54.13  | -65.50 |
| 12                                                                                | 0.00 | COMB3                                                                                                                                            | Combination | -61.88 | 13.84 | -0.20 | -4.49                                                                               | -41.01  | 34.37  |
| 12                                                                                | 2.50 | COMB3                                                                                                                                            | Combination | -44.58 | 13.84 | -0.20 | -4.49                                                                               | -40.50  | -0.23  |
| 12                                                                                | 5.00 | COMB3                                                                                                                                            | Combination | -27.28 | 13.84 | -0.20 | -4.49                                                                               | -40.00  | -34.83 |
| 12                                                                                | 0.00 | COMB4                                                                                                                                            | Combination | -61.88 | 13.84 | -3.17 | -5.85                                                                               | -69.96  | 34.37  |

|  |      | ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br>SAN CRISTÓBAL, EN BOGOTÁ D.C. |             |        |       |  |       |         |        |
|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------|--------|-------|-------------------------------------------------------------------------------------|-------|---------|--------|
| 12                                                                                | 2.50 | COMB4                                                                                                                                   | Combination | -44.58 | 13.84 | -3.17                                                                               | -5.85 | -62.05  | -0.23  |
| 12                                                                                | 5.00 | COMB4                                                                                                                                   | Combination | -27.28 | 13.84 | -3.17                                                                               | -5.85 | -54.13  | -34.83 |
| 12                                                                                | 0.00 | COMB5                                                                                                                                   | Combination | -58.75 | 25.67 | 3.26                                                                                | -2.91 | -7.23   | 73.60  |
| 12                                                                                | 2.50 | COMB5                                                                                                                                   | Combination | -41.45 | 25.67 | 3.26                                                                                | -2.91 | -15.37  | 9.42   |
| 12                                                                                | 5.00 | COMB5                                                                                                                                   | Combination | -24.15 | 25.67 | 3.26                                                                                | -2.91 | -23.51  | -54.77 |
| 12                                                                                | 0.00 | COMB6                                                                                                                                   | Combination | -58.75 | 25.67 | -6.63                                                                               | -7.43 | -103.74 | 73.60  |
| 12                                                                                | 2.50 | COMB6                                                                                                                                   | Combination | -41.45 | 25.67 | -6.63                                                                               | -7.43 | -87.18  | 9.42   |
| 12                                                                                | 5.00 | COMB6                                                                                                                                   | Combination | -24.15 | 25.67 | -6.63                                                                               | -7.43 | -70.61  | -54.77 |
| 12                                                                                | 0.00 | COMB7                                                                                                                                   | Combination | -60.19 | 20.21 | 3.26                                                                                | -2.91 | -7.23   | 55.49  |
| 12                                                                                | 2.50 | COMB7                                                                                                                                   | Combination | -42.89 | 20.21 | 3.26                                                                                | -2.91 | -15.37  | 4.96   |
| 12                                                                                | 5.00 | COMB7                                                                                                                                   | Combination | -25.59 | 20.21 | 3.26                                                                                | -2.91 | -23.51  | -45.56 |
| 12                                                                                | 0.00 | COMB8                                                                                                                                   | Combination | -60.19 | 20.21 | -6.63                                                                               | -7.43 | -103.74 | 55.49  |
| 12                                                                                | 2.50 | COMB8                                                                                                                                   | Combination | -42.89 | 20.21 | -6.63                                                                               | -7.43 | -87.18  | 4.96   |
| 12                                                                                | 5.00 | COMB8                                                                                                                                   | Combination | -25.59 | 20.21 | -6.63                                                                               | -7.43 | -70.61  | -45.56 |
| 12                                                                                | 0.00 | COMB9                                                                                                                                   | Combination | -39.05 | 32.02 | -0.20                                                                               | -4.49 | -41.01  | 94.63  |
| 12                                                                                | 2.50 | COMB9                                                                                                                                   | Combination | -21.75 | 32.02 | -0.20                                                                               | -4.49 | -40.50  | 14.59  |
| 12                                                                                | 5.00 | COMB9                                                                                                                                   | Combination | -4.45  | 32.02 | -0.20                                                                               | -4.49 | -40.00  | -65.45 |
| 12                                                                                | 0.00 | COMB10                                                                                                                                  | Combination | -39.05 | 32.02 | -3.17                                                                               | -5.85 | -69.96  | 94.63  |
| 12                                                                                | 2.50 | COMB10                                                                                                                                  | Combination | -21.75 | 32.02 | -3.17                                                                               | -5.85 | -62.05  | 14.59  |
| 12                                                                                | 5.00 | COMB10                                                                                                                                  | Combination | -4.45  | 32.02 | -3.17                                                                               | -5.85 | -54.13  | -65.45 |
| 12                                                                                | 0.00 | COMB11                                                                                                                                  | Combination | -43.87 | 13.81 | -0.20                                                                               | -4.49 | -41.01  | 34.28  |
| 12                                                                                | 2.50 | COMB11                                                                                                                                  | Combination | -26.57 | 13.81 | -0.20                                                                               | -4.49 | -40.50  | -0.25  |
| 12                                                                                | 5.00 | COMB11                                                                                                                                  | Combination | -9.27  | 13.81 | -0.20                                                                               | -4.49 | -40.00  | -34.78 |
| 12                                                                                | 0.00 | COMB12                                                                                                                                  | Combination | -43.87 | 13.81 | -3.17                                                                               | -5.85 | -69.96  | 34.28  |
| 12                                                                                | 2.50 | COMB12                                                                                                                                  | Combination | -26.57 | 13.81 | -3.17                                                                               | -5.85 | -62.05  | -0.25  |
| 12                                                                                | 5.00 | COMB12                                                                                                                                  | Combination | -9.27  | 13.81 | -3.17                                                                               | -5.85 | -54.13  | -34.78 |
| 12                                                                                | 0.00 | COMB13                                                                                                                                  | Combination | -40.74 | 25.65 | 3.26                                                                                | -2.91 | -7.23   | 73.51  |
| 12                                                                                | 2.50 | COMB13                                                                                                                                  | Combination | -23.44 | 25.65 | 3.26                                                                                | -2.91 | -15.37  | 9.40   |
| 12                                                                                | 5.00 | COMB13                                                                                                                                  | Combination | -6.14  | 25.65 | 3.26                                                                                | -2.91 | -23.51  | -54.72 |
| 12                                                                                | 0.00 | COMB14                                                                                                                                  | Combination | -40.74 | 25.65 | -6.63                                                                               | -7.43 | -103.74 | 73.51  |
| 12                                                                                | 2.50 | COMB14                                                                                                                                  | Combination | -23.44 | 25.65 | -6.63                                                                               | -7.43 | -87.18  | 9.40   |
| 12                                                                                | 5.00 | COMB14                                                                                                                                  | Combination | -6.14  | 25.65 | -6.63                                                                               | -7.43 | -70.61  | -54.72 |
| 12                                                                                | 0.00 | COMB15                                                                                                                                  | Combination | -42.18 | 20.18 | 3.26                                                                                | -2.91 | -7.23   | 55.40  |
| 12                                                                                | 2.50 | COMB15                                                                                                                                  | Combination | -24.88 | 20.18 | 3.26                                                                                | -2.91 | -15.37  | 4.94   |
| 12                                                                                | 5.00 | COMB15                                                                                                                                  | Combination | -7.58  | 20.18 | 3.26                                                                                | -2.91 | -23.51  | -45.52 |
| 12                                                                                | 0.00 | COMB16                                                                                                                                  | Combination | -42.18 | 20.18 | -6.63                                                                               | -7.43 | -103.74 | 55.40  |
| 12                                                                                | 2.50 | COMB16                                                                                                                                  | Combination | -24.88 | 20.18 | -6.63                                                                               | -7.43 | -87.18  | 4.94   |
| 12                                                                                | 5.00 | COMB16                                                                                                                                  | Combination | -7.58  | 20.18 | -6.63                                                                               | -7.43 | -70.61  | -45.52 |

|  |      | ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br>SAN CRISTÓBAL, EN BOGOTÁ D.C. |             |        |       |  |       |         |        |
|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------|--------|-------|-------------------------------------------------------------------------------------|-------|---------|--------|
| 12                                                                                | 0.00 | COMB17-M2                                                                                                                               | Combination | -21.77 | 80.99 | -0.05                                                                               | -5.32 | -38.31  | 446.64 |
| 12                                                                                | 2.50 | COMB17-M2                                                                                                                               | Combination | -4.47  | 80.99 | -0.05                                                                               | -5.32 | -38.18  | 244.17 |
| 12                                                                                | 5.00 | COMB17-M2                                                                                                                               | Combination | 12.83  | 80.99 | -0.05                                                                               | -5.32 | -38.06  | 41.69  |
| 12                                                                                | 0.00 | COMB18-M2                                                                                                                               | Combination | -21.77 | 80.99 | -3.02                                                                               | -6.68 | -67.26  | 446.64 |
| 12                                                                                | 2.50 | COMB18-M2                                                                                                                               | Combination | -4.47  | 80.99 | -3.02                                                                               | -6.68 | -59.73  | 244.17 |
| 12                                                                                | 5.00 | COMB18-M2                                                                                                                               | Combination | 12.83  | 80.99 | -3.02                                                                               | -6.68 | -52.19  | 41.69  |
| 12                                                                                | 0.00 | COMB19-M2                                                                                                                               | Combination | -26.59 | 62.79 | -0.05                                                                               | -5.32 | -38.31  | 386.29 |
| 12                                                                                | 2.50 | COMB19-M2                                                                                                                               | Combination | -9.29  | 62.79 | -0.05                                                                               | -5.32 | -38.18  | 229.33 |
| 12                                                                                | 5.00 | COMB19-M2                                                                                                                               | Combination | 8.01   | 62.79 | -0.05                                                                               | -5.32 | -38.06  | 72.36  |
| 12                                                                                | 0.00 | COMB20-M2                                                                                                                               | Combination | -26.59 | 62.79 | -3.02                                                                               | -6.68 | -67.26  | 386.29 |
| 12                                                                                | 2.50 | COMB20-M2                                                                                                                               | Combination | -9.29  | 62.79 | -3.02                                                                               | -6.68 | -59.73  | 229.33 |
| 12                                                                                | 5.00 | COMB20-M2                                                                                                                               | Combination | 8.01   | 62.79 | -3.02                                                                               | -6.68 | -52.19  | 72.36  |
| 12                                                                                | 0.00 | COMB21-M2                                                                                                                               | Combination | -23.46 | 74.62 | 3.41                                                                                | -3.74 | -4.53   | 425.52 |
| 12                                                                                | 2.50 | COMB21-M2                                                                                                                               | Combination | -6.16  | 74.62 | 3.41                                                                                | -3.74 | -13.05  | 238.97 |
| 12                                                                                | 5.00 | COMB21-M2                                                                                                                               | Combination | 11.14  | 74.62 | 3.41                                                                                | -3.74 | -21.57  | 52.43  |
| 12                                                                                | 0.00 | COMB22-M2                                                                                                                               | Combination | -23.46 | 74.62 | -6.47                                                                               | -8.26 | -101.04 | 425.52 |
| 12                                                                                | 2.50 | COMB22-M2                                                                                                                               | Combination | -6.16  | 74.62 | -6.47                                                                               | -8.26 | -84.86  | 238.97 |
| 12                                                                                | 5.00 | COMB22-M2                                                                                                                               | Combination | 11.14  | 74.62 | -6.47                                                                               | -8.26 | -68.67  | 52.43  |
| 12                                                                                | 0.00 | COMB23-M2                                                                                                                               | Combination | -24.90 | 69.16 | 3.41                                                                                | -3.74 | -4.53   | 407.41 |
| 12                                                                                | 2.50 | COMB23-M2                                                                                                                               | Combination | -7.60  | 69.16 | 3.41                                                                                | -3.74 | -13.05  | 234.52 |
| 12                                                                                | 5.00 | COMB23-M2                                                                                                                               | Combination | 9.70   | 69.16 | 3.41                                                                                | -3.74 | -21.57  | 61.63  |
| 12                                                                                | 0.00 | COMB24-M2                                                                                                                               | Combination | -24.90 | 69.16 | -6.47                                                                               | -8.26 | -101.04 | 407.41 |
| 12                                                                                | 2.50 | COMB24-M2                                                                                                                               | Combination | -7.60  | 69.16 | -6.47                                                                               | -8.26 | -84.86  | 234.52 |
| 12                                                                                | 5.00 | COMB24-M2                                                                                                                               | Combination | 9.70   | 69.16 | -6.47                                                                               | -8.26 | -68.67  | 61.63  |
| 12                                                                                | 0.00 | COMB25-M2                                                                                                                               | Combination | -3.76  | 80.96 | -0.05                                                                               | -5.32 | -38.31  | 446.55 |
| 12                                                                                | 2.50 | COMB25-M2                                                                                                                               | Combination | 13.54  | 80.96 | -0.05                                                                               | -5.32 | -38.18  | 244.15 |
| 12                                                                                | 5.00 | COMB25-M2                                                                                                                               | Combination | 30.84  | 80.96 | -0.05                                                                               | -5.32 | -38.06  | 41.74  |
| 12                                                                                | 0.00 | COMB26-M2                                                                                                                               | Combination | -3.76  | 80.96 | -3.02                                                                               | -6.68 | -67.26  | 446.55 |
| 12                                                                                | 2.50 | COMB26-M2                                                                                                                               | Combination | 13.54  | 80.96 | -3.02                                                                               | -6.68 | -59.73  | 244.15 |
| 12                                                                                | 5.00 | COMB26-M2                                                                                                                               | Combination | 30.84  | 80.96 | -3.02                                                                               | -6.68 | -52.19  | 41.74  |
| 12                                                                                | 0.00 | COMB27-M2                                                                                                                               | Combination | -8.58  | 62.76 | -0.05                                                                               | -5.32 | -38.31  | 386.21 |
| 12                                                                                | 2.50 | COMB27-M2                                                                                                                               | Combination | 8.72   | 62.76 | -0.05                                                                               | -5.32 | -38.18  | 229.31 |
| 12                                                                                | 5.00 | COMB27-M2                                                                                                                               | Combination | 26.02  | 62.76 | -0.05                                                                               | -5.32 | -38.06  | 72.41  |
| 12                                                                                | 0.00 | COMB28-M2                                                                                                                               | Combination | -8.58  | 62.76 | -3.02                                                                               | -6.68 | -67.26  | 386.21 |
| 12                                                                                | 2.50 | COMB28-M2                                                                                                                               | Combination | 8.72   | 62.76 | -3.02                                                                               | -6.68 | -59.73  | 229.31 |
| 12                                                                                | 5.00 | COMB28-M2                                                                                                                               | Combination | 26.02  | 62.76 | -3.02                                                                               | -6.68 | -52.19  | 72.41  |
| 12                                                                                | 0.00 | COMB29-M2                                                                                                                               | Combination | -5.45  | 74.59 | 3.41                                                                                | -3.74 | -4.53   | 425.43 |
| 12                                                                                | 2.50 | COMB29-M2                                                                                                                               | Combination | 11.85  | 74.59 | 3.41                                                                                | -3.74 | -13.05  | 238.95 |

|  |      | ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br>SAN CRISTÓBAL, EN BOGOTÁ D.C. |             |        |       |  |        |         |        |
|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------|--------|-------|-------------------------------------------------------------------------------------|--------|---------|--------|
| 12                                                                                | 5.00 | COMB29-M2                                                                                                                               | Combination | 29.15  | 74.59 | 3.41                                                                                | -3.74  | -21.57  | 52.47  |
| 12                                                                                | 0.00 | COMB30-M2                                                                                                                               | Combination | -5.45  | 74.59 | -6.47                                                                               | -8.26  | -101.04 | 425.43 |
| 12                                                                                | 2.50 | COMB30-M2                                                                                                                               | Combination | 11.85  | 74.59 | -6.47                                                                               | -8.26  | -84.86  | 238.95 |
| 12                                                                                | 5.00 | COMB30-M2                                                                                                                               | Combination | 29.15  | 74.59 | -6.47                                                                               | -8.26  | -68.67  | 52.47  |
| 12                                                                                | 0.00 | COMB31-M2                                                                                                                               | Combination | -6.89  | 69.13 | 3.41                                                                                | -3.74  | -4.53   | 407.33 |
| 12                                                                                | 2.50 | COMB31-M2                                                                                                                               | Combination | 10.41  | 69.13 | 3.41                                                                                | -3.74  | -13.05  | 234.50 |
| 12                                                                                | 5.00 | COMB31-M2                                                                                                                               | Combination | 27.71  | 69.13 | 3.41                                                                                | -3.74  | -21.57  | 61.68  |
| 12                                                                                | 0.00 | COMB32-M2                                                                                                                               | Combination | -6.89  | 69.13 | -6.47                                                                               | -8.26  | -101.04 | 407.33 |
| 12                                                                                | 2.50 | COMB32-M2                                                                                                                               | Combination | 10.41  | 69.13 | -6.47                                                                               | -8.26  | -84.86  | 234.50 |
| 12                                                                                | 5.00 | COMB32-M2                                                                                                                               | Combination | 27.71  | 69.13 | -6.47                                                                               | -8.26  | -68.67  | 61.68  |
| 12                                                                                | 0.00 | COMB33-M2                                                                                                                               | Combination | -20.78 | 82.75 | -1.08                                                                               | -8.24  | -40.02  | 456.42 |
| 12                                                                                | 2.50 | COMB33-M2                                                                                                                               | Combination | -3.48  | 82.75 | -1.08                                                                               | -8.24  | -37.30  | 249.55 |
| 12                                                                                | 5.00 | COMB33-M2                                                                                                                               | Combination | 13.82  | 82.75 | -1.08                                                                               | -8.24  | -34.59  | 42.69  |
| 12                                                                                | 0.00 | COMB34-M2                                                                                                                               | Combination | -20.78 | 82.75 | -4.05                                                                               | -9.59  | -68.97  | 456.42 |
| 12                                                                                | 2.50 | COMB34-M2                                                                                                                               | Combination | -3.48  | 82.75 | -4.05                                                                               | -9.59  | -58.85  | 249.55 |
| 12                                                                                | 5.00 | COMB34-M2                                                                                                                               | Combination | 13.82  | 82.75 | -4.05                                                                               | -9.59  | -48.72  | 42.69  |
| 12                                                                                | 0.00 | COMB35-M2                                                                                                                               | Combination | -25.60 | 64.54 | -1.08                                                                               | -8.24  | -40.02  | 396.07 |
| 12                                                                                | 2.50 | COMB35-M2                                                                                                                               | Combination | -8.30  | 64.54 | -1.08                                                                               | -8.24  | -37.30  | 234.72 |
| 12                                                                                | 5.00 | COMB35-M2                                                                                                                               | Combination | 9.00   | 64.54 | -1.08                                                                               | -8.24  | -34.59  | 73.36  |
| 12                                                                                | 0.00 | COMB36-M2                                                                                                                               | Combination | -25.60 | 64.54 | -4.05                                                                               | -9.59  | -68.97  | 396.07 |
| 12                                                                                | 2.50 | COMB36-M2                                                                                                                               | Combination | -8.30  | 64.54 | -4.05                                                                               | -9.59  | -58.85  | 234.72 |
| 12                                                                                | 5.00 | COMB36-M2                                                                                                                               | Combination | 9.00   | 64.54 | -4.05                                                                               | -9.59  | -48.72  | 73.36  |
| 12                                                                                | 0.00 | COMB37-M2                                                                                                                               | Combination | -22.47 | 76.37 | 2.37                                                                                | -6.66  | -6.24   | 435.30 |
| 12                                                                                | 2.50 | COMB37-M2                                                                                                                               | Combination | -5.17  | 76.37 | 2.37                                                                                | -6.66  | -12.17  | 244.36 |
| 12                                                                                | 5.00 | COMB37-M2                                                                                                                               | Combination | 12.13  | 76.37 | 2.37                                                                                | -6.66  | -18.11  | 53.42  |
| 12                                                                                | 0.00 | COMB38-M2                                                                                                                               | Combination | -22.47 | 76.37 | -7.51                                                                               | -11.17 | -102.75 | 435.30 |
| 12                                                                                | 2.50 | COMB38-M2                                                                                                                               | Combination | -5.17  | 76.37 | -7.51                                                                               | -11.17 | -83.98  | 244.36 |
| 12                                                                                | 5.00 | COMB38-M2                                                                                                                               | Combination | 12.13  | 76.37 | -7.51                                                                               | -11.17 | -65.21  | 53.42  |
| 12                                                                                | 0.00 | COMB39-M2                                                                                                                               | Combination | -23.91 | 70.91 | 2.37                                                                                | -6.66  | -6.24   | 417.19 |
| 12                                                                                | 2.50 | COMB39-M2                                                                                                                               | Combination | -6.61  | 70.91 | 2.37                                                                                | -6.66  | -12.17  | 239.91 |
| 12                                                                                | 5.00 | COMB39-M2                                                                                                                               | Combination | 10.69  | 70.91 | 2.37                                                                                | -6.66  | -18.11  | 62.63  |
| 12                                                                                | 0.00 | COMB40-M2                                                                                                                               | Combination | -23.91 | 70.91 | -7.51                                                                               | -11.17 | -102.75 | 417.19 |
| 12                                                                                | 2.50 | COMB40-M2                                                                                                                               | Combination | -6.61  | 70.91 | -7.51                                                                               | -11.17 | -83.98  | 239.91 |
| 12                                                                                | 5.00 | COMB40-M2                                                                                                                               | Combination | 10.69  | 70.91 | -7.51                                                                               | -11.17 | -65.21  | 62.63  |
| 12                                                                                | 0.00 | COMB41-M2                                                                                                                               | Combination | -2.77  | 82.72 | -1.08                                                                               | -8.24  | -40.02  | 456.33 |
| 12                                                                                | 2.50 | COMB41-M2                                                                                                                               | Combination | 14.53  | 82.72 | -1.08                                                                               | -8.24  | -37.30  | 249.54 |
| 12                                                                                | 5.00 | COMB41-M2                                                                                                                               | Combination | 31.83  | 82.72 | -1.08                                                                               | -8.24  | -34.59  | 42.74  |
| 12                                                                                | 0.00 | COMB42-M2                                                                                                                               | Combination | -2.77  | 82.72 | -4.05                                                                               | -9.59  | -68.97  | 456.33 |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|    |      |           |             |       |       |       |        |         |        |
|----|------|-----------|-------------|-------|-------|-------|--------|---------|--------|
| 12 | 2.50 | COMB42-M2 | Combination | 14.53 | 82.72 | -4.05 | -9.59  | -58.85  | 249.54 |
| 12 | 5.00 | COMB42-M2 | Combination | 31.83 | 82.72 | -4.05 | -9.59  | -48.72  | 42.74  |
| 12 | 0.00 | COMB43-M2 | Combination | -7.59 | 64.51 | -1.08 | -8.24  | -40.02  | 395.98 |
| 12 | 2.50 | COMB43-M2 | Combination | 9.71  | 64.51 | -1.08 | -8.24  | -37.30  | 234.70 |
| 12 | 5.00 | COMB43-M2 | Combination | 27.01 | 64.51 | -1.08 | -8.24  | -34.59  | 73.41  |
| 12 | 0.00 | COMB44-M2 | Combination | -7.59 | 64.51 | -4.05 | -9.59  | -68.97  | 395.98 |
| 12 | 2.50 | COMB44-M2 | Combination | 9.71  | 64.51 | -4.05 | -9.59  | -58.85  | 234.70 |
| 12 | 5.00 | COMB44-M2 | Combination | 27.01 | 64.51 | -4.05 | -9.59  | -48.72  | 73.41  |
| 12 | 0.00 | COMB45-M2 | Combination | -4.46 | 76.35 | 2.37  | -6.66  | -6.24   | 435.21 |
| 12 | 2.50 | COMB45-M2 | Combination | 12.84 | 76.35 | 2.37  | -6.66  | -12.17  | 244.34 |
| 12 | 5.00 | COMB45-M2 | Combination | 30.14 | 76.35 | 2.37  | -6.66  | -18.11  | 53.47  |
| 12 | 0.00 | COMB46-M2 | Combination | -4.46 | 76.35 | -7.51 | -11.17 | -102.75 | 435.21 |
| 12 | 2.50 | COMB46-M2 | Combination | 12.84 | 76.35 | -7.51 | -11.17 | -83.98  | 244.34 |
| 12 | 5.00 | COMB46-M2 | Combination | 30.14 | 76.35 | -7.51 | -11.17 | -65.21  | 53.47  |
| 12 | 0.00 | COMB47-M2 | Combination | -5.90 | 70.89 | 2.37  | -6.66  | -6.24   | 417.11 |
| 12 | 2.50 | COMB47-M2 | Combination | 11.40 | 70.89 | 2.37  | -6.66  | -12.17  | 239.89 |
| 12 | 5.00 | COMB47-M2 | Combination | 28.70 | 70.89 | 2.37  | -6.66  | -18.11  | 62.67  |
| 12 | 0.00 | COMB48-M2 | Combination | -5.90 | 70.89 | -7.51 | -11.17 | -102.75 | 417.11 |
| 12 | 2.50 | COMB48-M2 | Combination | 11.40 | 70.89 | -7.51 | -11.17 | -83.98  | 239.89 |
| 12 | 5.00 | COMB48-M2 | Combination | 28.70 | 70.89 | -7.51 | -11.17 | -65.21  | 62.67  |

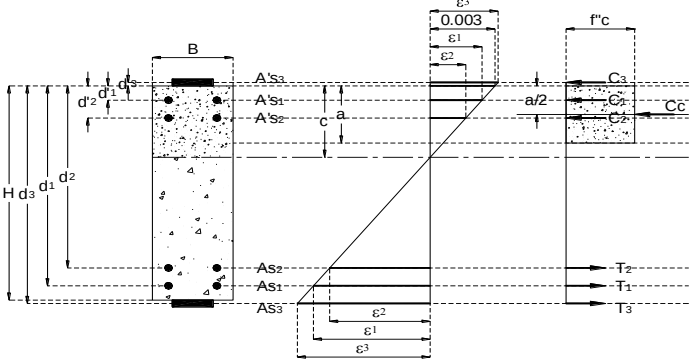
**Tabla 10-4 Elementos mecánicos mástil 2**

## 10.5 Diseño de trabe de liga

### 10.5.1 Diseño a flexión

Las combinaciones con los elementos mecánicos máximos son los siguientes:

COMB43 : Pu = 32.3 Ton V2 = 52.0 V3 = 2.3 Ton M2 =14.5 Ton-m M3 = 455.0 Ton-m

| REVISION FLEXION                                                                                                                                                                                                                                                            |        |                |                           |                  |           |                       |       |       |                |      |            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|----------------|---------------------------|------------------|-----------|-----------------------|-------|-------|----------------|------|------------|
| Calculo de resistencias a flexion para traves de concreto doblemente reforzadas                                                                                                                                                                                             |        |                |                           |                  |           |                       |       |       |                |      |            |
|                                                                                                                                                                                                                                                                             |        |                |                           |                  |           |                       |       |       |                |      |            |
| DATOS DE CONCRETO                                                                                                                                                                                                                                                           |        |                |                           |                  |           |                       |       |       |                |      |            |
| B                                                                                                                                                                                                                                                                           | H      | f <sub>c</sub> | f' <sub>c</sub>           | f'' <sub>c</sub> | E         | ε <sub>c</sub>        | c     | a     | C <sub>c</sub> | b    | M          |
| cm                                                                                                                                                                                                                                                                          | cm     | Kg/cm2         | Kg/cm2                    | Kg/cm2           | Kg/cm2    | Kg/cm2                | cm    | cm    | Kg             |      | Kg-cm      |
| 100.00                                                                                                                                                                                                                                                                      | 150.00 | 300.00         | 300.00                    | 300.00           | 265440.61 | 0.003                 | 12.45 | 10.41 | 312231.86      | 7.25 | 2263627.35 |
| <div><div></div><div><div>Diferencia</div><div>0.00</div><div>Mn (Kg-cm)</div><div>71811734.91</div><div>Mn (T-m)</div><div>718.12</div><div>MR (T-m)</div><div>646.31</div></div></div> |        |                |                           |                  |           |                       |       |       |                |      |            |
| SECCION TRANSVERSAL                                                                                                                                                                                                                                                         |        |                | DIAGRAMA DE DEFORMACIONES |                  |           | DIAGRAMA DE ESFUERZOS |       |       |                |      |            |

| DATOS               |        |        |            |         | CALCULO |         |          |           |           | MOMENTO |             |
|---------------------|--------|--------|------------|---------|---------|---------|----------|-----------|-----------|---------|-------------|
| ACERO EN COMPRESION |        |        |            |         |         |         |          |           |           |         |             |
|                     | Area   | d'     | Es         | Fy      | Δs      | ε s     | fs       | C         | ΣComp     | b       | M           |
|                     | cm2    | cm     | Kg/cm2     | Kg/cm2  |         |         | Kg/cm2   | Kg        | Kg        | cm      | Kg-cm       |
| A's3                | 0.00   | 0.00   | 2039000.00 | 4200.00 | 0.0021  | 0.0030  | 4200.00  | 0.00      | 534273.60 | 12.45   | 0.00        |
| A's1                | 127.21 | 8.90   | 2039000.00 | 4200.00 | 0.0021  | 0.0009  | 1745.50  | 222041.74 |           | 3.55    | 789068.06   |
| A's2                | 0.00   | 0.00   | 2039000.00 | 4200.00 | 0.0021  | 0.0030  | 4200.00  | 0.00      |           | 12.45   | 0.00        |
| ACERO EN TENSION    |        |        |            |         |         |         |          |           |           |         |             |
|                     | Area   | d      | Es         | Fy      | Δs      | ε s     | fs       | T         | ΣTension  | b       | M           |
|                     | cm2    | cm     | Kg/cm2     | Kg/cm2  |         |         |          |           | Kg        | cm      | Kg-cm       |
| As2                 | 0.00   | 0.00   | 2039000.00 | 4200.00 | 0.0021  | -0.0030 | -6117.00 | 0.00      | 534273.60 | -12.45  | 0.00        |
| As1                 | 127.21 | 141.15 | 2039000.00 | 4200.00 | 0.0021  | 0.0310  | 4200.00  | 534273.60 |           | 128.70  | 68759039.49 |
| As3                 | 0.00   | 0.00   | 2039000.00 | 2530.00 | 0.0012  | -0.0030 | -6117.00 | 0.00      |           | -12.45  | 0.00        |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

## 10.5.2 Elementos mecánicos, trabe de liga

**TABLE: Element Forces - Frames, Trabe de Liga**

| Frame | Station | OutputCase | CaseType    | P    | V2     | V3   | T      | M2     | M3     |
|-------|---------|------------|-------------|------|--------|------|--------|--------|--------|
| Text  | m       | Text       | Text        | Tonf | Tonf   | Tonf | Tonf-m | Tonf-m | Tonf-m |
| 9     | 0.00    | COMB1      | Combination | 4.51 | -14.33 | 2.57 | 22.80  | 17.03  | 23.24  |
| 9     | 0.50    | COMB1      | Combination | 4.51 | -11.65 | 2.57 | 22.80  | 15.75  | 29.69  |
| 9     | 0.99    | COMB1      | Combination | 4.51 | -8.96  | 2.57 | 22.80  | 14.48  | 34.81  |
| 9     | 1.49    | COMB1      | Combination | 4.51 | -6.27  | 2.57 | 22.80  | 13.20  | 38.59  |
| 9     | 1.99    | COMB1      | Combination | 4.51 | -3.59  | 2.57 | 22.80  | 11.92  | 41.04  |
| 9     | 2.48    | COMB1      | Combination | 4.51 | -0.90  | 2.57 | 22.80  | 10.64  | 42.16  |
| 9     | 2.98    | COMB1      | Combination | 4.51 | 1.78   | 2.57 | 22.80  | 9.37   | 41.94  |
| 9     | 3.48    | COMB1      | Combination | 4.51 | 4.47   | 2.57 | 22.80  | 8.09   | 40.39  |
| 9     | 3.98    | COMB1      | Combination | 4.51 | 7.16   | 2.57 | 22.80  | 6.81   | 37.50  |
| 9     | 4.47    | COMB1      | Combination | 4.51 | 9.84   | 2.57 | 22.80  | 5.53   | 33.27  |
| 9     | 4.97    | COMB1      | Combination | 4.51 | 12.53  | 2.57 | 22.80  | 4.25   | 27.72  |
| 9     | 5.47    | COMB1      | Combination | 4.51 | 15.22  | 2.57 | 22.80  | 2.98   | 20.82  |
| 9     | 5.96    | COMB1      | Combination | 4.51 | 17.90  | 2.57 | 22.80  | 1.70   | 12.59  |
| 9     | 6.46    | COMB1      | Combination | 4.51 | 20.59  | 2.57 | 22.80  | 0.42   | 3.03   |
| 9     | 6.96    | COMB1      | Combination | 4.51 | 23.27  | 2.57 | 22.80  | -0.86  | -7.87  |
| 9     | 7.45    | COMB1      | Combination | 4.51 | 25.96  | 2.57 | 22.80  | -2.13  | -20.10 |
| 9     | 7.95    | COMB1      | Combination | 4.51 | 28.65  | 2.57 | 22.80  | -3.41  | -33.66 |
| 9     | 0.00    | COMB2      | Combination | 4.51 | -14.33 | 2.75 | 24.00  | 18.10  | 23.24  |
| 9     | 0.50    | COMB2      | Combination | 4.51 | -11.65 | 2.75 | 24.00  | 16.73  | 29.69  |
| 9     | 0.99    | COMB2      | Combination | 4.51 | -8.96  | 2.75 | 24.00  | 15.36  | 34.81  |
| 9     | 1.49    | COMB2      | Combination | 4.51 | -6.27  | 2.75 | 24.00  | 13.99  | 38.59  |
| 9     | 1.99    | COMB2      | Combination | 4.51 | -3.59  | 2.75 | 24.00  | 12.63  | 41.04  |
| 9     | 2.48    | COMB2      | Combination | 4.51 | -0.90  | 2.75 | 24.00  | 11.26  | 42.16  |
| 9     | 2.98    | COMB2      | Combination | 4.51 | 1.78   | 2.75 | 24.00  | 9.89   | 41.94  |
| 9     | 3.48    | COMB2      | Combination | 4.51 | 4.47   | 2.75 | 24.00  | 8.52   | 40.39  |
| 9     | 3.98    | COMB2      | Combination | 4.51 | 7.16   | 2.75 | 24.00  | 7.16   | 37.50  |
| 9     | 4.47    | COMB2      | Combination | 4.51 | 9.84   | 2.75 | 24.00  | 5.79   | 33.27  |
| 9     | 4.97    | COMB2      | Combination | 4.51 | 12.53  | 2.75 | 24.00  | 4.42   | 27.72  |
| 9     | 5.47    | COMB2      | Combination | 4.51 | 15.22  | 2.75 | 24.00  | 3.05   | 20.82  |
| 9     | 5.96    | COMB2      | Combination | 4.51 | 17.90  | 2.75 | 24.00  | 1.69   | 12.59  |
| 9     | 6.46    | COMB2      | Combination | 4.51 | 20.59  | 2.75 | 24.00  | 0.32   | 3.03   |
| 9     | 6.96    | COMB2      | Combination | 4.51 | 23.27  | 2.75 | 24.00  | -1.05  | -7.87  |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|   |      |       |             |      |        |      |       |       |        |
|---|------|-------|-------------|------|--------|------|-------|-------|--------|
| 9 | 7.45 | COMB2 | Combination | 4.51 | 25.96  | 2.75 | 24.00 | -2.42 | -20.10 |
| 9 | 7.95 | COMB2 | Combination | 4.51 | 28.65  | 2.75 | 24.00 | -3.78 | -33.66 |
| 9 | 0.00 | COMB3 | Combination | 1.08 | -23.24 | 2.57 | 22.80 | 17.03 | -23.26 |
| 9 | 0.50 | COMB3 | Combination | 1.08 | -20.55 | 2.57 | 22.80 | 15.75 | -12.38 |
| 9 | 0.99 | COMB3 | Combination | 1.08 | -17.86 | 2.57 | 22.80 | 14.48 | -2.84  |
| 9 | 1.49 | COMB3 | Combination | 1.08 | -15.18 | 2.57 | 22.80 | 13.20 | 5.37   |
| 9 | 1.99 | COMB3 | Combination | 1.08 | -12.49 | 2.57 | 22.80 | 11.92 | 12.24  |
| 9 | 2.48 | COMB3 | Combination | 1.08 | -9.80  | 2.57 | 22.80 | 10.64 | 17.78  |
| 9 | 2.98 | COMB3 | Combination | 1.08 | -7.12  | 2.57 | 22.80 | 9.37  | 21.99  |
| 9 | 3.48 | COMB3 | Combination | 1.08 | -4.43  | 2.57 | 22.80 | 8.09  | 24.86  |
| 9 | 3.98 | COMB3 | Combination | 1.08 | -1.75  | 2.57 | 22.80 | 6.81  | 26.39  |
| 9 | 4.47 | COMB3 | Combination | 1.08 | 0.94   | 2.57 | 22.80 | 5.53  | 26.59  |
| 9 | 4.97 | COMB3 | Combination | 1.08 | 3.63   | 2.57 | 22.80 | 4.25  | 25.46  |
| 9 | 5.47 | COMB3 | Combination | 1.08 | 6.31   | 2.57 | 22.80 | 2.98  | 22.99  |
| 9 | 5.96 | COMB3 | Combination | 1.08 | 9.00   | 2.57 | 22.80 | 1.70  | 19.18  |
| 9 | 6.46 | COMB3 | Combination | 1.08 | 11.69  | 2.57 | 22.80 | 0.42  | 14.04  |
| 9 | 6.96 | COMB3 | Combination | 1.08 | 14.37  | 2.57 | 22.80 | -0.86 | 7.57   |
| 9 | 7.45 | COMB3 | Combination | 1.08 | 17.06  | 2.57 | 22.80 | -2.13 | -0.24  |
| 9 | 7.95 | COMB3 | Combination | 1.08 | 19.74  | 2.57 | 22.80 | -3.41 | -9.38  |
| 9 | 0.00 | COMB4 | Combination | 1.08 | -23.24 | 2.75 | 24.00 | 18.10 | -23.26 |
| 9 | 0.50 | COMB4 | Combination | 1.08 | -20.55 | 2.75 | 24.00 | 16.73 | -12.38 |
| 9 | 0.99 | COMB4 | Combination | 1.08 | -17.86 | 2.75 | 24.00 | 15.36 | -2.84  |
| 9 | 1.49 | COMB4 | Combination | 1.08 | -15.18 | 2.75 | 24.00 | 13.99 | 5.37   |
| 9 | 1.99 | COMB4 | Combination | 1.08 | -12.49 | 2.75 | 24.00 | 12.63 | 12.24  |
| 9 | 2.48 | COMB4 | Combination | 1.08 | -9.80  | 2.75 | 24.00 | 11.26 | 17.78  |
| 9 | 2.98 | COMB4 | Combination | 1.08 | -7.12  | 2.75 | 24.00 | 9.89  | 21.99  |
| 9 | 3.48 | COMB4 | Combination | 1.08 | -4.43  | 2.75 | 24.00 | 8.52  | 24.86  |
| 9 | 3.98 | COMB4 | Combination | 1.08 | -1.75  | 2.75 | 24.00 | 7.16  | 26.39  |
| 9 | 4.47 | COMB4 | Combination | 1.08 | 0.94   | 2.75 | 24.00 | 5.79  | 26.59  |
| 9 | 4.97 | COMB4 | Combination | 1.08 | 3.63   | 2.75 | 24.00 | 4.42  | 25.46  |
| 9 | 5.47 | COMB4 | Combination | 1.08 | 6.31   | 2.75 | 24.00 | 3.05  | 22.99  |
| 9 | 5.96 | COMB4 | Combination | 1.08 | 9.00   | 2.75 | 24.00 | 1.69  | 19.18  |
| 9 | 6.46 | COMB4 | Combination | 1.08 | 11.69  | 2.75 | 24.00 | 0.32  | 14.04  |
| 9 | 6.96 | COMB4 | Combination | 1.08 | 14.37  | 2.75 | 24.00 | -1.05 | 7.57   |
| 9 | 7.45 | COMB4 | Combination | 1.08 | 17.06  | 2.75 | 24.00 | -2.42 | -0.24  |
| 9 | 7.95 | COMB4 | Combination | 1.08 | 19.74  | 2.75 | 24.00 | -3.78 | -9.38  |
| 9 | 0.00 | COMB5 | Combination | 3.31 | -17.45 | 2.36 | 21.40 | 15.79 | 6.96   |
| 9 | 0.50 | COMB5 | Combination | 3.31 | -14.76 | 2.36 | 21.40 | 14.62 | 14.96  |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|   |      |       |             |      |        |      |       |       |        |
|---|------|-------|-------------|------|--------|------|-------|-------|--------|
| 9 | 0.99 | COMB5 | Combination | 3.31 | -12.08 | 2.36 | 21.40 | 13.44 | 21.63  |
| 9 | 1.49 | COMB5 | Combination | 3.31 | -9.39  | 2.36 | 21.40 | 12.27 | 26.97  |
| 9 | 1.99 | COMB5 | Combination | 3.31 | -6.70  | 2.36 | 21.40 | 11.10 | 30.96  |
| 9 | 2.48 | COMB5 | Combination | 3.31 | -4.02  | 2.36 | 21.40 | 9.92  | 33.63  |
| 9 | 2.98 | COMB5 | Combination | 3.31 | -1.33  | 2.36 | 21.40 | 8.75  | 34.96  |
| 9 | 3.48 | COMB5 | Combination | 3.31 | 1.35   | 2.36 | 21.40 | 7.58  | 34.95  |
| 9 | 3.98 | COMB5 | Combination | 3.31 | 4.04   | 2.36 | 21.40 | 6.41  | 33.61  |
| 9 | 4.47 | COMB5 | Combination | 3.31 | 6.73   | 2.36 | 21.40 | 5.23  | 30.93  |
| 9 | 4.97 | COMB5 | Combination | 3.31 | 9.41   | 2.36 | 21.40 | 4.06  | 26.92  |
| 9 | 5.47 | COMB5 | Combination | 3.31 | 12.10  | 2.36 | 21.40 | 2.89  | 21.58  |
| 9 | 5.96 | COMB5 | Combination | 3.31 | 14.79  | 2.36 | 21.40 | 1.71  | 14.90  |
| 9 | 6.46 | COMB5 | Combination | 3.31 | 17.47  | 2.36 | 21.40 | 0.54  | 6.89   |
| 9 | 6.96 | COMB5 | Combination | 3.31 | 20.16  | 2.36 | 21.40 | -0.63 | -2.46  |
| 9 | 7.45 | COMB5 | Combination | 3.31 | 22.84  | 2.36 | 21.40 | -1.81 | -13.15 |
| 9 | 7.95 | COMB5 | Combination | 3.31 | 25.53  | 2.36 | 21.40 | -2.98 | -25.16 |
| 9 | 0.00 | COMB6 | Combination | 3.31 | -17.45 | 2.96 | 25.40 | 19.34 | 6.96   |
| 9 | 0.50 | COMB6 | Combination | 3.31 | -14.76 | 2.96 | 25.40 | 17.87 | 14.96  |
| 9 | 0.99 | COMB6 | Combination | 3.31 | -12.08 | 2.96 | 25.40 | 16.39 | 21.63  |
| 9 | 1.49 | COMB6 | Combination | 3.31 | -9.39  | 2.96 | 25.40 | 14.92 | 26.97  |
| 9 | 1.99 | COMB6 | Combination | 3.31 | -6.70  | 2.96 | 25.40 | 13.45 | 30.96  |
| 9 | 2.48 | COMB6 | Combination | 3.31 | -4.02  | 2.96 | 25.40 | 11.98 | 33.63  |
| 9 | 2.98 | COMB6 | Combination | 3.31 | -1.33  | 2.96 | 25.40 | 10.51 | 34.96  |
| 9 | 3.48 | COMB6 | Combination | 3.31 | 1.35   | 2.96 | 25.40 | 9.03  | 34.95  |
| 9 | 3.98 | COMB6 | Combination | 3.31 | 4.04   | 2.96 | 25.40 | 7.56  | 33.61  |
| 9 | 4.47 | COMB6 | Combination | 3.31 | 6.73   | 2.96 | 25.40 | 6.09  | 30.93  |
| 9 | 4.97 | COMB6 | Combination | 3.31 | 9.41   | 2.96 | 25.40 | 4.62  | 26.92  |
| 9 | 5.47 | COMB6 | Combination | 3.31 | 12.10  | 2.96 | 25.40 | 3.14  | 21.58  |
| 9 | 5.96 | COMB6 | Combination | 3.31 | 14.79  | 2.96 | 25.40 | 1.67  | 14.90  |
| 9 | 6.46 | COMB6 | Combination | 3.31 | 17.47  | 2.96 | 25.40 | 0.20  | 6.89   |
| 9 | 6.96 | COMB6 | Combination | 3.31 | 20.16  | 2.96 | 25.40 | -1.27 | -2.46  |
| 9 | 7.45 | COMB6 | Combination | 3.31 | 22.84  | 2.96 | 25.40 | -2.74 | -13.15 |
| 9 | 7.95 | COMB6 | Combination | 3.31 | 25.53  | 2.96 | 25.40 | -4.22 | -25.16 |
| 9 | 0.00 | COMB7 | Combination | 2.28 | -20.12 | 2.36 | 21.40 | 15.79 | -6.99  |
| 9 | 0.50 | COMB7 | Combination | 2.28 | -17.43 | 2.36 | 21.40 | 14.62 | 2.34   |
| 9 | 0.99 | COMB7 | Combination | 2.28 | -14.75 | 2.36 | 21.40 | 13.44 | 10.34  |
| 9 | 1.49 | COMB7 | Combination | 2.28 | -12.06 | 2.36 | 21.40 | 12.27 | 17.00  |
| 9 | 1.99 | COMB7 | Combination | 2.28 | -9.37  | 2.36 | 21.40 | 11.10 | 22.32  |
| 9 | 2.48 | COMB7 | Combination | 2.28 | -6.69  | 2.36 | 21.40 | 9.92  | 26.31  |

|  |      | ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br>SAN CRISTÓBAL, EN BOGOTÁ D.C. |             |      |        |  |       |       |        |
|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------|------|--------|-------------------------------------------------------------------------------------|-------|-------|--------|
| 9                                                                                 | 2.98 | COMB7                                                                                                                                   | Combination | 2.28 | -4.00  | 2.36                                                                                | 21.40 | 8.75  | 28.97  |
| 9                                                                                 | 3.48 | COMB7                                                                                                                                   | Combination | 2.28 | -1.32  | 2.36                                                                                | 21.40 | 7.58  | 30.29  |
| 9                                                                                 | 3.98 | COMB7                                                                                                                                   | Combination | 2.28 | 1.37   | 2.36                                                                                | 21.40 | 6.41  | 30.28  |
| 9                                                                                 | 4.47 | COMB7                                                                                                                                   | Combination | 2.28 | 4.06   | 2.36                                                                                | 21.40 | 5.23  | 28.93  |
| 9                                                                                 | 4.97 | COMB7                                                                                                                                   | Combination | 2.28 | 6.74   | 2.36                                                                                | 21.40 | 4.06  | 26.25  |
| 9                                                                                 | 5.47 | COMB7                                                                                                                                   | Combination | 2.28 | 9.43   | 2.36                                                                                | 21.40 | 2.89  | 22.23  |
| 9                                                                                 | 5.96 | COMB7                                                                                                                                   | Combination | 2.28 | 12.12  | 2.36                                                                                | 21.40 | 1.71  | 16.88  |
| 9                                                                                 | 6.46 | COMB7                                                                                                                                   | Combination | 2.28 | 14.80  | 2.36                                                                                | 21.40 | 0.54  | 10.19  |
| 9                                                                                 | 6.96 | COMB7                                                                                                                                   | Combination | 2.28 | 17.49  | 2.36                                                                                | 21.40 | -0.63 | 2.17   |
| 9                                                                                 | 7.45 | COMB7                                                                                                                                   | Combination | 2.28 | 20.17  | 2.36                                                                                | 21.40 | -1.81 | -7.19  |
| 9                                                                                 | 7.95 | COMB7                                                                                                                                   | Combination | 2.28 | 22.86  | 2.36                                                                                | 21.40 | -2.98 | -17.88 |
| 9                                                                                 | 0.00 | COMB8                                                                                                                                   | Combination | 2.28 | -20.12 | 2.96                                                                                | 25.40 | 19.34 | -6.99  |
| 9                                                                                 | 0.50 | COMB8                                                                                                                                   | Combination | 2.28 | -17.43 | 2.96                                                                                | 25.40 | 17.87 | 2.34   |
| 9                                                                                 | 0.99 | COMB8                                                                                                                                   | Combination | 2.28 | -14.75 | 2.96                                                                                | 25.40 | 16.39 | 10.34  |
| 9                                                                                 | 1.49 | COMB8                                                                                                                                   | Combination | 2.28 | -12.06 | 2.96                                                                                | 25.40 | 14.92 | 17.00  |
| 9                                                                                 | 1.99 | COMB8                                                                                                                                   | Combination | 2.28 | -9.37  | 2.96                                                                                | 25.40 | 13.45 | 22.32  |
| 9                                                                                 | 2.48 | COMB8                                                                                                                                   | Combination | 2.28 | -6.69  | 2.96                                                                                | 25.40 | 11.98 | 26.31  |
| 9                                                                                 | 2.98 | COMB8                                                                                                                                   | Combination | 2.28 | -4.00  | 2.96                                                                                | 25.40 | 10.51 | 28.97  |
| 9                                                                                 | 3.48 | COMB8                                                                                                                                   | Combination | 2.28 | -1.32  | 2.96                                                                                | 25.40 | 9.03  | 30.29  |
| 9                                                                                 | 3.98 | COMB8                                                                                                                                   | Combination | 2.28 | 1.37   | 2.96                                                                                | 25.40 | 7.56  | 30.28  |
| 9                                                                                 | 4.47 | COMB8                                                                                                                                   | Combination | 2.28 | 4.06   | 2.96                                                                                | 25.40 | 6.09  | 28.93  |
| 9                                                                                 | 4.97 | COMB8                                                                                                                                   | Combination | 2.28 | 6.74   | 2.96                                                                                | 25.40 | 4.62  | 26.25  |
| 9                                                                                 | 5.47 | COMB8                                                                                                                                   | Combination | 2.28 | 9.43   | 2.96                                                                                | 25.40 | 3.14  | 22.23  |
| 9                                                                                 | 5.96 | COMB8                                                                                                                                   | Combination | 2.28 | 12.12  | 2.96                                                                                | 25.40 | 1.67  | 16.88  |
| 9                                                                                 | 6.46 | COMB8                                                                                                                                   | Combination | 2.28 | 14.80  | 2.96                                                                                | 25.40 | 0.20  | 10.19  |
| 9                                                                                 | 6.96 | COMB8                                                                                                                                   | Combination | 2.28 | 17.49  | 2.96                                                                                | 25.40 | -1.27 | 2.17   |
| 9                                                                                 | 7.45 | COMB8                                                                                                                                   | Combination | 2.28 | 20.17  | 2.96                                                                                | 25.40 | -2.74 | -7.19  |
| 9                                                                                 | 7.95 | COMB8                                                                                                                                   | Combination | 2.28 | 22.86  | 2.96                                                                                | 25.40 | -4.22 | -17.88 |
| 9                                                                                 | 0.00 | COMB9                                                                                                                                   | Combination | 4.55 | -14.45 | 2.57                                                                                | 22.80 | 17.03 | 22.46  |
| 9                                                                                 | 0.50 | COMB9                                                                                                                                   | Combination | 4.55 | -11.77 | 2.57                                                                                | 22.80 | 15.75 | 28.97  |
| 9                                                                                 | 0.99 | COMB9                                                                                                                                   | Combination | 4.55 | -9.08  | 2.57                                                                                | 22.80 | 14.48 | 34.15  |
| 9                                                                                 | 1.49 | COMB9                                                                                                                                   | Combination | 4.55 | -6.40  | 2.57                                                                                | 22.80 | 13.20 | 38.00  |
| 9                                                                                 | 1.99 | COMB9                                                                                                                                   | Combination | 4.55 | -3.71  | 2.57                                                                                | 22.80 | 11.92 | 40.51  |
| 9                                                                                 | 2.48 | COMB9                                                                                                                                   | Combination | 4.55 | -1.02  | 2.57                                                                                | 22.80 | 10.64 | 41.68  |
| 9                                                                                 | 2.98 | COMB9                                                                                                                                   | Combination | 4.55 | 1.66   | 2.57                                                                                | 22.80 | 9.37  | 41.52  |
| 9                                                                                 | 3.48 | COMB9                                                                                                                                   | Combination | 4.55 | 4.35   | 2.57                                                                                | 22.80 | 8.09  | 40.03  |
| 9                                                                                 | 3.98 | COMB9                                                                                                                                   | Combination | 4.55 | 7.04   | 2.57                                                                                | 22.80 | 6.81  | 37.20  |
| 9                                                                                 | 4.47 | COMB9                                                                                                                                   | Combination | 4.55 | 9.72   | 2.57                                                                                | 22.80 | 5.53  | 33.04  |

|  |      | ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br>SAN CRISTÓBAL, EN BOGOTÁ D.C. |             |      |        |      |  |       |        |
|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------|------|--------|------|-------------------------------------------------------------------------------------|-------|--------|
| 9                                                                                 | 4.97 | COMB9                                                                                                                                   | Combination | 4.55 | 12.41  | 2.57 | 22.80                                                                               | 4.25  | 27.54  |
| 9                                                                                 | 5.47 | COMB9                                                                                                                                   | Combination | 4.55 | 15.09  | 2.57 | 22.80                                                                               | 2.98  | 20.71  |
| 9                                                                                 | 5.96 | COMB9                                                                                                                                   | Combination | 4.55 | 17.78  | 2.57 | 22.80                                                                               | 1.70  | 12.54  |
| 9                                                                                 | 6.46 | COMB9                                                                                                                                   | Combination | 4.55 | 20.47  | 2.57 | 22.80                                                                               | 0.42  | 3.04   |
| 9                                                                                 | 6.96 | COMB9                                                                                                                                   | Combination | 4.55 | 23.15  | 2.57 | 22.80                                                                               | -0.86 | -7.80  |
| 9                                                                                 | 7.45 | COMB9                                                                                                                                   | Combination | 4.55 | 25.84  | 2.57 | 22.80                                                                               | -2.13 | -19.97 |
| 9                                                                                 | 7.95 | COMB9                                                                                                                                   | Combination | 4.55 | 28.53  | 2.57 | 22.80                                                                               | -3.41 | -33.47 |
| 9                                                                                 | 0.00 | COMB10                                                                                                                                  | Combination | 4.55 | -14.45 | 2.75 | 24.00                                                                               | 18.10 | 22.46  |
| 9                                                                                 | 0.50 | COMB10                                                                                                                                  | Combination | 4.55 | -11.77 | 2.75 | 24.00                                                                               | 16.73 | 28.97  |
| 9                                                                                 | 0.99 | COMB10                                                                                                                                  | Combination | 4.55 | -9.08  | 2.75 | 24.00                                                                               | 15.36 | 34.15  |
| 9                                                                                 | 1.49 | COMB10                                                                                                                                  | Combination | 4.55 | -6.40  | 2.75 | 24.00                                                                               | 13.99 | 38.00  |
| 9                                                                                 | 1.99 | COMB10                                                                                                                                  | Combination | 4.55 | -3.71  | 2.75 | 24.00                                                                               | 12.63 | 40.51  |
| 9                                                                                 | 2.48 | COMB10                                                                                                                                  | Combination | 4.55 | -1.02  | 2.75 | 24.00                                                                               | 11.26 | 41.68  |
| 9                                                                                 | 2.98 | COMB10                                                                                                                                  | Combination | 4.55 | 1.66   | 2.75 | 24.00                                                                               | 9.89  | 41.52  |
| 9                                                                                 | 3.48 | COMB10                                                                                                                                  | Combination | 4.55 | 4.35   | 2.75 | 24.00                                                                               | 8.52  | 40.03  |
| 9                                                                                 | 3.98 | COMB10                                                                                                                                  | Combination | 4.55 | 7.04   | 2.75 | 24.00                                                                               | 7.16  | 37.20  |
| 9                                                                                 | 4.47 | COMB10                                                                                                                                  | Combination | 4.55 | 9.72   | 2.75 | 24.00                                                                               | 5.79  | 33.04  |
| 9                                                                                 | 4.97 | COMB10                                                                                                                                  | Combination | 4.55 | 12.41  | 2.75 | 24.00                                                                               | 4.42  | 27.54  |
| 9                                                                                 | 5.47 | COMB10                                                                                                                                  | Combination | 4.55 | 15.09  | 2.75 | 24.00                                                                               | 3.05  | 20.71  |
| 9                                                                                 | 5.96 | COMB10                                                                                                                                  | Combination | 4.55 | 17.78  | 2.75 | 24.00                                                                               | 1.69  | 12.54  |
| 9                                                                                 | 6.46 | COMB10                                                                                                                                  | Combination | 4.55 | 20.47  | 2.75 | 24.00                                                                               | 0.32  | 3.04   |
| 9                                                                                 | 6.96 | COMB10                                                                                                                                  | Combination | 4.55 | 23.15  | 2.75 | 24.00                                                                               | -1.05 | -7.80  |
| 9                                                                                 | 7.45 | COMB10                                                                                                                                  | Combination | 4.55 | 25.84  | 2.75 | 24.00                                                                               | -2.42 | -19.97 |
| 9                                                                                 | 7.95 | COMB10                                                                                                                                  | Combination | 4.55 | 28.53  | 2.75 | 24.00                                                                               | -3.78 | -33.47 |
| 9                                                                                 | 0.00 | COMB11                                                                                                                                  | Combination | 1.13 | -23.36 | 2.57 | 22.80                                                                               | 17.03 | -24.04 |
| 9                                                                                 | 0.50 | COMB11                                                                                                                                  | Combination | 1.13 | -20.67 | 2.57 | 22.80                                                                               | 15.75 | -13.10 |
| 9                                                                                 | 0.99 | COMB11                                                                                                                                  | Combination | 1.13 | -17.98 | 2.57 | 22.80                                                                               | 14.48 | -3.50  |
| 9                                                                                 | 1.49 | COMB11                                                                                                                                  | Combination | 1.13 | -15.30 | 2.57 | 22.80                                                                               | 13.20 | 4.77   |
| 9                                                                                 | 1.99 | COMB11                                                                                                                                  | Combination | 1.13 | -12.61 | 2.57 | 22.80                                                                               | 11.92 | 11.71  |
| 9                                                                                 | 2.48 | COMB11                                                                                                                                  | Combination | 1.13 | -9.93  | 2.57 | 22.80                                                                               | 10.64 | 17.31  |
| 9                                                                                 | 2.98 | COMB11                                                                                                                                  | Combination | 1.13 | -7.24  | 2.57 | 22.80                                                                               | 9.37  | 21.57  |
| 9                                                                                 | 3.48 | COMB11                                                                                                                                  | Combination | 1.13 | -4.55  | 2.57 | 22.80                                                                               | 8.09  | 24.50  |
| 9                                                                                 | 3.98 | COMB11                                                                                                                                  | Combination | 1.13 | -1.87  | 2.57 | 22.80                                                                               | 6.81  | 26.10  |
| 9                                                                                 | 4.47 | COMB11                                                                                                                                  | Combination | 1.13 | 0.82   | 2.57 | 22.80                                                                               | 5.53  | 26.36  |
| 9                                                                                 | 4.97 | COMB11                                                                                                                                  | Combination | 1.13 | 3.50   | 2.57 | 22.80                                                                               | 4.25  | 25.28  |
| 9                                                                                 | 5.47 | COMB11                                                                                                                                  | Combination | 1.13 | 6.19   | 2.57 | 22.80                                                                               | 2.98  | 22.87  |
| 9                                                                                 | 5.96 | COMB11                                                                                                                                  | Combination | 1.13 | 8.88   | 2.57 | 22.80                                                                               | 1.70  | 19.13  |
| 9                                                                                 | 6.46 | COMB11                                                                                                                                  | Combination | 1.13 | 11.56  | 2.57 | 22.80                                                                               | 0.42  | 14.05  |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|   |      |        |             |      |        |      |       |       |        |
|---|------|--------|-------------|------|--------|------|-------|-------|--------|
| 9 | 6.96 | COMB11 | Combination | 1.13 | 14.25  | 2.57 | 22.80 | -0.86 | 7.64   |
| 9 | 7.45 | COMB11 | Combination | 1.13 | 16.94  | 2.57 | 22.80 | -2.13 | -0.11  |
| 9 | 7.95 | COMB11 | Combination | 1.13 | 19.62  | 2.57 | 22.80 | -3.41 | -9.19  |
| 9 | 0.00 | COMB12 | Combination | 1.13 | -23.36 | 2.75 | 24.00 | 18.10 | -24.04 |
| 9 | 0.50 | COMB12 | Combination | 1.13 | -20.67 | 2.75 | 24.00 | 16.73 | -13.10 |
| 9 | 0.99 | COMB12 | Combination | 1.13 | -17.98 | 2.75 | 24.00 | 15.36 | -3.50  |
| 9 | 1.49 | COMB12 | Combination | 1.13 | -15.30 | 2.75 | 24.00 | 13.99 | 4.77   |
| 9 | 1.99 | COMB12 | Combination | 1.13 | -12.61 | 2.75 | 24.00 | 12.63 | 11.71  |
| 9 | 2.48 | COMB12 | Combination | 1.13 | -9.93  | 2.75 | 24.00 | 11.26 | 17.31  |
| 9 | 2.98 | COMB12 | Combination | 1.13 | -7.24  | 2.75 | 24.00 | 9.89  | 21.57  |
| 9 | 3.48 | COMB12 | Combination | 1.13 | -4.55  | 2.75 | 24.00 | 8.52  | 24.50  |
| 9 | 3.98 | COMB12 | Combination | 1.13 | -1.87  | 2.75 | 24.00 | 7.16  | 26.10  |
| 9 | 4.47 | COMB12 | Combination | 1.13 | 0.82   | 2.75 | 24.00 | 5.79  | 26.36  |
| 9 | 4.97 | COMB12 | Combination | 1.13 | 3.50   | 2.75 | 24.00 | 4.42  | 25.28  |
| 9 | 5.47 | COMB12 | Combination | 1.13 | 6.19   | 2.75 | 24.00 | 3.05  | 22.87  |
| 9 | 5.96 | COMB12 | Combination | 1.13 | 8.88   | 2.75 | 24.00 | 1.69  | 19.13  |
| 9 | 6.46 | COMB12 | Combination | 1.13 | 11.56  | 2.75 | 24.00 | 0.32  | 14.05  |
| 9 | 6.96 | COMB12 | Combination | 1.13 | 14.25  | 2.75 | 24.00 | -1.05 | 7.64   |
| 9 | 7.45 | COMB12 | Combination | 1.13 | 16.94  | 2.75 | 24.00 | -2.42 | -0.11  |
| 9 | 7.95 | COMB12 | Combination | 1.13 | 19.62  | 2.75 | 24.00 | -3.78 | -9.19  |
| 9 | 0.00 | COMB13 | Combination | 3.36 | -17.57 | 2.36 | 21.40 | 15.79 | 6.18   |
| 9 | 0.50 | COMB13 | Combination | 3.36 | -14.88 | 2.36 | 21.40 | 14.62 | 14.25  |
| 9 | 0.99 | COMB13 | Combination | 3.36 | -12.20 | 2.36 | 21.40 | 13.44 | 20.97  |
| 9 | 1.49 | COMB13 | Combination | 3.36 | -9.51  | 2.36 | 21.40 | 12.27 | 26.37  |
| 9 | 1.99 | COMB13 | Combination | 3.36 | -6.83  | 2.36 | 21.40 | 11.10 | 30.43  |
| 9 | 2.48 | COMB13 | Combination | 3.36 | -4.14  | 2.36 | 21.40 | 9.92  | 33.15  |
| 9 | 2.98 | COMB13 | Combination | 3.36 | -1.45  | 2.36 | 21.40 | 8.75  | 34.54  |
| 9 | 3.48 | COMB13 | Combination | 3.36 | 1.23   | 2.36 | 21.40 | 7.58  | 34.59  |
| 9 | 3.98 | COMB13 | Combination | 3.36 | 3.92   | 2.36 | 21.40 | 6.41  | 33.31  |
| 9 | 4.47 | COMB13 | Combination | 3.36 | 6.61   | 2.36 | 21.40 | 5.23  | 30.70  |
| 9 | 4.97 | COMB13 | Combination | 3.36 | 9.29   | 2.36 | 21.40 | 4.06  | 26.75  |
| 9 | 5.47 | COMB13 | Combination | 3.36 | 11.98  | 2.36 | 21.40 | 2.89  | 21.47  |
| 9 | 5.96 | COMB13 | Combination | 3.36 | 14.66  | 2.36 | 21.40 | 1.71  | 14.85  |
| 9 | 6.46 | COMB13 | Combination | 3.36 | 17.35  | 2.36 | 21.40 | 0.54  | 6.89   |
| 9 | 6.96 | COMB13 | Combination | 3.36 | 20.04  | 2.36 | 21.40 | -0.63 | -2.39  |
| 9 | 7.45 | COMB13 | Combination | 3.36 | 22.72  | 2.36 | 21.40 | -1.81 | -13.02 |
| 9 | 7.95 | COMB13 | Combination | 3.36 | 25.41  | 2.36 | 21.40 | -2.98 | -24.98 |
| 9 | 0.00 | COMB14 | Combination | 3.36 | -17.57 | 2.96 | 25.40 | 19.34 | 6.18   |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|   |      |        |             |      |        |      |       |       |        |
|---|------|--------|-------------|------|--------|------|-------|-------|--------|
| 9 | 0.50 | COMB14 | Combination | 3.36 | -14.88 | 2.96 | 25.40 | 17.87 | 14.25  |
| 9 | 0.99 | COMB14 | Combination | 3.36 | -12.20 | 2.96 | 25.40 | 16.39 | 20.97  |
| 9 | 1.49 | COMB14 | Combination | 3.36 | -9.51  | 2.96 | 25.40 | 14.92 | 26.37  |
| 9 | 1.99 | COMB14 | Combination | 3.36 | -6.83  | 2.96 | 25.40 | 13.45 | 30.43  |
| 9 | 2.48 | COMB14 | Combination | 3.36 | -4.14  | 2.96 | 25.40 | 11.98 | 33.15  |
| 9 | 2.98 | COMB14 | Combination | 3.36 | -1.45  | 2.96 | 25.40 | 10.51 | 34.54  |
| 9 | 3.48 | COMB14 | Combination | 3.36 | 1.23   | 2.96 | 25.40 | 9.03  | 34.59  |
| 9 | 3.98 | COMB14 | Combination | 3.36 | 3.92   | 2.96 | 25.40 | 7.56  | 33.31  |
| 9 | 4.47 | COMB14 | Combination | 3.36 | 6.61   | 2.96 | 25.40 | 6.09  | 30.70  |
| 9 | 4.97 | COMB14 | Combination | 3.36 | 9.29   | 2.96 | 25.40 | 4.62  | 26.75  |
| 9 | 5.47 | COMB14 | Combination | 3.36 | 11.98  | 2.96 | 25.40 | 3.14  | 21.47  |
| 9 | 5.96 | COMB14 | Combination | 3.36 | 14.66  | 2.96 | 25.40 | 1.67  | 14.85  |
| 9 | 6.46 | COMB14 | Combination | 3.36 | 17.35  | 2.96 | 25.40 | 0.20  | 6.89   |
| 9 | 6.96 | COMB14 | Combination | 3.36 | 20.04  | 2.96 | 25.40 | -1.27 | -2.39  |
| 9 | 7.45 | COMB14 | Combination | 3.36 | 22.72  | 2.96 | 25.40 | -2.74 | -13.02 |
| 9 | 7.95 | COMB14 | Combination | 3.36 | 25.41  | 2.96 | 25.40 | -4.22 | -24.98 |
| 9 | 0.00 | COMB15 | Combination | 2.33 | -20.24 | 2.36 | 21.40 | 15.79 | -7.77  |
| 9 | 0.50 | COMB15 | Combination | 2.33 | -17.56 | 2.36 | 21.40 | 14.62 | 1.62   |
| 9 | 0.99 | COMB15 | Combination | 2.33 | -14.87 | 2.36 | 21.40 | 13.44 | 9.68   |
| 9 | 1.49 | COMB15 | Combination | 2.33 | -12.18 | 2.36 | 21.40 | 12.27 | 16.40  |
| 9 | 1.99 | COMB15 | Combination | 2.33 | -9.50  | 2.36 | 21.40 | 11.10 | 21.79  |
| 9 | 2.48 | COMB15 | Combination | 2.33 | -6.81  | 2.36 | 21.40 | 9.92  | 25.84  |
| 9 | 2.98 | COMB15 | Combination | 2.33 | -4.12  | 2.36 | 21.40 | 8.75  | 28.55  |
| 9 | 3.48 | COMB15 | Combination | 2.33 | -1.44  | 2.36 | 21.40 | 7.58  | 29.94  |
| 9 | 3.98 | COMB15 | Combination | 2.33 | 1.25   | 2.36 | 21.40 | 6.41  | 29.98  |
| 9 | 4.47 | COMB15 | Combination | 2.33 | 3.93   | 2.36 | 21.40 | 5.23  | 28.69  |
| 9 | 4.97 | COMB15 | Combination | 2.33 | 6.62   | 2.36 | 21.40 | 4.06  | 26.07  |
| 9 | 5.47 | COMB15 | Combination | 2.33 | 9.31   | 2.36 | 21.40 | 2.89  | 22.12  |
| 9 | 5.96 | COMB15 | Combination | 2.33 | 11.99  | 2.36 | 21.40 | 1.71  | 16.82  |
| 9 | 6.46 | COMB15 | Combination | 2.33 | 14.68  | 2.36 | 21.40 | 0.54  | 10.20  |
| 9 | 6.96 | COMB15 | Combination | 2.33 | 17.37  | 2.36 | 21.40 | -0.63 | 2.24   |
| 9 | 7.45 | COMB15 | Combination | 2.33 | 20.05  | 2.36 | 21.40 | -1.81 | -7.06  |
| 9 | 7.95 | COMB15 | Combination | 2.33 | 22.74  | 2.36 | 21.40 | -2.98 | -17.69 |
| 9 | 0.00 | COMB16 | Combination | 2.33 | -20.24 | 2.96 | 25.40 | 19.34 | -7.77  |
| 9 | 0.50 | COMB16 | Combination | 2.33 | -17.56 | 2.96 | 25.40 | 17.87 | 1.62   |
| 9 | 0.99 | COMB16 | Combination | 2.33 | -14.87 | 2.96 | 25.40 | 16.39 | 9.68   |
| 9 | 1.49 | COMB16 | Combination | 2.33 | -12.18 | 2.96 | 25.40 | 14.92 | 16.40  |
| 9 | 1.99 | COMB16 | Combination | 2.33 | -9.50  | 2.96 | 25.40 | 13.45 | 21.79  |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|   |      |           |             |        |       |      |       |       |         |
|---|------|-----------|-------------|--------|-------|------|-------|-------|---------|
| 9 | 2.48 | COMB16    | Combination | 2.33   | -6.81 | 2.96 | 25.40 | 11.98 | 25.84   |
| 9 | 2.98 | COMB16    | Combination | 2.33   | -4.12 | 2.96 | 25.40 | 10.51 | 28.55   |
| 9 | 3.48 | COMB16    | Combination | 2.33   | -1.44 | 2.96 | 25.40 | 9.03  | 29.94   |
| 9 | 3.98 | COMB16    | Combination | 2.33   | 1.25  | 2.96 | 25.40 | 7.56  | 29.98   |
| 9 | 4.47 | COMB16    | Combination | 2.33   | 3.93  | 2.96 | 25.40 | 6.09  | 28.69   |
| 9 | 4.97 | COMB16    | Combination | 2.33   | 6.62  | 2.96 | 25.40 | 4.62  | 26.07   |
| 9 | 5.47 | COMB16    | Combination | 2.33   | 9.31  | 2.96 | 25.40 | 3.14  | 22.12   |
| 9 | 5.96 | COMB16    | Combination | 2.33   | 11.99 | 2.96 | 25.40 | 1.67  | 16.82   |
| 9 | 6.46 | COMB16    | Combination | 2.33   | 14.68 | 2.96 | 25.40 | 0.20  | 10.20   |
| 9 | 6.96 | COMB16    | Combination | 2.33   | 17.37 | 2.96 | 25.40 | -1.27 | 2.24    |
| 9 | 7.45 | COMB16    | Combination | 2.33   | 20.05 | 2.96 | 25.40 | -2.74 | -7.06   |
| 9 | 7.95 | COMB16    | Combination | 2.33   | 22.74 | 2.96 | 25.40 | -4.22 | -17.69  |
| 9 | 0.00 | COMB17-M2 | Combination | -31.47 | 50.39 | 2.54 | 23.35 | 16.69 | 444.53  |
| 9 | 0.50 | COMB17-M2 | Combination | -31.47 | 53.07 | 2.54 | 23.35 | 15.43 | 418.82  |
| 9 | 0.99 | COMB17-M2 | Combination | -31.47 | 55.76 | 2.54 | 23.35 | 14.17 | 391.79  |
| 9 | 1.49 | COMB17-M2 | Combination | -31.47 | 58.45 | 2.54 | 23.35 | 12.91 | 363.41  |
| 9 | 1.99 | COMB17-M2 | Combination | -31.47 | 61.13 | 2.54 | 23.35 | 11.65 | 333.71  |
| 9 | 2.48 | COMB17-M2 | Combination | -31.47 | 63.82 | 2.54 | 23.35 | 10.39 | 302.66  |
| 9 | 2.98 | COMB17-M2 | Combination | -31.47 | 66.50 | 2.54 | 23.35 | 9.13  | 270.29  |
| 9 | 3.48 | COMB17-M2 | Combination | -31.47 | 69.19 | 2.54 | 23.35 | 7.87  | 236.58  |
| 9 | 3.98 | COMB17-M2 | Combination | -31.47 | 71.88 | 2.54 | 23.35 | 6.61  | 201.53  |
| 9 | 4.47 | COMB17-M2 | Combination | -31.47 | 74.56 | 2.54 | 23.35 | 5.34  | 165.15  |
| 9 | 4.97 | COMB17-M2 | Combination | -31.47 | 77.25 | 2.54 | 23.35 | 4.08  | 127.43  |
| 9 | 5.47 | COMB17-M2 | Combination | -31.47 | 79.94 | 2.54 | 23.35 | 2.82  | 88.38   |
| 9 | 5.96 | COMB17-M2 | Combination | -31.47 | 82.62 | 2.54 | 23.35 | 1.56  | 48.00   |
| 9 | 6.46 | COMB17-M2 | Combination | -31.47 | 85.31 | 2.54 | 23.35 | 0.30  | 6.28    |
| 9 | 6.96 | COMB17-M2 | Combination | -31.47 | 87.99 | 2.54 | 23.35 | -0.96 | -36.78  |
| 9 | 7.45 | COMB17-M2 | Combination | -31.47 | 90.68 | 2.54 | 23.35 | -2.22 | -81.17  |
| 9 | 7.95 | COMB17-M2 | Combination | -31.47 | 93.37 | 2.54 | 23.35 | -3.48 | -126.89 |
| 9 | 0.00 | COMB18-M2 | Combination | -31.47 | 50.39 | 2.72 | 24.55 | 17.75 | 444.53  |
| 9 | 0.50 | COMB18-M2 | Combination | -31.47 | 53.07 | 2.72 | 24.55 | 16.40 | 418.82  |
| 9 | 0.99 | COMB18-M2 | Combination | -31.47 | 55.76 | 2.72 | 24.55 | 15.05 | 391.79  |
| 9 | 1.49 | COMB18-M2 | Combination | -31.47 | 58.45 | 2.72 | 24.55 | 13.70 | 363.41  |
| 9 | 1.99 | COMB18-M2 | Combination | -31.47 | 61.13 | 2.72 | 24.55 | 12.35 | 333.71  |
| 9 | 2.48 | COMB18-M2 | Combination | -31.47 | 63.82 | 2.72 | 24.55 | 11.00 | 302.66  |
| 9 | 2.98 | COMB18-M2 | Combination | -31.47 | 66.50 | 2.72 | 24.55 | 9.65  | 270.29  |
| 9 | 3.48 | COMB18-M2 | Combination | -31.47 | 69.19 | 2.72 | 24.55 | 8.30  | 236.58  |
| 9 | 3.98 | COMB18-M2 | Combination | -31.47 | 71.88 | 2.72 | 24.55 | 6.95  | 201.53  |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|   |      |           |             |        |       |      |       |       |         |
|---|------|-----------|-------------|--------|-------|------|-------|-------|---------|
| 9 | 4.47 | COMB18-M2 | Combination | -31.47 | 74.56 | 2.72 | 24.55 | 5.60  | 165.15  |
| 9 | 4.97 | COMB18-M2 | Combination | -31.47 | 77.25 | 2.72 | 24.55 | 4.25  | 127.43  |
| 9 | 5.47 | COMB18-M2 | Combination | -31.47 | 79.94 | 2.72 | 24.55 | 2.90  | 88.38   |
| 9 | 5.96 | COMB18-M2 | Combination | -31.47 | 82.62 | 2.72 | 24.55 | 1.55  | 48.00   |
| 9 | 6.46 | COMB18-M2 | Combination | -31.47 | 85.31 | 2.72 | 24.55 | 0.20  | 6.28    |
| 9 | 6.96 | COMB18-M2 | Combination | -31.47 | 87.99 | 2.72 | 24.55 | -1.15 | -36.78  |
| 9 | 7.45 | COMB18-M2 | Combination | -31.47 | 90.68 | 2.72 | 24.55 | -2.50 | -81.17  |
| 9 | 7.95 | COMB18-M2 | Combination | -31.47 | 93.37 | 2.72 | 24.55 | -3.85 | -126.89 |
| 9 | 0.00 | COMB19-M2 | Combination | -34.90 | 41.48 | 2.54 | 23.35 | 16.69 | 398.03  |
| 9 | 0.50 | COMB19-M2 | Combination | -34.90 | 44.17 | 2.54 | 23.35 | 15.43 | 376.75  |
| 9 | 0.99 | COMB19-M2 | Combination | -34.90 | 46.86 | 2.54 | 23.35 | 14.17 | 354.14  |
| 9 | 1.49 | COMB19-M2 | Combination | -34.90 | 49.54 | 2.54 | 23.35 | 12.91 | 330.19  |
| 9 | 1.99 | COMB19-M2 | Combination | -34.90 | 52.23 | 2.54 | 23.35 | 11.65 | 304.90  |
| 9 | 2.48 | COMB19-M2 | Combination | -34.90 | 54.91 | 2.54 | 23.35 | 10.39 | 278.29  |
| 9 | 2.98 | COMB19-M2 | Combination | -34.90 | 57.60 | 2.54 | 23.35 | 9.13  | 250.33  |
| 9 | 3.48 | COMB19-M2 | Combination | -34.90 | 60.29 | 2.54 | 23.35 | 7.87  | 221.05  |
| 9 | 3.98 | COMB19-M2 | Combination | -34.90 | 62.97 | 2.54 | 23.35 | 6.61  | 190.42  |
| 9 | 4.47 | COMB19-M2 | Combination | -34.90 | 65.66 | 2.54 | 23.35 | 5.34  | 158.47  |
| 9 | 4.97 | COMB19-M2 | Combination | -34.90 | 68.35 | 2.54 | 23.35 | 4.08  | 125.17  |
| 9 | 5.47 | COMB19-M2 | Combination | -34.90 | 71.03 | 2.54 | 23.35 | 2.82  | 90.55   |
| 9 | 5.96 | COMB19-M2 | Combination | -34.90 | 73.72 | 2.54 | 23.35 | 1.56  | 54.59   |
| 9 | 6.46 | COMB19-M2 | Combination | -34.90 | 76.40 | 2.54 | 23.35 | 0.30  | 17.29   |
| 9 | 6.96 | COMB19-M2 | Combination | -34.90 | 79.09 | 2.54 | 23.35 | -0.96 | -21.34  |
| 9 | 7.45 | COMB19-M2 | Combination | -34.90 | 81.78 | 2.54 | 23.35 | -2.22 | -61.31  |
| 9 | 7.95 | COMB19-M2 | Combination | -34.90 | 84.46 | 2.54 | 23.35 | -3.48 | -102.61 |
| 9 | 0.00 | COMB20-M2 | Combination | -34.90 | 41.48 | 2.72 | 24.55 | 17.75 | 398.03  |
| 9 | 0.50 | COMB20-M2 | Combination | -34.90 | 44.17 | 2.72 | 24.55 | 16.40 | 376.75  |
| 9 | 0.99 | COMB20-M2 | Combination | -34.90 | 46.86 | 2.72 | 24.55 | 15.05 | 354.14  |
| 9 | 1.49 | COMB20-M2 | Combination | -34.90 | 49.54 | 2.72 | 24.55 | 13.70 | 330.19  |
| 9 | 1.99 | COMB20-M2 | Combination | -34.90 | 52.23 | 2.72 | 24.55 | 12.35 | 304.90  |
| 9 | 2.48 | COMB20-M2 | Combination | -34.90 | 54.91 | 2.72 | 24.55 | 11.00 | 278.29  |
| 9 | 2.98 | COMB20-M2 | Combination | -34.90 | 57.60 | 2.72 | 24.55 | 9.65  | 250.33  |
| 9 | 3.48 | COMB20-M2 | Combination | -34.90 | 60.29 | 2.72 | 24.55 | 8.30  | 221.05  |
| 9 | 3.98 | COMB20-M2 | Combination | -34.90 | 62.97 | 2.72 | 24.55 | 6.95  | 190.42  |
| 9 | 4.47 | COMB20-M2 | Combination | -34.90 | 65.66 | 2.72 | 24.55 | 5.60  | 158.47  |
| 9 | 4.97 | COMB20-M2 | Combination | -34.90 | 68.35 | 2.72 | 24.55 | 4.25  | 125.17  |
| 9 | 5.47 | COMB20-M2 | Combination | -34.90 | 71.03 | 2.72 | 24.55 | 2.90  | 90.55   |
| 9 | 5.96 | COMB20-M2 | Combination | -34.90 | 73.72 | 2.72 | 24.55 | 1.55  | 54.59   |

|  |      | ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br>SAN CRISTÓBAL, EN BOGOTÁ D.C. |             |        |       |      |  |       |         |
|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------|--------|-------|------|-------------------------------------------------------------------------------------|-------|---------|
| 9                                                                                 | 6.46 | COMB20-M2                                                                                                                               | Combination | -34.90 | 76.40 | 2.72 | 24.55                                                                               | 0.20  | 17.29   |
| 9                                                                                 | 6.96 | COMB20-M2                                                                                                                               | Combination | -34.90 | 79.09 | 2.72 | 24.55                                                                               | -1.15 | -21.34  |
| 9                                                                                 | 7.45 | COMB20-M2                                                                                                                               | Combination | -34.90 | 81.78 | 2.72 | 24.55                                                                               | -2.50 | -61.31  |
| 9                                                                                 | 7.95 | COMB20-M2                                                                                                                               | Combination | -34.90 | 84.46 | 2.72 | 24.55                                                                               | -3.85 | -102.61 |
| 9                                                                                 | 0.00 | COMB21-M2                                                                                                                               | Combination | -32.67 | 47.27 | 2.33 | 21.95                                                                               | 15.45 | 428.25  |
| 9                                                                                 | 0.50 | COMB21-M2                                                                                                                               | Combination | -32.67 | 49.96 | 2.33 | 21.95                                                                               | 14.29 | 404.10  |
| 9                                                                                 | 0.99 | COMB21-M2                                                                                                                               | Combination | -32.67 | 52.64 | 2.33 | 21.95                                                                               | 13.14 | 378.61  |
| 9                                                                                 | 1.49 | COMB21-M2                                                                                                                               | Combination | -32.67 | 55.33 | 2.33 | 21.95                                                                               | 11.98 | 351.79  |
| 9                                                                                 | 1.99 | COMB21-M2                                                                                                                               | Combination | -32.67 | 58.02 | 2.33 | 21.95                                                                               | 10.83 | 323.63  |
| 9                                                                                 | 2.48 | COMB21-M2                                                                                                                               | Combination | -32.67 | 60.70 | 2.33 | 21.95                                                                               | 9.67  | 294.13  |
| 9                                                                                 | 2.98 | COMB21-M2                                                                                                                               | Combination | -32.67 | 63.39 | 2.33 | 21.95                                                                               | 8.51  | 263.30  |
| 9                                                                                 | 3.48 | COMB21-M2                                                                                                                               | Combination | -32.67 | 66.07 | 2.33 | 21.95                                                                               | 7.36  | 231.14  |
| 9                                                                                 | 3.98 | COMB21-M2                                                                                                                               | Combination | -32.67 | 68.76 | 2.33 | 21.95                                                                               | 6.20  | 197.64  |
| 9                                                                                 | 4.47 | COMB21-M2                                                                                                                               | Combination | -32.67 | 71.45 | 2.33 | 21.95                                                                               | 5.05  | 162.81  |
| 9                                                                                 | 4.97 | COMB21-M2                                                                                                                               | Combination | -32.67 | 74.13 | 2.33 | 21.95                                                                               | 3.89  | 126.64  |
| 9                                                                                 | 5.47 | COMB21-M2                                                                                                                               | Combination | -32.67 | 76.82 | 2.33 | 21.95                                                                               | 2.73  | 89.14   |
| 9                                                                                 | 5.96 | COMB21-M2                                                                                                                               | Combination | -32.67 | 79.51 | 2.33 | 21.95                                                                               | 1.58  | 50.30   |
| 9                                                                                 | 6.46 | COMB21-M2                                                                                                                               | Combination | -32.67 | 82.19 | 2.33 | 21.95                                                                               | 0.42  | 10.13   |
| 9                                                                                 | 6.96 | COMB21-M2                                                                                                                               | Combination | -32.67 | 84.88 | 2.33 | 21.95                                                                               | -0.73 | -31.37  |
| 9                                                                                 | 7.45 | COMB21-M2                                                                                                                               | Combination | -32.67 | 87.56 | 2.33 | 21.95                                                                               | -1.89 | -74.22  |
| 9                                                                                 | 7.95 | COMB21-M2                                                                                                                               | Combination | -32.67 | 90.25 | 2.33 | 21.95                                                                               | -3.05 | -118.39 |
| 9                                                                                 | 0.00 | COMB22-M2                                                                                                                               | Combination | -32.67 | 47.27 | 2.93 | 25.95                                                                               | 19.00 | 428.25  |
| 9                                                                                 | 0.50 | COMB22-M2                                                                                                                               | Combination | -32.67 | 49.96 | 2.93 | 25.95                                                                               | 17.54 | 404.10  |
| 9                                                                                 | 0.99 | COMB22-M2                                                                                                                               | Combination | -32.67 | 52.64 | 2.93 | 25.95                                                                               | 16.09 | 378.61  |
| 9                                                                                 | 1.49 | COMB22-M2                                                                                                                               | Combination | -32.67 | 55.33 | 2.93 | 25.95                                                                               | 14.63 | 351.79  |
| 9                                                                                 | 1.99 | COMB22-M2                                                                                                                               | Combination | -32.67 | 58.02 | 2.93 | 25.95                                                                               | 13.18 | 323.63  |
| 9                                                                                 | 2.48 | COMB22-M2                                                                                                                               | Combination | -32.67 | 60.70 | 2.93 | 25.95                                                                               | 11.72 | 294.13  |
| 9                                                                                 | 2.98 | COMB22-M2                                                                                                                               | Combination | -32.67 | 63.39 | 2.93 | 25.95                                                                               | 10.27 | 263.30  |
| 9                                                                                 | 3.48 | COMB22-M2                                                                                                                               | Combination | -32.67 | 66.07 | 2.93 | 25.95                                                                               | 8.81  | 231.14  |
| 9                                                                                 | 3.98 | COMB22-M2                                                                                                                               | Combination | -32.67 | 68.76 | 2.93 | 25.95                                                                               | 7.36  | 197.64  |
| 9                                                                                 | 4.47 | COMB22-M2                                                                                                                               | Combination | -32.67 | 71.45 | 2.93 | 25.95                                                                               | 5.90  | 162.81  |
| 9                                                                                 | 4.97 | COMB22-M2                                                                                                                               | Combination | -32.67 | 74.13 | 2.93 | 25.95                                                                               | 4.45  | 126.64  |
| 9                                                                                 | 5.47 | COMB22-M2                                                                                                                               | Combination | -32.67 | 76.82 | 2.93 | 25.95                                                                               | 2.99  | 89.14   |
| 9                                                                                 | 5.96 | COMB22-M2                                                                                                                               | Combination | -32.67 | 79.51 | 2.93 | 25.95                                                                               | 1.54  | 50.30   |
| 9                                                                                 | 6.46 | COMB22-M2                                                                                                                               | Combination | -32.67 | 82.19 | 2.93 | 25.95                                                                               | 0.08  | 10.13   |
| 9                                                                                 | 6.96 | COMB22-M2                                                                                                                               | Combination | -32.67 | 84.88 | 2.93 | 25.95                                                                               | -1.37 | -31.37  |
| 9                                                                                 | 7.45 | COMB22-M2                                                                                                                               | Combination | -32.67 | 87.56 | 2.93 | 25.95                                                                               | -2.83 | -74.22  |
| 9                                                                                 | 7.95 | COMB22-M2                                                                                                                               | Combination | -32.67 | 90.25 | 2.93 | 25.95                                                                               | -4.28 | -118.39 |

|  |      | ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br>SAN CRISTÓBAL, EN BOGOTÁ D.C. |             |        |       |      |  |       |         |
|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------|--------|-------|------|-------------------------------------------------------------------------------------|-------|---------|
| 9                                                                                 | 0.00 | COMB23-M2                                                                                                                               | Combination | -33.70 | 44.60 | 2.33 | 21.95                                                                               | 15.45 | 414.31  |
| 9                                                                                 | 0.50 | COMB23-M2                                                                                                                               | Combination | -33.70 | 47.29 | 2.33 | 21.95                                                                               | 14.29 | 391.48  |
| 9                                                                                 | 0.99 | COMB23-M2                                                                                                                               | Combination | -33.70 | 49.97 | 2.33 | 21.95                                                                               | 13.14 | 367.31  |
| 9                                                                                 | 1.49 | COMB23-M2                                                                                                                               | Combination | -33.70 | 52.66 | 2.33 | 21.95                                                                               | 11.98 | 341.82  |
| 9                                                                                 | 1.99 | COMB23-M2                                                                                                                               | Combination | -33.70 | 55.34 | 2.33 | 21.95                                                                               | 10.83 | 314.99  |
| 9                                                                                 | 2.48 | COMB23-M2                                                                                                                               | Combination | -33.70 | 58.03 | 2.33 | 21.95                                                                               | 9.67  | 286.82  |
| 9                                                                                 | 2.98 | COMB23-M2                                                                                                                               | Combination | -33.70 | 60.72 | 2.33 | 21.95                                                                               | 8.51  | 257.32  |
| 9                                                                                 | 3.48 | COMB23-M2                                                                                                                               | Combination | -33.70 | 63.40 | 2.33 | 21.95                                                                               | 7.36  | 226.48  |
| 9                                                                                 | 3.98 | COMB23-M2                                                                                                                               | Combination | -33.70 | 66.09 | 2.33 | 21.95                                                                               | 6.20  | 194.31  |
| 9                                                                                 | 4.47 | COMB23-M2                                                                                                                               | Combination | -33.70 | 68.78 | 2.33 | 21.95                                                                               | 5.05  | 160.80  |
| 9                                                                                 | 4.97 | COMB23-M2                                                                                                                               | Combination | -33.70 | 71.46 | 2.33 | 21.95                                                                               | 3.89  | 125.96  |
| 9                                                                                 | 5.47 | COMB23-M2                                                                                                                               | Combination | -33.70 | 74.15 | 2.33 | 21.95                                                                               | 2.73  | 89.79   |
| 9                                                                                 | 5.96 | COMB23-M2                                                                                                                               | Combination | -33.70 | 76.83 | 2.33 | 21.95                                                                               | 1.58  | 52.28   |
| 9                                                                                 | 6.46 | COMB23-M2                                                                                                                               | Combination | -33.70 | 79.52 | 2.33 | 21.95                                                                               | 0.42  | 13.44   |
| 9                                                                                 | 6.96 | COMB23-M2                                                                                                                               | Combination | -33.70 | 82.21 | 2.33 | 21.95                                                                               | -0.73 | -26.74  |
| 9                                                                                 | 7.45 | COMB23-M2                                                                                                                               | Combination | -33.70 | 84.89 | 2.33 | 21.95                                                                               | -1.89 | -68.26  |
| 9                                                                                 | 7.95 | COMB23-M2                                                                                                                               | Combination | -33.70 | 87.58 | 2.33 | 21.95                                                                               | -3.05 | -111.11 |
| 9                                                                                 | 0.00 | COMB24-M2                                                                                                                               | Combination | -33.70 | 44.60 | 2.93 | 25.95                                                                               | 19.00 | 414.31  |
| 9                                                                                 | 0.50 | COMB24-M2                                                                                                                               | Combination | -33.70 | 47.29 | 2.93 | 25.95                                                                               | 17.54 | 391.48  |
| 9                                                                                 | 0.99 | COMB24-M2                                                                                                                               | Combination | -33.70 | 49.97 | 2.93 | 25.95                                                                               | 16.09 | 367.31  |
| 9                                                                                 | 1.49 | COMB24-M2                                                                                                                               | Combination | -33.70 | 52.66 | 2.93 | 25.95                                                                               | 14.63 | 341.82  |
| 9                                                                                 | 1.99 | COMB24-M2                                                                                                                               | Combination | -33.70 | 55.34 | 2.93 | 25.95                                                                               | 13.18 | 314.99  |
| 9                                                                                 | 2.48 | COMB24-M2                                                                                                                               | Combination | -33.70 | 58.03 | 2.93 | 25.95                                                                               | 11.72 | 286.82  |
| 9                                                                                 | 2.98 | COMB24-M2                                                                                                                               | Combination | -33.70 | 60.72 | 2.93 | 25.95                                                                               | 10.27 | 257.32  |
| 9                                                                                 | 3.48 | COMB24-M2                                                                                                                               | Combination | -33.70 | 63.40 | 2.93 | 25.95                                                                               | 8.81  | 226.48  |
| 9                                                                                 | 3.98 | COMB24-M2                                                                                                                               | Combination | -33.70 | 66.09 | 2.93 | 25.95                                                                               | 7.36  | 194.31  |
| 9                                                                                 | 4.47 | COMB24-M2                                                                                                                               | Combination | -33.70 | 68.78 | 2.93 | 25.95                                                                               | 5.90  | 160.80  |
| 9                                                                                 | 4.97 | COMB24-M2                                                                                                                               | Combination | -33.70 | 71.46 | 2.93 | 25.95                                                                               | 4.45  | 125.96  |
| 9                                                                                 | 5.47 | COMB24-M2                                                                                                                               | Combination | -33.70 | 74.15 | 2.93 | 25.95                                                                               | 2.99  | 89.79   |
| 9                                                                                 | 5.96 | COMB24-M2                                                                                                                               | Combination | -33.70 | 76.83 | 2.93 | 25.95                                                                               | 1.54  | 52.28   |
| 9                                                                                 | 6.46 | COMB24-M2                                                                                                                               | Combination | -33.70 | 79.52 | 2.93 | 25.95                                                                               | 0.08  | 13.44   |
| 9                                                                                 | 6.96 | COMB24-M2                                                                                                                               | Combination | -33.70 | 82.21 | 2.93 | 25.95                                                                               | -1.37 | -26.74  |
| 9                                                                                 | 7.45 | COMB24-M2                                                                                                                               | Combination | -33.70 | 84.89 | 2.93 | 25.95                                                                               | -2.83 | -68.26  |
| 9                                                                                 | 7.95 | COMB24-M2                                                                                                                               | Combination | -33.70 | 87.58 | 2.93 | 25.95                                                                               | -4.28 | -111.11 |
| 9                                                                                 | 0.00 | COMB25-M2                                                                                                                               | Combination | -31.42 | 50.27 | 2.54 | 23.35                                                                               | 16.69 | 443.75  |
| 9                                                                                 | 0.50 | COMB25-M2                                                                                                                               | Combination | -31.42 | 52.95 | 2.54 | 23.35                                                                               | 15.43 | 418.11  |
| 9                                                                                 | 0.99 | COMB25-M2                                                                                                                               | Combination | -31.42 | 55.64 | 2.54 | 23.35                                                                               | 14.17 | 391.13  |
| 9                                                                                 | 1.49 | COMB25-M2                                                                                                                               | Combination | -31.42 | 58.32 | 2.54 | 23.35                                                                               | 12.91 | 362.82  |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|   |      |           |             |        |       |      |       |       |         |
|---|------|-----------|-------------|--------|-------|------|-------|-------|---------|
| 9 | 1.99 | COMB25-M2 | Combination | -31.42 | 61.01 | 2.54 | 23.35 | 11.65 | 333.17  |
| 9 | 2.48 | COMB25-M2 | Combination | -31.42 | 63.70 | 2.54 | 23.35 | 10.39 | 302.19  |
| 9 | 2.98 | COMB25-M2 | Combination | -31.42 | 66.38 | 2.54 | 23.35 | 9.13  | 269.87  |
| 9 | 3.48 | COMB25-M2 | Combination | -31.42 | 69.07 | 2.54 | 23.35 | 7.87  | 236.22  |
| 9 | 3.98 | COMB25-M2 | Combination | -31.42 | 71.75 | 2.54 | 23.35 | 6.61  | 201.24  |
| 9 | 4.47 | COMB25-M2 | Combination | -31.42 | 74.44 | 2.54 | 23.35 | 5.34  | 164.91  |
| 9 | 4.97 | COMB25-M2 | Combination | -31.42 | 77.13 | 2.54 | 23.35 | 4.08  | 127.26  |
| 9 | 5.47 | COMB25-M2 | Combination | -31.42 | 79.81 | 2.54 | 23.35 | 2.82  | 88.27   |
| 9 | 5.96 | COMB25-M2 | Combination | -31.42 | 82.50 | 2.54 | 23.35 | 1.56  | 47.94   |
| 9 | 6.46 | COMB25-M2 | Combination | -31.42 | 85.19 | 2.54 | 23.35 | 0.30  | 6.29    |
| 9 | 6.96 | COMB25-M2 | Combination | -31.42 | 87.87 | 2.54 | 23.35 | -0.96 | -36.71  |
| 9 | 7.45 | COMB25-M2 | Combination | -31.42 | 90.56 | 2.54 | 23.35 | -2.22 | -81.04  |
| 9 | 7.95 | COMB25-M2 | Combination | -31.42 | 93.24 | 2.54 | 23.35 | -3.48 | -126.70 |
| 9 | 0.00 | COMB26-M2 | Combination | -31.42 | 50.27 | 2.72 | 24.55 | 17.75 | 443.75  |
| 9 | 0.50 | COMB26-M2 | Combination | -31.42 | 52.95 | 2.72 | 24.55 | 16.40 | 418.11  |
| 9 | 0.99 | COMB26-M2 | Combination | -31.42 | 55.64 | 2.72 | 24.55 | 15.05 | 391.13  |
| 9 | 1.49 | COMB26-M2 | Combination | -31.42 | 58.32 | 2.72 | 24.55 | 13.70 | 362.82  |
| 9 | 1.99 | COMB26-M2 | Combination | -31.42 | 61.01 | 2.72 | 24.55 | 12.35 | 333.17  |
| 9 | 2.48 | COMB26-M2 | Combination | -31.42 | 63.70 | 2.72 | 24.55 | 11.00 | 302.19  |
| 9 | 2.98 | COMB26-M2 | Combination | -31.42 | 66.38 | 2.72 | 24.55 | 9.65  | 269.87  |
| 9 | 3.48 | COMB26-M2 | Combination | -31.42 | 69.07 | 2.72 | 24.55 | 8.30  | 236.22  |
| 9 | 3.98 | COMB26-M2 | Combination | -31.42 | 71.75 | 2.72 | 24.55 | 6.95  | 201.24  |
| 9 | 4.47 | COMB26-M2 | Combination | -31.42 | 74.44 | 2.72 | 24.55 | 5.60  | 164.91  |
| 9 | 4.97 | COMB26-M2 | Combination | -31.42 | 77.13 | 2.72 | 24.55 | 4.25  | 127.26  |
| 9 | 5.47 | COMB26-M2 | Combination | -31.42 | 79.81 | 2.72 | 24.55 | 2.90  | 88.27   |
| 9 | 5.96 | COMB26-M2 | Combination | -31.42 | 82.50 | 2.72 | 24.55 | 1.55  | 47.94   |
| 9 | 6.46 | COMB26-M2 | Combination | -31.42 | 85.19 | 2.72 | 24.55 | 0.20  | 6.29    |
| 9 | 6.96 | COMB26-M2 | Combination | -31.42 | 87.87 | 2.72 | 24.55 | -1.15 | -36.71  |
| 9 | 7.45 | COMB26-M2 | Combination | -31.42 | 90.56 | 2.72 | 24.55 | -2.50 | -81.04  |
| 9 | 7.95 | COMB26-M2 | Combination | -31.42 | 93.24 | 2.72 | 24.55 | -3.85 | -126.70 |
| 9 | 0.00 | COMB27-M2 | Combination | -34.85 | 41.36 | 2.54 | 23.35 | 16.69 | 397.25  |
| 9 | 0.50 | COMB27-M2 | Combination | -34.85 | 44.05 | 2.54 | 23.35 | 15.43 | 376.03  |
| 9 | 0.99 | COMB27-M2 | Combination | -34.85 | 46.73 | 2.54 | 23.35 | 14.17 | 353.48  |
| 9 | 1.49 | COMB27-M2 | Combination | -34.85 | 49.42 | 2.54 | 23.35 | 12.91 | 329.59  |
| 9 | 1.99 | COMB27-M2 | Combination | -34.85 | 52.11 | 2.54 | 23.35 | 11.65 | 304.37  |
| 9 | 2.48 | COMB27-M2 | Combination | -34.85 | 54.79 | 2.54 | 23.35 | 10.39 | 277.81  |
| 9 | 2.98 | COMB27-M2 | Combination | -34.85 | 57.48 | 2.54 | 23.35 | 9.13  | 249.92  |
| 9 | 3.48 | COMB27-M2 | Combination | -34.85 | 60.17 | 2.54 | 23.35 | 7.87  | 220.69  |

| <div>  <div> <div>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA</div> <div>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN</div> <div>SAN CRISTÓBAL, EN BOGOTÁ D.C.</div> </div> <div>  </div> </div> |      |           |             |        |       |      |       |       |         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|-------------|--------|-------|------|-------|-------|---------|
| 9                                                                                                                                                                                                                                                                                                                                                                               | 3.98 | COMB27-M2 | Combination | -34.85 | 62.85 | 2.54 | 23.35 | 6.61  | 190.13  |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 4.47 | COMB27-M2 | Combination | -34.85 | 65.54 | 2.54 | 23.35 | 5.34  | 158.23  |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 4.97 | COMB27-M2 | Combination | -34.85 | 68.22 | 2.54 | 23.35 | 4.08  | 125.00  |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 5.47 | COMB27-M2 | Combination | -34.85 | 70.91 | 2.54 | 23.35 | 2.82  | 90.43   |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 5.96 | COMB27-M2 | Combination | -34.85 | 73.60 | 2.54 | 23.35 | 1.56  | 54.53   |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 6.46 | COMB27-M2 | Combination | -34.85 | 76.28 | 2.54 | 23.35 | 0.30  | 17.30   |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 6.96 | COMB27-M2 | Combination | -34.85 | 78.97 | 2.54 | 23.35 | -0.96 | -21.27  |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 7.45 | COMB27-M2 | Combination | -34.85 | 81.66 | 2.54 | 23.35 | -2.22 | -61.18  |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 7.95 | COMB27-M2 | Combination | -34.85 | 84.34 | 2.54 | 23.35 | -3.48 | -102.42 |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 0.00 | COMB28-M2 | Combination | -34.85 | 41.36 | 2.72 | 24.55 | 17.75 | 397.25  |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 0.50 | COMB28-M2 | Combination | -34.85 | 44.05 | 2.72 | 24.55 | 16.40 | 376.03  |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 0.99 | COMB28-M2 | Combination | -34.85 | 46.73 | 2.72 | 24.55 | 15.05 | 353.48  |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 1.49 | COMB28-M2 | Combination | -34.85 | 49.42 | 2.72 | 24.55 | 13.70 | 329.59  |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 1.99 | COMB28-M2 | Combination | -34.85 | 52.11 | 2.72 | 24.55 | 12.35 | 304.37  |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 2.48 | COMB28-M2 | Combination | -34.85 | 54.79 | 2.72 | 24.55 | 11.00 | 277.81  |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 2.98 | COMB28-M2 | Combination | -34.85 | 57.48 | 2.72 | 24.55 | 9.65  | 249.92  |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 3.48 | COMB28-M2 | Combination | -34.85 | 60.17 | 2.72 | 24.55 | 8.30  | 220.69  |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 3.98 | COMB28-M2 | Combination | -34.85 | 62.85 | 2.72 | 24.55 | 6.95  | 190.13  |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 4.47 | COMB28-M2 | Combination | -34.85 | 65.54 | 2.72 | 24.55 | 5.60  | 158.23  |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 4.97 | COMB28-M2 | Combination | -34.85 | 68.22 | 2.72 | 24.55 | 4.25  | 125.00  |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 5.47 | COMB28-M2 | Combination | -34.85 | 70.91 | 2.72 | 24.55 | 2.90  | 90.43   |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 5.96 | COMB28-M2 | Combination | -34.85 | 73.60 | 2.72 | 24.55 | 1.55  | 54.53   |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 6.46 | COMB28-M2 | Combination | -34.85 | 76.28 | 2.72 | 24.55 | 0.20  | 17.30   |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 6.96 | COMB28-M2 | Combination | -34.85 | 78.97 | 2.72 | 24.55 | -1.15 | -21.27  |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 7.45 | COMB28-M2 | Combination | -34.85 | 81.66 | 2.72 | 24.55 | -2.50 | -61.18  |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 7.95 | COMB28-M2 | Combination | -34.85 | 84.34 | 2.72 | 24.55 | -3.85 | -102.42 |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 0.00 | COMB29-M2 | Combination | -32.62 | 47.15 | 2.33 | 21.95 | 15.45 | 427.48  |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 0.50 | COMB29-M2 | Combination | -32.62 | 49.84 | 2.33 | 21.95 | 14.29 | 403.38  |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 0.99 | COMB29-M2 | Combination | -32.62 | 52.52 | 2.33 | 21.95 | 13.14 | 377.95  |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 1.49 | COMB29-M2 | Combination | -32.62 | 55.21 | 2.33 | 21.95 | 11.98 | 351.19  |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 1.99 | COMB29-M2 | Combination | -32.62 | 57.89 | 2.33 | 21.95 | 10.83 | 323.09  |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 2.48 | COMB29-M2 | Combination | -32.62 | 60.58 | 2.33 | 21.95 | 9.67  | 293.66  |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 2.98 | COMB29-M2 | Combination | -32.62 | 63.27 | 2.33 | 21.95 | 8.51  | 262.89  |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 3.48 | COMB29-M2 | Combination | -32.62 | 65.95 | 2.33 | 21.95 | 7.36  | 230.79  |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 3.98 | COMB29-M2 | Combination | -32.62 | 68.64 | 2.33 | 21.95 | 6.20  | 197.35  |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 4.47 | COMB29-M2 | Combination | -32.62 | 71.33 | 2.33 | 21.95 | 5.05  | 162.58  |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 4.97 | COMB29-M2 | Combination | -32.62 | 74.01 | 2.33 | 21.95 | 3.89  | 126.47  |
| 9                                                                                                                                                                                                                                                                                                                                                                               | 5.47 | COMB29-M2 | Combination | -32.62 | 76.70 | 2.33 | 21.95 | 2.73  | 89.03   |



|  |      | ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br>SAN CRISTÓBAL, EN BOGOTÁ D.C. |             |        |       |      |  |       |         |
|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------|--------|-------|------|-------------------------------------------------------------------------------------|-------|---------|
| 9                                                                                 | 5.96 | COMB29-M2                                                                                                                               | Combination | -32.62 | 79.38 | 2.33 | 21.95                                                                               | 1.58  | 50.25   |
| 9                                                                                 | 6.46 | COMB29-M2                                                                                                                               | Combination | -32.62 | 82.07 | 2.33 | 21.95                                                                               | 0.42  | 10.14   |
| 9                                                                                 | 6.96 | COMB29-M2                                                                                                                               | Combination | -32.62 | 84.76 | 2.33 | 21.95                                                                               | -0.73 | -31.31  |
| 9                                                                                 | 7.45 | COMB29-M2                                                                                                                               | Combination | -32.62 | 87.44 | 2.33 | 21.95                                                                               | -1.89 | -74.09  |
| 9                                                                                 | 7.95 | COMB29-M2                                                                                                                               | Combination | -32.62 | 90.13 | 2.33 | 21.95                                                                               | -3.05 | -118.20 |
| 9                                                                                 | 0.00 | COMB30-M2                                                                                                                               | Combination | -32.62 | 47.15 | 2.93 | 25.95                                                                               | 19.00 | 427.48  |
| 9                                                                                 | 0.50 | COMB30-M2                                                                                                                               | Combination | -32.62 | 49.84 | 2.93 | 25.95                                                                               | 17.54 | 403.38  |
| 9                                                                                 | 0.99 | COMB30-M2                                                                                                                               | Combination | -32.62 | 52.52 | 2.93 | 25.95                                                                               | 16.09 | 377.95  |
| 9                                                                                 | 1.49 | COMB30-M2                                                                                                                               | Combination | -32.62 | 55.21 | 2.93 | 25.95                                                                               | 14.63 | 351.19  |
| 9                                                                                 | 1.99 | COMB30-M2                                                                                                                               | Combination | -32.62 | 57.89 | 2.93 | 25.95                                                                               | 13.18 | 323.09  |
| 9                                                                                 | 2.48 | COMB30-M2                                                                                                                               | Combination | -32.62 | 60.58 | 2.93 | 25.95                                                                               | 11.72 | 293.66  |
| 9                                                                                 | 2.98 | COMB30-M2                                                                                                                               | Combination | -32.62 | 63.27 | 2.93 | 25.95                                                                               | 10.27 | 262.89  |
| 9                                                                                 | 3.48 | COMB30-M2                                                                                                                               | Combination | -32.62 | 65.95 | 2.93 | 25.95                                                                               | 8.81  | 230.79  |
| 9                                                                                 | 3.98 | COMB30-M2                                                                                                                               | Combination | -32.62 | 68.64 | 2.93 | 25.95                                                                               | 7.36  | 197.35  |
| 9                                                                                 | 4.47 | COMB30-M2                                                                                                                               | Combination | -32.62 | 71.33 | 2.93 | 25.95                                                                               | 5.90  | 162.58  |
| 9                                                                                 | 4.97 | COMB30-M2                                                                                                                               | Combination | -32.62 | 74.01 | 2.93 | 25.95                                                                               | 4.45  | 126.47  |
| 9                                                                                 | 5.47 | COMB30-M2                                                                                                                               | Combination | -32.62 | 76.70 | 2.93 | 25.95                                                                               | 2.99  | 89.03   |
| 9                                                                                 | 5.96 | COMB30-M2                                                                                                                               | Combination | -32.62 | 79.38 | 2.93 | 25.95                                                                               | 1.54  | 50.25   |
| 9                                                                                 | 6.46 | COMB30-M2                                                                                                                               | Combination | -32.62 | 82.07 | 2.93 | 25.95                                                                               | 0.08  | 10.14   |
| 9                                                                                 | 6.96 | COMB30-M2                                                                                                                               | Combination | -32.62 | 84.76 | 2.93 | 25.95                                                                               | -1.37 | -31.31  |
| 9                                                                                 | 7.45 | COMB30-M2                                                                                                                               | Combination | -32.62 | 87.44 | 2.93 | 25.95                                                                               | -2.83 | -74.09  |
| 9                                                                                 | 7.95 | COMB30-M2                                                                                                                               | Combination | -32.62 | 90.13 | 2.93 | 25.95                                                                               | -4.28 | -118.20 |
| 9                                                                                 | 0.00 | COMB31-M2                                                                                                                               | Combination | -33.65 | 44.48 | 2.33 | 21.95                                                                               | 15.45 | 413.53  |
| 9                                                                                 | 0.50 | COMB31-M2                                                                                                                               | Combination | -33.65 | 47.16 | 2.33 | 21.95                                                                               | 14.29 | 390.76  |
| 9                                                                                 | 0.99 | COMB31-M2                                                                                                                               | Combination | -33.65 | 49.85 | 2.33 | 21.95                                                                               | 13.14 | 366.66  |
| 9                                                                                 | 1.49 | COMB31-M2                                                                                                                               | Combination | -33.65 | 52.54 | 2.33 | 21.95                                                                               | 11.98 | 341.22  |
| 9                                                                                 | 1.99 | COMB31-M2                                                                                                                               | Combination | -33.65 | 55.22 | 2.33 | 21.95                                                                               | 10.83 | 314.45  |
| 9                                                                                 | 2.48 | COMB31-M2                                                                                                                               | Combination | -33.65 | 57.91 | 2.33 | 21.95                                                                               | 9.67  | 286.34  |
| 9                                                                                 | 2.98 | COMB31-M2                                                                                                                               | Combination | -33.65 | 60.60 | 2.33 | 21.95                                                                               | 8.51  | 256.90  |
| 9                                                                                 | 3.48 | COMB31-M2                                                                                                                               | Combination | -33.65 | 63.28 | 2.33 | 21.95                                                                               | 7.36  | 226.13  |
| 9                                                                                 | 3.98 | COMB31-M2                                                                                                                               | Combination | -33.65 | 65.97 | 2.33 | 21.95                                                                               | 6.20  | 194.02  |
| 9                                                                                 | 4.47 | COMB31-M2                                                                                                                               | Combination | -33.65 | 68.65 | 2.33 | 21.95                                                                               | 5.05  | 160.57  |
| 9                                                                                 | 4.97 | COMB31-M2                                                                                                                               | Combination | -33.65 | 71.34 | 2.33 | 21.95                                                                               | 3.89  | 125.79  |
| 9                                                                                 | 5.47 | COMB31-M2                                                                                                                               | Combination | -33.65 | 74.03 | 2.33 | 21.95                                                                               | 2.73  | 89.68   |
| 9                                                                                 | 5.96 | COMB31-M2                                                                                                                               | Combination | -33.65 | 76.71 | 2.33 | 21.95                                                                               | 1.58  | 52.23   |
| 9                                                                                 | 6.46 | COMB31-M2                                                                                                                               | Combination | -33.65 | 79.40 | 2.33 | 21.95                                                                               | 0.42  | 13.44   |
| 9                                                                                 | 6.96 | COMB31-M2                                                                                                                               | Combination | -33.65 | 82.09 | 2.33 | 21.95                                                                               | -0.73 | -26.68  |
| 9                                                                                 | 7.45 | COMB31-M2                                                                                                                               | Combination | -33.65 | 84.77 | 2.33 | 21.95                                                                               | -1.89 | -68.13  |



|  |      | ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br>SAN CRISTÓBAL, EN BOGOTÁ D.C. |             |        |       |      |  |       |         |
|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------|--------|-------|------|-------------------------------------------------------------------------------------|-------|---------|
| 9                                                                                 | 7.95 | COMB31-M2                                                                                                                               | Combination | -33.65 | 87.46 | 2.33 | 21.95                                                                               | -3.05 | -110.92 |
| 9                                                                                 | 0.00 | COMB32-M2                                                                                                                               | Combination | -33.65 | 44.48 | 2.93 | 25.95                                                                               | 19.00 | 413.53  |
| 9                                                                                 | 0.50 | COMB32-M2                                                                                                                               | Combination | -33.65 | 47.16 | 2.93 | 25.95                                                                               | 17.54 | 390.76  |
| 9                                                                                 | 0.99 | COMB32-M2                                                                                                                               | Combination | -33.65 | 49.85 | 2.93 | 25.95                                                                               | 16.09 | 366.66  |
| 9                                                                                 | 1.49 | COMB32-M2                                                                                                                               | Combination | -33.65 | 52.54 | 2.93 | 25.95                                                                               | 14.63 | 341.22  |
| 9                                                                                 | 1.99 | COMB32-M2                                                                                                                               | Combination | -33.65 | 55.22 | 2.93 | 25.95                                                                               | 13.18 | 314.45  |
| 9                                                                                 | 2.48 | COMB32-M2                                                                                                                               | Combination | -33.65 | 57.91 | 2.93 | 25.95                                                                               | 11.72 | 286.34  |
| 9                                                                                 | 2.98 | COMB32-M2                                                                                                                               | Combination | -33.65 | 60.60 | 2.93 | 25.95                                                                               | 10.27 | 256.90  |
| 9                                                                                 | 3.48 | COMB32-M2                                                                                                                               | Combination | -33.65 | 63.28 | 2.93 | 25.95                                                                               | 8.81  | 226.13  |
| 9                                                                                 | 3.98 | COMB32-M2                                                                                                                               | Combination | -33.65 | 65.97 | 2.93 | 25.95                                                                               | 7.36  | 194.02  |
| 9                                                                                 | 4.47 | COMB32-M2                                                                                                                               | Combination | -33.65 | 68.65 | 2.93 | 25.95                                                                               | 5.90  | 160.57  |
| 9                                                                                 | 4.97 | COMB32-M2                                                                                                                               | Combination | -33.65 | 71.34 | 2.93 | 25.95                                                                               | 4.45  | 125.79  |
| 9                                                                                 | 5.47 | COMB32-M2                                                                                                                               | Combination | -33.65 | 74.03 | 2.93 | 25.95                                                                               | 2.99  | 89.68   |
| 9                                                                                 | 5.96 | COMB32-M2                                                                                                                               | Combination | -33.65 | 76.71 | 2.93 | 25.95                                                                               | 1.54  | 52.23   |
| 9                                                                                 | 6.46 | COMB32-M2                                                                                                                               | Combination | -33.65 | 79.40 | 2.93 | 25.95                                                                               | 0.08  | 13.44   |
| 9                                                                                 | 6.96 | COMB32-M2                                                                                                                               | Combination | -33.65 | 82.09 | 2.93 | 25.95                                                                               | -1.37 | -26.68  |
| 9                                                                                 | 7.45 | COMB32-M2                                                                                                                               | Combination | -33.65 | 84.77 | 2.93 | 25.95                                                                               | -2.83 | -68.13  |
| 9                                                                                 | 7.95 | COMB32-M2                                                                                                                               | Combination | -33.65 | 87.46 | 2.93 | 25.95                                                                               | -4.28 | -110.92 |
| 9                                                                                 | 0.00 | COMB33-M2                                                                                                                               | Combination | -32.25 | 52.01 | 2.12 | 24.03                                                                               | 13.45 | 454.98  |
| 9                                                                                 | 0.50 | COMB33-M2                                                                                                                               | Combination | -32.25 | 54.70 | 2.12 | 24.03                                                                               | 12.40 | 428.47  |
| 9                                                                                 | 0.99 | COMB33-M2                                                                                                                               | Combination | -32.25 | 57.38 | 2.12 | 24.03                                                                               | 11.34 | 400.62  |
| 9                                                                                 | 1.49 | COMB33-M2                                                                                                                               | Combination | -32.25 | 60.07 | 2.12 | 24.03                                                                               | 10.29 | 371.44  |
| 9                                                                                 | 1.99 | COMB33-M2                                                                                                                               | Combination | -32.25 | 62.76 | 2.12 | 24.03                                                                               | 9.24  | 340.93  |
| 9                                                                                 | 2.48 | COMB33-M2                                                                                                                               | Combination | -32.25 | 65.44 | 2.12 | 24.03                                                                               | 8.19  | 309.08  |
| 9                                                                                 | 2.98 | COMB33-M2                                                                                                                               | Combination | -32.25 | 68.13 | 2.12 | 24.03                                                                               | 7.14  | 275.89  |
| 9                                                                                 | 3.48 | COMB33-M2                                                                                                                               | Combination | -32.25 | 70.82 | 2.12 | 24.03                                                                               | 6.08  | 241.37  |
| 9                                                                                 | 3.98 | COMB33-M2                                                                                                                               | Combination | -32.25 | 73.50 | 2.12 | 24.03                                                                               | 5.03  | 205.52  |
| 9                                                                                 | 4.47 | COMB33-M2                                                                                                                               | Combination | -32.25 | 76.19 | 2.12 | 24.03                                                                               | 3.98  | 168.33  |
| 9                                                                                 | 4.97 | COMB33-M2                                                                                                                               | Combination | -32.25 | 78.87 | 2.12 | 24.03                                                                               | 2.93  | 129.81  |
| 9                                                                                 | 5.47 | COMB33-M2                                                                                                                               | Combination | -32.25 | 81.56 | 2.12 | 24.03                                                                               | 1.88  | 89.95   |
| 9                                                                                 | 5.96 | COMB33-M2                                                                                                                               | Combination | -32.25 | 84.25 | 2.12 | 24.03                                                                               | 0.82  | 48.76   |
| 9                                                                                 | 6.46 | COMB33-M2                                                                                                                               | Combination | -32.25 | 86.93 | 2.12 | 24.03                                                                               | -0.23 | 6.23    |
| 9                                                                                 | 6.96 | COMB33-M2                                                                                                                               | Combination | -32.25 | 89.62 | 2.12 | 24.03                                                                               | -1.28 | -37.63  |
| 9                                                                                 | 7.45 | COMB33-M2                                                                                                                               | Combination | -32.25 | 92.31 | 2.12 | 24.03                                                                               | -2.33 | -82.83  |
| 9                                                                                 | 7.95 | COMB33-M2                                                                                                                               | Combination | -32.25 | 94.99 | 2.12 | 24.03                                                                               | -3.38 | -129.36 |
| 9                                                                                 | 0.00 | COMB34-M2                                                                                                                               | Combination | -32.25 | 52.01 | 2.30 | 25.23                                                                               | 14.51 | 454.98  |
| 9                                                                                 | 0.50 | COMB34-M2                                                                                                                               | Combination | -32.25 | 54.70 | 2.30 | 25.23                                                                               | 13.37 | 428.47  |
| 9                                                                                 | 0.99 | COMB34-M2                                                                                                                               | Combination | -32.25 | 57.38 | 2.30 | 25.23                                                                               | 12.23 | 400.62  |

|  |      | ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br>SAN CRISTÓBAL, EN BOGOTÁ D.C. |             |        |       |      |  |       |         |
|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------|--------|-------|------|-------------------------------------------------------------------------------------|-------|---------|
| 9                                                                                 | 1.49 | COMB34-M2                                                                                                                               | Combination | -32.25 | 60.07 | 2.30 | 25.23                                                                               | 11.09 | 371.44  |
| 9                                                                                 | 1.99 | COMB34-M2                                                                                                                               | Combination | -32.25 | 62.76 | 2.30 | 25.23                                                                               | 9.95  | 340.93  |
| 9                                                                                 | 2.48 | COMB34-M2                                                                                                                               | Combination | -32.25 | 65.44 | 2.30 | 25.23                                                                               | 8.80  | 309.08  |
| 9                                                                                 | 2.98 | COMB34-M2                                                                                                                               | Combination | -32.25 | 68.13 | 2.30 | 25.23                                                                               | 7.66  | 275.89  |
| 9                                                                                 | 3.48 | COMB34-M2                                                                                                                               | Combination | -32.25 | 70.82 | 2.30 | 25.23                                                                               | 6.52  | 241.37  |
| 9                                                                                 | 3.98 | COMB34-M2                                                                                                                               | Combination | -32.25 | 73.50 | 2.30 | 25.23                                                                               | 5.38  | 205.52  |
| 9                                                                                 | 4.47 | COMB34-M2                                                                                                                               | Combination | -32.25 | 76.19 | 2.30 | 25.23                                                                               | 4.24  | 168.33  |
| 9                                                                                 | 4.97 | COMB34-M2                                                                                                                               | Combination | -32.25 | 78.87 | 2.30 | 25.23                                                                               | 3.10  | 129.81  |
| 9                                                                                 | 5.47 | COMB34-M2                                                                                                                               | Combination | -32.25 | 81.56 | 2.30 | 25.23                                                                               | 1.95  | 89.95   |
| 9                                                                                 | 5.96 | COMB34-M2                                                                                                                               | Combination | -32.25 | 84.25 | 2.30 | 25.23                                                                               | 0.81  | 48.76   |
| 9                                                                                 | 6.46 | COMB34-M2                                                                                                                               | Combination | -32.25 | 86.93 | 2.30 | 25.23                                                                               | -0.33 | 6.23    |
| 9                                                                                 | 6.96 | COMB34-M2                                                                                                                               | Combination | -32.25 | 89.62 | 2.30 | 25.23                                                                               | -1.47 | -37.63  |
| 9                                                                                 | 7.45 | COMB34-M2                                                                                                                               | Combination | -32.25 | 92.31 | 2.30 | 25.23                                                                               | -2.61 | -82.83  |
| 9                                                                                 | 7.95 | COMB34-M2                                                                                                                               | Combination | -32.25 | 94.99 | 2.30 | 25.23                                                                               | -3.76 | -129.36 |
| 9                                                                                 | 0.00 | COMB35-M2                                                                                                                               | Combination | -35.68 | 43.11 | 2.12 | 24.03                                                                               | 13.45 | 408.48  |
| 9                                                                                 | 0.50 | COMB35-M2                                                                                                                               | Combination | -35.68 | 45.80 | 2.12 | 24.03                                                                               | 12.40 | 386.39  |
| 9                                                                                 | 0.99 | COMB35-M2                                                                                                                               | Combination | -35.68 | 48.48 | 2.12 | 24.03                                                                               | 11.34 | 362.97  |
| 9                                                                                 | 1.49 | COMB35-M2                                                                                                                               | Combination | -35.68 | 51.17 | 2.12 | 24.03                                                                               | 10.29 | 338.22  |
| 9                                                                                 | 1.99 | COMB35-M2                                                                                                                               | Combination | -35.68 | 53.85 | 2.12 | 24.03                                                                               | 9.24  | 312.13  |
| 9                                                                                 | 2.48 | COMB35-M2                                                                                                                               | Combination | -35.68 | 56.54 | 2.12 | 24.03                                                                               | 8.19  | 284.70  |
| 9                                                                                 | 2.98 | COMB35-M2                                                                                                                               | Combination | -35.68 | 59.23 | 2.12 | 24.03                                                                               | 7.14  | 255.94  |
| 9                                                                                 | 3.48 | COMB35-M2                                                                                                                               | Combination | -35.68 | 61.91 | 2.12 | 24.03                                                                               | 6.08  | 225.84  |
| 9                                                                                 | 3.98 | COMB35-M2                                                                                                                               | Combination | -35.68 | 64.60 | 2.12 | 24.03                                                                               | 5.03  | 194.41  |
| 9                                                                                 | 4.47 | COMB35-M2                                                                                                                               | Combination | -35.68 | 67.28 | 2.12 | 24.03                                                                               | 3.98  | 161.65  |
| 9                                                                                 | 4.97 | COMB35-M2                                                                                                                               | Combination | -35.68 | 69.97 | 2.12 | 24.03                                                                               | 2.93  | 127.55  |
| 9                                                                                 | 5.47 | COMB35-M2                                                                                                                               | Combination | -35.68 | 72.66 | 2.12 | 24.03                                                                               | 1.88  | 92.11   |
| 9                                                                                 | 5.96 | COMB35-M2                                                                                                                               | Combination | -35.68 | 75.34 | 2.12 | 24.03                                                                               | 0.82  | 55.35   |
| 9                                                                                 | 6.46 | COMB35-M2                                                                                                                               | Combination | -35.68 | 78.03 | 2.12 | 24.03                                                                               | -0.23 | 17.24   |
| 9                                                                                 | 6.96 | COMB35-M2                                                                                                                               | Combination | -35.68 | 80.72 | 2.12 | 24.03                                                                               | -1.28 | -22.20  |
| 9                                                                                 | 7.45 | COMB35-M2                                                                                                                               | Combination | -35.68 | 83.40 | 2.12 | 24.03                                                                               | -2.33 | -62.97  |
| 9                                                                                 | 7.95 | COMB35-M2                                                                                                                               | Combination | -35.68 | 86.09 | 2.12 | 24.03                                                                               | -3.38 | -105.08 |
| 9                                                                                 | 0.00 | COMB36-M2                                                                                                                               | Combination | -35.68 | 43.11 | 2.30 | 25.23                                                                               | 14.51 | 408.48  |
| 9                                                                                 | 0.50 | COMB36-M2                                                                                                                               | Combination | -35.68 | 45.80 | 2.30 | 25.23                                                                               | 13.37 | 386.39  |
| 9                                                                                 | 0.99 | COMB36-M2                                                                                                                               | Combination | -35.68 | 48.48 | 2.30 | 25.23                                                                               | 12.23 | 362.97  |
| 9                                                                                 | 1.49 | COMB36-M2                                                                                                                               | Combination | -35.68 | 51.17 | 2.30 | 25.23                                                                               | 11.09 | 338.22  |
| 9                                                                                 | 1.99 | COMB36-M2                                                                                                                               | Combination | -35.68 | 53.85 | 2.30 | 25.23                                                                               | 9.95  | 312.13  |
| 9                                                                                 | 2.48 | COMB36-M2                                                                                                                               | Combination | -35.68 | 56.54 | 2.30 | 25.23                                                                               | 8.80  | 284.70  |
| 9                                                                                 | 2.98 | COMB36-M2                                                                                                                               | Combination | -35.68 | 59.23 | 2.30 | 25.23                                                                               | 7.66  | 255.94  |

|  |      | ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br>SAN CRISTÓBAL, EN BOGOTÁ D.C. |             |        |       |      |  |       |         |
|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------|--------|-------|------|-------------------------------------------------------------------------------------|-------|---------|
| 9                                                                                 | 3.48 | COMB36-M2                                                                                                                               | Combination | -35.68 | 61.91 | 2.30 | 25.23                                                                               | 6.52  | 225.84  |
| 9                                                                                 | 3.98 | COMB36-M2                                                                                                                               | Combination | -35.68 | 64.60 | 2.30 | 25.23                                                                               | 5.38  | 194.41  |
| 9                                                                                 | 4.47 | COMB36-M2                                                                                                                               | Combination | -35.68 | 67.28 | 2.30 | 25.23                                                                               | 4.24  | 161.65  |
| 9                                                                                 | 4.97 | COMB36-M2                                                                                                                               | Combination | -35.68 | 69.97 | 2.30 | 25.23                                                                               | 3.10  | 127.55  |
| 9                                                                                 | 5.47 | COMB36-M2                                                                                                                               | Combination | -35.68 | 72.66 | 2.30 | 25.23                                                                               | 1.95  | 92.11   |
| 9                                                                                 | 5.96 | COMB36-M2                                                                                                                               | Combination | -35.68 | 75.34 | 2.30 | 25.23                                                                               | 0.81  | 55.35   |
| 9                                                                                 | 6.46 | COMB36-M2                                                                                                                               | Combination | -35.68 | 78.03 | 2.30 | 25.23                                                                               | -0.33 | 17.24   |
| 9                                                                                 | 6.96 | COMB36-M2                                                                                                                               | Combination | -35.68 | 80.72 | 2.30 | 25.23                                                                               | -1.47 | -22.20  |
| 9                                                                                 | 7.45 | COMB36-M2                                                                                                                               | Combination | -35.68 | 83.40 | 2.30 | 25.23                                                                               | -2.61 | -62.97  |
| 9                                                                                 | 7.95 | COMB36-M2                                                                                                                               | Combination | -35.68 | 86.09 | 2.30 | 25.23                                                                               | -3.76 | -105.08 |
| 9                                                                                 | 0.00 | COMB37-M2                                                                                                                               | Combination | -33.45 | 48.90 | 1.91 | 22.63                                                                               | 12.21 | 438.70  |
| 9                                                                                 | 0.50 | COMB37-M2                                                                                                                               | Combination | -33.45 | 51.58 | 1.91 | 22.63                                                                               | 11.26 | 413.74  |
| 9                                                                                 | 0.99 | COMB37-M2                                                                                                                               | Combination | -33.45 | 54.27 | 1.91 | 22.63                                                                               | 10.31 | 387.44  |
| 9                                                                                 | 1.49 | COMB37-M2                                                                                                                               | Combination | -33.45 | 56.95 | 1.91 | 22.63                                                                               | 9.37  | 359.81  |
| 9                                                                                 | 1.99 | COMB37-M2                                                                                                                               | Combination | -33.45 | 59.64 | 1.91 | 22.63                                                                               | 8.42  | 330.85  |
| 9                                                                                 | 2.48 | COMB37-M2                                                                                                                               | Combination | -33.45 | 62.33 | 1.91 | 22.63                                                                               | 7.47  | 300.54  |
| 9                                                                                 | 2.98 | COMB37-M2                                                                                                                               | Combination | -33.45 | 65.01 | 1.91 | 22.63                                                                               | 6.52  | 268.91  |
| 9                                                                                 | 3.48 | COMB37-M2                                                                                                                               | Combination | -33.45 | 67.70 | 1.91 | 22.63                                                                               | 5.58  | 235.94  |
| 9                                                                                 | 3.98 | COMB37-M2                                                                                                                               | Combination | -33.45 | 70.39 | 1.91 | 22.63                                                                               | 4.63  | 201.63  |
| 9                                                                                 | 4.47 | COMB37-M2                                                                                                                               | Combination | -33.45 | 73.07 | 1.91 | 22.63                                                                               | 3.68  | 165.99  |
| 9                                                                                 | 4.97 | COMB37-M2                                                                                                                               | Combination | -33.45 | 75.76 | 1.91 | 22.63                                                                               | 2.73  | 129.02  |
| 9                                                                                 | 5.47 | COMB37-M2                                                                                                                               | Combination | -33.45 | 78.44 | 1.91 | 22.63                                                                               | 1.79  | 90.71   |
| 9                                                                                 | 5.96 | COMB37-M2                                                                                                                               | Combination | -33.45 | 81.13 | 1.91 | 22.63                                                                               | 0.84  | 51.06   |
| 9                                                                                 | 6.46 | COMB37-M2                                                                                                                               | Combination | -33.45 | 83.82 | 1.91 | 22.63                                                                               | -0.11 | 10.08   |
| 9                                                                                 | 6.96 | COMB37-M2                                                                                                                               | Combination | -33.45 | 86.50 | 1.91 | 22.63                                                                               | -1.06 | -32.23  |
| 9                                                                                 | 7.45 | COMB37-M2                                                                                                                               | Combination | -33.45 | 89.19 | 1.91 | 22.63                                                                               | -2.00 | -75.88  |
| 9                                                                                 | 7.95 | COMB37-M2                                                                                                                               | Combination | -33.45 | 91.88 | 1.91 | 22.63                                                                               | -2.95 | -120.86 |
| 9                                                                                 | 0.00 | COMB38-M2                                                                                                                               | Combination | -33.45 | 48.90 | 2.51 | 26.62                                                                               | 15.75 | 438.70  |
| 9                                                                                 | 0.50 | COMB38-M2                                                                                                                               | Combination | -33.45 | 51.58 | 2.51 | 26.62                                                                               | 14.51 | 413.74  |
| 9                                                                                 | 0.99 | COMB38-M2                                                                                                                               | Combination | -33.45 | 54.27 | 2.51 | 26.62                                                                               | 13.26 | 387.44  |
| 9                                                                                 | 1.49 | COMB38-M2                                                                                                                               | Combination | -33.45 | 56.95 | 2.51 | 26.62                                                                               | 12.02 | 359.81  |
| 9                                                                                 | 1.99 | COMB38-M2                                                                                                                               | Combination | -33.45 | 59.64 | 2.51 | 26.62                                                                               | 10.77 | 330.85  |
| 9                                                                                 | 2.48 | COMB38-M2                                                                                                                               | Combination | -33.45 | 62.33 | 2.51 | 26.62                                                                               | 9.52  | 300.54  |
| 9                                                                                 | 2.98 | COMB38-M2                                                                                                                               | Combination | -33.45 | 65.01 | 2.51 | 26.62                                                                               | 8.28  | 268.91  |
| 9                                                                                 | 3.48 | COMB38-M2                                                                                                                               | Combination | -33.45 | 67.70 | 2.51 | 26.62                                                                               | 7.03  | 235.94  |
| 9                                                                                 | 3.98 | COMB38-M2                                                                                                                               | Combination | -33.45 | 70.39 | 2.51 | 26.62                                                                               | 5.78  | 201.63  |
| 9                                                                                 | 4.47 | COMB38-M2                                                                                                                               | Combination | -33.45 | 73.07 | 2.51 | 26.62                                                                               | 4.54  | 165.99  |
| 9                                                                                 | 4.97 | COMB38-M2                                                                                                                               | Combination | -33.45 | 75.76 | 2.51 | 26.62                                                                               | 3.29  | 129.02  |

|  |      | ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br>SAN CRISTÓBAL, EN BOGOTÁ D.C. |             |        |       |      |  |       |         |
|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------|--------|-------|------|-------------------------------------------------------------------------------------|-------|---------|
| 9                                                                                 | 5.47 | COMB38-M2                                                                                                                               | Combination | -33.45 | 78.44 | 2.51 | 26.62                                                                               | 2.04  | 90.71   |
| 9                                                                                 | 5.96 | COMB38-M2                                                                                                                               | Combination | -33.45 | 81.13 | 2.51 | 26.62                                                                               | 0.80  | 51.06   |
| 9                                                                                 | 6.46 | COMB38-M2                                                                                                                               | Combination | -33.45 | 83.82 | 2.51 | 26.62                                                                               | -0.45 | 10.08   |
| 9                                                                                 | 6.96 | COMB38-M2                                                                                                                               | Combination | -33.45 | 86.50 | 2.51 | 26.62                                                                               | -1.70 | -32.23  |
| 9                                                                                 | 7.45 | COMB38-M2                                                                                                                               | Combination | -33.45 | 89.19 | 2.51 | 26.62                                                                               | -2.94 | -75.88  |
| 9                                                                                 | 7.95 | COMB38-M2                                                                                                                               | Combination | -33.45 | 91.88 | 2.51 | 26.62                                                                               | -4.19 | -120.86 |
| 9                                                                                 | 0.00 | COMB39-M2                                                                                                                               | Combination | -34.48 | 46.22 | 1.91 | 22.63                                                                               | 12.21 | 424.76  |
| 9                                                                                 | 0.50 | COMB39-M2                                                                                                                               | Combination | -34.48 | 48.91 | 1.91 | 22.63                                                                               | 11.26 | 401.12  |
| 9                                                                                 | 0.99 | COMB39-M2                                                                                                                               | Combination | -34.48 | 51.60 | 1.91 | 22.63                                                                               | 10.31 | 376.15  |
| 9                                                                                 | 1.49 | COMB39-M2                                                                                                                               | Combination | -34.48 | 54.28 | 1.91 | 22.63                                                                               | 9.37  | 349.85  |
| 9                                                                                 | 1.99 | COMB39-M2                                                                                                                               | Combination | -34.48 | 56.97 | 1.91 | 22.63                                                                               | 8.42  | 322.21  |
| 9                                                                                 | 2.48 | COMB39-M2                                                                                                                               | Combination | -34.48 | 59.66 | 1.91 | 22.63                                                                               | 7.47  | 293.23  |
| 9                                                                                 | 2.98 | COMB39-M2                                                                                                                               | Combination | -34.48 | 62.34 | 1.91 | 22.63                                                                               | 6.52  | 262.92  |
| 9                                                                                 | 3.48 | COMB39-M2                                                                                                                               | Combination | -34.48 | 65.03 | 1.91 | 22.63                                                                               | 5.58  | 231.28  |
| 9                                                                                 | 3.98 | COMB39-M2                                                                                                                               | Combination | -34.48 | 67.71 | 1.91 | 22.63                                                                               | 4.63  | 198.30  |
| 9                                                                                 | 4.47 | COMB39-M2                                                                                                                               | Combination | -34.48 | 70.40 | 1.91 | 22.63                                                                               | 3.68  | 163.99  |
| 9                                                                                 | 4.97 | COMB39-M2                                                                                                                               | Combination | -34.48 | 73.09 | 1.91 | 22.63                                                                               | 2.73  | 128.34  |
| 9                                                                                 | 5.47 | COMB39-M2                                                                                                                               | Combination | -34.48 | 75.77 | 1.91 | 22.63                                                                               | 1.79  | 91.36   |
| 9                                                                                 | 5.96 | COMB39-M2                                                                                                                               | Combination | -34.48 | 78.46 | 1.91 | 22.63                                                                               | 0.84  | 53.04   |
| 9                                                                                 | 6.46 | COMB39-M2                                                                                                                               | Combination | -34.48 | 81.15 | 1.91 | 22.63                                                                               | -0.11 | 13.39   |
| 9                                                                                 | 6.96 | COMB39-M2                                                                                                                               | Combination | -34.48 | 83.83 | 1.91 | 22.63                                                                               | -1.06 | -27.60  |
| 9                                                                                 | 7.45 | COMB39-M2                                                                                                                               | Combination | -34.48 | 86.52 | 1.91 | 22.63                                                                               | -2.00 | -69.92  |
| 9                                                                                 | 7.95 | COMB39-M2                                                                                                                               | Combination | -34.48 | 89.20 | 1.91 | 22.63                                                                               | -2.95 | -113.58 |
| 9                                                                                 | 0.00 | COMB40-M2                                                                                                                               | Combination | -34.48 | 46.22 | 2.51 | 26.62                                                                               | 15.75 | 424.76  |
| 9                                                                                 | 0.50 | COMB40-M2                                                                                                                               | Combination | -34.48 | 48.91 | 2.51 | 26.62                                                                               | 14.51 | 401.12  |
| 9                                                                                 | 0.99 | COMB40-M2                                                                                                                               | Combination | -34.48 | 51.60 | 2.51 | 26.62                                                                               | 13.26 | 376.15  |
| 9                                                                                 | 1.49 | COMB40-M2                                                                                                                               | Combination | -34.48 | 54.28 | 2.51 | 26.62                                                                               | 12.02 | 349.85  |
| 9                                                                                 | 1.99 | COMB40-M2                                                                                                                               | Combination | -34.48 | 56.97 | 2.51 | 26.62                                                                               | 10.77 | 322.21  |
| 9                                                                                 | 2.48 | COMB40-M2                                                                                                                               | Combination | -34.48 | 59.66 | 2.51 | 26.62                                                                               | 9.52  | 293.23  |
| 9                                                                                 | 2.98 | COMB40-M2                                                                                                                               | Combination | -34.48 | 62.34 | 2.51 | 26.62                                                                               | 8.28  | 262.92  |
| 9                                                                                 | 3.48 | COMB40-M2                                                                                                                               | Combination | -34.48 | 65.03 | 2.51 | 26.62                                                                               | 7.03  | 231.28  |
| 9                                                                                 | 3.98 | COMB40-M2                                                                                                                               | Combination | -34.48 | 67.71 | 2.51 | 26.62                                                                               | 5.78  | 198.30  |
| 9                                                                                 | 4.47 | COMB40-M2                                                                                                                               | Combination | -34.48 | 70.40 | 2.51 | 26.62                                                                               | 4.54  | 163.99  |
| 9                                                                                 | 4.97 | COMB40-M2                                                                                                                               | Combination | -34.48 | 73.09 | 2.51 | 26.62                                                                               | 3.29  | 128.34  |
| 9                                                                                 | 5.47 | COMB40-M2                                                                                                                               | Combination | -34.48 | 75.77 | 2.51 | 26.62                                                                               | 2.04  | 91.36   |
| 9                                                                                 | 5.96 | COMB40-M2                                                                                                                               | Combination | -34.48 | 78.46 | 2.51 | 26.62                                                                               | 0.80  | 53.04   |
| 9                                                                                 | 6.46 | COMB40-M2                                                                                                                               | Combination | -34.48 | 81.15 | 2.51 | 26.62                                                                               | -0.45 | 13.39   |
| 9                                                                                 | 6.96 | COMB40-M2                                                                                                                               | Combination | -34.48 | 83.83 | 2.51 | 26.62                                                                               | -1.70 | -27.60  |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|   |      |           |             |        |       |      |       |       |         |
|---|------|-----------|-------------|--------|-------|------|-------|-------|---------|
| 9 | 7.45 | COMB40-M2 | Combination | -34.48 | 86.52 | 2.51 | 26.62 | -2.94 | -69.92  |
| 9 | 7.95 | COMB40-M2 | Combination | -34.48 | 89.20 | 2.51 | 26.62 | -4.19 | -113.58 |
| 9 | 0.00 | COMB41-M2 | Combination | -32.20 | 51.89 | 2.12 | 24.03 | 13.45 | 454.20  |
| 9 | 0.50 | COMB41-M2 | Combination | -32.20 | 54.58 | 2.12 | 24.03 | 12.40 | 427.75  |
| 9 | 0.99 | COMB41-M2 | Combination | -32.20 | 57.26 | 2.12 | 24.03 | 11.34 | 399.96  |
| 9 | 1.49 | COMB41-M2 | Combination | -32.20 | 59.95 | 2.12 | 24.03 | 10.29 | 370.84  |
| 9 | 1.99 | COMB41-M2 | Combination | -32.20 | 62.64 | 2.12 | 24.03 | 9.24  | 340.39  |
| 9 | 2.48 | COMB41-M2 | Combination | -32.20 | 65.32 | 2.12 | 24.03 | 8.19  | 308.60  |
| 9 | 2.98 | COMB41-M2 | Combination | -32.20 | 68.01 | 2.12 | 24.03 | 7.14  | 275.48  |
| 9 | 3.48 | COMB41-M2 | Combination | -32.20 | 70.69 | 2.12 | 24.03 | 6.08  | 241.02  |
| 9 | 3.98 | COMB41-M2 | Combination | -32.20 | 73.38 | 2.12 | 24.03 | 5.03  | 205.23  |
| 9 | 4.47 | COMB41-M2 | Combination | -32.20 | 76.07 | 2.12 | 24.03 | 3.98  | 168.10  |
| 9 | 4.97 | COMB41-M2 | Combination | -32.20 | 78.75 | 2.12 | 24.03 | 2.93  | 129.63  |
| 9 | 5.47 | COMB41-M2 | Combination | -32.20 | 81.44 | 2.12 | 24.03 | 1.88  | 89.84   |
| 9 | 5.96 | COMB41-M2 | Combination | -32.20 | 84.12 | 2.12 | 24.03 | 0.82  | 48.71   |
| 9 | 6.46 | COMB41-M2 | Combination | -32.20 | 86.81 | 2.12 | 24.03 | -0.23 | 6.24    |
| 9 | 6.96 | COMB41-M2 | Combination | -32.20 | 89.50 | 2.12 | 24.03 | -1.28 | -37.56  |
| 9 | 7.45 | COMB41-M2 | Combination | -32.20 | 92.18 | 2.12 | 24.03 | -2.33 | -82.70  |
| 9 | 7.95 | COMB41-M2 | Combination | -32.20 | 94.87 | 2.12 | 24.03 | -3.38 | -129.17 |
| 9 | 0.00 | COMB42-M2 | Combination | -32.20 | 51.89 | 2.30 | 25.23 | 14.51 | 454.20  |
| 9 | 0.50 | COMB42-M2 | Combination | -32.20 | 54.58 | 2.30 | 25.23 | 13.37 | 427.75  |
| 9 | 0.99 | COMB42-M2 | Combination | -32.20 | 57.26 | 2.30 | 25.23 | 12.23 | 399.96  |
| 9 | 1.49 | COMB42-M2 | Combination | -32.20 | 59.95 | 2.30 | 25.23 | 11.09 | 370.84  |
| 9 | 1.99 | COMB42-M2 | Combination | -32.20 | 62.64 | 2.30 | 25.23 | 9.95  | 340.39  |
| 9 | 2.48 | COMB42-M2 | Combination | -32.20 | 65.32 | 2.30 | 25.23 | 8.80  | 308.60  |
| 9 | 2.98 | COMB42-M2 | Combination | -32.20 | 68.01 | 2.30 | 25.23 | 7.66  | 275.48  |
| 9 | 3.48 | COMB42-M2 | Combination | -32.20 | 70.69 | 2.30 | 25.23 | 6.52  | 241.02  |
| 9 | 3.98 | COMB42-M2 | Combination | -32.20 | 73.38 | 2.30 | 25.23 | 5.38  | 205.23  |
| 9 | 4.47 | COMB42-M2 | Combination | -32.20 | 76.07 | 2.30 | 25.23 | 4.24  | 168.10  |
| 9 | 4.97 | COMB42-M2 | Combination | -32.20 | 78.75 | 2.30 | 25.23 | 3.10  | 129.63  |
| 9 | 5.47 | COMB42-M2 | Combination | -32.20 | 81.44 | 2.30 | 25.23 | 1.95  | 89.84   |
| 9 | 5.96 | COMB42-M2 | Combination | -32.20 | 84.12 | 2.30 | 25.23 | 0.81  | 48.71   |
| 9 | 6.46 | COMB42-M2 | Combination | -32.20 | 86.81 | 2.30 | 25.23 | -0.33 | 6.24    |
| 9 | 6.96 | COMB42-M2 | Combination | -32.20 | 89.50 | 2.30 | 25.23 | -1.47 | -37.56  |
| 9 | 7.45 | COMB42-M2 | Combination | -32.20 | 92.18 | 2.30 | 25.23 | -2.61 | -82.70  |
| 9 | 7.95 | COMB42-M2 | Combination | -32.20 | 94.87 | 2.30 | 25.23 | -3.76 | -129.17 |
| 9 | 0.00 | COMB43-M2 | Combination | -35.63 | 42.99 | 2.12 | 24.03 | 13.45 | 407.70  |
| 9 | 0.50 | COMB43-M2 | Combination | -35.63 | 45.67 | 2.12 | 24.03 | 12.40 | 385.68  |

|  |      | ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br>SAN CRISTÓBAL, EN BOGOTÁ D.C. |             |        |       |      |  |       |         |
|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------|--------|-------|------|-------------------------------------------------------------------------------------|-------|---------|
| 9                                                                                 | 0.99 | COMB43-M2                                                                                                                               | Combination | -35.63 | 48.36 | 2.12 | 24.03                                                                               | 11.34 | 362.32  |
| 9                                                                                 | 1.49 | COMB43-M2                                                                                                                               | Combination | -35.63 | 51.05 | 2.12 | 24.03                                                                               | 10.29 | 337.62  |
| 9                                                                                 | 1.99 | COMB43-M2                                                                                                                               | Combination | -35.63 | 53.73 | 2.12 | 24.03                                                                               | 9.24  | 311.59  |
| 9                                                                                 | 2.48 | COMB43-M2                                                                                                                               | Combination | -35.63 | 56.42 | 2.12 | 24.03                                                                               | 8.19  | 284.22  |
| 9                                                                                 | 2.98 | COMB43-M2                                                                                                                               | Combination | -35.63 | 59.10 | 2.12 | 24.03                                                                               | 7.14  | 255.52  |
| 9                                                                                 | 3.48 | COMB43-M2                                                                                                                               | Combination | -35.63 | 61.79 | 2.12 | 24.03                                                                               | 6.08  | 225.49  |
| 9                                                                                 | 3.98 | COMB43-M2                                                                                                                               | Combination | -35.63 | 64.48 | 2.12 | 24.03                                                                               | 5.03  | 194.12  |
| 9                                                                                 | 4.47 | COMB43-M2                                                                                                                               | Combination | -35.63 | 67.16 | 2.12 | 24.03                                                                               | 3.98  | 161.41  |
| 9                                                                                 | 4.97 | COMB43-M2                                                                                                                               | Combination | -35.63 | 69.85 | 2.12 | 24.03                                                                               | 2.93  | 127.37  |
| 9                                                                                 | 5.47 | COMB43-M2                                                                                                                               | Combination | -35.63 | 72.54 | 2.12 | 24.03                                                                               | 1.88  | 92.00   |
| 9                                                                                 | 5.96 | COMB43-M2                                                                                                                               | Combination | -35.63 | 75.22 | 2.12 | 24.03                                                                               | 0.82  | 55.29   |
| 9                                                                                 | 6.46 | COMB43-M2                                                                                                                               | Combination | -35.63 | 77.91 | 2.12 | 24.03                                                                               | -0.23 | 17.25   |
| 9                                                                                 | 6.96 | COMB43-M2                                                                                                                               | Combination | -35.63 | 80.59 | 2.12 | 24.03                                                                               | -1.28 | -22.13  |
| 9                                                                                 | 7.45 | COMB43-M2                                                                                                                               | Combination | -35.63 | 83.28 | 2.12 | 24.03                                                                               | -2.33 | -62.84  |
| 9                                                                                 | 7.95 | COMB43-M2                                                                                                                               | Combination | -35.63 | 85.97 | 2.12 | 24.03                                                                               | -3.38 | -104.89 |
| 9                                                                                 | 0.00 | COMB44-M2                                                                                                                               | Combination | -35.63 | 42.99 | 2.30 | 25.23                                                                               | 14.51 | 407.70  |
| 9                                                                                 | 0.50 | COMB44-M2                                                                                                                               | Combination | -35.63 | 45.67 | 2.30 | 25.23                                                                               | 13.37 | 385.68  |
| 9                                                                                 | 0.99 | COMB44-M2                                                                                                                               | Combination | -35.63 | 48.36 | 2.30 | 25.23                                                                               | 12.23 | 362.32  |
| 9                                                                                 | 1.49 | COMB44-M2                                                                                                                               | Combination | -35.63 | 51.05 | 2.30 | 25.23                                                                               | 11.09 | 337.62  |
| 9                                                                                 | 1.99 | COMB44-M2                                                                                                                               | Combination | -35.63 | 53.73 | 2.30 | 25.23                                                                               | 9.95  | 311.59  |
| 9                                                                                 | 2.48 | COMB44-M2                                                                                                                               | Combination | -35.63 | 56.42 | 2.30 | 25.23                                                                               | 8.80  | 284.22  |
| 9                                                                                 | 2.98 | COMB44-M2                                                                                                                               | Combination | -35.63 | 59.10 | 2.30 | 25.23                                                                               | 7.66  | 255.52  |
| 9                                                                                 | 3.48 | COMB44-M2                                                                                                                               | Combination | -35.63 | 61.79 | 2.30 | 25.23                                                                               | 6.52  | 225.49  |
| 9                                                                                 | 3.98 | COMB44-M2                                                                                                                               | Combination | -35.63 | 64.48 | 2.30 | 25.23                                                                               | 5.38  | 194.12  |
| 9                                                                                 | 4.47 | COMB44-M2                                                                                                                               | Combination | -35.63 | 67.16 | 2.30 | 25.23                                                                               | 4.24  | 161.41  |
| 9                                                                                 | 4.97 | COMB44-M2                                                                                                                               | Combination | -35.63 | 69.85 | 2.30 | 25.23                                                                               | 3.10  | 127.37  |
| 9                                                                                 | 5.47 | COMB44-M2                                                                                                                               | Combination | -35.63 | 72.54 | 2.30 | 25.23                                                                               | 1.95  | 92.00   |
| 9                                                                                 | 5.96 | COMB44-M2                                                                                                                               | Combination | -35.63 | 75.22 | 2.30 | 25.23                                                                               | 0.81  | 55.29   |
| 9                                                                                 | 6.46 | COMB44-M2                                                                                                                               | Combination | -35.63 | 77.91 | 2.30 | 25.23                                                                               | -0.33 | 17.25   |
| 9                                                                                 | 6.96 | COMB44-M2                                                                                                                               | Combination | -35.63 | 80.59 | 2.30 | 25.23                                                                               | -1.47 | -22.13  |
| 9                                                                                 | 7.45 | COMB44-M2                                                                                                                               | Combination | -35.63 | 83.28 | 2.30 | 25.23                                                                               | -2.61 | -62.84  |
| 9                                                                                 | 7.95 | COMB44-M2                                                                                                                               | Combination | -35.63 | 85.97 | 2.30 | 25.23                                                                               | -3.76 | -104.89 |
| 9                                                                                 | 0.00 | COMB45-M2                                                                                                                               | Combination | -33.40 | 48.77 | 1.91 | 22.63                                                                               | 12.21 | 437.93  |
| 9                                                                                 | 0.50 | COMB45-M2                                                                                                                               | Combination | -33.40 | 51.46 | 1.91 | 22.63                                                                               | 11.26 | 413.02  |
| 9                                                                                 | 0.99 | COMB45-M2                                                                                                                               | Combination | -33.40 | 54.15 | 1.91 | 22.63                                                                               | 10.31 | 386.79  |
| 9                                                                                 | 1.49 | COMB45-M2                                                                                                                               | Combination | -33.40 | 56.83 | 1.91 | 22.63                                                                               | 9.37  | 359.22  |
| 9                                                                                 | 1.99 | COMB45-M2                                                                                                                               | Combination | -33.40 | 59.52 | 1.91 | 22.63                                                                               | 8.42  | 330.31  |
| 9                                                                                 | 2.48 | COMB45-M2                                                                                                                               | Combination | -33.40 | 62.21 | 1.91 | 22.63                                                                               | 7.47  | 300.07  |



|  |      | ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br>SAN CRISTÓBAL, EN BOGOTÁ D.C. |             |        |       |      |  |       |         |
|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------|--------|-------|------|-------------------------------------------------------------------------------------|-------|---------|
| 9                                                                                 | 2.98 | COMB45-M2                                                                                                                               | Combination | -33.40 | 64.89 | 1.91 | 22.63                                                                               | 6.52  | 268.49  |
| 9                                                                                 | 3.48 | COMB45-M2                                                                                                                               | Combination | -33.40 | 67.58 | 1.91 | 22.63                                                                               | 5.58  | 235.58  |
| 9                                                                                 | 3.98 | COMB45-M2                                                                                                                               | Combination | -33.40 | 70.26 | 1.91 | 22.63                                                                               | 4.63  | 201.34  |
| 9                                                                                 | 4.47 | COMB45-M2                                                                                                                               | Combination | -33.40 | 72.95 | 1.91 | 22.63                                                                               | 3.68  | 165.76  |
| 9                                                                                 | 4.97 | COMB45-M2                                                                                                                               | Combination | -33.40 | 75.64 | 1.91 | 22.63                                                                               | 2.73  | 128.84  |
| 9                                                                                 | 5.47 | COMB45-M2                                                                                                                               | Combination | -33.40 | 78.32 | 1.91 | 22.63                                                                               | 1.79  | 90.59   |
| 9                                                                                 | 5.96 | COMB45-M2                                                                                                                               | Combination | -33.40 | 81.01 | 1.91 | 22.63                                                                               | 0.84  | 51.01   |
| 9                                                                                 | 6.46 | COMB45-M2                                                                                                                               | Combination | -33.40 | 83.70 | 1.91 | 22.63                                                                               | -0.11 | 10.09   |
| 9                                                                                 | 6.96 | COMB45-M2                                                                                                                               | Combination | -33.40 | 86.38 | 1.91 | 22.63                                                                               | -1.06 | -32.16  |
| 9                                                                                 | 7.45 | COMB45-M2                                                                                                                               | Combination | -33.40 | 89.07 | 1.91 | 22.63                                                                               | -2.00 | -75.75  |
| 9                                                                                 | 7.95 | COMB45-M2                                                                                                                               | Combination | -33.40 | 91.75 | 1.91 | 22.63                                                                               | -2.95 | -120.67 |
| 9                                                                                 | 0.00 | COMB46-M2                                                                                                                               | Combination | -33.40 | 48.77 | 2.51 | 26.62                                                                               | 15.75 | 437.93  |
| 9                                                                                 | 0.50 | COMB46-M2                                                                                                                               | Combination | -33.40 | 51.46 | 2.51 | 26.62                                                                               | 14.51 | 413.02  |
| 9                                                                                 | 0.99 | COMB46-M2                                                                                                                               | Combination | -33.40 | 54.15 | 2.51 | 26.62                                                                               | 13.26 | 386.79  |
| 9                                                                                 | 1.49 | COMB46-M2                                                                                                                               | Combination | -33.40 | 56.83 | 2.51 | 26.62                                                                               | 12.02 | 359.22  |
| 9                                                                                 | 1.99 | COMB46-M2                                                                                                                               | Combination | -33.40 | 59.52 | 2.51 | 26.62                                                                               | 10.77 | 330.31  |
| 9                                                                                 | 2.48 | COMB46-M2                                                                                                                               | Combination | -33.40 | 62.21 | 2.51 | 26.62                                                                               | 9.52  | 300.07  |
| 9                                                                                 | 2.98 | COMB46-M2                                                                                                                               | Combination | -33.40 | 64.89 | 2.51 | 26.62                                                                               | 8.28  | 268.49  |
| 9                                                                                 | 3.48 | COMB46-M2                                                                                                                               | Combination | -33.40 | 67.58 | 2.51 | 26.62                                                                               | 7.03  | 235.58  |
| 9                                                                                 | 3.98 | COMB46-M2                                                                                                                               | Combination | -33.40 | 70.26 | 2.51 | 26.62                                                                               | 5.78  | 201.34  |
| 9                                                                                 | 4.47 | COMB46-M2                                                                                                                               | Combination | -33.40 | 72.95 | 2.51 | 26.62                                                                               | 4.54  | 165.76  |
| 9                                                                                 | 4.97 | COMB46-M2                                                                                                                               | Combination | -33.40 | 75.64 | 2.51 | 26.62                                                                               | 3.29  | 128.84  |
| 9                                                                                 | 5.47 | COMB46-M2                                                                                                                               | Combination | -33.40 | 78.32 | 2.51 | 26.62                                                                               | 2.04  | 90.59   |
| 9                                                                                 | 5.96 | COMB46-M2                                                                                                                               | Combination | -33.40 | 81.01 | 2.51 | 26.62                                                                               | 0.80  | 51.01   |
| 9                                                                                 | 6.46 | COMB46-M2                                                                                                                               | Combination | -33.40 | 83.70 | 2.51 | 26.62                                                                               | -0.45 | 10.09   |
| 9                                                                                 | 6.96 | COMB46-M2                                                                                                                               | Combination | -33.40 | 86.38 | 2.51 | 26.62                                                                               | -1.70 | -32.16  |
| 9                                                                                 | 7.45 | COMB46-M2                                                                                                                               | Combination | -33.40 | 89.07 | 2.51 | 26.62                                                                               | -2.94 | -75.75  |
| 9                                                                                 | 7.95 | COMB46-M2                                                                                                                               | Combination | -33.40 | 91.75 | 2.51 | 26.62                                                                               | -4.19 | -120.67 |
| 9                                                                                 | 0.00 | COMB47-M2                                                                                                                               | Combination | -34.43 | 46.10 | 1.91 | 22.63                                                                               | 12.21 | 423.98  |
| 9                                                                                 | 0.50 | COMB47-M2                                                                                                                               | Combination | -34.43 | 48.79 | 1.91 | 22.63                                                                               | 11.26 | 400.40  |
| 9                                                                                 | 0.99 | COMB47-M2                                                                                                                               | Combination | -34.43 | 51.48 | 1.91 | 22.63                                                                               | 10.31 | 375.49  |
| 9                                                                                 | 1.49 | COMB47-M2                                                                                                                               | Combination | -34.43 | 54.16 | 1.91 | 22.63                                                                               | 9.37  | 349.25  |
| 9                                                                                 | 1.99 | COMB47-M2                                                                                                                               | Combination | -34.43 | 56.85 | 1.91 | 22.63                                                                               | 8.42  | 321.67  |
| 9                                                                                 | 2.48 | COMB47-M2                                                                                                                               | Combination | -34.43 | 59.53 | 1.91 | 22.63                                                                               | 7.47  | 292.76  |
| 9                                                                                 | 2.98 | COMB47-M2                                                                                                                               | Combination | -34.43 | 62.22 | 1.91 | 22.63                                                                               | 6.52  | 262.51  |
| 9                                                                                 | 3.48 | COMB47-M2                                                                                                                               | Combination | -34.43 | 64.91 | 1.91 | 22.63                                                                               | 5.58  | 230.92  |
| 9                                                                                 | 3.98 | COMB47-M2                                                                                                                               | Combination | -34.43 | 67.59 | 1.91 | 22.63                                                                               | 4.63  | 198.01  |
| 9                                                                                 | 4.47 | COMB47-M2                                                                                                                               | Combination | -34.43 | 70.28 | 1.91 | 22.63                                                                               | 3.68  | 163.75  |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|   |      |           |             |        |       |      |       |       |         |
|---|------|-----------|-------------|--------|-------|------|-------|-------|---------|
| 9 | 4.97 | COMB47-M2 | Combination | -34.43 | 72.97 | 1.91 | 22.63 | 2.73  | 128.17  |
| 9 | 5.47 | COMB47-M2 | Combination | -34.43 | 75.65 | 1.91 | 22.63 | 1.79  | 91.24   |
| 9 | 5.96 | COMB47-M2 | Combination | -34.43 | 78.34 | 1.91 | 22.63 | 0.84  | 52.99   |
| 9 | 6.46 | COMB47-M2 | Combination | -34.43 | 81.02 | 1.91 | 22.63 | -0.11 | 13.40   |
| 9 | 6.96 | COMB47-M2 | Combination | -34.43 | 83.71 | 1.91 | 22.63 | -1.06 | -27.53  |
| 9 | 7.45 | COMB47-M2 | Combination | -34.43 | 86.40 | 1.91 | 22.63 | -2.00 | -69.79  |
| 9 | 7.95 | COMB47-M2 | Combination | -34.43 | 89.08 | 1.91 | 22.63 | -2.95 | -113.39 |
| 9 | 0.00 | COMB48-M2 | Combination | -34.43 | 46.10 | 2.51 | 26.62 | 15.75 | 423.98  |
| 9 | 0.50 | COMB48-M2 | Combination | -34.43 | 48.79 | 2.51 | 26.62 | 14.51 | 400.40  |
| 9 | 0.99 | COMB48-M2 | Combination | -34.43 | 51.48 | 2.51 | 26.62 | 13.26 | 375.49  |
| 9 | 1.49 | COMB48-M2 | Combination | -34.43 | 54.16 | 2.51 | 26.62 | 12.02 | 349.25  |
| 9 | 1.99 | COMB48-M2 | Combination | -34.43 | 56.85 | 2.51 | 26.62 | 10.77 | 321.67  |
| 9 | 2.48 | COMB48-M2 | Combination | -34.43 | 59.53 | 2.51 | 26.62 | 9.52  | 292.76  |
| 9 | 2.98 | COMB48-M2 | Combination | -34.43 | 62.22 | 2.51 | 26.62 | 8.28  | 262.51  |
| 9 | 3.48 | COMB48-M2 | Combination | -34.43 | 64.91 | 2.51 | 26.62 | 7.03  | 230.92  |
| 9 | 3.98 | COMB48-M2 | Combination | -34.43 | 67.59 | 2.51 | 26.62 | 5.78  | 198.01  |
| 9 | 4.47 | COMB48-M2 | Combination | -34.43 | 70.28 | 2.51 | 26.62 | 4.54  | 163.75  |
| 9 | 4.97 | COMB48-M2 | Combination | -34.43 | 72.97 | 2.51 | 26.62 | 3.29  | 128.17  |
| 9 | 5.47 | COMB48-M2 | Combination | -34.43 | 75.65 | 2.51 | 26.62 | 2.04  | 91.24   |
| 9 | 5.96 | COMB48-M2 | Combination | -34.43 | 78.34 | 2.51 | 26.62 | 0.80  | 52.99   |
| 9 | 6.46 | COMB48-M2 | Combination | -34.43 | 81.02 | 2.51 | 26.62 | -0.45 | 13.40   |
| 9 | 6.96 | COMB48-M2 | Combination | -34.43 | 83.71 | 2.51 | 26.62 | -1.70 | -27.53  |
| 9 | 7.45 | COMB48-M2 | Combination | -34.43 | 86.40 | 2.51 | 26.62 | -2.94 | -69.79  |
| 9 | 7.95 | COMB48-M2 | Combination | -34.43 | 89.08 | 2.51 | 26.62 | -4.19 | -113.39 |

**Tabla 10-5 Elementos mecánicos trabe de liga**

Instituto de Desarrollo Urbano

## 10.6 Diseño de losa de cimentación

### 10.6.1 Resistencia a fuerza cortante por fricción

| Geometría           |       |         |                  |                    |          | Propiedades        |                    |                    |                  |                |                    |                    |                    |                    |
|---------------------|-------|---------|------------------|--------------------|----------|--------------------|--------------------|--------------------|------------------|----------------|--------------------|--------------------|--------------------|--------------------|
| h                   | B     | r       | a                | d                  | a/d      | f <sub>c</sub>     | f <sub>c</sub> "   | f <sub>y</sub>     | ρ <sub>min</sub> | ρ <sub>b</sub> | Fr                 | μ                  | Nu                 |                    |
| (cm)                | (cm)  | (cm)    | (cm)             | (cm)               |          | Kg/cm <sup>2</sup> | Kg/cm <sup>2</sup> | Kg/cm <sup>2</sup> | %                | %              |                    |                    | (Ton)              |                    |
| 150.0               | 100.0 | 9.50    | 20.0             | 140.50             | 0.14     | 300.0              | 255.0              | 4200.0             | 0.002887         | ---            | 0.750              | 1.40               | 0.00               |                    |
| ELEMENTOS MECANICOS |       |         | DIMENSIONAMIENTO |                    |          |                    | COMPROBACION       |                    |                  |                |                    |                    |                    |                    |
| P <sub>vu</sub>     | Phu   | Mu      | z                | A <sub>f</sub>     | ρ        | An                 | Avf                | V <sub>R2</sub>    | V <sub>R3</sub>  |                | As1                | As2                | As                 | Ah                 |
| (Ton)               | (Ton) | (Ton-m) | (cm)             | (cm <sup>2</sup> ) | %        | (cm <sup>2</sup> ) | (cm <sup>2</sup> ) | (Ton)              | (Ton)            |                | (cm <sup>2</sup> ) | (cm <sup>2</sup> ) | (cm <sup>2</sup> ) | (cm <sup>2</sup> ) |
| 180.0               | 0.0   | 39.42   | 126.450          | 9.897              | 0.000704 | 11.429             | 40.816             | 260.4              | 843.8            | Avf correcto   | 21.33              | 38.64              | 38.639             | 13.605             |

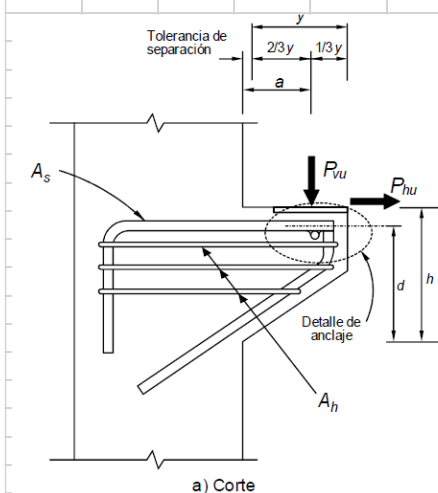
La sección donde arranca la mensula debe dimensionarse para que resista simultáneamente:

a) Una fuerza cortante,  $P_{vu}$ ;

b) Un momento flexionante  $P_{vu}a + P_{hu}(h-d)$

c) Y una tensión horizontal,  $P_{hu}$

El refuerzo constará de barras principales de área  $A_s$ , y de estribos complementarios horizontales de área  $A_h$ , ver figura:



El área  $A_s$ , se tomara como la mayor de las obtenidas con las expresiones sig:

$$A_f + A_n$$

$$\frac{2}{3}A_{vf} + A_n$$

El área  $A_h$ , se tomara al menos igual a  $0.5(A_s - A_n)$

donde:

$A_f$  = área de refuerzo para resistir el momento flexionante

$A_{vf}$  = área de refuerzo para resistir la fuerza cortante  $P_{vu}$

$A_n$  = área de refuerzo para resistir la tensión  $P_{hu}$



### 10.6.3 Revisión a flexión

Se diseña una sección rectangular de 150cmx150cm de dimensiones, considerando un refuerzo de 22 varillas del #25M, tanto en el lecho inferior, como en el superior.

| REVISION FLEXION                                                                |        |        |                           |         |           |                       |          |           |           |             |             |
|---------------------------------------------------------------------------------|--------|--------|---------------------------|---------|-----------|-----------------------|----------|-----------|-----------|-------------|-------------|
| Calculo de resistencias a flexion para traves de concreto doblemente reforzadas |        |        |                           |         |           |                       |          |           |           |             |             |
| DATOS DE CONCRETO                                                               |        |        |                           |         |           |                       |          |           |           |             |             |
| B                                                                               | H      | fc     | f" c                      | f' c    | E         | ε c                   | c        | a         | Cc        | b           | M           |
| cm                                                                              | cm     | Kg/cm2 | Kg/cm2                    | Kg/cm2  | Kg/cm2    | Kg/cm2                | cm       | cm        | Kg        |             | Kg-cm       |
| 150.00                                                                          | 150.00 | 300.00 | 300.00                    | 300.00  | 265440.61 | 0.003                 | 10.46    | 8.74      | 393208.40 | 6.09        | 2393342.31  |
|                                                                                 |        |        |                           |         |           |                       |          |           |           | Diferencia  |             |
|                                                                                 |        |        |                           |         |           |                       |          |           |           | 0.00        |             |
|                                                                                 |        |        |                           |         |           |                       |          |           |           | Mn (Kg-cm)  |             |
|                                                                                 |        |        |                           |         |           |                       |          |           |           | 61438058.89 |             |
|                                                                                 |        |        |                           |         |           |                       |          |           |           | Mn (T-m)    |             |
|                                                                                 |        |        |                           |         |           |                       |          |           |           | 614.38      |             |
|                                                                                 |        |        |                           |         |           |                       |          |           |           | MR (T-m)    |             |
|                                                                                 |        |        |                           |         |           |                       |          |           |           | 552.94      |             |
| SECCION TRANSVERSAL                                                             |        |        | DIAGRAMA DE DEFORMACIONES |         |           | DIAGRAMA DE ESFUERZOS |          |           |           |             |             |
| DATOS                                                                           |        |        |                           |         |           | CALCULO               |          |           |           | MOMENTO     |             |
| ACERO EN COMPRESION                                                             |        |        |                           |         |           |                       |          |           |           |             |             |
|                                                                                 | Area   | d'     | Es                        | Fy      | Δs        | ε s                   | fs       | C         | ΣComp     | b           | M           |
|                                                                                 | cm2    | cm     | Kg/cm2                    | Kg/cm2  |           |                       | Kg/cm2   | Kg        | Kg        | cm          | Kg-cm       |
| A's3                                                                            | 0.00   | 0.00   | 2039000.00                | 4200.00 | 0.0021    | 0.0030                | 4200.00  | 0.00      | 453591.60 | 10.46       | 0.00        |
| A's1                                                                            | 108.00 | 9.50   | 2039000.00                | 4200.00 | 0.0021    | 0.0003                | 559.11   | 60383.20  |           | 0.96        | 57707.26    |
| A's2                                                                            | 0.00   | 0.00   | 2039000.00                | 4200.00 | 0.0021    | 0.0030                | 4200.00  | 0.00      |           | 10.46       | 0.00        |
| ACERO EN TENSION                                                                |        |        |                           |         |           |                       |          |           |           |             |             |
|                                                                                 | Area   | d      | Es                        | Fy      | Δs        | ε s                   | fs       | T         | ΣTension  | b           | M           |
|                                                                                 | cm2    | cm     | Kg/cm2                    | Kg/cm2  |           |                       |          |           | Kg        | cm          | Kg-cm       |
| As2                                                                             | 0.00   | 0.00   | 2039000.00                | 4200.00 | 0.0021    | -0.0030               | -6117.00 | 0.00      | 453591.60 | -10.46      | 0.00        |
| As1                                                                             | 108.00 | 140.50 | 2039000.00                | 4200.00 | 0.0021    | 0.0373                | 4200.00  | 453591.60 |           | 130.04      | 58987009.33 |
| As3                                                                             | 0.00   | 0.00   | 2039000.00                | 2530.00 | 0.0012    | -0.0030               | -6117.00 | 0.00      |           | -10.46      | 0.00        |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

## 11 CONCLUSIONES

De acuerdo con las cargas proporcionadas y al estudio de mecánica de suelos en donde se define la capacidad de las pilas, los elementos estructurales que componen a la cimentación de las torres del cable aéreo, cumplen con los estados límite de falla y de servicio de acuerdo con la normativa establecida por los términos de referencia.



|                                                                                                                                                                    |                                                                                                                                                  |                                                                                                                                                                                                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p><b>ALCALDIA MAYOR<br/>BOGOTÁ D.C.</b><br/>INSTITUTO<br/>DESARROLLO URBANO</p> | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  <p><b>CONSORCIO CS</b><br/>Caly Mayor Colombia S.A.S. Supering<br/>Superingeniería y Operación de Proyectos</p> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## 12 ANEXO A



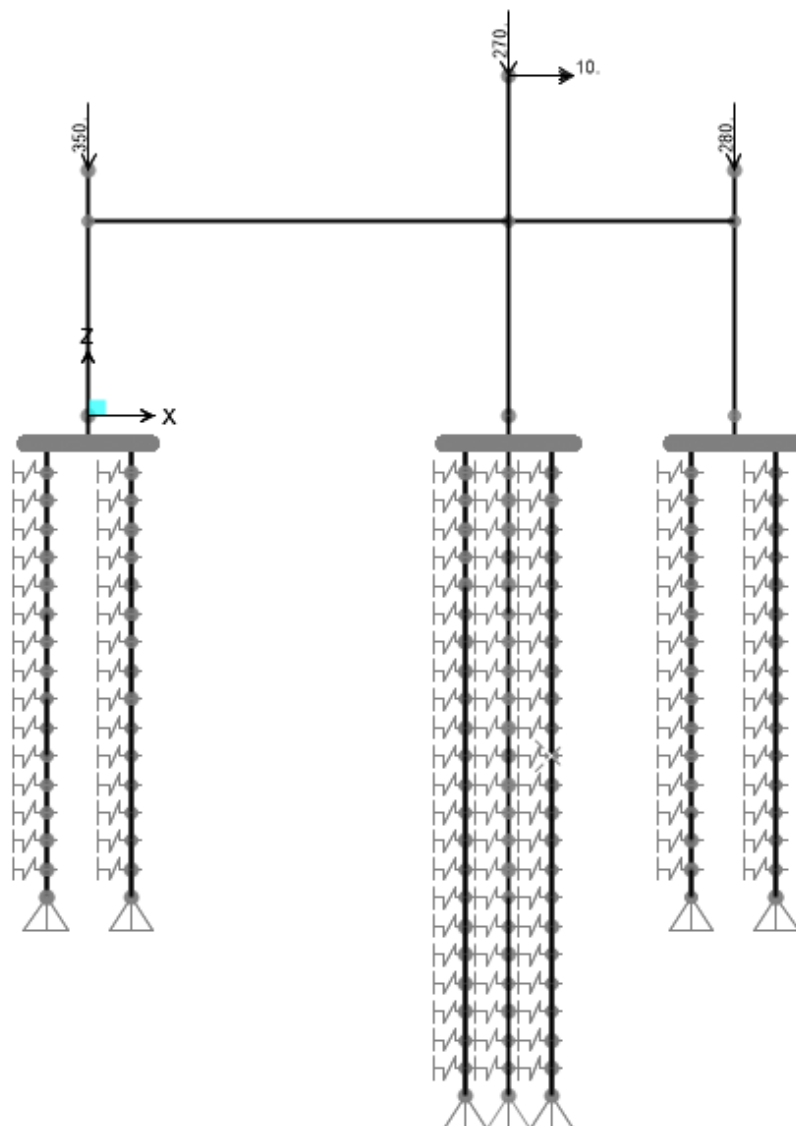


**Figura 12.1** – Cargas Permanentes (peso estación), KN



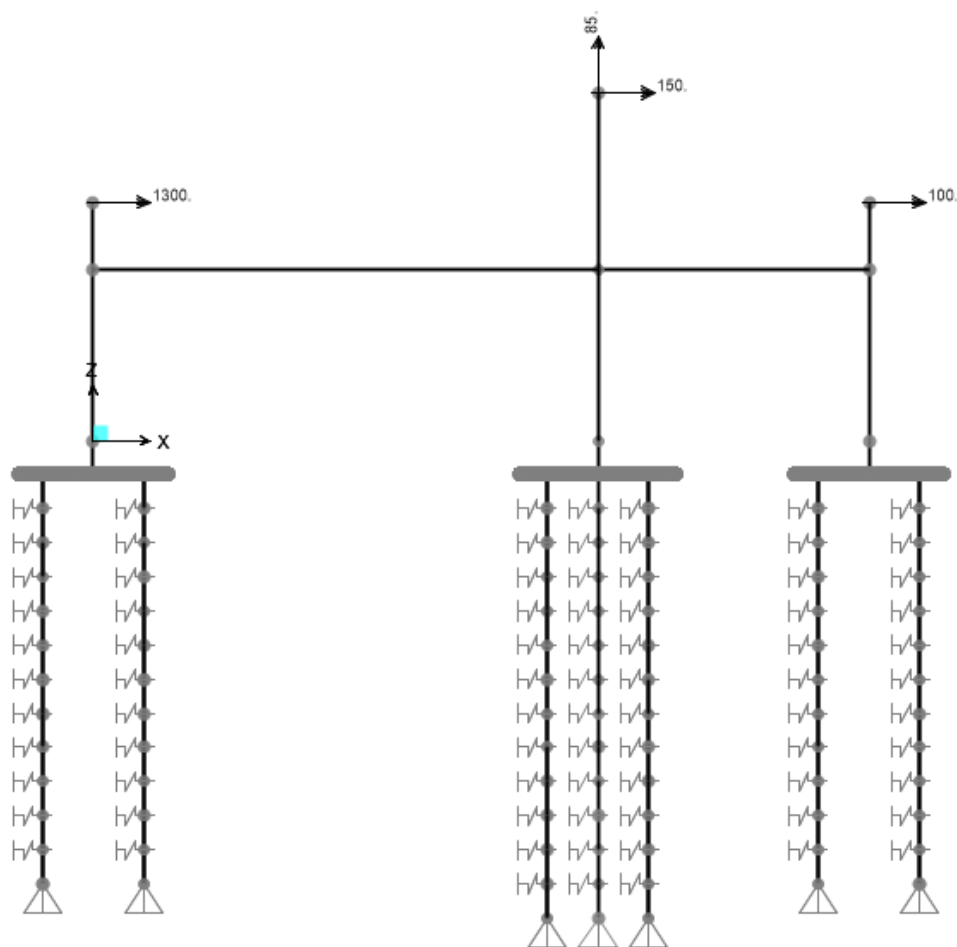


**Figura 12.2 – Cargas Variables (Viento Lateral fuera de operación), KN**

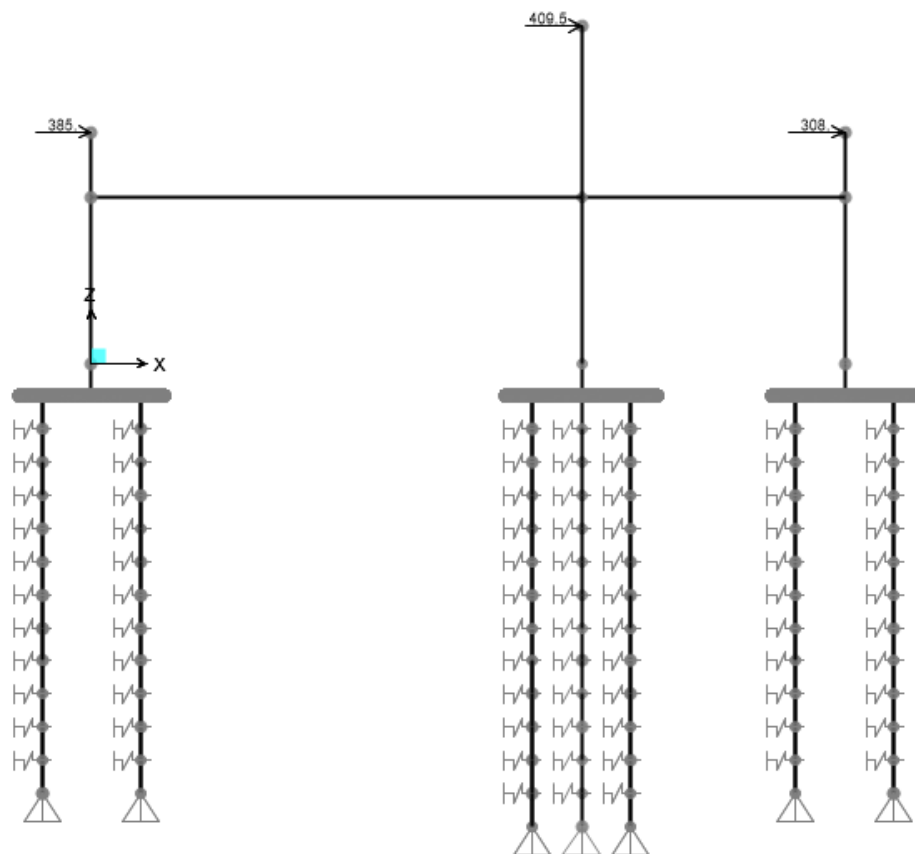


**Figura 12.3** – Cargas Accidentales (Sismo dirección X), KN

|                                                                                                                                                                    |                                                                                                                                                  |                                                                                                                                                                                                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p><b>ALCALDIA MAYOR<br/>BOGOTÁ D.C.</b><br/>INSTITUTO<br/>DESARROLLO URBANO</p> | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  <p><b>CONSORCIO CS</b><br/>Caly Mayor Colombia S.A.S. Supering<br/>Superingeniería y Operación de Proyectos</p> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## 13 ANEXO B



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

File C:\Users\cuahtemoc.rios\Downloads\CUAUHTEMOC\TELEMASTILES\ANALISIS SAP2000 v23\M-Altamira\_Resortes.\$2k was saved on m/d/yy at h:mm:ss

TABLE: "ACTIVE DEGREES OF FREEDOM"

UX=Yes UY=Yes UZ=Yes RX=Yes RY=Yes RZ=Yes

TABLE: "ANALYSIS OPTIONS"

Solver=Advanced SolverProc=Auto Force32Bit=No StiffCase=None GeomMod=None HingeOpt="In Elements"  
NumATHreads=0 MaxFileSize=0 UseMMFiles="Program Determined" AllowDiff=No

TABLE: "AREA SECTION ASSIGNMENTS"

Area=2 Section=ASEC1 MatProp=Default  
Area=3 Section=ASEC1 MatProp=Default  
Area=4 Section=ASEC1 MatProp=Default  
Area=5 Section=ASEC1 MatProp=Default  
Area=6 Section=ASEC1 MatProp=Default  
Area=7 Section=ASEC1 MatProp=Default  
Area=8 Section=ASEC1 MatProp=Default  
Area=9 Section=ASEC1 MatProp=Default  
Area=10 Section=ASEC1 MatProp=Default  
Area=11 Section=ASEC1 MatProp=Default  
Area=12 Section=ASEC1 MatProp=Default  
Area=13 Section=ASEC1 MatProp=Default  
Area=14 Section=ASEC1 MatProp=Default  
Area=15 Section=ASEC1 MatProp=Default  
Area=16 Section=ASEC1 MatProp=Default  
Area=17 Section=ASEC1 MatProp=Default  
Area=18 Section=ASEC1 MatProp=Default  
Area=19 Section=ASEC1 MatProp=Default  
Area=20 Section=ASEC1 MatProp=Default  
Area=21 Section=ASEC1 MatProp=Default  
Area=22 Section=ASEC1 MatProp=Default  
Area=23 Section=ASEC1 MatProp=Default  
Area=24 Section=ASEC1 MatProp=Default  
Area=25 Section=ASEC1 MatProp=Default  
Area=26 Section=ASEC1 MatProp=Default  
Area=27 Section=ASEC1 MatProp=Default  
Area=28 Section=ASEC1 MatProp=Default  
Area=29 Section=ASEC1 MatProp=Default  
Area=30 Section=ASEC1 MatProp=Default  
Area=31 Section=ASEC1 MatProp=Default  
Area=32 Section=ASEC1 MatProp=Default  
Area=33 Section=ASEC1 MatProp=Default  
Area=34 Section=ASEC1 MatProp=Default  
Area=35 Section=ASEC1 MatProp=Default  
Area=36 Section=ASEC1 MatProp=Default  
Area=37 Section=ASEC1 MatProp=Default  
Area=38 Section=ASEC1 MatProp=Default  
Area=39 Section=ASEC1 MatProp=Default  
Area=40 Section=ASEC1 MatProp=Default  
Area=41 Section=ASEC1 MatProp=Default  
Area=42 Section=ASEC1 MatProp=Default  
Area=43 Section=ASEC1 MatProp=Default  
Area=44 Section=ASEC1 MatProp=Default  
Area=45 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=46 Section=ASEC1 MatProp=Default  
 Area=47 Section=ASEC1 MatProp=Default  
 Area=48 Section=ASEC1 MatProp=Default  
 Area=49 Section=ASEC1 MatProp=Default  
 Area=50 Section=ASEC1 MatProp=Default  
 Area=51 Section=ASEC1 MatProp=Default  
 Area=52 Section=ASEC1 MatProp=Default  
 Area=53 Section=ASEC1 MatProp=Default  
 Area=54 Section=ASEC1 MatProp=Default  
 Area=55 Section=ASEC1 MatProp=Default  
 Area=56 Section=ASEC1 MatProp=Default  
 Area=57 Section=ASEC1 MatProp=Default  
 Area=58 Section=ASEC1 MatProp=Default  
 Area=59 Section=ASEC1 MatProp=Default  
 Area=60 Section=ASEC1 MatProp=Default  
 Area=61 Section=ASEC1 MatProp=Default  
 Area=62 Section=ASEC1 MatProp=Default  
 Area=63 Section=ASEC1 MatProp=Default  
 Area=64 Section=ASEC1 MatProp=Default  
 Area=65 Section=ASEC1 MatProp=Default  
 Area=66 Section=ASEC1 MatProp=Default  
 Area=67 Section=ASEC1 MatProp=Default  
 Area=68 Section=ASEC1 MatProp=Default  
 Area=69 Section=ASEC1 MatProp=Default  
 Area=70 Section=ASEC1 MatProp=Default  
 Area=71 Section=ASEC1 MatProp=Default  
 Area=72 Section=ASEC1 MatProp=Default  
 Area=73 Section=ASEC1 MatProp=Default  
 Area=74 Section=ASEC1 MatProp=Default  
 Area=75 Section=ASEC1 MatProp=Default  
 Area=76 Section=ASEC1 MatProp=Default  
 Area=77 Section=ASEC1 MatProp=Default  
 Area=78 Section=ASEC1 MatProp=Default  
 Area=79 Section=ASEC1 MatProp=Default  
 Area=80 Section=ASEC1 MatProp=Default  
 Area=81 Section=ASEC1 MatProp=Default  
 Area=82 Section=ASEC1 MatProp=Default  
 Area=83 Section=ASEC1 MatProp=Default  
 Area=84 Section=ASEC1 MatProp=Default  
 Area=85 Section=ASEC1 MatProp=Default  
 Area=86 Section=ASEC1 MatProp=Default  
 Area=87 Section=ASEC1 MatProp=Default  
 Area=88 Section=ASEC1 MatProp=Default  
 Area=89 Section=ASEC1 MatProp=Default  
 Area=90 Section=ASEC1 MatProp=Default  
 Area=91 Section=ASEC1 MatProp=Default  
 Area=92 Section=ASEC1 MatProp=Default  
 Area=93 Section=ASEC1 MatProp=Default  
 Area=94 Section=ASEC1 MatProp=Default  
 Area=95 Section=ASEC1 MatProp=Default  
 Area=96 Section=ASEC1 MatProp=Default  
 Area=97 Section=ASEC1 MatProp=Default  
 Area=98 Section=ASEC1 MatProp=Default  
 Area=99 Section=ASEC1 MatProp=Default  
 Area=100 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=101 Section=ASEC1 MatProp=Default  
 Area=102 Section=ASEC1 MatProp=Default  
 Area=103 Section=ASEC1 MatProp=Default  
 Area=104 Section=ASEC1 MatProp=Default  
 Area=105 Section=ASEC1 MatProp=Default  
 Area=106 Section=ASEC1 MatProp=Default  
 Area=107 Section=ASEC1 MatProp=Default  
 Area=108 Section=ASEC1 MatProp=Default  
 Area=109 Section=ASEC1 MatProp=Default  
 Area=110 Section=ASEC1 MatProp=Default  
 Area=111 Section=ASEC1 MatProp=Default  
 Area=112 Section=ASEC1 MatProp=Default  
 Area=113 Section=ASEC1 MatProp=Default  
 Area=114 Section=ASEC1 MatProp=Default  
 Area=115 Section=ASEC1 MatProp=Default  
 Area=116 Section=ASEC1 MatProp=Default  
 Area=117 Section=ASEC1 MatProp=Default  
 Area=118 Section=ASEC1 MatProp=Default  
 Area=119 Section=ASEC1 MatProp=Default  
 Area=120 Section=ASEC1 MatProp=Default  
 Area=121 Section=ASEC1 MatProp=Default  
 Area=122 Section=ASEC1 MatProp=Default  
 Area=123 Section=ASEC1 MatProp=Default  
 Area=124 Section=ASEC1 MatProp=Default  
 Area=125 Section=ASEC1 MatProp=Default  
 Area=126 Section=ASEC1 MatProp=Default  
 Area=127 Section=ASEC1 MatProp=Default  
 Area=128 Section=ASEC1 MatProp=Default  
 Area=129 Section=ASEC1 MatProp=Default  
 Area=130 Section=ASEC1 MatProp=Default  
 Area=131 Section=ASEC1 MatProp=Default  
 Area=132 Section=ASEC1 MatProp=Default  
 Area=133 Section=ASEC1 MatProp=Default  
 Area=134 Section=ASEC1 MatProp=Default  
 Area=135 Section=ASEC1 MatProp=Default  
 Area=136 Section=ASEC1 MatProp=Default  
 Area=137 Section=ASEC1 MatProp=Default  
 Area=138 Section=ASEC1 MatProp=Default  
 Area=139 Section=ASEC1 MatProp=Default  
 Area=140 Section=ASEC1 MatProp=Default  
 Area=141 Section=ASEC1 MatProp=Default  
 Area=142 Section=ASEC1 MatProp=Default  
 Area=143 Section=ASEC1 MatProp=Default  
 Area=144 Section=ASEC1 MatProp=Default  
 Area=145 Section=ASEC1 MatProp=Default  
 Area=146 Section=ASEC1 MatProp=Default  
 Area=147 Section=ASEC1 MatProp=Default  
 Area=148 Section=ASEC1 MatProp=Default  
 Area=149 Section=ASEC1 MatProp=Default  
 Area=150 Section=ASEC1 MatProp=Default  
 Area=151 Section=ASEC1 MatProp=Default  
 Area=152 Section=ASEC1 MatProp=Default  
 Area=153 Section=ASEC1 MatProp=Default  
 Area=154 Section=ASEC1 MatProp=Default  
 Area=155 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=156 Section=ASEC1 MatProp=Default  
Area=157 Section=ASEC1 MatProp=Default  
Area=158 Section=ASEC1 MatProp=Default  
Area=159 Section=ASEC1 MatProp=Default  
Area=160 Section=ASEC1 MatProp=Default  
Area=161 Section=ASEC1 MatProp=Default  
Area=162 Section=ASEC1 MatProp=Default  
Area=163 Section=ASEC1 MatProp=Default  
Area=164 Section=ASEC1 MatProp=Default  
Area=165 Section=ASEC1 MatProp=Default  
Area=166 Section=ASEC1 MatProp=Default  
Area=167 Section=ASEC1 MatProp=Default  
Area=168 Section=ASEC1 MatProp=Default  
Area=169 Section=ASEC1 MatProp=Default  
Area=170 Section=ASEC1 MatProp=Default  
Area=171 Section=ASEC1 MatProp=Default  
Area=172 Section=ASEC1 MatProp=Default  
Area=173 Section=ASEC1 MatProp=Default  
Area=174 Section=ASEC1 MatProp=Default  
Area=175 Section=ASEC1 MatProp=Default  
Area=176 Section=ASEC1 MatProp=Default  
Area=177 Section=ASEC1 MatProp=Default  
Area=178 Section=ASEC1 MatProp=Default  
Area=179 Section=ASEC1 MatProp=Default  
Area=180 Section=ASEC1 MatProp=Default  
Area=181 Section=ASEC1 MatProp=Default  
Area=182 Section=ASEC1 MatProp=Default  
Area=183 Section=ASEC1 MatProp=Default  
Area=184 Section=ASEC1 MatProp=Default  
Area=185 Section=ASEC1 MatProp=Default  
Area=186 Section=ASEC1 MatProp=Default  
Area=187 Section=ASEC1 MatProp=Default  
Area=188 Section=ASEC1 MatProp=Default  
Area=189 Section=ASEC1 MatProp=Default  
Area=190 Section=ASEC1 MatProp=Default  
Area=191 Section=ASEC1 MatProp=Default  
Area=192 Section=ASEC1 MatProp=Default  
Area=193 Section=ASEC1 MatProp=Default  
Area=194 Section=ASEC1 MatProp=Default  
Area=195 Section=ASEC1 MatProp=Default  
Area=196 Section=ASEC1 MatProp=Default  
Area=197 Section=ASEC1 MatProp=Default  
Area=198 Section=ASEC1 MatProp=Default  
Area=199 Section=ASEC1 MatProp=Default  
Area=200 Section=ASEC1 MatProp=Default  
Area=201 Section=ASEC1 MatProp=Default  
Area=202 Section=ASEC1 MatProp=Default  
Area=203 Section=ASEC1 MatProp=Default  
Area=204 Section=ASEC1 MatProp=Default  
Area=205 Section=ASEC1 MatProp=Default  
Area=206 Section=ASEC1 MatProp=Default  
Area=207 Section=ASEC1 MatProp=Default  
Area=208 Section=ASEC1 MatProp=Default  
Area=209 Section=ASEC1 MatProp=Default  
Area=210 Section=ASEC1 MatProp=Default





|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=211 Section=ASEC1 MatProp=Default  
 Area=212 Section=ASEC1 MatProp=Default  
 Area=213 Section=ASEC1 MatProp=Default  
 Area=214 Section=ASEC1 MatProp=Default  
 Area=215 Section=ASEC1 MatProp=Default  
 Area=216 Section=ASEC1 MatProp=Default  
 Area=217 Section=ASEC1 MatProp=Default  
 Area=218 Section=ASEC1 MatProp=Default  
 Area=219 Section=ASEC1 MatProp=Default  
 Area=220 Section=ASEC1 MatProp=Default  
 Area=221 Section=ASEC1 MatProp=Default  
 Area=222 Section=ASEC1 MatProp=Default  
 Area=223 Section=ASEC1 MatProp=Default  
 Area=224 Section=ASEC1 MatProp=Default  
 Area=225 Section=ASEC1 MatProp=Default  
 Area=226 Section=ASEC1 MatProp=Default  
 Area=227 Section=ASEC1 MatProp=Default  
 Area=228 Section=ASEC1 MatProp=Default  
 Area=229 Section=ASEC1 MatProp=Default  
 Area=230 Section=ASEC1 MatProp=Default  
 Area=231 Section=ASEC1 MatProp=Default  
 Area=232 Section=ASEC1 MatProp=Default  
 Area=233 Section=ASEC1 MatProp=Default  
 Area=234 Section=ASEC1 MatProp=Default  
 Area=235 Section=ASEC1 MatProp=Default  
 Area=236 Section=ASEC1 MatProp=Default  
 Area=237 Section=ASEC1 MatProp=Default  
 Area=238 Section=ASEC1 MatProp=Default  
 Area=239 Section=ASEC1 MatProp=Default  
 Area=240 Section=ASEC1 MatProp=Default  
 Area=241 Section=ASEC1 MatProp=Default  
 Area=242 Section=ASEC1 MatProp=Default  
 Area=243 Section=ASEC1 MatProp=Default  
 Area=244 Section=ASEC1 MatProp=Default  
 Area=245 Section=ASEC1 MatProp=Default  
 Area=246 Section=ASEC1 MatProp=Default  
 Area=247 Section=ASEC1 MatProp=Default  
 Area=248 Section=ASEC1 MatProp=Default  
 Area=249 Section=ASEC1 MatProp=Default  
 Area=250 Section=ASEC1 MatProp=Default  
 Area=251 Section=ASEC1 MatProp=Default  
 Area=252 Section=ASEC1 MatProp=Default  
 Area=253 Section=ASEC1 MatProp=Default  
 Area=254 Section=ASEC1 MatProp=Default  
 Area=255 Section=ASEC1 MatProp=Default  
 Area=256 Section=ASEC1 MatProp=Default  
 Area=257 Section=ASEC1 MatProp=Default  
 Area=258 Section=ASEC1 MatProp=Default  
 Area=259 Section=ASEC1 MatProp=Default  
 Area=260 Section=ASEC1 MatProp=Default  
 Area=261 Section=ASEC1 MatProp=Default  
 Area=262 Section=ASEC1 MatProp=Default  
 Area=263 Section=ASEC1 MatProp=Default  
 Area=264 Section=ASEC1 MatProp=Default  
 Area=265 Section=ASEC1 MatProp=Default



|          |               |                 |
|----------|---------------|-----------------|
| Area=266 | Section=ASEC1 | MatProp=Default |
| Area=267 | Section=ASEC1 | MatProp=Default |
| Area=268 | Section=ASEC1 | MatProp=Default |
| Area=269 | Section=ASEC1 | MatProp=Default |
| Area=270 | Section=ASEC1 | MatProp=Default |
| Area=271 | Section=ASEC1 | MatProp=Default |
| Area=272 | Section=ASEC1 | MatProp=Default |
| Area=273 | Section=ASEC1 | MatProp=Default |
| Area=274 | Section=ASEC1 | MatProp=Default |
| Area=275 | Section=ASEC1 | MatProp=Default |
| Area=276 | Section=ASEC1 | MatProp=Default |
| Area=277 | Section=ASEC1 | MatProp=Default |
| Area=278 | Section=ASEC1 | MatProp=Default |
| Area=279 | Section=ASEC1 | MatProp=Default |
| Area=280 | Section=ASEC1 | MatProp=Default |
| Area=281 | Section=ASEC1 | MatProp=Default |
| Area=282 | Section=ASEC1 | MatProp=Default |
| Area=283 | Section=ASEC1 | MatProp=Default |
| Area=284 | Section=ASEC1 | MatProp=Default |
| Area=285 | Section=ASEC1 | MatProp=Default |
| Area=286 | Section=ASEC1 | MatProp=Default |
| Area=287 | Section=ASEC1 | MatProp=Default |
| Area=288 | Section=ASEC1 | MatProp=Default |
| Area=289 | Section=ASEC1 | MatProp=Default |
| Area=290 | Section=ASEC1 | MatProp=Default |
| Area=291 | Section=ASEC1 | MatProp=Default |
| Area=292 | Section=ASEC1 | MatProp=Default |
| Area=293 | Section=ASEC1 | MatProp=Default |
| Area=294 | Section=ASEC1 | MatProp=Default |
| Area=295 | Section=ASEC1 | MatProp=Default |
| Area=296 | Section=ASEC1 | MatProp=Default |
| Area=297 | Section=ASEC1 | MatProp=Default |
| Area=298 | Section=ASEC1 | MatProp=Default |
| Area=299 | Section=ASEC1 | MatProp=Default |
| Area=300 | Section=ASEC1 | MatProp=Default |
| Area=301 | Section=ASEC1 | MatProp=Default |
| Area=302 | Section=ASEC1 | MatProp=Default |
| Area=303 | Section=ASEC1 | MatProp=Default |
| Area=304 | Section=ASEC1 | MatProp=Default |
| Area=305 | Section=ASEC1 | MatProp=Default |
| Area=306 | Section=ASEC1 | MatProp=Default |
| Area=307 | Section=ASEC1 | MatProp=Default |
| Area=308 | Section=ASEC1 | MatProp=Default |
| Area=309 | Section=ASEC1 | MatProp=Default |
| Area=310 | Section=ASEC1 | MatProp=Default |
| Area=311 | Section=ASEC1 | MatProp=Default |
| Area=312 | Section=ASEC1 | MatProp=Default |
| Area=313 | Section=ASEC1 | MatProp=Default |
| Area=314 | Section=ASEC1 | MatProp=Default |
| Area=315 | Section=ASEC1 | MatProp=Default |
| Area=316 | Section=ASEC1 | MatProp=Default |
| Area=317 | Section=ASEC1 | MatProp=Default |
| Area=318 | Section=ASEC1 | MatProp=Default |
| Area=319 | Section=ASEC1 | MatProp=Default |
| Area=320 | Section=ASEC1 | MatProp=Default |

|          |               |                 |
|----------|---------------|-----------------|
| Area=321 | Section=ASEC1 | MatProp=Default |
| Area=322 | Section=ASEC1 | MatProp=Default |
| Area=323 | Section=ASEC1 | MatProp=Default |
| Area=324 | Section=ASEC1 | MatProp=Default |
| Area=325 | Section=ASEC1 | MatProp=Default |
| Area=326 | Section=ASEC1 | MatProp=Default |
| Area=327 | Section=ASEC1 | MatProp=Default |
| Area=328 | Section=ASEC1 | MatProp=Default |
| Area=329 | Section=ASEC1 | MatProp=Default |
| Area=330 | Section=ASEC1 | MatProp=Default |
| Area=331 | Section=ASEC1 | MatProp=Default |
| Area=332 | Section=ASEC1 | MatProp=Default |
| Area=333 | Section=ASEC1 | MatProp=Default |
| Area=334 | Section=ASEC1 | MatProp=Default |
| Area=335 | Section=ASEC1 | MatProp=Default |
| Area=336 | Section=ASEC1 | MatProp=Default |
| Area=337 | Section=ASEC1 | MatProp=Default |
| Area=338 | Section=ASEC1 | MatProp=Default |
| Area=339 | Section=ASEC1 | MatProp=Default |
| Area=340 | Section=ASEC1 | MatProp=Default |
| Area=341 | Section=ASEC1 | MatProp=Default |
| Area=342 | Section=ASEC1 | MatProp=Default |
| Area=343 | Section=ASEC1 | MatProp=Default |
| Area=344 | Section=ASEC1 | MatProp=Default |
| Area=345 | Section=ASEC1 | MatProp=Default |
| Area=346 | Section=ASEC1 | MatProp=Default |
| Area=347 | Section=ASEC1 | MatProp=Default |
| Area=348 | Section=ASEC1 | MatProp=Default |
| Area=349 | Section=ASEC1 | MatProp=Default |
| Area=350 | Section=ASEC1 | MatProp=Default |
| Area=351 | Section=ASEC1 | MatProp=Default |
| Area=352 | Section=ASEC1 | MatProp=Default |
| Area=353 | Section=ASEC1 | MatProp=Default |
| Area=354 | Section=ASEC1 | MatProp=Default |
| Area=355 | Section=ASEC1 | MatProp=Default |
| Area=356 | Section=ASEC1 | MatProp=Default |
| Area=357 | Section=ASEC1 | MatProp=Default |
| Area=358 | Section=ASEC1 | MatProp=Default |
| Area=359 | Section=ASEC1 | MatProp=Default |
| Area=360 | Section=ASEC1 | MatProp=Default |
| Area=361 | Section=ASEC1 | MatProp=Default |
| Area=362 | Section=ASEC1 | MatProp=Default |
| Area=363 | Section=ASEC1 | MatProp=Default |
| Area=364 | Section=ASEC1 | MatProp=Default |
| Area=365 | Section=ASEC1 | MatProp=Default |
| Area=366 | Section=ASEC1 | MatProp=Default |
| Area=367 | Section=ASEC1 | MatProp=Default |
| Area=368 | Section=ASEC1 | MatProp=Default |
| Area=369 | Section=ASEC1 | MatProp=Default |
| Area=370 | Section=ASEC1 | MatProp=Default |
| Area=371 | Section=ASEC1 | MatProp=Default |
| Area=372 | Section=ASEC1 | MatProp=Default |
| Area=373 | Section=ASEC1 | MatProp=Default |
| Area=374 | Section=ASEC1 | MatProp=Default |
| Area=375 | Section=ASEC1 | MatProp=Default |

|          |               |                 |
|----------|---------------|-----------------|
| Area=376 | Section=ASEC1 | MatProp=Default |
| Area=377 | Section=ASEC1 | MatProp=Default |
| Area=378 | Section=ASEC1 | MatProp=Default |
| Area=379 | Section=ASEC1 | MatProp=Default |
| Area=380 | Section=ASEC1 | MatProp=Default |
| Area=381 | Section=ASEC1 | MatProp=Default |
| Area=382 | Section=ASEC1 | MatProp=Default |
| Area=383 | Section=ASEC1 | MatProp=Default |
| Area=384 | Section=ASEC1 | MatProp=Default |
| Area=385 | Section=ASEC1 | MatProp=Default |
| Area=386 | Section=ASEC1 | MatProp=Default |
| Area=387 | Section=ASEC1 | MatProp=Default |
| Area=388 | Section=ASEC1 | MatProp=Default |
| Area=389 | Section=ASEC1 | MatProp=Default |
| Area=390 | Section=ASEC1 | MatProp=Default |
| Area=391 | Section=ASEC1 | MatProp=Default |
| Area=392 | Section=ASEC1 | MatProp=Default |
| Area=393 | Section=ASEC1 | MatProp=Default |
| Area=394 | Section=ASEC1 | MatProp=Default |
| Area=395 | Section=ASEC1 | MatProp=Default |
| Area=396 | Section=ASEC1 | MatProp=Default |
| Area=397 | Section=ASEC1 | MatProp=Default |
| Area=398 | Section=ASEC1 | MatProp=Default |
| Area=399 | Section=ASEC1 | MatProp=Default |
| Area=400 | Section=ASEC1 | MatProp=Default |
| Area=401 | Section=ASEC1 | MatProp=Default |
| Area=402 | Section=ASEC1 | MatProp=Default |
| Area=403 | Section=ASEC1 | MatProp=Default |
| Area=404 | Section=ASEC1 | MatProp=Default |
| Area=405 | Section=ASEC1 | MatProp=Default |
| Area=406 | Section=ASEC1 | MatProp=Default |
| Area=407 | Section=ASEC1 | MatProp=Default |
| Area=408 | Section=ASEC1 | MatProp=Default |
| Area=409 | Section=ASEC1 | MatProp=Default |
| Area=410 | Section=ASEC1 | MatProp=Default |
| Area=411 | Section=ASEC1 | MatProp=Default |
| Area=412 | Section=ASEC1 | MatProp=Default |
| Area=413 | Section=ASEC1 | MatProp=Default |
| Area=414 | Section=ASEC1 | MatProp=Default |
| Area=415 | Section=ASEC1 | MatProp=Default |
| Area=416 | Section=ASEC1 | MatProp=Default |
| Area=417 | Section=ASEC1 | MatProp=Default |
| Area=418 | Section=ASEC1 | MatProp=Default |
| Area=419 | Section=ASEC1 | MatProp=Default |
| Area=420 | Section=ASEC1 | MatProp=Default |
| Area=421 | Section=ASEC1 | MatProp=Default |
| Area=422 | Section=ASEC1 | MatProp=Default |
| Area=423 | Section=ASEC1 | MatProp=Default |
| Area=424 | Section=ASEC1 | MatProp=Default |
| Area=425 | Section=ASEC1 | MatProp=Default |
| Area=426 | Section=ASEC1 | MatProp=Default |
| Area=427 | Section=ASEC1 | MatProp=Default |
| Area=428 | Section=ASEC1 | MatProp=Default |
| Area=429 | Section=ASEC1 | MatProp=Default |
| Area=430 | Section=ASEC1 | MatProp=Default |



ALCALDÍA MAYOR  
BOGOTÁ D.C.  
MOVILIDAD  
Instituto de Desarrollo Urbano

|          |               |                 |
|----------|---------------|-----------------|
| Area=431 | Section=ASEC1 | MatProp=Default |
| Area=432 | Section=ASEC1 | MatProp=Default |
| Area=433 | Section=ASEC1 | MatProp=Default |
| Area=434 | Section=ASEC1 | MatProp=Default |
| Area=435 | Section=ASEC1 | MatProp=Default |
| Area=436 | Section=ASEC1 | MatProp=Default |
| Area=437 | Section=ASEC1 | MatProp=Default |
| Area=438 | Section=ASEC1 | MatProp=Default |
| Area=439 | Section=ASEC1 | MatProp=Default |
| Area=440 | Section=ASEC1 | MatProp=Default |
| Area=441 | Section=ASEC1 | MatProp=Default |
| Area=442 | Section=ASEC1 | MatProp=Default |
| Area=443 | Section=ASEC1 | MatProp=Default |
| Area=444 | Section=ASEC1 | MatProp=Default |
| Area=445 | Section=ASEC1 | MatProp=Default |
| Area=446 | Section=ASEC1 | MatProp=Default |
| Area=447 | Section=ASEC1 | MatProp=Default |
| Area=448 | Section=ASEC1 | MatProp=Default |
| Area=449 | Section=ASEC1 | MatProp=Default |
| Area=450 | Section=ASEC1 | MatProp=Default |
| Area=451 | Section=ASEC1 | MatProp=Default |
| Area=452 | Section=ASEC1 | MatProp=Default |
| Area=453 | Section=ASEC1 | MatProp=Default |
| Area=454 | Section=ASEC1 | MatProp=Default |
| Area=455 | Section=ASEC1 | MatProp=Default |
| Area=456 | Section=ASEC1 | MatProp=Default |
| Area=457 | Section=ASEC1 | MatProp=Default |
| Area=458 | Section=ASEC1 | MatProp=Default |
| Area=459 | Section=ASEC1 | MatProp=Default |
| Area=460 | Section=ASEC1 | MatProp=Default |
| Area=461 | Section=ASEC1 | MatProp=Default |
| Area=462 | Section=ASEC1 | MatProp=Default |
| Area=463 | Section=ASEC1 | MatProp=Default |
| Area=464 | Section=ASEC1 | MatProp=Default |
| Area=465 | Section=ASEC1 | MatProp=Default |
| Area=466 | Section=ASEC1 | MatProp=Default |
| Area=467 | Section=ASEC1 | MatProp=Default |
| Area=468 | Section=ASEC1 | MatProp=Default |
| Area=469 | Section=ASEC1 | MatProp=Default |
| Area=470 | Section=ASEC1 | MatProp=Default |
| Area=471 | Section=ASEC1 | MatProp=Default |
| Area=472 | Section=ASEC1 | MatProp=Default |
| Area=473 | Section=ASEC1 | MatProp=Default |
| Area=474 | Section=ASEC1 | MatProp=Default |
| Area=475 | Section=ASEC1 | MatProp=Default |
| Area=476 | Section=ASEC1 | MatProp=Default |
| Area=477 | Section=ASEC1 | MatProp=Default |
| Area=478 | Section=ASEC1 | MatProp=Default |
| Area=479 | Section=ASEC1 | MatProp=Default |
| Area=480 | Section=ASEC1 | MatProp=Default |
| Area=481 | Section=ASEC1 | MatProp=Default |
| Area=482 | Section=ASEC1 | MatProp=Default |
| Area=483 | Section=ASEC1 | MatProp=Default |
| Area=484 | Section=ASEC1 | MatProp=Default |
| Area=485 | Section=ASEC1 | MatProp=Default |



ALCALDÍA MAYOR  
BOGOTÁ D.C.  
MOVILIDAD  
Instituto de Desarrollo Urbano



|          |               |                 |
|----------|---------------|-----------------|
| Area=486 | Section=ASEC1 | MatProp=Default |
| Area=487 | Section=ASEC1 | MatProp=Default |
| Area=488 | Section=ASEC1 | MatProp=Default |
| Area=489 | Section=ASEC1 | MatProp=Default |
| Area=490 | Section=ASEC1 | MatProp=Default |
| Area=491 | Section=ASEC1 | MatProp=Default |
| Area=492 | Section=ASEC1 | MatProp=Default |
| Area=493 | Section=ASEC1 | MatProp=Default |
| Area=494 | Section=ASEC1 | MatProp=Default |
| Area=495 | Section=ASEC1 | MatProp=Default |
| Area=496 | Section=ASEC1 | MatProp=Default |
| Area=497 | Section=ASEC1 | MatProp=Default |
| Area=498 | Section=ASEC1 | MatProp=Default |
| Area=499 | Section=ASEC1 | MatProp=Default |
| Area=500 | Section=ASEC1 | MatProp=Default |
| Area=501 | Section=ASEC1 | MatProp=Default |
| Area=502 | Section=ASEC1 | MatProp=Default |
| Area=503 | Section=ASEC1 | MatProp=Default |
| Area=504 | Section=ASEC1 | MatProp=Default |
| Area=505 | Section=ASEC1 | MatProp=Default |
| Area=506 | Section=ASEC1 | MatProp=Default |
| Area=507 | Section=ASEC1 | MatProp=Default |
| Area=508 | Section=ASEC1 | MatProp=Default |
| Area=509 | Section=ASEC1 | MatProp=Default |
| Area=510 | Section=ASEC1 | MatProp=Default |
| Area=511 | Section=ASEC1 | MatProp=Default |
| Area=512 | Section=ASEC1 | MatProp=Default |
| Area=513 | Section=ASEC1 | MatProp=Default |
| Area=514 | Section=ASEC1 | MatProp=Default |
| Area=515 | Section=ASEC1 | MatProp=Default |
| Area=516 | Section=ASEC1 | MatProp=Default |
| Area=517 | Section=ASEC1 | MatProp=Default |
| Area=518 | Section=ASEC1 | MatProp=Default |
| Area=519 | Section=ASEC1 | MatProp=Default |
| Area=520 | Section=ASEC1 | MatProp=Default |
| Area=521 | Section=ASEC1 | MatProp=Default |
| Area=522 | Section=ASEC1 | MatProp=Default |
| Area=523 | Section=ASEC1 | MatProp=Default |
| Area=524 | Section=ASEC1 | MatProp=Default |
| Area=525 | Section=ASEC1 | MatProp=Default |
| Area=526 | Section=ASEC1 | MatProp=Default |
| Area=527 | Section=ASEC1 | MatProp=Default |
| Area=528 | Section=ASEC1 | MatProp=Default |
| Area=529 | Section=ASEC1 | MatProp=Default |
| Area=530 | Section=ASEC1 | MatProp=Default |
| Area=531 | Section=ASEC1 | MatProp=Default |
| Area=532 | Section=ASEC1 | MatProp=Default |
| Area=533 | Section=ASEC1 | MatProp=Default |
| Area=534 | Section=ASEC1 | MatProp=Default |
| Area=535 | Section=ASEC1 | MatProp=Default |
| Area=536 | Section=ASEC1 | MatProp=Default |
| Area=537 | Section=ASEC1 | MatProp=Default |
| Area=538 | Section=ASEC1 | MatProp=Default |
| Area=539 | Section=ASEC1 | MatProp=Default |
| Area=540 | Section=ASEC1 | MatProp=Default |

|          |               |                 |
|----------|---------------|-----------------|
| Area=541 | Section=ASEC1 | MatProp=Default |
| Area=542 | Section=ASEC1 | MatProp=Default |
| Area=543 | Section=ASEC1 | MatProp=Default |
| Area=544 | Section=ASEC1 | MatProp=Default |
| Area=545 | Section=ASEC1 | MatProp=Default |
| Area=546 | Section=ASEC1 | MatProp=Default |
| Area=547 | Section=ASEC1 | MatProp=Default |
| Area=548 | Section=ASEC1 | MatProp=Default |
| Area=549 | Section=ASEC1 | MatProp=Default |
| Area=550 | Section=ASEC1 | MatProp=Default |
| Area=551 | Section=ASEC1 | MatProp=Default |
| Area=552 | Section=ASEC1 | MatProp=Default |
| Area=553 | Section=ASEC1 | MatProp=Default |
| Area=554 | Section=ASEC1 | MatProp=Default |
| Area=555 | Section=ASEC1 | MatProp=Default |
| Area=556 | Section=ASEC1 | MatProp=Default |
| Area=557 | Section=ASEC1 | MatProp=Default |
| Area=558 | Section=ASEC1 | MatProp=Default |
| Area=559 | Section=ASEC1 | MatProp=Default |
| Area=560 | Section=ASEC1 | MatProp=Default |
| Area=561 | Section=ASEC1 | MatProp=Default |
| Area=562 | Section=ASEC1 | MatProp=Default |
| Area=563 | Section=ASEC1 | MatProp=Default |
| Area=564 | Section=ASEC1 | MatProp=Default |
| Area=565 | Section=ASEC1 | MatProp=Default |
| Area=566 | Section=ASEC1 | MatProp=Default |
| Area=567 | Section=ASEC1 | MatProp=Default |
| Area=568 | Section=ASEC1 | MatProp=Default |
| Area=569 | Section=ASEC1 | MatProp=Default |
| Area=570 | Section=ASEC1 | MatProp=Default |
| Area=571 | Section=ASEC1 | MatProp=Default |
| Area=572 | Section=ASEC1 | MatProp=Default |
| Area=573 | Section=ASEC1 | MatProp=Default |
| Area=574 | Section=ASEC1 | MatProp=Default |
| Area=575 | Section=ASEC1 | MatProp=Default |
| Area=576 | Section=ASEC1 | MatProp=Default |
| Area=577 | Section=ASEC1 | MatProp=Default |
| Area=578 | Section=ASEC1 | MatProp=Default |
| Area=579 | Section=ASEC1 | MatProp=Default |
| Area=580 | Section=ASEC1 | MatProp=Default |
| Area=581 | Section=ASEC1 | MatProp=Default |
| Area=582 | Section=ASEC1 | MatProp=Default |
| Area=583 | Section=ASEC1 | MatProp=Default |
| Area=584 | Section=ASEC1 | MatProp=Default |
| Area=585 | Section=ASEC1 | MatProp=Default |
| Area=586 | Section=ASEC1 | MatProp=Default |
| Area=587 | Section=ASEC1 | MatProp=Default |
| Area=588 | Section=ASEC1 | MatProp=Default |
| Area=589 | Section=ASEC1 | MatProp=Default |
| Area=590 | Section=ASEC1 | MatProp=Default |
| Area=591 | Section=ASEC1 | MatProp=Default |
| Area=592 | Section=ASEC1 | MatProp=Default |
| Area=593 | Section=ASEC1 | MatProp=Default |
| Area=594 | Section=ASEC1 | MatProp=Default |
| Area=595 | Section=ASEC1 | MatProp=Default |



|          |               |                 |
|----------|---------------|-----------------|
| Area=596 | Section=ASEC1 | MatProp=Default |
| Area=597 | Section=ASEC1 | MatProp=Default |
| Area=598 | Section=ASEC1 | MatProp=Default |
| Area=599 | Section=ASEC1 | MatProp=Default |
| Area=600 | Section=ASEC1 | MatProp=Default |
| Area=601 | Section=ASEC1 | MatProp=Default |
| Area=602 | Section=ASEC1 | MatProp=Default |
| Area=603 | Section=ASEC1 | MatProp=Default |
| Area=604 | Section=ASEC1 | MatProp=Default |
| Area=605 | Section=ASEC1 | MatProp=Default |
| Area=606 | Section=ASEC1 | MatProp=Default |
| Area=607 | Section=ASEC1 | MatProp=Default |
| Area=608 | Section=ASEC1 | MatProp=Default |
| Area=609 | Section=ASEC1 | MatProp=Default |
| Area=610 | Section=ASEC1 | MatProp=Default |
| Area=611 | Section=ASEC1 | MatProp=Default |
| Area=612 | Section=ASEC1 | MatProp=Default |
| Area=613 | Section=ASEC1 | MatProp=Default |
| Area=614 | Section=ASEC1 | MatProp=Default |
| Area=615 | Section=ASEC1 | MatProp=Default |
| Area=616 | Section=ASEC1 | MatProp=Default |
| Area=617 | Section=ASEC1 | MatProp=Default |
| Area=618 | Section=ASEC1 | MatProp=Default |
| Area=619 | Section=ASEC1 | MatProp=Default |
| Area=620 | Section=ASEC1 | MatProp=Default |
| Area=621 | Section=ASEC1 | MatProp=Default |
| Area=622 | Section=ASEC1 | MatProp=Default |
| Area=623 | Section=ASEC1 | MatProp=Default |
| Area=624 | Section=ASEC1 | MatProp=Default |
| Area=625 | Section=ASEC1 | MatProp=Default |
| Area=626 | Section=ASEC1 | MatProp=Default |
| Area=627 | Section=ASEC1 | MatProp=Default |
| Area=628 | Section=ASEC1 | MatProp=Default |
| Area=629 | Section=ASEC1 | MatProp=Default |
| Area=630 | Section=ASEC1 | MatProp=Default |
| Area=631 | Section=ASEC1 | MatProp=Default |
| Area=632 | Section=ASEC1 | MatProp=Default |
| Area=633 | Section=ASEC1 | MatProp=Default |
| Area=634 | Section=ASEC1 | MatProp=Default |
| Area=635 | Section=ASEC1 | MatProp=Default |
| Area=636 | Section=ASEC1 | MatProp=Default |
| Area=637 | Section=ASEC1 | MatProp=Default |
| Area=638 | Section=ASEC1 | MatProp=Default |
| Area=639 | Section=ASEC1 | MatProp=Default |
| Area=640 | Section=ASEC1 | MatProp=Default |
| Area=641 | Section=ASEC1 | MatProp=Default |
| Area=642 | Section=ASEC1 | MatProp=Default |
| Area=643 | Section=ASEC1 | MatProp=Default |
| Area=644 | Section=ASEC1 | MatProp=Default |
| Area=645 | Section=ASEC1 | MatProp=Default |
| Area=646 | Section=ASEC1 | MatProp=Default |
| Area=647 | Section=ASEC1 | MatProp=Default |
| Area=648 | Section=ASEC1 | MatProp=Default |
| Area=649 | Section=ASEC1 | MatProp=Default |
| Area=650 | Section=ASEC1 | MatProp=Default |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=651 Section=ASEC1 MatProp=Default  
Area=652 Section=ASEC1 MatProp=Default  
Area=653 Section=ASEC1 MatProp=Default  
Area=654 Section=ASEC1 MatProp=Default  
Area=655 Section=ASEC1 MatProp=Default  
Area=656 Section=ASEC1 MatProp=Default  
Area=657 Section=ASEC1 MatProp=Default  
Area=658 Section=ASEC1 MatProp=Default  
Area=659 Section=ASEC1 MatProp=Default  
Area=660 Section=ASEC1 MatProp=Default  
Area=661 Section=ASEC1 MatProp=Default  
Area=662 Section=ASEC1 MatProp=Default  
Area=663 Section=ASEC1 MatProp=Default  
Area=664 Section=ASEC1 MatProp=Default  
Area=665 Section=ASEC1 MatProp=Default  
Area=666 Section=ASEC1 MatProp=Default  
Area=667 Section=ASEC1 MatProp=Default  
Area=668 Section=ASEC1 MatProp=Default  
Area=669 Section=ASEC1 MatProp=Default  
Area=670 Section=ASEC1 MatProp=Default  
Area=671 Section=ASEC1 MatProp=Default  
Area=672 Section=ASEC1 MatProp=Default  
Area=673 Section=ASEC1 MatProp=Default  
Area=674 Section=ASEC1 MatProp=Default  
Area=675 Section=ASEC1 MatProp=Default  
Area=676 Section=ASEC1 MatProp=Default  
Area=677 Section=ASEC1 MatProp=Default  
Area=678 Section=ASEC1 MatProp=Default  
Area=679 Section=ASEC1 MatProp=Default  
Area=680 Section=ASEC1 MatProp=Default  
Area=681 Section=ASEC1 MatProp=Default  
Area=682 Section=ASEC1 MatProp=Default  
Area=683 Section=ASEC1 MatProp=Default  
Area=684 Section=ASEC1 MatProp=Default  
Area=685 Section=ASEC1 MatProp=Default  
Area=686 Section=ASEC1 MatProp=Default  
Area=687 Section=ASEC1 MatProp=Default  
Area=688 Section=ASEC1 MatProp=Default  
Area=689 Section=ASEC1 MatProp=Default  
Area=690 Section=ASEC1 MatProp=Default  
Area=691 Section=ASEC1 MatProp=Default  
Area=692 Section=ASEC1 MatProp=Default  
Area=693 Section=ASEC1 MatProp=Default  
Area=694 Section=ASEC1 MatProp=Default  
Area=695 Section=ASEC1 MatProp=Default  
Area=696 Section=ASEC1 MatProp=Default  
Area=697 Section=ASEC1 MatProp=Default  
Area=698 Section=ASEC1 MatProp=Default  
Area=699 Section=ASEC1 MatProp=Default  
Area=700 Section=ASEC1 MatProp=Default  
Area=701 Section=ASEC1 MatProp=Default  
Area=702 Section=ASEC1 MatProp=Default  
Area=703 Section=ASEC1 MatProp=Default  
Area=704 Section=ASEC1 MatProp=Default  
Area=705 Section=ASEC1 MatProp=Default





ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA  
FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN  
SAN CRISTÓBAL, EN BOGOTÁ D.C.



|          |               |                 |
|----------|---------------|-----------------|
| Area=706 | Section=ASEC1 | MatProp=Default |
| Area=707 | Section=ASEC1 | MatProp=Default |
| Area=708 | Section=ASEC1 | MatProp=Default |
| Area=709 | Section=ASEC1 | MatProp=Default |
| Area=710 | Section=ASEC1 | MatProp=Default |
| Area=711 | Section=ASEC1 | MatProp=Default |
| Area=712 | Section=ASEC1 | MatProp=Default |
| Area=713 | Section=ASEC1 | MatProp=Default |
| Area=714 | Section=ASEC1 | MatProp=Default |
| Area=715 | Section=ASEC1 | MatProp=Default |
| Area=716 | Section=ASEC1 | MatProp=Default |
| Area=717 | Section=ASEC1 | MatProp=Default |
| Area=718 | Section=ASEC1 | MatProp=Default |
| Area=719 | Section=ASEC1 | MatProp=Default |
| Area=720 | Section=ASEC1 | MatProp=Default |
| Area=721 | Section=ASEC1 | MatProp=Default |
| Area=722 | Section=ASEC1 | MatProp=Default |
| Area=723 | Section=ASEC1 | MatProp=Default |
| Area=724 | Section=ASEC1 | MatProp=Default |
| Area=725 | Section=ASEC1 | MatProp=Default |
| Area=726 | Section=ASEC1 | MatProp=Default |
| Area=727 | Section=ASEC1 | MatProp=Default |
| Area=728 | Section=ASEC1 | MatProp=Default |
| Area=729 | Section=ASEC1 | MatProp=Default |
| Area=730 | Section=ASEC1 | MatProp=Default |
| Area=731 | Section=ASEC1 | MatProp=Default |
| Area=732 | Section=ASEC1 | MatProp=Default |
| Area=733 | Section=ASEC1 | MatProp=Default |
| Area=734 | Section=ASEC1 | MatProp=Default |
| Area=735 | Section=ASEC1 | MatProp=Default |
| Area=736 | Section=ASEC1 | MatProp=Default |
| Area=737 | Section=ASEC1 | MatProp=Default |
| Area=738 | Section=ASEC1 | MatProp=Default |
| Area=739 | Section=ASEC1 | MatProp=Default |
| Area=740 | Section=ASEC1 | MatProp=Default |
| Area=741 | Section=ASEC1 | MatProp=Default |
| Area=742 | Section=ASEC1 | MatProp=Default |
| Area=743 | Section=ASEC1 | MatProp=Default |
| Area=744 | Section=ASEC1 | MatProp=Default |
| Area=745 | Section=ASEC1 | MatProp=Default |
| Area=746 | Section=ASEC1 | MatProp=Default |
| Area=747 | Section=ASEC1 | MatProp=Default |
| Area=748 | Section=ASEC1 | MatProp=Default |
| Area=749 | Section=ASEC1 | MatProp=Default |
| Area=750 | Section=ASEC1 | MatProp=Default |
| Area=751 | Section=ASEC1 | MatProp=Default |
| Area=752 | Section=ASEC1 | MatProp=Default |
| Area=753 | Section=ASEC1 | MatProp=Default |
| Area=754 | Section=ASEC1 | MatProp=Default |
| Area=755 | Section=ASEC1 | MatProp=Default |
| Area=756 | Section=ASEC1 | MatProp=Default |
| Area=757 | Section=ASEC1 | MatProp=Default |
| Area=758 | Section=ASEC1 | MatProp=Default |
| Area=759 | Section=ASEC1 | MatProp=Default |
| Area=760 | Section=ASEC1 | MatProp=Default |



ALCALDÍA MAYOR  
BOGOTÁ D.C.  
MOVILIDAD  
Instituto de Desarrollo Urbano



ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA  
FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN  
SAN CRISTÓBAL, EN BOGOTÁ D.C.



|          |               |                 |
|----------|---------------|-----------------|
| Area=761 | Section=ASEC1 | MatProp=Default |
| Area=762 | Section=ASEC1 | MatProp=Default |
| Area=763 | Section=ASEC1 | MatProp=Default |
| Area=764 | Section=ASEC1 | MatProp=Default |
| Area=765 | Section=ASEC1 | MatProp=Default |
| Area=766 | Section=ASEC1 | MatProp=Default |
| Area=767 | Section=ASEC1 | MatProp=Default |
| Area=768 | Section=ASEC1 | MatProp=Default |
| Area=769 | Section=ASEC1 | MatProp=Default |
| Area=770 | Section=ASEC1 | MatProp=Default |
| Area=771 | Section=ASEC1 | MatProp=Default |
| Area=772 | Section=ASEC1 | MatProp=Default |
| Area=773 | Section=ASEC1 | MatProp=Default |
| Area=774 | Section=ASEC1 | MatProp=Default |
| Area=775 | Section=ASEC1 | MatProp=Default |
| Area=776 | Section=ASEC1 | MatProp=Default |
| Area=777 | Section=ASEC1 | MatProp=Default |
| Area=778 | Section=ASEC1 | MatProp=Default |
| Area=779 | Section=ASEC1 | MatProp=Default |
| Area=780 | Section=ASEC1 | MatProp=Default |
| Area=781 | Section=ASEC1 | MatProp=Default |
| Area=782 | Section=ASEC1 | MatProp=Default |
| Area=783 | Section=ASEC1 | MatProp=Default |
| Area=784 | Section=ASEC1 | MatProp=Default |
| Area=785 | Section=ASEC1 | MatProp=Default |
| Area=786 | Section=ASEC1 | MatProp=Default |
| Area=787 | Section=ASEC1 | MatProp=Default |
| Area=788 | Section=ASEC1 | MatProp=Default |
| Area=789 | Section=ASEC1 | MatProp=Default |
| Area=790 | Section=ASEC1 | MatProp=Default |
| Area=791 | Section=ASEC1 | MatProp=Default |
| Area=792 | Section=ASEC1 | MatProp=Default |
| Area=793 | Section=ASEC1 | MatProp=Default |
| Area=794 | Section=ASEC1 | MatProp=Default |
| Area=795 | Section=ASEC1 | MatProp=Default |
| Area=796 | Section=ASEC1 | MatProp=Default |
| Area=797 | Section=ASEC1 | MatProp=Default |
| Area=798 | Section=ASEC1 | MatProp=Default |
| Area=799 | Section=ASEC1 | MatProp=Default |
| Area=800 | Section=ASEC1 | MatProp=Default |
| Area=801 | Section=ASEC1 | MatProp=Default |
| Area=802 | Section=ASEC1 | MatProp=Default |
| Area=803 | Section=ASEC1 | MatProp=Default |
| Area=804 | Section=ASEC1 | MatProp=Default |
| Area=805 | Section=ASEC1 | MatProp=Default |
| Area=806 | Section=ASEC1 | MatProp=Default |
| Area=807 | Section=ASEC1 | MatProp=Default |
| Area=808 | Section=ASEC1 | MatProp=Default |
| Area=809 | Section=ASEC1 | MatProp=Default |
| Area=810 | Section=ASEC1 | MatProp=Default |
| Area=811 | Section=ASEC1 | MatProp=Default |
| Area=812 | Section=ASEC1 | MatProp=Default |
| Area=813 | Section=ASEC1 | MatProp=Default |
| Area=814 | Section=ASEC1 | MatProp=Default |
| Area=815 | Section=ASEC1 | MatProp=Default |



ALCALDÍA MAYOR  
BOGOTÁ D.C.  
MOVILIDAD  
Instituto de Desarrollo Urbano

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=816 Section=ASEC1 MatProp=Default  
 Area=817 Section=ASEC1 MatProp=Default  
 Area=818 Section=ASEC1 MatProp=Default  
 Area=819 Section=ASEC1 MatProp=Default  
 Area=820 Section=ASEC1 MatProp=Default  
 Area=821 Section=ASEC1 MatProp=Default  
 Area=822 Section=ASEC1 MatProp=Default  
 Area=823 Section=ASEC1 MatProp=Default  
 Area=824 Section=ASEC1 MatProp=Default  
 Area=825 Section=ASEC1 MatProp=Default  
 Area=826 Section=ASEC1 MatProp=Default  
 Area=827 Section=ASEC1 MatProp=Default  
 Area=828 Section=ASEC1 MatProp=Default  
 Area=829 Section=ASEC1 MatProp=Default  
 Area=830 Section=ASEC1 MatProp=Default  
 Area=831 Section=ASEC1 MatProp=Default  
 Area=832 Section=ASEC1 MatProp=Default  
 Area=833 Section=ASEC1 MatProp=Default  
 Area=834 Section=ASEC1 MatProp=Default  
 Area=835 Section=ASEC1 MatProp=Default  
 Area=836 Section=ASEC1 MatProp=Default  
 Area=837 Section=ASEC1 MatProp=Default  
 Area=838 Section=ASEC1 MatProp=Default  
 Area=839 Section=ASEC1 MatProp=Default  
 Area=840 Section=ASEC1 MatProp=Default  
 Area=841 Section=ASEC1 MatProp=Default  
 Area=842 Section=ASEC1 MatProp=Default  
 Area=843 Section=ASEC1 MatProp=Default  
 Area=844 Section=ASEC1 MatProp=Default  
 Area=845 Section=ASEC1 MatProp=Default  
 Area=846 Section=ASEC1 MatProp=Default  
 Area=847 Section=ASEC1 MatProp=Default  
 Area=848 Section=ASEC1 MatProp=Default  
 Area=849 Section=ASEC1 MatProp=Default  
 Area=850 Section=ASEC1 MatProp=Default  
 Area=851 Section=ASEC1 MatProp=Default  
 Area=852 Section=ASEC1 MatProp=Default  
 Area=853 Section=ASEC1 MatProp=Default  
 Area=854 Section=ASEC1 MatProp=Default  
 Area=855 Section=ASEC1 MatProp=Default  
 Area=856 Section=ASEC1 MatProp=Default  
 Area=857 Section=ASEC1 MatProp=Default  
 Area=858 Section=ASEC1 MatProp=Default  
 Area=859 Section=ASEC1 MatProp=Default  
 Area=860 Section=ASEC1 MatProp=Default  
 Area=861 Section=ASEC1 MatProp=Default  
 Area=862 Section=ASEC1 MatProp=Default  
 Area=863 Section=ASEC1 MatProp=Default  
 Area=864 Section=ASEC1 MatProp=Default  
 Area=865 Section=ASEC1 MatProp=Default  
 Area=866 Section=ASEC1 MatProp=Default  
 Area=867 Section=ASEC1 MatProp=Default  
 Area=868 Section=ASEC1 MatProp=Default  
 Area=869 Section=ASEC1 MatProp=Default  
 Area=870 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=871 Section=ASEC1 MatProp=Default  
Area=872 Section=ASEC1 MatProp=Default  
Area=873 Section=ASEC1 MatProp=Default  
Area=874 Section=ASEC1 MatProp=Default  
Area=875 Section=ASEC1 MatProp=Default  
Area=876 Section=ASEC1 MatProp=Default  
Area=877 Section=ASEC1 MatProp=Default  
Area=878 Section=ASEC1 MatProp=Default  
Area=879 Section=ASEC1 MatProp=Default  
Area=880 Section=ASEC1 MatProp=Default  
Area=881 Section=ASEC1 MatProp=Default  
Area=882 Section=ASEC1 MatProp=Default  
Area=883 Section=ASEC1 MatProp=Default  
Area=884 Section=ASEC1 MatProp=Default  
Area=885 Section=ASEC1 MatProp=Default  
Area=886 Section=ASEC1 MatProp=Default  
Area=887 Section=ASEC1 MatProp=Default  
Area=888 Section=ASEC1 MatProp=Default  
Area=889 Section=ASEC1 MatProp=Default  
Area=890 Section=ASEC1 MatProp=Default  
Area=891 Section=ASEC1 MatProp=Default  
Area=892 Section=ASEC1 MatProp=Default  
Area=893 Section=ASEC1 MatProp=Default  
Area=894 Section=ASEC1 MatProp=Default  
Area=895 Section=ASEC1 MatProp=Default  
Area=896 Section=ASEC1 MatProp=Default  
Area=897 Section=ASEC1 MatProp=Default  
Area=898 Section=ASEC1 MatProp=Default  
Area=899 Section=ASEC1 MatProp=Default  
Area=900 Section=ASEC1 MatProp=Default  
Area=901 Section=ASEC1 MatProp=Default  
Area=902 Section=ASEC1 MatProp=Default  
Area=903 Section=ASEC1 MatProp=Default  
Area=904 Section=ASEC1 MatProp=Default  
Area=905 Section=ASEC1 MatProp=Default  
Area=906 Section=ASEC1 MatProp=Default  
Area=907 Section=ASEC1 MatProp=Default  
Area=908 Section=ASEC1 MatProp=Default  
Area=909 Section=ASEC1 MatProp=Default  
Area=910 Section=ASEC1 MatProp=Default  
Area=911 Section=ASEC1 MatProp=Default  
Area=912 Section=ASEC1 MatProp=Default  
Area=913 Section=ASEC1 MatProp=Default  
Area=914 Section=ASEC1 MatProp=Default  
Area=915 Section=ASEC1 MatProp=Default  
Area=916 Section=ASEC1 MatProp=Default  
Area=917 Section=ASEC1 MatProp=Default  
Area=918 Section=ASEC1 MatProp=Default  
Area=919 Section=ASEC1 MatProp=Default  
Area=920 Section=ASEC1 MatProp=Default  
Area=921 Section=ASEC1 MatProp=Default  
Area=922 Section=ASEC1 MatProp=Default  
Area=923 Section=ASEC1 MatProp=Default  
Area=924 Section=ASEC1 MatProp=Default  
Area=925 Section=ASEC1 MatProp=Default



|          |               |                 |
|----------|---------------|-----------------|
| Area=926 | Section=ASEC1 | MatProp=Default |
| Area=927 | Section=ASEC1 | MatProp=Default |
| Area=928 | Section=ASEC1 | MatProp=Default |
| Area=929 | Section=ASEC1 | MatProp=Default |
| Area=930 | Section=ASEC1 | MatProp=Default |
| Area=931 | Section=ASEC1 | MatProp=Default |
| Area=932 | Section=ASEC1 | MatProp=Default |
| Area=933 | Section=ASEC1 | MatProp=Default |
| Area=934 | Section=ASEC1 | MatProp=Default |
| Area=935 | Section=ASEC1 | MatProp=Default |
| Area=936 | Section=ASEC1 | MatProp=Default |
| Area=937 | Section=ASEC1 | MatProp=Default |
| Area=938 | Section=ASEC1 | MatProp=Default |
| Area=939 | Section=ASEC1 | MatProp=Default |
| Area=940 | Section=ASEC1 | MatProp=Default |
| Area=941 | Section=ASEC1 | MatProp=Default |
| Area=942 | Section=ASEC1 | MatProp=Default |
| Area=943 | Section=ASEC1 | MatProp=Default |
| Area=944 | Section=ASEC1 | MatProp=Default |
| Area=945 | Section=ASEC1 | MatProp=Default |
| Area=946 | Section=ASEC1 | MatProp=Default |
| Area=947 | Section=ASEC1 | MatProp=Default |
| Area=948 | Section=ASEC1 | MatProp=Default |
| Area=949 | Section=ASEC1 | MatProp=Default |
| Area=950 | Section=ASEC1 | MatProp=Default |
| Area=951 | Section=ASEC1 | MatProp=Default |
| Area=952 | Section=ASEC1 | MatProp=Default |
| Area=953 | Section=ASEC1 | MatProp=Default |
| Area=954 | Section=ASEC1 | MatProp=Default |
| Area=955 | Section=ASEC1 | MatProp=Default |
| Area=956 | Section=ASEC1 | MatProp=Default |
| Area=957 | Section=ASEC1 | MatProp=Default |
| Area=958 | Section=ASEC1 | MatProp=Default |
| Area=959 | Section=ASEC1 | MatProp=Default |
| Area=960 | Section=ASEC1 | MatProp=Default |
| Area=961 | Section=ASEC1 | MatProp=Default |
| Area=962 | Section=ASEC1 | MatProp=Default |
| Area=963 | Section=ASEC1 | MatProp=Default |
| Area=964 | Section=ASEC1 | MatProp=Default |
| Area=965 | Section=ASEC1 | MatProp=Default |
| Area=966 | Section=ASEC1 | MatProp=Default |
| Area=967 | Section=ASEC1 | MatProp=Default |
| Area=968 | Section=ASEC1 | MatProp=Default |
| Area=969 | Section=ASEC1 | MatProp=Default |
| Area=970 | Section=ASEC1 | MatProp=Default |
| Area=971 | Section=ASEC1 | MatProp=Default |
| Area=972 | Section=ASEC1 | MatProp=Default |
| Area=973 | Section=ASEC1 | MatProp=Default |
| Area=974 | Section=ASEC1 | MatProp=Default |
| Area=975 | Section=ASEC1 | MatProp=Default |
| Area=976 | Section=ASEC1 | MatProp=Default |
| Area=977 | Section=ASEC1 | MatProp=Default |
| Area=978 | Section=ASEC1 | MatProp=Default |
| Area=979 | Section=ASEC1 | MatProp=Default |
| Area=980 | Section=ASEC1 | MatProp=Default |



ALCALDÍA MAYOR  
BOGOTÁ D.C.  
MOVILIDAD  
Instituto de Desarrollo Urbano



Area=981 Section=ASEC1 MatProp=Default  
Area=982 Section=ASEC1 MatProp=Default  
Area=983 Section=ASEC1 MatProp=Default  
Area=984 Section=ASEC1 MatProp=Default  
Area=985 Section=ASEC1 MatProp=Default  
Area=986 Section=ASEC1 MatProp=Default  
Area=987 Section=ASEC1 MatProp=Default  
Area=988 Section=ASEC1 MatProp=Default  
Area=989 Section=ASEC1 MatProp=Default  
Area=990 Section=ASEC1 MatProp=Default  
Area=991 Section=ASEC1 MatProp=Default  
Area=992 Section=ASEC1 MatProp=Default  
Area=993 Section=ASEC1 MatProp=Default  
Area=994 Section=ASEC1 MatProp=Default  
Area=995 Section=ASEC1 MatProp=Default  
Area=996 Section=ASEC1 MatProp=Default  
Area=997 Section=ASEC1 MatProp=Default  
Area=998 Section=ASEC1 MatProp=Default  
Area=999 Section=ASEC1 MatProp=Default  
Area=1000 Section=ASEC1 MatProp=Default  
Area=1001 Section=ASEC1 MatProp=Default  
Area=1002 Section=ASEC1 MatProp=Default  
Area=1003 Section=ASEC1 MatProp=Default  
Area=1004 Section=ASEC1 MatProp=Default  
Area=1005 Section=ASEC1 MatProp=Default  
Area=1006 Section=ASEC1 MatProp=Default  
Area=1007 Section=ASEC1 MatProp=Default  
Area=1008 Section=ASEC1 MatProp=Default  
Area=1009 Section=ASEC1 MatProp=Default  
Area=1010 Section=ASEC1 MatProp=Default  
Area=1011 Section=ASEC1 MatProp=Default  
Area=1012 Section=ASEC1 MatProp=Default  
Area=1013 Section=ASEC1 MatProp=Default  
Area=1014 Section=ASEC1 MatProp=Default  
Area=1015 Section=ASEC1 MatProp=Default  
Area=1016 Section=ASEC1 MatProp=Default  
Area=1017 Section=ASEC1 MatProp=Default  
Area=1018 Section=ASEC1 MatProp=Default  
Area=1019 Section=ASEC1 MatProp=Default  
Area=1020 Section=ASEC1 MatProp=Default  
Area=1021 Section=ASEC1 MatProp=Default  
Area=1022 Section=ASEC1 MatProp=Default  
Area=1023 Section=ASEC1 MatProp=Default  
Area=1024 Section=ASEC1 MatProp=Default  
Area=1025 Section=ASEC1 MatProp=Default  
Area=1026 Section=ASEC1 MatProp=Default  
Area=1027 Section=ASEC1 MatProp=Default  
Area=1028 Section=ASEC1 MatProp=Default  
Area=1029 Section=ASEC1 MatProp=Default  
Area=1030 Section=ASEC1 MatProp=Default  
Area=1031 Section=ASEC1 MatProp=Default  
Area=1032 Section=ASEC1 MatProp=Default  
Area=1033 Section=ASEC1 MatProp=Default  
Area=1034 Section=ASEC1 MatProp=Default  
Area=1035 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=1036 Section=ASEC1 MatProp=Default  
 Area=1037 Section=ASEC1 MatProp=Default  
 Area=1038 Section=ASEC1 MatProp=Default  
 Area=1039 Section=ASEC1 MatProp=Default  
 Area=1040 Section=ASEC1 MatProp=Default  
 Area=1041 Section=ASEC1 MatProp=Default  
 Area=1042 Section=ASEC1 MatProp=Default  
 Area=1043 Section=ASEC1 MatProp=Default  
 Area=1044 Section=ASEC1 MatProp=Default  
 Area=1045 Section=ASEC1 MatProp=Default  
 Area=1046 Section=ASEC1 MatProp=Default  
 Area=1047 Section=ASEC1 MatProp=Default  
 Area=1048 Section=ASEC1 MatProp=Default  
 Area=1049 Section=ASEC1 MatProp=Default  
 Area=1050 Section=ASEC1 MatProp=Default  
 Area=1051 Section=ASEC1 MatProp=Default  
 Area=1052 Section=ASEC1 MatProp=Default  
 Area=1053 Section=ASEC1 MatProp=Default  
 Area=1054 Section=ASEC1 MatProp=Default  
 Area=1055 Section=ASEC1 MatProp=Default  
 Area=1056 Section=ASEC1 MatProp=Default  
 Area=1057 Section=ASEC1 MatProp=Default  
 Area=1058 Section=ASEC1 MatProp=Default  
 Area=1059 Section=ASEC1 MatProp=Default  
 Area=1060 Section=ASEC1 MatProp=Default  
 Area=1061 Section=ASEC1 MatProp=Default  
 Area=1062 Section=ASEC1 MatProp=Default  
 Area=1063 Section=ASEC1 MatProp=Default  
 Area=1064 Section=ASEC1 MatProp=Default  
 Area=1065 Section=ASEC1 MatProp=Default  
 Area=1066 Section=ASEC1 MatProp=Default  
 Area=1067 Section=ASEC1 MatProp=Default  
 Area=1068 Section=ASEC1 MatProp=Default  
 Area=1069 Section=ASEC1 MatProp=Default  
 Area=1070 Section=ASEC1 MatProp=Default  
 Area=1071 Section=ASEC1 MatProp=Default  
 Area=1072 Section=ASEC1 MatProp=Default  
 Area=1073 Section=ASEC1 MatProp=Default  
 Area=1074 Section=ASEC1 MatProp=Default  
 Area=1075 Section=ASEC1 MatProp=Default  
 Area=1076 Section=ASEC1 MatProp=Default  
 Area=1077 Section=ASEC1 MatProp=Default  
 Area=1078 Section=ASEC1 MatProp=Default  
 Area=1079 Section=ASEC1 MatProp=Default  
 Area=1080 Section=ASEC1 MatProp=Default  
 Area=1081 Section=ASEC1 MatProp=Default  
 Area=1082 Section=ASEC1 MatProp=Default  
 Area=1083 Section=ASEC1 MatProp=Default  
 Area=1084 Section=ASEC1 MatProp=Default  
 Area=1085 Section=ASEC1 MatProp=Default  
 Area=1086 Section=ASEC1 MatProp=Default  
 Area=1087 Section=ASEC1 MatProp=Default  
 Area=1088 Section=ASEC1 MatProp=Default  
 Area=1089 Section=ASEC1 MatProp=Default  
 Area=1090 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=1091 Section=ASEC1 MatProp=Default  
 Area=1092 Section=ASEC1 MatProp=Default  
 Area=1093 Section=ASEC1 MatProp=Default  
 Area=1094 Section=ASEC1 MatProp=Default  
 Area=1095 Section=ASEC1 MatProp=Default  
 Area=1096 Section=ASEC1 MatProp=Default  
 Area=1097 Section=ASEC1 MatProp=Default  
 Area=1098 Section=ASEC1 MatProp=Default  
 Area=1099 Section=ASEC1 MatProp=Default  
 Area=1100 Section=ASEC1 MatProp=Default  
 Area=1101 Section=ASEC1 MatProp=Default  
 Area=1102 Section=ASEC1 MatProp=Default  
 Area=1103 Section=ASEC1 MatProp=Default  
 Area=1104 Section=ASEC1 MatProp=Default  
 Area=1105 Section=ASEC1 MatProp=Default  
 Area=1106 Section=ASEC1 MatProp=Default  
 Area=1107 Section=ASEC1 MatProp=Default  
 Area=1108 Section=ASEC1 MatProp=Default  
 Area=1109 Section=ASEC1 MatProp=Default  
 Area=1110 Section=ASEC1 MatProp=Default  
 Area=1111 Section=ASEC1 MatProp=Default  
 Area=1112 Section=ASEC1 MatProp=Default  
 Area=1113 Section=ASEC1 MatProp=Default  
 Area=1114 Section=ASEC1 MatProp=Default  
 Area=1115 Section=ASEC1 MatProp=Default  
 Area=1116 Section=ASEC1 MatProp=Default  
 Area=1117 Section=ASEC1 MatProp=Default  
 Area=1118 Section=ASEC1 MatProp=Default  
 Area=1119 Section=ASEC1 MatProp=Default  
 Area=1120 Section=ASEC1 MatProp=Default  
 Area=1121 Section=ASEC1 MatProp=Default  
 Area=1122 Section=ASEC1 MatProp=Default  
 Area=1123 Section=ASEC1 MatProp=Default  
 Area=1124 Section=ASEC1 MatProp=Default  
 Area=1125 Section=ASEC1 MatProp=Default  
 Area=1126 Section=ASEC1 MatProp=Default  
 Area=1127 Section=ASEC1 MatProp=Default  
 Area=1128 Section=ASEC1 MatProp=Default  
 Area=1129 Section=ASEC1 MatProp=Default  
 Area=1130 Section=ASEC1 MatProp=Default  
 Area=1131 Section=ASEC1 MatProp=Default  
 Area=1132 Section=ASEC1 MatProp=Default  
 Area=1133 Section=ASEC1 MatProp=Default  
 Area=1134 Section=ASEC1 MatProp=Default  
 Area=1135 Section=ASEC1 MatProp=Default  
 Area=1136 Section=ASEC1 MatProp=Default  
 Area=1137 Section=ASEC1 MatProp=Default  
 Area=1138 Section=ASEC1 MatProp=Default  
 Area=1139 Section=ASEC1 MatProp=Default  
 Area=1140 Section=ASEC1 MatProp=Default  
 Area=1141 Section=ASEC1 MatProp=Default  
 Area=1142 Section=ASEC1 MatProp=Default  
 Area=1143 Section=ASEC1 MatProp=Default  
 Area=1144 Section=ASEC1 MatProp=Default  
 Area=1145 Section=ASEC1 MatProp=Default

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=1146 Section=ASEC1 MatProp=Default  
 Area=1147 Section=ASEC1 MatProp=Default  
 Area=1148 Section=ASEC1 MatProp=Default  
 Area=1149 Section=ASEC1 MatProp=Default  
 Area=1150 Section=ASEC1 MatProp=Default  
 Area=1151 Section=ASEC1 MatProp=Default  
 Area=1152 Section=ASEC1 MatProp=Default  
 Area=1153 Section=ASEC1 MatProp=Default  
 Area=1154 Section=ASEC1 MatProp=Default  
 Area=1155 Section=ASEC1 MatProp=Default  
 Area=1156 Section=ASEC1 MatProp=Default  
 Area=1157 Section=ASEC1 MatProp=Default  
 Area=1158 Section=ASEC1 MatProp=Default  
 Area=1159 Section=ASEC1 MatProp=Default  
 Area=1160 Section=ASEC1 MatProp=Default  
 Area=1161 Section=ASEC1 MatProp=Default  
 Area=1162 Section=ASEC1 MatProp=Default  
 Area=1163 Section=ASEC1 MatProp=Default  
 Area=1164 Section=ASEC1 MatProp=Default  
 Area=1165 Section=ASEC1 MatProp=Default  
 Area=1166 Section=ASEC1 MatProp=Default  
 Area=1167 Section=ASEC1 MatProp=Default  
 Area=1168 Section=ASEC1 MatProp=Default  
 Area=1169 Section=ASEC1 MatProp=Default  
 Area=1170 Section=ASEC1 MatProp=Default  
 Area=1171 Section=ASEC1 MatProp=Default  
 Area=1172 Section=ASEC1 MatProp=Default  
 Area=1173 Section=ASEC1 MatProp=Default  
 Area=1174 Section=ASEC1 MatProp=Default  
 Area=1175 Section=ASEC1 MatProp=Default  
 Area=1176 Section=ASEC1 MatProp=Default  
 Area=1177 Section=ASEC1 MatProp=Default  
 Area=1178 Section=ASEC1 MatProp=Default  
 Area=1179 Section=ASEC1 MatProp=Default  
 Area=1180 Section=ASEC1 MatProp=Default  
 Area=1181 Section=ASEC1 MatProp=Default  
 Area=1182 Section=ASEC1 MatProp=Default  
 Area=1183 Section=ASEC1 MatProp=Default  
 Area=1184 Section=ASEC1 MatProp=Default  
 Area=1185 Section=ASEC1 MatProp=Default  
 Area=1186 Section=ASEC1 MatProp=Default  
 Area=1187 Section=ASEC1 MatProp=Default  
 Area=1188 Section=ASEC1 MatProp=Default  
 Area=1189 Section=ASEC1 MatProp=Default  
 Area=1190 Section=ASEC1 MatProp=Default  
 Area=1191 Section=ASEC1 MatProp=Default  
 Area=1192 Section=ASEC1 MatProp=Default  
 Area=1193 Section=ASEC1 MatProp=Default  
 Area=1194 Section=ASEC1 MatProp=Default  
 Area=1195 Section=ASEC1 MatProp=Default  
 Area=1196 Section=ASEC1 MatProp=Default  
 Area=1197 Section=ASEC1 MatProp=Default  
 Area=1198 Section=ASEC1 MatProp=Default  
 Area=1199 Section=ASEC1 MatProp=Default  
 Area=1200 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=1201 Section=ASEC1 MatProp=Default  
 Area=1202 Section=ASEC1 MatProp=Default  
 Area=1203 Section=ASEC1 MatProp=Default  
 Area=1204 Section=ASEC1 MatProp=Default  
 Area=1205 Section=ASEC1 MatProp=Default  
 Area=1206 Section=ASEC1 MatProp=Default  
 Area=1207 Section=ASEC1 MatProp=Default  
 Area=1208 Section=ASEC1 MatProp=Default  
 Area=1209 Section=ASEC1 MatProp=Default  
 Area=1210 Section=ASEC1 MatProp=Default  
 Area=1211 Section=ASEC1 MatProp=Default  
 Area=1212 Section=ASEC1 MatProp=Default  
 Area=1213 Section=ASEC1 MatProp=Default  
 Area=1214 Section=ASEC1 MatProp=Default  
 Area=1215 Section=ASEC1 MatProp=Default  
 Area=1216 Section=ASEC1 MatProp=Default  
 Area=1217 Section=ASEC1 MatProp=Default  
 Area=1218 Section=ASEC1 MatProp=Default  
 Area=1219 Section=ASEC1 MatProp=Default  
 Area=1220 Section=ASEC1 MatProp=Default  
 Area=1221 Section=ASEC1 MatProp=Default  
 Area=1222 Section=ASEC1 MatProp=Default  
 Area=1223 Section=ASEC1 MatProp=Default  
 Area=1224 Section=ASEC1 MatProp=Default  
 Area=1225 Section=ASEC1 MatProp=Default  
 Area=1226 Section=ASEC1 MatProp=Default  
 Area=1227 Section=ASEC1 MatProp=Default  
 Area=1228 Section=ASEC1 MatProp=Default  
 Area=1229 Section=ASEC1 MatProp=Default  
 Area=1230 Section=ASEC1 MatProp=Default  
 Area=1231 Section=ASEC1 MatProp=Default  
 Area=1232 Section=ASEC1 MatProp=Default  
 Area=1233 Section=ASEC1 MatProp=Default  
 Area=1234 Section=ASEC1 MatProp=Default  
 Area=1235 Section=ASEC1 MatProp=Default  
 Area=1236 Section=ASEC1 MatProp=Default  
 Area=1237 Section=ASEC1 MatProp=Default  
 Area=1238 Section=ASEC1 MatProp=Default  
 Area=1239 Section=ASEC1 MatProp=Default  
 Area=1240 Section=ASEC1 MatProp=Default  
 Area=1241 Section=ASEC1 MatProp=Default  
 Area=1242 Section=ASEC1 MatProp=Default  
 Area=1243 Section=ASEC1 MatProp=Default  
 Area=1244 Section=ASEC1 MatProp=Default  
 Area=1245 Section=ASEC1 MatProp=Default  
 Area=1246 Section=ASEC1 MatProp=Default  
 Area=1247 Section=ASEC1 MatProp=Default  
 Area=1248 Section=ASEC1 MatProp=Default  
 Area=1249 Section=ASEC1 MatProp=Default  
 Area=1250 Section=ASEC1 MatProp=Default  
 Area=1251 Section=ASEC1 MatProp=Default  
 Area=1252 Section=ASEC1 MatProp=Default  
 Area=1253 Section=ASEC1 MatProp=Default  
 Area=1254 Section=ASEC1 MatProp=Default  
 Area=1255 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=1256 Section=ASEC1 MatProp=Default  
 Area=1257 Section=ASEC1 MatProp=Default  
 Area=1258 Section=ASEC1 MatProp=Default  
 Area=1259 Section=ASEC1 MatProp=Default  
 Area=1260 Section=ASEC1 MatProp=Default  
 Area=1261 Section=ASEC1 MatProp=Default  
 Area=1262 Section=ASEC1 MatProp=Default  
 Area=1263 Section=ASEC1 MatProp=Default  
 Area=1264 Section=ASEC1 MatProp=Default  
 Area=1265 Section=ASEC1 MatProp=Default  
 Area=1266 Section=ASEC1 MatProp=Default  
 Area=1267 Section=ASEC1 MatProp=Default  
 Area=1268 Section=ASEC1 MatProp=Default  
 Area=1269 Section=ASEC1 MatProp=Default  
 Area=1270 Section=ASEC1 MatProp=Default  
 Area=1271 Section=ASEC1 MatProp=Default  
 Area=1272 Section=ASEC1 MatProp=Default  
 Area=1273 Section=ASEC1 MatProp=Default  
 Area=1274 Section=ASEC1 MatProp=Default  
 Area=1275 Section=ASEC1 MatProp=Default  
 Area=1276 Section=ASEC1 MatProp=Default  
 Area=1277 Section=ASEC1 MatProp=Default  
 Area=1278 Section=ASEC1 MatProp=Default  
 Area=1279 Section=ASEC1 MatProp=Default  
 Area=1280 Section=ASEC1 MatProp=Default  
 Area=1281 Section=ASEC1 MatProp=Default  
 Area=1282 Section=ASEC1 MatProp=Default  
 Area=1283 Section=ASEC1 MatProp=Default  
 Area=1284 Section=ASEC1 MatProp=Default  
 Area=1285 Section=ASEC1 MatProp=Default  
 Area=1286 Section=ASEC1 MatProp=Default  
 Area=1287 Section=ASEC1 MatProp=Default  
 Area=1288 Section=ASEC1 MatProp=Default  
 Area=1289 Section=ASEC1 MatProp=Default  
 Area=1290 Section=ASEC1 MatProp=Default  
 Area=1291 Section=ASEC1 MatProp=Default  
 Area=1292 Section=ASEC1 MatProp=Default  
 Area=1293 Section=ASEC1 MatProp=Default  
 Area=1294 Section=ASEC1 MatProp=Default  
 Area=1295 Section=ASEC1 MatProp=Default  
 Area=1296 Section=ASEC1 MatProp=Default  
 Area=1297 Section=ASEC1 MatProp=Default  
 Area=1298 Section=ASEC1 MatProp=Default  
 Area=1299 Section=ASEC1 MatProp=Default  
 Area=1300 Section=ASEC1 MatProp=Default  
 Area=1301 Section=ASEC1 MatProp=Default  
 Area=1302 Section=ASEC1 MatProp=Default  
 Area=1303 Section=ASEC1 MatProp=Default  
 Area=1304 Section=ASEC1 MatProp=Default  
 Area=1305 Section=ASEC1 MatProp=Default  
 Area=1306 Section=ASEC1 MatProp=Default  
 Area=1307 Section=ASEC1 MatProp=Default  
 Area=1308 Section=ASEC1 MatProp=Default  
 Area=1309 Section=ASEC1 MatProp=Default  
 Area=1310 Section=ASEC1 MatProp=Default





ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA  
FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN  
SAN CRISTÓBAL, EN BOGOTÁ D.C.



Area=1311 Section=ASEC1 MatProp=Default  
Area=1312 Section=ASEC1 MatProp=Default  
Area=1313 Section=ASEC1 MatProp=Default  
Area=1314 Section=ASEC1 MatProp=Default  
Area=1315 Section=ASEC1 MatProp=Default  
Area=1316 Section=ASEC1 MatProp=Default  
Area=1317 Section=ASEC1 MatProp=Default  
Area=1318 Section=ASEC1 MatProp=Default  
Area=1319 Section=ASEC1 MatProp=Default  
Area=1320 Section=ASEC1 MatProp=Default  
Area=1321 Section=ASEC1 MatProp=Default  
Area=1322 Section=ASEC1 MatProp=Default  
Area=1323 Section=ASEC1 MatProp=Default  
Area=1324 Section=ASEC1 MatProp=Default  
Area=1325 Section=ASEC1 MatProp=Default  
Area=1326 Section=ASEC1 MatProp=Default  
Area=1327 Section=ASEC1 MatProp=Default  
Area=1328 Section=ASEC1 MatProp=Default  
Area=1329 Section=ASEC1 MatProp=Default  
Area=1330 Section=ASEC1 MatProp=Default  
Area=1331 Section=ASEC1 MatProp=Default  
Area=1332 Section=ASEC1 MatProp=Default  
Area=1333 Section=ASEC1 MatProp=Default  
Area=1334 Section=ASEC1 MatProp=Default  
Area=1335 Section=ASEC1 MatProp=Default  
Area=1336 Section=ASEC1 MatProp=Default  
Area=1337 Section=ASEC1 MatProp=Default  
Area=1338 Section=ASEC1 MatProp=Default  
Area=1339 Section=ASEC1 MatProp=Default  
Area=1340 Section=ASEC1 MatProp=Default  
Area=1341 Section=ASEC1 MatProp=Default  
Area=1342 Section=ASEC1 MatProp=Default  
Area=1343 Section=ASEC1 MatProp=Default  
Area=1344 Section=ASEC1 MatProp=Default  
Area=1345 Section=ASEC1 MatProp=Default  
Area=1346 Section=ASEC1 MatProp=Default  
Area=1347 Section=ASEC1 MatProp=Default  
Area=1348 Section=ASEC1 MatProp=Default  
Area=1349 Section=ASEC1 MatProp=Default  
Area=1350 Section=ASEC1 MatProp=Default  
Area=1351 Section=ASEC1 MatProp=Default  
Area=1352 Section=ASEC1 MatProp=Default  
Area=1353 Section=ASEC1 MatProp=Default  
Area=1354 Section=ASEC1 MatProp=Default  
Area=1355 Section=ASEC1 MatProp=Default  
Area=1356 Section=ASEC1 MatProp=Default  
Area=1357 Section=ASEC1 MatProp=Default  
Area=1358 Section=ASEC1 MatProp=Default  
Area=1359 Section=ASEC1 MatProp=Default  
Area=1360 Section=ASEC1 MatProp=Default  
Area=1361 Section=ASEC1 MatProp=Default  
Area=1362 Section=ASEC1 MatProp=Default  
Area=1363 Section=ASEC1 MatProp=Default  
Area=1364 Section=ASEC1 MatProp=Default  
Area=1365 Section=ASEC1 MatProp=Default





|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=1366 Section=ASEC1 MatProp=Default  
 Area=1367 Section=ASEC1 MatProp=Default  
 Area=1368 Section=ASEC1 MatProp=Default  
 Area=1369 Section=ASEC1 MatProp=Default  
 Area=1370 Section=ASEC1 MatProp=Default  
 Area=1371 Section=ASEC1 MatProp=Default  
 Area=1372 Section=ASEC1 MatProp=Default  
 Area=1373 Section=ASEC1 MatProp=Default  
 Area=1374 Section=ASEC1 MatProp=Default  
 Area=1375 Section=ASEC1 MatProp=Default  
 Area=1376 Section=ASEC1 MatProp=Default  
 Area=1377 Section=ASEC1 MatProp=Default  
 Area=1378 Section=ASEC1 MatProp=Default  
 Area=1379 Section=ASEC1 MatProp=Default  
 Area=1380 Section=ASEC1 MatProp=Default  
 Area=1381 Section=ASEC1 MatProp=Default  
 Area=1382 Section=ASEC1 MatProp=Default  
 Area=1383 Section=ASEC1 MatProp=Default  
 Area=1384 Section=ASEC1 MatProp=Default  
 Area=1385 Section=ASEC1 MatProp=Default  
 Area=1386 Section=ASEC1 MatProp=Default  
 Area=1387 Section=ASEC1 MatProp=Default  
 Area=1388 Section=ASEC1 MatProp=Default  
 Area=1389 Section=ASEC1 MatProp=Default  
 Area=1390 Section=ASEC1 MatProp=Default  
 Area=1391 Section=ASEC1 MatProp=Default  
 Area=1392 Section=ASEC1 MatProp=Default  
 Area=1393 Section=ASEC1 MatProp=Default  
 Area=1394 Section=ASEC1 MatProp=Default  
 Area=1395 Section=ASEC1 MatProp=Default  
 Area=1396 Section=ASEC1 MatProp=Default  
 Area=1397 Section=ASEC1 MatProp=Default  
 Area=1398 Section=ASEC1 MatProp=Default  
 Area=1399 Section=ASEC1 MatProp=Default  
 Area=1400 Section=ASEC1 MatProp=Default  
 Area=1401 Section=ASEC1 MatProp=Default  
 Area=1402 Section=ASEC1 MatProp=Default  
 Area=1403 Section=ASEC1 MatProp=Default  
 Area=1404 Section=ASEC1 MatProp=Default  
 Area=1405 Section=ASEC1 MatProp=Default  
 Area=1406 Section=ASEC1 MatProp=Default  
 Area=1407 Section=ASEC1 MatProp=Default  
 Area=1408 Section=ASEC1 MatProp=Default  
 Area=1409 Section=ASEC1 MatProp=Default  
 Area=1410 Section=ASEC1 MatProp=Default  
 Area=1411 Section=ASEC1 MatProp=Default  
 Area=1412 Section=ASEC1 MatProp=Default  
 Area=1413 Section=ASEC1 MatProp=Default  
 Area=1414 Section=ASEC1 MatProp=Default  
 Area=1415 Section=ASEC1 MatProp=Default  
 Area=1416 Section=ASEC1 MatProp=Default  
 Area=1417 Section=ASEC1 MatProp=Default  
 Area=1418 Section=ASEC1 MatProp=Default  
 Area=1419 Section=ASEC1 MatProp=Default  
 Area=1420 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=1421 Section=ASEC1 MatProp=Default  
 Area=1422 Section=ASEC1 MatProp=Default  
 Area=1423 Section=ASEC1 MatProp=Default  
 Area=1424 Section=ASEC1 MatProp=Default  
 Area=1425 Section=ASEC1 MatProp=Default  
 Area=1426 Section=ASEC1 MatProp=Default  
 Area=1427 Section=ASEC1 MatProp=Default  
 Area=1428 Section=ASEC1 MatProp=Default  
 Area=1429 Section=ASEC1 MatProp=Default  
 Area=1430 Section=ASEC1 MatProp=Default  
 Area=1431 Section=ASEC1 MatProp=Default  
 Area=1432 Section=ASEC1 MatProp=Default  
 Area=1433 Section=ASEC1 MatProp=Default  
 Area=1434 Section=ASEC1 MatProp=Default  
 Area=1435 Section=ASEC1 MatProp=Default  
 Area=1436 Section=ASEC1 MatProp=Default  
 Area=1437 Section=ASEC1 MatProp=Default  
 Area=1438 Section=ASEC1 MatProp=Default  
 Area=1439 Section=ASEC1 MatProp=Default  
 Area=1440 Section=ASEC1 MatProp=Default  
 Area=1441 Section=ASEC1 MatProp=Default  
 Area=1442 Section=ASEC1 MatProp=Default  
 Area=1443 Section=ASEC1 MatProp=Default  
 Area=1444 Section=ASEC1 MatProp=Default  
 Area=1445 Section=ASEC1 MatProp=Default  
 Area=1446 Section=ASEC1 MatProp=Default  
 Area=1447 Section=ASEC1 MatProp=Default  
 Area=1448 Section=ASEC1 MatProp=Default  
 Area=1449 Section=ASEC1 MatProp=Default  
 Area=1450 Section=ASEC1 MatProp=Default  
 Area=1451 Section=ASEC1 MatProp=Default  
 Area=1452 Section=ASEC1 MatProp=Default  
 Area=1453 Section=ASEC1 MatProp=Default  
 Area=1454 Section=ASEC1 MatProp=Default  
 Area=1455 Section=ASEC1 MatProp=Default  
 Area=1456 Section=ASEC1 MatProp=Default  
 Area=1457 Section=ASEC1 MatProp=Default  
 Area=1458 Section=ASEC1 MatProp=Default  
 Area=1459 Section=ASEC1 MatProp=Default  
 Area=1460 Section=ASEC1 MatProp=Default  
 Area=1461 Section=ASEC1 MatProp=Default  
 Area=1462 Section=ASEC1 MatProp=Default  
 Area=1463 Section=ASEC1 MatProp=Default  
 Area=1464 Section=ASEC1 MatProp=Default  
 Area=1465 Section=ASEC1 MatProp=Default  
 Area=1466 Section=ASEC1 MatProp=Default  
 Area=1467 Section=ASEC1 MatProp=Default  
 Area=1468 Section=ASEC1 MatProp=Default  
 Area=1469 Section=ASEC1 MatProp=Default  
 Area=1470 Section=ASEC1 MatProp=Default  
 Area=1471 Section=ASEC1 MatProp=Default  
 Area=1472 Section=ASEC1 MatProp=Default  
 Area=1473 Section=ASEC1 MatProp=Default  
 Area=1474 Section=ASEC1 MatProp=Default  
 Area=1475 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=1476 Section=ASEC1 MatProp=Default  
 Area=1477 Section=ASEC1 MatProp=Default  
 Area=1478 Section=ASEC1 MatProp=Default  
 Area=1479 Section=ASEC1 MatProp=Default  
 Area=1480 Section=ASEC1 MatProp=Default  
 Area=1481 Section=ASEC1 MatProp=Default  
 Area=1482 Section=ASEC1 MatProp=Default  
 Area=1483 Section=ASEC1 MatProp=Default  
 Area=1484 Section=ASEC1 MatProp=Default  
 Area=1485 Section=ASEC1 MatProp=Default  
 Area=1486 Section=ASEC1 MatProp=Default  
 Area=1487 Section=ASEC1 MatProp=Default  
 Area=1488 Section=ASEC1 MatProp=Default  
 Area=1489 Section=ASEC1 MatProp=Default  
 Area=1490 Section=ASEC1 MatProp=Default  
 Area=1491 Section=ASEC1 MatProp=Default  
 Area=1492 Section=ASEC1 MatProp=Default  
 Area=1493 Section=ASEC1 MatProp=Default  
 Area=1494 Section=ASEC1 MatProp=Default  
 Area=1495 Section=ASEC1 MatProp=Default  
 Area=1496 Section=ASEC1 MatProp=Default  
 Area=1497 Section=ASEC1 MatProp=Default  
 Area=1498 Section=ASEC1 MatProp=Default  
 Area=1499 Section=ASEC1 MatProp=Default  
 Area=1500 Section=ASEC1 MatProp=Default  
 Area=1501 Section=ASEC1 MatProp=Default  
 Area=1502 Section=ASEC1 MatProp=Default  
 Area=1503 Section=ASEC1 MatProp=Default  
 Area=1504 Section=ASEC1 MatProp=Default  
 Area=1505 Section=ASEC1 MatProp=Default  
 Area=1506 Section=ASEC1 MatProp=Default  
 Area=1507 Section=ASEC1 MatProp=Default  
 Area=1508 Section=ASEC1 MatProp=Default  
 Area=1509 Section=ASEC1 MatProp=Default  
 Area=1510 Section=ASEC1 MatProp=Default  
 Area=1511 Section=ASEC1 MatProp=Default  
 Area=1512 Section=ASEC1 MatProp=Default  
 Area=1513 Section=ASEC1 MatProp=Default  
 Area=1514 Section=ASEC1 MatProp=Default  
 Area=1515 Section=ASEC1 MatProp=Default  
 Area=1516 Section=ASEC1 MatProp=Default  
 Area=1517 Section=ASEC1 MatProp=Default  
 Area=1518 Section=ASEC1 MatProp=Default  
 Area=1519 Section=ASEC1 MatProp=Default  
 Area=1520 Section=ASEC1 MatProp=Default  
 Area=1521 Section=ASEC1 MatProp=Default  
 Area=1522 Section=ASEC1 MatProp=Default  
 Area=1523 Section=ASEC1 MatProp=Default  
 Area=1524 Section=ASEC1 MatProp=Default  
 Area=1525 Section=ASEC1 MatProp=Default  
 Area=1526 Section=ASEC1 MatProp=Default  
 Area=1527 Section=ASEC1 MatProp=Default  
 Area=1528 Section=ASEC1 MatProp=Default  
 Area=1529 Section=ASEC1 MatProp=Default  
 Area=1530 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=1531 Section=ASEC1 MatProp=Default  
 Area=1532 Section=ASEC1 MatProp=Default  
 Area=1533 Section=ASEC1 MatProp=Default  
 Area=1534 Section=ASEC1 MatProp=Default  
 Area=1535 Section=ASEC1 MatProp=Default  
 Area=1536 Section=ASEC1 MatProp=Default  
 Area=1537 Section=ASEC1 MatProp=Default  
 Area=1538 Section=ASEC1 MatProp=Default  
 Area=1539 Section=ASEC1 MatProp=Default  
 Area=1540 Section=ASEC1 MatProp=Default  
 Area=1541 Section=ASEC1 MatProp=Default  
 Area=1542 Section=ASEC1 MatProp=Default  
 Area=1543 Section=ASEC1 MatProp=Default  
 Area=1544 Section=ASEC1 MatProp=Default  
 Area=1545 Section=ASEC1 MatProp=Default  
 Area=1546 Section=ASEC1 MatProp=Default  
 Area=1547 Section=ASEC1 MatProp=Default  
 Area=1548 Section=ASEC1 MatProp=Default  
 Area=1549 Section=ASEC1 MatProp=Default  
 Area=1550 Section=ASEC1 MatProp=Default  
 Area=1551 Section=ASEC1 MatProp=Default  
 Area=1552 Section=ASEC1 MatProp=Default  
 Area=1553 Section=ASEC1 MatProp=Default  
 Area=1554 Section=ASEC1 MatProp=Default  
 Area=1555 Section=ASEC1 MatProp=Default  
 Area=1556 Section=ASEC1 MatProp=Default  
 Area=1557 Section=ASEC1 MatProp=Default  
 Area=1558 Section=ASEC1 MatProp=Default  
 Area=1559 Section=ASEC1 MatProp=Default  
 Area=1560 Section=ASEC1 MatProp=Default  
 Area=1561 Section=ASEC1 MatProp=Default  
 Area=1562 Section=ASEC1 MatProp=Default  
 Area=1563 Section=ASEC1 MatProp=Default  
 Area=1564 Section=ASEC1 MatProp=Default  
 Area=1565 Section=ASEC1 MatProp=Default  
 Area=1566 Section=ASEC1 MatProp=Default  
 Area=1567 Section=ASEC1 MatProp=Default  
 Area=1568 Section=ASEC1 MatProp=Default  
 Area=1569 Section=ASEC1 MatProp=Default  
 Area=1570 Section=ASEC1 MatProp=Default  
 Area=1571 Section=ASEC1 MatProp=Default  
 Area=1572 Section=ASEC1 MatProp=Default  
 Area=1573 Section=ASEC1 MatProp=Default  
 Area=1574 Section=ASEC1 MatProp=Default  
 Area=1575 Section=ASEC1 MatProp=Default  
 Area=1576 Section=ASEC1 MatProp=Default  
 Area=1577 Section=ASEC1 MatProp=Default  
 Area=1578 Section=ASEC1 MatProp=Default  
 Area=1579 Section=ASEC1 MatProp=Default  
 Area=1580 Section=ASEC1 MatProp=Default  
 Area=1581 Section=ASEC1 MatProp=Default  
 Area=1582 Section=ASEC1 MatProp=Default  
 Area=1583 Section=ASEC1 MatProp=Default  
 Area=1584 Section=ASEC1 MatProp=Default  
 Area=1585 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=1586 Section=ASEC1 MatProp=Default  
 Area=1587 Section=ASEC1 MatProp=Default  
 Area=1588 Section=ASEC1 MatProp=Default  
 Area=1589 Section=ASEC1 MatProp=Default  
 Area=1590 Section=ASEC1 MatProp=Default  
 Area=1591 Section=ASEC1 MatProp=Default  
 Area=1592 Section=ASEC1 MatProp=Default  
 Area=1593 Section=ASEC1 MatProp=Default  
 Area=1594 Section=ASEC1 MatProp=Default  
 Area=1595 Section=ASEC1 MatProp=Default  
 Area=1596 Section=ASEC1 MatProp=Default  
 Area=1597 Section=ASEC1 MatProp=Default  
 Area=1598 Section=ASEC1 MatProp=Default  
 Area=1599 Section=ASEC1 MatProp=Default  
 Area=1600 Section=ASEC1 MatProp=Default  
 Area=1601 Section=ASEC1 MatProp=Default  
 Area=1602 Section=ASEC1 MatProp=Default  
 Area=1603 Section=ASEC1 MatProp=Default  
 Area=1604 Section=ASEC1 MatProp=Default  
 Area=1605 Section=ASEC1 MatProp=Default  
 Area=1606 Section=ASEC1 MatProp=Default  
 Area=1607 Section=ASEC1 MatProp=Default  
 Area=1608 Section=ASEC1 MatProp=Default  
 Area=1609 Section=ASEC1 MatProp=Default  
 Area=1610 Section=ASEC1 MatProp=Default  
 Area=1611 Section=ASEC1 MatProp=Default  
 Area=1612 Section=ASEC1 MatProp=Default  
 Area=1613 Section=ASEC1 MatProp=Default  
 Area=1614 Section=ASEC1 MatProp=Default  
 Area=1615 Section=ASEC1 MatProp=Default  
 Area=1616 Section=ASEC1 MatProp=Default  
 Area=1617 Section=ASEC1 MatProp=Default  
 Area=1618 Section=ASEC1 MatProp=Default  
 Area=1619 Section=ASEC1 MatProp=Default  
 Area=1620 Section=ASEC1 MatProp=Default  
 Area=1621 Section=ASEC1 MatProp=Default  
 Area=1622 Section=ASEC1 MatProp=Default  
 Area=1623 Section=ASEC1 MatProp=Default  
 Area=1624 Section=ASEC1 MatProp=Default  
 Area=1625 Section=ASEC1 MatProp=Default  
 Area=1626 Section=ASEC1 MatProp=Default  
 Area=1627 Section=ASEC1 MatProp=Default  
 Area=1628 Section=ASEC1 MatProp=Default  
 Area=1629 Section=ASEC1 MatProp=Default  
 Area=1630 Section=ASEC1 MatProp=Default  
 Area=1631 Section=ASEC1 MatProp=Default  
 Area=1632 Section=ASEC1 MatProp=Default  
 Area=1633 Section=ASEC1 MatProp=Default  
 Area=1634 Section=ASEC1 MatProp=Default  
 Area=1635 Section=ASEC1 MatProp=Default  
 Area=1636 Section=ASEC1 MatProp=Default  
 Area=1637 Section=ASEC1 MatProp=Default  
 Area=1638 Section=ASEC1 MatProp=Default  
 Area=1639 Section=ASEC1 MatProp=Default  
 Area=1640 Section=ASEC1 MatProp=Default





|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=1641 Section=ASEC1 MatProp=Default  
 Area=1642 Section=ASEC1 MatProp=Default  
 Area=1643 Section=ASEC1 MatProp=Default  
 Area=1644 Section=ASEC1 MatProp=Default  
 Area=1645 Section=ASEC1 MatProp=Default  
 Area=1646 Section=ASEC1 MatProp=Default  
 Area=1647 Section=ASEC1 MatProp=Default  
 Area=1648 Section=ASEC1 MatProp=Default  
 Area=1649 Section=ASEC1 MatProp=Default  
 Area=1650 Section=ASEC1 MatProp=Default  
 Area=1651 Section=ASEC1 MatProp=Default  
 Area=1652 Section=ASEC1 MatProp=Default  
 Area=1653 Section=ASEC1 MatProp=Default  
 Area=1654 Section=ASEC1 MatProp=Default  
 Area=1655 Section=ASEC1 MatProp=Default  
 Area=1656 Section=ASEC1 MatProp=Default  
 Area=1657 Section=ASEC1 MatProp=Default  
 Area=1658 Section=ASEC1 MatProp=Default  
 Area=1659 Section=ASEC1 MatProp=Default  
 Area=1660 Section=ASEC1 MatProp=Default  
 Area=1661 Section=ASEC1 MatProp=Default  
 Area=1662 Section=ASEC1 MatProp=Default  
 Area=1663 Section=ASEC1 MatProp=Default  
 Area=1664 Section=ASEC1 MatProp=Default  
 Area=1665 Section=ASEC1 MatProp=Default  
 Area=1666 Section=ASEC1 MatProp=Default  
 Area=1667 Section=ASEC1 MatProp=Default  
 Area=1668 Section=ASEC1 MatProp=Default  
 Area=1669 Section=ASEC1 MatProp=Default  
 Area=1670 Section=ASEC1 MatProp=Default  
 Area=1671 Section=ASEC1 MatProp=Default  
 Area=1672 Section=ASEC1 MatProp=Default  
 Area=1673 Section=ASEC1 MatProp=Default  
 Area=1674 Section=ASEC1 MatProp=Default  
 Area=1675 Section=ASEC1 MatProp=Default  
 Area=1676 Section=ASEC1 MatProp=Default  
 Area=1677 Section=ASEC1 MatProp=Default  
 Area=1678 Section=ASEC1 MatProp=Default  
 Area=1679 Section=ASEC1 MatProp=Default  
 Area=1680 Section=ASEC1 MatProp=Default  
 Area=1681 Section=ASEC1 MatProp=Default  
 Area=1682 Section=ASEC1 MatProp=Default  
 Area=1683 Section=ASEC1 MatProp=Default  
 Area=1684 Section=ASEC1 MatProp=Default  
 Area=1685 Section=ASEC1 MatProp=Default  
 Area=1686 Section=ASEC1 MatProp=Default  
 Area=1687 Section=ASEC1 MatProp=Default  
 Area=1688 Section=ASEC1 MatProp=Default  
 Area=1689 Section=ASEC1 MatProp=Default  
 Area=1690 Section=ASEC1 MatProp=Default  
 Area=1691 Section=ASEC1 MatProp=Default  
 Area=1692 Section=ASEC1 MatProp=Default  
 Area=1693 Section=ASEC1 MatProp=Default  
 Area=1694 Section=ASEC1 MatProp=Default  
 Area=1695 Section=ASEC1 MatProp=Default





|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=1696 Section=ASEC1 MatProp=Default  
 Area=1697 Section=ASEC1 MatProp=Default  
 Area=1698 Section=ASEC1 MatProp=Default  
 Area=1699 Section=ASEC1 MatProp=Default  
 Area=1700 Section=ASEC1 MatProp=Default  
 Area=1701 Section=ASEC1 MatProp=Default  
 Area=1702 Section=ASEC1 MatProp=Default  
 Area=1703 Section=ASEC1 MatProp=Default  
 Area=1704 Section=ASEC1 MatProp=Default  
 Area=1705 Section=ASEC1 MatProp=Default  
 Area=1706 Section=ASEC1 MatProp=Default  
 Area=1707 Section=ASEC1 MatProp=Default  
 Area=1708 Section=ASEC1 MatProp=Default  
 Area=1709 Section=ASEC1 MatProp=Default  
 Area=1710 Section=ASEC1 MatProp=Default  
 Area=1711 Section=ASEC1 MatProp=Default  
 Area=1712 Section=ASEC1 MatProp=Default  
 Area=1713 Section=ASEC1 MatProp=Default  
 Area=1714 Section=ASEC1 MatProp=Default  
 Area=1715 Section=ASEC1 MatProp=Default  
 Area=1716 Section=ASEC1 MatProp=Default  
 Area=1717 Section=ASEC1 MatProp=Default  
 Area=1718 Section=ASEC1 MatProp=Default  
 Area=1719 Section=ASEC1 MatProp=Default  
 Area=1720 Section=ASEC1 MatProp=Default  
 Area=1721 Section=ASEC1 MatProp=Default  
 Area=1722 Section=ASEC1 MatProp=Default  
 Area=1723 Section=ASEC1 MatProp=Default  
 Area=1724 Section=ASEC1 MatProp=Default  
 Area=1725 Section=ASEC1 MatProp=Default  
 Area=1726 Section=ASEC1 MatProp=Default  
 Area=1727 Section=ASEC1 MatProp=Default  
 Area=1728 Section=ASEC1 MatProp=Default  
 Area=1729 Section=ASEC1 MatProp=Default  
 Area=1730 Section=ASEC1 MatProp=Default  
 Area=1731 Section=ASEC1 MatProp=Default  
 Area=1732 Section=ASEC1 MatProp=Default  
 Area=1733 Section=ASEC1 MatProp=Default  
 Area=1734 Section=ASEC1 MatProp=Default  
 Area=1735 Section=ASEC1 MatProp=Default  
 Area=1736 Section=ASEC1 MatProp=Default  
 Area=1737 Section=ASEC1 MatProp=Default  
 Area=1738 Section=ASEC1 MatProp=Default  
 Area=1739 Section=ASEC1 MatProp=Default  
 Area=1740 Section=ASEC1 MatProp=Default  
 Area=1741 Section=ASEC1 MatProp=Default  
 Area=1742 Section=ASEC1 MatProp=Default  
 Area=1743 Section=ASEC1 MatProp=Default  
 Area=1744 Section=ASEC1 MatProp=Default  
 Area=1745 Section=ASEC1 MatProp=Default  
 Area=1746 Section=ASEC1 MatProp=Default  
 Area=1747 Section=ASEC1 MatProp=Default  
 Area=1748 Section=ASEC1 MatProp=Default  
 Area=1749 Section=ASEC1 MatProp=Default  
 Area=1750 Section=ASEC1 MatProp=Default

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=1751 Section=ASEC1 MatProp=Default  
 Area=1752 Section=ASEC1 MatProp=Default  
 Area=1753 Section=ASEC1 MatProp=Default  
 Area=1754 Section=ASEC1 MatProp=Default  
 Area=1755 Section=ASEC1 MatProp=Default  
 Area=1756 Section=ASEC1 MatProp=Default  
 Area=1757 Section=ASEC1 MatProp=Default  
 Area=1758 Section=ASEC1 MatProp=Default  
 Area=1759 Section=ASEC1 MatProp=Default  
 Area=1760 Section=ASEC1 MatProp=Default  
 Area=1761 Section=ASEC1 MatProp=Default  
 Area=1762 Section=ASEC1 MatProp=Default  
 Area=1763 Section=ASEC1 MatProp=Default  
 Area=1764 Section=ASEC1 MatProp=Default  
 Area=1765 Section=ASEC1 MatProp=Default  
 Area=1766 Section=ASEC1 MatProp=Default  
 Area=1767 Section=ASEC1 MatProp=Default  
 Area=1768 Section=ASEC1 MatProp=Default  
 Area=1769 Section=ASEC1 MatProp=Default  
 Area=1770 Section=ASEC1 MatProp=Default  
 Area=1771 Section=ASEC1 MatProp=Default  
 Area=1772 Section=ASEC1 MatProp=Default  
 Area=1773 Section=ASEC1 MatProp=Default  
 Area=1774 Section=ASEC1 MatProp=Default  
 Area=1775 Section=ASEC1 MatProp=Default  
 Area=1776 Section=ASEC1 MatProp=Default  
 Area=1777 Section=ASEC1 MatProp=Default  
 Area=1778 Section=ASEC1 MatProp=Default  
 Area=1779 Section=ASEC1 MatProp=Default  
 Area=1780 Section=ASEC1 MatProp=Default  
 Area=1781 Section=ASEC1 MatProp=Default  
 Area=1782 Section=ASEC1 MatProp=Default  
 Area=1783 Section=ASEC1 MatProp=Default  
 Area=1784 Section=ASEC1 MatProp=Default  
 Area=1785 Section=ASEC1 MatProp=Default  
 Area=1786 Section=ASEC1 MatProp=Default  
 Area=1787 Section=ASEC1 MatProp=Default  
 Area=1788 Section=ASEC1 MatProp=Default  
 Area=1789 Section=ASEC1 MatProp=Default  
 Area=1790 Section=ASEC1 MatProp=Default  
 Area=1791 Section=ASEC1 MatProp=Default  
 Area=1792 Section=ASEC1 MatProp=Default  
 Area=1793 Section=ASEC1 MatProp=Default  
 Area=1794 Section=ASEC1 MatProp=Default  
 Area=1795 Section=ASEC1 MatProp=Default  
 Area=1796 Section=ASEC1 MatProp=Default  
 Area=1797 Section=ASEC1 MatProp=Default  
 Area=1798 Section=ASEC1 MatProp=Default  
 Area=1799 Section=ASEC1 MatProp=Default  
 Area=1800 Section=ASEC1 MatProp=Default  
 Area=1801 Section=ASEC1 MatProp=Default  
 Area=1802 Section=ASEC1 MatProp=Default  
 Area=1803 Section=ASEC1 MatProp=Default  
 Area=1804 Section=ASEC1 MatProp=Default  
 Area=1805 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=1806 Section=ASEC1 MatProp=Default  
 Area=1807 Section=ASEC1 MatProp=Default  
 Area=1808 Section=ASEC1 MatProp=Default  
 Area=1809 Section=ASEC1 MatProp=Default  
 Area=1810 Section=ASEC1 MatProp=Default  
 Area=1811 Section=ASEC1 MatProp=Default  
 Area=1812 Section=ASEC1 MatProp=Default  
 Area=1813 Section=ASEC1 MatProp=Default  
 Area=1814 Section=ASEC1 MatProp=Default  
 Area=1815 Section=ASEC1 MatProp=Default  
 Area=1816 Section=ASEC1 MatProp=Default  
 Area=1817 Section=ASEC1 MatProp=Default  
 Area=1818 Section=ASEC1 MatProp=Default  
 Area=1819 Section=ASEC1 MatProp=Default  
 Area=1820 Section=ASEC1 MatProp=Default  
 Area=1821 Section=ASEC1 MatProp=Default  
 Area=1822 Section=ASEC1 MatProp=Default  
 Area=1823 Section=ASEC1 MatProp=Default  
 Area=1824 Section=ASEC1 MatProp=Default  
 Area=1825 Section=ASEC1 MatProp=Default  
 Area=1826 Section=ASEC1 MatProp=Default  
 Area=1827 Section=ASEC1 MatProp=Default  
 Area=1828 Section=ASEC1 MatProp=Default  
 Area=1829 Section=ASEC1 MatProp=Default  
 Area=1830 Section=ASEC1 MatProp=Default  
 Area=1831 Section=ASEC1 MatProp=Default  
 Area=1832 Section=ASEC1 MatProp=Default  
 Area=1833 Section=ASEC1 MatProp=Default  
 Area=1834 Section=ASEC1 MatProp=Default  
 Area=1835 Section=ASEC1 MatProp=Default  
 Area=1836 Section=ASEC1 MatProp=Default  
 Area=1837 Section=ASEC1 MatProp=Default  
 Area=1838 Section=ASEC1 MatProp=Default  
 Area=1839 Section=ASEC1 MatProp=Default  
 Area=1840 Section=ASEC1 MatProp=Default  
 Area=1841 Section=ASEC1 MatProp=Default  
 Area=1842 Section=ASEC1 MatProp=Default  
 Area=1843 Section=ASEC1 MatProp=Default  
 Area=1844 Section=ASEC1 MatProp=Default  
 Area=1845 Section=ASEC1 MatProp=Default  
 Area=1846 Section=ASEC1 MatProp=Default  
 Area=1847 Section=ASEC1 MatProp=Default  
 Area=1848 Section=ASEC1 MatProp=Default  
 Area=1849 Section=ASEC1 MatProp=Default  
 Area=1850 Section=ASEC1 MatProp=Default  
 Area=1851 Section=ASEC1 MatProp=Default  
 Area=1852 Section=ASEC1 MatProp=Default  
 Area=1853 Section=ASEC1 MatProp=Default  
 Area=1854 Section=ASEC1 MatProp=Default  
 Area=1855 Section=ASEC1 MatProp=Default  
 Area=1856 Section=ASEC1 MatProp=Default  
 Area=1857 Section=ASEC1 MatProp=Default  
 Area=1858 Section=ASEC1 MatProp=Default  
 Area=1859 Section=ASEC1 MatProp=Default  
 Area=1860 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=1861 Section=ASEC1 MatProp=Default  
 Area=1862 Section=ASEC1 MatProp=Default  
 Area=1863 Section=ASEC1 MatProp=Default  
 Area=1864 Section=ASEC1 MatProp=Default  
 Area=1865 Section=ASEC1 MatProp=Default  
 Area=1866 Section=ASEC1 MatProp=Default  
 Area=1867 Section=ASEC1 MatProp=Default  
 Area=1868 Section=ASEC1 MatProp=Default  
 Area=1869 Section=ASEC1 MatProp=Default  
 Area=1870 Section=ASEC1 MatProp=Default  
 Area=1871 Section=ASEC1 MatProp=Default  
 Area=1872 Section=ASEC1 MatProp=Default  
 Area=1873 Section=ASEC1 MatProp=Default  
 Area=1874 Section=ASEC1 MatProp=Default  
 Area=1875 Section=ASEC1 MatProp=Default  
 Area=1876 Section=ASEC1 MatProp=Default  
 Area=1877 Section=ASEC1 MatProp=Default  
 Area=1878 Section=ASEC1 MatProp=Default  
 Area=1879 Section=ASEC1 MatProp=Default  
 Area=1880 Section=ASEC1 MatProp=Default  
 Area=1881 Section=ASEC1 MatProp=Default  
 Area=1882 Section=ASEC1 MatProp=Default  
 Area=1883 Section=ASEC1 MatProp=Default  
 Area=1884 Section=ASEC1 MatProp=Default  
 Area=1885 Section=ASEC1 MatProp=Default  
 Area=1886 Section=ASEC1 MatProp=Default  
 Area=1887 Section=ASEC1 MatProp=Default  
 Area=1888 Section=ASEC1 MatProp=Default  
 Area=1889 Section=ASEC1 MatProp=Default  
 Area=1890 Section=ASEC1 MatProp=Default  
 Area=1891 Section=ASEC1 MatProp=Default  
 Area=1892 Section=ASEC1 MatProp=Default  
 Area=1893 Section=ASEC1 MatProp=Default  
 Area=1894 Section=ASEC1 MatProp=Default  
 Area=1895 Section=ASEC1 MatProp=Default  
 Area=1896 Section=ASEC1 MatProp=Default  
 Area=1897 Section=ASEC1 MatProp=Default  
 Area=1898 Section=ASEC1 MatProp=Default  
 Area=1899 Section=ASEC1 MatProp=Default  
 Area=1900 Section=ASEC1 MatProp=Default  
 Area=1901 Section=ASEC1 MatProp=Default  
 Area=1902 Section=ASEC1 MatProp=Default  
 Area=1903 Section=ASEC1 MatProp=Default  
 Area=1904 Section=ASEC1 MatProp=Default  
 Area=1905 Section=ASEC1 MatProp=Default  
 Area=1906 Section=ASEC1 MatProp=Default  
 Area=1907 Section=ASEC1 MatProp=Default  
 Area=1908 Section=ASEC1 MatProp=Default  
 Area=1909 Section=ASEC1 MatProp=Default  
 Area=1910 Section=ASEC1 MatProp=Default  
 Area=1911 Section=ASEC1 MatProp=Default  
 Area=1912 Section=ASEC1 MatProp=Default  
 Area=1913 Section=ASEC1 MatProp=Default  
 Area=1914 Section=ASEC1 MatProp=Default  
 Area=1915 Section=ASEC1 MatProp=Default

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=1916 Section=ASEC1 MatProp=Default  
 Area=1917 Section=ASEC1 MatProp=Default  
 Area=1918 Section=ASEC1 MatProp=Default  
 Area=1919 Section=ASEC1 MatProp=Default  
 Area=1920 Section=ASEC1 MatProp=Default  
 Area=1921 Section=ASEC1 MatProp=Default  
 Area=1922 Section=ASEC1 MatProp=Default  
 Area=1923 Section=ASEC1 MatProp=Default  
 Area=1924 Section=ASEC1 MatProp=Default  
 Area=1925 Section=ASEC1 MatProp=Default  
 Area=1926 Section=ASEC1 MatProp=Default  
 Area=1927 Section=ASEC1 MatProp=Default  
 Area=1928 Section=ASEC1 MatProp=Default  
 Area=1929 Section=ASEC1 MatProp=Default  
 Area=1930 Section=ASEC1 MatProp=Default  
 Area=1931 Section=ASEC1 MatProp=Default  
 Area=1932 Section=ASEC1 MatProp=Default  
 Area=1933 Section=ASEC1 MatProp=Default  
 Area=1934 Section=ASEC1 MatProp=Default  
 Area=1935 Section=ASEC1 MatProp=Default  
 Area=1936 Section=ASEC1 MatProp=Default  
 Area=1937 Section=ASEC1 MatProp=Default  
 Area=1938 Section=ASEC1 MatProp=Default  
 Area=1939 Section=ASEC1 MatProp=Default  
 Area=1940 Section=ASEC1 MatProp=Default  
 Area=1941 Section=ASEC1 MatProp=Default  
 Area=1942 Section=ASEC1 MatProp=Default  
 Area=1943 Section=ASEC1 MatProp=Default  
 Area=1944 Section=ASEC1 MatProp=Default  
 Area=1945 Section=ASEC1 MatProp=Default  
 Area=1946 Section=ASEC1 MatProp=Default  
 Area=1947 Section=ASEC1 MatProp=Default  
 Area=1948 Section=ASEC1 MatProp=Default  
 Area=1949 Section=ASEC1 MatProp=Default  
 Area=1950 Section=ASEC1 MatProp=Default  
 Area=1951 Section=ASEC1 MatProp=Default  
 Area=1952 Section=ASEC1 MatProp=Default  
 Area=1953 Section=ASEC1 MatProp=Default  
 Area=1954 Section=ASEC1 MatProp=Default  
 Area=1955 Section=ASEC1 MatProp=Default  
 Area=1956 Section=ASEC1 MatProp=Default  
 Area=1957 Section=ASEC1 MatProp=Default  
 Area=1958 Section=ASEC1 MatProp=Default  
 Area=1959 Section=ASEC1 MatProp=Default  
 Area=1960 Section=ASEC1 MatProp=Default  
 Area=1961 Section=ASEC1 MatProp=Default  
 Area=1962 Section=ASEC1 MatProp=Default  
 Area=1963 Section=ASEC1 MatProp=Default  
 Area=1964 Section=ASEC1 MatProp=Default  
 Area=1965 Section=ASEC1 MatProp=Default  
 Area=1966 Section=ASEC1 MatProp=Default  
 Area=1967 Section=ASEC1 MatProp=Default  
 Area=1968 Section=ASEC1 MatProp=Default  
 Area=1969 Section=ASEC1 MatProp=Default  
 Area=1970 Section=ASEC1 MatProp=Default





|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=1971 Section=ASEC1 MatProp=Default  
 Area=1972 Section=ASEC1 MatProp=Default  
 Area=1973 Section=ASEC1 MatProp=Default  
 Area=1974 Section=ASEC1 MatProp=Default  
 Area=1975 Section=ASEC1 MatProp=Default  
 Area=1976 Section=ASEC1 MatProp=Default  
 Area=1977 Section=ASEC1 MatProp=Default  
 Area=1978 Section=ASEC1 MatProp=Default  
 Area=1979 Section=ASEC1 MatProp=Default  
 Area=1980 Section=ASEC1 MatProp=Default  
 Area=1981 Section=ASEC1 MatProp=Default  
 Area=1982 Section=ASEC1 MatProp=Default  
 Area=1983 Section=ASEC1 MatProp=Default  
 Area=1984 Section=ASEC1 MatProp=Default  
 Area=1985 Section=ASEC1 MatProp=Default  
 Area=1986 Section=ASEC1 MatProp=Default  
 Area=1987 Section=ASEC1 MatProp=Default  
 Area=1988 Section=ASEC1 MatProp=Default  
 Area=1989 Section=ASEC1 MatProp=Default  
 Area=1990 Section=ASEC1 MatProp=Default  
 Area=1991 Section=ASEC1 MatProp=Default  
 Area=1992 Section=ASEC1 MatProp=Default  
 Area=1993 Section=ASEC1 MatProp=Default  
 Area=1994 Section=ASEC1 MatProp=Default  
 Area=1995 Section=ASEC1 MatProp=Default  
 Area=1996 Section=ASEC1 MatProp=Default  
 Area=1997 Section=ASEC1 MatProp=Default  
 Area=1998 Section=ASEC1 MatProp=Default  
 Area=1999 Section=ASEC1 MatProp=Default  
 Area=2000 Section=ASEC1 MatProp=Default  
 Area=2001 Section=ASEC1 MatProp=Default  
 Area=2002 Section=ASEC1 MatProp=Default  
 Area=2003 Section=ASEC1 MatProp=Default  
 Area=2004 Section=ASEC1 MatProp=Default  
 Area=2005 Section=ASEC1 MatProp=Default  
 Area=2006 Section=ASEC1 MatProp=Default  
 Area=2007 Section=ASEC1 MatProp=Default  
 Area=2008 Section=ASEC1 MatProp=Default  
 Area=2009 Section=ASEC1 MatProp=Default  
 Area=2010 Section=ASEC1 MatProp=Default  
 Area=2011 Section=ASEC1 MatProp=Default  
 Area=2012 Section=ASEC1 MatProp=Default  
 Area=2013 Section=ASEC1 MatProp=Default  
 Area=2014 Section=ASEC1 MatProp=Default  
 Area=2015 Section=ASEC1 MatProp=Default  
 Area=2016 Section=ASEC1 MatProp=Default  
 Area=2017 Section=ASEC1 MatProp=Default  
 Area=2018 Section=ASEC1 MatProp=Default  
 Area=2019 Section=ASEC1 MatProp=Default  
 Area=2020 Section=ASEC1 MatProp=Default  
 Area=2021 Section=ASEC1 MatProp=Default  
 Area=2022 Section=ASEC1 MatProp=Default  
 Area=2023 Section=ASEC1 MatProp=Default  
 Area=2024 Section=ASEC1 MatProp=Default  
 Area=2025 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=2026 Section=ASEC1 MatProp=Default  
 Area=2027 Section=ASEC1 MatProp=Default  
 Area=2028 Section=ASEC1 MatProp=Default  
 Area=2029 Section=ASEC1 MatProp=Default  
 Area=2030 Section=ASEC1 MatProp=Default  
 Area=2031 Section=ASEC1 MatProp=Default  
 Area=2032 Section=ASEC1 MatProp=Default  
 Area=2033 Section=ASEC1 MatProp=Default  
 Area=2034 Section=ASEC1 MatProp=Default  
 Area=2035 Section=ASEC1 MatProp=Default  
 Area=2036 Section=ASEC1 MatProp=Default  
 Area=2037 Section=ASEC1 MatProp=Default  
 Area=2038 Section=ASEC1 MatProp=Default  
 Area=2039 Section=ASEC1 MatProp=Default  
 Area=2040 Section=ASEC1 MatProp=Default  
 Area=2041 Section=ASEC1 MatProp=Default  
 Area=2042 Section=ASEC1 MatProp=Default  
 Area=2043 Section=ASEC1 MatProp=Default  
 Area=2044 Section=ASEC1 MatProp=Default  
 Area=2045 Section=ASEC1 MatProp=Default  
 Area=2046 Section=ASEC1 MatProp=Default  
 Area=2047 Section=ASEC1 MatProp=Default  
 Area=2048 Section=ASEC1 MatProp=Default  
 Area=2049 Section=ASEC1 MatProp=Default  
 Area=2050 Section=ASEC1 MatProp=Default  
 Area=2051 Section=ASEC1 MatProp=Default  
 Area=2052 Section=ASEC1 MatProp=Default  
 Area=2053 Section=ASEC1 MatProp=Default  
 Area=2054 Section=ASEC1 MatProp=Default  
 Area=2055 Section=ASEC1 MatProp=Default  
 Area=2056 Section=ASEC1 MatProp=Default  
 Area=2057 Section=ASEC1 MatProp=Default  
 Area=2058 Section=ASEC1 MatProp=Default  
 Area=2059 Section=ASEC1 MatProp=Default  
 Area=2060 Section=ASEC1 MatProp=Default  
 Area=2061 Section=ASEC1 MatProp=Default  
 Area=2062 Section=ASEC1 MatProp=Default  
 Area=2063 Section=ASEC1 MatProp=Default  
 Area=2064 Section=ASEC1 MatProp=Default  
 Area=2065 Section=ASEC1 MatProp=Default  
 Area=2066 Section=ASEC1 MatProp=Default  
 Area=2067 Section=ASEC1 MatProp=Default  
 Area=2068 Section=ASEC1 MatProp=Default  
 Area=2069 Section=ASEC1 MatProp=Default  
 Area=2070 Section=ASEC1 MatProp=Default  
 Area=2071 Section=ASEC1 MatProp=Default  
 Area=2072 Section=ASEC1 MatProp=Default  
 Area=2073 Section=ASEC1 MatProp=Default  
 Area=2074 Section=ASEC1 MatProp=Default  
 Area=2075 Section=ASEC1 MatProp=Default  
 Area=2076 Section=ASEC1 MatProp=Default  
 Area=2077 Section=ASEC1 MatProp=Default  
 Area=2078 Section=ASEC1 MatProp=Default  
 Area=2079 Section=ASEC1 MatProp=Default  
 Area=2080 Section=ASEC1 MatProp=Default

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=2081 Section=ASEC1 MatProp=Default  
 Area=2082 Section=ASEC1 MatProp=Default  
 Area=2083 Section=ASEC1 MatProp=Default  
 Area=2084 Section=ASEC1 MatProp=Default  
 Area=2085 Section=ASEC1 MatProp=Default  
 Area=2086 Section=ASEC1 MatProp=Default  
 Area=2087 Section=ASEC1 MatProp=Default  
 Area=2088 Section=ASEC1 MatProp=Default  
 Area=2089 Section=ASEC1 MatProp=Default  
 Area=2090 Section=ASEC1 MatProp=Default  
 Area=2091 Section=ASEC1 MatProp=Default  
 Area=2092 Section=ASEC1 MatProp=Default  
 Area=2093 Section=ASEC1 MatProp=Default  
 Area=2094 Section=ASEC1 MatProp=Default  
 Area=2095 Section=ASEC1 MatProp=Default  
 Area=2096 Section=ASEC1 MatProp=Default  
 Area=2097 Section=ASEC1 MatProp=Default  
 Area=2098 Section=ASEC1 MatProp=Default  
 Area=2099 Section=ASEC1 MatProp=Default  
 Area=2100 Section=ASEC1 MatProp=Default  
 Area=2101 Section=ASEC1 MatProp=Default  
 Area=2102 Section=ASEC1 MatProp=Default  
 Area=2103 Section=ASEC1 MatProp=Default  
 Area=2104 Section=ASEC1 MatProp=Default  
 Area=2105 Section=ASEC1 MatProp=Default  
 Area=2106 Section=ASEC1 MatProp=Default  
 Area=2107 Section=ASEC1 MatProp=Default  
 Area=2108 Section=ASEC1 MatProp=Default  
 Area=2109 Section=ASEC1 MatProp=Default  
 Area=2110 Section=ASEC1 MatProp=Default  
 Area=2111 Section=ASEC1 MatProp=Default  
 Area=2112 Section=ASEC1 MatProp=Default  
 Area=2113 Section=ASEC1 MatProp=Default  
 Area=2114 Section=ASEC1 MatProp=Default  
 Area=2115 Section=ASEC1 MatProp=Default  
 Area=2116 Section=ASEC1 MatProp=Default  
 Area=2117 Section=ASEC1 MatProp=Default  
 Area=2118 Section=ASEC1 MatProp=Default  
 Area=2119 Section=ASEC1 MatProp=Default  
 Area=2120 Section=ASEC1 MatProp=Default  
 Area=2121 Section=ASEC1 MatProp=Default  
 Area=2122 Section=ASEC1 MatProp=Default  
 Area=2123 Section=ASEC1 MatProp=Default  
 Area=2124 Section=ASEC1 MatProp=Default  
 Area=2125 Section=ASEC1 MatProp=Default  
 Area=2126 Section=ASEC1 MatProp=Default  
 Area=2127 Section=ASEC1 MatProp=Default  
 Area=2128 Section=ASEC1 MatProp=Default  
 Area=2129 Section=ASEC1 MatProp=Default  
 Area=2130 Section=ASEC1 MatProp=Default  
 Area=2131 Section=ASEC1 MatProp=Default  
 Area=2132 Section=ASEC1 MatProp=Default  
 Area=2133 Section=ASEC1 MatProp=Default  
 Area=2134 Section=ASEC1 MatProp=Default  
 Area=2135 Section=ASEC1 MatProp=Default

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=2136 Section=ASEC1 MatProp=Default  
 Area=2137 Section=ASEC1 MatProp=Default  
 Area=2138 Section=ASEC1 MatProp=Default  
 Area=2139 Section=ASEC1 MatProp=Default  
 Area=2140 Section=ASEC1 MatProp=Default  
 Area=2141 Section=ASEC1 MatProp=Default  
 Area=2142 Section=ASEC1 MatProp=Default  
 Area=2143 Section=ASEC1 MatProp=Default  
 Area=2144 Section=ASEC1 MatProp=Default  
 Area=2145 Section=ASEC1 MatProp=Default  
 Area=2146 Section=ASEC1 MatProp=Default  
 Area=2147 Section=ASEC1 MatProp=Default  
 Area=2148 Section=ASEC1 MatProp=Default  
 Area=2149 Section=ASEC1 MatProp=Default  
 Area=2150 Section=ASEC1 MatProp=Default  
 Area=2151 Section=ASEC1 MatProp=Default  
 Area=2152 Section=ASEC1 MatProp=Default  
 Area=2153 Section=ASEC1 MatProp=Default  
 Area=2154 Section=ASEC1 MatProp=Default  
 Area=2155 Section=ASEC1 MatProp=Default  
 Area=2156 Section=ASEC1 MatProp=Default  
 Area=2157 Section=ASEC1 MatProp=Default  
 Area=2158 Section=ASEC1 MatProp=Default  
 Area=2159 Section=ASEC1 MatProp=Default  
 Area=2160 Section=ASEC1 MatProp=Default  
 Area=2161 Section=ASEC1 MatProp=Default  
 Area=2162 Section=ASEC1 MatProp=Default  
 Area=2163 Section=ASEC1 MatProp=Default  
 Area=2164 Section=ASEC1 MatProp=Default  
 Area=2165 Section=ASEC1 MatProp=Default  
 Area=2166 Section=ASEC1 MatProp=Default  
 Area=2167 Section=ASEC1 MatProp=Default  
 Area=2168 Section=ASEC1 MatProp=Default  
 Area=2169 Section=ASEC1 MatProp=Default  
 Area=2170 Section=ASEC1 MatProp=Default  
 Area=2171 Section=ASEC1 MatProp=Default  
 Area=2172 Section=ASEC1 MatProp=Default  
 Area=2173 Section=ASEC1 MatProp=Default  
 Area=2174 Section=ASEC1 MatProp=Default  
 Area=2175 Section=ASEC1 MatProp=Default  
 Area=2176 Section=ASEC1 MatProp=Default  
 Area=2177 Section=ASEC1 MatProp=Default  
 Area=2178 Section=ASEC1 MatProp=Default  
 Area=2179 Section=ASEC1 MatProp=Default  
 Area=2180 Section=ASEC1 MatProp=Default  
 Area=2181 Section=ASEC1 MatProp=Default  
 Area=2182 Section=ASEC1 MatProp=Default  
 Area=2183 Section=ASEC1 MatProp=Default  
 Area=2184 Section=ASEC1 MatProp=Default  
 Area=2185 Section=ASEC1 MatProp=Default  
 Area=2186 Section=ASEC1 MatProp=Default  
 Area=2187 Section=ASEC1 MatProp=Default  
 Area=2188 Section=ASEC1 MatProp=Default  
 Area=2189 Section=ASEC1 MatProp=Default  
 Area=2190 Section=ASEC1 MatProp=Default

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=2191 Section=ASEC1 MatProp=Default  
 Area=2192 Section=ASEC1 MatProp=Default  
 Area=2193 Section=ASEC1 MatProp=Default  
 Area=2194 Section=ASEC1 MatProp=Default  
 Area=2195 Section=ASEC1 MatProp=Default  
 Area=2196 Section=ASEC1 MatProp=Default  
 Area=2197 Section=ASEC1 MatProp=Default  
 Area=2198 Section=ASEC1 MatProp=Default  
 Area=2199 Section=ASEC1 MatProp=Default  
 Area=2200 Section=ASEC1 MatProp=Default  
 Area=2201 Section=ASEC1 MatProp=Default  
 Area=2202 Section=ASEC1 MatProp=Default  
 Area=2203 Section=ASEC1 MatProp=Default  
 Area=2204 Section=ASEC1 MatProp=Default  
 Area=2205 Section=ASEC1 MatProp=Default  
 Area=2206 Section=ASEC1 MatProp=Default  
 Area=2207 Section=ASEC1 MatProp=Default  
 Area=2208 Section=ASEC1 MatProp=Default  
 Area=2209 Section=ASEC1 MatProp=Default  
 Area=2210 Section=ASEC1 MatProp=Default  
 Area=2211 Section=ASEC1 MatProp=Default  
 Area=2212 Section=ASEC1 MatProp=Default  
 Area=2213 Section=ASEC1 MatProp=Default  
 Area=2214 Section=ASEC1 MatProp=Default  
 Area=2215 Section=ASEC1 MatProp=Default  
 Area=2216 Section=ASEC1 MatProp=Default  
 Area=2217 Section=ASEC1 MatProp=Default  
 Area=2218 Section=ASEC1 MatProp=Default  
 Area=2219 Section=ASEC1 MatProp=Default  
 Area=2220 Section=ASEC1 MatProp=Default  
 Area=2221 Section=ASEC1 MatProp=Default  
 Area=2222 Section=ASEC1 MatProp=Default  
 Area=2223 Section=ASEC1 MatProp=Default  
 Area=2224 Section=ASEC1 MatProp=Default  
 Area=2225 Section=ASEC1 MatProp=Default  
 Area=2226 Section=ASEC1 MatProp=Default  
 Area=2227 Section=ASEC1 MatProp=Default  
 Area=2228 Section=ASEC1 MatProp=Default  
 Area=2229 Section=ASEC1 MatProp=Default  
 Area=2230 Section=ASEC1 MatProp=Default  
 Area=2231 Section=ASEC1 MatProp=Default  
 Area=2232 Section=ASEC1 MatProp=Default  
 Area=2233 Section=ASEC1 MatProp=Default  
 Area=2234 Section=ASEC1 MatProp=Default  
 Area=2235 Section=ASEC1 MatProp=Default  
 Area=2236 Section=ASEC1 MatProp=Default  
 Area=2237 Section=ASEC1 MatProp=Default  
 Area=2238 Section=ASEC1 MatProp=Default  
 Area=2239 Section=ASEC1 MatProp=Default  
 Area=2240 Section=ASEC1 MatProp=Default  
 Area=2241 Section=ASEC1 MatProp=Default  
 Area=2242 Section=ASEC1 MatProp=Default  
 Area=2243 Section=ASEC1 MatProp=Default  
 Area=2244 Section=ASEC1 MatProp=Default  
 Area=2245 Section=ASEC1 MatProp=Default



ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA  
FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN  
SAN CRISTÓBAL, EN BOGOTÁ D.C.



Area=2246 Section=ASEC1 MatProp=Default  
Area=2247 Section=ASEC1 MatProp=Default  
Area=2248 Section=ASEC1 MatProp=Default  
Area=2249 Section=ASEC1 MatProp=Default  
Area=2250 Section=ASEC1 MatProp=Default  
Area=2251 Section=ASEC1 MatProp=Default  
Area=2252 Section=ASEC1 MatProp=Default  
Area=2253 Section=ASEC1 MatProp=Default  
Area=2254 Section=ASEC1 MatProp=Default  
Area=2255 Section=ASEC1 MatProp=Default  
Area=2256 Section=ASEC1 MatProp=Default  
Area=2257 Section=ASEC1 MatProp=Default  
Area=2258 Section=ASEC1 MatProp=Default  
Area=2259 Section=ASEC1 MatProp=Default  
Area=2260 Section=ASEC1 MatProp=Default  
Area=2261 Section=ASEC1 MatProp=Default  
Area=2262 Section=ASEC1 MatProp=Default  
Area=2263 Section=ASEC1 MatProp=Default  
Area=2264 Section=ASEC1 MatProp=Default  
Area=2265 Section=ASEC1 MatProp=Default  
Area=2266 Section=ASEC1 MatProp=Default  
Area=2267 Section=ASEC1 MatProp=Default  
Area=2268 Section=ASEC1 MatProp=Default  
Area=2269 Section=ASEC1 MatProp=Default  
Area=2270 Section=ASEC1 MatProp=Default  
Area=2271 Section=ASEC1 MatProp=Default  
Area=2272 Section=ASEC1 MatProp=Default  
Area=2273 Section=ASEC1 MatProp=Default  
Area=2274 Section=ASEC1 MatProp=Default  
Area=2275 Section=ASEC1 MatProp=Default  
Area=2276 Section=ASEC1 MatProp=Default  
Area=2277 Section=ASEC1 MatProp=Default  
Area=2278 Section=ASEC1 MatProp=Default  
Area=2279 Section=ASEC1 MatProp=Default  
Area=2280 Section=ASEC1 MatProp=Default  
Area=2281 Section=ASEC1 MatProp=Default  
Area=2282 Section=ASEC1 MatProp=Default  
Area=2283 Section=ASEC1 MatProp=Default  
Area=2284 Section=ASEC1 MatProp=Default  
Area=2285 Section=ASEC1 MatProp=Default  
Area=2286 Section=ASEC1 MatProp=Default  
Area=2287 Section=ASEC1 MatProp=Default  
Area=2288 Section=ASEC1 MatProp=Default  
Area=2289 Section=ASEC1 MatProp=Default  
Area=2290 Section=ASEC1 MatProp=Default  
Area=2291 Section=ASEC1 MatProp=Default  
Area=2292 Section=ASEC1 MatProp=Default  
Area=2293 Section=ASEC1 MatProp=Default  
Area=2294 Section=ASEC1 MatProp=Default  
Area=2295 Section=ASEC1 MatProp=Default  
Area=2296 Section=ASEC1 MatProp=Default  
Area=2297 Section=ASEC1 MatProp=Default  
Area=2298 Section=ASEC1 MatProp=Default  
Area=2299 Section=ASEC1 MatProp=Default  
Area=2300 Section=ASEC1 MatProp=Default





|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=2301 Section=ASEC1 MatProp=Default  
 Area=2302 Section=ASEC1 MatProp=Default  
 Area=2303 Section=ASEC1 MatProp=Default  
 Area=2304 Section=ASEC1 MatProp=Default  
 Area=2305 Section=ASEC1 MatProp=Default  
 Area=2306 Section=ASEC1 MatProp=Default  
 Area=2307 Section=ASEC1 MatProp=Default  
 Area=2308 Section=ASEC1 MatProp=Default  
 Area=2309 Section=ASEC1 MatProp=Default  
 Area=2310 Section=ASEC1 MatProp=Default  
 Area=2311 Section=ASEC1 MatProp=Default  
 Area=2312 Section=ASEC1 MatProp=Default  
 Area=2313 Section=ASEC1 MatProp=Default  
 Area=2314 Section=ASEC1 MatProp=Default  
 Area=2315 Section=ASEC1 MatProp=Default  
 Area=2316 Section=ASEC1 MatProp=Default  
 Area=2317 Section=ASEC1 MatProp=Default  
 Area=2318 Section=ASEC1 MatProp=Default  
 Area=2319 Section=ASEC1 MatProp=Default  
 Area=2320 Section=ASEC1 MatProp=Default  
 Area=2321 Section=ASEC1 MatProp=Default  
 Area=2322 Section=ASEC1 MatProp=Default  
 Area=2323 Section=ASEC1 MatProp=Default  
 Area=2324 Section=ASEC1 MatProp=Default  
 Area=2325 Section=ASEC1 MatProp=Default  
 Area=2326 Section=ASEC1 MatProp=Default  
 Area=2327 Section=ASEC1 MatProp=Default  
 Area=2328 Section=ASEC1 MatProp=Default  
 Area=2329 Section=ASEC1 MatProp=Default  
 Area=2330 Section=ASEC1 MatProp=Default  
 Area=2331 Section=ASEC1 MatProp=Default  
 Area=2332 Section=ASEC1 MatProp=Default  
 Area=2333 Section=ASEC1 MatProp=Default  
 Area=2334 Section=ASEC1 MatProp=Default  
 Area=2335 Section=ASEC1 MatProp=Default  
 Area=2336 Section=ASEC1 MatProp=Default  
 Area=2337 Section=ASEC1 MatProp=Default  
 Area=2338 Section=ASEC1 MatProp=Default  
 Area=2339 Section=ASEC1 MatProp=Default  
 Area=2340 Section=ASEC1 MatProp=Default  
 Area=2341 Section=ASEC1 MatProp=Default  
 Area=2342 Section=ASEC1 MatProp=Default  
 Area=2343 Section=ASEC1 MatProp=Default  
 Area=2344 Section=ASEC1 MatProp=Default  
 Area=2345 Section=ASEC1 MatProp=Default  
 Area=2346 Section=ASEC1 MatProp=Default  
 Area=2347 Section=ASEC1 MatProp=Default  
 Area=2348 Section=ASEC1 MatProp=Default  
 Area=2349 Section=ASEC1 MatProp=Default  
 Area=2350 Section=ASEC1 MatProp=Default  
 Area=2351 Section=ASEC1 MatProp=Default  
 Area=2352 Section=ASEC1 MatProp=Default  
 Area=2353 Section=ASEC1 MatProp=Default  
 Area=2354 Section=ASEC1 MatProp=Default  
 Area=2355 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=2356 Section=ASEC1 MatProp=Default  
 Area=2357 Section=ASEC1 MatProp=Default  
 Area=2358 Section=ASEC1 MatProp=Default  
 Area=2359 Section=ASEC1 MatProp=Default  
 Area=2360 Section=ASEC1 MatProp=Default  
 Area=2361 Section=ASEC1 MatProp=Default  
 Area=2362 Section=ASEC1 MatProp=Default  
 Area=2363 Section=ASEC1 MatProp=Default  
 Area=2364 Section=ASEC1 MatProp=Default  
 Area=2365 Section=ASEC1 MatProp=Default  
 Area=2366 Section=ASEC1 MatProp=Default  
 Area=2367 Section=ASEC1 MatProp=Default  
 Area=2368 Section=ASEC1 MatProp=Default  
 Area=2369 Section=ASEC1 MatProp=Default  
 Area=2370 Section=ASEC1 MatProp=Default  
 Area=2371 Section=ASEC1 MatProp=Default  
 Area=2372 Section=ASEC1 MatProp=Default  
 Area=2373 Section=ASEC1 MatProp=Default  
 Area=2374 Section=ASEC1 MatProp=Default  
 Area=2375 Section=ASEC1 MatProp=Default  
 Area=2376 Section=ASEC1 MatProp=Default  
 Area=2377 Section=ASEC1 MatProp=Default  
 Area=2378 Section=ASEC1 MatProp=Default  
 Area=2379 Section=ASEC1 MatProp=Default  
 Area=2380 Section=ASEC1 MatProp=Default  
 Area=2381 Section=ASEC1 MatProp=Default  
 Area=2382 Section=ASEC1 MatProp=Default  
 Area=2383 Section=ASEC1 MatProp=Default  
 Area=2384 Section=ASEC1 MatProp=Default  
 Area=2385 Section=ASEC1 MatProp=Default  
 Area=2386 Section=ASEC1 MatProp=Default  
 Area=2387 Section=ASEC1 MatProp=Default  
 Area=2388 Section=ASEC1 MatProp=Default  
 Area=2389 Section=ASEC1 MatProp=Default  
 Area=2390 Section=ASEC1 MatProp=Default  
 Area=2391 Section=ASEC1 MatProp=Default  
 Area=2392 Section=ASEC1 MatProp=Default  
 Area=2393 Section=ASEC1 MatProp=Default  
 Area=2394 Section=ASEC1 MatProp=Default  
 Area=2395 Section=ASEC1 MatProp=Default  
 Area=2396 Section=ASEC1 MatProp=Default  
 Area=2397 Section=ASEC1 MatProp=Default  
 Area=2398 Section=ASEC1 MatProp=Default  
 Area=2399 Section=ASEC1 MatProp=Default  
 Area=2400 Section=ASEC1 MatProp=Default  
 Area=2401 Section=ASEC1 MatProp=Default  
 Area=2402 Section=ASEC1 MatProp=Default  
 Area=2403 Section=ASEC1 MatProp=Default  
 Area=2404 Section=ASEC1 MatProp=Default  
 Area=2405 Section=ASEC1 MatProp=Default  
 Area=2406 Section=ASEC1 MatProp=Default  
 Area=2407 Section=ASEC1 MatProp=Default  
 Area=2408 Section=ASEC1 MatProp=Default  
 Area=2409 Section=ASEC1 MatProp=Default  
 Area=2410 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=2411 Section=ASEC1 MatProp=Default  
 Area=2412 Section=ASEC1 MatProp=Default  
 Area=2413 Section=ASEC1 MatProp=Default  
 Area=2414 Section=ASEC1 MatProp=Default  
 Area=2415 Section=ASEC1 MatProp=Default  
 Area=2416 Section=ASEC1 MatProp=Default  
 Area=2417 Section=ASEC1 MatProp=Default  
 Area=2418 Section=ASEC1 MatProp=Default  
 Area=2419 Section=ASEC1 MatProp=Default  
 Area=2420 Section=ASEC1 MatProp=Default  
 Area=2421 Section=ASEC1 MatProp=Default  
 Area=2422 Section=ASEC1 MatProp=Default  
 Area=2423 Section=ASEC1 MatProp=Default  
 Area=2424 Section=ASEC1 MatProp=Default  
 Area=2425 Section=ASEC1 MatProp=Default  
 Area=2426 Section=ASEC1 MatProp=Default  
 Area=2427 Section=ASEC1 MatProp=Default  
 Area=2428 Section=ASEC1 MatProp=Default  
 Area=2429 Section=ASEC1 MatProp=Default  
 Area=2430 Section=ASEC1 MatProp=Default  
 Area=2431 Section=ASEC1 MatProp=Default  
 Area=2432 Section=ASEC1 MatProp=Default  
 Area=2433 Section=ASEC1 MatProp=Default  
 Area=2434 Section=ASEC1 MatProp=Default  
 Area=2435 Section=ASEC1 MatProp=Default  
 Area=2436 Section=ASEC1 MatProp=Default  
 Area=2437 Section=ASEC1 MatProp=Default  
 Area=2438 Section=ASEC1 MatProp=Default  
 Area=2439 Section=ASEC1 MatProp=Default  
 Area=2440 Section=ASEC1 MatProp=Default  
 Area=2441 Section=ASEC1 MatProp=Default  
 Area=2442 Section=ASEC1 MatProp=Default  
 Area=2443 Section=ASEC1 MatProp=Default  
 Area=2444 Section=ASEC1 MatProp=Default  
 Area=2445 Section=ASEC1 MatProp=Default  
 Area=2446 Section=ASEC1 MatProp=Default  
 Area=2447 Section=ASEC1 MatProp=Default  
 Area=2448 Section=ASEC1 MatProp=Default  
 Area=2449 Section=ASEC1 MatProp=Default  
 Area=2450 Section=ASEC1 MatProp=Default  
 Area=2451 Section=ASEC1 MatProp=Default  
 Area=2452 Section=ASEC1 MatProp=Default  
 Area=2453 Section=ASEC1 MatProp=Default  
 Area=2454 Section=ASEC1 MatProp=Default  
 Area=2455 Section=ASEC1 MatProp=Default  
 Area=2456 Section=ASEC1 MatProp=Default  
 Area=2457 Section=ASEC1 MatProp=Default  
 Area=2458 Section=ASEC1 MatProp=Default  
 Area=2459 Section=ASEC1 MatProp=Default  
 Area=2460 Section=ASEC1 MatProp=Default  
 Area=2461 Section=ASEC1 MatProp=Default  
 Area=2462 Section=ASEC1 MatProp=Default  
 Area=2463 Section=ASEC1 MatProp=Default  
 Area=2464 Section=ASEC1 MatProp=Default  
 Area=2465 Section=ASEC1 MatProp=Default





ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA  
FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN  
SAN CRISTÓBAL, EN BOGOTÁ D.C.



|           |               |                 |
|-----------|---------------|-----------------|
| Area=2466 | Section=ASEC1 | MatProp=Default |
| Area=2467 | Section=ASEC1 | MatProp=Default |
| Area=2468 | Section=ASEC1 | MatProp=Default |
| Area=2469 | Section=ASEC1 | MatProp=Default |
| Area=2470 | Section=ASEC1 | MatProp=Default |
| Area=2471 | Section=ASEC1 | MatProp=Default |
| Area=2472 | Section=ASEC1 | MatProp=Default |
| Area=2473 | Section=ASEC1 | MatProp=Default |
| Area=2474 | Section=ASEC1 | MatProp=Default |
| Area=2475 | Section=ASEC1 | MatProp=Default |
| Area=2476 | Section=ASEC1 | MatProp=Default |
| Area=2477 | Section=ASEC1 | MatProp=Default |
| Area=2478 | Section=ASEC1 | MatProp=Default |
| Area=2479 | Section=ASEC1 | MatProp=Default |
| Area=2480 | Section=ASEC1 | MatProp=Default |
| Area=2481 | Section=ASEC1 | MatProp=Default |
| Area=2482 | Section=ASEC1 | MatProp=Default |
| Area=2483 | Section=ASEC1 | MatProp=Default |
| Area=2484 | Section=ASEC1 | MatProp=Default |
| Area=2485 | Section=ASEC1 | MatProp=Default |
| Area=2486 | Section=ASEC1 | MatProp=Default |
| Area=2487 | Section=ASEC1 | MatProp=Default |
| Area=2488 | Section=ASEC1 | MatProp=Default |
| Area=2489 | Section=ASEC1 | MatProp=Default |
| Area=2490 | Section=ASEC1 | MatProp=Default |
| Area=2491 | Section=ASEC1 | MatProp=Default |
| Area=2492 | Section=ASEC1 | MatProp=Default |
| Area=2493 | Section=ASEC1 | MatProp=Default |
| Area=2494 | Section=ASEC1 | MatProp=Default |
| Area=2495 | Section=ASEC1 | MatProp=Default |
| Area=2496 | Section=ASEC1 | MatProp=Default |
| Area=2497 | Section=ASEC1 | MatProp=Default |
| Area=2498 | Section=ASEC1 | MatProp=Default |
| Area=2499 | Section=ASEC1 | MatProp=Default |
| Area=2500 | Section=ASEC1 | MatProp=Default |
| Area=2501 | Section=ASEC1 | MatProp=Default |
| Area=2502 | Section=ASEC1 | MatProp=Default |
| Area=2503 | Section=ASEC1 | MatProp=Default |
| Area=2504 | Section=ASEC1 | MatProp=Default |
| Area=2505 | Section=ASEC1 | MatProp=Default |
| Area=2506 | Section=ASEC1 | MatProp=Default |
| Area=2507 | Section=ASEC1 | MatProp=Default |
| Area=2508 | Section=ASEC1 | MatProp=Default |
| Area=2509 | Section=ASEC1 | MatProp=Default |
| Area=2510 | Section=ASEC1 | MatProp=Default |
| Area=2511 | Section=ASEC1 | MatProp=Default |
| Area=2512 | Section=ASEC1 | MatProp=Default |
| Area=2513 | Section=ASEC1 | MatProp=Default |
| Area=2514 | Section=ASEC1 | MatProp=Default |
| Area=2515 | Section=ASEC1 | MatProp=Default |
| Area=2516 | Section=ASEC1 | MatProp=Default |
| Area=2517 | Section=ASEC1 | MatProp=Default |
| Area=2518 | Section=ASEC1 | MatProp=Default |
| Area=2519 | Section=ASEC1 | MatProp=Default |
| Area=2520 | Section=ASEC1 | MatProp=Default |



ALCALDÍA MAYOR  
BOGOTÁ D.C.  
INSTITUTO DE DESARROLLO URBANO

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=2521 Section=ASEC1 MatProp=Default  
 Area=2522 Section=ASEC1 MatProp=Default  
 Area=2523 Section=ASEC1 MatProp=Default  
 Area=2524 Section=ASEC1 MatProp=Default  
 Area=2525 Section=ASEC1 MatProp=Default  
 Area=2526 Section=ASEC1 MatProp=Default  
 Area=2527 Section=ASEC1 MatProp=Default  
 Area=2528 Section=ASEC1 MatProp=Default  
 Area=2529 Section=ASEC1 MatProp=Default  
 Area=2530 Section=ASEC1 MatProp=Default  
 Area=2531 Section=ASEC1 MatProp=Default  
 Area=2532 Section=ASEC1 MatProp=Default  
 Area=2533 Section=ASEC1 MatProp=Default  
 Area=2534 Section=ASEC1 MatProp=Default  
 Area=2535 Section=ASEC1 MatProp=Default  
 Area=2536 Section=ASEC1 MatProp=Default  
 Area=2537 Section=ASEC1 MatProp=Default  
 Area=2538 Section=ASEC1 MatProp=Default  
 Area=2539 Section=ASEC1 MatProp=Default  
 Area=2540 Section=ASEC1 MatProp=Default  
 Area=2541 Section=ASEC1 MatProp=Default  
 Area=2542 Section=ASEC1 MatProp=Default  
 Area=2543 Section=ASEC1 MatProp=Default  
 Area=2544 Section=ASEC1 MatProp=Default  
 Area=2545 Section=ASEC1 MatProp=Default  
 Area=2546 Section=ASEC1 MatProp=Default  
 Area=2547 Section=ASEC1 MatProp=Default  
 Area=2548 Section=ASEC1 MatProp=Default  
 Area=2549 Section=ASEC1 MatProp=Default  
 Area=2550 Section=ASEC1 MatProp=Default  
 Area=2551 Section=ASEC1 MatProp=Default  
 Area=2552 Section=ASEC1 MatProp=Default  
 Area=2553 Section=ASEC1 MatProp=Default  
 Area=2554 Section=ASEC1 MatProp=Default  
 Area=2555 Section=ASEC1 MatProp=Default  
 Area=2556 Section=ASEC1 MatProp=Default  
 Area=2557 Section=ASEC1 MatProp=Default  
 Area=2558 Section=ASEC1 MatProp=Default  
 Area=2559 Section=ASEC1 MatProp=Default  
 Area=2560 Section=ASEC1 MatProp=Default  
 Area=2561 Section=ASEC1 MatProp=Default  
 Area=2562 Section=ASEC1 MatProp=Default  
 Area=2563 Section=ASEC1 MatProp=Default  
 Area=2564 Section=ASEC1 MatProp=Default  
 Area=2565 Section=ASEC1 MatProp=Default  
 Area=2566 Section=ASEC1 MatProp=Default  
 Area=2567 Section=ASEC1 MatProp=Default  
 Area=2568 Section=ASEC1 MatProp=Default  
 Area=2569 Section=ASEC1 MatProp=Default  
 Area=2570 Section=ASEC1 MatProp=Default  
 Area=2571 Section=ASEC1 MatProp=Default  
 Area=2572 Section=ASEC1 MatProp=Default  
 Area=2573 Section=ASEC1 MatProp=Default  
 Area=2574 Section=ASEC1 MatProp=Default  
 Area=2575 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=2576 Section=ASEC1 MatProp=Default  
 Area=2577 Section=ASEC1 MatProp=Default  
 Area=2578 Section=ASEC1 MatProp=Default  
 Area=2579 Section=ASEC1 MatProp=Default  
 Area=2580 Section=ASEC1 MatProp=Default  
 Area=2581 Section=ASEC1 MatProp=Default  
 Area=2582 Section=ASEC1 MatProp=Default  
 Area=2583 Section=ASEC1 MatProp=Default  
 Area=2584 Section=ASEC1 MatProp=Default  
 Area=2585 Section=ASEC1 MatProp=Default  
 Area=2586 Section=ASEC1 MatProp=Default  
 Area=2587 Section=ASEC1 MatProp=Default  
 Area=2588 Section=ASEC1 MatProp=Default  
 Area=2589 Section=ASEC1 MatProp=Default  
 Area=2590 Section=ASEC1 MatProp=Default  
 Area=2591 Section=ASEC1 MatProp=Default  
 Area=2592 Section=ASEC1 MatProp=Default  
 Area=2593 Section=ASEC1 MatProp=Default  
 Area=2594 Section=ASEC1 MatProp=Default  
 Area=2595 Section=ASEC1 MatProp=Default  
 Area=2596 Section=ASEC1 MatProp=Default  
 Area=2597 Section=ASEC1 MatProp=Default  
 Area=2598 Section=ASEC1 MatProp=Default  
 Area=2599 Section=ASEC1 MatProp=Default  
 Area=2600 Section=ASEC1 MatProp=Default  
 Area=2601 Section=ASEC1 MatProp=Default  
 Area=2602 Section=ASEC1 MatProp=Default  
 Area=2603 Section=ASEC1 MatProp=Default  
 Area=2604 Section=ASEC1 MatProp=Default  
 Area=2605 Section=ASEC1 MatProp=Default  
 Area=2606 Section=ASEC1 MatProp=Default  
 Area=2607 Section=ASEC1 MatProp=Default  
 Area=2608 Section=ASEC1 MatProp=Default  
 Area=2609 Section=ASEC1 MatProp=Default  
 Area=2610 Section=ASEC1 MatProp=Default  
 Area=2611 Section=ASEC1 MatProp=Default  
 Area=2612 Section=ASEC1 MatProp=Default  
 Area=2613 Section=ASEC1 MatProp=Default  
 Area=2614 Section=ASEC1 MatProp=Default  
 Area=2615 Section=ASEC1 MatProp=Default  
 Area=2616 Section=ASEC1 MatProp=Default  
 Area=2617 Section=ASEC1 MatProp=Default  
 Area=2618 Section=ASEC1 MatProp=Default  
 Area=2619 Section=ASEC1 MatProp=Default  
 Area=2620 Section=ASEC1 MatProp=Default  
 Area=2621 Section=ASEC1 MatProp=Default  
 Area=2622 Section=ASEC1 MatProp=Default  
 Area=2623 Section=ASEC1 MatProp=Default  
 Area=2624 Section=ASEC1 MatProp=Default  
 Area=2625 Section=ASEC1 MatProp=Default  
 Area=2626 Section=ASEC1 MatProp=Default  
 Area=2627 Section=ASEC1 MatProp=Default  
 Area=2628 Section=ASEC1 MatProp=Default  
 Area=2629 Section=ASEC1 MatProp=Default  
 Area=2630 Section=ASEC1 MatProp=Default





|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=2631 Section=ASEC1 MatProp=Default  
 Area=2632 Section=ASEC1 MatProp=Default  
 Area=2633 Section=ASEC1 MatProp=Default  
 Area=2634 Section=ASEC1 MatProp=Default  
 Area=2635 Section=ASEC1 MatProp=Default  
 Area=2636 Section=ASEC1 MatProp=Default  
 Area=2637 Section=ASEC1 MatProp=Default  
 Area=2638 Section=ASEC1 MatProp=Default  
 Area=2639 Section=ASEC1 MatProp=Default  
 Area=2640 Section=ASEC1 MatProp=Default  
 Area=2641 Section=ASEC1 MatProp=Default  
 Area=2642 Section=ASEC1 MatProp=Default  
 Area=2643 Section=ASEC1 MatProp=Default  
 Area=2644 Section=ASEC1 MatProp=Default  
 Area=2645 Section=ASEC1 MatProp=Default  
 Area=2646 Section=ASEC1 MatProp=Default  
 Area=2647 Section=ASEC1 MatProp=Default  
 Area=2648 Section=ASEC1 MatProp=Default  
 Area=2649 Section=ASEC1 MatProp=Default  
 Area=2650 Section=ASEC1 MatProp=Default  
 Area=2651 Section=ASEC1 MatProp=Default  
 Area=2652 Section=ASEC1 MatProp=Default  
 Area=2653 Section=ASEC1 MatProp=Default  
 Area=2654 Section=ASEC1 MatProp=Default  
 Area=2655 Section=ASEC1 MatProp=Default  
 Area=2656 Section=ASEC1 MatProp=Default  
 Area=2657 Section=ASEC1 MatProp=Default  
 Area=2658 Section=ASEC1 MatProp=Default  
 Area=2659 Section=ASEC1 MatProp=Default  
 Area=2660 Section=ASEC1 MatProp=Default  
 Area=2661 Section=ASEC1 MatProp=Default  
 Area=2662 Section=ASEC1 MatProp=Default  
 Area=2663 Section=ASEC1 MatProp=Default  
 Area=2664 Section=ASEC1 MatProp=Default  
 Area=2665 Section=ASEC1 MatProp=Default  
 Area=2666 Section=ASEC1 MatProp=Default  
 Area=2667 Section=ASEC1 MatProp=Default  
 Area=2668 Section=ASEC1 MatProp=Default  
 Area=2669 Section=ASEC1 MatProp=Default  
 Area=2670 Section=ASEC1 MatProp=Default  
 Area=2671 Section=ASEC1 MatProp=Default  
 Area=2672 Section=ASEC1 MatProp=Default  
 Area=2673 Section=ASEC1 MatProp=Default  
 Area=2674 Section=ASEC1 MatProp=Default  
 Area=2675 Section=ASEC1 MatProp=Default  
 Area=2676 Section=ASEC1 MatProp=Default  
 Area=2677 Section=ASEC1 MatProp=Default  
 Area=2678 Section=ASEC1 MatProp=Default  
 Area=2679 Section=ASEC1 MatProp=Default  
 Area=2680 Section=ASEC1 MatProp=Default  
 Area=2681 Section=ASEC1 MatProp=Default  
 Area=2682 Section=ASEC1 MatProp=Default  
 Area=2683 Section=ASEC1 MatProp=Default  
 Area=2684 Section=ASEC1 MatProp=Default  
 Area=2685 Section=ASEC1 MatProp=Default





|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=2686 Section=ASEC1 MatProp=Default  
 Area=2687 Section=ASEC1 MatProp=Default  
 Area=2688 Section=ASEC1 MatProp=Default  
 Area=2689 Section=ASEC1 MatProp=Default  
 Area=2690 Section=ASEC1 MatProp=Default  
 Area=2691 Section=ASEC1 MatProp=Default  
 Area=2692 Section=ASEC1 MatProp=Default  
 Area=2693 Section=ASEC1 MatProp=Default  
 Area=2694 Section=ASEC1 MatProp=Default  
 Area=2695 Section=ASEC1 MatProp=Default  
 Area=2696 Section=ASEC1 MatProp=Default  
 Area=2697 Section=ASEC1 MatProp=Default  
 Area=2698 Section=ASEC1 MatProp=Default  
 Area=2699 Section=ASEC1 MatProp=Default  
 Area=2700 Section=ASEC1 MatProp=Default  
 Area=2701 Section=ASEC1 MatProp=Default  
 Area=2702 Section=ASEC1 MatProp=Default  
 Area=2703 Section=ASEC1 MatProp=Default  
 Area=2704 Section=ASEC1 MatProp=Default  
 Area=2705 Section=ASEC1 MatProp=Default  
 Area=2706 Section=ASEC1 MatProp=Default  
 Area=2707 Section=ASEC1 MatProp=Default  
 Area=2708 Section=ASEC1 MatProp=Default  
 Area=2709 Section=ASEC1 MatProp=Default  
 Area=2710 Section=ASEC1 MatProp=Default  
 Area=2711 Section=ASEC1 MatProp=Default  
 Area=2712 Section=ASEC1 MatProp=Default  
 Area=2713 Section=ASEC1 MatProp=Default  
 Area=2714 Section=ASEC1 MatProp=Default  
 Area=2715 Section=ASEC1 MatProp=Default  
 Area=2716 Section=ASEC1 MatProp=Default  
 Area=2717 Section=ASEC1 MatProp=Default  
 Area=2718 Section=ASEC1 MatProp=Default  
 Area=2719 Section=ASEC1 MatProp=Default  
 Area=2720 Section=ASEC1 MatProp=Default  
 Area=2721 Section=ASEC1 MatProp=Default  
 Area=2722 Section=ASEC1 MatProp=Default  
 Area=2723 Section=ASEC1 MatProp=Default  
 Area=2724 Section=ASEC1 MatProp=Default  
 Area=2725 Section=ASEC1 MatProp=Default  
 Area=2726 Section=ASEC1 MatProp=Default  
 Area=2727 Section=ASEC1 MatProp=Default  
 Area=2728 Section=ASEC1 MatProp=Default  
 Area=2729 Section=ASEC1 MatProp=Default  
 Area=2730 Section=ASEC1 MatProp=Default  
 Area=2731 Section=ASEC1 MatProp=Default  
 Area=2732 Section=ASEC1 MatProp=Default  
 Area=2733 Section=ASEC1 MatProp=Default  
 Area=2734 Section=ASEC1 MatProp=Default  
 Area=2735 Section=ASEC1 MatProp=Default  
 Area=2736 Section=ASEC1 MatProp=Default  
 Area=2737 Section=ASEC1 MatProp=Default  
 Area=2738 Section=ASEC1 MatProp=Default  
 Area=2739 Section=ASEC1 MatProp=Default  
 Area=2740 Section=ASEC1 MatProp=Default

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=2741 Section=ASEC1 MatProp=Default  
 Area=2742 Section=ASEC1 MatProp=Default  
 Area=2743 Section=ASEC1 MatProp=Default  
 Area=2744 Section=ASEC1 MatProp=Default  
 Area=2745 Section=ASEC1 MatProp=Default  
 Area=2746 Section=ASEC1 MatProp=Default  
 Area=2747 Section=ASEC1 MatProp=Default  
 Area=2748 Section=ASEC1 MatProp=Default  
 Area=2749 Section=ASEC1 MatProp=Default  
 Area=2750 Section=ASEC1 MatProp=Default  
 Area=2751 Section=ASEC1 MatProp=Default  
 Area=2752 Section=ASEC1 MatProp=Default  
 Area=2753 Section=ASEC1 MatProp=Default  
 Area=2754 Section=ASEC1 MatProp=Default  
 Area=2755 Section=ASEC1 MatProp=Default  
 Area=2756 Section=ASEC1 MatProp=Default  
 Area=2757 Section=ASEC1 MatProp=Default  
 Area=2758 Section=ASEC1 MatProp=Default  
 Area=2759 Section=ASEC1 MatProp=Default  
 Area=2760 Section=ASEC1 MatProp=Default  
 Area=2761 Section=ASEC1 MatProp=Default  
 Area=2762 Section=ASEC1 MatProp=Default  
 Area=2763 Section=ASEC1 MatProp=Default  
 Area=2764 Section=ASEC1 MatProp=Default  
 Area=2765 Section=ASEC1 MatProp=Default  
 Area=2766 Section=ASEC1 MatProp=Default  
 Area=2767 Section=ASEC1 MatProp=Default  
 Area=2768 Section=ASEC1 MatProp=Default  
 Area=2769 Section=ASEC1 MatProp=Default  
 Area=2770 Section=ASEC1 MatProp=Default  
 Area=2771 Section=ASEC1 MatProp=Default  
 Area=2772 Section=ASEC1 MatProp=Default  
 Area=2773 Section=ASEC1 MatProp=Default  
 Area=2774 Section=ASEC1 MatProp=Default  
 Area=2775 Section=ASEC1 MatProp=Default  
 Area=2776 Section=ASEC1 MatProp=Default  
 Area=2777 Section=ASEC1 MatProp=Default  
 Area=2778 Section=ASEC1 MatProp=Default  
 Area=2779 Section=ASEC1 MatProp=Default  
 Area=2780 Section=ASEC1 MatProp=Default  
 Area=2781 Section=ASEC1 MatProp=Default  
 Area=2782 Section=ASEC1 MatProp=Default  
 Area=2783 Section=ASEC1 MatProp=Default  
 Area=2784 Section=ASEC1 MatProp=Default  
 Area=2785 Section=ASEC1 MatProp=Default  
 Area=2786 Section=ASEC1 MatProp=Default  
 Area=2787 Section=ASEC1 MatProp=Default  
 Area=2788 Section=ASEC1 MatProp=Default  
 Area=2789 Section=ASEC1 MatProp=Default  
 Area=2790 Section=ASEC1 MatProp=Default  
 Area=2791 Section=ASEC1 MatProp=Default  
 Area=2792 Section=ASEC1 MatProp=Default  
 Area=2793 Section=ASEC1 MatProp=Default  
 Area=2794 Section=ASEC1 MatProp=Default  
 Area=2795 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=2796 Section=ASEC1 MatProp=Default  
 Area=2797 Section=ASEC1 MatProp=Default  
 Area=2798 Section=ASEC1 MatProp=Default  
 Area=2799 Section=ASEC1 MatProp=Default  
 Area=2800 Section=ASEC1 MatProp=Default  
 Area=2801 Section=ASEC1 MatProp=Default  
 Area=2802 Section=ASEC1 MatProp=Default  
 Area=2803 Section=ASEC1 MatProp=Default  
 Area=2804 Section=ASEC1 MatProp=Default  
 Area=2805 Section=ASEC1 MatProp=Default  
 Area=2806 Section=ASEC1 MatProp=Default  
 Area=2807 Section=ASEC1 MatProp=Default  
 Area=2808 Section=ASEC1 MatProp=Default  
 Area=2809 Section=ASEC1 MatProp=Default  
 Area=2810 Section=ASEC1 MatProp=Default  
 Area=2811 Section=ASEC1 MatProp=Default  
 Area=2812 Section=ASEC1 MatProp=Default  
 Area=2813 Section=ASEC1 MatProp=Default  
 Area=2814 Section=ASEC1 MatProp=Default  
 Area=2815 Section=ASEC1 MatProp=Default  
 Area=2816 Section=ASEC1 MatProp=Default  
 Area=2817 Section=ASEC1 MatProp=Default  
 Area=2818 Section=ASEC1 MatProp=Default  
 Area=2819 Section=ASEC1 MatProp=Default  
 Area=2820 Section=ASEC1 MatProp=Default  
 Area=2821 Section=ASEC1 MatProp=Default  
 Area=2822 Section=ASEC1 MatProp=Default  
 Area=2823 Section=ASEC1 MatProp=Default  
 Area=2824 Section=ASEC1 MatProp=Default  
 Area=2825 Section=ASEC1 MatProp=Default  
 Area=2826 Section=ASEC1 MatProp=Default  
 Area=2827 Section=ASEC1 MatProp=Default  
 Area=2828 Section=ASEC1 MatProp=Default  
 Area=2829 Section=ASEC1 MatProp=Default  
 Area=2830 Section=ASEC1 MatProp=Default  
 Area=2831 Section=ASEC1 MatProp=Default  
 Area=2832 Section=ASEC1 MatProp=Default  
 Area=2833 Section=ASEC1 MatProp=Default  
 Area=2834 Section=ASEC1 MatProp=Default  
 Area=2835 Section=ASEC1 MatProp=Default  
 Area=2836 Section=ASEC1 MatProp=Default  
 Area=2837 Section=ASEC1 MatProp=Default  
 Area=2838 Section=ASEC1 MatProp=Default  
 Area=2839 Section=ASEC1 MatProp=Default  
 Area=2840 Section=ASEC1 MatProp=Default  
 Area=2841 Section=ASEC1 MatProp=Default  
 Area=2842 Section=ASEC1 MatProp=Default  
 Area=2843 Section=ASEC1 MatProp=Default  
 Area=2844 Section=ASEC1 MatProp=Default  
 Area=2845 Section=ASEC1 MatProp=Default  
 Area=2846 Section=ASEC1 MatProp=Default  
 Area=2847 Section=ASEC1 MatProp=Default  
 Area=2848 Section=ASEC1 MatProp=Default  
 Area=2849 Section=ASEC1 MatProp=Default  
 Area=2850 Section=ASEC1 MatProp=Default

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=2851 Section=ASEC1 MatProp=Default  
 Area=2852 Section=ASEC1 MatProp=Default  
 Area=2853 Section=ASEC1 MatProp=Default  
 Area=2854 Section=ASEC1 MatProp=Default  
 Area=2855 Section=ASEC1 MatProp=Default  
 Area=2856 Section=ASEC1 MatProp=Default  
 Area=2857 Section=ASEC1 MatProp=Default  
 Area=2858 Section=ASEC1 MatProp=Default  
 Area=2859 Section=ASEC1 MatProp=Default  
 Area=2860 Section=ASEC1 MatProp=Default  
 Area=2861 Section=ASEC1 MatProp=Default  
 Area=2862 Section=ASEC1 MatProp=Default  
 Area=2863 Section=ASEC1 MatProp=Default  
 Area=2864 Section=ASEC1 MatProp=Default  
 Area=2865 Section=ASEC1 MatProp=Default  
 Area=2866 Section=ASEC1 MatProp=Default  
 Area=2867 Section=ASEC1 MatProp=Default  
 Area=2868 Section=ASEC1 MatProp=Default  
 Area=2869 Section=ASEC1 MatProp=Default  
 Area=2870 Section=ASEC1 MatProp=Default  
 Area=2871 Section=ASEC1 MatProp=Default  
 Area=2872 Section=ASEC1 MatProp=Default  
 Area=2873 Section=ASEC1 MatProp=Default  
 Area=2874 Section=ASEC1 MatProp=Default  
 Area=2875 Section=ASEC1 MatProp=Default  
 Area=2876 Section=ASEC1 MatProp=Default  
 Area=2877 Section=ASEC1 MatProp=Default  
 Area=2878 Section=ASEC1 MatProp=Default  
 Area=2879 Section=ASEC1 MatProp=Default  
 Area=2880 Section=ASEC1 MatProp=Default  
 Area=2881 Section=ASEC1 MatProp=Default  
 Area=2882 Section=ASEC1 MatProp=Default  
 Area=2883 Section=ASEC1 MatProp=Default  
 Area=2884 Section=ASEC1 MatProp=Default  
 Area=2885 Section=ASEC1 MatProp=Default  
 Area=2886 Section=ASEC1 MatProp=Default  
 Area=2887 Section=ASEC1 MatProp=Default  
 Area=2888 Section=ASEC1 MatProp=Default  
 Area=2889 Section=ASEC1 MatProp=Default  
 Area=2890 Section=ASEC1 MatProp=Default  
 Area=2891 Section=ASEC1 MatProp=Default  
 Area=2892 Section=ASEC1 MatProp=Default  
 Area=2893 Section=ASEC1 MatProp=Default  
 Area=2894 Section=ASEC1 MatProp=Default  
 Area=2895 Section=ASEC1 MatProp=Default  
 Area=2896 Section=ASEC1 MatProp=Default  
 Area=2897 Section=ASEC1 MatProp=Default  
 Area=2898 Section=ASEC1 MatProp=Default  
 Area=2899 Section=ASEC1 MatProp=Default  
 Area=2900 Section=ASEC1 MatProp=Default  
 Area=2901 Section=ASEC1 MatProp=Default  
 Area=2902 Section=ASEC1 MatProp=Default  
 Area=2903 Section=ASEC1 MatProp=Default  
 Area=2904 Section=ASEC1 MatProp=Default  
 Area=2905 Section=ASEC1 MatProp=Default

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=2906 Section=ASEC1 MatProp=Default  
 Area=2907 Section=ASEC1 MatProp=Default  
 Area=2908 Section=ASEC1 MatProp=Default  
 Area=2909 Section=ASEC1 MatProp=Default  
 Area=2910 Section=ASEC1 MatProp=Default  
 Area=2911 Section=ASEC1 MatProp=Default  
 Area=2912 Section=ASEC1 MatProp=Default  
 Area=2913 Section=ASEC1 MatProp=Default  
 Area=2914 Section=ASEC1 MatProp=Default  
 Area=2915 Section=ASEC1 MatProp=Default  
 Area=2916 Section=ASEC1 MatProp=Default  
 Area=2917 Section=ASEC1 MatProp=Default  
 Area=2918 Section=ASEC1 MatProp=Default  
 Area=2919 Section=ASEC1 MatProp=Default  
 Area=2920 Section=ASEC1 MatProp=Default  
 Area=2921 Section=ASEC1 MatProp=Default  
 Area=2922 Section=ASEC1 MatProp=Default  
 Area=2923 Section=ASEC1 MatProp=Default  
 Area=2924 Section=ASEC1 MatProp=Default  
 Area=2925 Section=ASEC1 MatProp=Default  
 Area=2926 Section=ASEC1 MatProp=Default  
 Area=2927 Section=ASEC1 MatProp=Default  
 Area=2928 Section=ASEC1 MatProp=Default  
 Area=2929 Section=ASEC1 MatProp=Default  
 Area=2930 Section=ASEC1 MatProp=Default  
 Area=2931 Section=ASEC1 MatProp=Default  
 Area=2932 Section=ASEC1 MatProp=Default  
 Area=2933 Section=ASEC1 MatProp=Default  
 Area=2934 Section=ASEC1 MatProp=Default  
 Area=2935 Section=ASEC1 MatProp=Default  
 Area=2936 Section=ASEC1 MatProp=Default  
 Area=2937 Section=ASEC1 MatProp=Default  
 Area=2938 Section=ASEC1 MatProp=Default  
 Area=2939 Section=ASEC1 MatProp=Default  
 Area=2940 Section=ASEC1 MatProp=Default  
 Area=2941 Section=ASEC1 MatProp=Default  
 Area=2942 Section=ASEC1 MatProp=Default  
 Area=2943 Section=ASEC1 MatProp=Default  
 Area=2944 Section=ASEC1 MatProp=Default  
 Area=2945 Section=ASEC1 MatProp=Default  
 Area=2946 Section=ASEC1 MatProp=Default  
 Area=2947 Section=ASEC1 MatProp=Default  
 Area=2948 Section=ASEC1 MatProp=Default  
 Area=2949 Section=ASEC1 MatProp=Default  
 Area=2950 Section=ASEC1 MatProp=Default  
 Area=2951 Section=ASEC1 MatProp=Default  
 Area=2952 Section=ASEC1 MatProp=Default  
 Area=2953 Section=ASEC1 MatProp=Default  
 Area=2954 Section=ASEC1 MatProp=Default  
 Area=2955 Section=ASEC1 MatProp=Default  
 Area=2956 Section=ASEC1 MatProp=Default  
 Area=2957 Section=ASEC1 MatProp=Default  
 Area=2958 Section=ASEC1 MatProp=Default  
 Area=2959 Section=ASEC1 MatProp=Default  
 Area=2960 Section=ASEC1 MatProp=Default







ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA  
FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN  
SAN CRISTÓBAL, EN BOGOTÁ D.C.



Area=2961 Section=ASEC1 MatProp=Default  
Area=2962 Section=ASEC1 MatProp=Default  
Area=2963 Section=ASEC1 MatProp=Default  
Area=2964 Section=ASEC1 MatProp=Default  
Area=2965 Section=ASEC1 MatProp=Default  
Area=2966 Section=ASEC1 MatProp=Default  
Area=2967 Section=ASEC1 MatProp=Default  
Area=2968 Section=ASEC1 MatProp=Default  
Area=2969 Section=ASEC1 MatProp=Default  
Area=2970 Section=ASEC1 MatProp=Default  
Area=2971 Section=ASEC1 MatProp=Default  
Area=2972 Section=ASEC1 MatProp=Default  
Area=2973 Section=ASEC1 MatProp=Default  
Area=2974 Section=ASEC1 MatProp=Default  
Area=2975 Section=ASEC1 MatProp=Default  
Area=2976 Section=ASEC1 MatProp=Default  
Area=2977 Section=ASEC1 MatProp=Default  
Area=2978 Section=ASEC1 MatProp=Default  
Area=2979 Section=ASEC1 MatProp=Default  
Area=2980 Section=ASEC1 MatProp=Default  
Area=2981 Section=ASEC1 MatProp=Default  
Area=2982 Section=ASEC1 MatProp=Default  
Area=2983 Section=ASEC1 MatProp=Default  
Area=2984 Section=ASEC1 MatProp=Default  
Area=2985 Section=ASEC1 MatProp=Default  
Area=2986 Section=ASEC1 MatProp=Default  
Area=2987 Section=ASEC1 MatProp=Default  
Area=2988 Section=ASEC1 MatProp=Default  
Area=2989 Section=ASEC1 MatProp=Default  
Area=2990 Section=ASEC1 MatProp=Default  
Area=2991 Section=ASEC1 MatProp=Default  
Area=2992 Section=ASEC1 MatProp=Default  
Area=2993 Section=ASEC1 MatProp=Default  
Area=2994 Section=ASEC1 MatProp=Default  
Area=2995 Section=ASEC1 MatProp=Default  
Area=2996 Section=ASEC1 MatProp=Default  
Area=2997 Section=ASEC1 MatProp=Default  
Area=2998 Section=ASEC1 MatProp=Default  
Area=2999 Section=ASEC1 MatProp=Default  
Area=3000 Section=ASEC1 MatProp=Default  
Area=3001 Section=ASEC1 MatProp=Default  
Area=3002 Section=ASEC1 MatProp=Default  
Area=3003 Section=ASEC1 MatProp=Default  
Area=3004 Section=ASEC1 MatProp=Default  
Area=3005 Section=ASEC1 MatProp=Default  
Area=3006 Section=ASEC1 MatProp=Default  
Area=3007 Section=ASEC1 MatProp=Default  
Area=3008 Section=ASEC1 MatProp=Default  
Area=3009 Section=ASEC1 MatProp=Default  
Area=3010 Section=ASEC1 MatProp=Default  
Area=3011 Section=ASEC1 MatProp=Default  
Area=3012 Section=ASEC1 MatProp=Default  
Area=3013 Section=ASEC1 MatProp=Default  
Area=3014 Section=ASEC1 MatProp=Default  
Area=3015 Section=ASEC1 MatProp=Default







ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA  
FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN  
SAN CRISTÓBAL, EN BOGOTÁ D.C.



Area=3016 Section=ASEC1 MatProp=Default  
Area=3017 Section=ASEC1 MatProp=Default  
Area=3018 Section=ASEC1 MatProp=Default  
Area=3019 Section=ASEC1 MatProp=Default  
Area=3020 Section=ASEC1 MatProp=Default  
Area=3021 Section=ASEC1 MatProp=Default  
Area=3022 Section=ASEC1 MatProp=Default  
Area=3023 Section=ASEC1 MatProp=Default  
Area=3024 Section=ASEC1 MatProp=Default  
Area=3025 Section=ASEC1 MatProp=Default  
Area=3026 Section=ASEC1 MatProp=Default  
Area=3027 Section=ASEC1 MatProp=Default  
Area=3028 Section=ASEC1 MatProp=Default  
Area=3029 Section=ASEC1 MatProp=Default  
Area=3030 Section=ASEC1 MatProp=Default  
Area=3031 Section=ASEC1 MatProp=Default  
Area=3032 Section=ASEC1 MatProp=Default  
Area=3033 Section=ASEC1 MatProp=Default  
Area=3034 Section=ASEC1 MatProp=Default  
Area=3035 Section=ASEC1 MatProp=Default  
Area=3036 Section=ASEC1 MatProp=Default  
Area=3037 Section=ASEC1 MatProp=Default  
Area=3038 Section=ASEC1 MatProp=Default  
Area=3039 Section=ASEC1 MatProp=Default  
Area=3040 Section=ASEC1 MatProp=Default  
Area=3041 Section=ASEC1 MatProp=Default  
Area=3042 Section=ASEC1 MatProp=Default  
Area=3043 Section=ASEC1 MatProp=Default  
Area=3044 Section=ASEC1 MatProp=Default  
Area=3045 Section=ASEC1 MatProp=Default  
Area=3046 Section=ASEC1 MatProp=Default  
Area=3047 Section=ASEC1 MatProp=Default  
Area=3048 Section=ASEC1 MatProp=Default  
Area=3049 Section=ASEC1 MatProp=Default  
Area=3050 Section=ASEC1 MatProp=Default  
Area=3051 Section=ASEC1 MatProp=Default  
Area=3052 Section=ASEC1 MatProp=Default  
Area=3053 Section=ASEC1 MatProp=Default  
Area=3054 Section=ASEC1 MatProp=Default  
Area=3055 Section=ASEC1 MatProp=Default  
Area=3056 Section=ASEC1 MatProp=Default  
Area=3057 Section=ASEC1 MatProp=Default  
Area=3058 Section=ASEC1 MatProp=Default  
Area=3059 Section=ASEC1 MatProp=Default  
Area=3060 Section=ASEC1 MatProp=Default  
Area=3061 Section=ASEC1 MatProp=Default  
Area=3062 Section=ASEC1 MatProp=Default  
Area=3063 Section=ASEC1 MatProp=Default  
Area=3064 Section=ASEC1 MatProp=Default  
Area=3065 Section=ASEC1 MatProp=Default  
Area=3066 Section=ASEC1 MatProp=Default  
Area=3067 Section=ASEC1 MatProp=Default  
Area=3068 Section=ASEC1 MatProp=Default  
Area=3069 Section=ASEC1 MatProp=Default  
Area=3070 Section=ASEC1 MatProp=Default





ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA  
FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN  
SAN CRISTÓBAL, EN BOGOTÁ D.C.



Area=3071 Section=ASEC1 MatProp=Default  
Area=3072 Section=ASEC1 MatProp=Default  
Area=3073 Section=ASEC1 MatProp=Default  
Area=3074 Section=ASEC1 MatProp=Default  
Area=3075 Section=ASEC1 MatProp=Default  
Area=3076 Section=ASEC1 MatProp=Default  
Area=3077 Section=ASEC1 MatProp=Default  
Area=3078 Section=ASEC1 MatProp=Default  
Area=3079 Section=ASEC1 MatProp=Default  
Area=3080 Section=ASEC1 MatProp=Default  
Area=3081 Section=ASEC1 MatProp=Default  
Area=3082 Section=ASEC1 MatProp=Default  
Area=3083 Section=ASEC1 MatProp=Default  
Area=3084 Section=ASEC1 MatProp=Default  
Area=3085 Section=ASEC1 MatProp=Default  
Area=3086 Section=ASEC1 MatProp=Default  
Area=3087 Section=ASEC1 MatProp=Default  
Area=3088 Section=ASEC1 MatProp=Default  
Area=3089 Section=ASEC1 MatProp=Default  
Area=3090 Section=ASEC1 MatProp=Default  
Area=3091 Section=ASEC1 MatProp=Default  
Area=3092 Section=ASEC1 MatProp=Default  
Area=3093 Section=ASEC1 MatProp=Default  
Area=3094 Section=ASEC1 MatProp=Default  
Area=3095 Section=ASEC1 MatProp=Default  
Area=3096 Section=ASEC1 MatProp=Default  
Area=3097 Section=ASEC1 MatProp=Default  
Area=3098 Section=ASEC1 MatProp=Default  
Area=3099 Section=ASEC1 MatProp=Default  
Area=3100 Section=ASEC1 MatProp=Default  
Area=3101 Section=ASEC1 MatProp=Default  
Area=3102 Section=ASEC1 MatProp=Default  
Area=3103 Section=ASEC1 MatProp=Default  
Area=3104 Section=ASEC1 MatProp=Default  
Area=3105 Section=ASEC1 MatProp=Default  
Area=3106 Section=ASEC1 MatProp=Default  
Area=3107 Section=ASEC1 MatProp=Default  
Area=3108 Section=ASEC1 MatProp=Default  
Area=3109 Section=ASEC1 MatProp=Default  
Area=3110 Section=ASEC1 MatProp=Default  
Area=3111 Section=ASEC1 MatProp=Default  
Area=3112 Section=ASEC1 MatProp=Default  
Area=3113 Section=ASEC1 MatProp=Default  
Area=3114 Section=ASEC1 MatProp=Default  
Area=3115 Section=ASEC1 MatProp=Default  
Area=3116 Section=ASEC1 MatProp=Default  
Area=3117 Section=ASEC1 MatProp=Default  
Area=3118 Section=ASEC1 MatProp=Default  
Area=3119 Section=ASEC1 MatProp=Default  
Area=3120 Section=ASEC1 MatProp=Default  
Area=3121 Section=ASEC1 MatProp=Default  
Area=3122 Section=ASEC1 MatProp=Default  
Area=3123 Section=ASEC1 MatProp=Default  
Area=3124 Section=ASEC1 MatProp=Default  
Area=3125 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=3126 Section=ASEC1 MatProp=Default  
 Area=3127 Section=ASEC1 MatProp=Default  
 Area=3128 Section=ASEC1 MatProp=Default  
 Area=3129 Section=ASEC1 MatProp=Default  
 Area=3130 Section=ASEC1 MatProp=Default  
 Area=3131 Section=ASEC1 MatProp=Default  
 Area=3132 Section=ASEC1 MatProp=Default  
 Area=3133 Section=ASEC1 MatProp=Default  
 Area=3134 Section=ASEC1 MatProp=Default  
 Area=3135 Section=ASEC1 MatProp=Default  
 Area=3136 Section=ASEC1 MatProp=Default  
 Area=3137 Section=ASEC1 MatProp=Default  
 Area=3138 Section=ASEC1 MatProp=Default  
 Area=3139 Section=ASEC1 MatProp=Default  
 Area=3140 Section=ASEC1 MatProp=Default  
 Area=3141 Section=ASEC1 MatProp=Default  
 Area=3142 Section=ASEC1 MatProp=Default  
 Area=3143 Section=ASEC1 MatProp=Default  
 Area=3144 Section=ASEC1 MatProp=Default  
 Area=3145 Section=ASEC1 MatProp=Default  
 Area=3146 Section=ASEC1 MatProp=Default  
 Area=3147 Section=ASEC1 MatProp=Default  
 Area=3148 Section=ASEC1 MatProp=Default  
 Area=3149 Section=ASEC1 MatProp=Default  
 Area=3150 Section=ASEC1 MatProp=Default  
 Area=3151 Section=ASEC1 MatProp=Default  
 Area=3152 Section=ASEC1 MatProp=Default  
 Area=3153 Section=ASEC1 MatProp=Default  
 Area=3154 Section=ASEC1 MatProp=Default  
 Area=3155 Section=ASEC1 MatProp=Default  
 Area=3156 Section=ASEC1 MatProp=Default  
 Area=3157 Section=ASEC1 MatProp=Default  
 Area=3158 Section=ASEC1 MatProp=Default  
 Area=3159 Section=ASEC1 MatProp=Default  
 Area=3160 Section=ASEC1 MatProp=Default  
 Area=3161 Section=ASEC1 MatProp=Default  
 Area=3162 Section=ASEC1 MatProp=Default  
 Area=3163 Section=ASEC1 MatProp=Default  
 Area=3164 Section=ASEC1 MatProp=Default  
 Area=3165 Section=ASEC1 MatProp=Default  
 Area=3166 Section=ASEC1 MatProp=Default  
 Area=3167 Section=ASEC1 MatProp=Default  
 Area=3168 Section=ASEC1 MatProp=Default  
 Area=3169 Section=ASEC1 MatProp=Default  
 Area=3170 Section=ASEC1 MatProp=Default  
 Area=3171 Section=ASEC1 MatProp=Default  
 Area=3172 Section=ASEC1 MatProp=Default  
 Area=3173 Section=ASEC1 MatProp=Default  
 Area=3174 Section=ASEC1 MatProp=Default  
 Area=3175 Section=ASEC1 MatProp=Default  
 Area=3176 Section=ASEC1 MatProp=Default  
 Area=3177 Section=ASEC1 MatProp=Default  
 Area=3178 Section=ASEC1 MatProp=Default  
 Area=3179 Section=ASEC1 MatProp=Default  
 Area=3180 Section=ASEC1 MatProp=Default





ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA  
FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN  
SAN CRISTÓBAL, EN BOGOTÁ D.C.



Area=3181 Section=ASEC1 MatProp=Default  
Area=3182 Section=ASEC1 MatProp=Default  
Area=3183 Section=ASEC1 MatProp=Default  
Area=3184 Section=ASEC1 MatProp=Default  
Area=3185 Section=ASEC1 MatProp=Default  
Area=3186 Section=ASEC1 MatProp=Default  
Area=3187 Section=ASEC1 MatProp=Default  
Area=3188 Section=ASEC1 MatProp=Default  
Area=3189 Section=ASEC1 MatProp=Default  
Area=3190 Section=ASEC1 MatProp=Default  
Area=3191 Section=ASEC1 MatProp=Default  
Area=3192 Section=ASEC1 MatProp=Default  
Area=3193 Section=ASEC1 MatProp=Default  
Area=3194 Section=ASEC1 MatProp=Default  
Area=3195 Section=ASEC1 MatProp=Default  
Area=3196 Section=ASEC1 MatProp=Default  
Area=3197 Section=ASEC1 MatProp=Default  
Area=3198 Section=ASEC1 MatProp=Default  
Area=3199 Section=ASEC1 MatProp=Default  
Area=3200 Section=ASEC1 MatProp=Default  
Area=3201 Section=ASEC1 MatProp=Default  
Area=3202 Section=ASEC1 MatProp=Default  
Area=3203 Section=ASEC1 MatProp=Default  
Area=3204 Section=ASEC1 MatProp=Default  
Area=3205 Section=ASEC1 MatProp=Default  
Area=3206 Section=ASEC1 MatProp=Default  
Area=3207 Section=ASEC1 MatProp=Default  
Area=3208 Section=ASEC1 MatProp=Default  
Area=3209 Section=ASEC1 MatProp=Default  
Area=3210 Section=ASEC1 MatProp=Default  
Area=3211 Section=ASEC1 MatProp=Default  
Area=3212 Section=ASEC1 MatProp=Default  
Area=3213 Section=ASEC1 MatProp=Default  
Area=3214 Section=ASEC1 MatProp=Default  
Area=3215 Section=ASEC1 MatProp=Default  
Area=3216 Section=ASEC1 MatProp=Default  
Area=3217 Section=ASEC1 MatProp=Default  
Area=3218 Section=ASEC1 MatProp=Default  
Area=3219 Section=ASEC1 MatProp=Default  
Area=3220 Section=ASEC1 MatProp=Default  
Area=3221 Section=ASEC1 MatProp=Default  
Area=3222 Section=ASEC1 MatProp=Default  
Area=3223 Section=ASEC1 MatProp=Default  
Area=3224 Section=ASEC1 MatProp=Default  
Area=3225 Section=ASEC1 MatProp=Default  
Area=3226 Section=ASEC1 MatProp=Default  
Area=3227 Section=ASEC1 MatProp=Default  
Area=3228 Section=ASEC1 MatProp=Default  
Area=3229 Section=ASEC1 MatProp=Default  
Area=3230 Section=ASEC1 MatProp=Default  
Area=3231 Section=ASEC1 MatProp=Default  
Area=3232 Section=ASEC1 MatProp=Default  
Area=3233 Section=ASEC1 MatProp=Default  
Area=3234 Section=ASEC1 MatProp=Default  
Area=3235 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=3236 Section=ASEC1 MatProp=Default  
 Area=3237 Section=ASEC1 MatProp=Default  
 Area=3238 Section=ASEC1 MatProp=Default  
 Area=3239 Section=ASEC1 MatProp=Default  
 Area=3240 Section=ASEC1 MatProp=Default  
 Area=3241 Section=ASEC1 MatProp=Default  
 Area=3242 Section=ASEC1 MatProp=Default  
 Area=3243 Section=ASEC1 MatProp=Default  
 Area=3244 Section=ASEC1 MatProp=Default  
 Area=3245 Section=ASEC1 MatProp=Default  
 Area=3246 Section=ASEC1 MatProp=Default  
 Area=3247 Section=ASEC1 MatProp=Default  
 Area=3248 Section=ASEC1 MatProp=Default  
 Area=3249 Section=ASEC1 MatProp=Default  
 Area=3250 Section=ASEC1 MatProp=Default  
 Area=3251 Section=ASEC1 MatProp=Default  
 Area=3252 Section=ASEC1 MatProp=Default  
 Area=3253 Section=ASEC1 MatProp=Default  
 Area=3254 Section=ASEC1 MatProp=Default  
 Area=3255 Section=ASEC1 MatProp=Default  
 Area=3256 Section=ASEC1 MatProp=Default  
 Area=3257 Section=ASEC1 MatProp=Default  
 Area=3258 Section=ASEC1 MatProp=Default  
 Area=3259 Section=ASEC1 MatProp=Default  
 Area=3260 Section=ASEC1 MatProp=Default  
 Area=3261 Section=ASEC1 MatProp=Default  
 Area=3262 Section=ASEC1 MatProp=Default  
 Area=3263 Section=ASEC1 MatProp=Default  
 Area=3264 Section=ASEC1 MatProp=Default  
 Area=3265 Section=ASEC1 MatProp=Default  
 Area=3266 Section=ASEC1 MatProp=Default  
 Area=3267 Section=ASEC1 MatProp=Default  
 Area=3268 Section=ASEC1 MatProp=Default  
 Area=3269 Section=ASEC1 MatProp=Default  
 Area=3270 Section=ASEC1 MatProp=Default  
 Area=3271 Section=ASEC1 MatProp=Default  
 Area=3272 Section=ASEC1 MatProp=Default  
 Area=3273 Section=ASEC1 MatProp=Default  
 Area=3274 Section=ASEC1 MatProp=Default  
 Area=3275 Section=ASEC1 MatProp=Default  
 Area=3276 Section=ASEC1 MatProp=Default  
 Area=3277 Section=ASEC1 MatProp=Default  
 Area=3278 Section=ASEC1 MatProp=Default  
 Area=3279 Section=ASEC1 MatProp=Default  
 Area=3280 Section=ASEC1 MatProp=Default  
 Area=3281 Section=ASEC1 MatProp=Default  
 Area=3282 Section=ASEC1 MatProp=Default  
 Area=3283 Section=ASEC1 MatProp=Default  
 Area=3284 Section=ASEC1 MatProp=Default  
 Area=3285 Section=ASEC1 MatProp=Default  
 Area=3286 Section=ASEC1 MatProp=Default  
 Area=3287 Section=ASEC1 MatProp=Default  
 Area=3288 Section=ASEC1 MatProp=Default  
 Area=3289 Section=ASEC1 MatProp=Default  
 Area=3290 Section=ASEC1 MatProp=Default







ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA  
FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN  
SAN CRISTÓBAL, EN BOGOTÁ D.C.



Area=3291 Section=ASEC1 MatProp=Default  
Area=3292 Section=ASEC1 MatProp=Default  
Area=3293 Section=ASEC1 MatProp=Default  
Area=3294 Section=ASEC1 MatProp=Default  
Area=3295 Section=ASEC1 MatProp=Default  
Area=3296 Section=ASEC1 MatProp=Default  
Area=3297 Section=ASEC1 MatProp=Default  
Area=3298 Section=ASEC1 MatProp=Default  
Area=3299 Section=ASEC1 MatProp=Default  
Area=3300 Section=ASEC1 MatProp=Default  
Area=3301 Section=ASEC1 MatProp=Default  
Area=3302 Section=ASEC1 MatProp=Default  
Area=3303 Section=ASEC1 MatProp=Default  
Area=3304 Section=ASEC1 MatProp=Default  
Area=3305 Section=ASEC1 MatProp=Default  
Area=3306 Section=ASEC1 MatProp=Default  
Area=3307 Section=ASEC1 MatProp=Default  
Area=3308 Section=ASEC1 MatProp=Default  
Area=3309 Section=ASEC1 MatProp=Default  
Area=3310 Section=ASEC1 MatProp=Default  
Area=3311 Section=ASEC1 MatProp=Default  
Area=3312 Section=ASEC1 MatProp=Default  
Area=3313 Section=ASEC1 MatProp=Default  
Area=3314 Section=ASEC1 MatProp=Default  
Area=3315 Section=ASEC1 MatProp=Default  
Area=3316 Section=ASEC1 MatProp=Default  
Area=3317 Section=ASEC1 MatProp=Default  
Area=3318 Section=ASEC1 MatProp=Default  
Area=3319 Section=ASEC1 MatProp=Default  
Area=3320 Section=ASEC1 MatProp=Default  
Area=3321 Section=ASEC1 MatProp=Default  
Area=3322 Section=ASEC1 MatProp=Default  
Area=3323 Section=ASEC1 MatProp=Default  
Area=3324 Section=ASEC1 MatProp=Default  
Area=3325 Section=ASEC1 MatProp=Default  
Area=3326 Section=ASEC1 MatProp=Default  
Area=3327 Section=ASEC1 MatProp=Default  
Area=3328 Section=ASEC1 MatProp=Default  
Area=3329 Section=ASEC1 MatProp=Default  
Area=3330 Section=ASEC1 MatProp=Default  
Area=3331 Section=ASEC1 MatProp=Default  
Area=3332 Section=ASEC1 MatProp=Default  
Area=3333 Section=ASEC1 MatProp=Default  
Area=3334 Section=ASEC1 MatProp=Default  
Area=3335 Section=ASEC1 MatProp=Default  
Area=3336 Section=ASEC1 MatProp=Default  
Area=3337 Section=ASEC1 MatProp=Default  
Area=3338 Section=ASEC1 MatProp=Default  
Area=3339 Section=ASEC1 MatProp=Default  
Area=3340 Section=ASEC1 MatProp=Default  
Area=3341 Section=ASEC1 MatProp=Default  
Area=3342 Section=ASEC1 MatProp=Default  
Area=3343 Section=ASEC1 MatProp=Default  
Area=3344 Section=ASEC1 MatProp=Default  
Area=3345 Section=ASEC1 MatProp=Default





|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=3346 Section=ASEC1 MatProp=Default  
 Area=3347 Section=ASEC1 MatProp=Default  
 Area=3348 Section=ASEC1 MatProp=Default  
 Area=3349 Section=ASEC1 MatProp=Default  
 Area=3350 Section=ASEC1 MatProp=Default  
 Area=3351 Section=ASEC1 MatProp=Default  
 Area=3352 Section=ASEC1 MatProp=Default  
 Area=3353 Section=ASEC1 MatProp=Default  
 Area=3354 Section=ASEC1 MatProp=Default  
 Area=3355 Section=ASEC1 MatProp=Default  
 Area=3356 Section=ASEC1 MatProp=Default  
 Area=3357 Section=ASEC1 MatProp=Default  
 Area=3358 Section=ASEC1 MatProp=Default  
 Area=3359 Section=ASEC1 MatProp=Default  
 Area=3360 Section=ASEC1 MatProp=Default  
 Area=3361 Section=ASEC1 MatProp=Default  
 Area=3362 Section=ASEC1 MatProp=Default  
 Area=3363 Section=ASEC1 MatProp=Default  
 Area=3364 Section=ASEC1 MatProp=Default  
 Area=3365 Section=ASEC1 MatProp=Default  
 Area=3366 Section=ASEC1 MatProp=Default  
 Area=3367 Section=ASEC1 MatProp=Default  
 Area=3368 Section=ASEC1 MatProp=Default  
 Area=3369 Section=ASEC1 MatProp=Default  
 Area=3370 Section=ASEC1 MatProp=Default  
 Area=3371 Section=ASEC1 MatProp=Default  
 Area=3372 Section=ASEC1 MatProp=Default  
 Area=3373 Section=ASEC1 MatProp=Default  
 Area=3374 Section=ASEC1 MatProp=Default  
 Area=3375 Section=ASEC1 MatProp=Default  
 Area=3376 Section=ASEC1 MatProp=Default  
 Area=3377 Section=ASEC1 MatProp=Default  
 Area=3378 Section=ASEC1 MatProp=Default  
 Area=3379 Section=ASEC1 MatProp=Default  
 Area=3380 Section=ASEC1 MatProp=Default  
 Area=3381 Section=ASEC1 MatProp=Default  
 Area=3382 Section=ASEC1 MatProp=Default  
 Area=3383 Section=ASEC1 MatProp=Default  
 Area=3384 Section=ASEC1 MatProp=Default  
 Area=3385 Section=ASEC1 MatProp=Default  
 Area=3386 Section=ASEC1 MatProp=Default  
 Area=3387 Section=ASEC1 MatProp=Default  
 Area=3388 Section=ASEC1 MatProp=Default  
 Area=3389 Section=ASEC1 MatProp=Default  
 Area=3390 Section=ASEC1 MatProp=Default  
 Area=3391 Section=ASEC1 MatProp=Default  
 Area=3392 Section=ASEC1 MatProp=Default  
 Area=3393 Section=ASEC1 MatProp=Default  
 Area=3394 Section=ASEC1 MatProp=Default  
 Area=3395 Section=ASEC1 MatProp=Default  
 Area=3396 Section=ASEC1 MatProp=Default  
 Area=3397 Section=ASEC1 MatProp=Default  
 Area=3398 Section=ASEC1 MatProp=Default  
 Area=3399 Section=ASEC1 MatProp=Default  
 Area=3400 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=3401 Section=ASEC1 MatProp=Default  
 Area=3402 Section=ASEC1 MatProp=Default  
 Area=3403 Section=ASEC1 MatProp=Default  
 Area=3404 Section=ASEC1 MatProp=Default  
 Area=3405 Section=ASEC1 MatProp=Default  
 Area=3406 Section=ASEC1 MatProp=Default  
 Area=3407 Section=ASEC1 MatProp=Default  
 Area=3408 Section=ASEC1 MatProp=Default  
 Area=3409 Section=ASEC1 MatProp=Default  
 Area=3410 Section=ASEC1 MatProp=Default  
 Area=3411 Section=ASEC1 MatProp=Default  
 Area=3412 Section=ASEC1 MatProp=Default  
 Area=3413 Section=ASEC1 MatProp=Default  
 Area=3414 Section=ASEC1 MatProp=Default  
 Area=3415 Section=ASEC1 MatProp=Default  
 Area=3416 Section=ASEC1 MatProp=Default  
 Area=3417 Section=ASEC1 MatProp=Default  
 Area=3418 Section=ASEC1 MatProp=Default  
 Area=3419 Section=ASEC1 MatProp=Default  
 Area=3420 Section=ASEC1 MatProp=Default  
 Area=3421 Section=ASEC1 MatProp=Default  
 Area=3422 Section=ASEC1 MatProp=Default  
 Area=3423 Section=ASEC1 MatProp=Default  
 Area=3424 Section=ASEC1 MatProp=Default  
 Area=3425 Section=ASEC1 MatProp=Default  
 Area=3426 Section=ASEC1 MatProp=Default  
 Area=3427 Section=ASEC1 MatProp=Default  
 Area=3428 Section=ASEC1 MatProp=Default  
 Area=3429 Section=ASEC1 MatProp=Default  
 Area=3430 Section=ASEC1 MatProp=Default  
 Area=3431 Section=ASEC1 MatProp=Default  
 Area=3432 Section=ASEC1 MatProp=Default  
 Area=3433 Section=ASEC1 MatProp=Default  
 Area=3434 Section=ASEC1 MatProp=Default  
 Area=3435 Section=ASEC1 MatProp=Default  
 Area=3436 Section=ASEC1 MatProp=Default  
 Area=3437 Section=ASEC1 MatProp=Default  
 Area=3438 Section=ASEC1 MatProp=Default  
 Area=3439 Section=ASEC1 MatProp=Default  
 Area=3440 Section=ASEC1 MatProp=Default  
 Area=3441 Section=ASEC1 MatProp=Default  
 Area=3442 Section=ASEC1 MatProp=Default  
 Area=3443 Section=ASEC1 MatProp=Default  
 Area=3444 Section=ASEC1 MatProp=Default  
 Area=3445 Section=ASEC1 MatProp=Default  
 Area=3446 Section=ASEC1 MatProp=Default  
 Area=3447 Section=ASEC1 MatProp=Default  
 Area=3448 Section=ASEC1 MatProp=Default  
 Area=3449 Section=ASEC1 MatProp=Default  
 Area=3450 Section=ASEC1 MatProp=Default  
 Area=3451 Section=ASEC1 MatProp=Default  
 Area=3452 Section=ASEC1 MatProp=Default  
 Area=3453 Section=ASEC1 MatProp=Default  
 Area=3454 Section=ASEC1 MatProp=Default  
 Area=3455 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=3456 Section=ASEC1 MatProp=Default  
 Area=3457 Section=ASEC1 MatProp=Default  
 Area=3458 Section=ASEC1 MatProp=Default  
 Area=3459 Section=ASEC1 MatProp=Default  
 Area=3460 Section=ASEC1 MatProp=Default  
 Area=3461 Section=ASEC1 MatProp=Default  
 Area=3462 Section=ASEC1 MatProp=Default  
 Area=3463 Section=ASEC1 MatProp=Default  
 Area=3464 Section=ASEC1 MatProp=Default  
 Area=3465 Section=ASEC1 MatProp=Default  
 Area=3466 Section=ASEC1 MatProp=Default  
 Area=3467 Section=ASEC1 MatProp=Default  
 Area=3468 Section=ASEC1 MatProp=Default  
 Area=3469 Section=ASEC1 MatProp=Default  
 Area=3470 Section=ASEC1 MatProp=Default  
 Area=3471 Section=ASEC1 MatProp=Default  
 Area=3472 Section=ASEC1 MatProp=Default  
 Area=3473 Section=ASEC1 MatProp=Default  
 Area=3474 Section=ASEC1 MatProp=Default  
 Area=3475 Section=ASEC1 MatProp=Default  
 Area=3476 Section=ASEC1 MatProp=Default  
 Area=3477 Section=ASEC1 MatProp=Default  
 Area=3478 Section=ASEC1 MatProp=Default  
 Area=3479 Section=ASEC1 MatProp=Default  
 Area=3480 Section=ASEC1 MatProp=Default  
 Area=3481 Section=ASEC1 MatProp=Default  
 Area=3482 Section=ASEC1 MatProp=Default  
 Area=3483 Section=ASEC1 MatProp=Default  
 Area=3484 Section=ASEC1 MatProp=Default  
 Area=3485 Section=ASEC1 MatProp=Default  
 Area=3486 Section=ASEC1 MatProp=Default  
 Area=3487 Section=ASEC1 MatProp=Default  
 Area=3488 Section=ASEC1 MatProp=Default  
 Area=3489 Section=ASEC1 MatProp=Default  
 Area=3490 Section=ASEC1 MatProp=Default  
 Area=3491 Section=ASEC1 MatProp=Default  
 Area=3492 Section=ASEC1 MatProp=Default  
 Area=3493 Section=ASEC1 MatProp=Default  
 Area=3494 Section=ASEC1 MatProp=Default  
 Area=3495 Section=ASEC1 MatProp=Default  
 Area=3496 Section=ASEC1 MatProp=Default  
 Area=3497 Section=ASEC1 MatProp=Default  
 Area=3498 Section=ASEC1 MatProp=Default  
 Area=3499 Section=ASEC1 MatProp=Default  
 Area=3500 Section=ASEC1 MatProp=Default  
 Area=3501 Section=ASEC1 MatProp=Default  
 Area=3502 Section=ASEC1 MatProp=Default  
 Area=3503 Section=ASEC1 MatProp=Default  
 Area=3504 Section=ASEC1 MatProp=Default  
 Area=3505 Section=ASEC1 MatProp=Default  
 Area=3506 Section=ASEC1 MatProp=Default  
 Area=3507 Section=ASEC1 MatProp=Default  
 Area=3508 Section=ASEC1 MatProp=Default  
 Area=3509 Section=ASEC1 MatProp=Default  
 Area=3510 Section=ASEC1 MatProp=Default

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=3511 Section=ASEC1 MatProp=Default  
 Area=3512 Section=ASEC1 MatProp=Default  
 Area=3513 Section=ASEC1 MatProp=Default  
 Area=3514 Section=ASEC1 MatProp=Default  
 Area=3515 Section=ASEC1 MatProp=Default  
 Area=3516 Section=ASEC1 MatProp=Default  
 Area=3517 Section=ASEC1 MatProp=Default  
 Area=3518 Section=ASEC1 MatProp=Default  
 Area=3519 Section=ASEC1 MatProp=Default  
 Area=3520 Section=ASEC1 MatProp=Default  
 Area=3521 Section=ASEC1 MatProp=Default  
 Area=3522 Section=ASEC1 MatProp=Default  
 Area=3523 Section=ASEC1 MatProp=Default  
 Area=3524 Section=ASEC1 MatProp=Default  
 Area=3525 Section=ASEC1 MatProp=Default  
 Area=3526 Section=ASEC1 MatProp=Default  
 Area=3527 Section=ASEC1 MatProp=Default  
 Area=3528 Section=ASEC1 MatProp=Default  
 Area=3529 Section=ASEC1 MatProp=Default  
 Area=3530 Section=ASEC1 MatProp=Default  
 Area=3531 Section=ASEC1 MatProp=Default  
 Area=3532 Section=ASEC1 MatProp=Default  
 Area=3533 Section=ASEC1 MatProp=Default  
 Area=3534 Section=ASEC1 MatProp=Default  
 Area=3535 Section=ASEC1 MatProp=Default  
 Area=3536 Section=ASEC1 MatProp=Default  
 Area=3537 Section=ASEC1 MatProp=Default  
 Area=3538 Section=ASEC1 MatProp=Default  
 Area=3539 Section=ASEC1 MatProp=Default  
 Area=3540 Section=ASEC1 MatProp=Default  
 Area=3541 Section=ASEC1 MatProp=Default  
 Area=3542 Section=ASEC1 MatProp=Default  
 Area=3543 Section=ASEC1 MatProp=Default  
 Area=3544 Section=ASEC1 MatProp=Default  
 Area=3545 Section=ASEC1 MatProp=Default  
 Area=3546 Section=ASEC1 MatProp=Default  
 Area=3547 Section=ASEC1 MatProp=Default  
 Area=3548 Section=ASEC1 MatProp=Default  
 Area=3549 Section=ASEC1 MatProp=Default  
 Area=3550 Section=ASEC1 MatProp=Default  
 Area=3551 Section=ASEC1 MatProp=Default  
 Area=3552 Section=ASEC1 MatProp=Default  
 Area=3553 Section=ASEC1 MatProp=Default  
 Area=3554 Section=ASEC1 MatProp=Default  
 Area=3555 Section=ASEC1 MatProp=Default  
 Area=3556 Section=ASEC1 MatProp=Default  
 Area=3557 Section=ASEC1 MatProp=Default  
 Area=3558 Section=ASEC1 MatProp=Default  
 Area=3559 Section=ASEC1 MatProp=Default  
 Area=3560 Section=ASEC1 MatProp=Default  
 Area=3561 Section=ASEC1 MatProp=Default  
 Area=3562 Section=ASEC1 MatProp=Default  
 Area=3563 Section=ASEC1 MatProp=Default  
 Area=3564 Section=ASEC1 MatProp=Default  
 Area=3565 Section=ASEC1 MatProp=Default

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=3566 Section=ASEC1 MatProp=Default  
 Area=3567 Section=ASEC1 MatProp=Default  
 Area=3568 Section=ASEC1 MatProp=Default  
 Area=3569 Section=ASEC1 MatProp=Default  
 Area=3570 Section=ASEC1 MatProp=Default  
 Area=3571 Section=ASEC1 MatProp=Default  
 Area=3572 Section=ASEC1 MatProp=Default  
 Area=3573 Section=ASEC1 MatProp=Default  
 Area=3574 Section=ASEC1 MatProp=Default  
 Area=3575 Section=ASEC1 MatProp=Default  
 Area=3576 Section=ASEC1 MatProp=Default  
 Area=3577 Section=ASEC1 MatProp=Default  
 Area=3578 Section=ASEC1 MatProp=Default  
 Area=3579 Section=ASEC1 MatProp=Default  
 Area=3580 Section=ASEC1 MatProp=Default  
 Area=3581 Section=ASEC1 MatProp=Default  
 Area=3582 Section=ASEC1 MatProp=Default  
 Area=3583 Section=ASEC1 MatProp=Default  
 Area=3584 Section=ASEC1 MatProp=Default  
 Area=3585 Section=ASEC1 MatProp=Default  
 Area=3586 Section=ASEC1 MatProp=Default  
 Area=3587 Section=ASEC1 MatProp=Default  
 Area=3588 Section=ASEC1 MatProp=Default  
 Area=3589 Section=ASEC1 MatProp=Default  
 Area=3590 Section=ASEC1 MatProp=Default  
 Area=3591 Section=ASEC1 MatProp=Default  
 Area=3592 Section=ASEC1 MatProp=Default  
 Area=3593 Section=ASEC1 MatProp=Default  
 Area=3594 Section=ASEC1 MatProp=Default  
 Area=3595 Section=ASEC1 MatProp=Default  
 Area=3596 Section=ASEC1 MatProp=Default  
 Area=3597 Section=ASEC1 MatProp=Default  
 Area=3598 Section=ASEC1 MatProp=Default  
 Area=3599 Section=ASEC1 MatProp=Default  
 Area=3600 Section=ASEC1 MatProp=Default  
 Area=3601 Section=ASEC1 MatProp=Default  
 Area=3602 Section=ASEC1 MatProp=Default  
 Area=3603 Section=ASEC1 MatProp=Default  
 Area=3604 Section=ASEC1 MatProp=Default  
 Area=3605 Section=ASEC1 MatProp=Default  
 Area=3606 Section=ASEC1 MatProp=Default  
 Area=3607 Section=ASEC1 MatProp=Default  
 Area=3608 Section=ASEC1 MatProp=Default  
 Area=3609 Section=ASEC1 MatProp=Default  
 Area=3610 Section=ASEC1 MatProp=Default  
 Area=3611 Section=ASEC1 MatProp=Default  
 Area=3612 Section=ASEC1 MatProp=Default  
 Area=3613 Section=ASEC1 MatProp=Default  
 Area=3614 Section=ASEC1 MatProp=Default  
 Area=3615 Section=ASEC1 MatProp=Default  
 Area=3616 Section=ASEC1 MatProp=Default  
 Area=3617 Section=ASEC1 MatProp=Default  
 Area=3618 Section=ASEC1 MatProp=Default  
 Area=3619 Section=ASEC1 MatProp=Default  
 Area=3620 Section=ASEC1 MatProp=Default







ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA  
FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN  
SAN CRISTÓBAL, EN BOGOTÁ D.C.



Area=3621 Section=ASEC1 MatProp=Default  
Area=3622 Section=ASEC1 MatProp=Default  
Area=3623 Section=ASEC1 MatProp=Default  
Area=3624 Section=ASEC1 MatProp=Default  
Area=3625 Section=ASEC1 MatProp=Default  
Area=3626 Section=ASEC1 MatProp=Default  
Area=3627 Section=ASEC1 MatProp=Default  
Area=3628 Section=ASEC1 MatProp=Default  
Area=3629 Section=ASEC1 MatProp=Default  
Area=3630 Section=ASEC1 MatProp=Default  
Area=3631 Section=ASEC1 MatProp=Default  
Area=3632 Section=ASEC1 MatProp=Default  
Area=3633 Section=ASEC1 MatProp=Default  
Area=3634 Section=ASEC1 MatProp=Default  
Area=3635 Section=ASEC1 MatProp=Default  
Area=3636 Section=ASEC1 MatProp=Default  
Area=3637 Section=ASEC1 MatProp=Default  
Area=3638 Section=ASEC1 MatProp=Default  
Area=3639 Section=ASEC1 MatProp=Default  
Area=3640 Section=ASEC1 MatProp=Default  
Area=3641 Section=ASEC1 MatProp=Default  
Area=3642 Section=ASEC1 MatProp=Default  
Area=3643 Section=ASEC1 MatProp=Default  
Area=3644 Section=ASEC1 MatProp=Default  
Area=3645 Section=ASEC1 MatProp=Default  
Area=3646 Section=ASEC1 MatProp=Default  
Area=3647 Section=ASEC1 MatProp=Default  
Area=3648 Section=ASEC1 MatProp=Default  
Area=3649 Section=ASEC1 MatProp=Default  
Area=3650 Section=ASEC1 MatProp=Default  
Area=3651 Section=ASEC1 MatProp=Default  
Area=3652 Section=ASEC1 MatProp=Default  
Area=3653 Section=ASEC1 MatProp=Default  
Area=3654 Section=ASEC1 MatProp=Default  
Area=3655 Section=ASEC1 MatProp=Default  
Area=3656 Section=ASEC1 MatProp=Default  
Area=3657 Section=ASEC1 MatProp=Default  
Area=3658 Section=ASEC1 MatProp=Default  
Area=3659 Section=ASEC1 MatProp=Default  
Area=3660 Section=ASEC1 MatProp=Default  
Area=3661 Section=ASEC1 MatProp=Default  
Area=3662 Section=ASEC1 MatProp=Default  
Area=3663 Section=ASEC1 MatProp=Default  
Area=3664 Section=ASEC1 MatProp=Default  
Area=3665 Section=ASEC1 MatProp=Default  
Area=3666 Section=ASEC1 MatProp=Default  
Area=3667 Section=ASEC1 MatProp=Default  
Area=3668 Section=ASEC1 MatProp=Default  
Area=3669 Section=ASEC1 MatProp=Default  
Area=3670 Section=ASEC1 MatProp=Default  
Area=3671 Section=ASEC1 MatProp=Default  
Area=3672 Section=ASEC1 MatProp=Default  
Area=3673 Section=ASEC1 MatProp=Default  
Area=3674 Section=ASEC1 MatProp=Default  
Area=3675 Section=ASEC1 MatProp=Default







ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA  
FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN  
SAN CRISTÓBAL, EN BOGOTÁ D.C.



|           |               |                 |
|-----------|---------------|-----------------|
| Area=3676 | Section=ASEC1 | MatProp=Default |
| Area=3677 | Section=ASEC1 | MatProp=Default |
| Area=3678 | Section=ASEC1 | MatProp=Default |
| Area=3679 | Section=ASEC1 | MatProp=Default |
| Area=3680 | Section=ASEC1 | MatProp=Default |
| Area=3681 | Section=ASEC1 | MatProp=Default |
| Area=3682 | Section=ASEC1 | MatProp=Default |
| Area=3683 | Section=ASEC1 | MatProp=Default |
| Area=3684 | Section=ASEC1 | MatProp=Default |
| Area=3685 | Section=ASEC1 | MatProp=Default |
| Area=3686 | Section=ASEC1 | MatProp=Default |
| Area=3687 | Section=ASEC1 | MatProp=Default |
| Area=3688 | Section=ASEC1 | MatProp=Default |
| Area=3689 | Section=ASEC1 | MatProp=Default |
| Area=3690 | Section=ASEC1 | MatProp=Default |
| Area=3691 | Section=ASEC1 | MatProp=Default |
| Area=3692 | Section=ASEC1 | MatProp=Default |
| Area=3693 | Section=ASEC1 | MatProp=Default |
| Area=3694 | Section=ASEC1 | MatProp=Default |
| Area=3695 | Section=ASEC1 | MatProp=Default |
| Area=3696 | Section=ASEC1 | MatProp=Default |
| Area=3697 | Section=ASEC1 | MatProp=Default |
| Area=3698 | Section=ASEC1 | MatProp=Default |
| Area=3699 | Section=ASEC1 | MatProp=Default |
| Area=3700 | Section=ASEC1 | MatProp=Default |
| Area=3701 | Section=ASEC1 | MatProp=Default |
| Area=3702 | Section=ASEC1 | MatProp=Default |
| Area=3703 | Section=ASEC1 | MatProp=Default |
| Area=3704 | Section=ASEC1 | MatProp=Default |
| Area=3705 | Section=ASEC1 | MatProp=Default |
| Area=3706 | Section=ASEC1 | MatProp=Default |
| Area=3707 | Section=ASEC1 | MatProp=Default |
| Area=3708 | Section=ASEC1 | MatProp=Default |
| Area=3709 | Section=ASEC1 | MatProp=Default |
| Area=3710 | Section=ASEC1 | MatProp=Default |
| Area=3711 | Section=ASEC1 | MatProp=Default |
| Area=3712 | Section=ASEC1 | MatProp=Default |
| Area=3713 | Section=ASEC1 | MatProp=Default |
| Area=3714 | Section=ASEC1 | MatProp=Default |
| Area=3715 | Section=ASEC1 | MatProp=Default |
| Area=3716 | Section=ASEC1 | MatProp=Default |
| Area=3717 | Section=ASEC1 | MatProp=Default |
| Area=3718 | Section=ASEC1 | MatProp=Default |
| Area=3719 | Section=ASEC1 | MatProp=Default |
| Area=3720 | Section=ASEC1 | MatProp=Default |
| Area=3721 | Section=ASEC1 | MatProp=Default |
| Area=3722 | Section=ASEC1 | MatProp=Default |
| Area=3723 | Section=ASEC1 | MatProp=Default |
| Area=3724 | Section=ASEC1 | MatProp=Default |
| Area=3725 | Section=ASEC1 | MatProp=Default |
| Area=3726 | Section=ASEC1 | MatProp=Default |
| Area=3727 | Section=ASEC1 | MatProp=Default |
| Area=3728 | Section=ASEC1 | MatProp=Default |
| Area=3729 | Section=ASEC1 | MatProp=Default |
| Area=3730 | Section=ASEC1 | MatProp=Default |



ALCALDÍA MAYOR  
BOGOTÁ D.C.  
INSTITUTO DE DESARROLLO URBANO



ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA  
FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN  
SAN CRISTÓBAL, EN BOGOTÁ D.C.



Area=3731 Section=ASEC1 MatProp=Default  
Area=3732 Section=ASEC1 MatProp=Default  
Area=3733 Section=ASEC1 MatProp=Default  
Area=3734 Section=ASEC1 MatProp=Default  
Area=3735 Section=ASEC1 MatProp=Default  
Area=3736 Section=ASEC1 MatProp=Default  
Area=3737 Section=ASEC1 MatProp=Default  
Area=3738 Section=ASEC1 MatProp=Default  
Area=3739 Section=ASEC1 MatProp=Default  
Area=3740 Section=ASEC1 MatProp=Default  
Area=3741 Section=ASEC1 MatProp=Default  
Area=3742 Section=ASEC1 MatProp=Default  
Area=3743 Section=ASEC1 MatProp=Default  
Area=3744 Section=ASEC1 MatProp=Default  
Area=3745 Section=ASEC1 MatProp=Default  
Area=3746 Section=ASEC1 MatProp=Default  
Area=3747 Section=ASEC1 MatProp=Default  
Area=3748 Section=ASEC1 MatProp=Default  
Area=3749 Section=ASEC1 MatProp=Default  
Area=3750 Section=ASEC1 MatProp=Default  
Area=3751 Section=ASEC1 MatProp=Default  
Area=3752 Section=ASEC1 MatProp=Default  
Area=3753 Section=ASEC1 MatProp=Default  
Area=3754 Section=ASEC1 MatProp=Default  
Area=3755 Section=ASEC1 MatProp=Default  
Area=3756 Section=ASEC1 MatProp=Default  
Area=3757 Section=ASEC1 MatProp=Default  
Area=3758 Section=ASEC1 MatProp=Default  
Area=3759 Section=ASEC1 MatProp=Default  
Area=3760 Section=ASEC1 MatProp=Default  
Area=3761 Section=ASEC1 MatProp=Default  
Area=3762 Section=ASEC1 MatProp=Default  
Area=3763 Section=ASEC1 MatProp=Default  
Area=3764 Section=ASEC1 MatProp=Default  
Area=3765 Section=ASEC1 MatProp=Default  
Area=3766 Section=ASEC1 MatProp=Default  
Area=3767 Section=ASEC1 MatProp=Default  
Area=3768 Section=ASEC1 MatProp=Default  
Area=3769 Section=ASEC1 MatProp=Default  
Area=3770 Section=ASEC1 MatProp=Default  
Area=3771 Section=ASEC1 MatProp=Default  
Area=3772 Section=ASEC1 MatProp=Default  
Area=3773 Section=ASEC1 MatProp=Default  
Area=3774 Section=ASEC1 MatProp=Default  
Area=3775 Section=ASEC1 MatProp=Default  
Area=3776 Section=ASEC1 MatProp=Default  
Area=3777 Section=ASEC1 MatProp=Default  
Area=3778 Section=ASEC1 MatProp=Default  
Area=3779 Section=ASEC1 MatProp=Default  
Area=3780 Section=ASEC1 MatProp=Default  
Area=3781 Section=ASEC1 MatProp=Default  
Area=3782 Section=ASEC1 MatProp=Default  
Area=3783 Section=ASEC1 MatProp=Default  
Area=3784 Section=ASEC1 MatProp=Default  
Area=3785 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=3786 Section=ASEC1 MatProp=Default  
 Area=3787 Section=ASEC1 MatProp=Default  
 Area=3788 Section=ASEC1 MatProp=Default  
 Area=3789 Section=ASEC1 MatProp=Default  
 Area=3790 Section=ASEC1 MatProp=Default  
 Area=3791 Section=ASEC1 MatProp=Default  
 Area=3792 Section=ASEC1 MatProp=Default  
 Area=3793 Section=ASEC1 MatProp=Default  
 Area=3794 Section=ASEC1 MatProp=Default  
 Area=3795 Section=ASEC1 MatProp=Default  
 Area=3796 Section=ASEC1 MatProp=Default  
 Area=3797 Section=ASEC1 MatProp=Default  
 Area=3798 Section=ASEC1 MatProp=Default  
 Area=3799 Section=ASEC1 MatProp=Default  
 Area=3800 Section=ASEC1 MatProp=Default  
 Area=3801 Section=ASEC1 MatProp=Default  
 Area=3802 Section=ASEC1 MatProp=Default  
 Area=3803 Section=ASEC1 MatProp=Default  
 Area=3804 Section=ASEC1 MatProp=Default  
 Area=3805 Section=ASEC1 MatProp=Default  
 Area=3806 Section=ASEC1 MatProp=Default  
 Area=3807 Section=ASEC1 MatProp=Default  
 Area=3808 Section=ASEC1 MatProp=Default  
 Area=3809 Section=ASEC1 MatProp=Default  
 Area=3810 Section=ASEC1 MatProp=Default  
 Area=3811 Section=ASEC1 MatProp=Default  
 Area=3812 Section=ASEC1 MatProp=Default  
 Area=3813 Section=ASEC1 MatProp=Default  
 Area=3814 Section=ASEC1 MatProp=Default  
 Area=3815 Section=ASEC1 MatProp=Default  
 Area=3816 Section=ASEC1 MatProp=Default  
 Area=3817 Section=ASEC1 MatProp=Default  
 Area=3818 Section=ASEC1 MatProp=Default  
 Area=3819 Section=ASEC1 MatProp=Default  
 Area=3820 Section=ASEC1 MatProp=Default  
 Area=3821 Section=ASEC1 MatProp=Default  
 Area=3822 Section=ASEC1 MatProp=Default  
 Area=3823 Section=ASEC1 MatProp=Default  
 Area=3824 Section=ASEC1 MatProp=Default  
 Area=3825 Section=ASEC1 MatProp=Default  
 Area=3826 Section=ASEC1 MatProp=Default  
 Area=3827 Section=ASEC1 MatProp=Default  
 Area=3828 Section=ASEC1 MatProp=Default  
 Area=3829 Section=ASEC1 MatProp=Default  
 Area=3830 Section=ASEC1 MatProp=Default  
 Area=3831 Section=ASEC1 MatProp=Default  
 Area=3832 Section=ASEC1 MatProp=Default  
 Area=3833 Section=ASEC1 MatProp=Default  
 Area=3834 Section=ASEC1 MatProp=Default  
 Area=3835 Section=ASEC1 MatProp=Default  
 Area=3836 Section=ASEC1 MatProp=Default  
 Area=3837 Section=ASEC1 MatProp=Default  
 Area=3838 Section=ASEC1 MatProp=Default  
 Area=3839 Section=ASEC1 MatProp=Default  
 Area=3840 Section=ASEC1 MatProp=Default





ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA  
FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN  
SAN CRISTÓBAL, EN BOGOTÁ D.C.



|           |               |                 |
|-----------|---------------|-----------------|
| Area=3841 | Section=ASEC1 | MatProp=Default |
| Area=3842 | Section=ASEC1 | MatProp=Default |
| Area=3843 | Section=ASEC1 | MatProp=Default |
| Area=3844 | Section=ASEC1 | MatProp=Default |
| Area=3845 | Section=ASEC1 | MatProp=Default |
| Area=3846 | Section=ASEC1 | MatProp=Default |
| Area=3847 | Section=ASEC1 | MatProp=Default |
| Area=3848 | Section=ASEC1 | MatProp=Default |
| Area=3849 | Section=ASEC1 | MatProp=Default |
| Area=3850 | Section=ASEC1 | MatProp=Default |
| Area=3851 | Section=ASEC1 | MatProp=Default |
| Area=3852 | Section=ASEC1 | MatProp=Default |
| Area=3853 | Section=ASEC1 | MatProp=Default |
| Area=3854 | Section=ASEC1 | MatProp=Default |
| Area=3855 | Section=ASEC1 | MatProp=Default |
| Area=3856 | Section=ASEC1 | MatProp=Default |
| Area=3857 | Section=ASEC1 | MatProp=Default |
| Area=3858 | Section=ASEC1 | MatProp=Default |
| Area=3859 | Section=ASEC1 | MatProp=Default |
| Area=3860 | Section=ASEC1 | MatProp=Default |
| Area=3861 | Section=ASEC1 | MatProp=Default |
| Area=3862 | Section=ASEC1 | MatProp=Default |
| Area=3863 | Section=ASEC1 | MatProp=Default |
| Area=3864 | Section=ASEC1 | MatProp=Default |
| Area=3865 | Section=ASEC1 | MatProp=Default |
| Area=3866 | Section=ASEC1 | MatProp=Default |
| Area=3867 | Section=ASEC1 | MatProp=Default |
| Area=3868 | Section=ASEC1 | MatProp=Default |
| Area=3869 | Section=ASEC1 | MatProp=Default |
| Area=3870 | Section=ASEC1 | MatProp=Default |
| Area=3871 | Section=ASEC1 | MatProp=Default |
| Area=3872 | Section=ASEC1 | MatProp=Default |
| Area=3873 | Section=ASEC1 | MatProp=Default |
| Area=3875 | Section=ASEC1 | MatProp=Default |
| Area=3876 | Section=ASEC1 | MatProp=Default |
| Area=3877 | Section=ASEC1 | MatProp=Default |
| Area=3878 | Section=ASEC1 | MatProp=Default |
| Area=3879 | Section=ASEC1 | MatProp=Default |
| Area=3880 | Section=ASEC1 | MatProp=Default |
| Area=3881 | Section=ASEC1 | MatProp=Default |
| Area=3882 | Section=ASEC1 | MatProp=Default |
| Area=3883 | Section=ASEC1 | MatProp=Default |
| Area=3884 | Section=ASEC1 | MatProp=Default |
| Area=3885 | Section=ASEC1 | MatProp=Default |
| Area=3886 | Section=ASEC1 | MatProp=Default |
| Area=3887 | Section=ASEC1 | MatProp=Default |
| Area=3888 | Section=ASEC1 | MatProp=Default |
| Area=3889 | Section=ASEC1 | MatProp=Default |
| Area=3890 | Section=ASEC1 | MatProp=Default |
| Area=3891 | Section=ASEC1 | MatProp=Default |
| Area=3892 | Section=ASEC1 | MatProp=Default |
| Area=3893 | Section=ASEC1 | MatProp=Default |
| Area=3894 | Section=ASEC1 | MatProp=Default |
| Area=3895 | Section=ASEC1 | MatProp=Default |
| Area=3896 | Section=ASEC1 | MatProp=Default |



ALCALDÍA MAYOR  
BOGOTÁ D.C.  
INSTITUTO DE MOVILIDAD  
INSTITUTO DE Desarrollo Urbano

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=3897 Section=ASEC1 MatProp=Default  
 Area=3898 Section=ASEC1 MatProp=Default  
 Area=3899 Section=ASEC1 MatProp=Default  
 Area=3900 Section=ASEC1 MatProp=Default  
 Area=3901 Section=ASEC1 MatProp=Default  
 Area=3902 Section=ASEC1 MatProp=Default  
 Area=3903 Section=ASEC1 MatProp=Default  
 Area=3904 Section=ASEC1 MatProp=Default  
 Area=3905 Section=ASEC1 MatProp=Default  
 Area=3906 Section=ASEC1 MatProp=Default  
 Area=3907 Section=ASEC1 MatProp=Default  
 Area=3908 Section=ASEC1 MatProp=Default  
 Area=3909 Section=ASEC1 MatProp=Default  
 Area=3910 Section=ASEC1 MatProp=Default  
 Area=3911 Section=ASEC1 MatProp=Default  
 Area=3912 Section=ASEC1 MatProp=Default  
 Area=3913 Section=ASEC1 MatProp=Default  
 Area=3914 Section=ASEC1 MatProp=Default  
 Area=3915 Section=ASEC1 MatProp=Default  
 Area=3916 Section=ASEC1 MatProp=Default  
 Area=3917 Section=ASEC1 MatProp=Default  
 Area=3918 Section=ASEC1 MatProp=Default  
 Area=3919 Section=ASEC1 MatProp=Default  
 Area=3920 Section=ASEC1 MatProp=Default  
 Area=3921 Section=ASEC1 MatProp=Default  
 Area=3922 Section=ASEC1 MatProp=Default  
 Area=3923 Section=ASEC1 MatProp=Default  
 Area=3924 Section=ASEC1 MatProp=Default  
 Area=3925 Section=ASEC1 MatProp=Default  
 Area=3926 Section=ASEC1 MatProp=Default  
 Area=3927 Section=ASEC1 MatProp=Default  
 Area=3928 Section=ASEC1 MatProp=Default  
 Area=3929 Section=ASEC1 MatProp=Default  
 Area=3930 Section=ASEC1 MatProp=Default  
 Area=3931 Section=ASEC1 MatProp=Default  
 Area=3932 Section=ASEC1 MatProp=Default  
 Area=3933 Section=ASEC1 MatProp=Default  
 Area=3934 Section=ASEC1 MatProp=Default  
 Area=3935 Section=ASEC1 MatProp=Default  
 Area=3936 Section=ASEC1 MatProp=Default  
 Area=3937 Section=ASEC1 MatProp=Default  
 Area=3938 Section=ASEC1 MatProp=Default  
 Area=3939 Section=ASEC1 MatProp=Default  
 Area=3940 Section=ASEC1 MatProp=Default  
 Area=3941 Section=ASEC1 MatProp=Default  
 Area=3942 Section=ASEC1 MatProp=Default  
 Area=3943 Section=ASEC1 MatProp=Default  
 Area=3944 Section=ASEC1 MatProp=Default  
 Area=3945 Section=ASEC1 MatProp=Default  
 Area=3946 Section=ASEC1 MatProp=Default  
 Area=3947 Section=ASEC1 MatProp=Default  
 Area=3948 Section=ASEC1 MatProp=Default  
 Area=3949 Section=ASEC1 MatProp=Default  
 Area=3950 Section=ASEC1 MatProp=Default  
 Area=3951 Section=ASEC1 MatProp=Default





|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=3952 Section=ASEC1 MatProp=Default  
 Area=3953 Section=ASEC1 MatProp=Default  
 Area=3954 Section=ASEC1 MatProp=Default  
 Area=3955 Section=ASEC1 MatProp=Default  
 Area=3956 Section=ASEC1 MatProp=Default  
 Area=3957 Section=ASEC1 MatProp=Default  
 Area=3958 Section=ASEC1 MatProp=Default  
 Area=3959 Section=ASEC1 MatProp=Default  
 Area=3960 Section=ASEC1 MatProp=Default  
 Area=3961 Section=ASEC1 MatProp=Default  
 Area=3962 Section=ASEC1 MatProp=Default  
 Area=3963 Section=ASEC1 MatProp=Default  
 Area=3964 Section=ASEC1 MatProp=Default  
 Area=3965 Section=ASEC1 MatProp=Default  
 Area=3966 Section=ASEC1 MatProp=Default  
 Area=3967 Section=ASEC1 MatProp=Default  
 Area=3968 Section=ASEC1 MatProp=Default  
 Area=3969 Section=ASEC1 MatProp=Default  
 Area=3970 Section=ASEC1 MatProp=Default  
 Area=3971 Section=ASEC1 MatProp=Default  
 Area=3972 Section=ASEC1 MatProp=Default  
 Area=3973 Section=ASEC1 MatProp=Default  
 Area=3974 Section=ASEC1 MatProp=Default  
 Area=3975 Section=ASEC1 MatProp=Default  
 Area=3976 Section=ASEC1 MatProp=Default  
 Area=3977 Section=ASEC1 MatProp=Default  
 Area=3978 Section=ASEC1 MatProp=Default  
 Area=3979 Section=ASEC1 MatProp=Default  
 Area=3980 Section=ASEC1 MatProp=Default  
 Area=3981 Section=ASEC1 MatProp=Default  
 Area=3982 Section=ASEC1 MatProp=Default  
 Area=3983 Section=ASEC1 MatProp=Default  
 Area=3984 Section=ASEC1 MatProp=Default  
 Area=3985 Section=ASEC1 MatProp=Default  
 Area=3986 Section=ASEC1 MatProp=Default  
 Area=3987 Section=ASEC1 MatProp=Default  
 Area=3988 Section=ASEC1 MatProp=Default  
 Area=3989 Section=ASEC1 MatProp=Default  
 Area=3990 Section=ASEC1 MatProp=Default  
 Area=3991 Section=ASEC1 MatProp=Default  
 Area=3992 Section=ASEC1 MatProp=Default  
 Area=3993 Section=ASEC1 MatProp=Default  
 Area=3994 Section=ASEC1 MatProp=Default  
 Area=3995 Section=ASEC1 MatProp=Default  
 Area=3996 Section=ASEC1 MatProp=Default  
 Area=3997 Section=ASEC1 MatProp=Default  
 Area=3998 Section=ASEC1 MatProp=Default  
 Area=3999 Section=ASEC1 MatProp=Default  
 Area=4000 Section=ASEC1 MatProp=Default  
 Area=4001 Section=ASEC1 MatProp=Default  
 Area=4002 Section=ASEC1 MatProp=Default  
 Area=4003 Section=ASEC1 MatProp=Default  
 Area=4004 Section=ASEC1 MatProp=Default  
 Area=4005 Section=ASEC1 MatProp=Default  
 Area=4006 Section=ASEC1 MatProp=Default





|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=4007 Section=ASEC1 MatProp=Default  
 Area=4008 Section=ASEC1 MatProp=Default  
 Area=4009 Section=ASEC1 MatProp=Default  
 Area=4010 Section=ASEC1 MatProp=Default  
 Area=4011 Section=ASEC1 MatProp=Default  
 Area=4012 Section=ASEC1 MatProp=Default  
 Area=4013 Section=ASEC1 MatProp=Default  
 Area=4014 Section=ASEC1 MatProp=Default  
 Area=4015 Section=ASEC1 MatProp=Default  
 Area=4016 Section=ASEC1 MatProp=Default  
 Area=4017 Section=ASEC1 MatProp=Default  
 Area=4018 Section=ASEC1 MatProp=Default  
 Area=4019 Section=ASEC1 MatProp=Default  
 Area=4020 Section=ASEC1 MatProp=Default  
 Area=4021 Section=ASEC1 MatProp=Default  
 Area=4022 Section=ASEC1 MatProp=Default  
 Area=4023 Section=ASEC1 MatProp=Default  
 Area=4024 Section=ASEC1 MatProp=Default  
 Area=4025 Section=ASEC1 MatProp=Default  
 Area=4026 Section=ASEC1 MatProp=Default  
 Area=4027 Section=ASEC1 MatProp=Default  
 Area=4028 Section=ASEC1 MatProp=Default  
 Area=4029 Section=ASEC1 MatProp=Default  
 Area=4030 Section=ASEC1 MatProp=Default  
 Area=4031 Section=ASEC1 MatProp=Default  
 Area=4032 Section=ASEC1 MatProp=Default  
 Area=4033 Section=ASEC1 MatProp=Default  
 Area=4034 Section=ASEC1 MatProp=Default  
 Area=4035 Section=ASEC1 MatProp=Default  
 Area=4036 Section=ASEC1 MatProp=Default  
 Area=4037 Section=ASEC1 MatProp=Default  
 Area=4038 Section=ASEC1 MatProp=Default  
 Area=4039 Section=ASEC1 MatProp=Default  
 Area=4040 Section=ASEC1 MatProp=Default  
 Area=4041 Section=ASEC1 MatProp=Default  
 Area=4042 Section=ASEC1 MatProp=Default  
 Area=4043 Section=ASEC1 MatProp=Default  
 Area=4044 Section=ASEC1 MatProp=Default  
 Area=4045 Section=ASEC1 MatProp=Default  
 Area=4046 Section=ASEC1 MatProp=Default  
 Area=4047 Section=ASEC1 MatProp=Default  
 Area=4048 Section=ASEC1 MatProp=Default  
 Area=4049 Section=ASEC1 MatProp=Default  
 Area=4050 Section=ASEC1 MatProp=Default  
 Area=4051 Section=ASEC1 MatProp=Default  
 Area=4052 Section=ASEC1 MatProp=Default  
 Area=4053 Section=ASEC1 MatProp=Default  
 Area=4054 Section=ASEC1 MatProp=Default  
 Area=4055 Section=ASEC1 MatProp=Default  
 Area=4056 Section=ASEC1 MatProp=Default  
 Area=4057 Section=ASEC1 MatProp=Default  
 Area=4058 Section=ASEC1 MatProp=Default  
 Area=4059 Section=ASEC1 MatProp=Default  
 Area=4060 Section=ASEC1 MatProp=Default  
 Area=4061 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=4062 Section=ASEC1 MatProp=Default  
 Area=4063 Section=ASEC1 MatProp=Default  
 Area=4064 Section=ASEC1 MatProp=Default  
 Area=4065 Section=ASEC1 MatProp=Default  
 Area=4066 Section=ASEC1 MatProp=Default  
 Area=4067 Section=ASEC1 MatProp=Default  
 Area=4068 Section=ASEC1 MatProp=Default  
 Area=4069 Section=ASEC1 MatProp=Default  
 Area=4070 Section=ASEC1 MatProp=Default  
 Area=4071 Section=ASEC1 MatProp=Default  
 Area=4072 Section=ASEC1 MatProp=Default  
 Area=4073 Section=ASEC1 MatProp=Default  
 Area=4074 Section=ASEC1 MatProp=Default  
 Area=4075 Section=ASEC1 MatProp=Default  
 Area=4076 Section=ASEC1 MatProp=Default  
 Area=4077 Section=ASEC1 MatProp=Default  
 Area=4078 Section=ASEC1 MatProp=Default  
 Area=4079 Section=ASEC1 MatProp=Default  
 Area=4080 Section=ASEC1 MatProp=Default  
 Area=4081 Section=ASEC1 MatProp=Default  
 Area=4082 Section=ASEC1 MatProp=Default  
 Area=4083 Section=ASEC1 MatProp=Default  
 Area=4084 Section=ASEC1 MatProp=Default  
 Area=4085 Section=ASEC1 MatProp=Default  
 Area=4086 Section=ASEC1 MatProp=Default  
 Area=4087 Section=ASEC1 MatProp=Default  
 Area=4088 Section=ASEC1 MatProp=Default  
 Area=4089 Section=ASEC1 MatProp=Default  
 Area=4090 Section=ASEC1 MatProp=Default  
 Area=4091 Section=ASEC1 MatProp=Default  
 Area=4092 Section=ASEC1 MatProp=Default  
 Area=4093 Section=ASEC1 MatProp=Default  
 Area=4094 Section=ASEC1 MatProp=Default  
 Area=4095 Section=ASEC1 MatProp=Default  
 Area=4096 Section=ASEC1 MatProp=Default  
 Area=4097 Section=ASEC1 MatProp=Default  
 Area=4098 Section=ASEC1 MatProp=Default  
 Area=4099 Section=ASEC1 MatProp=Default  
 Area=4100 Section=ASEC1 MatProp=Default  
 Area=4101 Section=ASEC1 MatProp=Default  
 Area=4102 Section=ASEC1 MatProp=Default  
 Area=4103 Section=ASEC1 MatProp=Default  
 Area=4104 Section=ASEC1 MatProp=Default  
 Area=4105 Section=ASEC1 MatProp=Default  
 Area=4106 Section=ASEC1 MatProp=Default  
 Area=4107 Section=ASEC1 MatProp=Default  
 Area=4108 Section=ASEC1 MatProp=Default  
 Area=4109 Section=ASEC1 MatProp=Default  
 Area=4110 Section=ASEC1 MatProp=Default  
 Area=4111 Section=ASEC1 MatProp=Default  
 Area=4112 Section=ASEC1 MatProp=Default  
 Area=4113 Section=ASEC1 MatProp=Default  
 Area=4114 Section=ASEC1 MatProp=Default  
 Area=4115 Section=ASEC1 MatProp=Default  
 Area=4116 Section=ASEC1 MatProp=Default

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=4117 Section=ASEC1 MatProp=Default  
 Area=4118 Section=ASEC1 MatProp=Default  
 Area=4119 Section=ASEC1 MatProp=Default  
 Area=4120 Section=ASEC1 MatProp=Default  
 Area=4121 Section=ASEC1 MatProp=Default  
 Area=4122 Section=ASEC1 MatProp=Default  
 Area=4123 Section=ASEC1 MatProp=Default  
 Area=4124 Section=ASEC1 MatProp=Default  
 Area=4125 Section=ASEC1 MatProp=Default  
 Area=4126 Section=ASEC1 MatProp=Default  
 Area=4127 Section=ASEC1 MatProp=Default  
 Area=4128 Section=ASEC1 MatProp=Default  
 Area=4129 Section=ASEC1 MatProp=Default  
 Area=4130 Section=ASEC1 MatProp=Default  
 Area=4131 Section=ASEC1 MatProp=Default  
 Area=4132 Section=ASEC1 MatProp=Default  
 Area=4133 Section=ASEC1 MatProp=Default  
 Area=4134 Section=ASEC1 MatProp=Default  
 Area=4135 Section=ASEC1 MatProp=Default  
 Area=4136 Section=ASEC1 MatProp=Default  
 Area=4137 Section=ASEC1 MatProp=Default  
 Area=4138 Section=ASEC1 MatProp=Default  
 Area=4139 Section=ASEC1 MatProp=Default  
 Area=4140 Section=ASEC1 MatProp=Default  
 Area=4141 Section=ASEC1 MatProp=Default  
 Area=4142 Section=ASEC1 MatProp=Default  
 Area=4143 Section=ASEC1 MatProp=Default  
 Area=4144 Section=ASEC1 MatProp=Default  
 Area=4145 Section=ASEC1 MatProp=Default  
 Area=4146 Section=ASEC1 MatProp=Default  
 Area=4147 Section=ASEC1 MatProp=Default  
 Area=4148 Section=ASEC1 MatProp=Default  
 Area=4149 Section=ASEC1 MatProp=Default  
 Area=4150 Section=ASEC1 MatProp=Default  
 Area=4151 Section=ASEC1 MatProp=Default  
 Area=4152 Section=ASEC1 MatProp=Default  
 Area=4153 Section=ASEC1 MatProp=Default  
 Area=4154 Section=ASEC1 MatProp=Default  
 Area=4155 Section=ASEC1 MatProp=Default  
 Area=4156 Section=ASEC1 MatProp=Default  
 Area=4157 Section=ASEC1 MatProp=Default  
 Area=4158 Section=ASEC1 MatProp=Default  
 Area=4159 Section=ASEC1 MatProp=Default  
 Area=4160 Section=ASEC1 MatProp=Default  
 Area=4161 Section=ASEC1 MatProp=Default  
 Area=4162 Section=ASEC1 MatProp=Default  
 Area=4163 Section=ASEC1 MatProp=Default  
 Area=4164 Section=ASEC1 MatProp=Default  
 Area=4165 Section=ASEC1 MatProp=Default  
 Area=4166 Section=ASEC1 MatProp=Default  
 Area=4167 Section=ASEC1 MatProp=Default  
 Area=4168 Section=ASEC1 MatProp=Default  
 Area=4169 Section=ASEC1 MatProp=Default  
 Area=4170 Section=ASEC1 MatProp=Default  
 Area=4171 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=4172 Section=ASEC1 MatProp=Default  
 Area=4173 Section=ASEC1 MatProp=Default  
 Area=4174 Section=ASEC1 MatProp=Default  
 Area=4175 Section=ASEC1 MatProp=Default  
 Area=4176 Section=ASEC1 MatProp=Default  
 Area=4177 Section=ASEC1 MatProp=Default  
 Area=4178 Section=ASEC1 MatProp=Default  
 Area=4179 Section=ASEC1 MatProp=Default  
 Area=4180 Section=ASEC1 MatProp=Default  
 Area=4181 Section=ASEC1 MatProp=Default  
 Area=4182 Section=ASEC1 MatProp=Default  
 Area=4183 Section=ASEC1 MatProp=Default  
 Area=4184 Section=ASEC1 MatProp=Default  
 Area=4185 Section=ASEC1 MatProp=Default  
 Area=4186 Section=ASEC1 MatProp=Default  
 Area=4187 Section=ASEC1 MatProp=Default  
 Area=4188 Section=ASEC1 MatProp=Default  
 Area=4189 Section=ASEC1 MatProp=Default  
 Area=4190 Section=ASEC1 MatProp=Default  
 Area=4191 Section=ASEC1 MatProp=Default  
 Area=4192 Section=ASEC1 MatProp=Default  
 Area=4193 Section=ASEC1 MatProp=Default  
 Area=4194 Section=ASEC1 MatProp=Default  
 Area=4195 Section=ASEC1 MatProp=Default  
 Area=4196 Section=ASEC1 MatProp=Default  
 Area=4197 Section=ASEC1 MatProp=Default  
 Area=4198 Section=ASEC1 MatProp=Default  
 Area=4199 Section=ASEC1 MatProp=Default  
 Area=4200 Section=ASEC1 MatProp=Default  
 Area=4201 Section=ASEC1 MatProp=Default  
 Area=4202 Section=ASEC1 MatProp=Default  
 Area=4203 Section=ASEC1 MatProp=Default  
 Area=4204 Section=ASEC1 MatProp=Default  
 Area=4205 Section=ASEC1 MatProp=Default  
 Area=4206 Section=ASEC1 MatProp=Default  
 Area=4207 Section=ASEC1 MatProp=Default  
 Area=4208 Section=ASEC1 MatProp=Default  
 Area=4209 Section=ASEC1 MatProp=Default  
 Area=4210 Section=ASEC1 MatProp=Default  
 Area=4211 Section=ASEC1 MatProp=Default  
 Area=4212 Section=ASEC1 MatProp=Default  
 Area=4213 Section=ASEC1 MatProp=Default  
 Area=4214 Section=ASEC1 MatProp=Default  
 Area=4215 Section=ASEC1 MatProp=Default  
 Area=4216 Section=ASEC1 MatProp=Default  
 Area=4217 Section=ASEC1 MatProp=Default  
 Area=4218 Section=ASEC1 MatProp=Default  
 Area=4219 Section=ASEC1 MatProp=Default  
 Area=4220 Section=ASEC1 MatProp=Default  
 Area=4221 Section=ASEC1 MatProp=Default  
 Area=4222 Section=ASEC1 MatProp=Default  
 Area=4223 Section=ASEC1 MatProp=Default  
 Area=4224 Section=ASEC1 MatProp=Default  
 Area=4225 Section=ASEC1 MatProp=Default  
 Area=4226 Section=ASEC1 MatProp=Default

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=4227 Section=ASEC1 MatProp=Default  
 Area=4228 Section=ASEC1 MatProp=Default  
 Area=4229 Section=ASEC1 MatProp=Default  
 Area=4230 Section=ASEC1 MatProp=Default  
 Area=4231 Section=ASEC1 MatProp=Default  
 Area=4232 Section=ASEC1 MatProp=Default  
 Area=4233 Section=ASEC1 MatProp=Default  
 Area=4234 Section=ASEC1 MatProp=Default  
 Area=4235 Section=ASEC1 MatProp=Default  
 Area=4236 Section=ASEC1 MatProp=Default  
 Area=4237 Section=ASEC1 MatProp=Default  
 Area=4238 Section=ASEC1 MatProp=Default  
 Area=4239 Section=ASEC1 MatProp=Default  
 Area=4240 Section=ASEC1 MatProp=Default  
 Area=4241 Section=ASEC1 MatProp=Default  
 Area=4242 Section=ASEC1 MatProp=Default  
 Area=4243 Section=ASEC1 MatProp=Default  
 Area=4244 Section=ASEC1 MatProp=Default  
 Area=4245 Section=ASEC1 MatProp=Default  
 Area=4246 Section=ASEC1 MatProp=Default  
 Area=4247 Section=ASEC1 MatProp=Default  
 Area=4248 Section=ASEC1 MatProp=Default  
 Area=4249 Section=ASEC1 MatProp=Default  
 Area=4250 Section=ASEC1 MatProp=Default  
 Area=4251 Section=ASEC1 MatProp=Default  
 Area=4252 Section=ASEC1 MatProp=Default  
 Area=4253 Section=ASEC1 MatProp=Default  
 Area=4254 Section=ASEC1 MatProp=Default  
 Area=4255 Section=ASEC1 MatProp=Default  
 Area=4256 Section=ASEC1 MatProp=Default  
 Area=4257 Section=ASEC1 MatProp=Default  
 Area=4258 Section=ASEC1 MatProp=Default  
 Area=4259 Section=ASEC1 MatProp=Default  
 Area=4260 Section=ASEC1 MatProp=Default  
 Area=4261 Section=ASEC1 MatProp=Default  
 Area=4262 Section=ASEC1 MatProp=Default  
 Area=4263 Section=ASEC1 MatProp=Default  
 Area=4264 Section=ASEC1 MatProp=Default  
 Area=4265 Section=ASEC1 MatProp=Default  
 Area=4266 Section=ASEC1 MatProp=Default  
 Area=4267 Section=ASEC1 MatProp=Default  
 Area=4268 Section=ASEC1 MatProp=Default  
 Area=4269 Section=ASEC1 MatProp=Default  
 Area=4270 Section=ASEC1 MatProp=Default  
 Area=4271 Section=ASEC1 MatProp=Default  
 Area=4272 Section=ASEC1 MatProp=Default  
 Area=4273 Section=ASEC1 MatProp=Default  
 Area=4274 Section=ASEC1 MatProp=Default  
 Area=4275 Section=ASEC1 MatProp=Default  
 Area=4276 Section=ASEC1 MatProp=Default  
 Area=4277 Section=ASEC1 MatProp=Default  
 Area=4278 Section=ASEC1 MatProp=Default  
 Area=4279 Section=ASEC1 MatProp=Default  
 Area=4280 Section=ASEC1 MatProp=Default  
 Area=4281 Section=ASEC1 MatProp=Default





|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=4282 Section=ASEC1 MatProp=Default  
 Area=4283 Section=ASEC1 MatProp=Default  
 Area=4284 Section=ASEC1 MatProp=Default  
 Area=4285 Section=ASEC1 MatProp=Default  
 Area=4286 Section=ASEC1 MatProp=Default  
 Area=4287 Section=ASEC1 MatProp=Default  
 Area=4288 Section=ASEC1 MatProp=Default  
 Area=4289 Section=ASEC1 MatProp=Default  
 Area=4290 Section=ASEC1 MatProp=Default  
 Area=4291 Section=ASEC1 MatProp=Default  
 Area=4292 Section=ASEC1 MatProp=Default  
 Area=4293 Section=ASEC1 MatProp=Default  
 Area=4294 Section=ASEC1 MatProp=Default  
 Area=4295 Section=ASEC1 MatProp=Default  
 Area=4296 Section=ASEC1 MatProp=Default  
 Area=4297 Section=ASEC1 MatProp=Default  
 Area=4298 Section=ASEC1 MatProp=Default  
 Area=4299 Section=ASEC1 MatProp=Default  
 Area=4300 Section=ASEC1 MatProp=Default  
 Area=4301 Section=ASEC1 MatProp=Default  
 Area=4302 Section=ASEC1 MatProp=Default  
 Area=4303 Section=ASEC1 MatProp=Default  
 Area=4304 Section=ASEC1 MatProp=Default  
 Area=4305 Section=ASEC1 MatProp=Default  
 Area=4306 Section=ASEC1 MatProp=Default  
 Area=4307 Section=ASEC1 MatProp=Default  
 Area=4308 Section=ASEC1 MatProp=Default  
 Area=4309 Section=ASEC1 MatProp=Default  
 Area=4310 Section=ASEC1 MatProp=Default  
 Area=4311 Section=ASEC1 MatProp=Default  
 Area=4312 Section=ASEC1 MatProp=Default  
 Area=4313 Section=ASEC1 MatProp=Default  
 Area=4314 Section=ASEC1 MatProp=Default  
 Area=4315 Section=ASEC1 MatProp=Default  
 Area=4316 Section=ASEC1 MatProp=Default  
 Area=4317 Section=ASEC1 MatProp=Default  
 Area=4318 Section=ASEC1 MatProp=Default  
 Area=4319 Section=ASEC1 MatProp=Default  
 Area=4320 Section=ASEC1 MatProp=Default  
 Area=4321 Section=ASEC1 MatProp=Default  
 Area=4322 Section=ASEC1 MatProp=Default  
 Area=4323 Section=ASEC1 MatProp=Default  
 Area=4324 Section=ASEC1 MatProp=Default  
 Area=4325 Section=ASEC1 MatProp=Default  
 Area=4326 Section=ASEC1 MatProp=Default  
 Area=4327 Section=ASEC1 MatProp=Default  
 Area=4328 Section=ASEC1 MatProp=Default  
 Area=4329 Section=ASEC1 MatProp=Default  
 Area=4330 Section=ASEC1 MatProp=Default  
 Area=4331 Section=ASEC1 MatProp=Default  
 Area=4332 Section=ASEC1 MatProp=Default  
 Area=4333 Section=ASEC1 MatProp=Default  
 Area=4334 Section=ASEC1 MatProp=Default  
 Area=4335 Section=ASEC1 MatProp=Default  
 Area=4336 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=4337 Section=ASEC1 MatProp=Default  
 Area=4338 Section=ASEC1 MatProp=Default  
 Area=4339 Section=ASEC1 MatProp=Default  
 Area=4340 Section=ASEC1 MatProp=Default  
 Area=4341 Section=ASEC1 MatProp=Default  
 Area=4342 Section=ASEC1 MatProp=Default  
 Area=4343 Section=ASEC1 MatProp=Default  
 Area=4344 Section=ASEC1 MatProp=Default  
 Area=4345 Section=ASEC1 MatProp=Default  
 Area=4346 Section=ASEC1 MatProp=Default  
 Area=4347 Section=ASEC1 MatProp=Default  
 Area=4348 Section=ASEC1 MatProp=Default  
 Area=4349 Section=ASEC1 MatProp=Default  
 Area=4350 Section=ASEC1 MatProp=Default  
 Area=4351 Section=ASEC1 MatProp=Default  
 Area=4352 Section=ASEC1 MatProp=Default  
 Area=4353 Section=ASEC1 MatProp=Default  
 Area=4354 Section=ASEC1 MatProp=Default  
 Area=4355 Section=ASEC1 MatProp=Default  
 Area=4356 Section=ASEC1 MatProp=Default  
 Area=4357 Section=ASEC1 MatProp=Default  
 Area=4358 Section=ASEC1 MatProp=Default  
 Area=4359 Section=ASEC1 MatProp=Default  
 Area=4360 Section=ASEC1 MatProp=Default  
 Area=4361 Section=ASEC1 MatProp=Default  
 Area=4362 Section=ASEC1 MatProp=Default  
 Area=4363 Section=ASEC1 MatProp=Default  
 Area=4364 Section=ASEC1 MatProp=Default  
 Area=4365 Section=ASEC1 MatProp=Default  
 Area=4366 Section=ASEC1 MatProp=Default  
 Area=4367 Section=ASEC1 MatProp=Default  
 Area=4368 Section=ASEC1 MatProp=Default  
 Area=4369 Section=ASEC1 MatProp=Default  
 Area=4370 Section=ASEC1 MatProp=Default  
 Area=4371 Section=ASEC1 MatProp=Default  
 Area=4372 Section=ASEC1 MatProp=Default  
 Area=4373 Section=ASEC1 MatProp=Default  
 Area=4374 Section=ASEC1 MatProp=Default  
 Area=4375 Section=ASEC1 MatProp=Default  
 Area=4376 Section=ASEC1 MatProp=Default  
 Area=4377 Section=ASEC1 MatProp=Default  
 Area=4378 Section=ASEC1 MatProp=Default  
 Area=4379 Section=ASEC1 MatProp=Default  
 Area=4380 Section=ASEC1 MatProp=Default  
 Area=4381 Section=ASEC1 MatProp=Default  
 Area=4382 Section=ASEC1 MatProp=Default  
 Area=4383 Section=ASEC1 MatProp=Default  
 Area=4384 Section=ASEC1 MatProp=Default  
 Area=4385 Section=ASEC1 MatProp=Default  
 Area=4386 Section=ASEC1 MatProp=Default  
 Area=4387 Section=ASEC1 MatProp=Default  
 Area=4388 Section=ASEC1 MatProp=Default  
 Area=4389 Section=ASEC1 MatProp=Default  
 Area=4390 Section=ASEC1 MatProp=Default  
 Area=4391 Section=ASEC1 MatProp=Default

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=4392 Section=ASEC1 MatProp=Default  
 Area=4393 Section=ASEC1 MatProp=Default  
 Area=4394 Section=ASEC1 MatProp=Default  
 Area=4395 Section=ASEC1 MatProp=Default  
 Area=4396 Section=ASEC1 MatProp=Default  
 Area=4397 Section=ASEC1 MatProp=Default  
 Area=4398 Section=ASEC1 MatProp=Default  
 Area=4399 Section=ASEC1 MatProp=Default  
 Area=4400 Section=ASEC1 MatProp=Default  
 Area=4401 Section=ASEC1 MatProp=Default  
 Area=4402 Section=ASEC1 MatProp=Default  
 Area=4403 Section=ASEC1 MatProp=Default  
 Area=4404 Section=ASEC1 MatProp=Default  
 Area=4405 Section=ASEC1 MatProp=Default  
 Area=4406 Section=ASEC1 MatProp=Default  
 Area=4407 Section=ASEC1 MatProp=Default  
 Area=4408 Section=ASEC1 MatProp=Default  
 Area=4409 Section=ASEC1 MatProp=Default  
 Area=4410 Section=ASEC1 MatProp=Default  
 Area=4411 Section=ASEC1 MatProp=Default  
 Area=4412 Section=ASEC1 MatProp=Default  
 Area=4413 Section=ASEC1 MatProp=Default  
 Area=4414 Section=ASEC1 MatProp=Default  
 Area=4415 Section=ASEC1 MatProp=Default  
 Area=4416 Section=ASEC1 MatProp=Default  
 Area=4417 Section=ASEC1 MatProp=Default  
 Area=4418 Section=ASEC1 MatProp=Default  
 Area=4419 Section=ASEC1 MatProp=Default  
 Area=4420 Section=ASEC1 MatProp=Default  
 Area=4421 Section=ASEC1 MatProp=Default  
 Area=4422 Section=ASEC1 MatProp=Default  
 Area=4423 Section=ASEC1 MatProp=Default  
 Area=4424 Section=ASEC1 MatProp=Default  
 Area=4425 Section=ASEC1 MatProp=Default  
 Area=4426 Section=ASEC1 MatProp=Default  
 Area=4427 Section=ASEC1 MatProp=Default  
 Area=4428 Section=ASEC1 MatProp=Default  
 Area=4429 Section=ASEC1 MatProp=Default  
 Area=4430 Section=ASEC1 MatProp=Default  
 Area=4431 Section=ASEC1 MatProp=Default  
 Area=4432 Section=ASEC1 MatProp=Default  
 Area=4433 Section=ASEC1 MatProp=Default  
 Area=4434 Section=ASEC1 MatProp=Default  
 Area=4435 Section=ASEC1 MatProp=Default  
 Area=4436 Section=ASEC1 MatProp=Default  
 Area=4437 Section=ASEC1 MatProp=Default  
 Area=4438 Section=ASEC1 MatProp=Default  
 Area=4439 Section=ASEC1 MatProp=Default  
 Area=4440 Section=ASEC1 MatProp=Default  
 Area=4441 Section=ASEC1 MatProp=Default  
 Area=4442 Section=ASEC1 MatProp=Default  
 Area=4443 Section=ASEC1 MatProp=Default  
 Area=4444 Section=ASEC1 MatProp=Default  
 Area=4445 Section=ASEC1 MatProp=Default  
 Area=4446 Section=ASEC1 MatProp=Default

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=4447 Section=ASEC1 MatProp=Default  
 Area=4448 Section=ASEC1 MatProp=Default  
 Area=4449 Section=ASEC1 MatProp=Default  
 Area=4450 Section=ASEC1 MatProp=Default  
 Area=4451 Section=ASEC1 MatProp=Default  
 Area=4452 Section=ASEC1 MatProp=Default  
 Area=4453 Section=ASEC1 MatProp=Default  
 Area=4454 Section=ASEC1 MatProp=Default  
 Area=4455 Section=ASEC1 MatProp=Default  
 Area=4456 Section=ASEC1 MatProp=Default  
 Area=4457 Section=ASEC1 MatProp=Default  
 Area=4458 Section=ASEC1 MatProp=Default  
 Area=4459 Section=ASEC1 MatProp=Default  
 Area=4460 Section=ASEC1 MatProp=Default  
 Area=4461 Section=ASEC1 MatProp=Default  
 Area=4462 Section=ASEC1 MatProp=Default  
 Area=4463 Section=ASEC1 MatProp=Default  
 Area=4464 Section=ASEC1 MatProp=Default  
 Area=4465 Section=ASEC1 MatProp=Default  
 Area=4466 Section=ASEC1 MatProp=Default  
 Area=4467 Section=ASEC1 MatProp=Default  
 Area=4468 Section=ASEC1 MatProp=Default  
 Area=4469 Section=ASEC1 MatProp=Default  
 Area=4470 Section=ASEC1 MatProp=Default  
 Area=4471 Section=ASEC1 MatProp=Default  
 Area=4472 Section=ASEC1 MatProp=Default  
 Area=4473 Section=ASEC1 MatProp=Default  
 Area=4474 Section=ASEC1 MatProp=Default  
 Area=4475 Section=ASEC1 MatProp=Default  
 Area=4476 Section=ASEC1 MatProp=Default  
 Area=4477 Section=ASEC1 MatProp=Default  
 Area=4478 Section=ASEC1 MatProp=Default  
 Area=4479 Section=ASEC1 MatProp=Default  
 Area=4480 Section=ASEC1 MatProp=Default  
 Area=4481 Section=ASEC1 MatProp=Default  
 Area=4482 Section=ASEC1 MatProp=Default  
 Area=4483 Section=ASEC1 MatProp=Default  
 Area=4484 Section=ASEC1 MatProp=Default  
 Area=4485 Section=ASEC1 MatProp=Default  
 Area=4486 Section=ASEC1 MatProp=Default  
 Area=4487 Section=ASEC1 MatProp=Default  
 Area=4488 Section=ASEC1 MatProp=Default  
 Area=4489 Section=ASEC1 MatProp=Default  
 Area=4490 Section=ASEC1 MatProp=Default  
 Area=4491 Section=ASEC1 MatProp=Default  
 Area=4492 Section=ASEC1 MatProp=Default  
 Area=4493 Section=ASEC1 MatProp=Default  
 Area=4494 Section=ASEC1 MatProp=Default  
 Area=4495 Section=ASEC1 MatProp=Default  
 Area=4496 Section=ASEC1 MatProp=Default  
 Area=4497 Section=ASEC1 MatProp=Default  
 Area=4498 Section=ASEC1 MatProp=Default  
 Area=4499 Section=ASEC1 MatProp=Default  
 Area=4500 Section=ASEC1 MatProp=Default  
 Area=4501 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=4502 Section=ASEC1 MatProp=Default  
 Area=4503 Section=ASEC1 MatProp=Default  
 Area=4504 Section=ASEC1 MatProp=Default  
 Area=4505 Section=ASEC1 MatProp=Default  
 Area=4506 Section=ASEC1 MatProp=Default  
 Area=4507 Section=ASEC1 MatProp=Default  
 Area=4508 Section=ASEC1 MatProp=Default  
 Area=4509 Section=ASEC1 MatProp=Default  
 Area=4510 Section=ASEC1 MatProp=Default  
 Area=4511 Section=ASEC1 MatProp=Default  
 Area=4512 Section=ASEC1 MatProp=Default  
 Area=4513 Section=ASEC1 MatProp=Default  
 Area=4514 Section=ASEC1 MatProp=Default  
 Area=4515 Section=ASEC1 MatProp=Default  
 Area=4516 Section=ASEC1 MatProp=Default  
 Area=4517 Section=ASEC1 MatProp=Default  
 Area=4518 Section=ASEC1 MatProp=Default  
 Area=4519 Section=ASEC1 MatProp=Default  
 Area=4520 Section=ASEC1 MatProp=Default  
 Area=4521 Section=ASEC1 MatProp=Default  
 Area=4522 Section=ASEC1 MatProp=Default  
 Area=4523 Section=ASEC1 MatProp=Default  
 Area=4524 Section=ASEC1 MatProp=Default  
 Area=4525 Section=ASEC1 MatProp=Default  
 Area=4526 Section=ASEC1 MatProp=Default  
 Area=4527 Section=ASEC1 MatProp=Default  
 Area=4528 Section=ASEC1 MatProp=Default  
 Area=4529 Section=ASEC1 MatProp=Default  
 Area=4530 Section=ASEC1 MatProp=Default  
 Area=4531 Section=ASEC1 MatProp=Default  
 Area=4532 Section=ASEC1 MatProp=Default  
 Area=4533 Section=ASEC1 MatProp=Default  
 Area=4534 Section=ASEC1 MatProp=Default  
 Area=4535 Section=ASEC1 MatProp=Default  
 Area=4536 Section=ASEC1 MatProp=Default  
 Area=4537 Section=ASEC1 MatProp=Default  
 Area=4538 Section=ASEC1 MatProp=Default  
 Area=4539 Section=ASEC1 MatProp=Default  
 Area=4540 Section=ASEC1 MatProp=Default  
 Area=4541 Section=ASEC1 MatProp=Default  
 Area=4542 Section=ASEC1 MatProp=Default  
 Area=4543 Section=ASEC1 MatProp=Default  
 Area=4544 Section=ASEC1 MatProp=Default  
 Area=4545 Section=ASEC1 MatProp=Default  
 Area=4546 Section=ASEC1 MatProp=Default  
 Area=4547 Section=ASEC1 MatProp=Default  
 Area=4548 Section=ASEC1 MatProp=Default  
 Area=4549 Section=ASEC1 MatProp=Default  
 Area=4550 Section=ASEC1 MatProp=Default  
 Area=4551 Section=ASEC1 MatProp=Default  
 Area=4552 Section=ASEC1 MatProp=Default  
 Area=4553 Section=ASEC1 MatProp=Default  
 Area=4554 Section=ASEC1 MatProp=Default  
 Area=4555 Section=ASEC1 MatProp=Default  
 Area=4556 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=4557 Section=ASEC1 MatProp=Default  
 Area=4558 Section=ASEC1 MatProp=Default  
 Area=4559 Section=ASEC1 MatProp=Default  
 Area=4560 Section=ASEC1 MatProp=Default  
 Area=4561 Section=ASEC1 MatProp=Default  
 Area=4562 Section=ASEC1 MatProp=Default  
 Area=4563 Section=ASEC1 MatProp=Default  
 Area=4564 Section=ASEC1 MatProp=Default  
 Area=4565 Section=ASEC1 MatProp=Default  
 Area=4566 Section=ASEC1 MatProp=Default  
 Area=4567 Section=ASEC1 MatProp=Default  
 Area=4568 Section=ASEC1 MatProp=Default  
 Area=4569 Section=ASEC1 MatProp=Default  
 Area=4570 Section=ASEC1 MatProp=Default  
 Area=4571 Section=ASEC1 MatProp=Default  
 Area=4572 Section=ASEC1 MatProp=Default  
 Area=4573 Section=ASEC1 MatProp=Default  
 Area=4574 Section=ASEC1 MatProp=Default  
 Area=4575 Section=ASEC1 MatProp=Default  
 Area=4576 Section=ASEC1 MatProp=Default  
 Area=4577 Section=ASEC1 MatProp=Default  
 Area=4578 Section=ASEC1 MatProp=Default  
 Area=4579 Section=ASEC1 MatProp=Default  
 Area=4580 Section=ASEC1 MatProp=Default  
 Area=4581 Section=ASEC1 MatProp=Default  
 Area=4582 Section=ASEC1 MatProp=Default  
 Area=4583 Section=ASEC1 MatProp=Default  
 Area=4584 Section=ASEC1 MatProp=Default  
 Area=4585 Section=ASEC1 MatProp=Default  
 Area=4586 Section=ASEC1 MatProp=Default  
 Area=4587 Section=ASEC1 MatProp=Default  
 Area=4588 Section=ASEC1 MatProp=Default  
 Area=4589 Section=ASEC1 MatProp=Default  
 Area=4590 Section=ASEC1 MatProp=Default  
 Area=4591 Section=ASEC1 MatProp=Default  
 Area=4592 Section=ASEC1 MatProp=Default  
 Area=4593 Section=ASEC1 MatProp=Default  
 Area=4594 Section=ASEC1 MatProp=Default  
 Area=4595 Section=ASEC1 MatProp=Default  
 Area=4596 Section=ASEC1 MatProp=Default  
 Area=4597 Section=ASEC1 MatProp=Default  
 Area=4598 Section=ASEC1 MatProp=Default  
 Area=4599 Section=ASEC1 MatProp=Default  
 Area=4600 Section=ASEC1 MatProp=Default  
 Area=4601 Section=ASEC1 MatProp=Default  
 Area=4602 Section=ASEC1 MatProp=Default  
 Area=4603 Section=ASEC1 MatProp=Default  
 Area=4604 Section=ASEC1 MatProp=Default  
 Area=4605 Section=ASEC1 MatProp=Default  
 Area=4606 Section=ASEC1 MatProp=Default  
 Area=4607 Section=ASEC1 MatProp=Default  
 Area=4608 Section=ASEC1 MatProp=Default  
 Area=4609 Section=ASEC1 MatProp=Default  
 Area=4610 Section=ASEC1 MatProp=Default  
 Area=4611 Section=ASEC1 MatProp=Default





|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=4612 Section=ASEC1 MatProp=Default  
 Area=4613 Section=ASEC1 MatProp=Default  
 Area=4614 Section=ASEC1 MatProp=Default  
 Area=4615 Section=ASEC1 MatProp=Default  
 Area=4616 Section=ASEC1 MatProp=Default  
 Area=4617 Section=ASEC1 MatProp=Default  
 Area=4618 Section=ASEC1 MatProp=Default  
 Area=4619 Section=ASEC1 MatProp=Default  
 Area=4620 Section=ASEC1 MatProp=Default  
 Area=4621 Section=ASEC1 MatProp=Default  
 Area=4622 Section=ASEC1 MatProp=Default  
 Area=4623 Section=ASEC1 MatProp=Default  
 Area=4624 Section=ASEC1 MatProp=Default  
 Area=4625 Section=ASEC1 MatProp=Default  
 Area=4626 Section=ASEC1 MatProp=Default  
 Area=4627 Section=ASEC1 MatProp=Default  
 Area=4628 Section=ASEC1 MatProp=Default  
 Area=4629 Section=ASEC1 MatProp=Default  
 Area=4630 Section=ASEC1 MatProp=Default  
 Area=4631 Section=ASEC1 MatProp=Default  
 Area=4632 Section=ASEC1 MatProp=Default  
 Area=4633 Section=ASEC1 MatProp=Default  
 Area=4634 Section=ASEC1 MatProp=Default  
 Area=4635 Section=ASEC1 MatProp=Default  
 Area=4636 Section=ASEC1 MatProp=Default  
 Area=4637 Section=ASEC1 MatProp=Default  
 Area=4638 Section=ASEC1 MatProp=Default  
 Area=4639 Section=ASEC1 MatProp=Default  
 Area=4640 Section=ASEC1 MatProp=Default  
 Area=4641 Section=ASEC1 MatProp=Default  
 Area=4642 Section=ASEC1 MatProp=Default  
 Area=4643 Section=ASEC1 MatProp=Default  
 Area=4644 Section=ASEC1 MatProp=Default  
 Area=4645 Section=ASEC1 MatProp=Default  
 Area=4646 Section=ASEC1 MatProp=Default  
 Area=4647 Section=ASEC1 MatProp=Default  
 Area=4648 Section=ASEC1 MatProp=Default  
 Area=4649 Section=ASEC1 MatProp=Default  
 Area=4650 Section=ASEC1 MatProp=Default  
 Area=4651 Section=ASEC1 MatProp=Default  
 Area=4652 Section=ASEC1 MatProp=Default  
 Area=4653 Section=ASEC1 MatProp=Default  
 Area=4654 Section=ASEC1 MatProp=Default  
 Area=4655 Section=ASEC1 MatProp=Default  
 Area=4656 Section=ASEC1 MatProp=Default  
 Area=4657 Section=ASEC1 MatProp=Default  
 Area=4658 Section=ASEC1 MatProp=Default  
 Area=4659 Section=ASEC1 MatProp=Default  
 Area=4660 Section=ASEC1 MatProp=Default  
 Area=4661 Section=ASEC1 MatProp=Default  
 Area=4662 Section=ASEC1 MatProp=Default  
 Area=4663 Section=ASEC1 MatProp=Default  
 Area=4664 Section=ASEC1 MatProp=Default  
 Area=4665 Section=ASEC1 MatProp=Default  
 Area=4666 Section=ASEC1 MatProp=Default





|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=4667 Section=ASEC1 MatProp=Default  
 Area=4668 Section=ASEC1 MatProp=Default  
 Area=4669 Section=ASEC1 MatProp=Default  
 Area=4670 Section=ASEC1 MatProp=Default  
 Area=4671 Section=ASEC1 MatProp=Default  
 Area=4672 Section=ASEC1 MatProp=Default  
 Area=4673 Section=ASEC1 MatProp=Default  
 Area=4674 Section=ASEC1 MatProp=Default  
 Area=4675 Section=ASEC1 MatProp=Default  
 Area=4676 Section=ASEC1 MatProp=Default  
 Area=4677 Section=ASEC1 MatProp=Default  
 Area=4678 Section=ASEC1 MatProp=Default  
 Area=4679 Section=ASEC1 MatProp=Default  
 Area=4680 Section=ASEC1 MatProp=Default  
 Area=4681 Section=ASEC1 MatProp=Default  
 Area=4682 Section=ASEC1 MatProp=Default  
 Area=4683 Section=ASEC1 MatProp=Default  
 Area=4684 Section=ASEC1 MatProp=Default  
 Area=4685 Section=ASEC1 MatProp=Default  
 Area=4686 Section=ASEC1 MatProp=Default  
 Area=4687 Section=ASEC1 MatProp=Default  
 Area=4688 Section=ASEC1 MatProp=Default  
 Area=4689 Section=ASEC1 MatProp=Default  
 Area=4690 Section=ASEC1 MatProp=Default  
 Area=4691 Section=ASEC1 MatProp=Default  
 Area=4692 Section=ASEC1 MatProp=Default  
 Area=4693 Section=ASEC1 MatProp=Default  
 Area=4694 Section=ASEC1 MatProp=Default  
 Area=4695 Section=ASEC1 MatProp=Default  
 Area=4696 Section=ASEC1 MatProp=Default  
 Area=4697 Section=ASEC1 MatProp=Default  
 Area=4698 Section=ASEC1 MatProp=Default  
 Area=4699 Section=ASEC1 MatProp=Default  
 Area=4700 Section=ASEC1 MatProp=Default  
 Area=4701 Section=ASEC1 MatProp=Default  
 Area=4702 Section=ASEC1 MatProp=Default  
 Area=4703 Section=ASEC1 MatProp=Default  
 Area=4704 Section=ASEC1 MatProp=Default  
 Area=4705 Section=ASEC1 MatProp=Default  
 Area=4706 Section=ASEC1 MatProp=Default  
 Area=4707 Section=ASEC1 MatProp=Default  
 Area=4708 Section=ASEC1 MatProp=Default  
 Area=4709 Section=ASEC1 MatProp=Default  
 Area=4710 Section=ASEC1 MatProp=Default  
 Area=4711 Section=ASEC1 MatProp=Default  
 Area=4712 Section=ASEC1 MatProp=Default  
 Area=4713 Section=ASEC1 MatProp=Default  
 Area=4714 Section=ASEC1 MatProp=Default  
 Area=4715 Section=ASEC1 MatProp=Default  
 Area=4716 Section=ASEC1 MatProp=Default  
 Area=4717 Section=ASEC1 MatProp=Default  
 Area=4718 Section=ASEC1 MatProp=Default  
 Area=4719 Section=ASEC1 MatProp=Default  
 Area=4720 Section=ASEC1 MatProp=Default  
 Area=4721 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=4722 Section=ASEC1 MatProp=Default  
 Area=4723 Section=ASEC1 MatProp=Default  
 Area=4724 Section=ASEC1 MatProp=Default  
 Area=4725 Section=ASEC1 MatProp=Default  
 Area=4726 Section=ASEC1 MatProp=Default  
 Area=4727 Section=ASEC1 MatProp=Default  
 Area=4728 Section=ASEC1 MatProp=Default  
 Area=4729 Section=ASEC1 MatProp=Default  
 Area=4730 Section=ASEC1 MatProp=Default  
 Area=4731 Section=ASEC1 MatProp=Default  
 Area=4732 Section=ASEC1 MatProp=Default  
 Area=4733 Section=ASEC1 MatProp=Default  
 Area=4734 Section=ASEC1 MatProp=Default  
 Area=4735 Section=ASEC1 MatProp=Default  
 Area=4736 Section=ASEC1 MatProp=Default  
 Area=4737 Section=ASEC1 MatProp=Default  
 Area=4738 Section=ASEC1 MatProp=Default  
 Area=4739 Section=ASEC1 MatProp=Default  
 Area=4740 Section=ASEC1 MatProp=Default  
 Area=4741 Section=ASEC1 MatProp=Default  
 Area=4742 Section=ASEC1 MatProp=Default  
 Area=4743 Section=ASEC1 MatProp=Default  
 Area=4744 Section=ASEC1 MatProp=Default  
 Area=4745 Section=ASEC1 MatProp=Default  
 Area=4746 Section=ASEC1 MatProp=Default  
 Area=4747 Section=ASEC1 MatProp=Default  
 Area=4748 Section=ASEC1 MatProp=Default  
 Area=4749 Section=ASEC1 MatProp=Default  
 Area=4750 Section=ASEC1 MatProp=Default  
 Area=4751 Section=ASEC1 MatProp=Default  
 Area=4752 Section=ASEC1 MatProp=Default  
 Area=4753 Section=ASEC1 MatProp=Default  
 Area=4754 Section=ASEC1 MatProp=Default  
 Area=4755 Section=ASEC1 MatProp=Default  
 Area=4756 Section=ASEC1 MatProp=Default  
 Area=4757 Section=ASEC1 MatProp=Default  
 Area=4758 Section=ASEC1 MatProp=Default  
 Area=4759 Section=ASEC1 MatProp=Default  
 Area=4760 Section=ASEC1 MatProp=Default  
 Area=4761 Section=ASEC1 MatProp=Default  
 Area=4762 Section=ASEC1 MatProp=Default  
 Area=4763 Section=ASEC1 MatProp=Default  
 Area=4764 Section=ASEC1 MatProp=Default  
 Area=4765 Section=ASEC1 MatProp=Default  
 Area=4766 Section=ASEC1 MatProp=Default  
 Area=4767 Section=ASEC1 MatProp=Default  
 Area=4768 Section=ASEC1 MatProp=Default  
 Area=4769 Section=ASEC1 MatProp=Default  
 Area=4770 Section=ASEC1 MatProp=Default  
 Area=4771 Section=ASEC1 MatProp=Default  
 Area=4772 Section=ASEC1 MatProp=Default  
 Area=4773 Section=ASEC1 MatProp=Default  
 Area=4774 Section=ASEC1 MatProp=Default  
 Area=4775 Section=ASEC1 MatProp=Default  
 Area=4776 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=4777 Section=ASEC1 MatProp=Default  
 Area=4778 Section=ASEC1 MatProp=Default  
 Area=4779 Section=ASEC1 MatProp=Default  
 Area=4780 Section=ASEC1 MatProp=Default  
 Area=4781 Section=ASEC1 MatProp=Default  
 Area=4782 Section=ASEC1 MatProp=Default  
 Area=4783 Section=ASEC1 MatProp=Default  
 Area=4784 Section=ASEC1 MatProp=Default  
 Area=4785 Section=ASEC1 MatProp=Default  
 Area=4786 Section=ASEC1 MatProp=Default  
 Area=4787 Section=ASEC1 MatProp=Default  
 Area=4788 Section=ASEC1 MatProp=Default  
 Area=4789 Section=ASEC1 MatProp=Default  
 Area=4790 Section=ASEC1 MatProp=Default  
 Area=4791 Section=ASEC1 MatProp=Default  
 Area=4792 Section=ASEC1 MatProp=Default  
 Area=4793 Section=ASEC1 MatProp=Default  
 Area=4794 Section=ASEC1 MatProp=Default  
 Area=4795 Section=ASEC1 MatProp=Default  
 Area=4796 Section=ASEC1 MatProp=Default  
 Area=4797 Section=ASEC1 MatProp=Default  
 Area=4798 Section=ASEC1 MatProp=Default  
 Area=4799 Section=ASEC1 MatProp=Default  
 Area=4800 Section=ASEC1 MatProp=Default  
 Area=4801 Section=ASEC1 MatProp=Default  
 Area=4802 Section=ASEC1 MatProp=Default  
 Area=4803 Section=ASEC1 MatProp=Default  
 Area=4804 Section=ASEC1 MatProp=Default  
 Area=4805 Section=ASEC1 MatProp=Default  
 Area=4806 Section=ASEC1 MatProp=Default  
 Area=4807 Section=ASEC1 MatProp=Default  
 Area=4808 Section=ASEC1 MatProp=Default  
 Area=4809 Section=ASEC1 MatProp=Default  
 Area=4810 Section=ASEC1 MatProp=Default  
 Area=4811 Section=ASEC1 MatProp=Default  
 Area=4812 Section=ASEC1 MatProp=Default  
 Area=4813 Section=ASEC1 MatProp=Default  
 Area=4814 Section=ASEC1 MatProp=Default  
 Area=4815 Section=ASEC1 MatProp=Default  
 Area=4816 Section=ASEC1 MatProp=Default  
 Area=4817 Section=ASEC1 MatProp=Default  
 Area=4818 Section=ASEC1 MatProp=Default  
 Area=4819 Section=ASEC1 MatProp=Default  
 Area=4820 Section=ASEC1 MatProp=Default  
 Area=4821 Section=ASEC1 MatProp=Default  
 Area=4822 Section=ASEC1 MatProp=Default  
 Area=4823 Section=ASEC1 MatProp=Default  
 Area=4824 Section=ASEC1 MatProp=Default  
 Area=4825 Section=ASEC1 MatProp=Default  
 Area=4826 Section=ASEC1 MatProp=Default  
 Area=4827 Section=ASEC1 MatProp=Default  
 Area=4828 Section=ASEC1 MatProp=Default  
 Area=4829 Section=ASEC1 MatProp=Default  
 Area=4830 Section=ASEC1 MatProp=Default  
 Area=4831 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=4832 Section=ASEC1 MatProp=Default  
 Area=4833 Section=ASEC1 MatProp=Default  
 Area=4834 Section=ASEC1 MatProp=Default  
 Area=4835 Section=ASEC1 MatProp=Default  
 Area=4836 Section=ASEC1 MatProp=Default  
 Area=4837 Section=ASEC1 MatProp=Default  
 Area=4838 Section=ASEC1 MatProp=Default  
 Area=4839 Section=ASEC1 MatProp=Default  
 Area=4840 Section=ASEC1 MatProp=Default  
 Area=4841 Section=ASEC1 MatProp=Default  
 Area=4842 Section=ASEC1 MatProp=Default  
 Area=4843 Section=ASEC1 MatProp=Default  
 Area=4844 Section=ASEC1 MatProp=Default  
 Area=4845 Section=ASEC1 MatProp=Default  
 Area=4846 Section=ASEC1 MatProp=Default  
 Area=4847 Section=ASEC1 MatProp=Default  
 Area=4848 Section=ASEC1 MatProp=Default  
 Area=4849 Section=ASEC1 MatProp=Default  
 Area=4850 Section=ASEC1 MatProp=Default  
 Area=4851 Section=ASEC1 MatProp=Default  
 Area=4852 Section=ASEC1 MatProp=Default  
 Area=4853 Section=ASEC1 MatProp=Default  
 Area=4854 Section=ASEC1 MatProp=Default  
 Area=4855 Section=ASEC1 MatProp=Default  
 Area=4856 Section=ASEC1 MatProp=Default  
 Area=4857 Section=ASEC1 MatProp=Default  
 Area=4858 Section=ASEC1 MatProp=Default  
 Area=4859 Section=ASEC1 MatProp=Default  
 Area=4860 Section=ASEC1 MatProp=Default  
 Area=4861 Section=ASEC1 MatProp=Default  
 Area=4862 Section=ASEC1 MatProp=Default  
 Area=4863 Section=ASEC1 MatProp=Default  
 Area=4864 Section=ASEC1 MatProp=Default  
 Area=4865 Section=ASEC1 MatProp=Default  
 Area=4866 Section=ASEC1 MatProp=Default  
 Area=4867 Section=ASEC1 MatProp=Default  
 Area=4868 Section=ASEC1 MatProp=Default  
 Area=4869 Section=ASEC1 MatProp=Default  
 Area=4870 Section=ASEC1 MatProp=Default  
 Area=4871 Section=ASEC1 MatProp=Default  
 Area=4872 Section=ASEC1 MatProp=Default  
 Area=4873 Section=ASEC1 MatProp=Default  
 Area=4874 Section=ASEC1 MatProp=Default  
 Area=4875 Section=ASEC1 MatProp=Default  
 Area=4876 Section=ASEC1 MatProp=Default  
 Area=4877 Section=ASEC1 MatProp=Default  
 Area=4878 Section=ASEC1 MatProp=Default  
 Area=4879 Section=ASEC1 MatProp=Default  
 Area=4880 Section=ASEC1 MatProp=Default  
 Area=4881 Section=ASEC1 MatProp=Default  
 Area=4882 Section=ASEC1 MatProp=Default  
 Area=4883 Section=ASEC1 MatProp=Default  
 Area=4884 Section=ASEC1 MatProp=Default  
 Area=4885 Section=ASEC1 MatProp=Default  
 Area=4886 Section=ASEC1 MatProp=Default





ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA  
FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN  
SAN CRISTÓBAL, EN BOGOTÁ D.C.



|           |               |                 |
|-----------|---------------|-----------------|
| Area=4887 | Section=ASEC1 | MatProp=Default |
| Area=4888 | Section=ASEC1 | MatProp=Default |
| Area=4889 | Section=ASEC1 | MatProp=Default |
| Area=4890 | Section=ASEC1 | MatProp=Default |
| Area=4891 | Section=ASEC1 | MatProp=Default |
| Area=4892 | Section=ASEC1 | MatProp=Default |
| Area=4893 | Section=ASEC1 | MatProp=Default |
| Area=4894 | Section=ASEC1 | MatProp=Default |
| Area=4895 | Section=ASEC1 | MatProp=Default |
| Area=4896 | Section=ASEC1 | MatProp=Default |
| Area=4897 | Section=ASEC1 | MatProp=Default |
| Area=4898 | Section=ASEC1 | MatProp=Default |
| Area=4899 | Section=ASEC1 | MatProp=Default |
| Area=4900 | Section=ASEC1 | MatProp=Default |
| Area=4901 | Section=ASEC1 | MatProp=Default |
| Area=4902 | Section=ASEC1 | MatProp=Default |
| Area=4903 | Section=ASEC1 | MatProp=Default |
| Area=4904 | Section=ASEC1 | MatProp=Default |
| Area=4905 | Section=ASEC1 | MatProp=Default |
| Area=4906 | Section=ASEC1 | MatProp=Default |
| Area=4907 | Section=ASEC1 | MatProp=Default |
| Area=4908 | Section=ASEC1 | MatProp=Default |
| Area=4909 | Section=ASEC1 | MatProp=Default |
| Area=4910 | Section=ASEC1 | MatProp=Default |
| Area=4911 | Section=ASEC1 | MatProp=Default |
| Area=4912 | Section=ASEC1 | MatProp=Default |
| Area=4913 | Section=ASEC1 | MatProp=Default |
| Area=4914 | Section=ASEC1 | MatProp=Default |
| Area=4915 | Section=ASEC1 | MatProp=Default |
| Area=4916 | Section=ASEC1 | MatProp=Default |
| Area=4917 | Section=ASEC1 | MatProp=Default |
| Area=4918 | Section=ASEC1 | MatProp=Default |
| Area=4919 | Section=ASEC1 | MatProp=Default |
| Area=4920 | Section=ASEC1 | MatProp=Default |
| Area=4921 | Section=ASEC1 | MatProp=Default |
| Area=4922 | Section=ASEC1 | MatProp=Default |
| Area=4923 | Section=ASEC1 | MatProp=Default |
| Area=4924 | Section=ASEC1 | MatProp=Default |
| Area=4925 | Section=ASEC1 | MatProp=Default |
| Area=4926 | Section=ASEC1 | MatProp=Default |
| Area=4927 | Section=ASEC1 | MatProp=Default |
| Area=4928 | Section=ASEC1 | MatProp=Default |
| Area=4929 | Section=ASEC1 | MatProp=Default |
| Area=4930 | Section=ASEC1 | MatProp=Default |
| Area=4931 | Section=ASEC1 | MatProp=Default |
| Area=4932 | Section=ASEC1 | MatProp=Default |
| Area=4933 | Section=ASEC1 | MatProp=Default |
| Area=4934 | Section=ASEC1 | MatProp=Default |
| Area=4935 | Section=ASEC1 | MatProp=Default |
| Area=4936 | Section=ASEC1 | MatProp=Default |
| Area=4937 | Section=ASEC1 | MatProp=Default |
| Area=4938 | Section=ASEC1 | MatProp=Default |
| Area=4939 | Section=ASEC1 | MatProp=Default |
| Area=4940 | Section=ASEC1 | MatProp=Default |
| Area=4941 | Section=ASEC1 | MatProp=Default |





|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=4942 Section=ASEC1 MatProp=Default  
 Area=4943 Section=ASEC1 MatProp=Default  
 Area=4944 Section=ASEC1 MatProp=Default  
 Area=4945 Section=ASEC1 MatProp=Default  
 Area=4946 Section=ASEC1 MatProp=Default  
 Area=4947 Section=ASEC1 MatProp=Default  
 Area=4948 Section=ASEC1 MatProp=Default  
 Area=4949 Section=ASEC1 MatProp=Default  
 Area=4950 Section=ASEC1 MatProp=Default  
 Area=4951 Section=ASEC1 MatProp=Default  
 Area=4952 Section=ASEC1 MatProp=Default  
 Area=4953 Section=ASEC1 MatProp=Default  
 Area=4954 Section=ASEC1 MatProp=Default  
 Area=4955 Section=ASEC1 MatProp=Default  
 Area=4956 Section=ASEC1 MatProp=Default  
 Area=4957 Section=ASEC1 MatProp=Default  
 Area=4958 Section=ASEC1 MatProp=Default  
 Area=4959 Section=ASEC1 MatProp=Default  
 Area=4960 Section=ASEC1 MatProp=Default  
 Area=4961 Section=ASEC1 MatProp=Default  
 Area=4962 Section=ASEC1 MatProp=Default  
 Area=4963 Section=ASEC1 MatProp=Default  
 Area=4964 Section=ASEC1 MatProp=Default  
 Area=4965 Section=ASEC1 MatProp=Default  
 Area=4966 Section=ASEC1 MatProp=Default  
 Area=4967 Section=ASEC1 MatProp=Default  
 Area=4968 Section=ASEC1 MatProp=Default  
 Area=4969 Section=ASEC1 MatProp=Default  
 Area=4970 Section=ASEC1 MatProp=Default  
 Area=4971 Section=ASEC1 MatProp=Default  
 Area=4972 Section=ASEC1 MatProp=Default  
 Area=4973 Section=ASEC1 MatProp=Default  
 Area=4974 Section=ASEC1 MatProp=Default  
 Area=4975 Section=ASEC1 MatProp=Default  
 Area=4976 Section=ASEC1 MatProp=Default  
 Area=4977 Section=ASEC1 MatProp=Default  
 Area=4978 Section=ASEC1 MatProp=Default  
 Area=4979 Section=ASEC1 MatProp=Default  
 Area=4980 Section=ASEC1 MatProp=Default  
 Area=4981 Section=ASEC1 MatProp=Default  
 Area=4982 Section=ASEC1 MatProp=Default  
 Area=4983 Section=ASEC1 MatProp=Default  
 Area=4984 Section=ASEC1 MatProp=Default  
 Area=4985 Section=ASEC1 MatProp=Default  
 Area=4986 Section=ASEC1 MatProp=Default  
 Area=4987 Section=ASEC1 MatProp=Default  
 Area=4988 Section=ASEC1 MatProp=Default  
 Area=4989 Section=ASEC1 MatProp=Default  
 Area=4990 Section=ASEC1 MatProp=Default  
 Area=4991 Section=ASEC1 MatProp=Default  
 Area=4992 Section=ASEC1 MatProp=Default  
 Area=4993 Section=ASEC1 MatProp=Default  
 Area=4994 Section=ASEC1 MatProp=Default  
 Area=4995 Section=ASEC1 MatProp=Default  
 Area=4996 Section=ASEC1 MatProp=Default





|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=4997 Section=ASEC1 MatProp=Default  
 Area=4998 Section=ASEC1 MatProp=Default  
 Area=4999 Section=ASEC1 MatProp=Default  
 Area=5000 Section=ASEC1 MatProp=Default  
 Area=5001 Section=ASEC1 MatProp=Default  
 Area=5002 Section=ASEC1 MatProp=Default  
 Area=5003 Section=ASEC1 MatProp=Default  
 Area=5004 Section=ASEC1 MatProp=Default  
 Area=5005 Section=ASEC1 MatProp=Default  
 Area=5006 Section=ASEC1 MatProp=Default  
 Area=5007 Section=ASEC1 MatProp=Default  
 Area=5008 Section=ASEC1 MatProp=Default  
 Area=5009 Section=ASEC1 MatProp=Default  
 Area=5010 Section=ASEC1 MatProp=Default  
 Area=5011 Section=ASEC1 MatProp=Default  
 Area=5012 Section=ASEC1 MatProp=Default  
 Area=5013 Section=ASEC1 MatProp=Default  
 Area=5014 Section=ASEC1 MatProp=Default  
 Area=5015 Section=ASEC1 MatProp=Default  
 Area=5016 Section=ASEC1 MatProp=Default  
 Area=5017 Section=ASEC1 MatProp=Default  
 Area=5018 Section=ASEC1 MatProp=Default  
 Area=5019 Section=ASEC1 MatProp=Default  
 Area=5020 Section=ASEC1 MatProp=Default  
 Area=5021 Section=ASEC1 MatProp=Default  
 Area=5022 Section=ASEC1 MatProp=Default  
 Area=5023 Section=ASEC1 MatProp=Default  
 Area=5024 Section=ASEC1 MatProp=Default  
 Area=5025 Section=ASEC1 MatProp=Default  
 Area=5026 Section=ASEC1 MatProp=Default  
 Area=5027 Section=ASEC1 MatProp=Default  
 Area=5028 Section=ASEC1 MatProp=Default  
 Area=5029 Section=ASEC1 MatProp=Default  
 Area=5030 Section=ASEC1 MatProp=Default  
 Area=5031 Section=ASEC1 MatProp=Default  
 Area=5032 Section=ASEC1 MatProp=Default  
 Area=5033 Section=ASEC1 MatProp=Default  
 Area=5034 Section=ASEC1 MatProp=Default  
 Area=5035 Section=ASEC1 MatProp=Default  
 Area=5036 Section=ASEC1 MatProp=Default  
 Area=5037 Section=ASEC1 MatProp=Default  
 Area=5038 Section=ASEC1 MatProp=Default  
 Area=5039 Section=ASEC1 MatProp=Default  
 Area=5040 Section=ASEC1 MatProp=Default  
 Area=5041 Section=ASEC1 MatProp=Default  
 Area=5042 Section=ASEC1 MatProp=Default  
 Area=5043 Section=ASEC1 MatProp=Default  
 Area=5044 Section=ASEC1 MatProp=Default  
 Area=5045 Section=ASEC1 MatProp=Default  
 Area=5046 Section=ASEC1 MatProp=Default  
 Area=5047 Section=ASEC1 MatProp=Default  
 Area=5048 Section=ASEC1 MatProp=Default  
 Area=5049 Section=ASEC1 MatProp=Default  
 Area=5050 Section=ASEC1 MatProp=Default  
 Area=5051 Section=ASEC1 MatProp=Default



ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA  
FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN  
SAN CRISTÓBAL, EN BOGOTÁ D.C.



|           |               |                 |
|-----------|---------------|-----------------|
| Area=5052 | Section=ASEC1 | MatProp=Default |
| Area=5053 | Section=ASEC1 | MatProp=Default |
| Area=5054 | Section=ASEC1 | MatProp=Default |
| Area=5055 | Section=ASEC1 | MatProp=Default |
| Area=5056 | Section=ASEC1 | MatProp=Default |
| Area=5057 | Section=ASEC1 | MatProp=Default |
| Area=5058 | Section=ASEC1 | MatProp=Default |
| Area=5059 | Section=ASEC1 | MatProp=Default |
| Area=5060 | Section=ASEC1 | MatProp=Default |
| Area=5061 | Section=ASEC1 | MatProp=Default |
| Area=5062 | Section=ASEC1 | MatProp=Default |
| Area=5063 | Section=ASEC1 | MatProp=Default |
| Area=5064 | Section=ASEC1 | MatProp=Default |
| Area=5065 | Section=ASEC1 | MatProp=Default |
| Area=5066 | Section=ASEC1 | MatProp=Default |
| Area=5067 | Section=ASEC1 | MatProp=Default |
| Area=5068 | Section=ASEC1 | MatProp=Default |
| Area=5069 | Section=ASEC1 | MatProp=Default |
| Area=5070 | Section=ASEC1 | MatProp=Default |
| Area=5071 | Section=ASEC1 | MatProp=Default |
| Area=5072 | Section=ASEC1 | MatProp=Default |
| Area=5073 | Section=ASEC1 | MatProp=Default |
| Area=5074 | Section=ASEC1 | MatProp=Default |
| Area=5075 | Section=ASEC1 | MatProp=Default |
| Area=5076 | Section=ASEC1 | MatProp=Default |
| Area=5077 | Section=ASEC1 | MatProp=Default |
| Area=5078 | Section=ASEC1 | MatProp=Default |
| Area=5079 | Section=ASEC1 | MatProp=Default |
| Area=5080 | Section=ASEC1 | MatProp=Default |
| Area=5081 | Section=ASEC1 | MatProp=Default |
| Area=5082 | Section=ASEC1 | MatProp=Default |
| Area=5083 | Section=ASEC1 | MatProp=Default |
| Area=5084 | Section=ASEC1 | MatProp=Default |
| Area=5085 | Section=ASEC1 | MatProp=Default |
| Area=5086 | Section=ASEC1 | MatProp=Default |
| Area=5087 | Section=ASEC1 | MatProp=Default |
| Area=5088 | Section=ASEC1 | MatProp=Default |
| Area=5089 | Section=ASEC1 | MatProp=Default |
| Area=5090 | Section=ASEC1 | MatProp=Default |
| Area=5091 | Section=ASEC1 | MatProp=Default |
| Area=5092 | Section=ASEC1 | MatProp=Default |
| Area=5093 | Section=ASEC1 | MatProp=Default |
| Area=5094 | Section=ASEC1 | MatProp=Default |
| Area=5095 | Section=ASEC1 | MatProp=Default |
| Area=5096 | Section=ASEC1 | MatProp=Default |
| Area=5097 | Section=ASEC1 | MatProp=Default |
| Area=5098 | Section=ASEC1 | MatProp=Default |
| Area=5099 | Section=ASEC1 | MatProp=Default |
| Area=5100 | Section=ASEC1 | MatProp=Default |
| Area=5101 | Section=ASEC1 | MatProp=Default |
| Area=5102 | Section=ASEC1 | MatProp=Default |
| Area=5103 | Section=ASEC1 | MatProp=Default |
| Area=5104 | Section=ASEC1 | MatProp=Default |
| Area=5105 | Section=ASEC1 | MatProp=Default |
| Area=5106 | Section=ASEC1 | MatProp=Default |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=5107 Section=ASEC1 MatProp=Default  
 Area=5108 Section=ASEC1 MatProp=Default  
 Area=5109 Section=ASEC1 MatProp=Default  
 Area=5110 Section=ASEC1 MatProp=Default  
 Area=5111 Section=ASEC1 MatProp=Default  
 Area=5112 Section=ASEC1 MatProp=Default  
 Area=5113 Section=ASEC1 MatProp=Default  
 Area=5114 Section=ASEC1 MatProp=Default  
 Area=5115 Section=ASEC1 MatProp=Default  
 Area=5116 Section=ASEC1 MatProp=Default  
 Area=5117 Section=ASEC1 MatProp=Default  
 Area=5118 Section=ASEC1 MatProp=Default  
 Area=5119 Section=ASEC1 MatProp=Default  
 Area=5120 Section=ASEC1 MatProp=Default  
 Area=5121 Section=ASEC1 MatProp=Default  
 Area=5122 Section=ASEC1 MatProp=Default  
 Area=5123 Section=ASEC1 MatProp=Default  
 Area=5124 Section=ASEC1 MatProp=Default  
 Area=5125 Section=ASEC1 MatProp=Default  
 Area=5126 Section=ASEC1 MatProp=Default  
 Area=5127 Section=ASEC1 MatProp=Default  
 Area=5128 Section=ASEC1 MatProp=Default  
 Area=5129 Section=ASEC1 MatProp=Default  
 Area=5130 Section=ASEC1 MatProp=Default  
 Area=5131 Section=ASEC1 MatProp=Default  
 Area=5132 Section=ASEC1 MatProp=Default  
 Area=5133 Section=ASEC1 MatProp=Default  
 Area=5134 Section=ASEC1 MatProp=Default  
 Area=5135 Section=ASEC1 MatProp=Default  
 Area=5136 Section=ASEC1 MatProp=Default  
 Area=5137 Section=ASEC1 MatProp=Default  
 Area=5138 Section=ASEC1 MatProp=Default  
 Area=5139 Section=ASEC1 MatProp=Default  
 Area=5140 Section=ASEC1 MatProp=Default  
 Area=5141 Section=ASEC1 MatProp=Default  
 Area=5142 Section=ASEC1 MatProp=Default  
 Area=5143 Section=ASEC1 MatProp=Default  
 Area=5144 Section=ASEC1 MatProp=Default  
 Area=5145 Section=ASEC1 MatProp=Default  
 Area=5146 Section=ASEC1 MatProp=Default  
 Area=5147 Section=ASEC1 MatProp=Default  
 Area=5148 Section=ASEC1 MatProp=Default  
 Area=5149 Section=ASEC1 MatProp=Default  
 Area=5150 Section=ASEC1 MatProp=Default  
 Area=5151 Section=ASEC1 MatProp=Default  
 Area=5152 Section=ASEC1 MatProp=Default  
 Area=5153 Section=ASEC1 MatProp=Default  
 Area=5154 Section=ASEC1 MatProp=Default  
 Area=5155 Section=ASEC1 MatProp=Default  
 Area=5156 Section=ASEC1 MatProp=Default  
 Area=5157 Section=ASEC1 MatProp=Default  
 Area=5158 Section=ASEC1 MatProp=Default  
 Area=5159 Section=ASEC1 MatProp=Default  
 Area=5160 Section=ASEC1 MatProp=Default  
 Area=5161 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=5162 Section=ASEC1 MatProp=Default  
 Area=5163 Section=ASEC1 MatProp=Default  
 Area=5164 Section=ASEC1 MatProp=Default  
 Area=5165 Section=ASEC1 MatProp=Default  
 Area=5166 Section=ASEC1 MatProp=Default  
 Area=5167 Section=ASEC1 MatProp=Default  
 Area=5168 Section=ASEC1 MatProp=Default  
 Area=5169 Section=ASEC1 MatProp=Default  
 Area=5170 Section=ASEC1 MatProp=Default  
 Area=5171 Section=ASEC1 MatProp=Default  
 Area=5172 Section=ASEC1 MatProp=Default  
 Area=5173 Section=ASEC1 MatProp=Default  
 Area=5174 Section=ASEC1 MatProp=Default  
 Area=5175 Section=ASEC1 MatProp=Default  
 Area=5176 Section=ASEC1 MatProp=Default  
 Area=5177 Section=ASEC1 MatProp=Default  
 Area=5178 Section=ASEC1 MatProp=Default  
 Area=5179 Section=ASEC1 MatProp=Default  
 Area=5180 Section=ASEC1 MatProp=Default  
 Area=5181 Section=ASEC1 MatProp=Default  
 Area=5182 Section=ASEC1 MatProp=Default  
 Area=5183 Section=ASEC1 MatProp=Default  
 Area=5184 Section=ASEC1 MatProp=Default  
 Area=5185 Section=ASEC1 MatProp=Default  
 Area=5186 Section=ASEC1 MatProp=Default  
 Area=5187 Section=ASEC1 MatProp=Default  
 Area=5188 Section=ASEC1 MatProp=Default  
 Area=5189 Section=ASEC1 MatProp=Default  
 Area=5190 Section=ASEC1 MatProp=Default  
 Area=5191 Section=ASEC1 MatProp=Default  
 Area=5192 Section=ASEC1 MatProp=Default  
 Area=5193 Section=ASEC1 MatProp=Default  
 Area=5194 Section=ASEC1 MatProp=Default  
 Area=5195 Section=ASEC1 MatProp=Default  
 Area=5196 Section=ASEC1 MatProp=Default  
 Area=5197 Section=ASEC1 MatProp=Default  
 Area=5198 Section=ASEC1 MatProp=Default  
 Area=5199 Section=ASEC1 MatProp=Default  
 Area=5200 Section=ASEC1 MatProp=Default  
 Area=5201 Section=ASEC1 MatProp=Default  
 Area=5202 Section=ASEC1 MatProp=Default  
 Area=5203 Section=ASEC1 MatProp=Default  
 Area=5204 Section=ASEC1 MatProp=Default  
 Area=5205 Section=ASEC1 MatProp=Default  
 Area=5206 Section=ASEC1 MatProp=Default  
 Area=5207 Section=ASEC1 MatProp=Default  
 Area=5208 Section=ASEC1 MatProp=Default  
 Area=5209 Section=ASEC1 MatProp=Default  
 Area=5210 Section=ASEC1 MatProp=Default  
 Area=5211 Section=ASEC1 MatProp=Default  
 Area=5212 Section=ASEC1 MatProp=Default  
 Area=5213 Section=ASEC1 MatProp=Default  
 Area=5214 Section=ASEC1 MatProp=Default  
 Area=5215 Section=ASEC1 MatProp=Default  
 Area=5216 Section=ASEC1 MatProp=Default

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=5217 Section=ASEC1 MatProp=Default  
 Area=5218 Section=ASEC1 MatProp=Default  
 Area=5219 Section=ASEC1 MatProp=Default  
 Area=5220 Section=ASEC1 MatProp=Default  
 Area=5221 Section=ASEC1 MatProp=Default  
 Area=5222 Section=ASEC1 MatProp=Default  
 Area=5223 Section=ASEC1 MatProp=Default  
 Area=5224 Section=ASEC1 MatProp=Default  
 Area=5225 Section=ASEC1 MatProp=Default  
 Area=5226 Section=ASEC1 MatProp=Default  
 Area=5227 Section=ASEC1 MatProp=Default  
 Area=5228 Section=ASEC1 MatProp=Default  
 Area=5229 Section=ASEC1 MatProp=Default  
 Area=5230 Section=ASEC1 MatProp=Default  
 Area=5231 Section=ASEC1 MatProp=Default  
 Area=5232 Section=ASEC1 MatProp=Default  
 Area=5233 Section=ASEC1 MatProp=Default  
 Area=5234 Section=ASEC1 MatProp=Default  
 Area=5235 Section=ASEC1 MatProp=Default  
 Area=5236 Section=ASEC1 MatProp=Default  
 Area=5237 Section=ASEC1 MatProp=Default  
 Area=5238 Section=ASEC1 MatProp=Default  
 Area=5239 Section=ASEC1 MatProp=Default  
 Area=5240 Section=ASEC1 MatProp=Default  
 Area=5241 Section=ASEC1 MatProp=Default  
 Area=5242 Section=ASEC1 MatProp=Default  
 Area=5243 Section=ASEC1 MatProp=Default  
 Area=5244 Section=ASEC1 MatProp=Default  
 Area=5245 Section=ASEC1 MatProp=Default  
 Area=5246 Section=ASEC1 MatProp=Default  
 Area=5247 Section=ASEC1 MatProp=Default  
 Area=5248 Section=ASEC1 MatProp=Default  
 Area=5249 Section=ASEC1 MatProp=Default  
 Area=5250 Section=ASEC1 MatProp=Default  
 Area=5251 Section=ASEC1 MatProp=Default  
 Area=5252 Section=ASEC1 MatProp=Default  
 Area=5253 Section=ASEC1 MatProp=Default  
 Area=5254 Section=ASEC1 MatProp=Default  
 Area=5255 Section=ASEC1 MatProp=Default  
 Area=5256 Section=ASEC1 MatProp=Default  
 Area=5257 Section=ASEC1 MatProp=Default  
 Area=5258 Section=ASEC1 MatProp=Default  
 Area=5259 Section=ASEC1 MatProp=Default  
 Area=5260 Section=ASEC1 MatProp=Default  
 Area=5261 Section=ASEC1 MatProp=Default  
 Area=5262 Section=ASEC1 MatProp=Default  
 Area=5263 Section=ASEC1 MatProp=Default  
 Area=5264 Section=ASEC1 MatProp=Default  
 Area=5265 Section=ASEC1 MatProp=Default  
 Area=5266 Section=ASEC1 MatProp=Default  
 Area=5267 Section=ASEC1 MatProp=Default  
 Area=5268 Section=ASEC1 MatProp=Default  
 Area=5269 Section=ASEC1 MatProp=Default  
 Area=5270 Section=ASEC1 MatProp=Default  
 Area=5271 Section=ASEC1 MatProp=Default





|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=5272 Section=ASEC1 MatProp=Default  
 Area=5273 Section=ASEC1 MatProp=Default  
 Area=5274 Section=ASEC1 MatProp=Default  
 Area=5275 Section=ASEC1 MatProp=Default  
 Area=5276 Section=ASEC1 MatProp=Default  
 Area=5277 Section=ASEC1 MatProp=Default  
 Area=5278 Section=ASEC1 MatProp=Default  
 Area=5279 Section=ASEC1 MatProp=Default  
 Area=5280 Section=ASEC1 MatProp=Default  
 Area=5281 Section=ASEC1 MatProp=Default  
 Area=5282 Section=ASEC1 MatProp=Default  
 Area=5283 Section=ASEC1 MatProp=Default  
 Area=5284 Section=ASEC1 MatProp=Default  
 Area=5285 Section=ASEC1 MatProp=Default  
 Area=5286 Section=ASEC1 MatProp=Default  
 Area=5287 Section=ASEC1 MatProp=Default  
 Area=5288 Section=ASEC1 MatProp=Default  
 Area=5289 Section=ASEC1 MatProp=Default  
 Area=5290 Section=ASEC1 MatProp=Default  
 Area=5291 Section=ASEC1 MatProp=Default  
 Area=5292 Section=ASEC1 MatProp=Default  
 Area=5293 Section=ASEC1 MatProp=Default  
 Area=5294 Section=ASEC1 MatProp=Default  
 Area=5295 Section=ASEC1 MatProp=Default  
 Area=5296 Section=ASEC1 MatProp=Default  
 Area=5297 Section=ASEC1 MatProp=Default  
 Area=5298 Section=ASEC1 MatProp=Default  
 Area=5299 Section=ASEC1 MatProp=Default  
 Area=5300 Section=ASEC1 MatProp=Default  
 Area=5301 Section=ASEC1 MatProp=Default  
 Area=5302 Section=ASEC1 MatProp=Default  
 Area=5303 Section=ASEC1 MatProp=Default  
 Area=5304 Section=ASEC1 MatProp=Default  
 Area=5305 Section=ASEC1 MatProp=Default  
 Area=5306 Section=ASEC1 MatProp=Default  
 Area=5307 Section=ASEC1 MatProp=Default  
 Area=5308 Section=ASEC1 MatProp=Default  
 Area=5309 Section=ASEC1 MatProp=Default  
 Area=5310 Section=ASEC1 MatProp=Default  
 Area=5311 Section=ASEC1 MatProp=Default  
 Area=5312 Section=ASEC1 MatProp=Default  
 Area=5313 Section=ASEC1 MatProp=Default  
 Area=5314 Section=ASEC1 MatProp=Default  
 Area=5315 Section=ASEC1 MatProp=Default  
 Area=5316 Section=ASEC1 MatProp=Default  
 Area=5317 Section=ASEC1 MatProp=Default  
 Area=5318 Section=ASEC1 MatProp=Default  
 Area=5319 Section=ASEC1 MatProp=Default  
 Area=5320 Section=ASEC1 MatProp=Default  
 Area=5321 Section=ASEC1 MatProp=Default  
 Area=5322 Section=ASEC1 MatProp=Default  
 Area=5323 Section=ASEC1 MatProp=Default  
 Area=5324 Section=ASEC1 MatProp=Default  
 Area=5325 Section=ASEC1 MatProp=Default  
 Area=5326 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=5327 Section=ASEC1 MatProp=Default  
 Area=5328 Section=ASEC1 MatProp=Default  
 Area=5329 Section=ASEC1 MatProp=Default  
 Area=5330 Section=ASEC1 MatProp=Default  
 Area=5331 Section=ASEC1 MatProp=Default  
 Area=5332 Section=ASEC1 MatProp=Default  
 Area=5333 Section=ASEC1 MatProp=Default  
 Area=5334 Section=ASEC1 MatProp=Default  
 Area=5335 Section=ASEC1 MatProp=Default  
 Area=5336 Section=ASEC1 MatProp=Default  
 Area=5337 Section=ASEC1 MatProp=Default  
 Area=5338 Section=ASEC1 MatProp=Default  
 Area=5339 Section=ASEC1 MatProp=Default  
 Area=5340 Section=ASEC1 MatProp=Default  
 Area=5341 Section=ASEC1 MatProp=Default  
 Area=5342 Section=ASEC1 MatProp=Default  
 Area=5343 Section=ASEC1 MatProp=Default  
 Area=5344 Section=ASEC1 MatProp=Default  
 Area=5345 Section=ASEC1 MatProp=Default  
 Area=5346 Section=ASEC1 MatProp=Default  
 Area=5347 Section=ASEC1 MatProp=Default  
 Area=5348 Section=ASEC1 MatProp=Default  
 Area=5349 Section=ASEC1 MatProp=Default  
 Area=5350 Section=ASEC1 MatProp=Default  
 Area=5351 Section=ASEC1 MatProp=Default  
 Area=5352 Section=ASEC1 MatProp=Default  
 Area=5353 Section=ASEC1 MatProp=Default  
 Area=5354 Section=ASEC1 MatProp=Default  
 Area=5355 Section=ASEC1 MatProp=Default  
 Area=5356 Section=ASEC1 MatProp=Default  
 Area=5357 Section=ASEC1 MatProp=Default  
 Area=5358 Section=ASEC1 MatProp=Default  
 Area=5359 Section=ASEC1 MatProp=Default  
 Area=5360 Section=ASEC1 MatProp=Default  
 Area=5361 Section=ASEC1 MatProp=Default  
 Area=5362 Section=ASEC1 MatProp=Default  
 Area=5363 Section=ASEC1 MatProp=Default  
 Area=5364 Section=ASEC1 MatProp=Default  
 Area=5365 Section=ASEC1 MatProp=Default  
 Area=5366 Section=ASEC1 MatProp=Default  
 Area=5367 Section=ASEC1 MatProp=Default  
 Area=5368 Section=ASEC1 MatProp=Default  
 Area=5369 Section=ASEC1 MatProp=Default  
 Area=5370 Section=ASEC1 MatProp=Default  
 Area=5371 Section=ASEC1 MatProp=Default  
 Area=5372 Section=ASEC1 MatProp=Default  
 Area=5373 Section=ASEC1 MatProp=Default  
 Area=5374 Section=ASEC1 MatProp=Default  
 Area=5375 Section=ASEC1 MatProp=Default  
 Area=5376 Section=ASEC1 MatProp=Default  
 Area=5377 Section=ASEC1 MatProp=Default  
 Area=5378 Section=ASEC1 MatProp=Default  
 Area=5379 Section=ASEC1 MatProp=Default  
 Area=5380 Section=ASEC1 MatProp=Default  
 Area=5381 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=5382 Section=ASEC1 MatProp=Default  
 Area=5383 Section=ASEC1 MatProp=Default  
 Area=5384 Section=ASEC1 MatProp=Default  
 Area=5385 Section=ASEC1 MatProp=Default  
 Area=5386 Section=ASEC1 MatProp=Default  
 Area=5387 Section=ASEC1 MatProp=Default  
 Area=5388 Section=ASEC1 MatProp=Default  
 Area=5389 Section=ASEC1 MatProp=Default  
 Area=5390 Section=ASEC1 MatProp=Default  
 Area=5391 Section=ASEC1 MatProp=Default  
 Area=5392 Section=ASEC1 MatProp=Default  
 Area=5393 Section=ASEC1 MatProp=Default  
 Area=5394 Section=ASEC1 MatProp=Default  
 Area=5395 Section=ASEC1 MatProp=Default  
 Area=5396 Section=ASEC1 MatProp=Default  
 Area=5397 Section=ASEC1 MatProp=Default  
 Area=5398 Section=ASEC1 MatProp=Default  
 Area=5399 Section=ASEC1 MatProp=Default  
 Area=5400 Section=ASEC1 MatProp=Default  
 Area=5401 Section=ASEC1 MatProp=Default  
 Area=5402 Section=ASEC1 MatProp=Default  
 Area=5403 Section=ASEC1 MatProp=Default  
 Area=5404 Section=ASEC1 MatProp=Default  
 Area=5405 Section=ASEC1 MatProp=Default  
 Area=5406 Section=ASEC1 MatProp=Default  
 Area=5407 Section=ASEC1 MatProp=Default  
 Area=5408 Section=ASEC1 MatProp=Default  
 Area=5409 Section=ASEC1 MatProp=Default  
 Area=5410 Section=ASEC1 MatProp=Default  
 Area=5411 Section=ASEC1 MatProp=Default  
 Area=5412 Section=ASEC1 MatProp=Default  
 Area=5413 Section=ASEC1 MatProp=Default  
 Area=5414 Section=ASEC1 MatProp=Default  
 Area=5415 Section=ASEC1 MatProp=Default  
 Area=5416 Section=ASEC1 MatProp=Default  
 Area=5417 Section=ASEC1 MatProp=Default  
 Area=5418 Section=ASEC1 MatProp=Default  
 Area=5419 Section=ASEC1 MatProp=Default  
 Area=5420 Section=ASEC1 MatProp=Default  
 Area=5421 Section=ASEC1 MatProp=Default  
 Area=5422 Section=ASEC1 MatProp=Default  
 Area=5423 Section=ASEC1 MatProp=Default  
 Area=5424 Section=ASEC1 MatProp=Default  
 Area=5425 Section=ASEC1 MatProp=Default  
 Area=5426 Section=ASEC1 MatProp=Default  
 Area=5427 Section=ASEC1 MatProp=Default  
 Area=5428 Section=ASEC1 MatProp=Default  
 Area=5429 Section=ASEC1 MatProp=Default  
 Area=5430 Section=ASEC1 MatProp=Default  
 Area=5431 Section=ASEC1 MatProp=Default  
 Area=5432 Section=ASEC1 MatProp=Default  
 Area=5433 Section=ASEC1 MatProp=Default  
 Area=5434 Section=ASEC1 MatProp=Default  
 Area=5435 Section=ASEC1 MatProp=Default  
 Area=5436 Section=ASEC1 MatProp=Default

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=5437 Section=ASEC1 MatProp=Default  
 Area=5438 Section=ASEC1 MatProp=Default  
 Area=5439 Section=ASEC1 MatProp=Default  
 Area=5440 Section=ASEC1 MatProp=Default  
 Area=5441 Section=ASEC1 MatProp=Default  
 Area=5442 Section=ASEC1 MatProp=Default  
 Area=5443 Section=ASEC1 MatProp=Default  
 Area=5444 Section=ASEC1 MatProp=Default  
 Area=5445 Section=ASEC1 MatProp=Default  
 Area=5446 Section=ASEC1 MatProp=Default  
 Area=5447 Section=ASEC1 MatProp=Default  
 Area=5448 Section=ASEC1 MatProp=Default  
 Area=5449 Section=ASEC1 MatProp=Default  
 Area=5450 Section=ASEC1 MatProp=Default  
 Area=5451 Section=ASEC1 MatProp=Default  
 Area=5452 Section=ASEC1 MatProp=Default  
 Area=5453 Section=ASEC1 MatProp=Default  
 Area=5454 Section=ASEC1 MatProp=Default  
 Area=5455 Section=ASEC1 MatProp=Default  
 Area=5456 Section=ASEC1 MatProp=Default  
 Area=5457 Section=ASEC1 MatProp=Default  
 Area=5458 Section=ASEC1 MatProp=Default  
 Area=5459 Section=ASEC1 MatProp=Default  
 Area=5460 Section=ASEC1 MatProp=Default  
 Area=5461 Section=ASEC1 MatProp=Default  
 Area=5462 Section=ASEC1 MatProp=Default  
 Area=5463 Section=ASEC1 MatProp=Default  
 Area=5464 Section=ASEC1 MatProp=Default  
 Area=5465 Section=ASEC1 MatProp=Default  
 Area=5466 Section=ASEC1 MatProp=Default  
 Area=5467 Section=ASEC1 MatProp=Default  
 Area=5468 Section=ASEC1 MatProp=Default  
 Area=5469 Section=ASEC1 MatProp=Default  
 Area=5470 Section=ASEC1 MatProp=Default  
 Area=5471 Section=ASEC1 MatProp=Default  
 Area=5472 Section=ASEC1 MatProp=Default  
 Area=5473 Section=ASEC1 MatProp=Default  
 Area=5474 Section=ASEC1 MatProp=Default  
 Area=5475 Section=ASEC1 MatProp=Default  
 Area=5476 Section=ASEC1 MatProp=Default  
 Area=5477 Section=ASEC1 MatProp=Default  
 Area=5478 Section=ASEC1 MatProp=Default  
 Area=5479 Section=ASEC1 MatProp=Default  
 Area=5480 Section=ASEC1 MatProp=Default  
 Area=5481 Section=ASEC1 MatProp=Default  
 Area=5482 Section=ASEC1 MatProp=Default  
 Area=5483 Section=ASEC1 MatProp=Default  
 Area=5484 Section=ASEC1 MatProp=Default  
 Area=5485 Section=ASEC1 MatProp=Default  
 Area=5486 Section=ASEC1 MatProp=Default  
 Area=5487 Section=ASEC1 MatProp=Default  
 Area=5488 Section=ASEC1 MatProp=Default  
 Area=5489 Section=ASEC1 MatProp=Default  
 Area=5490 Section=ASEC1 MatProp=Default  
 Area=5491 Section=ASEC1 MatProp=Default

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=5492 Section=ASEC1 MatProp=Default  
 Area=5493 Section=ASEC1 MatProp=Default  
 Area=5494 Section=ASEC1 MatProp=Default  
 Area=5495 Section=ASEC1 MatProp=Default  
 Area=5496 Section=ASEC1 MatProp=Default  
 Area=5497 Section=ASEC1 MatProp=Default  
 Area=5498 Section=ASEC1 MatProp=Default  
 Area=5499 Section=ASEC1 MatProp=Default  
 Area=5500 Section=ASEC1 MatProp=Default  
 Area=5501 Section=ASEC1 MatProp=Default  
 Area=5502 Section=ASEC1 MatProp=Default  
 Area=5503 Section=ASEC1 MatProp=Default  
 Area=5504 Section=ASEC1 MatProp=Default  
 Area=5505 Section=ASEC1 MatProp=Default  
 Area=5506 Section=ASEC1 MatProp=Default  
 Area=5507 Section=ASEC1 MatProp=Default  
 Area=5508 Section=ASEC1 MatProp=Default  
 Area=5509 Section=ASEC1 MatProp=Default  
 Area=5510 Section=ASEC1 MatProp=Default  
 Area=5511 Section=ASEC1 MatProp=Default  
 Area=5512 Section=ASEC1 MatProp=Default  
 Area=5513 Section=ASEC1 MatProp=Default  
 Area=5514 Section=ASEC1 MatProp=Default  
 Area=5515 Section=ASEC1 MatProp=Default  
 Area=5516 Section=ASEC1 MatProp=Default  
 Area=5517 Section=ASEC1 MatProp=Default  
 Area=5518 Section=ASEC1 MatProp=Default  
 Area=5519 Section=ASEC1 MatProp=Default  
 Area=5520 Section=ASEC1 MatProp=Default  
 Area=5521 Section=ASEC1 MatProp=Default  
 Area=5522 Section=ASEC1 MatProp=Default  
 Area=5523 Section=ASEC1 MatProp=Default  
 Area=5524 Section=ASEC1 MatProp=Default  
 Area=5525 Section=ASEC1 MatProp=Default  
 Area=5526 Section=ASEC1 MatProp=Default  
 Area=5527 Section=ASEC1 MatProp=Default  
 Area=5528 Section=ASEC1 MatProp=Default  
 Area=5529 Section=ASEC1 MatProp=Default  
 Area=5530 Section=ASEC1 MatProp=Default  
 Area=5531 Section=ASEC1 MatProp=Default  
 Area=5532 Section=ASEC1 MatProp=Default  
 Area=5533 Section=ASEC1 MatProp=Default  
 Area=5534 Section=ASEC1 MatProp=Default  
 Area=5535 Section=ASEC1 MatProp=Default  
 Area=5536 Section=ASEC1 MatProp=Default  
 Area=5537 Section=ASEC1 MatProp=Default  
 Area=5538 Section=ASEC1 MatProp=Default  
 Area=5539 Section=ASEC1 MatProp=Default  
 Area=5540 Section=ASEC1 MatProp=Default  
 Area=5541 Section=ASEC1 MatProp=Default  
 Area=5542 Section=ASEC1 MatProp=Default  
 Area=5543 Section=ASEC1 MatProp=Default  
 Area=5544 Section=ASEC1 MatProp=Default  
 Area=5545 Section=ASEC1 MatProp=Default  
 Area=5546 Section=ASEC1 MatProp=Default

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=5547 Section=ASEC1 MatProp=Default  
 Area=5548 Section=ASEC1 MatProp=Default  
 Area=5549 Section=ASEC1 MatProp=Default  
 Area=5550 Section=ASEC1 MatProp=Default  
 Area=5551 Section=ASEC1 MatProp=Default  
 Area=5552 Section=ASEC1 MatProp=Default  
 Area=5553 Section=ASEC1 MatProp=Default  
 Area=5554 Section=ASEC1 MatProp=Default  
 Area=5555 Section=ASEC1 MatProp=Default  
 Area=5556 Section=ASEC1 MatProp=Default  
 Area=5557 Section=ASEC1 MatProp=Default  
 Area=5558 Section=ASEC1 MatProp=Default  
 Area=5559 Section=ASEC1 MatProp=Default  
 Area=5560 Section=ASEC1 MatProp=Default  
 Area=5561 Section=ASEC1 MatProp=Default  
 Area=5562 Section=ASEC1 MatProp=Default  
 Area=5563 Section=ASEC1 MatProp=Default  
 Area=5564 Section=ASEC1 MatProp=Default  
 Area=5565 Section=ASEC1 MatProp=Default  
 Area=5566 Section=ASEC1 MatProp=Default  
 Area=5567 Section=ASEC1 MatProp=Default  
 Area=5568 Section=ASEC1 MatProp=Default  
 Area=5569 Section=ASEC1 MatProp=Default  
 Area=5570 Section=ASEC1 MatProp=Default  
 Area=5571 Section=ASEC1 MatProp=Default  
 Area=5572 Section=ASEC1 MatProp=Default  
 Area=5573 Section=ASEC1 MatProp=Default  
 Area=5574 Section=ASEC1 MatProp=Default  
 Area=5575 Section=ASEC1 MatProp=Default  
 Area=5576 Section=ASEC1 MatProp=Default  
 Area=5577 Section=ASEC1 MatProp=Default  
 Area=5578 Section=ASEC1 MatProp=Default  
 Area=5579 Section=ASEC1 MatProp=Default  
 Area=5580 Section=ASEC1 MatProp=Default  
 Area=5581 Section=ASEC1 MatProp=Default  
 Area=5582 Section=ASEC1 MatProp=Default  
 Area=5583 Section=ASEC1 MatProp=Default  
 Area=5584 Section=ASEC1 MatProp=Default  
 Area=5585 Section=ASEC1 MatProp=Default  
 Area=5586 Section=ASEC1 MatProp=Default  
 Area=5587 Section=ASEC1 MatProp=Default  
 Area=5588 Section=ASEC1 MatProp=Default  
 Area=5589 Section=ASEC1 MatProp=Default  
 Area=5590 Section=ASEC1 MatProp=Default  
 Area=5591 Section=ASEC1 MatProp=Default  
 Area=5592 Section=ASEC1 MatProp=Default  
 Area=5593 Section=ASEC1 MatProp=Default  
 Area=5594 Section=ASEC1 MatProp=Default  
 Area=5595 Section=ASEC1 MatProp=Default  
 Area=5596 Section=ASEC1 MatProp=Default  
 Area=5597 Section=ASEC1 MatProp=Default  
 Area=5598 Section=ASEC1 MatProp=Default  
 Area=5599 Section=ASEC1 MatProp=Default  
 Area=5600 Section=ASEC1 MatProp=Default  
 Area=5601 Section=ASEC1 MatProp=Default



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=5602 Section=ASEC1 MatProp=Default  
 Area=5603 Section=ASEC1 MatProp=Default  
 Area=5604 Section=ASEC1 MatProp=Default  
 Area=5605 Section=ASEC1 MatProp=Default  
 Area=5606 Section=ASEC1 MatProp=Default  
 Area=5607 Section=ASEC1 MatProp=Default  
 Area=5608 Section=ASEC1 MatProp=Default  
 Area=5609 Section=ASEC1 MatProp=Default  
 Area=5610 Section=ASEC1 MatProp=Default  
 Area=5611 Section=ASEC1 MatProp=Default  
 Area=5612 Section=ASEC1 MatProp=Default  
 Area=5613 Section=ASEC1 MatProp=Default  
 Area=5614 Section=ASEC1 MatProp=Default  
 Area=5615 Section=ASEC1 MatProp=Default  
 Area=5616 Section=ASEC1 MatProp=Default  
 Area=5617 Section=ASEC1 MatProp=Default  
 Area=5618 Section=ASEC1 MatProp=Default  
 Area=5619 Section=ASEC1 MatProp=Default  
 Area=5620 Section=ASEC1 MatProp=Default  
 Area=5621 Section=ASEC1 MatProp=Default  
 Area=5622 Section=ASEC1 MatProp=Default  
 Area=5623 Section=ASEC1 MatProp=Default  
 Area=5624 Section=ASEC1 MatProp=Default  
 Area=5625 Section=ASEC1 MatProp=Default  
 Area=5626 Section=ASEC1 MatProp=Default  
 Area=5627 Section=ASEC1 MatProp=Default  
 Area=5628 Section=ASEC1 MatProp=Default  
 Area=5629 Section=ASEC1 MatProp=Default  
 Area=5630 Section=ASEC1 MatProp=Default  
 Area=5631 Section=ASEC1 MatProp=Default  
 Area=5632 Section=ASEC1 MatProp=Default  
 Area=5633 Section=ASEC1 MatProp=Default  
 Area=5634 Section=ASEC1 MatProp=Default  
 Area=5635 Section=ASEC1 MatProp=Default  
 Area=5636 Section=ASEC1 MatProp=Default  
 Area=5637 Section=ASEC1 MatProp=Default  
 Area=5638 Section=ASEC1 MatProp=Default  
 Area=5639 Section=ASEC1 MatProp=Default  
 Area=5640 Section=ASEC1 MatProp=Default  
 Area=5641 Section=ASEC1 MatProp=Default  
 Area=5642 Section=ASEC1 MatProp=Default  
 Area=5643 Section=ASEC1 MatProp=Default  
 Area=5644 Section=ASEC1 MatProp=Default  
 Area=5645 Section=ASEC1 MatProp=Default  
 Area=5646 Section=ASEC1 MatProp=Default  
 Area=5647 Section=ASEC1 MatProp=Default  
 Area=5648 Section=ASEC1 MatProp=Default  
 Area=5649 Section=ASEC1 MatProp=Default  
 Area=5650 Section=ASEC1 MatProp=Default  
 Area=5651 Section=ASEC1 MatProp=Default  
 Area=5652 Section=ASEC1 MatProp=Default  
 Area=5653 Section=ASEC1 MatProp=Default  
 Area=5654 Section=ASEC1 MatProp=Default  
 Area=5655 Section=ASEC1 MatProp=Default  
 Area=5656 Section=ASEC1 MatProp=Default





|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=5657 Section=ASEC1 MatProp=Default  
 Area=5658 Section=ASEC1 MatProp=Default  
 Area=5659 Section=ASEC1 MatProp=Default  
 Area=5660 Section=ASEC1 MatProp=Default  
 Area=5661 Section=ASEC1 MatProp=Default  
 Area=5662 Section=ASEC1 MatProp=Default  
 Area=5663 Section=ASEC1 MatProp=Default  
 Area=5664 Section=ASEC1 MatProp=Default  
 Area=5665 Section=ASEC1 MatProp=Default  
 Area=5666 Section=ASEC1 MatProp=Default  
 Area=5667 Section=ASEC1 MatProp=Default  
 Area=5668 Section=ASEC1 MatProp=Default  
 Area=5669 Section=ASEC1 MatProp=Default  
 Area=5670 Section=ASEC1 MatProp=Default  
 Area=5671 Section=ASEC1 MatProp=Default  
 Area=5672 Section=ASEC1 MatProp=Default  
 Area=5673 Section=ASEC1 MatProp=Default  
 Area=5674 Section=ASEC1 MatProp=Default  
 Area=5675 Section=ASEC1 MatProp=Default  
 Area=5676 Section=ASEC1 MatProp=Default  
 Area=5677 Section=ASEC1 MatProp=Default  
 Area=5678 Section=ASEC1 MatProp=Default  
 Area=5679 Section=ASEC1 MatProp=Default  
 Area=5680 Section=ASEC1 MatProp=Default  
 Area=5681 Section=ASEC1 MatProp=Default  
 Area=5682 Section=ASEC1 MatProp=Default  
 Area=5683 Section=ASEC1 MatProp=Default  
 Area=5684 Section=ASEC1 MatProp=Default  
 Area=5685 Section=ASEC1 MatProp=Default  
 Area=5686 Section=ASEC1 MatProp=Default  
 Area=5687 Section=ASEC1 MatProp=Default  
 Area=5688 Section=ASEC1 MatProp=Default  
 Area=5689 Section=ASEC1 MatProp=Default  
 Area=5690 Section=ASEC1 MatProp=Default  
 Area=5691 Section=ASEC1 MatProp=Default  
 Area=5692 Section=ASEC1 MatProp=Default  
 Area=5693 Section=ASEC1 MatProp=Default  
 Area=5694 Section=ASEC1 MatProp=Default  
 Area=5695 Section=ASEC1 MatProp=Default  
 Area=5696 Section=ASEC1 MatProp=Default  
 Area=5697 Section=ASEC1 MatProp=Default  
 Area=5698 Section=ASEC1 MatProp=Default  
 Area=5699 Section=ASEC1 MatProp=Default  
 Area=5700 Section=ASEC1 MatProp=Default  
 Area=5701 Section=ASEC1 MatProp=Default  
 Area=5702 Section=ASEC1 MatProp=Default  
 Area=5703 Section=ASEC1 MatProp=Default  
 Area=5704 Section=ASEC1 MatProp=Default  
 Area=5705 Section=ASEC1 MatProp=Default  
 Area=5706 Section=ASEC1 MatProp=Default  
 Area=5707 Section=ASEC1 MatProp=Default  
 Area=5708 Section=ASEC1 MatProp=Default  
 Area=5709 Section=ASEC1 MatProp=Default  
 Area=5710 Section=ASEC1 MatProp=Default  
 Area=5711 Section=ASEC1 MatProp=Default

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=5712 Section=ASEC1 MatProp=Default  
 Area=5713 Section=ASEC1 MatProp=Default  
 Area=5714 Section=ASEC1 MatProp=Default  
 Area=5715 Section=ASEC1 MatProp=Default  
 Area=5716 Section=ASEC1 MatProp=Default  
 Area=5717 Section=ASEC1 MatProp=Default  
 Area=5718 Section=ASEC1 MatProp=Default  
 Area=5719 Section=ASEC1 MatProp=Default  
 Area=5720 Section=ASEC1 MatProp=Default  
 Area=5721 Section=ASEC1 MatProp=Default  
 Area=5722 Section=ASEC1 MatProp=Default  
 Area=5723 Section=ASEC1 MatProp=Default  
 Area=5724 Section=ASEC1 MatProp=Default  
 Area=5725 Section=ASEC1 MatProp=Default  
 Area=5726 Section=ASEC1 MatProp=Default  
 Area=5727 Section=ASEC1 MatProp=Default  
 Area=5728 Section=ASEC1 MatProp=Default  
 Area=5729 Section=ASEC1 MatProp=Default  
 Area=5730 Section=ASEC1 MatProp=Default  
 Area=5731 Section=ASEC1 MatProp=Default  
 Area=5732 Section=ASEC1 MatProp=Default  
 Area=5733 Section=ASEC1 MatProp=Default  
 Area=5734 Section=ASEC1 MatProp=Default  
 Area=5735 Section=ASEC1 MatProp=Default  
 Area=5736 Section=ASEC1 MatProp=Default  
 Area=5737 Section=ASEC1 MatProp=Default  
 Area=5738 Section=ASEC1 MatProp=Default  
 Area=5739 Section=ASEC1 MatProp=Default  
 Area=5740 Section=ASEC1 MatProp=Default  
 Area=5741 Section=ASEC1 MatProp=Default  
 Area=5742 Section=ASEC1 MatProp=Default  
 Area=5743 Section=ASEC1 MatProp=Default  
 Area=5744 Section=ASEC1 MatProp=Default  
 Area=5745 Section=ASEC1 MatProp=Default  
 Area=5746 Section=ASEC1 MatProp=Default  
 Area=5747 Section=ASEC1 MatProp=Default  
 Area=5748 Section=ASEC1 MatProp=Default  
 Area=5749 Section=ASEC1 MatProp=Default  
 Area=5750 Section=ASEC1 MatProp=Default  
 Area=5751 Section=ASEC1 MatProp=Default  
 Area=5752 Section=ASEC1 MatProp=Default  
 Area=5753 Section=ASEC1 MatProp=Default  
 Area=5754 Section=ASEC1 MatProp=Default  
 Area=5755 Section=ASEC1 MatProp=Default  
 Area=5756 Section=ASEC1 MatProp=Default  
 Area=5757 Section=ASEC1 MatProp=Default  
 Area=5758 Section=ASEC1 MatProp=Default  
 Area=5759 Section=ASEC1 MatProp=Default  
 Area=5760 Section=ASEC1 MatProp=Default  
 Area=5761 Section=ASEC1 MatProp=Default  
 Area=5762 Section=ASEC1 MatProp=Default  
 Area=5763 Section=ASEC1 MatProp=Default  
 Area=5764 Section=ASEC1 MatProp=Default  
 Area=5765 Section=ASEC1 MatProp=Default  
 Area=5766 Section=ASEC1 MatProp=Default

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=5767 Section=ASEC1 MatProp=Default  
 Area=5768 Section=ASEC1 MatProp=Default  
 Area=5769 Section=ASEC1 MatProp=Default  
 Area=5770 Section=ASEC1 MatProp=Default  
 Area=5771 Section=ASEC1 MatProp=Default  
 Area=5772 Section=ASEC1 MatProp=Default  
 Area=5773 Section=ASEC1 MatProp=Default  
 Area=5774 Section=ASEC1 MatProp=Default  
 Area=5775 Section=ASEC1 MatProp=Default  
 Area=5776 Section=ASEC1 MatProp=Default  
 Area=5777 Section=ASEC1 MatProp=Default  
 Area=5778 Section=ASEC1 MatProp=Default  
 Area=5779 Section=ASEC1 MatProp=Default  
 Area=5780 Section=ASEC1 MatProp=Default  
 Area=5781 Section=ASEC1 MatProp=Default  
 Area=5782 Section=ASEC1 MatProp=Default  
 Area=5783 Section=ASEC1 MatProp=Default  
 Area=5784 Section=ASEC1 MatProp=Default  
 Area=5785 Section=ASEC1 MatProp=Default  
 Area=5786 Section=ASEC1 MatProp=Default  
 Area=5787 Section=ASEC1 MatProp=Default  
 Area=5788 Section=ASEC1 MatProp=Default  
 Area=5789 Section=ASEC1 MatProp=Default  
 Area=5790 Section=ASEC1 MatProp=Default  
 Area=5791 Section=ASEC1 MatProp=Default  
 Area=5792 Section=ASEC1 MatProp=Default  
 Area=5793 Section=ASEC1 MatProp=Default  
 Area=5794 Section=ASEC1 MatProp=Default  
 Area=5795 Section=ASEC1 MatProp=Default  
 Area=5796 Section=ASEC1 MatProp=Default  
 Area=5797 Section=ASEC1 MatProp=Default  
 Area=5798 Section=ASEC1 MatProp=Default  
 Area=5799 Section=ASEC1 MatProp=Default  
 Area=5800 Section=ASEC1 MatProp=Default  
 Area=5801 Section=ASEC1 MatProp=Default  
 Area=5802 Section=ASEC1 MatProp=Default  
 Area=5803 Section=ASEC1 MatProp=Default  
 Area=5804 Section=ASEC1 MatProp=Default  
 Area=5805 Section=ASEC1 MatProp=Default  
 Area=5806 Section=ASEC1 MatProp=Default  
 Area=5807 Section=ASEC1 MatProp=Default  
 Area=5808 Section=ASEC1 MatProp=Default  
 Area=5809 Section=ASEC1 MatProp=Default  
 Area=5810 Section=ASEC1 MatProp=Default  
 Area=5811 Section=ASEC1 MatProp=Default  
 Area=5812 Section=ASEC1 MatProp=Default  
 Area=5813 Section=ASEC1 MatProp=Default  
 Area=5814 Section=ASEC1 MatProp=Default  
 Area=5815 Section=ASEC1 MatProp=Default  
 Area=5816 Section=ASEC1 MatProp=Default  
 Area=5817 Section=ASEC1 MatProp=Default  
 Area=5818 Section=ASEC1 MatProp=Default  
 Area=5819 Section=ASEC1 MatProp=Default  
 Area=5820 Section=ASEC1 MatProp=Default  
 Area=5821 Section=ASEC1 MatProp=Default

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=5822 Section=ASEC1 MatProp=Default  
 Area=5823 Section=ASEC1 MatProp=Default  
 Area=5824 Section=ASEC1 MatProp=Default  
 Area=5825 Section=ASEC1 MatProp=Default  
 Area=5826 Section=ASEC1 MatProp=Default  
 Area=5827 Section=ASEC1 MatProp=Default  
 Area=5828 Section=ASEC1 MatProp=Default  
 Area=5829 Section=ASEC1 MatProp=Default  
 Area=5830 Section=ASEC1 MatProp=Default  
 Area=5831 Section=ASEC1 MatProp=Default  
 Area=5832 Section=ASEC1 MatProp=Default  
 Area=5833 Section=ASEC1 MatProp=Default  
 Area=5834 Section=ASEC1 MatProp=Default  
 Area=5835 Section=ASEC1 MatProp=Default  
 Area=5836 Section=ASEC1 MatProp=Default  
 Area=5837 Section=ASEC1 MatProp=Default  
 Area=5838 Section=ASEC1 MatProp=Default  
 Area=5839 Section=ASEC1 MatProp=Default  
 Area=5840 Section=ASEC1 MatProp=Default  
 Area=5841 Section=ASEC1 MatProp=Default  
 Area=5842 Section=ASEC1 MatProp=Default  
 Area=5843 Section=ASEC1 MatProp=Default  
 Area=5844 Section=ASEC1 MatProp=Default  
 Area=5845 Section=ASEC1 MatProp=Default  
 Area=5846 Section=ASEC1 MatProp=Default  
 Area=5847 Section=ASEC1 MatProp=Default  
 Area=5848 Section=ASEC1 MatProp=Default  
 Area=5849 Section=ASEC1 MatProp=Default  
 Area=5850 Section=ASEC1 MatProp=Default  
 Area=5851 Section=ASEC1 MatProp=Default  
 Area=5852 Section=ASEC1 MatProp=Default  
 Area=5853 Section=ASEC1 MatProp=Default  
 Area=5854 Section=ASEC1 MatProp=Default  
 Area=5855 Section=ASEC1 MatProp=Default  
 Area=5856 Section=ASEC1 MatProp=Default  
 Area=5857 Section=ASEC1 MatProp=Default  
 Area=5858 Section=ASEC1 MatProp=Default  
 Area=5859 Section=ASEC1 MatProp=Default  
 Area=5860 Section=ASEC1 MatProp=Default  
 Area=5861 Section=ASEC1 MatProp=Default  
 Area=5862 Section=ASEC1 MatProp=Default  
 Area=5863 Section=ASEC1 MatProp=Default  
 Area=5864 Section=ASEC1 MatProp=Default  
 Area=5865 Section=ASEC1 MatProp=Default  
 Area=5866 Section=ASEC1 MatProp=Default  
 Area=5867 Section=ASEC1 MatProp=Default  
 Area=5868 Section=ASEC1 MatProp=Default  
 Area=5869 Section=ASEC1 MatProp=Default  
 Area=5870 Section=ASEC1 MatProp=Default  
 Area=5871 Section=ASEC1 MatProp=Default  
 Area=5872 Section=ASEC1 MatProp=Default  
 Area=5873 Section=ASEC1 MatProp=Default  
 Area=5874 Section=ASEC1 MatProp=Default  
 Area=5875 Section=ASEC1 MatProp=Default  
 Area=5876 Section=ASEC1 MatProp=Default

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=5877 Section=ASEC1 MatProp=Default  
 Area=5878 Section=ASEC1 MatProp=Default  
 Area=5879 Section=ASEC1 MatProp=Default  
 Area=5880 Section=ASEC1 MatProp=Default  
 Area=5881 Section=ASEC1 MatProp=Default  
 Area=5882 Section=ASEC1 MatProp=Default  
 Area=5883 Section=ASEC1 MatProp=Default  
 Area=5884 Section=ASEC1 MatProp=Default  
 Area=5885 Section=ASEC1 MatProp=Default  
 Area=5886 Section=ASEC1 MatProp=Default  
 Area=5887 Section=ASEC1 MatProp=Default  
 Area=5888 Section=ASEC1 MatProp=Default  
 Area=5889 Section=ASEC1 MatProp=Default  
 Area=5890 Section=ASEC1 MatProp=Default  
 Area=5891 Section=ASEC1 MatProp=Default  
 Area=5892 Section=ASEC1 MatProp=Default  
 Area=5893 Section=ASEC1 MatProp=Default  
 Area=5894 Section=ASEC1 MatProp=Default  
 Area=5895 Section=ASEC1 MatProp=Default  
 Area=5896 Section=ASEC1 MatProp=Default  
 Area=5897 Section=ASEC1 MatProp=Default  
 Area=5898 Section=ASEC1 MatProp=Default  
 Area=5899 Section=ASEC1 MatProp=Default  
 Area=5900 Section=ASEC1 MatProp=Default  
 Area=5901 Section=ASEC1 MatProp=Default  
 Area=5902 Section=ASEC1 MatProp=Default  
 Area=5903 Section=ASEC1 MatProp=Default  
 Area=5904 Section=ASEC1 MatProp=Default  
 Area=5905 Section=ASEC1 MatProp=Default  
 Area=5906 Section=ASEC1 MatProp=Default  
 Area=5907 Section=ASEC1 MatProp=Default  
 Area=5908 Section=ASEC1 MatProp=Default  
 Area=5909 Section=ASEC1 MatProp=Default  
 Area=5910 Section=ASEC1 MatProp=Default  
 Area=5911 Section=ASEC1 MatProp=Default  
 Area=5912 Section=ASEC1 MatProp=Default  
 Area=5913 Section=ASEC1 MatProp=Default  
 Area=5914 Section=ASEC1 MatProp=Default  
 Area=5915 Section=ASEC1 MatProp=Default  
 Area=5916 Section=ASEC1 MatProp=Default  
 Area=5917 Section=ASEC1 MatProp=Default  
 Area=5918 Section=ASEC1 MatProp=Default  
 Area=5919 Section=ASEC1 MatProp=Default  
 Area=5920 Section=ASEC1 MatProp=Default  
 Area=5921 Section=ASEC1 MatProp=Default  
 Area=5922 Section=ASEC1 MatProp=Default  
 Area=5923 Section=ASEC1 MatProp=Default  
 Area=5924 Section=ASEC1 MatProp=Default  
 Area=5925 Section=ASEC1 MatProp=Default  
 Area=5926 Section=ASEC1 MatProp=Default  
 Area=5927 Section=ASEC1 MatProp=Default  
 Area=5928 Section=ASEC1 MatProp=Default  
 Area=5929 Section=ASEC1 MatProp=Default  
 Area=5930 Section=ASEC1 MatProp=Default  
 Area=5931 Section=ASEC1 MatProp=Default





|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=5932 Section=ASEC1 MatProp=Default  
 Area=5933 Section=ASEC1 MatProp=Default  
 Area=5934 Section=ASEC1 MatProp=Default  
 Area=5935 Section=ASEC1 MatProp=Default  
 Area=5936 Section=ASEC1 MatProp=Default  
 Area=5937 Section=ASEC1 MatProp=Default  
 Area=5938 Section=ASEC1 MatProp=Default  
 Area=5939 Section=ASEC1 MatProp=Default  
 Area=5940 Section=ASEC1 MatProp=Default  
 Area=5941 Section=ASEC1 MatProp=Default  
 Area=5942 Section=ASEC1 MatProp=Default  
 Area=5943 Section=ASEC1 MatProp=Default  
 Area=5944 Section=ASEC1 MatProp=Default  
 Area=5945 Section=ASEC1 MatProp=Default  
 Area=5946 Section=ASEC1 MatProp=Default  
 Area=5947 Section=ASEC1 MatProp=Default  
 Area=5948 Section=ASEC1 MatProp=Default  
 Area=5949 Section=ASEC1 MatProp=Default  
 Area=5950 Section=ASEC1 MatProp=Default  
 Area=5951 Section=ASEC1 MatProp=Default  
 Area=5952 Section=ASEC1 MatProp=Default  
 Area=5953 Section=ASEC1 MatProp=Default  
 Area=5954 Section=ASEC1 MatProp=Default  
 Area=5955 Section=ASEC1 MatProp=Default  
 Area=5956 Section=ASEC1 MatProp=Default  
 Area=5957 Section=ASEC1 MatProp=Default  
 Area=5958 Section=ASEC1 MatProp=Default  
 Area=5959 Section=ASEC1 MatProp=Default  
 Area=5960 Section=ASEC1 MatProp=Default  
 Area=5961 Section=ASEC1 MatProp=Default  
 Area=5962 Section=ASEC1 MatProp=Default  
 Area=5963 Section=ASEC1 MatProp=Default  
 Area=5964 Section=ASEC1 MatProp=Default  
 Area=5965 Section=ASEC1 MatProp=Default  
 Area=5966 Section=ASEC1 MatProp=Default  
 Area=5967 Section=ASEC1 MatProp=Default  
 Area=5968 Section=ASEC1 MatProp=Default  
 Area=5969 Section=ASEC1 MatProp=Default  
 Area=5970 Section=ASEC1 MatProp=Default  
 Area=5971 Section=ASEC1 MatProp=Default  
 Area=5972 Section=ASEC1 MatProp=Default  
 Area=5973 Section=ASEC1 MatProp=Default  
 Area=5974 Section=ASEC1 MatProp=Default  
 Area=5975 Section=ASEC1 MatProp=Default  
 Area=5976 Section=ASEC1 MatProp=Default  
 Area=5977 Section=ASEC1 MatProp=Default  
 Area=5978 Section=ASEC1 MatProp=Default  
 Area=5979 Section=ASEC1 MatProp=Default  
 Area=5980 Section=ASEC1 MatProp=Default  
 Area=5981 Section=ASEC1 MatProp=Default  
 Area=5982 Section=ASEC1 MatProp=Default  
 Area=5983 Section=ASEC1 MatProp=Default  
 Area=5984 Section=ASEC1 MatProp=Default  
 Area=5985 Section=ASEC1 MatProp=Default  
 Area=5986 Section=ASEC1 MatProp=Default





|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=5987 Section=ASEC1 MatProp=Default  
Area=5988 Section=ASEC1 MatProp=Default  
Area=5989 Section=ASEC1 MatProp=Default  
Area=5990 Section=ASEC1 MatProp=Default

TABLE: "AREA SECTION PROPERTIES"

Section=ASEC1 Material=A-36 MatAngle=0 AreaType=Shell Type=Shell-Thin DrillDOF=Yes Thickness=0.25  
BendThick=0.25 Color=Cyan F11Mod=1 F22Mod=1 F12Mod=1 M11Mod=1 M22Mod=1 M12Mod=1 V13Mod=1  
V23Mod=1 MMod=1 WMod=1 Notes="Added 16/12/2021 02:51:38 p. m."  
Section=Losa150cm Material=4000Psi MatAngle=0 AreaType=Shell Type=Shell-Thick DrillDOF=Yes  
Thickness=1.5 BendThick=1.5 Color=White F11Mod=1 F22Mod=1 F12Mod=1 M11Mod=1 M22Mod=1  
M12Mod=1 V13Mod=1 V23Mod=1 MMod=1 WMod=1 Notes="Added 16/12/2021 02:51:49 p. m."

TABLE: "AREA SECTION PROPERTY DESIGN PARAMETERS"

Section=ASEC1 RebarMat=None RebarOpt=Default  
Section=Losa150cm RebarMat=None RebarOpt=Default

TABLE: "AREA SECTION PROPERTY - TIME DEPENDENT"

Section=ASEC1 TypeSize=Auto AutoSFSize=1  
Section=Losa150cm TypeSize=Auto AutoSFSize=1

TABLE: "AUTO WAVE 3 - WAVE CHARACTERISTICS - GENERAL"

WaveChar=Default WaveType="From Theory" KinFactor=1 SWaterDepth=45 WaveHeight=18 WavePeriod=12  
WaveTheory=Linear

TABLE: "CASE - MODAL 1 - GENERAL"

Case=MODAL ModeType=Eigen MaxNumModes=12 MinNumModes=1 EigenShift=0 EigenCutoff=0  
EigenTol=1E-09 AutoShift=Yes

TABLE: "CASE - STATIC 1 - LOAD ASSIGNMENTS"

Case=DEAD LoadType="Load pattern" LoadName=DEAD LoadSF=1  
Case="Peso estacion" LoadType="Load pattern" LoadName="Peso estacion" LoadSF=1  
Case="Carro en posicion adelantada" LoadType="Load pattern" LoadName="Carro en posicion adelantada"  
LoadSF=1  
Case="Carro en posicion atras" LoadType="Load pattern" LoadName="Carro en posicion atras" LoadSF=1  
Case="Deflexion del cable" LoadType="Load pattern" LoadName="Deflexion del cable" LoadSF=1  
Case="Tension multiconductor" LoadType="Load pattern" LoadName="Tension multiconductor" LoadSF=1  
Case="Viento lateral en operacion" LoadType="Load pattern" LoadName="Viento lateral en operacion" LoadSF=1  
Case="Viento lateral fuera de operacion" LoadType="Load pattern" LoadName="Viento lateral fuera de operacion"  
LoadSF=1  
Case="Vehiculos en estacion(operacion)" LoadType="Load pattern" LoadName="Vehiculos en estacion  
(operacion)" LoadSF=1  
Case=Sx LoadType="Load pattern" LoadName=Sx LoadSF=1  
Case=Sy LoadType="Load pattern" LoadName=Sy LoadSF=1  
Case="Tension del cable" LoadType="Load pattern" LoadName="Tension del cable" LoadSF=1  
Case="Viento longitudinal en operacion" LoadType="Load pattern" LoadName="Viento longitudinal en  
operacion" LoadSF=1  
Case="Viento longitudinal fuera de operacion" LoadType="Load pattern" LoadName="Viento longitudinal fuera  
de operacion" LoadSF=1

TABLE: "COMBINATION DEFINITIONS"



ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA  
FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN  
SAN CRISTÓBAL, EN BOGOTÁ D.C.



ComboName=COMB1 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=23dc78be-6b62-49ef-85fb-844d347bad58

ComboName=COMB1 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB1 CaseName="Carro en posicion adelantada" ScaleFactor=1.7  
ComboName=COMB1 CaseName="Deflexion del cable" ScaleFactor=1.7  
ComboName=COMB1 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB1 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB1 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB1 CaseName=Sx ScaleFactor=1.1  
ComboName=COMB1 CaseName=Sy ScaleFactor=0.33

ComboName=COMB2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=af03785c-78ce-4efd-aad6-fcb11cb310f6

ComboName=COMB2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB2 CaseName="Carro en posicion adelantada" ScaleFactor=1.7  
ComboName=COMB2 CaseName="Deflexion del cable" ScaleFactor=1.7  
ComboName=COMB2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB2 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB2 CaseName=Sx ScaleFactor=1.1  
ComboName=COMB2 CaseName=Sy ScaleFactor=-0.33

ComboName=COMB3 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=ce1010f7-47a2-408b-9569-980e767ab6db

ComboName=COMB3 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB3 CaseName="Carro en posicion adelantada" ScaleFactor=1.7  
ComboName=COMB3 CaseName="Deflexion del cable" ScaleFactor=1.7  
ComboName=COMB3 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB3 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB3 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB3 CaseName=Sx ScaleFactor=-1.1  
ComboName=COMB3 CaseName=Sy ScaleFactor=0.33

ComboName=COMB4 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=e44e4e21-0a3a-457f-b5d1-c262e5827d6f

ComboName=COMB4 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB4 CaseName="Carro en posicion adelantada" ScaleFactor=1.7  
ComboName=COMB4 CaseName="Deflexion del cable" ScaleFactor=1.7  
ComboName=COMB4 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB4 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB4 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB4 CaseName=Sx ScaleFactor=-1.1  
ComboName=COMB4 CaseName=Sy ScaleFactor=-0.33

ComboName=COMB5 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=ed5210ff-ae32-4785-a87f-d2d1abb3589a

ComboName=COMB5 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB5 CaseName="Carro en posicion adelantada" ScaleFactor=1.7  
ComboName=COMB5 CaseName="Deflexion del cable" ScaleFactor=1.7  
ComboName=COMB5 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB5 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB5 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB5 CaseName=Sx ScaleFactor=0.33  
ComboName=COMB5 CaseName=Sy ScaleFactor=1.1



ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA  
FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN  
SAN CRISTÓBAL, EN BOGOTÁ D.C.



ComboName=COMB6 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=16641190-3e4e-40e2-8d4c-b5f81d87fbf0

ComboName=COMB6 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB6 CaseName="Carro en posicion adelantada" ScaleFactor=1.7  
ComboName=COMB6 CaseName="Deflexion del cable" ScaleFactor=1.7  
ComboName=COMB6 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB6 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB6 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB6 CaseName=Sx ScaleFactor=0.33  
ComboName=COMB6 CaseName=Sy ScaleFactor=-1.1

ComboName=COMB7 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=7c9a5ff4-b4b2-4fce-b997-c052f8ac9c9e

ComboName=COMB7 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB7 CaseName="Carro en posicion adelantada" ScaleFactor=1.7  
ComboName=COMB7 CaseName="Deflexion del cable" ScaleFactor=1.7  
ComboName=COMB7 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB7 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB7 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB7 CaseName=Sx ScaleFactor=-0.33  
ComboName=COMB7 CaseName=Sy ScaleFactor=1.1

ComboName=COMB8 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=9fdb01f4-1ca9-43e9-b1cc-1544cb614992

ComboName=COMB8 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB8 CaseName="Carro en posicion adelantada" ScaleFactor=1.7  
ComboName=COMB8 CaseName="Deflexion del cable" ScaleFactor=1.7  
ComboName=COMB8 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB8 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB8 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB8 CaseName=Sx ScaleFactor=-0.33  
ComboName=COMB8 CaseName=Sy ScaleFactor=-1.1

ComboName=COMB9 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=cd67070a-cdcd-47ba-bbce-1b7fc1561e47

ComboName=COMB9 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB9 CaseName="Carro en posición atras" ScaleFactor=1.7  
ComboName=COMB9 CaseName="Deflexion del cable" ScaleFactor=1.7  
ComboName=COMB9 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB9 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB9 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB9 CaseName=Sx ScaleFactor=1.1  
ComboName=COMB9 CaseName=Sy ScaleFactor=0.33

ComboName=COMB10 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=fdd1388f-77e1-4033-b7c2-dfa1aa1f0caa

ComboName=COMB10 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB10 CaseName="Carro en posicion atras" ScaleFactor=1.7  
ComboName=COMB10 CaseName="Deflexion del cable" ScaleFactor=1.7  
ComboName=COMB10 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB10 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB10 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB10 CaseName=Sx ScaleFactor=1.1  
ComboName=COMB10 CaseName=Sy ScaleFactor=-0.33

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

ComboName=COMB11 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=cd0935ae-b036-4b04-abf5-bf3b8104de6e

ComboName=COMB11 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB11 CaseName="Carro en posicion atras" ScaleFactor=1.7  
ComboName=COMB11 CaseName="Deflexion del cable" ScaleFactor=1.7  
ComboName=COMB11 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB11 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB11 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB11 CaseName=Sx ScaleFactor=-1.1  
ComboName=COMB11 CaseName=Sy ScaleFactor=0.33

ComboName=COMB12 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=572a7b09-36d0-4e65-a2b4-6b031a3cb757

ComboName=COMB12 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB12 CaseName="Carro en posicion atras" ScaleFactor=1.7  
ComboName=COMB12 CaseName="Deflexion del cable" ScaleFactor=1.7  
ComboName=COMB12 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB12 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB12 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB12 CaseName=Sx ScaleFactor=-1.1  
ComboName=COMB12 CaseName=Sy ScaleFactor=-0.33

ComboName=COMB13 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=14fac8ab-3b13-4075-b24f-66b8e62835cd

ComboName=COMB13 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB13 CaseName="Carro en posicion atras" ScaleFactor=1.7  
ComboName=COMB13 CaseName="Deflexion del cable" ScaleFactor=1.7  
ComboName=COMB13 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB13 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB13 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB13 CaseName=Sx ScaleFactor=0.33  
ComboName=COMB13 CaseName=Sy ScaleFactor=1.1

ComboName=COMB14 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=2f4a5912-f29a-4081-9184-2d66f4533850

ComboName=COMB14 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB14 CaseName="Carro en posicion atras" ScaleFactor=1.7  
ComboName=COMB14 CaseName="Deflexion del cable" ScaleFactor=1.7  
ComboName=COMB14 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB14 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB14 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB14 CaseName=Sx ScaleFactor=0.33  
ComboName=COMB14 CaseName=Sy ScaleFactor=-1.1

ComboName=COMB15 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=a1437377-86d8-4729-acce-f93a4164e094

ComboName=COMB15 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB15 CaseName="Carro en posicion atras" ScaleFactor=1.7  
ComboName=COMB15 CaseName="Deflexion del cable" ScaleFactor=1.7  
ComboName=COMB15 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB15 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB15 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB15 CaseName=Sx ScaleFactor=-0.33  
ComboName=COMB15 CaseName=Sy ScaleFactor=1.1



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

ComboName=COMB16 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=e1b62809-f239-44d1-8294-4e2da6036ee9

ComboName=COMB16 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB16 CaseName="Carro en posicion atras" ScaleFactor=1.7  
ComboName=COMB16 CaseName="Deflexion del cable" ScaleFactor=1.7  
ComboName=COMB16 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB16 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB16 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB16 CaseName=Sx ScaleFactor=-0.33  
ComboName=COMB16 CaseName=Sy ScaleFactor=-1.1

ComboName=COMB17-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=cf17703d-c6da-47ea-8e08-2e03d43f7d92

ComboName=COMB17-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB17-M2 CaseName="Carro en posicion adelantada" ScaleFactor=1.7  
ComboName=COMB17-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB17-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB17-M2 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB17-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB17-M2 CaseName=Sx ScaleFactor=1.1  
ComboName=COMB17-M2 CaseName=Sy ScaleFactor=0.33

ComboName=COMB18-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=8bacf643-8aa9-47d2-af1c-0b4d35da346b

ComboName=COMB18-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB18-M2 CaseName="Carro en posicion adelantada" ScaleFactor=1.7  
ComboName=COMB18-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB18-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB18-M2 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB18-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB18-M2 CaseName=Sx ScaleFactor=1.1  
ComboName=COMB18-M2 CaseName=Sy ScaleFactor=-0.33

ComboName=COMB19-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=dc4f3ff6-a8d2-4ee8-ae66-36f7d990d905

ComboName=COMB19-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB19-M2 CaseName="Carro en posicion adelantada" ScaleFactor=1.7  
ComboName=COMB19-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB19-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB19-M2 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB19-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB19-M2 CaseName=Sx ScaleFactor=-1.1  
ComboName=COMB19-M2 CaseName=Sy ScaleFactor=0.33

ComboName=COMB20-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=bf6e95e4-ad90-4e61-9b59-504a7b73f1f7

ComboName=COMB20-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB20-M2 CaseName="Carro en posicion adelantada" ScaleFactor=1.7  
ComboName=COMB20-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB20-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB20-M2 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB20-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB20-M2 CaseName=Sx ScaleFactor=-1.1  
ComboName=COMB20-M2 CaseName=Sy ScaleFactor=-0.33

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

ComboName=COMB21-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=543d0703-5713-4f43-92f3-850b828a51cb

ComboName=COMB21-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB21-M2 CaseName="Carro en posicion adelantada" ScaleFactor=1.7  
ComboName=COMB21-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB21-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB21-M2 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB21-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB21-M2 CaseName=Sx ScaleFactor=0.33  
ComboName=COMB21-M2 CaseName=Sy ScaleFactor=1.1

ComboName=COMB22-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=744280cb-d77f-4452-a130-f4781ab9415d

ComboName=COMB22-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB22-M2 CaseName="Carro en posicion adelantada" ScaleFactor=1.7  
ComboName=COMB22-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB22-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB22-M2 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB22-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB22-M2 CaseName=Sx ScaleFactor=0.33  
ComboName=COMB22-M2 CaseName=Sy ScaleFactor=-1.1

ComboName=COMB22-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=1db568b0-1e95-43b6-bebd-0bd3f2252c93

ComboName=COMB23-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB23-M2 CaseName="Carro en posicion adelantada" ScaleFactor=1.7  
ComboName=COMB23-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB23-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB23-M2 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB23-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB23-M2 CaseName=Sx ScaleFactor=-0.33  
ComboName=COMB23-M2 CaseName=Sy ScaleFactor=1.1

ComboName=COMB24-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=4019b41e-27fa-4f85-afd2-1b02226962c8

ComboName=COMB24-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB24-M2 CaseName="Carro en posicion adelantada" ScaleFactor=1.7  
ComboName=COMB24-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB24-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB24-M2 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB24-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB24-M2 CaseName=Sx ScaleFactor=-0.33  
ComboName=COMB24-M2 CaseName=Sy ScaleFactor=-1.1

ComboName=COMB25-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=6ab4bea5-a5e8-4527-aa4d-4e2d214c0a7c

ComboName=COMB25-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB25-M2 CaseName="Carro en posicion atras" ScaleFactor=1.7  
ComboName=COMB25-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB25-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB25-M2 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB25-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB25-M2 CaseName=Sx ScaleFactor=1.1  
ComboName=COMB25-M2 CaseName=Sy ScaleFactor=0.33



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

ComboName=COMB26-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=bcf23760-c4d3-4529-8538-a728f445753b

ComboName=COMB26-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB26-M2 CaseName="Carro en posicion atras" ScaleFactor=1.7  
ComboName=COMB26-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB26-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB26-M2 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB26-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB26-M2 CaseName=Sx ScaleFactor=1.1  
ComboName=COMB26-M2 CaseName=Sy ScaleFactor=-0.33

ComboName=COMB27-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=c6ab445a-cdbf-4787-90ae-0a8736e5eb3d

ComboName=COMB27-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB27-M2 CaseName="Carro en posicion atras" ScaleFactor=1.7  
ComboName=COMB27-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB27-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB27-M2 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB27-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB27-M2 CaseName=Sx ScaleFactor=-1.1  
ComboName=COMB27-M2 CaseName=Sy ScaleFactor=-0.33

ComboName=COMB28-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=7649db02-b7e4-4a83-8f79-225eff56b0ad

ComboName=COMB28-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB28-M2 CaseName="Carro en posicion atras" ScaleFactor=1.7  
ComboName=COMB28-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB28-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB28-M2 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB28-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB28-M2 CaseName=Sx ScaleFactor=-1.1  
ComboName=COMB28-M2 CaseName=Sy ScaleFactor=-0.33

ComboName=COMB29-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=baf19d66-91a3-40ab-8d4a-87937fb6ad3e

ComboName=COMB29-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB29-M2 CaseName="Carro en posicion atras" ScaleFactor=1.7  
ComboName=COMB29-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB29-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB29-M2 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB29-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB29-M2 CaseName=Sx ScaleFactor=0.33  
ComboName=COMB29-M2 CaseName=Sy ScaleFactor=1.1

ComboName=COMB30-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=4c83d568-4b16-46dc-8f13-e21dc5c191a4

ComboName=COMB30-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB30-M2 CaseName="Carro en posicion atras" ScaleFactor=1.7  
ComboName=COMB30-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB30-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB30-M2 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB30-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB30-M2 CaseName=Sx ScaleFactor=0.33  
ComboName=COMB30-M2 CaseName=Sy ScaleFactor=-1.1

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

ComboName=COMB31-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=ee18d5f0-be18-43d4-82f6-109897a06795

ComboName=COMB31-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB31-M2 CaseName="Carro en posicion atras" ScaleFactor=1.7  
ComboName=COMB31-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB31-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB31-M2 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB31-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB31-M2 CaseName=Sx ScaleFactor=-0.33  
ComboName=COMB31-M2 CaseName=Sy ScaleFactor=1.1

ComboName=COMB32-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=5c7db824-39a4-4fe0-8ecc-42c9ab40c26f

ComboName=COMB32-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB32-M2 CaseName="Carro en posicion atras" ScaleFactor=1.7  
ComboName=COMB32-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB32-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB32-M2 CaseName="Viento lateral en operacion" ScaleFactor=1.7  
ComboName=COMB32-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB32-M2 CaseName=Sx ScaleFactor=-0.33  
ComboName=COMB32-M2 CaseName=Sy ScaleFactor=-1.1

ComboName=COMB33-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=ac2b21b7-a8d7-4180-a14a-333b77b6fbc

ComboName=COMB33-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB33-M2 CaseName="Carro en posicion adelantada" ScaleFactor=1.7  
ComboName=COMB33-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB33-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB33-M2 CaseName="Viento longitudinal en operacion" ScaleFactor=1.7  
ComboName=COMB33-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB33-M2 CaseName=Sx ScaleFactor=1.1  
ComboName=COMB33-M2 CaseName=Sy ScaleFactor=0.33

ComboName=COMB34-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=ad3b3817-aaf0-4f08-a22f-36784ff4aa2e

ComboName=COMB34-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB34-M2 CaseName="Carro en posicion adelantada" ScaleFactor=1.7  
ComboName=COMB34-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB34-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB34-M2 CaseName="Viento longitudinal en operacion" ScaleFactor=1.7  
ComboName=COMB34-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB34-M2 CaseName=Sx ScaleFactor=1.1  
ComboName=COMB34-M2 CaseName=Sy ScaleFactor=-0.33

ComboName=COMB35-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=a220f189-af3d-4800-9b2f-7d746d174336

ComboName=COMB35-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB35-M2 CaseName="Carro en posicion adelantada" ScaleFactor=1.7  
ComboName=COMB35-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB35-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB35-M2 CaseName="Viento longitudinal en operacion" ScaleFactor=1.7  
ComboName=COMB35-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB35-M2 CaseName=Sx ScaleFactor=-1.1  
ComboName=COMB35-M2 CaseName=Sy ScaleFactor=0.33

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

ComboName=COMB36-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=550a583f-bb95-4f3b-8b6a-  
df528d6a9109

ComboName=COMB36-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB36-M2 CaseName="Carro en posicion adelantada" ScaleFactor=1.7  
ComboName=COMB36-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB36-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB36-M2 CaseName="Viento longitudinal en operacion" ScaleFactor=1.7  
ComboName=COMB36-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB36-M2 CaseName=Sx ScaleFactor=-1.1  
ComboName=COMB36-M2 CaseName=Sy ScaleFactor=-0.33

ComboName=COMB37-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=a0295337-5c8a-4cd7-  
bcc9-eb0d7d49d736

ComboName=COMB37-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB37-M2 CaseName="Carro en posicion adelantada" ScaleFactor=1.7  
ComboName=COMB37-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB37-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB37-M2 CaseName="Viento longitudinal en operacion" ScaleFactor=1.7  
ComboName=COMB37-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB37-M2 CaseName=Sx ScaleFactor=0.33  
ComboName=COMB37-M2 CaseName=Sy ScaleFactor=1.1

ComboName=COMB38-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=0ddb4d7a-04fa-42e5-baf2-  
f92bd6fb853b

ComboName=COMB38-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB38-M2 CaseName="Carro en posicion adelantada" ScaleFactor=1.7  
ComboName=COMB38-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB38-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB38-M2 CaseName="Viento longitudinal en operacion" ScaleFactor=1.7  
ComboName=COMB38-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB38-M2 CaseName=Sx ScaleFactor=0.33  
ComboName=COMB38-M2 CaseName=Sy ScaleFactor=-1.1

ComboName=COMB39-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=36bc96a4-af7a-4b60-8fba-  
379d2866c882

ComboName=COMB39-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB39-M2 CaseName="Carro en posicion adelantada" ScaleFactor=1.7  
ComboName=COMB39-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB39-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB39-M2 CaseName="Viento longitudinal en operacion" ScaleFactor=1.7  
ComboName=COMB39-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB39-M2 CaseName=Sx ScaleFactor=-0.33  
ComboName=COMB39-M2 CaseName=Sy ScaleFactor=1.1

ComboName=COMB40-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=fec2a355-b24c-4a44-  
ab15-e1ff91f7b988

ComboName=COMB40-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB40-M2 CaseName="Carro en posicion adelantada" ScaleFactor=1.7  
ComboName=COMB40-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB40-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB40-M2 CaseName="Viento longitudinal en operacion" ScaleFactor=1.7  
ComboName=COMB40-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB40-M2 CaseName=Sx ScaleFactor=-0.33  
ComboName=COMB40-M2 CaseName=Sy ScaleFactor=-1.1



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

ComboName=COMB41-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=0019e231-611b-45a3-ade4-839fb49c38eb

ComboName=COMB41-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB41-M2 CaseName="Carro en posicion atras" ScaleFactor=1.7  
ComboName=COMB41-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB41-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB41-M2 CaseName="Viento longitudinal en operacion" ScaleFactor=1.7  
ComboName=COMB41-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB41-M2 CaseName=Sx ScaleFactor=1.1  
ComboName=COMB41-M2 CaseName=Sy ScaleFactor=0.33

ComboName=COMB42-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=ea8122a7-9452-4e7c-be4c-3302635d7239

ComboName=COMB42-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB42-M2 CaseName="Carro en posicion atras" ScaleFactor=1.7  
ComboName=COMB42-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB42-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB42-M2 CaseName="Viento longitudinal en operacion" ScaleFactor=1.7  
ComboName=COMB42-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB42-M2 CaseName=Sx ScaleFactor=1.1  
ComboName=COMB42-M2 CaseName=Sy ScaleFactor=-0.33

ComboName=COMB43-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=40b3df18-1b27-4792-8b79-1b56f2412077

ComboName=COMB43-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB43-M2 CaseName="Carro en posicion atras" ScaleFactor=1.7  
ComboName=COMB43-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB43-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB43-M2 CaseName="Viento longitudinal en operacion" ScaleFactor=1.7  
ComboName=COMB43-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB43-M2 CaseName=Sx ScaleFactor=-1.1  
ComboName=COMB43-M2 CaseName=Sy ScaleFactor=0.33

ComboName=COMB44-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=ec07a8e4-7ca3-4d0d-8872-d1406b11c141

ComboName=COMB44-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB44-M2 CaseName="Carro en posicion atras" ScaleFactor=1.7  
ComboName=COMB44-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB44-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB44-M2 CaseName="Viento longitudinal en operacion" ScaleFactor=1.7  
ComboName=COMB44-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB44-M2 CaseName=Sx ScaleFactor=-1.1  
ComboName=COMB44-M2 CaseName=Sy ScaleFactor=-0.33

ComboName=COMB45-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=b5072d42-05c4-4925-be55-7215720b819b

ComboName=COMB45-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB45-M2 CaseName="Carro en posicion atras" ScaleFactor=1.7  
ComboName=COMB45-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB45-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB45-M2 CaseName="Viento longitudinal en operacion" ScaleFactor=1.7  
ComboName=COMB45-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB45-M2 CaseName=Sx ScaleFactor=0.33  
ComboName=COMB45-M2 CaseName=Sy ScaleFactor=1.1

ComboName=COMB46-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=8b1e376e-e7b0-4d35-b9e9-8a5c8cd34cf8

ComboName=COMB46-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB46-M2 CaseName="Carro en posicion atras" ScaleFactor=1.7  
ComboName=COMB46-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB46-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB46-M2 CaseName="Viento longitudinal en operacion" ScaleFactor=1.7  
ComboName=COMB46-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB46-M2 CaseName=Sx ScaleFactor=0.33  
ComboName=COMB46-M2 CaseName=Sy ScaleFactor=-1.1

ComboName=COMB47-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=21259f7e-12f2-4810-ae09-7f7139e73dbe

ComboName=COMB47-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB47-M2 CaseName="Carro en posicion atras" ScaleFactor=1.7  
ComboName=COMB47-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB47-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB47-M2 CaseName="Viento longitudinal en operacion" ScaleFactor=1.7  
ComboName=COMB47-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB47-M2 CaseName=Sx ScaleFactor=-0.33  
ComboName=COMB47-M2 CaseName=Sy ScaleFactor=1.1

ComboName=COMB48-M2 ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1.5  
SteelDesign=None ConcDesign=Strength AlumDesign=None ColdDesign=None GUID=e5276a80-bfc9-47e1-aa2e-933c1c723665

ComboName=COMB48-M2 CaseName="Peso estacion" ScaleFactor=1.5  
ComboName=COMB48-M2 CaseName="Carro en posicion atras" ScaleFactor=1.7  
ComboName=COMB48-M2 CaseName="Tension del cable" ScaleFactor=1.7  
ComboName=COMB48-M2 CaseName="Tension multiconductor" ScaleFactor=1.7  
ComboName=COMB48-M2 CaseName="Viento longitudinal en operacion" ScaleFactor=1.7  
ComboName=COMB48-M2 CaseName="Vehiculos en estacion(operacion)" ScaleFactor=1.7  
ComboName=COMB48-M2 CaseName=Sx ScaleFactor=-0.33  
ComboName=COMB48-M2 CaseName=Sy ScaleFactor=-1.1

ComboName=DSTL ComboType="Linear Add" AutoDesign=No CaseName=DEAD ScaleFactor=1  
SteelDesign=Strength ConcDesign=None AlumDesign=None ColdDesign=None GUID=e67ae547-567f-453a-87ca-788c21a07a71 Notes="Dead Only, Strength"

TABLE: "CONNECTIVITY - AREA"

|         |           |           |           |           |                                           |
|---------|-----------|-----------|-----------|-----------|-------------------------------------------|
| Area=2  | Joint1=16 | Joint2=17 | Joint3=18 | Joint4=19 | GUID=6a644127-b2c3-4983-8006-bae4ce19e45b |
| Area=3  | Joint1=19 | Joint2=18 | Joint3=20 | Joint4=21 | GUID=798b88cc-cb92-4a96-b0db-30e9d12fe742 |
| Area=4  | Joint1=21 | Joint2=20 | Joint3=22 | Joint4=23 | GUID=c11d3148-e5da-4db7-bf0b-8f897520bdd1 |
| Area=5  | Joint1=23 | Joint2=22 | Joint3=24 | Joint4=25 | GUID=a5af49b2-de9b-40e0-a824-d570711b0197 |
| Area=6  | Joint1=25 | Joint2=24 | Joint3=26 | Joint4=27 | GUID=8151a29c-f072-4318-9c2e-7f1ef68539bc |
| Area=7  | Joint1=27 | Joint2=26 | Joint3=28 | Joint4=29 | GUID=8dc9815d-69ba-411d-8ec4-b84326ad06e5 |
| Area=8  | Joint1=29 | Joint2=28 | Joint3=30 | Joint4=31 | GUID=9fc52a93-c9a3-4f70-998e-f277b2ed21f4 |
| Area=9  | Joint1=31 | Joint2=30 | Joint3=32 | Joint4=33 | GUID=d73d6ecc-779b-447d-93a5-7dccc2c636f2 |
| Area=10 | Joint1=33 | Joint2=32 | Joint3=34 | Joint4=35 | GUID=be9abadb-2f38-4fdc-8566-063424ce9f89 |
| Area=11 | Joint1=35 | Joint2=34 | Joint3=36 | Joint4=37 | GUID=a7383fe3-4974-475d-9341-60ee72b1a6fe |
| Area=12 | Joint1=37 | Joint2=36 | Joint3=38 | Joint4=39 | GUID=a266ddd5-aaa8-4f1e-99ee-2c89c1b542db |
| Area=13 | Joint1=39 | Joint2=38 | Joint3=40 | Joint4=41 | GUID=7811eac6-63a9-4551-b329-eb995b111116 |
| Area=14 | Joint1=41 | Joint2=40 | Joint3=42 | Joint4=43 | GUID=3cad9f69-467d-44e4-b3af-ab7cde289d8a |
| Area=15 | Joint1=43 | Joint2=42 | Joint3=44 | Joint4=45 | GUID=bd630d02-5586-440f-bca4-d401fe219324 |
| Area=16 | Joint1=45 | Joint2=44 | Joint3=46 | Joint4=47 | GUID=329ff260-b640-47f8-b396-def284436afd |
| Area=17 | Joint1=47 | Joint2=46 | Joint3=48 | Joint4=49 | GUID=667388b0-ca56-407d-a52e-3b5783d5c54c |
| Area=18 | Joint1=49 | Joint2=48 | Joint3=50 | Joint4=51 | GUID=de32e73a-33ce-435d-91d6-905aae7f8057 |

|         |            |            |            |            |                                            |
|---------|------------|------------|------------|------------|--------------------------------------------|
| Area=19 | Joint1=51  | Joint2=50  | Joint3=52  | Joint4=53  | GUID=e6484ab4-4caf-444b-9396-634599952a80  |
| Area=20 | Joint1=53  | Joint2=52  | Joint3=54  | Joint4=55  | GUID=006fa07f-925f-4174-8608-cc2a3f61315e  |
| Area=21 | Joint1=55  | Joint2=54  | Joint3=56  | Joint4=57  | GUID=3d18c542-fd1d-459c-8213-719b53fef066  |
| Area=22 | Joint1=57  | Joint2=56  | Joint3=58  | Joint4=59  | GUID=df442cab-a7dd-4024-9aaf-80f5cbd6dd63  |
| Area=23 | Joint1=59  | Joint2=58  | Joint3=60  | Joint4=61  | GUID=3af6eced-499d-4cec-8bd9-eac65a42e7fa  |
| Area=24 | Joint1=61  | Joint2=60  | Joint3=62  | Joint4=63  | GUID=e5db1821-5cb7-4637-b31a-ef2b14044ea3  |
| Area=25 | Joint1=63  | Joint2=62  | Joint3=64  | Joint4=65  | GUID=3ffe7699-29a0-4389-8c66-a0abab44029b  |
| Area=26 | Joint1=65  | Joint2=64  | Joint3=66  | Joint4=67  | GUID=3a042eba-ded5-40ff-8626-4eb09d1004c4  |
| Area=27 | Joint1=67  | Joint2=66  | Joint3=68  | Joint4=69  | GUID=97c0d19c-1924-4255-b5f1-a910021f8f19  |
| Area=28 | Joint1=69  | Joint2=68  | Joint3=70  | Joint4=71  | GUID=e999c93d-76c3-49bf-8e33-ed050f5de8ce  |
| Area=29 | Joint1=71  | Joint2=70  | Joint3=72  | Joint4=73  | GUID=897f61cf-4a7a-4e36-8dea-974daa6d5097  |
| Area=30 | Joint1=73  | Joint2=72  | Joint3=74  | Joint4=75  | GUID=df9df932-e84a-4cd6-a139-07adb399425   |
| Area=31 | Joint1=75  | Joint2=74  | Joint3=76  | Joint4=77  | GUID=c73eea03-a9ee-4ff4-abbd-e9aa7ecd0001  |
| Area=32 | Joint1=77  | Joint2=76  | Joint3=78  | Joint4=79  | GUID=f3afd3c2-0b54-4e7c-82f7-340139506d7d  |
| Area=33 | Joint1=79  | Joint2=78  | Joint3=80  | Joint4=81  | GUID=d21074f3-9f4b-4848-a44d-9e094fd63b61  |
| Area=34 | Joint1=81  | Joint2=80  | Joint3=82  | Joint4=83  | GUID=637c485a-a9d1-4818-b43b-82611e4ce770  |
| Area=35 | Joint1=83  | Joint2=82  | Joint3=84  | Joint4=85  | GUID=9eaf18f8-7fb3-43c9-8667-eebb15d2147   |
| Area=36 | Joint1=85  | Joint2=84  | Joint3=86  | Joint4=87  | GUID=b332330c-5038-4019-bb67-1bf727ca2ed4  |
| Area=37 | Joint1=87  | Joint2=86  | Joint3=88  | Joint4=89  | GUID=0e5d6b49-0150-4038-abc4-52e406973544  |
| Area=38 | Joint1=89  | Joint2=88  | Joint3=90  | Joint4=91  | GUID=261a48b0-895e-45ba-8240-39b24a559520  |
| Area=39 | Joint1=91  | Joint2=90  | Joint3=92  | Joint4=93  | GUID=a82b36a2-1ebd-4784-9459-f703f4588861  |
| Area=40 | Joint1=93  | Joint2=92  | Joint3=94  | Joint4=95  | GUID=f4a32345-e3f7-4d61-ba74-e7e0de7af180  |
| Area=41 | Joint1=95  | Joint2=94  | Joint3=96  | Joint4=97  | GUID=01b54640-36d7-4925-911f-d95dfff5c5e17 |
| Area=42 | Joint1=97  | Joint2=96  | Joint3=98  | Joint4=99  | GUID=60f687e9-7789-4113-b4d1-3ccaa788d55e  |
| Area=43 | Joint1=99  | Joint2=98  | Joint3=100 | Joint4=101 | GUID=a37c7c2a-2177-43fe-b182-358fd7548d12  |
| Area=44 | Joint1=101 | Joint2=100 | Joint3=102 | Joint4=103 | GUID=041c3866-16c4-4278-9dd7-710a2e46db6d  |
| Area=45 | Joint1=103 | Joint2=102 | Joint3=104 | Joint4=14  | GUID=a64664f2-028b-4352-8373-2331d51ba9a5  |
| Area=46 | Joint1=17  | Joint2=105 | Joint3=106 | Joint4=18  | GUID=8318b894-984e-46bd-b127-3e1c2ea1d457  |
| Area=47 | Joint1=18  | Joint2=106 | Joint3=107 | Joint4=20  | GUID=64d6fc11-cc46-4a3a-b7c8-26ac8b7dc1b3  |
| Area=48 | Joint1=20  | Joint2=107 | Joint3=108 | Joint4=22  | GUID=26980252-ab1d-4186-aec5-be856c5e2e98  |
| Area=49 | Joint1=22  | Joint2=108 | Joint3=109 | Joint4=24  | GUID=8e05df40-6969-467c-b8f3-94e2419b069e  |
| Area=50 | Joint1=24  | Joint2=109 | Joint3=110 | Joint4=26  | GUID=5d1a0fb1-babb-4a0a-83c2-fb7d696f1996  |
| Area=51 | Joint1=26  | Joint2=110 | Joint3=111 | Joint4=28  | GUID=6620340e-7917-4860-a353-72609a6e2926  |
| Area=52 | Joint1=28  | Joint2=111 | Joint3=112 | Joint4=30  | GUID=a56b9bf1-5845-4ef0-8633-2fa2afc39552  |
| Area=53 | Joint1=30  | Joint2=112 | Joint3=113 | Joint4=32  | GUID=8711b957-5894-4383-950f-5e98327f256e  |
| Area=54 | Joint1=32  | Joint2=113 | Joint3=114 | Joint4=34  | GUID=1701c245-762d-4910-ad3a-3f5609880126  |
| Area=55 | Joint1=34  | Joint2=114 | Joint3=115 | Joint4=36  | GUID=05dd5512-d9a0-47b8-ae64-45fe66b6d082  |
| Area=56 | Joint1=36  | Joint2=115 | Joint3=116 | Joint4=38  | GUID=d97103eb-aaf2-479d-84f6-144c5e5ffa11  |
| Area=57 | Joint1=38  | Joint2=116 | Joint3=117 | Joint4=40  | GUID=56491dd4-3e94-440f-aedf-212457d1895d  |
| Area=58 | Joint1=40  | Joint2=117 | Joint3=118 | Joint4=42  | GUID=36da3a7f-9a11-45fc-9611-4261f05a60a9  |
| Area=59 | Joint1=42  | Joint2=118 | Joint3=119 | Joint4=44  | GUID=072abddb-efec-4027-9046-98d6dac0c9fa  |
| Area=60 | Joint1=44  | Joint2=119 | Joint3=120 | Joint4=46  | GUID=0b5d2cb4-0063-4095-8dd4-24602860e8b5  |
| Area=61 | Joint1=46  | Joint2=120 | Joint3=121 | Joint4=48  | GUID=aefe979c-97c8-464a-b9f6-403ba43f89b6  |
| Area=62 | Joint1=48  | Joint2=121 | Joint3=122 | Joint4=50  | GUID=0c397a78-3775-441d-b92c-e9fcdffe0174  |
| Area=63 | Joint1=50  | Joint2=122 | Joint3=123 | Joint4=52  | GUID=df9676f0-c3d2-433d-bebc-ca373a4ec3c4  |
| Area=64 | Joint1=52  | Joint2=123 | Joint3=124 | Joint4=54  | GUID=01fe9581-e56b-4634-a7f4-f6a953ae2f41  |
| Area=65 | Joint1=54  | Joint2=124 | Joint3=125 | Joint4=56  | GUID=7a1e9517-c2c4-46af-8cfd-c53da9170ace  |
| Area=66 | Joint1=56  | Joint2=125 | Joint3=126 | Joint4=58  | GUID=85d9aff8-4171-47ab-8546-1cb1ee6e69bb  |
| Area=67 | Joint1=58  | Joint2=126 | Joint3=127 | Joint4=60  | GUID=f9820771-50f5-42b8-8843-6c16674f7b2c  |
| Area=68 | Joint1=60  | Joint2=127 | Joint3=128 | Joint4=62  | GUID=427aad9a-f12e-499c-b5e7-a7ee9da77ebe  |
| Area=69 | Joint1=62  | Joint2=128 | Joint3=129 | Joint4=64  | GUID=bd26c0ae-04f5-499c-b22a-a073360fc52a  |
| Area=70 | Joint1=64  | Joint2=129 | Joint3=130 | Joint4=66  | GUID=b0911f17-6724-4eeb-8b9a-923c3723c68a  |
| Area=71 | Joint1=66  | Joint2=130 | Joint3=131 | Joint4=68  | GUID=5cd0ed20-3db1-426b-84f7-057d8a31e53d  |
| Area=72 | Joint1=68  | Joint2=131 | Joint3=132 | Joint4=70  | GUID=534563e7-f31d-441d-8aae-764fe38ff097  |
| Area=73 | Joint1=70  | Joint2=132 | Joint3=133 | Joint4=72  | GUID=71815764-a0a7-40f0-829b-97ff70651073  |



|          |            |            |            |            |                                           |
|----------|------------|------------|------------|------------|-------------------------------------------|
| Area=74  | Joint1=72  | Joint2=133 | Joint3=134 | Joint4=74  | GUID=1f057a1c-4b35-4b63-92e7-23b75a7db084 |
| Area=75  | Joint1=74  | Joint2=134 | Joint3=135 | Joint4=76  | GUID=8fb14faa-00e1-4bff-86a1-845dd174b2ba |
| Area=76  | Joint1=76  | Joint2=135 | Joint3=136 | Joint4=78  | GUID=e2efaf4e-51f9-451e-8ffc-7d9063182a93 |
| Area=77  | Joint1=78  | Joint2=136 | Joint3=137 | Joint4=80  | GUID=41298f8b-1d59-4e8f-901b-f46876c46639 |
| Area=78  | Joint1=80  | Joint2=137 | Joint3=138 | Joint4=82  | GUID=d9998a20-4262-48e0-b7da-56c050880984 |
| Area=79  | Joint1=82  | Joint2=138 | Joint3=139 | Joint4=84  | GUID=bf1fd763-2611-4b74-b2a7-1ee49458f485 |
| Area=80  | Joint1=84  | Joint2=139 | Joint3=140 | Joint4=86  | GUID=152563a1-7229-4f64-b7e4-8f60bbae1172 |
| Area=81  | Joint1=86  | Joint2=140 | Joint3=141 | Joint4=88  | GUID=f87ce306-1b4e-42cd-83c6-8182968eda1f |
| Area=82  | Joint1=88  | Joint2=141 | Joint3=142 | Joint4=90  | GUID=d2c5c36a-fa14-4e33-89b4-7010db58394f |
| Area=83  | Joint1=90  | Joint2=142 | Joint3=143 | Joint4=92  | GUID=a8337429-445f-4210-9979-d539120b854b |
| Area=84  | Joint1=92  | Joint2=143 | Joint3=144 | Joint4=94  | GUID=28b5aa57-85a1-4684-82ae-aa10ee1565fc |
| Area=85  | Joint1=94  | Joint2=144 | Joint3=145 | Joint4=96  | GUID=0acb2ca7-0b87-4ea2-89d5-3dcf425242bd |
| Area=86  | Joint1=96  | Joint2=145 | Joint3=146 | Joint4=98  | GUID=bc0d662e-7297-4c4c-80db-a96caea1a7b5 |
| Area=87  | Joint1=98  | Joint2=146 | Joint3=147 | Joint4=100 | GUID=ea1ed024-e76d-4960-86ba-3067d9d2361e |
| Area=88  | Joint1=100 | Joint2=147 | Joint3=148 | Joint4=102 | GUID=b643bb43-8ee1-414e-b0ee-d0e9ffed2df7 |
| Area=89  | Joint1=102 | Joint2=148 | Joint3=149 | Joint4=104 | GUID=5a9962d6-6fd1-4970-b5ed-cf8f4b273515 |
| Area=90  | Joint1=105 | Joint2=150 | Joint3=151 | Joint4=106 | GUID=3a758d0f-ff8a-41b9-a59e-0488712e9039 |
| Area=91  | Joint1=106 | Joint2=151 | Joint3=152 | Joint4=107 | GUID=9365f7c8-b56c-4b65-a2b4-7be4165d9dd7 |
| Area=92  | Joint1=107 | Joint2=152 | Joint3=153 | Joint4=108 | GUID=98c8f518-ca56-4f7e-8e8a-543f2ad526bf |
| Area=93  | Joint1=108 | Joint2=153 | Joint3=154 | Joint4=109 | GUID=f9232b68-762d-496c-9f09-e3baa4de4476 |
| Area=94  | Joint1=109 | Joint2=154 | Joint3=155 | Joint4=110 | GUID=0fca85b8-a418-452f-bc0b-fc8ce296d2b7 |
| Area=95  | Joint1=110 | Joint2=155 | Joint3=156 | Joint4=111 | GUID=9da69296-bba2-4859-9625-05981ab6cd86 |
| Area=96  | Joint1=111 | Joint2=156 | Joint3=157 | Joint4=112 | GUID=9e67ae3e-a887-4ab7-9992-b026d2b5b51a |
| Area=97  | Joint1=112 | Joint2=157 | Joint3=158 | Joint4=113 | GUID=93e0fec7-07b3-4237-a070-e61e0e85be87 |
| Area=98  | Joint1=113 | Joint2=158 | Joint3=159 | Joint4=114 | GUID=b58b1c84-fffe-40df-8a5e-dbe2d99b2c1d |
| Area=99  | Joint1=114 | Joint2=159 | Joint3=160 | Joint4=115 | GUID=0912d2b9-48ba-4c52-a0b3-25adcc89e296 |
| Area=100 | Joint1=115 | Joint2=160 | Joint3=161 | Joint4=116 | GUID=7398bc4a-9e4f-44fc-8129-010593cc8e1f |
| Area=101 | Joint1=116 | Joint2=161 | Joint3=162 | Joint4=117 | GUID=42b05f6a-b115-4d8c-9a55-d26ef2dddea8 |
| Area=102 | Joint1=117 | Joint2=162 | Joint3=163 | Joint4=118 | GUID=6200fe2e-6920-4b82-bcab-3b71b45ef8a7 |
| Area=103 | Joint1=118 | Joint2=163 | Joint3=164 | Joint4=119 | GUID=92202d8c-092f-4171-a858-047430dba2e8 |
| Area=104 | Joint1=119 | Joint2=164 | Joint3=165 | Joint4=120 | GUID=e75ff2a2-3d33-4a68-9d2a-4f183da87acd |
| Area=105 | Joint1=120 | Joint2=165 | Joint3=166 | Joint4=121 | GUID=df8d9743-900f-4ba5-881e-47ee571d0ca0 |
| Area=106 | Joint1=121 | Joint2=166 | Joint3=167 | Joint4=122 | GUID=68676a12-4c3c-435e-8bb9-f75f325d282a |
| Area=107 | Joint1=122 | Joint2=167 | Joint3=168 | Joint4=123 | GUID=cfa21734-f912-4e25-951d-3cea3754dbec |
| Area=108 | Joint1=123 | Joint2=168 | Joint3=169 | Joint4=124 | GUID=909c7113-fc98-4aa0-800c-2041e18a0a98 |
| Area=109 | Joint1=124 | Joint2=169 | Joint3=170 | Joint4=125 | GUID=2a1b7bc0-7c46-4f18-a421-2b91aaa96b9b |
| Area=110 | Joint1=125 | Joint2=170 | Joint3=171 | Joint4=126 | GUID=27857420-5565-4209-ab84-fd371e35c424 |
| Area=111 | Joint1=126 | Joint2=171 | Joint3=172 | Joint4=127 | GUID=df5d0795-4807-48a0-9080-4baa9e283ecf |
| Area=112 | Joint1=127 | Joint2=172 | Joint3=173 | Joint4=128 | GUID=d7f6806d-81b6-4cba-88d0-750627754d64 |
| Area=113 | Joint1=128 | Joint2=173 | Joint3=174 | Joint4=129 | GUID=082197b6-4991-459f-a9d1-1a6d14b042e4 |
| Area=114 | Joint1=129 | Joint2=174 | Joint3=175 | Joint4=130 | GUID=86e65507-92c9-4476-bb44-39b358d08b15 |
| Area=115 | Joint1=130 | Joint2=175 | Joint3=176 | Joint4=131 | GUID=73286aea-34a6-4ad3-b113-833b7d858b0f |
| Area=116 | Joint1=131 | Joint2=176 | Joint3=177 | Joint4=132 | GUID=563ece4e-7088-49c0-8c17-34ae3a2e5466 |
| Area=117 | Joint1=132 | Joint2=177 | Joint3=178 | Joint4=133 | GUID=9dc445f3-e58b-4027-8736-b7062595705a |
| Area=118 | Joint1=133 | Joint2=178 | Joint3=179 | Joint4=134 | GUID=5ad011e4-bdd6-4a0b-a198-91d4e073d313 |
| Area=119 | Joint1=134 | Joint2=179 | Joint3=180 | Joint4=135 | GUID=6bcd6445-9f00-4faa-954e-e2b229ca0f22 |
| Area=120 | Joint1=135 | Joint2=180 | Joint3=181 | Joint4=136 | GUID=284155c4-04b0-4b21-a28b-7796e8d7247d |
| Area=121 | Joint1=136 | Joint2=181 | Joint3=182 | Joint4=137 | GUID=8af4e721-cf14-4910-8aca-e31b437c8e7e |
| Area=122 | Joint1=137 | Joint2=182 | Joint3=183 | Joint4=138 | GUID=262656bd-9d27-4cb1-8be5-f8546e486ade |
| Area=123 | Joint1=138 | Joint2=183 | Joint3=184 | Joint4=139 | GUID=1ca9333b-e189-426c-b2f3-77227a9cfb0e |
| Area=124 | Joint1=139 | Joint2=184 | Joint3=185 | Joint4=140 | GUID=ca1439f9-9ac6-4019-a64a-207538645d34 |
| Area=125 | Joint1=140 | Joint2=185 | Joint3=186 | Joint4=141 | GUID=b2dd273c-4967-4700-a484-b0cf30a2bfc  |
| Area=126 | Joint1=141 | Joint2=186 | Joint3=187 | Joint4=142 | GUID=0a693383-aa50-445d-b2b7-b756296c915a |
| Area=127 | Joint1=142 | Joint2=187 | Joint3=188 | Joint4=143 | GUID=51b68b81-29e1-4b96-a45f-1b02f78f7c43 |
| Area=128 | Joint1=143 | Joint2=188 | Joint3=189 | Joint4=144 | GUID=560cac9a-10cc-4ff2-a8f0-5ddbe7d273ea |

|          |            |            |            |            |                                           |
|----------|------------|------------|------------|------------|-------------------------------------------|
| Area=129 | Joint1=144 | Joint2=189 | Joint3=190 | Joint4=145 | GUID=d8a0e6b0-6d5c-4960-9558-0e604cb0451c |
| Area=130 | Joint1=145 | Joint2=190 | Joint3=191 | Joint4=146 | GUID=5022e695-4164-4d8a-80c7-cbe3df46d55f |
| Area=131 | Joint1=146 | Joint2=191 | Joint3=192 | Joint4=147 | GUID=458717fb-973c-4e1c-b60b-e0d65254e534 |
| Area=132 | Joint1=147 | Joint2=192 | Joint3=193 | Joint4=148 | GUID=13219251-8a1f-4f11-9bc5-01fd601eefc1 |
| Area=133 | Joint1=148 | Joint2=193 | Joint3=194 | Joint4=149 | GUID=d4c01deb-d9c8-4b63-871c-24f6743464ee |
| Area=134 | Joint1=150 | Joint2=195 | Joint3=196 | Joint4=151 | GUID=31d2a2a9-ff13-44fc-b9a5-1bfd5497032a |
| Area=135 | Joint1=151 | Joint2=196 | Joint3=197 | Joint4=152 | GUID=84582b80-7dcf-4b1f-854d-c4eda90e5bc3 |
| Area=136 | Joint1=152 | Joint2=197 | Joint3=198 | Joint4=153 | GUID=1b3414a4-0a27-47c6-bf72-0cdb90764a2e |
| Area=137 | Joint1=153 | Joint2=198 | Joint3=199 | Joint4=154 | GUID=9d070406-4ae2-46ab-aac1-42a43cd1f49e |
| Area=138 | Joint1=154 | Joint2=199 | Joint3=200 | Joint4=155 | GUID=1e9fe3ff-a1b6-406d-8757-7a6c8ab555f2 |
| Area=139 | Joint1=155 | Joint2=200 | Joint3=201 | Joint4=156 | GUID=50c38301-35b0-4818-ab6f-3f2fd9025d07 |
| Area=140 | Joint1=156 | Joint2=201 | Joint3=202 | Joint4=157 | GUID=5a6f60f9-3a90-4531-846d-08aaf4ced3b0 |
| Area=141 | Joint1=157 | Joint2=202 | Joint3=203 | Joint4=158 | GUID=73f6c78a-9b97-4bbd-aae3-92859216e3b3 |
| Area=142 | Joint1=158 | Joint2=203 | Joint3=204 | Joint4=159 | GUID=f942e77e-8e3c-4710-9f3b-7a8f57c5c792 |
| Area=143 | Joint1=159 | Joint2=204 | Joint3=205 | Joint4=160 | GUID=26134770-2b40-47cb-a8f2-07a3c8ae375f |
| Area=144 | Joint1=160 | Joint2=205 | Joint3=206 | Joint4=161 | GUID=8d1c22e8-8ca6-4eab-830e-52e31c1cac02 |
| Area=145 | Joint1=161 | Joint2=206 | Joint3=207 | Joint4=162 | GUID=748ae6af-8dc2-422f-9ef8-2c0e78914a5e |
| Area=146 | Joint1=162 | Joint2=207 | Joint3=208 | Joint4=163 | GUID=cec8afbb-191b-4218-aa55-650021faa9f3 |
| Area=147 | Joint1=163 | Joint2=208 | Joint3=209 | Joint4=164 | GUID=09d778e3-f23a-4c2a-ab68-e2e60b1ef647 |
| Area=148 | Joint1=164 | Joint2=209 | Joint3=210 | Joint4=165 | GUID=fbf56873-d922-4611-aa8e-df99776c9fe4 |
| Area=149 | Joint1=165 | Joint2=210 | Joint3=211 | Joint4=166 | GUID=54f7623f-43ec-420d-8bb9-ef54698d1e4a |
| Area=150 | Joint1=166 | Joint2=211 | Joint3=212 | Joint4=167 | GUID=6e28a98e-8f74-4af0-9ca6-39d08c1bd816 |
| Area=151 | Joint1=167 | Joint2=212 | Joint3=213 | Joint4=168 | GUID=dd81091b-9368-4f0a-8e98-110522f140b3 |
| Area=152 | Joint1=168 | Joint2=213 | Joint3=214 | Joint4=169 | GUID=0ea642d8-962d-4160-aa17-1b1829af50ea |
| Area=153 | Joint1=169 | Joint2=214 | Joint3=215 | Joint4=170 | GUID=0d434eeb-e5f2-4070-be9a-6c90d0973033 |
| Area=154 | Joint1=170 | Joint2=215 | Joint3=216 | Joint4=171 | GUID=136a0b02-e874-447c-9b29-23c2b7664654 |
| Area=155 | Joint1=171 | Joint2=216 | Joint3=217 | Joint4=172 | GUID=17ff58d5-a874-40d7-8a7b-8f6974e4f322 |
| Area=156 | Joint1=172 | Joint2=217 | Joint3=218 | Joint4=173 | GUID=f824a015-dd3e-4118-ad0d-cf1be5abcf6  |
| Area=157 | Joint1=173 | Joint2=218 | Joint3=219 | Joint4=174 | GUID=8d9136dc-0b97-4796-8040-c1063c62de72 |
| Area=158 | Joint1=174 | Joint2=219 | Joint3=220 | Joint4=175 | GUID=54093290-73b4-43ab-b91c-da099802bbf6 |
| Area=159 | Joint1=175 | Joint2=220 | Joint3=221 | Joint4=176 | GUID=7db7320d-7c32-4d34-8b92-04ae32c82a5a |
| Area=160 | Joint1=176 | Joint2=221 | Joint3=222 | Joint4=177 | GUID=7dbdb29d-af81-4982-a19d-a3fd9f47f796 |
| Area=161 | Joint1=177 | Joint2=222 | Joint3=223 | Joint4=178 | GUID=82fb7dae-5e3b-41b4-bb24-c1b396ad66c8 |
| Area=162 | Joint1=178 | Joint2=223 | Joint3=224 | Joint4=179 | GUID=5503bfa6-e9ea-4a2b-bc12-ab0c639adbb  |
| Area=163 | Joint1=179 | Joint2=224 | Joint3=225 | Joint4=180 | GUID=24c5d7d3-7094-46ad-8a08-33bb75ebace5 |
| Area=164 | Joint1=180 | Joint2=225 | Joint3=226 | Joint4=181 | GUID=c9647e6e-d43b-40bc-b510-0a5803e75e7e |
| Area=165 | Joint1=181 | Joint2=226 | Joint3=227 | Joint4=182 | GUID=7ec88e3a-b9dd-49f7-91eb-f8145f46a127 |
| Area=166 | Joint1=182 | Joint2=227 | Joint3=228 | Joint4=183 | GUID=31d804ba-7b3e-41e1-999b-8e84cb5b3a72 |
| Area=167 | Joint1=183 | Joint2=228 | Joint3=229 | Joint4=184 | GUID=d03797f4-9200-423c-8fd5-7990ab960fd5 |
| Area=168 | Joint1=184 | Joint2=229 | Joint3=230 | Joint4=185 | GUID=ac5f39f9-f49d-47e0-842e-a591ea4cf4a8 |
| Area=169 | Joint1=185 | Joint2=230 | Joint3=231 | Joint4=186 | GUID=3fdb01c9-5e2c-4209-b47e-62c6a64a5c7d |
| Area=170 | Joint1=186 | Joint2=231 | Joint3=232 | Joint4=187 | GUID=d2e8a59a-fd2c-4938-b8e9-0f8d352cd810 |
| Area=171 | Joint1=187 | Joint2=232 | Joint3=233 | Joint4=188 | GUID=f8ef5583-ec9d-449b-8554-7ca3f0a1091e |
| Area=172 | Joint1=188 | Joint2=233 | Joint3=234 | Joint4=189 | GUID=dd55852c-1ec3-4104-9057-3d453d20a2c2 |
| Area=173 | Joint1=189 | Joint2=234 | Joint3=235 | Joint4=190 | GUID=ef0c67d1-8bf8-4393-91ce-34573d2b89da |
| Area=174 | Joint1=190 | Joint2=235 | Joint3=236 | Joint4=191 | GUID=3beb89cb-de0d-4ce3-bd46-66fe853b6cde |
| Area=175 | Joint1=191 | Joint2=236 | Joint3=237 | Joint4=192 | GUID=0456731e-03b8-4ea0-9bfb-fd2b028a3f51 |
| Area=176 | Joint1=192 | Joint2=237 | Joint3=238 | Joint4=193 | GUID=4c79d2dc-d002-40af-a546-6af081a8cef4 |
| Area=177 | Joint1=193 | Joint2=238 | Joint3=239 | Joint4=194 | GUID=c2eef59f-3686-4242-876f-6ad673b079a4 |
| Area=178 | Joint1=195 | Joint2=240 | Joint3=241 | Joint4=196 | GUID=c5ba748e-fbaf-4f92-82ea-1a8209711acc |
| Area=179 | Joint1=196 | Joint2=241 | Joint3=242 | Joint4=197 | GUID=e1145f61-943a-46b7-8cb2-b319210c1e56 |
| Area=180 | Joint1=197 | Joint2=242 | Joint3=243 | Joint4=198 | GUID=7748193a-9276-450c-9f55-7fb8016ed5e0 |
| Area=181 | Joint1=198 | Joint2=243 | Joint3=244 | Joint4=199 | GUID=c5af0f87-12c1-47ee-855e-9a4b7d7f0e20 |
| Area=182 | Joint1=199 | Joint2=244 | Joint3=245 | Joint4=200 | GUID=e93329a7-53ee-4dc1-a6b4-5e4c5412bd44 |
| Area=183 | Joint1=200 | Joint2=245 | Joint3=246 | Joint4=201 | GUID=40c49d73-cfa1-4da6-b253-4b1e5afa60f9 |

|          |            |            |            |            |                                            |
|----------|------------|------------|------------|------------|--------------------------------------------|
| Area=184 | Joint1=201 | Joint2=246 | Joint3=247 | Joint4=202 | GUID=75a30508-58fb-4e51-bfae-dcb733dde053  |
| Area=185 | Joint1=202 | Joint2=247 | Joint3=248 | Joint4=203 | GUID=d1dca9f6-dc59-44eb-84c5-072e54b4ed83  |
| Area=186 | Joint1=203 | Joint2=248 | Joint3=249 | Joint4=204 | GUID=0c52f339-e65c-4352-87f9-7bbb42e19fdc  |
| Area=187 | Joint1=204 | Joint2=249 | Joint3=250 | Joint4=205 | GUID=a39ed3bb-2384-42a0-a04a-4752ee8ca7c2  |
| Area=188 | Joint1=205 | Joint2=250 | Joint3=251 | Joint4=206 | GUID=a4628eb6-94dd-46d1-bea1-66d51efb4870  |
| Area=189 | Joint1=206 | Joint2=251 | Joint3=252 | Joint4=207 | GUID=3fd366ea-fde8-4f02-bd48-27a5a5e0fbbe  |
| Area=190 | Joint1=207 | Joint2=252 | Joint3=253 | Joint4=208 | GUID=ab036140-80f9-4950-8bf8-d92e6a465cd5  |
| Area=191 | Joint1=208 | Joint2=253 | Joint3=254 | Joint4=209 | GUID=3b61a3e9-94d1-4650-987c-37b84857ae2a  |
| Area=192 | Joint1=209 | Joint2=254 | Joint3=255 | Joint4=210 | GUID=a87d28e5-f6f8-4e67-aa95-77d4c7e56a19  |
| Area=193 | Joint1=210 | Joint2=255 | Joint3=256 | Joint4=211 | GUID=85d79dd1-4677-464b-9e32-d4f648e0dbce  |
| Area=194 | Joint1=211 | Joint2=256 | Joint3=257 | Joint4=212 | GUID=e0177267-0e38-4ef7-adf7-2a6ad2c6a6c4  |
| Area=195 | Joint1=212 | Joint2=257 | Joint3=258 | Joint4=213 | GUID=03aef0b5-a3b5-418e-b7fe-961574dccc94  |
| Area=196 | Joint1=213 | Joint2=258 | Joint3=259 | Joint4=214 | GUID=20c4b764-bd60-4d4e-99a5-e1c8f35aba6e  |
| Area=197 | Joint1=214 | Joint2=259 | Joint3=260 | Joint4=215 | GUID=2f125b7b-6f82-4d69-aefe-2eee8e3c2875  |
| Area=198 | Joint1=215 | Joint2=260 | Joint3=261 | Joint4=216 | GUID=ccce8c41-04cf-4f07-8c09-0aa1467e6f74  |
| Area=199 | Joint1=216 | Joint2=261 | Joint3=262 | Joint4=217 | GUID=6bc36885-75b8-4c99-ba65-a9e43ee9d39   |
| Area=200 | Joint1=217 | Joint2=262 | Joint3=263 | Joint4=218 | GUID=2c20bc8a-bd4f-4bfe-9fb2-bc371835cd30  |
| Area=201 | Joint1=218 | Joint2=263 | Joint3=264 | Joint4=219 | GUID=61d9a426-e602-48bd-a2f7-29d0c679581b  |
| Area=202 | Joint1=219 | Joint2=264 | Joint3=265 | Joint4=220 | GUID=ef5dbe42-7319-4e0f-983d-7ac3121baf46  |
| Area=203 | Joint1=220 | Joint2=265 | Joint3=266 | Joint4=221 | GUID=b0e54c5e-6776-4695-a0fc-4a905a6064ed  |
| Area=204 | Joint1=221 | Joint2=266 | Joint3=267 | Joint4=222 | GUID=dd898687-9a41-4101-9a9b-f975a2984b58  |
| Area=205 | Joint1=222 | Joint2=267 | Joint3=268 | Joint4=223 | GUID=4f0c140e-c2ab-4d5e-894f-05dbcb779b4d  |
| Area=206 | Joint1=223 | Joint2=268 | Joint3=269 | Joint4=224 | GUID=27e2d1fb-3987-450b-b801-1b631cb36320  |
| Area=207 | Joint1=224 | Joint2=269 | Joint3=270 | Joint4=225 | GUID=7f068107-079a-45da-903e-87953c4bb6c3  |
| Area=208 | Joint1=225 | Joint2=270 | Joint3=271 | Joint4=226 | GUID=cee65550-f33d-4bec-8211-cc2611242427  |
| Area=209 | Joint1=226 | Joint2=271 | Joint3=272 | Joint4=227 | GUID=273ca88c-f6fd-4ef8-8893-bdb662dbb79b  |
| Area=210 | Joint1=227 | Joint2=272 | Joint3=273 | Joint4=228 | GUID=e0ac7238-f311-4d40-9e1a-5e97606496b9  |
| Area=211 | Joint1=228 | Joint2=273 | Joint3=274 | Joint4=229 | GUID=64d4cefc-c6b0-4b3f-a530-f89e6845cbc8  |
| Area=212 | Joint1=229 | Joint2=274 | Joint3=275 | Joint4=230 | GUID=7b863006-4e5a-4c3f-b287-47e41e400ef1  |
| Area=213 | Joint1=230 | Joint2=275 | Joint3=276 | Joint4=231 | GUID=b71c782c-3c15-49b5-8c8f-68c31709a6f5  |
| Area=214 | Joint1=231 | Joint2=276 | Joint3=277 | Joint4=232 | GUID=40130f99-b559-4aa4-875e-e52103568f0f  |
| Area=215 | Joint1=232 | Joint2=277 | Joint3=278 | Joint4=233 | GUID=410328ab-821b-4939-80a9-e59fbde3c6cc  |
| Area=216 | Joint1=233 | Joint2=278 | Joint3=279 | Joint4=234 | GUID=5692370f-5b2c-4c67-9652-522c5f0de676  |
| Area=217 | Joint1=234 | Joint2=279 | Joint3=280 | Joint4=235 | GUID=875cd0ac-a860-4264-a7d0-6e13d20c2bdd  |
| Area=218 | Joint1=235 | Joint2=280 | Joint3=281 | Joint4=236 | GUID=07d7a57f-becd-4da3-8d66-48f98b1e14c2  |
| Area=219 | Joint1=236 | Joint2=281 | Joint3=282 | Joint4=237 | GUID=c10966c8-97c0-472e-bff2-0f7b6425fb26  |
| Area=220 | Joint1=237 | Joint2=282 | Joint3=283 | Joint4=238 | GUID=24508b99-e61a-40ed-90d5-74f4fd7885b5  |
| Area=221 | Joint1=238 | Joint2=283 | Joint3=284 | Joint4=239 | GUID=125cf879-bc20-4206-a600-1a1533587187  |
| Area=222 | Joint1=240 | Joint2=285 | Joint3=286 | Joint4=241 | GUID=b8872277-a735-47f9-901f-637cc7225142  |
| Area=223 | Joint1=241 | Joint2=286 | Joint3=287 | Joint4=242 | GUID=252b8e13-a59c-4179-a2c2-4f66e2a91dfd  |
| Area=224 | Joint1=242 | Joint2=287 | Joint3=288 | Joint4=243 | GUID=530167a2-7b3b-4710-b637-9679b7954a7e  |
| Area=225 | Joint1=243 | Joint2=288 | Joint3=289 | Joint4=244 | GUID=b6df66d0-f38c-46ab-bca3-2932b5b91a4b  |
| Area=226 | Joint1=244 | Joint2=289 | Joint3=290 | Joint4=245 | GUID=b3d28556-e7cf-4968-bf9a-6c67d23adab2  |
| Area=227 | Joint1=245 | Joint2=290 | Joint3=291 | Joint4=246 | GUID=6a97dece-b21c-4012-bf61-82ac6f039298  |
| Area=228 | Joint1=246 | Joint2=291 | Joint3=292 | Joint4=247 | GUID=b41b91fa-d3a7-4643-a71b-30f3dbeb3b16d |
| Area=229 | Joint1=247 | Joint2=292 | Joint3=293 | Joint4=248 | GUID=51203c1c-4ee7-4706-94c0-8dd7583e0239  |
| Area=230 | Joint1=248 | Joint2=293 | Joint3=294 | Joint4=249 | GUID=96c1b282-5cc6-49ac-a851-ba142eb161d2  |
| Area=231 | Joint1=249 | Joint2=294 | Joint3=295 | Joint4=250 | GUID=d59d2094-4eda-4c40-9521-991378f39f2e  |
| Area=232 | Joint1=250 | Joint2=295 | Joint3=296 | Joint4=251 | GUID=c67aec38-b5a1-4d1c-8b97-82fd2983cfd7  |
| Area=233 | Joint1=251 | Joint2=296 | Joint3=297 | Joint4=252 | GUID=86eca1d7-39b3-4e45-a896-c44440dc1a22  |
| Area=234 | Joint1=252 | Joint2=297 | Joint3=298 | Joint4=253 | GUID=ff609e6f-4bf5-46ec-9cbf-6a78b9f078cd  |
| Area=235 | Joint1=253 | Joint2=298 | Joint3=299 | Joint4=254 | GUID=572c9116-7c28-4cf1-b632-55f5d81e6184  |
| Area=236 | Joint1=254 | Joint2=299 | Joint3=300 | Joint4=255 | GUID=14399863-b133-4f75-ad34-9fa2d1f9583c  |
| Area=237 | Joint1=255 | Joint2=300 | Joint3=301 | Joint4=256 | GUID=c987ea20-3e63-48cb-a459-df36f1fd4240  |
| Area=238 | Joint1=256 | Joint2=301 | Joint3=302 | Joint4=257 | GUID=2ea40f68-ecad-4194-ab9f-8cbfe6accf8f  |



|          |            |            |            |            |                                           |
|----------|------------|------------|------------|------------|-------------------------------------------|
| Area=239 | Joint1=257 | Joint2=302 | Joint3=303 | Joint4=258 | GUID=59d89500-310e-418c-a66a-e1966cf04cc7 |
| Area=240 | Joint1=258 | Joint2=303 | Joint3=304 | Joint4=259 | GUID=3d0b2bb8-ec0f-4553-9e94-3f5fa52eaf3d |
| Area=241 | Joint1=259 | Joint2=304 | Joint3=305 | Joint4=260 | GUID=d211ab40-145c-4cce-affd-07d6db06aaf5 |
| Area=242 | Joint1=260 | Joint2=305 | Joint3=306 | Joint4=261 | GUID=82568914-215a-46da-994b-0c0f893517e8 |
| Area=243 | Joint1=261 | Joint2=306 | Joint3=307 | Joint4=262 | GUID=49ab84da-aea2-4c9c-be4a-40b671144c50 |
| Area=244 | Joint1=262 | Joint2=307 | Joint3=308 | Joint4=263 | GUID=2bebf589-3b20-4dd9-acda-1c3ea708f940 |
| Area=245 | Joint1=263 | Joint2=308 | Joint3=309 | Joint4=264 | GUID=86142a02-6bfb-4675-921a-b53c6343a352 |
| Area=246 | Joint1=264 | Joint2=309 | Joint3=310 | Joint4=265 | GUID=f5607396-7350-47cc-a328-8d41d47ed54e |
| Area=247 | Joint1=265 | Joint2=310 | Joint3=311 | Joint4=266 | GUID=ab31fbfc-1907-46f7-8539-1c21cb5fff31 |
| Area=248 | Joint1=266 | Joint2=311 | Joint3=312 | Joint4=267 | GUID=5a4fba54-03dd-4b1d-87fb-ad4365d95b85 |
| Area=249 | Joint1=267 | Joint2=312 | Joint3=313 | Joint4=268 | GUID=03a68b2f-5a46-420d-92b6-a5baa05ea7c7 |
| Area=250 | Joint1=268 | Joint2=313 | Joint3=314 | Joint4=269 | GUID=ff1cfd5-b269-48c8-b5a5-f2f5e7de8baf  |
| Area=251 | Joint1=269 | Joint2=314 | Joint3=315 | Joint4=270 | GUID=198cbd4b-b48e-4072-b842-925e12a577e6 |
| Area=252 | Joint1=270 | Joint2=315 | Joint3=316 | Joint4=271 | GUID=d98fa8a3-8a46-4625-9005-01c82c20b8b7 |
| Area=253 | Joint1=271 | Joint2=316 | Joint3=317 | Joint4=272 | GUID=068fa991-fd88-4a02-96b4-38201e83e821 |
| Area=254 | Joint1=272 | Joint2=317 | Joint3=318 | Joint4=273 | GUID=cd9cb039-004a-4b37-b951-443ad418f8a  |
| Area=255 | Joint1=273 | Joint2=318 | Joint3=319 | Joint4=274 | GUID=6da41c00-101b-45a3-903e-fb0e1c29a0b6 |
| Area=256 | Joint1=274 | Joint2=319 | Joint3=320 | Joint4=275 | GUID=21414326-17fc-4679-8dc9-b47132f1de22 |
| Area=257 | Joint1=275 | Joint2=320 | Joint3=321 | Joint4=276 | GUID=a7fd3d4b-9a6f-49e0-b6c1-23c4184f690c |
| Area=258 | Joint1=276 | Joint2=321 | Joint3=322 | Joint4=277 | GUID=56e5c078-f51f-4426-886b-1fde5e9f0000 |
| Area=259 | Joint1=277 | Joint2=322 | Joint3=323 | Joint4=278 | GUID=307f5fd0-3129-4af3-9466-6f5d525f7b87 |
| Area=260 | Joint1=278 | Joint2=323 | Joint3=324 | Joint4=279 | GUID=84e266de-2091-4a79-af6e-dda2c9526ede |
| Area=261 | Joint1=279 | Joint2=324 | Joint3=325 | Joint4=280 | GUID=ade42121-2ab8-41b1-9dcb-16329df5d53  |
| Area=262 | Joint1=280 | Joint2=325 | Joint3=326 | Joint4=281 | GUID=793e182e-d7eb-4ce0-ade8-62cd6c38bbaf |
| Area=263 | Joint1=281 | Joint2=326 | Joint3=327 | Joint4=282 | GUID=5ea25d36-97e9-4aae-bde2-44565e49cabb |
| Area=264 | Joint1=282 | Joint2=327 | Joint3=328 | Joint4=283 | GUID=05d1ea34-bf61-490c-a75d-5d956eccfd9b |
| Area=265 | Joint1=283 | Joint2=328 | Joint3=329 | Joint4=284 | GUID=10c38fff-2ab0-47a2-b095-e2dc8858b30e |
| Area=266 | Joint1=285 | Joint2=330 | Joint3=331 | Joint4=286 | GUID=cd0db006-1994-4e43-87cd-66212894b402 |
| Area=267 | Joint1=286 | Joint2=331 | Joint3=332 | Joint4=287 | GUID=3a9adf4f-a45a-42db-a8ec-874159df4706 |
| Area=268 | Joint1=287 | Joint2=332 | Joint3=333 | Joint4=288 | GUID=5dc2cc26-22e0-4024-8ddb-035d7cc65304 |
| Area=269 | Joint1=288 | Joint2=333 | Joint3=334 | Joint4=289 | GUID=f6f3afe1-2d9b-4dc3-8a9f-9eec645268e9 |
| Area=270 | Joint1=289 | Joint2=334 | Joint3=335 | Joint4=290 | GUID=364d16d9-0a5d-495a-a521-80ce0455cf90 |
| Area=271 | Joint1=290 | Joint2=335 | Joint3=336 | Joint4=291 | GUID=551d40ba-02cb-40f1-b7de-9646b69d8bf0 |
| Area=272 | Joint1=291 | Joint2=336 | Joint3=337 | Joint4=292 | GUID=6a1c9f2b-f3a0-41f1-a616-744594073e1c |
| Area=273 | Joint1=292 | Joint2=337 | Joint3=338 | Joint4=293 | GUID=6c125f7e-a6c2-42f3-9fe6-dc4d973d52e9 |
| Area=274 | Joint1=293 | Joint2=338 | Joint3=339 | Joint4=294 | GUID=c01e02c5-e7c2-475b-be64-757c8a2ae2cc |
| Area=275 | Joint1=294 | Joint2=339 | Joint3=340 | Joint4=295 | GUID=ba9a248a-616e-4b7c-9a41-0be37e8d2dc1 |
| Area=276 | Joint1=295 | Joint2=340 | Joint3=341 | Joint4=296 | GUID=53f92757-7cd4-409f-9b83-530ac3960945 |
| Area=277 | Joint1=296 | Joint2=341 | Joint3=342 | Joint4=297 | GUID=3ac14641-0dbb-4368-ab45-2699ce7660d7 |
| Area=278 | Joint1=297 | Joint2=342 | Joint3=343 | Joint4=298 | GUID=d8da4b18-3d66-4093-b391-f8dda440989e |
| Area=279 | Joint1=298 | Joint2=343 | Joint3=344 | Joint4=299 | GUID=f6f666d-5caa-4e1c-ae7e-22750dd7fb8c  |
| Area=280 | Joint1=299 | Joint2=344 | Joint3=345 | Joint4=300 | GUID=0fa54ad6-aea9-4945-8307-99ddba776c05 |
| Area=281 | Joint1=300 | Joint2=345 | Joint3=346 | Joint4=301 | GUID=1f0ee7b8-4c52-4ecc-836b-f27aa56f038c |
| Area=282 | Joint1=301 | Joint2=346 | Joint3=347 | Joint4=302 | GUID=2284c9ac-e4e0-4a73-8aec-28d9144ed258 |
| Area=283 | Joint1=302 | Joint2=347 | Joint3=348 | Joint4=303 | GUID=40c73609-a193-4f53-ac00-54602d858cde |
| Area=284 | Joint1=303 | Joint2=348 | Joint3=349 | Joint4=304 | GUID=08035656-0a41-4240-b404-b7d5cdc55ebe |
| Area=285 | Joint1=304 | Joint2=349 | Joint3=350 | Joint4=305 | GUID=d35ee215-90cf-4089-9003-25899a20c703 |
| Area=286 | Joint1=305 | Joint2=350 | Joint3=351 | Joint4=306 | GUID=99a96bcb-1be3-4be2-9b66-f5f130dec863 |
| Area=287 | Joint1=306 | Joint2=351 | Joint3=352 | Joint4=307 | GUID=1e060a40-63a7-47e4-9a53-dc04d65c9b2e |
| Area=288 | Joint1=307 | Joint2=352 | Joint3=353 | Joint4=308 | GUID=fa77576e-c033-4619-86d1-56cd8c9f96e8 |
| Area=289 | Joint1=308 | Joint2=353 | Joint3=354 | Joint4=309 | GUID=b5eae381-e18a-4366-bceb-bc8a57a0daff |
| Area=290 | Joint1=309 | Joint2=354 | Joint3=355 | Joint4=310 | GUID=441f0441-9042-417b-ba59-e93fcc2c11b2 |
| Area=291 | Joint1=310 | Joint2=355 | Joint3=356 | Joint4=311 | GUID=e1a35569-a780-439a-bbcd-ef1b8a08a7f6 |
| Area=292 | Joint1=311 | Joint2=356 | Joint3=357 | Joint4=312 | GUID=5a44b938-0975-42ee-9951-bdd3b58f7d74 |
| Area=293 | Joint1=312 | Joint2=357 | Joint3=358 | Joint4=313 | GUID=d8694515-991b-4334-b2b8-3bfba57c5d06 |

|          |            |            |            |            |                                            |
|----------|------------|------------|------------|------------|--------------------------------------------|
| Area=294 | Joint1=313 | Joint2=358 | Joint3=359 | Joint4=314 | GUID=b5cfaefd-d776-473a-bc3c-a33b4aef825   |
| Area=295 | Joint1=314 | Joint2=359 | Joint3=360 | Joint4=315 | GUID=cb083d16-eba5-4aa2-a41b-8929fe34dec   |
| Area=296 | Joint1=315 | Joint2=360 | Joint3=361 | Joint4=316 | GUID=6712200f-39a3-457b-995b-a118071fa0b1  |
| Area=297 | Joint1=316 | Joint2=361 | Joint3=362 | Joint4=317 | GUID=c0bc2755-3be9-48a8-b86f-bc0ae485b6fa  |
| Area=298 | Joint1=317 | Joint2=362 | Joint3=363 | Joint4=318 | GUID=0d2e34da-a938-44b4-b266-7ac22421c584  |
| Area=299 | Joint1=318 | Joint2=363 | Joint3=364 | Joint4=319 | GUID=3adcf688-c78e-4f9b-a47e-e222e1404162  |
| Area=300 | Joint1=319 | Joint2=364 | Joint3=365 | Joint4=320 | GUID=de56a508-0e28-4df1-9ccc-beb7a9bef779  |
| Area=301 | Joint1=320 | Joint2=365 | Joint3=366 | Joint4=321 | GUID=d75f9e06-51db-4933-96fc-884882429dcf  |
| Area=302 | Joint1=321 | Joint2=366 | Joint3=367 | Joint4=322 | GUID=4e21abdb-ca14-4425-a87a-ee5baebc64a5  |
| Area=303 | Joint1=322 | Joint2=367 | Joint3=368 | Joint4=323 | GUID=352f8751-9404-4cfc-bacf-c1efa7ba12d8  |
| Area=304 | Joint1=323 | Joint2=368 | Joint3=369 | Joint4=324 | GUID=acf675e6-ddc6-4229-b56a-70eaf0c518fb  |
| Area=305 | Joint1=324 | Joint2=369 | Joint3=370 | Joint4=325 | GUID=666c8760-c616-4193-b51a-7c831cb49bee  |
| Area=306 | Joint1=325 | Joint2=370 | Joint3=371 | Joint4=326 | GUID=93c2bfe3-1e92-466f-920b-32ca46faef8d  |
| Area=307 | Joint1=326 | Joint2=371 | Joint3=372 | Joint4=327 | GUID=1a60e34e-883c-4f62-8d5f-859d734859d0  |
| Area=308 | Joint1=327 | Joint2=372 | Joint3=373 | Joint4=328 | GUID=380d1038-a43a-464d-a28e-38fc0982b91d  |
| Area=309 | Joint1=328 | Joint2=373 | Joint3=374 | Joint4=329 | GUID=f6e5d9c4-e1fc-4e88-ae4b-ec343fac4d92  |
| Area=310 | Joint1=330 | Joint2=375 | Joint3=376 | Joint4=331 | GUID=a181734c-5b3d-4aad-9e6b-87dfe3856e3c  |
| Area=311 | Joint1=331 | Joint2=376 | Joint3=377 | Joint4=332 | GUID=dbdfa75b-7ceb-41e3-a8dc-c299fe3d276d  |
| Area=312 | Joint1=332 | Joint2=377 | Joint3=378 | Joint4=333 | GUID=878570eb-4ad8-4c72-8275-1a767f6e7fa2  |
| Area=313 | Joint1=333 | Joint2=378 | Joint3=379 | Joint4=334 | GUID=380cfab4-3979-4528-916c-d6e8bbfde13   |
| Area=314 | Joint1=334 | Joint2=379 | Joint3=380 | Joint4=335 | GUID=a1057a17-0374-436b-b2be-359dca7cb45d  |
| Area=315 | Joint1=335 | Joint2=380 | Joint3=381 | Joint4=336 | GUID=1be8b1c3-39bc-48fb-868d-1d923301e7a   |
| Area=316 | Joint1=336 | Joint2=381 | Joint3=382 | Joint4=337 | GUID=c080ec86-f10f-4ff2-95e5-71dcd1727312  |
| Area=317 | Joint1=337 | Joint2=382 | Joint3=383 | Joint4=338 | GUID=54ddb553-e588-4c43-ad31-07d914b3d26b  |
| Area=318 | Joint1=338 | Joint2=383 | Joint3=384 | Joint4=339 | GUID=567d18e2-b205-4c75-8f57-46fe47500571  |
| Area=319 | Joint1=339 | Joint2=384 | Joint3=385 | Joint4=340 | GUID=ca205227-2b4f-422c-bd5c-4111513df3a1  |
| Area=320 | Joint1=340 | Joint2=385 | Joint3=386 | Joint4=341 | GUID=4f6023ac-88aa-493c-999b-443683fb2436  |
| Area=321 | Joint1=341 | Joint2=386 | Joint3=387 | Joint4=342 | GUID=fac97573-22ad-410a-ad11-75ce3b935547  |
| Area=322 | Joint1=342 | Joint2=387 | Joint3=388 | Joint4=343 | GUID=5ca2ecc8-1492-441b-a04f-41ba29fc704e  |
| Area=323 | Joint1=343 | Joint2=388 | Joint3=389 | Joint4=344 | GUID=b50747f8-bbcf-4749-b998-93f2a3105d3c  |
| Area=324 | Joint1=344 | Joint2=389 | Joint3=390 | Joint4=345 | GUID=8727b8cd-78f9-4d3f-8220-0d9cd1eaebbf  |
| Area=325 | Joint1=345 | Joint2=390 | Joint3=391 | Joint4=346 | GUID=06aa9588-3850-4fca-b02d-6e4e45cb678e  |
| Area=326 | Joint1=346 | Joint2=391 | Joint3=392 | Joint4=347 | GUID=28f4270c-026e-4974-8005-5808163198dd  |
| Area=327 | Joint1=347 | Joint2=392 | Joint3=393 | Joint4=348 | GUID=b2e2f991-b775-46c0-a6a8-29af358e1fc1  |
| Area=328 | Joint1=348 | Joint2=393 | Joint3=394 | Joint4=349 | GUID=305e0f7d-89b3-4747-aa42-2bd05cc22f82  |
| Area=329 | Joint1=349 | Joint2=394 | Joint3=395 | Joint4=350 | GUID=ab457929-ac3d-403a-9284-6c67b11e258b  |
| Area=330 | Joint1=350 | Joint2=395 | Joint3=396 | Joint4=351 | GUID=e8bc7b5f-674c-4a36-9be4-ef9a1c909a7d  |
| Area=331 | Joint1=351 | Joint2=396 | Joint3=397 | Joint4=352 | GUID=3944da79-62a6-4e32-abf1-f2e4c4c0f369  |
| Area=332 | Joint1=352 | Joint2=397 | Joint3=398 | Joint4=353 | GUID=dbd92f09-5ead-46e0-9bc8-d657f6784101  |
| Area=333 | Joint1=353 | Joint2=398 | Joint3=399 | Joint4=354 | GUID=2cd1fa1d-c702-43e7-821c-3e4eec6fa946  |
| Area=334 | Joint1=354 | Joint2=399 | Joint3=400 | Joint4=355 | GUID=b8fa2e87-c901-44ae-b953-94abc6a2fe50  |
| Area=335 | Joint1=355 | Joint2=400 | Joint3=401 | Joint4=356 | GUID=4d55d9d0-8ec7-44dc-b390-acef27f26666  |
| Area=336 | Joint1=356 | Joint2=401 | Joint3=402 | Joint4=357 | GUID=f7a3c3b5-4aff-46dd-9d25-e08d59ccedec  |
| Area=337 | Joint1=357 | Joint2=402 | Joint3=403 | Joint4=358 | GUID=727e49cc-74d3-40e6-af46-54445385ef18  |
| Area=338 | Joint1=358 | Joint2=403 | Joint3=404 | Joint4=359 | GUID=f31dce0b-f866-48c4-a933-c12a33912d0e  |
| Area=339 | Joint1=359 | Joint2=404 | Joint3=405 | Joint4=360 | GUID=7dc5ad48-108f-4697-91dc-ddb61217cd04  |
| Area=340 | Joint1=360 | Joint2=405 | Joint3=406 | Joint4=361 | GUID=0ed83b79-50e7-4eb0-9105-c13577e1d10a  |
| Area=341 | Joint1=361 | Joint2=406 | Joint3=407 | Joint4=362 | GUID=b1e5acd1-f5d0-4cd2-bbdb-15c64278079a  |
| Area=342 | Joint1=362 | Joint2=407 | Joint3=408 | Joint4=363 | GUID=e1d06ef5-fb25-468a-b115-3aadcc20b6021 |
| Area=343 | Joint1=363 | Joint2=408 | Joint3=409 | Joint4=364 | GUID=30865331-bdbf-4096-9836-4ab2cc56e0d0  |
| Area=344 | Joint1=364 | Joint2=409 | Joint3=410 | Joint4=365 | GUID=99119f1c-30d5-4de2-a3b9-8bf4f339efa6  |
| Area=345 | Joint1=365 | Joint2=410 | Joint3=411 | Joint4=366 | GUID=c628d738-307c-4ef9-80be-59b5c06e397f  |
| Area=346 | Joint1=366 | Joint2=411 | Joint3=412 | Joint4=367 | GUID=5b154185-4366-4044-8397-8493631177ba  |
| Area=347 | Joint1=367 | Joint2=412 | Joint3=413 | Joint4=368 | GUID=74c225f6-d16b-4e36-aa5b-fa143c816ca5  |
| Area=348 | Joint1=368 | Joint2=413 | Joint3=414 | Joint4=369 | GUID=259a9792-8a32-4341-be71-ebc45417064c  |

|          |            |            |            |            |                                           |
|----------|------------|------------|------------|------------|-------------------------------------------|
| Area=349 | Joint1=369 | Joint2=414 | Joint3=415 | Joint4=370 | GUID=87df9fe1-93e3-4fb0-92a6-ce20287000d7 |
| Area=350 | Joint1=370 | Joint2=415 | Joint3=416 | Joint4=371 | GUID=7e95f1ea-055c-4d50-b779-8b777e4c64d8 |
| Area=351 | Joint1=371 | Joint2=416 | Joint3=417 | Joint4=372 | GUID=96fe5d8c-c380-45e9-ab38-d3bac6c603ab |
| Area=352 | Joint1=372 | Joint2=417 | Joint3=418 | Joint4=373 | GUID=170e049e-4eeb-49fd-acb0-0b1bf5dbf31c |
| Area=353 | Joint1=373 | Joint2=418 | Joint3=419 | Joint4=374 | GUID=f4e3fe30-efe2-4e00-81d7-e12c9e845531 |
| Area=354 | Joint1=375 | Joint2=420 | Joint3=421 | Joint4=376 | GUID=2fbeb42-9115-4803-ac33-8bed9716fdc6  |
| Area=355 | Joint1=376 | Joint2=421 | Joint3=422 | Joint4=377 | GUID=bcfe684e-8ab6-451d-837a-2796a937dd3e |
| Area=356 | Joint1=377 | Joint2=422 | Joint3=423 | Joint4=378 | GUID=52eb35d5-3614-489e-ae06-b57be1dde68d |
| Area=357 | Joint1=378 | Joint2=423 | Joint3=424 | Joint4=379 | GUID=8952895c-f315-4e63-9d41-5304701d7dde |
| Area=358 | Joint1=379 | Joint2=424 | Joint3=425 | Joint4=380 | GUID=87b73b1f-518f-48a3-809e-8d532a9ed95a |
| Area=359 | Joint1=380 | Joint2=425 | Joint3=426 | Joint4=381 | GUID=98e30ee6-5ae7-4220-a060-668cd71ff728 |
| Area=360 | Joint1=381 | Joint2=426 | Joint3=427 | Joint4=382 | GUID=276d56dc-8b30-4940-966f-540b8ca1be13 |
| Area=361 | Joint1=382 | Joint2=427 | Joint3=428 | Joint4=383 | GUID=ee61b6f2-0658-451c-b4cb-6fb70918c8b4 |
| Area=362 | Joint1=383 | Joint2=428 | Joint3=429 | Joint4=384 | GUID=f3975d76-cadc-48e6-b4ea-ed68e482bafc |
| Area=363 | Joint1=384 | Joint2=429 | Joint3=430 | Joint4=385 | GUID=3aeaec17-e010-44b0-890b-31f085f12fae |
| Area=364 | Joint1=385 | Joint2=430 | Joint3=431 | Joint4=386 | GUID=b6a67fdf-feb4-4b23-8955-8ef392014a5a |
| Area=365 | Joint1=386 | Joint2=431 | Joint3=432 | Joint4=387 | GUID=5be3f1d4-2138-4945-992a-fed2642b57b  |
| Area=366 | Joint1=387 | Joint2=432 | Joint3=433 | Joint4=388 | GUID=0ceba4a7-93ea-4de2-8098-9761dede2008 |
| Area=367 | Joint1=388 | Joint2=433 | Joint3=434 | Joint4=389 | GUID=9027f06c-f6b2-43fb-8222-9c2628f91650 |
| Area=368 | Joint1=389 | Joint2=434 | Joint3=435 | Joint4=390 | GUID=92255e31-a5f3-40f0-a855-6cd4a6718907 |
| Area=369 | Joint1=390 | Joint2=435 | Joint3=436 | Joint4=391 | GUID=f9bcfcdb-b5fc-4b53-b8d7-dcf2efad2c1b |
| Area=370 | Joint1=391 | Joint2=436 | Joint3=437 | Joint4=392 | GUID=232c1403-a72f-4fe3-bca2-7f10ae1ddb72 |
| Area=371 | Joint1=392 | Joint2=437 | Joint3=438 | Joint4=393 | GUID=ebbeb3a4-e470-40a4-9586-ea9206360b10 |
| Area=372 | Joint1=393 | Joint2=438 | Joint3=439 | Joint4=394 | GUID=19b98ee2-3b0c-4530-a2e0-a71bef960ac5 |
| Area=373 | Joint1=394 | Joint2=439 | Joint3=440 | Joint4=395 | GUID=b487fc8a-9cc5-4d40-90fe-48c333289716 |
| Area=374 | Joint1=395 | Joint2=440 | Joint3=441 | Joint4=396 | GUID=e3e7a6d6-7f3d-45c1-bf10-6aff06d3a778 |
| Area=375 | Joint1=396 | Joint2=441 | Joint3=442 | Joint4=397 | GUID=ad2b9986-ef23-4a49-9f0e-297887aba593 |
| Area=376 | Joint1=397 | Joint2=442 | Joint3=443 | Joint4=398 | GUID=b657ef42-714d-4113-9f25-03f9f819be7b |
| Area=377 | Joint1=398 | Joint2=443 | Joint3=444 | Joint4=399 | GUID=f3dbe787-a423-4e24-a29a-fa857a9c6eae |
| Area=378 | Joint1=399 | Joint2=444 | Joint3=445 | Joint4=400 | GUID=c49865b9-8c14-4cf0-a758-39ad25d8b267 |
| Area=379 | Joint1=400 | Joint2=445 | Joint3=446 | Joint4=401 | GUID=603c76b9-99a3-4bf3-b43b-61244a91c7b8 |
| Area=380 | Joint1=401 | Joint2=446 | Joint3=447 | Joint4=402 | GUID=5476360b-c467-4d35-8eac-c31faba891c1 |
| Area=381 | Joint1=402 | Joint2=447 | Joint3=448 | Joint4=403 | GUID=3b0afe53-1836-4ff2-ba99-601619fbb8eb |
| Area=382 | Joint1=403 | Joint2=448 | Joint3=449 | Joint4=404 | GUID=5f29696e-4888-4d04-bf5c-fa4e9e7f0b68 |
| Area=383 | Joint1=404 | Joint2=449 | Joint3=450 | Joint4=405 | GUID=54de510f-0e1f-46e5-89a7-b1de71178277 |
| Area=384 | Joint1=405 | Joint2=450 | Joint3=451 | Joint4=406 | GUID=5fafd546-1c26-4467-8dc6-b16cfa54dc46 |
| Area=385 | Joint1=406 | Joint2=451 | Joint3=452 | Joint4=407 | GUID=ecf50c17-63a2-428f-8ee8-fe543676e4b5 |
| Area=386 | Joint1=407 | Joint2=452 | Joint3=453 | Joint4=408 | GUID=32be2fd5-0f1c-4420-82de-27d6de357711 |
| Area=387 | Joint1=408 | Joint2=453 | Joint3=454 | Joint4=409 | GUID=1f1f969d-903b-4dba-b826-b1c53a89cc62 |
| Area=388 | Joint1=409 | Joint2=454 | Joint3=455 | Joint4=410 | GUID=a56843bd-4d53-47a5-966f-88614bfc91fa |
| Area=389 | Joint1=410 | Joint2=455 | Joint3=456 | Joint4=411 | GUID=1af1c1c5-2ef4-4127-8191-0b58fbcabbb9 |
| Area=390 | Joint1=411 | Joint2=456 | Joint3=457 | Joint4=412 | GUID=83e4957e-7af7-41be-acf1-76aa804e2eb7 |
| Area=391 | Joint1=412 | Joint2=457 | Joint3=458 | Joint4=413 | GUID=e61d0d5e-18db-48d3-9a5b-1500cd7e055c |
| Area=392 | Joint1=413 | Joint2=458 | Joint3=459 | Joint4=414 | GUID=67785b79-600c-4b08-a59a-05f0443c247c |
| Area=393 | Joint1=414 | Joint2=459 | Joint3=460 | Joint4=415 | GUID=bda00aa1-4f1d-4f51-8940-992fca53df23 |
| Area=394 | Joint1=415 | Joint2=460 | Joint3=461 | Joint4=416 | GUID=687f3a75-b0a8-4675-96bc-91f50acae643 |
| Area=395 | Joint1=416 | Joint2=461 | Joint3=462 | Joint4=417 | GUID=d124b06e-3147-4d66-918a-72f5f4602cf2 |
| Area=396 | Joint1=417 | Joint2=462 | Joint3=463 | Joint4=418 | GUID=3464444c-5103-4279-96fa-773bfe820c94 |
| Area=397 | Joint1=418 | Joint2=463 | Joint3=464 | Joint4=419 | GUID=c705dff7-5047-4a3d-9c51-ab6d108893b2 |
| Area=398 | Joint1=420 | Joint2=465 | Joint3=466 | Joint4=421 | GUID=a6ca3de4-23a5-4910-a03f-9e7083a27f00 |
| Area=399 | Joint1=421 | Joint2=466 | Joint3=467 | Joint4=422 | GUID=bd758ef4-8603-4e8f-bdfa-3d879cc96f35 |
| Area=400 | Joint1=422 | Joint2=467 | Joint3=468 | Joint4=423 | GUID=ad909262-aff5-4f4b-9fe1-e712f89a22df |
| Area=401 | Joint1=423 | Joint2=468 | Joint3=469 | Joint4=424 | GUID=de1a5af1-8727-45f2-8600-5b44aa90e07c |
| Area=402 | Joint1=424 | Joint2=469 | Joint3=470 | Joint4=425 | GUID=04667866-7794-448c-bfc5-0b589b28e07e |
| Area=403 | Joint1=425 | Joint2=470 | Joint3=471 | Joint4=426 | GUID=cee69782-573e-46de-8f17-fecf3794a8d5 |



|          |            |            |            |            |                                           |
|----------|------------|------------|------------|------------|-------------------------------------------|
| Area=404 | Joint1=426 | Joint2=471 | Joint3=472 | Joint4=427 | GUID=0f4eee01-edc7-45db-8704-5e41b4914343 |
| Area=405 | Joint1=427 | Joint2=472 | Joint3=473 | Joint4=428 | GUID=a6c3c939-fe30-48b6-be31-2eaa8332eba3 |
| Area=406 | Joint1=428 | Joint2=473 | Joint3=474 | Joint4=429 | GUID=f6785ce9-d4f9-48a0-a23b-33c39ea1ed5f |
| Area=407 | Joint1=429 | Joint2=474 | Joint3=475 | Joint4=430 | GUID=510a3f8a-9927-4812-b8ac-3775a63c12db |
| Area=408 | Joint1=430 | Joint2=475 | Joint3=476 | Joint4=431 | GUID=26d06115-78b2-4ed2-92b5-1dd3aad9025e |
| Area=409 | Joint1=431 | Joint2=476 | Joint3=477 | Joint4=432 | GUID=eec2e74b-0b51-45f3-8769-ccfe9bb05b07 |
| Area=410 | Joint1=432 | Joint2=477 | Joint3=478 | Joint4=433 | GUID=237ffa6c-0cf1-40cc-be1a-4e647b8f124f |
| Area=411 | Joint1=433 | Joint2=478 | Joint3=479 | Joint4=434 | GUID=314127fc-ab65-499e-a550-6efc254595d2 |
| Area=412 | Joint1=434 | Joint2=479 | Joint3=480 | Joint4=435 | GUID=68f01a26-cddb-45e2-9f33-114215fb0202 |
| Area=413 | Joint1=435 | Joint2=480 | Joint3=481 | Joint4=436 | GUID=39d99fa1-844b-40f8-8800-8a4b596ca4ad |
| Area=414 | Joint1=436 | Joint2=481 | Joint3=482 | Joint4=437 | GUID=1fe1b695-2d7e-4742-80aa-ef7df913c8ea |
| Area=415 | Joint1=437 | Joint2=482 | Joint3=483 | Joint4=438 | GUID=6a979a04-dc7c-4cca-8e5c-440c1e750fca |
| Area=416 | Joint1=438 | Joint2=483 | Joint3=484 | Joint4=439 | GUID=b36ccea6-3f13-42e9-b51e-2e85760a5088 |
| Area=417 | Joint1=439 | Joint2=484 | Joint3=485 | Joint4=440 | GUID=9a4deb87-87ef-4a96-b4dd-e08dfefe44f7 |
| Area=418 | Joint1=440 | Joint2=485 | Joint3=486 | Joint4=441 | GUID=e660adb9-1ede-4044-ab78-11371fb63a6f |
| Area=419 | Joint1=441 | Joint2=486 | Joint3=487 | Joint4=442 | GUID=bfc5cac4-758f-4960-9c4d-f8c5b28618a6 |
| Area=420 | Joint1=442 | Joint2=487 | Joint3=488 | Joint4=443 | GUID=55891615-60ca-4727-93f5-ec1da5e52270 |
| Area=421 | Joint1=443 | Joint2=488 | Joint3=489 | Joint4=444 | GUID=b6c5000a-c4af-4f19-96e1-7a414c949948 |
| Area=422 | Joint1=444 | Joint2=489 | Joint3=490 | Joint4=445 | GUID=46d21ecf-b131-47dd-b8a0-0214a83be2d1 |
| Area=423 | Joint1=445 | Joint2=490 | Joint3=491 | Joint4=446 | GUID=9de5424b-eb53-4e0f-92fa-1ff331ac5c0c |
| Area=424 | Joint1=446 | Joint2=491 | Joint3=492 | Joint4=447 | GUID=924b535a-d417-4068-90bc-82a2c747745e |
| Area=425 | Joint1=447 | Joint2=492 | Joint3=493 | Joint4=448 | GUID=2cd29e89-7d83-4329-a33c-26885eab8366 |
| Area=426 | Joint1=448 | Joint2=493 | Joint3=494 | Joint4=449 | GUID=70ce3265-fa9d-4b44-a7cb-376aff01096  |
| Area=427 | Joint1=449 | Joint2=494 | Joint3=495 | Joint4=450 | GUID=09d6a9ac-2afa-46f4-bc22-e04bec1b6e1e |
| Area=428 | Joint1=450 | Joint2=495 | Joint3=496 | Joint4=451 | GUID=fafc8594-8ef4-4a90-83c1-574461d559fc |
| Area=429 | Joint1=451 | Joint2=496 | Joint3=497 | Joint4=452 | GUID=5b485b8e-36ac-4e0e-a462-7cd4651ad9bc |
| Area=430 | Joint1=452 | Joint2=497 | Joint3=498 | Joint4=453 | GUID=c01b840f-d620-4653-b832-d03c3395e83c |
| Area=431 | Joint1=453 | Joint2=498 | Joint3=499 | Joint4=454 | GUID=5bd894ab-ce44-4535-bf45-4c53a1c531cd |
| Area=432 | Joint1=454 | Joint2=499 | Joint3=500 | Joint4=455 | GUID=4324f4fa-4bae-4133-9315-26f45487e4ed |
| Area=433 | Joint1=455 | Joint2=500 | Joint3=501 | Joint4=456 | GUID=23ead698-000c-41b7-a327-fbeaf1683f7b |
| Area=434 | Joint1=456 | Joint2=501 | Joint3=502 | Joint4=457 | GUID=801684ba-c635-4f87-91eb-4ce77834c25c |
| Area=435 | Joint1=457 | Joint2=502 | Joint3=503 | Joint4=458 | GUID=c54d427b-89da-4fd8-a4a9-a22ba362e467 |
| Area=436 | Joint1=458 | Joint2=503 | Joint3=504 | Joint4=459 | GUID=bff4ed5a-0fd2-4ddc-b40a-8aa8b5297a0e |
| Area=437 | Joint1=459 | Joint2=504 | Joint3=505 | Joint4=460 | GUID=4c5f183a-028c-4afd-8e63-19bad13c6fee |
| Area=438 | Joint1=460 | Joint2=505 | Joint3=506 | Joint4=461 | GUID=251ece03-360c-4bfa-8057-dbd168739b66 |
| Area=439 | Joint1=461 | Joint2=506 | Joint3=507 | Joint4=462 | GUID=8eed1908-bfe3-4e42-bb0e-1d30837f2f7c |
| Area=440 | Joint1=462 | Joint2=507 | Joint3=508 | Joint4=463 | GUID=6ba1a75e-2707-48d5-b022-9f065c8c7084 |
| Area=441 | Joint1=463 | Joint2=508 | Joint3=509 | Joint4=464 | GUID=f6700b20-d4af-4721-bd91-5b3164b54283 |
| Area=442 | Joint1=465 | Joint2=510 | Joint3=511 | Joint4=466 | GUID=ddf5964b-315d-49f6-9725-6e1a537af13a |
| Area=443 | Joint1=466 | Joint2=511 | Joint3=512 | Joint4=467 | GUID=dc23ca1b-6ca2-43e6-b3a9-c91486da58ff |
| Area=444 | Joint1=467 | Joint2=512 | Joint3=513 | Joint4=468 | GUID=25277a12-178e-4ac4-beef-3297a86a8240 |
| Area=445 | Joint1=468 | Joint2=513 | Joint3=514 | Joint4=469 | GUID=a137ffb8-e48e-4a9d-9d5a-f9862f9cb657 |
| Area=446 | Joint1=469 | Joint2=514 | Joint3=515 | Joint4=470 | GUID=12041249-e3b6-4655-b0df-9265c46fefe9 |
| Area=447 | Joint1=470 | Joint2=515 | Joint3=516 | Joint4=471 | GUID=6c11d861-dda1-400f-baa0-0cdc5704ce32 |
| Area=448 | Joint1=471 | Joint2=516 | Joint3=517 | Joint4=472 | GUID=d472a66f-1dbd-4160-9e57-3630f13c4b25 |
| Area=449 | Joint1=472 | Joint2=517 | Joint3=518 | Joint4=473 | GUID=60b002ff-15e0-4e78-b152-d481ffaceed2 |
| Area=450 | Joint1=473 | Joint2=518 | Joint3=519 | Joint4=474 | GUID=a6d73389-c0d5-4d28-a1e7-e93115c55b53 |
| Area=451 | Joint1=474 | Joint2=519 | Joint3=520 | Joint4=475 | GUID=8976d479-b16f-4e5b-983a-7f29791c4012 |
| Area=452 | Joint1=475 | Joint2=520 | Joint3=521 | Joint4=476 | GUID=ed8c4a7b-66ac-4735-82f7-80112f6fcf68 |
| Area=453 | Joint1=476 | Joint2=521 | Joint3=522 | Joint4=477 | GUID=d48cb60f-2d11-4af4-900d-e75d65edd225 |
| Area=454 | Joint1=477 | Joint2=522 | Joint3=523 | Joint4=478 | GUID=fbdd3968-428f-45fb-b7cd-b8e60c4734b0 |
| Area=455 | Joint1=478 | Joint2=523 | Joint3=524 | Joint4=479 | GUID=302857b4-d1ab-41b9-bfba-85d450f6898b |
| Area=456 | Joint1=479 | Joint2=524 | Joint3=525 | Joint4=480 | GUID=bd770e00-2e2d-4e11-bfaf-6fa72e3cf979 |
| Area=457 | Joint1=480 | Joint2=525 | Joint3=526 | Joint4=481 | GUID=27fd46c5-6cec-4ad5-9f0a-f06755c15b35 |
| Area=458 | Joint1=481 | Joint2=526 | Joint3=527 | Joint4=482 | GUID=20d4be68-fb32-4f9c-9112-7402bd1a288c |

|          |            |            |            |            |                                           |
|----------|------------|------------|------------|------------|-------------------------------------------|
| Area=459 | Joint1=482 | Joint2=527 | Joint3=528 | Joint4=483 | GUID=37ebc6a5-b980-455b-9696-2afc54411d25 |
| Area=460 | Joint1=483 | Joint2=528 | Joint3=529 | Joint4=484 | GUID=566479f8-bbdb-4a24-bf51-c6b952dc5226 |
| Area=461 | Joint1=484 | Joint2=529 | Joint3=530 | Joint4=485 | GUID=cb41266e-2104-459d-97bc-aff9faa7537d |
| Area=462 | Joint1=485 | Joint2=530 | Joint3=531 | Joint4=486 | GUID=f4323e2f-2938-4d94-a4f9-0d3f98065ab6 |
| Area=463 | Joint1=486 | Joint2=531 | Joint3=532 | Joint4=487 | GUID=26b01373-05ed-44f1-9dec-9aafd8424d9  |
| Area=464 | Joint1=487 | Joint2=532 | Joint3=533 | Joint4=488 | GUID=62376285-2940-4e37-a11e-dea4aab0411a |
| Area=465 | Joint1=488 | Joint2=533 | Joint3=534 | Joint4=489 | GUID=4763e85b-b131-4f22-a3d3-73d8d36f22ca |
| Area=466 | Joint1=489 | Joint2=534 | Joint3=535 | Joint4=490 | GUID=e8bdd8e1-cb7d-482a-bb0f-5596693ff6d6 |
| Area=467 | Joint1=490 | Joint2=535 | Joint3=536 | Joint4=491 | GUID=f7aa8f1c-1265-4e7e-b821-7b27b4da4fb1 |
| Area=468 | Joint1=491 | Joint2=536 | Joint3=537 | Joint4=492 | GUID=71cf2e9e-5890-4489-bc39-fd73c2fb72cd |
| Area=469 | Joint1=492 | Joint2=537 | Joint3=538 | Joint4=493 | GUID=9a846a3c-5520-4ebe-a615-10babcd7f941 |
| Area=470 | Joint1=493 | Joint2=538 | Joint3=539 | Joint4=494 | GUID=bc1374f3-2215-493e-bf73-873e7a5aa386 |
| Area=471 | Joint1=494 | Joint2=539 | Joint3=540 | Joint4=495 | GUID=b784423c-55d8-40c6-a29d-a66efa73b3b1 |
| Area=472 | Joint1=495 | Joint2=540 | Joint3=541 | Joint4=496 | GUID=d5185409-c9e4-4d54-93bf-9d3ee8822aa3 |
| Area=473 | Joint1=496 | Joint2=541 | Joint3=542 | Joint4=497 | GUID=44125f68-9676-4f9d-9a5b-4d2a84a7ca5f |
| Area=474 | Joint1=497 | Joint2=542 | Joint3=543 | Joint4=498 | GUID=70153f74-0d84-4dfc-b821-7b27b4da4fb1 |
| Area=475 | Joint1=498 | Joint2=543 | Joint3=544 | Joint4=499 | GUID=ca0f3ed7-9b30-4832-b497-e5126ceb330c |
| Area=476 | Joint1=499 | Joint2=544 | Joint3=545 | Joint4=500 | GUID=75bd5e58-34c4-431f-947b-687b7fc1acd7 |
| Area=477 | Joint1=500 | Joint2=545 | Joint3=546 | Joint4=501 | GUID=ff8709ae-dc75-4c32-a190-10d91fefcbfb |
| Area=478 | Joint1=501 | Joint2=546 | Joint3=547 | Joint4=502 | GUID=f72cb98c-227a-4119-8fdf-a8b8fcb254f2 |
| Area=479 | Joint1=502 | Joint2=547 | Joint3=548 | Joint4=503 | GUID=b5be44a4-d9fc-4648-af7a-e2bf6f934ea3 |
| Area=480 | Joint1=503 | Joint2=548 | Joint3=549 | Joint4=504 | GUID=6d21cbb7-c965-467b-ad28-36f710ee0acc |
| Area=481 | Joint1=504 | Joint2=549 | Joint3=550 | Joint4=505 | GUID=0d1c68ff-91f1-476d-a0fc-7a50e565a8cc |
| Area=482 | Joint1=505 | Joint2=550 | Joint3=551 | Joint4=506 | GUID=a3d080c0-784e-4695-bc21-f88f6ae8ce9a |
| Area=483 | Joint1=506 | Joint2=551 | Joint3=552 | Joint4=507 | GUID=4a54a0c1-2ed7-40b3-b3dd-c2eb6f5c7a72 |
| Area=484 | Joint1=507 | Joint2=552 | Joint3=553 | Joint4=508 | GUID=32b94def-ee9a-40fc-a6d9-22432a4d1373 |
| Area=485 | Joint1=508 | Joint2=553 | Joint3=554 | Joint4=509 | GUID=6e50a19f-003f-4016-bd3d-c28c5dba6e9d |
| Area=486 | Joint1=510 | Joint2=555 | Joint3=556 | Joint4=511 | GUID=01ac2b20-9dde-49d1-b42f-6474b5d50cc3 |
| Area=487 | Joint1=511 | Joint2=556 | Joint3=557 | Joint4=512 | GUID=9fd0c5e7-8445-48bd-968c-f89573e783e0 |
| Area=488 | Joint1=512 | Joint2=557 | Joint3=558 | Joint4=513 | GUID=dc11ab4d-dc07-46b8-ae20-d99bc311d221 |
| Area=489 | Joint1=513 | Joint2=558 | Joint3=559 | Joint4=514 | GUID=fb38cace-2d61-4dc4-832e-415fc6352fb1 |
| Area=490 | Joint1=514 | Joint2=559 | Joint3=560 | Joint4=515 | GUID=70dfc447-785b-4aef-892a-aa621778bc0c |
| Area=491 | Joint1=515 | Joint2=560 | Joint3=561 | Joint4=516 | GUID=dd94ba9a-4f58-4a1e-a2ab-cc685df9e4c8 |
| Area=492 | Joint1=516 | Joint2=561 | Joint3=562 | Joint4=517 | GUID=d0cb6076-8551-4f9e-9454-438813db208c |
| Area=493 | Joint1=517 | Joint2=562 | Joint3=563 | Joint4=518 | GUID=68800f31-2d76-4412-a354-9a5d9223fc9a |
| Area=494 | Joint1=518 | Joint2=563 | Joint3=564 | Joint4=519 | GUID=62301b05-833b-42bd-9132-3582b5476546 |
| Area=495 | Joint1=519 | Joint2=564 | Joint3=565 | Joint4=520 | GUID=236faad5-1a9f-41d0-a11b-e8329b45eb34 |
| Area=496 | Joint1=520 | Joint2=565 | Joint3=566 | Joint4=521 | GUID=700f1044-5049-4302-8291-a2739a0e3c1e |
| Area=497 | Joint1=521 | Joint2=566 | Joint3=567 | Joint4=522 | GUID=5cc55f4e-3a54-42c1-93fb-9134db53ac66 |
| Area=498 | Joint1=522 | Joint2=567 | Joint3=568 | Joint4=523 | GUID=d9594b87-bc58-4340-871a-1e94e9b594ae |
| Area=499 | Joint1=523 | Joint2=568 | Joint3=569 | Joint4=524 | GUID=87c4a49f-9364-48e4-9a36-2a103f097ff7 |
| Area=500 | Joint1=524 | Joint2=569 | Joint3=570 | Joint4=525 | GUID=c9245485-3a7f-4db7-828a-752e3ef4dad5 |
| Area=501 | Joint1=525 | Joint2=570 | Joint3=571 | Joint4=526 | GUID=ef4c9149-0339-4ebc-bae2-faae3d024a54 |
| Area=502 | Joint1=526 | Joint2=571 | Joint3=572 | Joint4=527 | GUID=9bd3470d-f04d-4a59-a8a7-d1034ea7ef1a |
| Area=503 | Joint1=527 | Joint2=572 | Joint3=573 | Joint4=528 | GUID=d0db94ec-89e6-4582-88ab-9700decbb671 |
| Area=504 | Joint1=528 | Joint2=573 | Joint3=574 | Joint4=529 | GUID=b080bda1-55b8-4517-9ebb-5df9c1af5ec3 |
| Area=505 | Joint1=529 | Joint2=574 | Joint3=575 | Joint4=530 | GUID=e52e83ba-9db3-4fbf-9841-d3358299fda8 |
| Area=506 | Joint1=530 | Joint2=575 | Joint3=576 | Joint4=531 | GUID=0f83e7be-0a9a-4690-8e8c-67520b563eed |
| Area=507 | Joint1=531 | Joint2=576 | Joint3=577 | Joint4=532 | GUID=cdf02e5b-ba10-426d-99b7-4735c18b92d0 |
| Area=508 | Joint1=532 | Joint2=577 | Joint3=578 | Joint4=533 | GUID=cf8dbdd3-80a2-4d93-ac40-f63a4cce8ad4 |
| Area=509 | Joint1=533 | Joint2=578 | Joint3=579 | Joint4=534 | GUID=391fd07f-0f1e-48de-8497-e227bedbb1d8 |
| Area=510 | Joint1=534 | Joint2=579 | Joint3=580 | Joint4=535 | GUID=f09f7566-ff14-4f27-aff6-615780d7bc25 |
| Area=511 | Joint1=535 | Joint2=580 | Joint3=581 | Joint4=536 | GUID=2c697995-a12f-413d-ad26-ee861118982f |
| Area=512 | Joint1=536 | Joint2=581 | Joint3=582 | Joint4=537 | GUID=df3afbd9-9375-4fd5-82a9-eb137d01b8b1 |
| Area=513 | Joint1=537 | Joint2=582 | Joint3=583 | Joint4=538 | GUID=447ff784-82e9-4756-9d0a-dd1d0f9c355d |

|          |            |            |            |            |                                            |
|----------|------------|------------|------------|------------|--------------------------------------------|
| Area=514 | Joint1=538 | Joint2=583 | Joint3=584 | Joint4=539 | GUID=b7be48d7-4be6-42c5-8af1-6578c076ca6c  |
| Area=515 | Joint1=539 | Joint2=584 | Joint3=585 | Joint4=540 | GUID=790dea12-cfdf-4a44-9573-68f1b0098016  |
| Area=516 | Joint1=540 | Joint2=585 | Joint3=586 | Joint4=541 | GUID=bbc22b81-e754-40bd-b046-a9a07475aa3d  |
| Area=517 | Joint1=541 | Joint2=586 | Joint3=587 | Joint4=542 | GUID=f28087c0-c888-408a-b42a-338e528125fa  |
| Area=518 | Joint1=542 | Joint2=587 | Joint3=588 | Joint4=543 | GUID=e31a2cba-7d90-4ab4-ae1a-40e1aabbff5ff |
| Area=519 | Joint1=543 | Joint2=588 | Joint3=589 | Joint4=544 | GUID=c375d032-5133-4480-a789-2d8479f5683a  |
| Area=520 | Joint1=544 | Joint2=589 | Joint3=590 | Joint4=545 | GUID=aa8f26f3-12e0-4f10-a49a-8145d0f1a7ef  |
| Area=521 | Joint1=545 | Joint2=590 | Joint3=591 | Joint4=546 | GUID=3c34a10c-6db4-4b3a-8423-c274bc64e1cc  |
| Area=522 | Joint1=546 | Joint2=591 | Joint3=592 | Joint4=547 | GUID=297e37d1-fb07-4a52-8400-e64e09047c44  |
| Area=523 | Joint1=547 | Joint2=592 | Joint3=593 | Joint4=548 | GUID=78da8b61-abeb-43e9-bbd8-d49165e35c35  |
| Area=524 | Joint1=548 | Joint2=593 | Joint3=594 | Joint4=549 | GUID=ffd0569e-1ed4-491b-af94-637a67625780  |
| Area=525 | Joint1=549 | Joint2=594 | Joint3=595 | Joint4=550 | GUID=4ea2f452-ab59-4b26-a293-8598f62662a6  |
| Area=526 | Joint1=550 | Joint2=595 | Joint3=596 | Joint4=551 | GUID=cba68f50-89d3-4db0-8db3-273732998c01  |
| Area=527 | Joint1=551 | Joint2=596 | Joint3=597 | Joint4=552 | GUID=b9c6a1c9-ebcf-4c56-a535-27741dc5188f  |
| Area=528 | Joint1=552 | Joint2=597 | Joint3=598 | Joint4=553 | GUID=e0a0af96-acba-4f69-8cbd-6e521694a89f  |
| Area=529 | Joint1=553 | Joint2=598 | Joint3=599 | Joint4=554 | GUID=faf69014-60e3-4c9a-8405-01ed0da7b3e1  |
| Area=530 | Joint1=555 | Joint2=600 | Joint3=601 | Joint4=556 | GUID=7558ee7a-0ac4-4aaa-9300-e04afc94f76e  |
| Area=531 | Joint1=556 | Joint2=601 | Joint3=602 | Joint4=557 | GUID=954cc8b4-35b7-4a54-9ca3-d014b1e2c842  |
| Area=532 | Joint1=557 | Joint2=602 | Joint3=603 | Joint4=558 | GUID=7eea57e6-3df5-4e4a-8d6e-c4e69341e184  |
| Area=533 | Joint1=558 | Joint2=603 | Joint3=604 | Joint4=559 | GUID=35bca18d-36de-4255-b811-a7d907bd5e9c  |
| Area=534 | Joint1=559 | Joint2=604 | Joint3=605 | Joint4=560 | GUID=89176859-a470-4a60-a215-8b00c5a6ea14  |
| Area=535 | Joint1=560 | Joint2=605 | Joint3=606 | Joint4=561 | GUID=9818a485-c450-4558-a9b8-12b6cfff8a29  |
| Area=536 | Joint1=561 | Joint2=606 | Joint3=607 | Joint4=562 | GUID=0cffe210-4507-4f1a-8ab8-8cc51bb0e01   |
| Area=537 | Joint1=562 | Joint2=607 | Joint3=608 | Joint4=563 | GUID=e4ce6edc-2601-426c-b230-e362bbb7b5d1  |
| Area=538 | Joint1=563 | Joint2=608 | Joint3=609 | Joint4=564 | GUID=8919ae2f-02d7-4839-a3ba-5c17b1b9e7a3  |
| Area=539 | Joint1=564 | Joint2=609 | Joint3=610 | Joint4=565 | GUID=b984061d-5771-483a-b9c7-f4ab63b3e17e  |
| Area=540 | Joint1=565 | Joint2=610 | Joint3=611 | Joint4=566 | GUID=fa56bb7c-7389-45e3-a628-a7341320ae0f  |
| Area=541 | Joint1=566 | Joint2=611 | Joint3=612 | Joint4=567 | GUID=0acd53ca-c195-443c-850d-dad3b6fee8ba  |
| Area=542 | Joint1=567 | Joint2=612 | Joint3=613 | Joint4=568 | GUID=5a23e083-b7b9-42b6-8d03-2f6319a4730d  |
| Area=543 | Joint1=568 | Joint2=613 | Joint3=614 | Joint4=569 | GUID=1392e7e9-ffea-449f-8924-67492bbb9a1f  |
| Area=544 | Joint1=569 | Joint2=614 | Joint3=615 | Joint4=570 | GUID=814314dd-1e78-480d-a94e-74b0e6576db5  |
| Area=545 | Joint1=570 | Joint2=615 | Joint3=616 | Joint4=571 | GUID=aeefb165-5d69-4620-b2fc-a12b61556209  |
| Area=546 | Joint1=571 | Joint2=616 | Joint3=617 | Joint4=572 | GUID=7cf7c9bf-c182-4ae9-911a-8d3a23a4cebd  |
| Area=547 | Joint1=572 | Joint2=617 | Joint3=618 | Joint4=573 | GUID=6164ccd6-7e57-42e4-9093-3f995816504b  |
| Area=548 | Joint1=573 | Joint2=618 | Joint3=619 | Joint4=574 | GUID=10d74947-9e0b-42b7-9500-742dc4ef58b7  |
| Area=549 | Joint1=574 | Joint2=619 | Joint3=620 | Joint4=575 | GUID=967b7b09-8217-4ec5-ae19-5c6783c0295c  |
| Area=550 | Joint1=575 | Joint2=620 | Joint3=621 | Joint4=576 | GUID=624bf1b5-bfd9-4952-abe8-4199daf24378  |
| Area=551 | Joint1=576 | Joint2=621 | Joint3=622 | Joint4=577 | GUID=95eb80ea-c8b7-476a-80b9-c2f3de47414a  |
| Area=552 | Joint1=577 | Joint2=622 | Joint3=623 | Joint4=578 | GUID=a256b64f-4926-4fd0-ab2c-6fcdcbdfda17f |
| Area=553 | Joint1=578 | Joint2=623 | Joint3=624 | Joint4=579 | GUID=a0102bdb-9371-4324-9810-98dbab8e11ba  |
| Area=554 | Joint1=579 | Joint2=624 | Joint3=625 | Joint4=580 | GUID=48566244-da64-4112-90f7-9fa8d9d30438  |
| Area=555 | Joint1=580 | Joint2=625 | Joint3=626 | Joint4=581 | GUID=1cc78f7a-1ccf-4119-a45e-99c62f42a941  |
| Area=556 | Joint1=581 | Joint2=626 | Joint3=627 | Joint4=582 | GUID=47f9f3b8-bef5-4358-9daf-c07719d82b8d  |
| Area=557 | Joint1=582 | Joint2=627 | Joint3=628 | Joint4=583 | GUID=531f051f-fbe3-4567-820f-d7f2b448a147  |
| Area=558 | Joint1=583 | Joint2=628 | Joint3=629 | Joint4=584 | GUID=e516153d-38d8-487d-b6eb-b7c84f8b2b4e  |
| Area=559 | Joint1=584 | Joint2=629 | Joint3=630 | Joint4=585 | GUID=64bd572d-6298-4068-93d8-718ba3c32148  |
| Area=560 | Joint1=585 | Joint2=630 | Joint3=631 | Joint4=586 | GUID=6e5a4381-84d7-4bf4-8ad2-1161eed57336  |
| Area=561 | Joint1=586 | Joint2=631 | Joint3=632 | Joint4=587 | GUID=9cd0d863-3e92-4027-b9b4-03420acbc182  |
| Area=562 | Joint1=587 | Joint2=632 | Joint3=633 | Joint4=588 | GUID=dd3f6a21-f9cf-4122-acb3-6aa162c9659e  |
| Area=563 | Joint1=588 | Joint2=633 | Joint3=634 | Joint4=589 | GUID=d146a7af-90aa-4abc-a99f-ed7d7d356c67  |
| Area=564 | Joint1=589 | Joint2=634 | Joint3=635 | Joint4=590 | GUID=98b3cb06-ed17-48f1-99b5-1530f61baa44  |
| Area=565 | Joint1=590 | Joint2=635 | Joint3=636 | Joint4=591 | GUID=eef2d5e1-4784-4689-ac76-e4a373259d57  |
| Area=566 | Joint1=591 | Joint2=636 | Joint3=637 | Joint4=592 | GUID=8175ebb0-294c-4c57-ab8a-24b8c5db21af  |
| Area=567 | Joint1=592 | Joint2=637 | Joint3=638 | Joint4=593 | GUID=3b207aad-e329-46c7-9852-e8f1d9799eff  |
| Area=568 | Joint1=593 | Joint2=638 | Joint3=639 | Joint4=594 | GUID=32a925f7-557d-4ae8-8780-ac703421b392  |



|          |            |            |            |            |                                            |
|----------|------------|------------|------------|------------|--------------------------------------------|
| Area=569 | Joint1=594 | Joint2=639 | Joint3=640 | Joint4=595 | GUID=9ae45f8b-1dab-461f-ad9a-66892f52773c  |
| Area=570 | Joint1=595 | Joint2=640 | Joint3=641 | Joint4=596 | GUID=fd413c56-785c-4942-a821-781b167c6193  |
| Area=571 | Joint1=596 | Joint2=641 | Joint3=642 | Joint4=597 | GUID=b223ee2f-3a18-4b44-98df-18a2665779e2  |
| Area=572 | Joint1=597 | Joint2=642 | Joint3=643 | Joint4=598 | GUID=b8e5a921-2a99-4c58-85bb-bf482b59e10a  |
| Area=573 | Joint1=598 | Joint2=643 | Joint3=644 | Joint4=599 | GUID=dec62cf9-5fc2-4153-ba19-bb89f883ecea  |
| Area=574 | Joint1=600 | Joint2=645 | Joint3=646 | Joint4=601 | GUID=0838f532-1bd4-49f6-8259-399e26783297  |
| Area=575 | Joint1=601 | Joint2=646 | Joint3=647 | Joint4=602 | GUID=33832da5-fbfd-427b-9604-08b0b32a4099  |
| Area=576 | Joint1=602 | Joint2=647 | Joint3=648 | Joint4=603 | GUID=5df37390-cdca-4e1c-9b2a-5eac17548433  |
| Area=577 | Joint1=603 | Joint2=648 | Joint3=649 | Joint4=604 | GUID=970bc609-c406-4bae-b700-cf69935b5c6f  |
| Area=578 | Joint1=604 | Joint2=649 | Joint3=650 | Joint4=605 | GUID=4cf9d359-45e6-43b0-a354-e7f9e2b3500f  |
| Area=579 | Joint1=605 | Joint2=650 | Joint3=651 | Joint4=606 | GUID=3c5c5380-978b-4359-8416-fc640b06a82d  |
| Area=580 | Joint1=606 | Joint2=651 | Joint3=652 | Joint4=607 | GUID=d0f97482-7234-40cd-b180-0b9849522ea5  |
| Area=581 | Joint1=607 | Joint2=652 | Joint3=653 | Joint4=608 | GUID=d9b11c17-9766-49ba-9825-56e9718b593f  |
| Area=582 | Joint1=608 | Joint2=653 | Joint3=654 | Joint4=609 | GUID=f705b78e-b631-44ee-98ac-35919189764a  |
| Area=583 | Joint1=609 | Joint2=654 | Joint3=655 | Joint4=610 | GUID=ae235a46-b83c-4853-b070-49b1dc45bab1  |
| Area=584 | Joint1=610 | Joint2=655 | Joint3=656 | Joint4=611 | GUID=8dd98c82-333f-4a34-b19a-e24b7227b1f0  |
| Area=585 | Joint1=611 | Joint2=656 | Joint3=657 | Joint4=612 | GUID=d9eab8cd-a5b7-4b47-b129-35d60458d634  |
| Area=586 | Joint1=612 | Joint2=657 | Joint3=658 | Joint4=613 | GUID=346b26bc-c276-47e4-87ea-4bf65512a565  |
| Area=587 | Joint1=613 | Joint2=658 | Joint3=659 | Joint4=614 | GUID=cd1dd9b1-d022-4fec-b4fe-9434a5952684  |
| Area=588 | Joint1=614 | Joint2=659 | Joint3=660 | Joint4=615 | GUID=8d65d961-a910-465a-b5a1-57ab7986f0e3  |
| Area=589 | Joint1=615 | Joint2=660 | Joint3=661 | Joint4=616 | GUID=2ede91bc-83f8-4dc6-a77f-ffd771df4537  |
| Area=590 | Joint1=616 | Joint2=661 | Joint3=662 | Joint4=617 | GUID=7223855d-0893-471b-aa81-9c97615a0a08  |
| Area=591 | Joint1=617 | Joint2=662 | Joint3=663 | Joint4=618 | GUID=e249e1cd-fb13-4a42-919d-6d4a4118a7f8  |
| Area=592 | Joint1=618 | Joint2=663 | Joint3=664 | Joint4=619 | GUID=47015429-a8ff-4123-b1d5-d3b989cfd42b  |
| Area=593 | Joint1=619 | Joint2=664 | Joint3=665 | Joint4=620 | GUID=c0e9c923-bf70-4670-9168-297d2d4da5c6  |
| Area=594 | Joint1=620 | Joint2=665 | Joint3=666 | Joint4=621 | GUID=fca06761-370e-4c3c-9842-2d231f3de4af  |
| Area=595 | Joint1=621 | Joint2=666 | Joint3=667 | Joint4=622 | GUID=7eed9d4c-ba9c-4e8a-aa56-118236d9a75e  |
| Area=596 | Joint1=622 | Joint2=667 | Joint3=668 | Joint4=623 | GUID=5bb844d8-806e-4656-8f3d-7c03689d9f78  |
| Area=597 | Joint1=623 | Joint2=668 | Joint3=669 | Joint4=624 | GUID=b66e0837-8bfe-47a2-a795-b3107f11b6bf  |
| Area=598 | Joint1=624 | Joint2=669 | Joint3=670 | Joint4=625 | GUID=ea1182f6-2bf5-424f-a574-ba222d731841  |
| Area=599 | Joint1=625 | Joint2=670 | Joint3=671 | Joint4=626 | GUID=d7667962-dab1-4516-abca-bb74f8fe753   |
| Area=600 | Joint1=626 | Joint2=671 | Joint3=672 | Joint4=627 | GUID=c91cd5cb-dec2-4055-9a91-6e57a5b18927  |
| Area=601 | Joint1=627 | Joint2=672 | Joint3=673 | Joint4=628 | GUID=9077f06e-50cb-4d17-b71d-e609740a15e1  |
| Area=602 | Joint1=628 | Joint2=673 | Joint3=674 | Joint4=629 | GUID=76f2737a-b739-42fc-a6c7-aeaa9da46734  |
| Area=603 | Joint1=629 | Joint2=674 | Joint3=675 | Joint4=630 | GUID=3780d5e3-02ba-4e15-96fa-2965b078d106  |
| Area=604 | Joint1=630 | Joint2=675 | Joint3=676 | Joint4=631 | GUID=2e77c155-297b-4f12-ba69-9721013c16fd  |
| Area=605 | Joint1=631 | Joint2=676 | Joint3=677 | Joint4=632 | GUID=3f1936de-32da-41c7-990a-083cc01b8125  |
| Area=606 | Joint1=632 | Joint2=677 | Joint3=678 | Joint4=633 | GUID=1dcc982-ba85-4b22-ac04-6c8b905cae22   |
| Area=607 | Joint1=633 | Joint2=678 | Joint3=679 | Joint4=634 | GUID=25a74125-7a6d-4c2c-82df-afe92c1ea075  |
| Area=608 | Joint1=634 | Joint2=679 | Joint3=680 | Joint4=635 | GUID=58c2d447-8ae1-4c29-b494-5454d92e063b  |
| Area=609 | Joint1=635 | Joint2=680 | Joint3=681 | Joint4=636 | GUID=69bd36c9-4609-4810-bd77-60ba4bf32b25  |
| Area=610 | Joint1=636 | Joint2=681 | Joint3=682 | Joint4=637 | GUID=10f88775-f390-4202-aa00-a193adacce19d |
| Area=611 | Joint1=637 | Joint2=682 | Joint3=683 | Joint4=638 | GUID=20f00f1a-85f6-4352-84b0-dff78f6f37ba  |
| Area=612 | Joint1=638 | Joint2=683 | Joint3=684 | Joint4=639 | GUID=1906af99-5d20-46a1-9008-abe5021f56b3  |
| Area=613 | Joint1=639 | Joint2=684 | Joint3=685 | Joint4=640 | GUID=d629a525-45dc-4a91-9e9d-58db2f07c1ad  |
| Area=614 | Joint1=640 | Joint2=685 | Joint3=686 | Joint4=641 | GUID=f493e7d6-56cf-44cb-a504-9d408d65aa4c  |
| Area=615 | Joint1=641 | Joint2=686 | Joint3=687 | Joint4=642 | GUID=71ace658-9d04-4dfc-bd16-1800c48c1371  |
| Area=616 | Joint1=642 | Joint2=687 | Joint3=688 | Joint4=643 | GUID=b9f53ee2-298d-4f88-aa4d-501240927590  |
| Area=617 | Joint1=643 | Joint2=688 | Joint3=689 | Joint4=644 | GUID=784e7957-ae6c-4593-aeb7-052812251feb  |
| Area=618 | Joint1=645 | Joint2=690 | Joint3=691 | Joint4=646 | GUID=30780cd7-e080-463b-b069-086b30d5b878  |
| Area=619 | Joint1=646 | Joint2=691 | Joint3=692 | Joint4=647 | GUID=4bb63dd3-94f0-40de-b008-7e7bd7bf85e9  |
| Area=620 | Joint1=647 | Joint2=692 | Joint3=693 | Joint4=648 | GUID=baa867eb-0fe3-4786-bdc1-823a4af681bd  |
| Area=621 | Joint1=648 | Joint2=693 | Joint3=694 | Joint4=649 | GUID=933472a0-f40e-4bfa-994c-9d2ccf606f4a  |
| Area=622 | Joint1=649 | Joint2=694 | Joint3=695 | Joint4=650 | GUID=d7ca3b8b-46bf-4c4d-a6f3-003984c2a480  |
| Area=623 | Joint1=650 | Joint2=695 | Joint3=696 | Joint4=651 | GUID=093a5643-f57a-4d01-ad95-7edf49b73472  |

|          |            |            |            |            |                                           |
|----------|------------|------------|------------|------------|-------------------------------------------|
| Area=624 | Joint1=651 | Joint2=696 | Joint3=697 | Joint4=652 | GUID=b018197a-f37d-459e-aad1-b5bca18a1a88 |
| Area=625 | Joint1=652 | Joint2=697 | Joint3=698 | Joint4=653 | GUID=6d4f3550-f6cf-409e-bc83-4eac08fdd4b4 |
| Area=626 | Joint1=653 | Joint2=698 | Joint3=699 | Joint4=654 | GUID=70dc6dca-31b1-4c24-8bdb-5101e981cdbf |
| Area=627 | Joint1=654 | Joint2=699 | Joint3=700 | Joint4=655 | GUID=73782cd6-2f71-4ca0-84eb-e53d2f972f9f |
| Area=628 | Joint1=655 | Joint2=700 | Joint3=701 | Joint4=656 | GUID=b5a0cb6a-9fa6-4592-b34c-087ac9111977 |
| Area=629 | Joint1=656 | Joint2=701 | Joint3=702 | Joint4=657 | GUID=3fc2f6e3-cb95-42f2-a22b-e2628682c7e8 |
| Area=630 | Joint1=657 | Joint2=702 | Joint3=703 | Joint4=658 | GUID=ba6e8dfd-5d80-4275-8554-7a0ad4bec7aa |
| Area=631 | Joint1=658 | Joint2=703 | Joint3=704 | Joint4=659 | GUID=db8909ab-cdd9-4616-a9e3-760b5fa16ce2 |
| Area=632 | Joint1=659 | Joint2=704 | Joint3=705 | Joint4=660 | GUID=0d53614c-4874-4144-bc57-62f6aa98cf9b |
| Area=633 | Joint1=660 | Joint2=705 | Joint3=706 | Joint4=661 | GUID=e399d2cc-0dac-4164-9707-3e3aa40622dc |
| Area=634 | Joint1=661 | Joint2=706 | Joint3=707 | Joint4=662 | GUID=bcd89052-944d-4838-846c-f717492c9164 |
| Area=635 | Joint1=662 | Joint2=707 | Joint3=708 | Joint4=663 | GUID=ceb182cb-c5af-47c9-bc63-81086fba6518 |
| Area=636 | Joint1=663 | Joint2=708 | Joint3=709 | Joint4=664 | GUID=d3c6ecc0-51c2-4e59-9e10-4cdf5cd3f30a |
| Area=637 | Joint1=664 | Joint2=709 | Joint3=710 | Joint4=665 | GUID=e16b44e2-863f-474f-8250-901a0ff1f741 |
| Area=638 | Joint1=665 | Joint2=710 | Joint3=711 | Joint4=666 | GUID=bd9810e5-47df-4d64-a944-d3f6821ceeb1 |
| Area=639 | Joint1=666 | Joint2=711 | Joint3=712 | Joint4=667 | GUID=35a19f1b-78f9-47de-9188-5d56146f515  |
| Area=640 | Joint1=667 | Joint2=712 | Joint3=713 | Joint4=668 | GUID=65eddb2e-bcc1-4c2e-9257-8c41198eb185 |
| Area=641 | Joint1=668 | Joint2=713 | Joint3=714 | Joint4=669 | GUID=c576c8dc-ba9f-4860-9cfc-71f1047531cd |
| Area=642 | Joint1=669 | Joint2=714 | Joint3=715 | Joint4=670 | GUID=d8366f86-bc9e-4a19-b0f5-827a68816d22 |
| Area=643 | Joint1=670 | Joint2=715 | Joint3=716 | Joint4=671 | GUID=0967ceb8-da73-48a9-b8a2-3702f4cf0719 |
| Area=644 | Joint1=671 | Joint2=716 | Joint3=717 | Joint4=672 | GUID=42a0839b-3745-4920-87ba-92edba80667a |
| Area=645 | Joint1=672 | Joint2=717 | Joint3=718 | Joint4=673 | GUID=16086132-bec5-4f11-ae0d-06cebe94b6db |
| Area=646 | Joint1=673 | Joint2=718 | Joint3=719 | Joint4=674 | GUID=3e1868bb-13f1-4f3a-bed8-71dbd5b2bbb4 |
| Area=647 | Joint1=674 | Joint2=719 | Joint3=720 | Joint4=675 | GUID=906c5c89-555d-4d66-bf75-97fbaa1b2fd3 |
| Area=648 | Joint1=675 | Joint2=720 | Joint3=721 | Joint4=676 | GUID=a9edfb91-ba79-468a-b2ab-b7eb9fa7304a |
| Area=649 | Joint1=676 | Joint2=721 | Joint3=722 | Joint4=677 | GUID=9e70d1f1-0ac5-4906-964f-f234ac6d105f |
| Area=650 | Joint1=677 | Joint2=722 | Joint3=723 | Joint4=678 | GUID=950105c4-ac66-42f2-b97d-db8c554b4e2e |
| Area=651 | Joint1=678 | Joint2=723 | Joint3=724 | Joint4=679 | GUID=0cef6864-a503-497e-b537-4330c461335e |
| Area=652 | Joint1=679 | Joint2=724 | Joint3=725 | Joint4=680 | GUID=b16d54a7-2e89-4e77-a419-7f15d1bf1375 |
| Area=653 | Joint1=680 | Joint2=725 | Joint3=726 | Joint4=681 | GUID=037d75cb-b105-4be5-a1a7-18c759b24b9f |
| Area=654 | Joint1=681 | Joint2=726 | Joint3=727 | Joint4=682 | GUID=8f158fa3-4fd9-442d-b629-5954dce27591 |
| Area=655 | Joint1=682 | Joint2=727 | Joint3=728 | Joint4=683 | GUID=e8352609-3192-47f0-bec6-bf0a791a8c6c |
| Area=656 | Joint1=683 | Joint2=728 | Joint3=729 | Joint4=684 | GUID=381c793c-3aa6-4600-b26b-c46eef6cb965 |
| Area=657 | Joint1=684 | Joint2=729 | Joint3=730 | Joint4=685 | GUID=951e6294-7989-4bfe-9a51-ec335a344644 |
| Area=658 | Joint1=685 | Joint2=730 | Joint3=731 | Joint4=686 | GUID=be433ef2-c4cf-4fc7-ac19-e06e5370e7b4 |
| Area=659 | Joint1=686 | Joint2=731 | Joint3=732 | Joint4=687 | GUID=7530035b-a895-4973-8fec-e5fa8ff52392 |
| Area=660 | Joint1=687 | Joint2=732 | Joint3=733 | Joint4=688 | GUID=950df5d5-6e31-4f26-9df1-238ae5a63a45 |
| Area=661 | Joint1=688 | Joint2=733 | Joint3=734 | Joint4=689 | GUID=83f7c1d2-c63a-4299-92c7-4a2a87eae300 |
| Area=662 | Joint1=690 | Joint2=735 | Joint3=736 | Joint4=691 | GUID=737da164-e8eb-4a26-a045-f4b892745719 |
| Area=663 | Joint1=691 | Joint2=736 | Joint3=737 | Joint4=692 | GUID=842e1811-5f12-402e-8daf-4676a9dfe088 |
| Area=664 | Joint1=692 | Joint2=737 | Joint3=738 | Joint4=693 | GUID=42f9c765-91cd-4aa1-b27c-7cc9c9bc7ed3 |
| Area=665 | Joint1=693 | Joint2=738 | Joint3=739 | Joint4=694 | GUID=16806f7a-b5ee-4bac-a452-556edda89aff |
| Area=666 | Joint1=694 | Joint2=739 | Joint3=740 | Joint4=695 | GUID=d7f8be41-5d17-4e52-9224-36ea0939890c |
| Area=667 | Joint1=695 | Joint2=740 | Joint3=741 | Joint4=696 | GUID=63cb0af5-2d69-4ddb-82c2-ed01722bc1c0 |
| Area=668 | Joint1=696 | Joint2=741 | Joint3=742 | Joint4=697 | GUID=e75cebd0-0b02-40a7-88bd-6c204ff84726 |
| Area=669 | Joint1=697 | Joint2=742 | Joint3=743 | Joint4=698 | GUID=17c79eb1-a355-45be-a40a-c103b5e240f0 |
| Area=670 | Joint1=698 | Joint2=743 | Joint3=744 | Joint4=699 | GUID=df485007-f30c-4eb9-9aed-86fd7d1ac7b4 |
| Area=671 | Joint1=699 | Joint2=744 | Joint3=745 | Joint4=700 | GUID=e8c02e87-d941-4c15-bf0b-50207e4f9bd3 |
| Area=672 | Joint1=700 | Joint2=745 | Joint3=746 | Joint4=701 | GUID=6466f585-9866-4e89-ac23-1dea823a5f0c |
| Area=673 | Joint1=701 | Joint2=746 | Joint3=747 | Joint4=702 | GUID=0accdbe1-60f8-4594-984b-592a39af522c |
| Area=674 | Joint1=702 | Joint2=747 | Joint3=748 | Joint4=703 | GUID=ddf8603f-c7fa-4971-a7be-73f1ca4ffc8  |
| Area=675 | Joint1=703 | Joint2=748 | Joint3=749 | Joint4=704 | GUID=bdbbc264-e148-498a-994b-6ac69c4e0211 |
| Area=676 | Joint1=704 | Joint2=749 | Joint3=750 | Joint4=705 | GUID=7722100c-deeb-417e-ab8d-f899bf17663f |
| Area=677 | Joint1=705 | Joint2=750 | Joint3=751 | Joint4=706 | GUID=7a872156-4200-4226-b98c-c505ddff9b37 |
| Area=678 | Joint1=706 | Joint2=751 | Joint3=752 | Joint4=707 | GUID=b042c305-ab21-4890-8776-ed4ac18e3bb7 |



|          |            |            |            |            |                                            |
|----------|------------|------------|------------|------------|--------------------------------------------|
| Area=679 | Joint1=707 | Joint2=752 | Joint3=753 | Joint4=708 | GUID=7edb7bab-1375-4faf-b04d-bff27b56fb5f  |
| Area=680 | Joint1=708 | Joint2=753 | Joint3=754 | Joint4=709 | GUID=405c91c3-7456-40fd-904f-f2470f084873  |
| Area=681 | Joint1=709 | Joint2=754 | Joint3=755 | Joint4=710 | GUID=7b5213dd-3342-49a2-8f09-f26c656965f9  |
| Area=682 | Joint1=710 | Joint2=755 | Joint3=756 | Joint4=711 | GUID=c04147ea-9baf-4feb-9d43-68f8ce104e5f  |
| Area=683 | Joint1=711 | Joint2=756 | Joint3=757 | Joint4=712 | GUID=a32cef25-9b1a-42e1-9ee8-51eb1b27b9c9  |
| Area=684 | Joint1=712 | Joint2=757 | Joint3=758 | Joint4=713 | GUID=c22e2af2-c48c-4ffb-8011-ba04f7da055a  |
| Area=685 | Joint1=713 | Joint2=758 | Joint3=759 | Joint4=714 | GUID=57c02baa-ab35-4c74-80fb-184a3ce7e874  |
| Area=686 | Joint1=714 | Joint2=759 | Joint3=760 | Joint4=715 | GUID=3fce1860-973a-4729-8e7d-90838ee63202  |
| Area=687 | Joint1=715 | Joint2=760 | Joint3=761 | Joint4=716 | GUID=f86b320e-3dde-43ef-8fdd-7cdb3affb8b54 |
| Area=688 | Joint1=716 | Joint2=761 | Joint3=762 | Joint4=717 | GUID=46c2ce0d-27af-444a-ac4e-92cc9436ea1a  |
| Area=689 | Joint1=717 | Joint2=762 | Joint3=763 | Joint4=718 | GUID=86c97824-ec86-43dc-bd97-049e6fba0e57  |
| Area=690 | Joint1=718 | Joint2=763 | Joint3=764 | Joint4=719 | GUID=61094c3e-a98a-4430-8593-bcfd317c5dc4  |
| Area=691 | Joint1=719 | Joint2=764 | Joint3=765 | Joint4=720 | GUID=0e00e8fd-e6fd-4e04-b235-a12274bc0ac6  |
| Area=692 | Joint1=720 | Joint2=765 | Joint3=766 | Joint4=721 | GUID=16a6adfb-538c-4880-bac2-40ef1f0c0faa  |
| Area=693 | Joint1=721 | Joint2=766 | Joint3=767 | Joint4=722 | GUID=3a2b6a1d-691a-4dc4-867e-b02116142873  |
| Area=694 | Joint1=722 | Joint2=767 | Joint3=768 | Joint4=723 | GUID=f80ada67-1b8e-4005-8987-2657f3a8ebd5  |
| Area=695 | Joint1=723 | Joint2=768 | Joint3=769 | Joint4=724 | GUID=96a06152-720a-400d-b279-54b241f7ea17  |
| Area=696 | Joint1=724 | Joint2=769 | Joint3=770 | Joint4=725 | GUID=8eb4ecf7-4602-4188-adcf-9b315be1aaff  |
| Area=697 | Joint1=725 | Joint2=770 | Joint3=771 | Joint4=726 | GUID=bf21a63e-26de-441f-9cb0-a68c67242a96  |
| Area=698 | Joint1=726 | Joint2=771 | Joint3=772 | Joint4=727 | GUID=74f0a285-426f-4e49-8bf3-b695efabb503  |
| Area=699 | Joint1=727 | Joint2=772 | Joint3=773 | Joint4=728 | GUID=423d11f1-423c-43d8-8066-4c9ca3624d7b  |
| Area=700 | Joint1=728 | Joint2=773 | Joint3=774 | Joint4=729 | GUID=3ea7bbfe-a18d-4d2f-af1d-841527679f5a  |
| Area=701 | Joint1=729 | Joint2=774 | Joint3=775 | Joint4=730 | GUID=5bceb530-9997-4b1c-a6b1-50f27d6d1ea4  |
| Area=702 | Joint1=730 | Joint2=775 | Joint3=776 | Joint4=731 | GUID=6376755e-f32b-493c-bcd4-dd63303afa8f  |
| Area=703 | Joint1=731 | Joint2=776 | Joint3=777 | Joint4=732 | GUID=ca553177-f25c-49ba-a6ff-8e06ac726cd5  |
| Area=704 | Joint1=732 | Joint2=777 | Joint3=778 | Joint4=733 | GUID=b8c5dbb1-5b9c-426c-b84c-d241f413fc8e  |
| Area=705 | Joint1=733 | Joint2=778 | Joint3=779 | Joint4=734 | GUID=1fe901c7-13be-48a8-bb7f-46c17baf9b5   |
| Area=706 | Joint1=735 | Joint2=780 | Joint3=781 | Joint4=736 | GUID=f3de338b-fbad-4df5-b4be-bd8c7c816245  |
| Area=707 | Joint1=736 | Joint2=781 | Joint3=782 | Joint4=737 | GUID=e1f88613-edc1-4060-b0db-81c9cad77ce3  |
| Area=708 | Joint1=737 | Joint2=782 | Joint3=783 | Joint4=738 | GUID=86013d89-154d-4ddf-8cb7-ea6ba5a192b0  |
| Area=709 | Joint1=738 | Joint2=783 | Joint3=784 | Joint4=739 | GUID=b3c9ee0f-4b88-400d-92c7-c31f2a7d0b26  |
| Area=710 | Joint1=739 | Joint2=784 | Joint3=785 | Joint4=740 | GUID=84d710ac-3ab0-400c-a248-2dbfba9424d0  |
| Area=711 | Joint1=740 | Joint2=785 | Joint3=786 | Joint4=741 | GUID=62e18a6b-f6f9-4acb-ad28-30ea563ed5e3  |
| Area=712 | Joint1=741 | Joint2=786 | Joint3=787 | Joint4=742 | GUID=c2d65770-3c84-4df7-9d0a-6d32897cbe3c  |
| Area=713 | Joint1=742 | Joint2=787 | Joint3=788 | Joint4=743 | GUID=76e853b8-d57b-4e0b-a63b-c2333c6fdd82  |
| Area=714 | Joint1=743 | Joint2=788 | Joint3=789 | Joint4=744 | GUID=951b0313-e29e-448d-aa0f-89faca80e157  |
| Area=715 | Joint1=744 | Joint2=789 | Joint3=790 | Joint4=745 | GUID=b9e1ba4c-2a6b-4fbd-9ef9-6b7337c932cb  |
| Area=716 | Joint1=745 | Joint2=790 | Joint3=791 | Joint4=746 | GUID=79149080-f1d7-4728-98fc-3db7eadf584f  |
| Area=717 | Joint1=746 | Joint2=791 | Joint3=792 | Joint4=747 | GUID=976bbe7a-259e-4ffb-95ff-e97dbacd4ceb  |
| Area=718 | Joint1=747 | Joint2=792 | Joint3=793 | Joint4=748 | GUID=6a4f8a5f-ee9f-459c-9113-842bc47f11e7  |
| Area=719 | Joint1=748 | Joint2=793 | Joint3=794 | Joint4=749 | GUID=dad1f113-67e1-4379-af97-a442d2c827ed  |
| Area=720 | Joint1=749 | Joint2=794 | Joint3=795 | Joint4=750 | GUID=b283669b-4a8a-4411-b2b4-0a2d9c529b0d  |
| Area=721 | Joint1=750 | Joint2=795 | Joint3=796 | Joint4=751 | GUID=93f528e1-aac1-4e1a-b0bc-17f9de1f6ee9  |
| Area=722 | Joint1=751 | Joint2=796 | Joint3=797 | Joint4=752 | GUID=761e84a3-39e6-4250-80c4-f4c1b2cced22  |
| Area=723 | Joint1=752 | Joint2=797 | Joint3=798 | Joint4=753 | GUID=4379daac-6a73-4220-bc12-3557d717f664  |
| Area=724 | Joint1=753 | Joint2=798 | Joint3=799 | Joint4=754 | GUID=29f7a9d7-2508-4c34-bdee-7209db9a694b  |
| Area=725 | Joint1=754 | Joint2=799 | Joint3=800 | Joint4=755 | GUID=9415032a-b0c8-495e-bd84-40ba7a097c5d  |
| Area=726 | Joint1=755 | Joint2=800 | Joint3=801 | Joint4=756 | GUID=993bc2e9-e3d2-440f-892f-e4b702471a36  |
| Area=727 | Joint1=756 | Joint2=801 | Joint3=802 | Joint4=757 | GUID=98732d58-ba24-4421-a0c0-52ccb5aed580  |
| Area=728 | Joint1=757 | Joint2=802 | Joint3=803 | Joint4=758 | GUID=2da719f6-50a4-4b9e-a06e-f1c066e84524  |
| Area=729 | Joint1=758 | Joint2=803 | Joint3=804 | Joint4=759 | GUID=39a6572d-d52c-4324-84ad-db1b1d60a587  |
| Area=730 | Joint1=759 | Joint2=804 | Joint3=805 | Joint4=760 | GUID=0a497fc7-8f5e-460d-ab70-6625a6a5ee77  |
| Area=731 | Joint1=760 | Joint2=805 | Joint3=806 | Joint4=761 | GUID=ee74e998-4567-47c1-b796-bab84eb7e657  |
| Area=732 | Joint1=761 | Joint2=806 | Joint3=807 | Joint4=762 | GUID=c2cd83e5-303b-48db-bbcb-dc9b2dee2bbb  |
| Area=733 | Joint1=762 | Joint2=807 | Joint3=808 | Joint4=763 | GUID=c44f22b7-455c-41c5-8426-ff6d7f026344  |

|          |            |            |            |            |                                            |
|----------|------------|------------|------------|------------|--------------------------------------------|
| Area=734 | Joint1=763 | Joint2=808 | Joint3=809 | Joint4=764 | GUID=b57e06a3-3323-4add-a288-1201a9d39c53  |
| Area=735 | Joint1=764 | Joint2=809 | Joint3=810 | Joint4=765 | GUID=b5795cd8-fec3-4ffe-bf3f-d165e2b5d48c  |
| Area=736 | Joint1=765 | Joint2=810 | Joint3=811 | Joint4=766 | GUID=650dead2-9bcc-4aa9-ae0f-c860fa05dcd0  |
| Area=737 | Joint1=766 | Joint2=811 | Joint3=812 | Joint4=767 | GUID=c432a841-584d-4d93-9a6b-064f5af35e88  |
| Area=738 | Joint1=767 | Joint2=812 | Joint3=813 | Joint4=768 | GUID=9d82cd4d-c82b-4664-85bb-541fd276861d  |
| Area=739 | Joint1=768 | Joint2=813 | Joint3=814 | Joint4=769 | GUID=571fb477-a24c-4290-a6f9-eae99d6cd906  |
| Area=740 | Joint1=769 | Joint2=814 | Joint3=815 | Joint4=770 | GUID=558b3fc5-85d6-4e23-83c7-4233a998a9cb  |
| Area=741 | Joint1=770 | Joint2=815 | Joint3=816 | Joint4=771 | GUID=593428dd-80a6-4e86-af48-b5daf32cf0fa  |
| Area=742 | Joint1=771 | Joint2=816 | Joint3=817 | Joint4=772 | GUID=8143a3b3-87ac-4b63-bf1a-1d61a481d2c94 |
| Area=743 | Joint1=772 | Joint2=817 | Joint3=818 | Joint4=773 | GUID=ca4ab428-878d-45fe-bd02-0eaf1685c416  |
| Area=744 | Joint1=773 | Joint2=818 | Joint3=819 | Joint4=774 | GUID=551fa592-8d71-4418-81dd-215c049b9d63  |
| Area=745 | Joint1=774 | Joint2=819 | Joint3=820 | Joint4=775 | GUID=618479dc-8a82-4132-ad3f-97a512bd377f  |
| Area=746 | Joint1=775 | Joint2=820 | Joint3=821 | Joint4=776 | GUID=597bfbdb-3557-4117-9fc4-3657648eef0d  |
| Area=747 | Joint1=776 | Joint2=821 | Joint3=822 | Joint4=777 | GUID=540541da-f8bf-4d55-b54f-7f1eb0141d2f  |
| Area=748 | Joint1=777 | Joint2=822 | Joint3=823 | Joint4=778 | GUID=a6a45c11-0f09-4bbf-b0a1-4d44aeb44ef3  |
| Area=749 | Joint1=778 | Joint2=823 | Joint3=824 | Joint4=779 | GUID=48b19dc6-c916-4bc3-bf1a-1d61a481d214  |
| Area=750 | Joint1=780 | Joint2=825 | Joint3=826 | Joint4=781 | GUID=828b4dd1-f9f5-4893-8d45-86e6ca10132f  |
| Area=751 | Joint1=781 | Joint2=826 | Joint3=827 | Joint4=782 | GUID=4a357550-db6f-4eb8-bef2-81ef1cb8542a  |
| Area=752 | Joint1=782 | Joint2=827 | Joint3=828 | Joint4=783 | GUID=4b870c7e-a210-4ce2-b21a-b0f455e8d847  |
| Area=753 | Joint1=783 | Joint2=828 | Joint3=829 | Joint4=784 | GUID=b4321a4e-bb95-4528-b4ff-29382cae6b9a  |
| Area=754 | Joint1=784 | Joint2=829 | Joint3=830 | Joint4=785 | GUID=edb2a47d-debe-464f-b52d-c45909784ccd  |
| Area=755 | Joint1=785 | Joint2=830 | Joint3=831 | Joint4=786 | GUID=06759623-162e-4804-91c7-6d516b244c81  |
| Area=756 | Joint1=786 | Joint2=831 | Joint3=832 | Joint4=787 | GUID=2df9a10a-33f9-4036-b2ef-8ebf45177ea8  |
| Area=757 | Joint1=787 | Joint2=832 | Joint3=833 | Joint4=788 | GUID=6d71e141-a8f4-4237-b037-ec324ed7813e  |
| Area=758 | Joint1=788 | Joint2=833 | Joint3=834 | Joint4=789 | GUID=5cd090e6-2611-49fe-afce-f4d1cf753987  |
| Area=759 | Joint1=789 | Joint2=834 | Joint3=835 | Joint4=790 | GUID=f81cf225-cf77-433f-8c1d-77ee8c46c1ac  |
| Area=760 | Joint1=790 | Joint2=835 | Joint3=836 | Joint4=791 | GUID=a81c7f2e-94a1-41c4-ad80-444363c938c8  |
| Area=761 | Joint1=791 | Joint2=836 | Joint3=837 | Joint4=792 | GUID=525b8ac4-e280-4cf0-b74c-ae7f6e4b5a2b  |
| Area=762 | Joint1=792 | Joint2=837 | Joint3=838 | Joint4=793 | GUID=71faec74-06a9-470a-ae11-1618e72baec3  |
| Area=763 | Joint1=793 | Joint2=838 | Joint3=839 | Joint4=794 | GUID=cd9095e4-7961-4f98-a9a1-5356d5241d84  |
| Area=764 | Joint1=794 | Joint2=839 | Joint3=840 | Joint4=795 | GUID=f97790cd-1927-434b-b5cd-78adfbcb52dbe |
| Area=765 | Joint1=795 | Joint2=840 | Joint3=841 | Joint4=796 | GUID=b2e5c8ac-2c57-4502-bf75-a3499aa1c6a0  |
| Area=766 | Joint1=796 | Joint2=841 | Joint3=842 | Joint4=797 | GUID=1c2e8826-6e6a-4f20-a51f-6a3f394911bb  |
| Area=767 | Joint1=797 | Joint2=842 | Joint3=843 | Joint4=798 | GUID=f61f5efb-b7df-44a7-b371-c9852016da66  |
| Area=768 | Joint1=798 | Joint2=843 | Joint3=844 | Joint4=799 | GUID=24b72f97-f7ce-4188-8089-ad260614a903  |
| Area=769 | Joint1=799 | Joint2=844 | Joint3=845 | Joint4=800 | GUID=cd58f190-f30e-443a-8bca-286f69f22d5e  |
| Area=770 | Joint1=800 | Joint2=845 | Joint3=846 | Joint4=801 | GUID=c5e6041b-3318-4d6a-bcde-25b137a10e49  |
| Area=771 | Joint1=801 | Joint2=846 | Joint3=847 | Joint4=802 | GUID=a4eeac5e-d7bd-4055-8f46-a41a68160ed4  |
| Area=772 | Joint1=802 | Joint2=847 | Joint3=848 | Joint4=803 | GUID=adae79e5-bab9-4457-bc29-c6615b5f377d  |
| Area=773 | Joint1=803 | Joint2=848 | Joint3=849 | Joint4=804 | GUID=b18f6bdf-246a-4e82-8f97-952fa410bb93  |
| Area=774 | Joint1=804 | Joint2=849 | Joint3=850 | Joint4=805 | GUID=038fd57d-ddc3-4600-b43c-d1d1341b4f3a  |
| Area=775 | Joint1=805 | Joint2=850 | Joint3=851 | Joint4=806 | GUID=b3764a3d-f6da-478d-9e5f-f61baf4c240e  |
| Area=776 | Joint1=806 | Joint2=851 | Joint3=852 | Joint4=807 | GUID=a5ffabc5-b12f-4ed7-a06b-d3efd9e8e653  |
| Area=777 | Joint1=807 | Joint2=852 | Joint3=853 | Joint4=808 | GUID=5a4382fe-0058-4424-b85e-5a34276517f7  |
| Area=778 | Joint1=808 | Joint2=853 | Joint3=854 | Joint4=809 | GUID=a5091935-21f4-455e-aaf8-0bb4012246d4  |
| Area=779 | Joint1=809 | Joint2=854 | Joint3=855 | Joint4=810 | GUID=bff5ff66-6826-4b43-9f29-2c5dcfe3fffd  |
| Area=780 | Joint1=810 | Joint2=855 | Joint3=856 | Joint4=811 | GUID=964b2d98-2a09-4a56-96ca-661f442187f1  |
| Area=781 | Joint1=811 | Joint2=856 | Joint3=857 | Joint4=812 | GUID=b416cd7e-a541-4044-a464-9218efa285b4  |
| Area=782 | Joint1=812 | Joint2=857 | Joint3=858 | Joint4=813 | GUID=aca27f2d-a804-48a4-a11d-90e3f541da19  |
| Area=783 | Joint1=813 | Joint2=858 | Joint3=859 | Joint4=814 | GUID=16f9aad9-fa15-4615-80ef-5a8db7c2f223  |
| Area=784 | Joint1=814 | Joint2=859 | Joint3=860 | Joint4=815 | GUID=eec1e147-b5d3-468b-8a30-ce0b4a49b29f  |
| Area=785 | Joint1=815 | Joint2=860 | Joint3=861 | Joint4=816 | GUID=6076a890-886e-44ee-b54a-ef33d6d1d16c  |
| Area=786 | Joint1=816 | Joint2=861 | Joint3=862 | Joint4=817 | GUID=9bbe3401-0efc-4e18-b1b8-8ebf15023586  |
| Area=787 | Joint1=817 | Joint2=862 | Joint3=863 | Joint4=818 | GUID=3ae76e8d-4c58-4114-b5ea-b3e90f22018e  |
| Area=788 | Joint1=818 | Joint2=863 | Joint3=864 | Joint4=819 | GUID=cef6e4f8-af32-4a5c-82c9-8cb2bd542627  |

|          |            |            |            |            |                                           |
|----------|------------|------------|------------|------------|-------------------------------------------|
| Area=789 | Joint1=819 | Joint2=864 | Joint3=865 | Joint4=820 | GUID=c660c6c0-0037-432d-877f-bb33e26939f4 |
| Area=790 | Joint1=820 | Joint2=865 | Joint3=866 | Joint4=821 | GUID=ad8e51b7-3e36-47c8-9341-3a3562169c1b |
| Area=791 | Joint1=821 | Joint2=866 | Joint3=867 | Joint4=822 | GUID=0b689b6f-8b40-45b5-8676-c464b26d2ef1 |
| Area=792 | Joint1=822 | Joint2=867 | Joint3=868 | Joint4=823 | GUID=0432f217-ce7c-4b51-8675-6bcd28c3a3fd |
| Area=793 | Joint1=823 | Joint2=868 | Joint3=869 | Joint4=824 | GUID=2132e49e-f662-4cd1-92cc-03928e0fa7a2 |
| Area=794 | Joint1=825 | Joint2=870 | Joint3=871 | Joint4=826 | GUID=45cd5212-6856-4c1e-9037-0cc25f235455 |
| Area=795 | Joint1=826 | Joint2=871 | Joint3=872 | Joint4=827 | GUID=f95ddee5-5f5b-473f-9075-57ce3b6a838b |
| Area=796 | Joint1=827 | Joint2=872 | Joint3=873 | Joint4=828 | GUID=da76076a-123c-4037-a925-601287f845d8 |
| Area=797 | Joint1=828 | Joint2=873 | Joint3=874 | Joint4=829 | GUID=0bc33dfe-d258-4c83-8f28-701ebd0a868f |
| Area=798 | Joint1=829 | Joint2=874 | Joint3=875 | Joint4=830 | GUID=c3f75905-87ab-418e-b115-e4d764a1c1a7 |
| Area=799 | Joint1=830 | Joint2=875 | Joint3=876 | Joint4=831 | GUID=03482132-04e4-4d49-a013-6fcde1c6462a |
| Area=800 | Joint1=831 | Joint2=876 | Joint3=877 | Joint4=832 | GUID=e9aa4183-ca61-4c7a-9e40-b41d82cd0c41 |
| Area=801 | Joint1=832 | Joint2=877 | Joint3=878 | Joint4=833 | GUID=c13f060c-8d73-4343-988f-0d82c8a1d468 |
| Area=802 | Joint1=833 | Joint2=878 | Joint3=879 | Joint4=834 | GUID=575dcc81-2629-4d49-a35f-e579dfd01c23 |
| Area=803 | Joint1=834 | Joint2=879 | Joint3=880 | Joint4=835 | GUID=4bdd0262-db3d-4797-916e-4ef2c2cadafe |
| Area=804 | Joint1=835 | Joint2=880 | Joint3=881 | Joint4=836 | GUID=6be4cbca-59fc-4fb5-b0a8-97b2190be741 |
| Area=805 | Joint1=836 | Joint2=881 | Joint3=882 | Joint4=837 | GUID=39f6059d-d3a3-45cc-ae6a-e2c6c16ec7c2 |
| Area=806 | Joint1=837 | Joint2=882 | Joint3=883 | Joint4=838 | GUID=63bd399f-9114-44a2-821e-a5bdb8f94a1c |
| Area=807 | Joint1=838 | Joint2=883 | Joint3=884 | Joint4=839 | GUID=7889bfbf-af2b-44d8-b542-4920e46270bc |
| Area=808 | Joint1=839 | Joint2=884 | Joint3=885 | Joint4=840 | GUID=bcb09373-e1bf-408a-9320-12e7ecadb7c1 |
| Area=809 | Joint1=840 | Joint2=885 | Joint3=886 | Joint4=841 | GUID=6b30bc76-a220-42bd-9957-e6c2d57503bf |
| Area=810 | Joint1=841 | Joint2=886 | Joint3=887 | Joint4=842 | GUID=8eaa265d-0a5e-46ba-9ba8-cdee9e876016 |
| Area=811 | Joint1=842 | Joint2=887 | Joint3=888 | Joint4=843 | GUID=9d4804b4-9cdd-4953-abb9-c289fcbaf4a  |
| Area=812 | Joint1=843 | Joint2=888 | Joint3=889 | Joint4=844 | GUID=aa7cc1e8-6695-407e-94a0-0e24e36ba233 |
| Area=813 | Joint1=844 | Joint2=889 | Joint3=890 | Joint4=845 | GUID=3fee9d1f-fc7b-4bd6-9e26-f8cc36f89fac |
| Area=814 | Joint1=845 | Joint2=890 | Joint3=891 | Joint4=846 | GUID=ad358f6b-41b1-4980-b03d-aa8a325834f9 |
| Area=815 | Joint1=846 | Joint2=891 | Joint3=892 | Joint4=847 | GUID=200c04e7-0b44-47b7-98e0-ee314e285876 |
| Area=816 | Joint1=847 | Joint2=892 | Joint3=893 | Joint4=848 | GUID=d2b16513-1151-4bed-aa0a-b84bf2859fc9 |
| Area=817 | Joint1=848 | Joint2=893 | Joint3=894 | Joint4=849 | GUID=2ad56af6-5c19-482e-86fb-f642edca690c |
| Area=818 | Joint1=849 | Joint2=894 | Joint3=895 | Joint4=850 | GUID=54620720-52c7-463e-8693-378fb589dc67 |
| Area=819 | Joint1=850 | Joint2=895 | Joint3=896 | Joint4=851 | GUID=c8e9c7b0-c904-4736-9010-db7c96c75d55 |
| Area=820 | Joint1=851 | Joint2=896 | Joint3=897 | Joint4=852 | GUID=cecde0e7-300d-4e32-b84b-a17f520a1c2a |
| Area=821 | Joint1=852 | Joint2=897 | Joint3=898 | Joint4=853 | GUID=d3b85f92-fdb5-462c-b735-e4f35f586244 |
| Area=822 | Joint1=853 | Joint2=898 | Joint3=899 | Joint4=854 | GUID=007e9a37-d29e-40dd-bae2-a15342674e91 |
| Area=823 | Joint1=854 | Joint2=899 | Joint3=900 | Joint4=855 | GUID=683b2650-4706-441f-ac7b-e26d030a7797 |
| Area=824 | Joint1=855 | Joint2=900 | Joint3=901 | Joint4=856 | GUID=9dc19f9e-ac59-407a-af34-94e2d49ade9c |
| Area=825 | Joint1=856 | Joint2=901 | Joint3=902 | Joint4=857 | GUID=e4202cb3-da0e-429f-b042-9a6030446b6f |
| Area=826 | Joint1=857 | Joint2=902 | Joint3=903 | Joint4=858 | GUID=5e47dead-3cc3-4533-936f-c3dafaa843cc |
| Area=827 | Joint1=858 | Joint2=903 | Joint3=904 | Joint4=859 | GUID=d8e40198-a1c0-4296-8032-7652ccbb7c6c |
| Area=828 | Joint1=859 | Joint2=904 | Joint3=905 | Joint4=860 | GUID=7e47ca1f-cc74-43f1-ba2b-74b850257932 |
| Area=829 | Joint1=860 | Joint2=905 | Joint3=906 | Joint4=861 | GUID=efe3ebfb-e405-4320-b66b-17a3bfc2a77d |
| Area=830 | Joint1=861 | Joint2=906 | Joint3=907 | Joint4=862 | GUID=7cf6275f-f237-4a31-9bb6-e20ecf7d107a |
| Area=831 | Joint1=862 | Joint2=907 | Joint3=908 | Joint4=863 | GUID=3eb6fb15-de1d-4587-8e8f-357eca893b50 |
| Area=832 | Joint1=863 | Joint2=908 | Joint3=909 | Joint4=864 | GUID=b481b362-ec83-4174-9a2e-0333b30ff8d6 |
| Area=833 | Joint1=864 | Joint2=909 | Joint3=910 | Joint4=865 | GUID=9e2855f3-af27-497e-b110-a099d5532b8d |
| Area=834 | Joint1=865 | Joint2=910 | Joint3=911 | Joint4=866 | GUID=45cab0ce-6aff-4f03-97b0-afe8eb6790a2 |
| Area=835 | Joint1=866 | Joint2=911 | Joint3=912 | Joint4=867 | GUID=ef54baf6-d8b9-4592-bf4c-6667764c6af0 |
| Area=836 | Joint1=867 | Joint2=912 | Joint3=913 | Joint4=868 | GUID=4bca3574-9b5c-4996-8f29-d1e175b5b25d |
| Area=837 | Joint1=868 | Joint2=913 | Joint3=914 | Joint4=869 | GUID=98bfc6c3-7425-4d26-9b74-b78ff42e1251 |
| Area=838 | Joint1=870 | Joint2=915 | Joint3=916 | Joint4=871 | GUID=8cb38ccb-92da-4b99-a6c7-a236c9becb42 |
| Area=839 | Joint1=871 | Joint2=916 | Joint3=917 | Joint4=872 | GUID=158db158-5c9b-482a-b0c9-189294ad455d |
| Area=840 | Joint1=872 | Joint2=917 | Joint3=918 | Joint4=873 | GUID=5b4b1ebe-b9a7-406b-8978-e923c7701152 |
| Area=841 | Joint1=873 | Joint2=918 | Joint3=919 | Joint4=874 | GUID=2bdd26cb-096f-4b9e-9240-535a2aaa3616 |
| Area=842 | Joint1=874 | Joint2=919 | Joint3=920 | Joint4=875 | GUID=a18baf42-b885-4b26-b45c-9b0f16380fcf |
| Area=843 | Joint1=875 | Joint2=920 | Joint3=921 | Joint4=876 | GUID=0d952967-393f-4cec-b244-43409db876e1 |



|          |            |            |            |            |                                           |
|----------|------------|------------|------------|------------|-------------------------------------------|
| Area=844 | Joint1=876 | Joint2=921 | Joint3=922 | Joint4=877 | GUID=cc655214-43c7-4246-8c5d-97fe2e181f12 |
| Area=845 | Joint1=877 | Joint2=922 | Joint3=923 | Joint4=878 | GUID=b9ff0cd6-2391-4791-938b-af53c26f9a0d |
| Area=846 | Joint1=878 | Joint2=923 | Joint3=924 | Joint4=879 | GUID=a224ec48-7ef6-45d0-ae7d-51c58e42d138 |
| Area=847 | Joint1=879 | Joint2=924 | Joint3=925 | Joint4=880 | GUID=859f98c7-2bc0-4b7a-ab51-0ad9430d1ca8 |
| Area=848 | Joint1=880 | Joint2=925 | Joint3=926 | Joint4=881 | GUID=f96e4ff3-68a8-4c9e-ab26-ad1daa4f3b05 |
| Area=849 | Joint1=881 | Joint2=926 | Joint3=927 | Joint4=882 | GUID=ee2e192a-37bc-4d10-a0cc-6640ad56f59e |
| Area=850 | Joint1=882 | Joint2=927 | Joint3=928 | Joint4=883 | GUID=525ecba3-8494-4332-a223-2a43a9000184 |
| Area=851 | Joint1=883 | Joint2=928 | Joint3=929 | Joint4=884 | GUID=be3186ae-8fc8-4d94-bf1f-eeb27cd23263 |
| Area=852 | Joint1=884 | Joint2=929 | Joint3=930 | Joint4=885 | GUID=dd131f78-4f7f-40fe-8ce6-1102199a0998 |
| Area=853 | Joint1=885 | Joint2=930 | Joint3=931 | Joint4=886 | GUID=d0eeb24c-64df-42db-9c7d-564059b360d9 |
| Area=854 | Joint1=886 | Joint2=931 | Joint3=932 | Joint4=887 | GUID=56d1e84b-88f2-459d-8822-12242e1ac4e8 |
| Area=855 | Joint1=887 | Joint2=932 | Joint3=933 | Joint4=888 | GUID=efb10def-9dd0-416c-ac91-d9bea76c8130 |
| Area=856 | Joint1=888 | Joint2=933 | Joint3=934 | Joint4=889 | GUID=662e9828-654c-4009-a180-85c1f444690b |
| Area=857 | Joint1=889 | Joint2=934 | Joint3=935 | Joint4=890 | GUID=4ecb1d6c-1d91-4e4b-a70c-11aed572e81e |
| Area=858 | Joint1=890 | Joint2=935 | Joint3=936 | Joint4=891 | GUID=c1c78e96-bb29-4912-8e6e-5cc54366560a |
| Area=859 | Joint1=891 | Joint2=936 | Joint3=937 | Joint4=892 | GUID=530a1f40-b076-40bb-bd0e-03be75582712 |
| Area=860 | Joint1=892 | Joint2=937 | Joint3=938 | Joint4=893 | GUID=a75650f1-5544-430f-baa3-3529fe1881ba |
| Area=861 | Joint1=893 | Joint2=938 | Joint3=939 | Joint4=894 | GUID=363d213d-b468-4603-80e9-e6c6815ec069 |
| Area=862 | Joint1=894 | Joint2=939 | Joint3=940 | Joint4=895 | GUID=a4eee083-1dfb-4da6-ad53-1f7036352f1a |
| Area=863 | Joint1=895 | Joint2=940 | Joint3=941 | Joint4=896 | GUID=ada2e892-71b9-4816-a69b-3a7bb3d83479 |
| Area=864 | Joint1=896 | Joint2=941 | Joint3=942 | Joint4=897 | GUID=fcf40250-e464-46dd-ac29-e224bcef487e |
| Area=865 | Joint1=897 | Joint2=942 | Joint3=943 | Joint4=898 | GUID=ee4bde86-ed6f-4c4b-a077-27c9cba279f9 |
| Area=866 | Joint1=898 | Joint2=943 | Joint3=944 | Joint4=899 | GUID=7986d3bb-81ae-43be-bd1e-dad64de5f139 |
| Area=867 | Joint1=899 | Joint2=944 | Joint3=945 | Joint4=900 | GUID=75550033-6586-4499-bed9-a29202f7f085 |
| Area=868 | Joint1=900 | Joint2=945 | Joint3=946 | Joint4=901 | GUID=44e98c56-fcce-40ff-8b0a-31ab518136e7 |
| Area=869 | Joint1=901 | Joint2=946 | Joint3=947 | Joint4=902 | GUID=0ee068cc-aae0-4e6a-8295-614f7b1affe5 |
| Area=870 | Joint1=902 | Joint2=947 | Joint3=948 | Joint4=903 | GUID=12076e7b-a419-440c-934e-c08fcf48da2a |
| Area=871 | Joint1=903 | Joint2=948 | Joint3=949 | Joint4=904 | GUID=1862895a-7d38-4c28-ac0b-34dfc188c469 |
| Area=872 | Joint1=904 | Joint2=949 | Joint3=950 | Joint4=905 | GUID=3fc2e310-10c1-4485-8d1a-4af14d410ae8 |
| Area=873 | Joint1=905 | Joint2=950 | Joint3=951 | Joint4=906 | GUID=5e91f2b3-ff9c-4a6a-9049-8b25302a2857 |
| Area=874 | Joint1=906 | Joint2=951 | Joint3=952 | Joint4=907 | GUID=9ae6ce0d-7ed4-405f-832a-f48e3da0830f |
| Area=875 | Joint1=907 | Joint2=952 | Joint3=953 | Joint4=908 | GUID=c6fe75ef-8c71-4d7d-b02c-b6a8c293ba6e |
| Area=876 | Joint1=908 | Joint2=953 | Joint3=954 | Joint4=909 | GUID=a6a6bbf0-6902-46b0-8883-d5dce50c7c09 |
| Area=877 | Joint1=909 | Joint2=954 | Joint3=955 | Joint4=910 | GUID=ebbc4d1e-4549-4090-a87f-1ea01abc3d1b |
| Area=878 | Joint1=910 | Joint2=955 | Joint3=956 | Joint4=911 | GUID=f60aa2ae-faba-4e41-86a8-a2e45de32214 |
| Area=879 | Joint1=911 | Joint2=956 | Joint3=957 | Joint4=912 | GUID=cbfe8d3b-422b-4392-8cea-0c2b66987fa4 |
| Area=880 | Joint1=912 | Joint2=957 | Joint3=958 | Joint4=913 | GUID=06da34ac-5975-4e56-88bd-5a56d7d53e3f |
| Area=881 | Joint1=913 | Joint2=958 | Joint3=959 | Joint4=914 | GUID=8d6245e5-a70f-406d-ad29-12a32f26bc59 |
| Area=882 | Joint1=915 | Joint2=960 | Joint3=961 | Joint4=916 | GUID=a3a7c76f-909f-4ee1-a5a0-5ff60acd5469 |
| Area=883 | Joint1=916 | Joint2=961 | Joint3=962 | Joint4=917 | GUID=356a6b9f-37ae-411d-b70b-ec1c7dc213eb |
| Area=884 | Joint1=917 | Joint2=962 | Joint3=963 | Joint4=918 | GUID=db3ed355-4164-4e93-8fb9-227bb74480e6 |
| Area=885 | Joint1=918 | Joint2=963 | Joint3=964 | Joint4=919 | GUID=f8141c6b-0cfb-4046-9b21-54732f0b3c4c |
| Area=886 | Joint1=919 | Joint2=964 | Joint3=965 | Joint4=920 | GUID=4d9327a0-27bb-42a9-b3bd-e38a1db00b7f |
| Area=887 | Joint1=920 | Joint2=965 | Joint3=966 | Joint4=921 | GUID=5846be79-20dc-4577-9d0f-f42bd287a927 |
| Area=888 | Joint1=921 | Joint2=966 | Joint3=967 | Joint4=922 | GUID=f950ca51-5d89-46d1-9b14-52deedf6450f |
| Area=889 | Joint1=922 | Joint2=967 | Joint3=968 | Joint4=923 | GUID=89a5b0dc-ec73-44f3-8b02-5c4bf70b2932 |
| Area=890 | Joint1=923 | Joint2=968 | Joint3=969 | Joint4=924 | GUID=6d72646d-7856-448f-892f-79518c23e607 |
| Area=891 | Joint1=924 | Joint2=969 | Joint3=970 | Joint4=925 | GUID=1947841b-fdbd-4376-bfd6-6d7b657ef9ac |
| Area=892 | Joint1=925 | Joint2=970 | Joint3=971 | Joint4=926 | GUID=cda02d6-318a-4ab6-a78a-8543ce9f74e4  |
| Area=893 | Joint1=926 | Joint2=971 | Joint3=972 | Joint4=927 | GUID=b2753aa0-3bc9-4bf9-9329-bedc6b79f6cc |
| Area=894 | Joint1=927 | Joint2=972 | Joint3=973 | Joint4=928 | GUID=7db20224-ae3c-4671-948a-016824f348b5 |
| Area=895 | Joint1=928 | Joint2=973 | Joint3=974 | Joint4=929 | GUID=e9eae8e8-e0ca-493a-89bf-250e54263b1  |
| Area=896 | Joint1=929 | Joint2=974 | Joint3=975 | Joint4=930 | GUID=7105f9fc-a7bc-45b0-97f4-016b9a5f6904 |
| Area=897 | Joint1=930 | Joint2=975 | Joint3=976 | Joint4=931 | GUID=60dc0664-962e-46cb-9000-6232aa49d9a5 |
| Area=898 | Joint1=931 | Joint2=976 | Joint3=977 | Joint4=932 | GUID=a93cfd93-bfdf-40bb-b87b-b6702835fdc5 |

|          |            |             |             |            |                                           |
|----------|------------|-------------|-------------|------------|-------------------------------------------|
| Area=899 | Joint1=932 | Joint2=977  | Joint3=978  | Joint4=933 | GUID=3111e34a-5a6e-4094-9f85-5cdccb6c989f |
| Area=900 | Joint1=933 | Joint2=978  | Joint3=979  | Joint4=934 | GUID=07732204-4a82-4cac-bfbc-ad9629a9f859 |
| Area=901 | Joint1=934 | Joint2=979  | Joint3=980  | Joint4=935 | GUID=681c6c04-add8-443d-be63-b5b328420ffc |
| Area=902 | Joint1=935 | Joint2=980  | Joint3=981  | Joint4=936 | GUID=63fd8504-e059-4f7b-a37b-18de728aba27 |
| Area=903 | Joint1=936 | Joint2=981  | Joint3=982  | Joint4=937 | GUID=78ea5226-a33d-4859-9052-1c5763d1540a |
| Area=904 | Joint1=937 | Joint2=982  | Joint3=983  | Joint4=938 | GUID=db650564-8a6e-453d-ba0f-8109e22bd7ae |
| Area=905 | Joint1=938 | Joint2=983  | Joint3=984  | Joint4=939 | GUID=5408c085-6136-4417-a2d0-656ec20cc2b0 |
| Area=906 | Joint1=939 | Joint2=984  | Joint3=985  | Joint4=940 | GUID=004fbf79-65e0-4c05-876e-ec3c447be095 |
| Area=907 | Joint1=940 | Joint2=985  | Joint3=986  | Joint4=941 | GUID=4e5dab4a-0023-4d67-8a8b-7e05d4108df4 |
| Area=908 | Joint1=941 | Joint2=986  | Joint3=987  | Joint4=942 | GUID=486e7ae2-a23a-4ab7-9d7c-d8d46629d060 |
| Area=909 | Joint1=942 | Joint2=987  | Joint3=988  | Joint4=943 | GUID=e319c01d-2c0c-4c71-99dd-604cad1c1d01 |
| Area=910 | Joint1=943 | Joint2=988  | Joint3=989  | Joint4=944 | GUID=a99efebc-eb83-44a9-89ef-9f5383ea7150 |
| Area=911 | Joint1=944 | Joint2=989  | Joint3=990  | Joint4=945 | GUID=f5c7ca99-0975-4887-a65b-8629f17e63c4 |
| Area=912 | Joint1=945 | Joint2=990  | Joint3=991  | Joint4=946 | GUID=b8a07eb4-00da-4620-9be7-8d7514bcc4f5 |
| Area=913 | Joint1=946 | Joint2=991  | Joint3=992  | Joint4=947 | GUID=25301970-7817-48ba-b266-481dbdb5eabd |
| Area=914 | Joint1=947 | Joint2=992  | Joint3=993  | Joint4=948 | GUID=5898091c-cfa7-4e7f-b2b0-04f5c4c9642e |
| Area=915 | Joint1=948 | Joint2=993  | Joint3=994  | Joint4=949 | GUID=fcbd53d7-c4b4-4cf0-862a-d7ac3d5547ca |
| Area=916 | Joint1=949 | Joint2=994  | Joint3=995  | Joint4=950 | GUID=28374135-3502-4ee6-8ccc-0a2fae04513f |
| Area=917 | Joint1=950 | Joint2=995  | Joint3=996  | Joint4=951 | GUID=1a323a76-e72f-414f-8f9a-1b379cdd8956 |
| Area=918 | Joint1=951 | Joint2=996  | Joint3=997  | Joint4=952 | GUID=6e168c7d-6b64-4f4a-af35-6bfc38a1f515 |
| Area=919 | Joint1=952 | Joint2=997  | Joint3=998  | Joint4=953 | GUID=e1cc31bd-1d70-4851-af3c-0db38cf7dcac |
| Area=920 | Joint1=953 | Joint2=998  | Joint3=999  | Joint4=954 | GUID=ac1a9821-6484-456c-bd20-10a48e0b1fd0 |
| Area=921 | Joint1=954 | Joint2=999  | Joint3=1000 | Joint4=955 | GUID=bed49479-cc5b-4546-a168-721f739495d  |
| Area=922 | Joint1=955 | Joint2=1000 | Joint3=1001 | Joint4=956 | GUID=a3ea4457-2193-47f8-9a5d-2da3352ac8df |
| Area=923 | Joint1=956 | Joint2=1001 | Joint3=1002 | Joint4=957 | GUID=bd55db85-342d-4747-ac79-061e6728bd11 |
| Area=924 | Joint1=957 | Joint2=1002 | Joint3=1003 | Joint4=958 | GUID=9d1dcf3b-ba91-4a5e-8ed5-87c0227f416e |
| Area=925 | Joint1=958 | Joint2=1003 | Joint3=1004 | Joint4=959 | GUID=ca312d1d-4f0c-4207-bea4-5504ab3b08c6 |
| Area=926 | Joint1=960 | Joint2=1005 | Joint3=1006 | Joint4=961 | GUID=f5f7bbd7-d8c6-4c7c-a8b7-c476e455c637 |
| Area=927 | Joint1=961 | Joint2=1006 | Joint3=1007 | Joint4=962 | GUID=31be88ca-0d61-46ab-8339-009ed4241fce |
| Area=928 | Joint1=962 | Joint2=1007 | Joint3=1008 | Joint4=963 | GUID=d6ea3c15-479c-4066-b904-f591c529789a |
| Area=929 | Joint1=963 | Joint2=1008 | Joint3=1009 | Joint4=964 | GUID=02d1f6bb-33fc-4246-aa4d-c3421f6ec64f |
| Area=930 | Joint1=964 | Joint2=1009 | Joint3=1010 | Joint4=965 | GUID=79a221f4-dd68-4b4d-ab07-9579377cfb4e |
| Area=931 | Joint1=965 | Joint2=1010 | Joint3=1011 | Joint4=966 | GUID=6864cb9d-4ec4-4325-b929-5fd011f1fec1 |
| Area=932 | Joint1=966 | Joint2=1011 | Joint3=1012 | Joint4=967 | GUID=c1cce41f-9a37-4eda-9a24-57be2f5af219 |
| Area=933 | Joint1=967 | Joint2=1012 | Joint3=1013 | Joint4=968 | GUID=28731c6a-fbd0-4ad5-a781-4b24ace4adfe |
| Area=934 | Joint1=968 | Joint2=1013 | Joint3=1014 | Joint4=969 | GUID=da70d99b-6b4a-4d0f-a755-60c0be812744 |
| Area=935 | Joint1=969 | Joint2=1014 | Joint3=1015 | Joint4=970 | GUID=b5c2975e-e801-48c2-82c5-39fb1012a6a3 |
| Area=936 | Joint1=970 | Joint2=1015 | Joint3=1016 | Joint4=971 | GUID=5d5cebb6-bd19-4349-b4c0-f435584a0a41 |
| Area=937 | Joint1=971 | Joint2=1016 | Joint3=1017 | Joint4=972 | GUID=e4d062dd-8c65-4b58-aa8f-78aaafa62825 |
| Area=938 | Joint1=972 | Joint2=1017 | Joint3=1018 | Joint4=973 | GUID=866cd04a-0d77-45b9-a430-b22f134b16a1 |
| Area=939 | Joint1=973 | Joint2=1018 | Joint3=1019 | Joint4=974 | GUID=0d012cb8-7ab1-4043-9b0e-2dafb74baf66 |
| Area=940 | Joint1=974 | Joint2=1019 | Joint3=1020 | Joint4=975 | GUID=b018ecfd-f910-414e-b95a-75d7ecaf557b |
| Area=941 | Joint1=975 | Joint2=1020 | Joint3=1021 | Joint4=976 | GUID=fa630fdd-e2e5-4c8f-a236-72cae2ae0d63 |
| Area=942 | Joint1=976 | Joint2=1021 | Joint3=1022 | Joint4=977 | GUID=10295914-63ef-4dcd-9abd-1a3951c85b6f |
| Area=943 | Joint1=977 | Joint2=1022 | Joint3=1023 | Joint4=978 | GUID=d4f3284b-0fd8-46dc-8ca7-44caaa78167a |
| Area=944 | Joint1=978 | Joint2=1023 | Joint3=1024 | Joint4=979 | GUID=b1d1842e-3aab-4703-9bd5-b482e692224b |
| Area=945 | Joint1=979 | Joint2=1024 | Joint3=1025 | Joint4=980 | GUID=36f6c8aa-6675-4a19-8b13-f262b5994d9d |
| Area=946 | Joint1=980 | Joint2=1025 | Joint3=1026 | Joint4=981 | GUID=1539c1dd-234d-4af5-ad0b-94d09c91e632 |
| Area=947 | Joint1=981 | Joint2=1026 | Joint3=10   | Joint4=982 | GUID=16cae989-6508-4ab8-b08e-054007d00b47 |
| Area=948 | Joint1=982 | Joint2=10   | Joint3=1027 | Joint4=983 | GUID=6859f0d1-622f-49a7-91eb-6a717d2d9126 |
| Area=949 | Joint1=983 | Joint2=1027 | Joint3=1028 | Joint4=984 | GUID=bd51dbad-1bcc-4ec2-9ba4-5505e92bf626 |
| Area=950 | Joint1=984 | Joint2=1028 | Joint3=1029 | Joint4=985 | GUID=423a3a75-7c0b-4839-9c44-042fea981a77 |
| Area=951 | Joint1=985 | Joint2=1029 | Joint3=1030 | Joint4=986 | GUID=dc45757e-52a4-4570-ac01-d5a1fb9abe4b |
| Area=952 | Joint1=986 | Joint2=1030 | Joint3=1031 | Joint4=987 | GUID=c742bcca-9833-4534-a157-f4800cb12cb5 |
| Area=953 | Joint1=987 | Joint2=1031 | Joint3=1032 | Joint4=988 | GUID=9a5a8e0e-35bf-45b5-97c9-b03dba141353 |



|           |             |             |             |             |                                            |
|-----------|-------------|-------------|-------------|-------------|--------------------------------------------|
| Area=954  | Joint1=988  | Joint2=1032 | Joint3=1033 | Joint4=989  | GUID=e316d33b-bfa1-44e7-a9ea-1cfbf111fa59  |
| Area=955  | Joint1=989  | Joint2=1033 | Joint3=1034 | Joint4=990  | GUID=e259a93b-059d-44b9-ad19-14d418e5fb21  |
| Area=956  | Joint1=990  | Joint2=1034 | Joint3=1035 | Joint4=991  | GUID=73815094-0f71-4824-9c1d-ef60b1e70abd  |
| Area=957  | Joint1=991  | Joint2=1035 | Joint3=1036 | Joint4=992  | GUID=8030080b-6bc7-4063-90c4-f255eeb86864  |
| Area=958  | Joint1=992  | Joint2=1036 | Joint3=1037 | Joint4=993  | GUID=7f63fe76-05f1-4454-b18d-8681ede567f8  |
| Area=959  | Joint1=993  | Joint2=1037 | Joint3=1038 | Joint4=994  | GUID=dc5ed87e-66ff-4f60-a1b5-3e342fe23051  |
| Area=960  | Joint1=994  | Joint2=1038 | Joint3=1039 | Joint4=995  | GUID=ca3306b5-059f-4eda-a748-87e8432e4a96  |
| Area=961  | Joint1=995  | Joint2=1039 | Joint3=1040 | Joint4=996  | GUID=c08d370e-bc54-47be-a9c0-eab452d63aa1  |
| Area=962  | Joint1=996  | Joint2=1040 | Joint3=1041 | Joint4=997  | GUID=98bd8175-ae0b-4ab3-a1c6-561fabcb8b03b |
| Area=963  | Joint1=997  | Joint2=1041 | Joint3=1042 | Joint4=998  | GUID=a171b0fe-7468-4770-bf59-d8fe5aa55b09  |
| Area=964  | Joint1=998  | Joint2=1042 | Joint3=1043 | Joint4=999  | GUID=845ef320-70b1-445b-8636-97c9f02fade4  |
| Area=965  | Joint1=999  | Joint2=1043 | Joint3=1044 | Joint4=1000 | GUID=436908b8-dc5a-4ed0-864f-8592f897e552  |
| Area=966  | Joint1=1000 | Joint2=1044 | Joint3=1045 | Joint4=1001 | GUID=0968010d-dd1b-4b6d-b1d1-9c729e6b2048  |
| Area=967  | Joint1=1001 | Joint2=1045 | Joint3=1046 | Joint4=1002 | GUID=00128cb2-a92f-4387-89da-7e16e93a515e  |
| Area=968  | Joint1=1002 | Joint2=1046 | Joint3=1047 | Joint4=1003 | GUID=c6c1595f-e1d1-4131-b5c6-b250ab95d86b  |
| Area=969  | Joint1=1003 | Joint2=1047 | Joint3=1048 | Joint4=1004 | GUID=c757a360-882d-4322-84bd-6c1d9dfce949  |
| Area=970  | Joint1=1005 | Joint2=1049 | Joint3=1050 | Joint4=1006 | GUID=44fd0608-d778-4925-a2de-64bea1785521  |
| Area=971  | Joint1=1006 | Joint2=1050 | Joint3=1051 | Joint4=1007 | GUID=c69b1db9-31cf-4326-be27-5ee99f3fa3d1  |
| Area=972  | Joint1=1007 | Joint2=1051 | Joint3=1052 | Joint4=1008 | GUID=fbc09749-0008-4358-9bd8-d10f1da1a3a9  |
| Area=973  | Joint1=1008 | Joint2=1052 | Joint3=1053 | Joint4=1009 | GUID=aa9882dd-1bb4-4ddf-a792-e8b1685a1f7a  |
| Area=974  | Joint1=1009 | Joint2=1053 | Joint3=1054 | Joint4=1010 | GUID=b30a7ac1-5e7b-432b-b7af-cc32ef2604aa  |
| Area=975  | Joint1=1010 | Joint2=1054 | Joint3=1055 | Joint4=1011 | GUID=c302aa0d-35f1-4431-8c44-285c8fc9b155  |
| Area=976  | Joint1=1011 | Joint2=1055 | Joint3=1056 | Joint4=1012 | GUID=ba7b9805-30ed-40fb-a2d4-bdc63e908ad9  |
| Area=977  | Joint1=1012 | Joint2=1056 | Joint3=1057 | Joint4=1013 | GUID=33820895-e5b5-4db1-871e-185806729472  |
| Area=978  | Joint1=1013 | Joint2=1057 | Joint3=1058 | Joint4=1014 | GUID=5df66e83-5af9-453e-8269-9baeda2ba06c  |
| Area=979  | Joint1=1014 | Joint2=1058 | Joint3=1059 | Joint4=1015 | GUID=c3dbbc62-8365-40dd-adb9-d6987c665ced  |
| Area=980  | Joint1=1015 | Joint2=1059 | Joint3=1060 | Joint4=1016 | GUID=a9225ce5-8d3f-436e-8f25-54fe5457b2d0  |
| Area=981  | Joint1=1016 | Joint2=1060 | Joint3=1061 | Joint4=1017 | GUID=2af54940-1e4e-4f93-ab70-a8695d43799a  |
| Area=982  | Joint1=1017 | Joint2=1061 | Joint3=1062 | Joint4=1018 | GUID=2483f89f-2be3-429a-a13b-0ae214cc8cf7  |
| Area=983  | Joint1=1018 | Joint2=1062 | Joint3=1063 | Joint4=1019 | GUID=6d2cf4f0-e989-4a33-824c-59c967969477  |
| Area=984  | Joint1=1019 | Joint2=1063 | Joint3=1064 | Joint4=1020 | GUID=ef9595d9-1923-42c9-bec1-738faa1adffd  |
| Area=985  | Joint1=1020 | Joint2=1064 | Joint3=1065 | Joint4=1021 | GUID=8bfa518a-4bcb-4d98-baa1-fe5c330a14ca  |
| Area=986  | Joint1=1021 | Joint2=1065 | Joint3=1066 | Joint4=1022 | GUID=721d680c-6443-42b7-b3ae-fa9072bc7989  |
| Area=987  | Joint1=1022 | Joint2=1066 | Joint3=1067 | Joint4=1023 | GUID=6b94ec3f-a6bc-4d70-b5aa-e703461be6f6  |
| Area=988  | Joint1=1023 | Joint2=1067 | Joint3=1068 | Joint4=1024 | GUID=e81db792-e43f-4329-8a04-36979a319cee  |
| Area=989  | Joint1=1024 | Joint2=1068 | Joint3=1069 | Joint4=1025 | GUID=17a9aa3c-08d7-4057-88b4-4dfdcd92d0af  |
| Area=990  | Joint1=1025 | Joint2=1069 | Joint3=1070 | Joint4=1026 | GUID=d95a3dc5-0817-4275-a11c-9b7580d4aa00  |
| Area=991  | Joint1=1026 | Joint2=1070 | Joint3=1071 | Joint4=10   | GUID=3d99e4e9-bc1c-4831-8aa3-b93e06d2472b  |
| Area=992  | Joint1=10   | Joint2=1071 | Joint3=1072 | Joint4=1027 | GUID=acfad17d-28ca-4cbc-9717-9ee2b28cfa10  |
| Area=993  | Joint1=1027 | Joint2=1072 | Joint3=1073 | Joint4=1028 | GUID=aed75252-5df6-4c95-80b3-b012a956f3d4  |
| Area=994  | Joint1=1028 | Joint2=1073 | Joint3=1074 | Joint4=1029 | GUID=d799dbee-7db5-4faf-acb3-ea6f829289e6  |
| Area=995  | Joint1=1029 | Joint2=1074 | Joint3=1075 | Joint4=1030 | GUID=23c9033f-9040-4c2d-b303-26d7d8074d95  |
| Area=996  | Joint1=1030 | Joint2=1075 | Joint3=1076 | Joint4=1031 | GUID=cd247231-d72b-46a7-bd95-639703eb088   |
| Area=997  | Joint1=1031 | Joint2=1076 | Joint3=1077 | Joint4=1032 | GUID=8e591391-8609-4f8d-b741-5b4a6ee06bb5  |
| Area=998  | Joint1=1032 | Joint2=1077 | Joint3=1078 | Joint4=1033 | GUID=12538cba-270a-47d2-8e36-d782c0f33fde  |
| Area=999  | Joint1=1033 | Joint2=1078 | Joint3=1079 | Joint4=1034 | GUID=8de84e8f-2c1d-4c2f-821d-4ad58de820b0  |
| Area=1000 | Joint1=1034 | Joint2=1079 | Joint3=1080 | Joint4=1035 | GUID=354cc2c4-6c88-4efa-a0db-026fe54830c1  |
| Area=1001 | Joint1=1035 | Joint2=1080 | Joint3=1081 | Joint4=1036 | GUID=ef661a87-ef49-4893-b9b1-608148f8c787  |
| Area=1002 | Joint1=1036 | Joint2=1081 | Joint3=1082 | Joint4=1037 | GUID=29694769-2e06-4170-bd07-ba0231138ac2  |
| Area=1003 | Joint1=1037 | Joint2=1082 | Joint3=1083 | Joint4=1038 | GUID=54a1c0f4-bc87-4dde-afa9-80f78a5a2779  |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=1004 | Joint1=1038 | Joint2=1083 | Joint3=1084 | Joint4=1039 | GUID=a15e8d48-0785-451e-a8b9-977d0f6576c8 |
| Area=1005 | Joint1=1039 | Joint2=1084 | Joint3=1085 | Joint4=1040 | GUID=d46c35d1-6a28-4c09-900d-93c607a14bff |
| Area=1006 | Joint1=1040 | Joint2=1085 | Joint3=1086 | Joint4=1041 | GUID=12004aa8-cdfd-4354-89c3-69bc85b0d46e |
| Area=1007 | Joint1=1041 | Joint2=1086 | Joint3=1087 | Joint4=1042 | GUID=93a172f9-1b03-4015-ac02-4bb4015eef18 |
| Area=1008 | Joint1=1042 | Joint2=1087 | Joint3=1088 | Joint4=1043 | GUID=748e4939-87ce-418f-83c9-1b71da6531b2 |
| Area=1009 | Joint1=1043 | Joint2=1088 | Joint3=1089 | Joint4=1044 | GUID=136112e6-5fba-42a1-9e5b-d965904138ac |
| Area=1010 | Joint1=1044 | Joint2=1089 | Joint3=1090 | Joint4=1045 | GUID=3f70e20f-7ef3-43b9-8594-2a7d6f878c9a |
| Area=1011 | Joint1=1045 | Joint2=1090 | Joint3=1091 | Joint4=1046 | GUID=ef17b62e-5a8b-4a8c-9993-31a459d1a5d3 |
| Area=1012 | Joint1=1046 | Joint2=1091 | Joint3=1092 | Joint4=1047 | GUID=5f805ad0-eda5-4388-8e51-6ab83566c740 |
| Area=1013 | Joint1=1047 | Joint2=1092 | Joint3=1093 | Joint4=1048 | GUID=cb63473b-dc2e-4121-987e-bd50968fb60e |
| Area=1014 | Joint1=1049 | Joint2=1094 | Joint3=1095 | Joint4=1050 | GUID=0b06ff07-66f4-40b3-a894-e69d9e59fd75 |
| Area=1015 | Joint1=1050 | Joint2=1095 | Joint3=1096 | Joint4=1051 | GUID=1c9a5075-8c2d-4f31-851a-1fcc68d5bbb1 |
| Area=1016 | Joint1=1051 | Joint2=1096 | Joint3=1097 | Joint4=1052 | GUID=78fe1eaa-3962-4c30-be17-d8bb88f85d2a |
| Area=1017 | Joint1=1052 | Joint2=1097 | Joint3=1098 | Joint4=1053 | GUID=8f23fc43-4756-461d-b2a1-9bc64d5a41eb |
| Area=1018 | Joint1=1053 | Joint2=1098 | Joint3=1099 | Joint4=1054 | GUID=f094d599-d1f8-4fa5-ba83-5ea70cf340b0 |
| Area=1019 | Joint1=1054 | Joint2=1099 | Joint3=1100 | Joint4=1055 | GUID=3a8223d8-5e11-45e1-81f3-85e08d7d048b |
| Area=1020 | Joint1=1055 | Joint2=1100 | Joint3=1101 | Joint4=1056 | GUID=aadebba2-dbdf-4395-91be-540c5178cdd8 |
| Area=1021 | Joint1=1056 | Joint2=1101 | Joint3=1102 | Joint4=1057 | GUID=ef3f4999-24bf-4786-a278-33907a8f2bb4 |
| Area=1022 | Joint1=1057 | Joint2=1102 | Joint3=1103 | Joint4=1058 | GUID=2f656d3b-b084-4a2d-b0aa-87df924a2919 |
| Area=1023 | Joint1=1058 | Joint2=1103 | Joint3=1104 | Joint4=1059 | GUID=58462b35-d872-4f4e-a774-24edae9b104  |
| Area=1024 | Joint1=1059 | Joint2=1104 | Joint3=1105 | Joint4=1060 | GUID=534c67a0-51f1-4dc2-bfad-7865a09dca96 |
| Area=1025 | Joint1=1060 | Joint2=1105 | Joint3=1106 | Joint4=1061 | GUID=7c952f13-1312-434d-872c-e0a042893537 |
| Area=1026 | Joint1=1061 | Joint2=1106 | Joint3=1107 | Joint4=1062 | GUID=24a28e5f-0e13-43f3-b77c-d4368e1f9d6b |
| Area=1027 | Joint1=1062 | Joint2=1107 | Joint3=1108 | Joint4=1063 | GUID=7f3db59a-69ac-4430-906c-ccd4340fa04c |
| Area=1028 | Joint1=1063 | Joint2=1108 | Joint3=1109 | Joint4=1064 | GUID=9665da74-07a2-4cc6-9165-51f0377a525b |
| Area=1029 | Joint1=1064 | Joint2=1109 | Joint3=1110 | Joint4=1065 | GUID=fa122fd0-3047-4096-826a-01d59a938826 |
| Area=1030 | Joint1=1065 | Joint2=1110 | Joint3=1111 | Joint4=1066 | GUID=1f4fba07-6a20-4e52-aef7-4d8584fe4a9b |
| Area=1031 | Joint1=1066 | Joint2=1111 | Joint3=1112 | Joint4=1067 | GUID=8f45fb16-7435-49ba-b32c-e5cfb01c2a00 |
| Area=1032 | Joint1=1067 | Joint2=1112 | Joint3=1113 | Joint4=1068 | GUID=6625732b-ffed-4e58-8b84-3653d539bd7d |
| Area=1033 | Joint1=1068 | Joint2=1113 | Joint3=1114 | Joint4=1069 | GUID=bba91c2a-231c-4a31-a33b-bafbb6265ee4 |
| Area=1034 | Joint1=1069 | Joint2=1114 | Joint3=1115 | Joint4=1070 | GUID=3026b909-53a4-49e7-91f4-719d010e60b1 |
| Area=1035 | Joint1=1070 | Joint2=1115 | Joint3=1116 | Joint4=1071 | GUID=a34874c8-4436-44ec-9850-0dd55c8b4a13 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=1036 | Joint1=1071 | Joint2=1116 | Joint3=1117 | Joint4=1072 | GUID=f954f4a3-e2bc-4cd0-ad5d-58de03313181 |
| Area=1037 | Joint1=1072 | Joint2=1117 | Joint3=1118 | Joint4=1073 | GUID=9beddb15-afc6-4e9e-88de-0d75447bbc69 |
| Area=1038 | Joint1=1073 | Joint2=1118 | Joint3=1119 | Joint4=1074 | GUID=fa834efb-b4ed-493f-9716-18ebdcad4b7d |
| Area=1039 | Joint1=1074 | Joint2=1119 | Joint3=1120 | Joint4=1075 | GUID=5706bc52-599e-4d45-9f39-c64b1ff6a019 |
| Area=1040 | Joint1=1075 | Joint2=1120 | Joint3=1121 | Joint4=1076 | GUID=f858250b-b951-4bdc-97fa-88f02be42eca |
| Area=1041 | Joint1=1076 | Joint2=1121 | Joint3=1122 | Joint4=1077 | GUID=8fff2c2c-18cf-48d5-9ef8-36d8f5f3ef53 |
| Area=1042 | Joint1=1077 | Joint2=1122 | Joint3=1123 | Joint4=1078 | GUID=1a77d259-dfd1-43cf-9458-19e338f00bee |
| Area=1043 | Joint1=1078 | Joint2=1123 | Joint3=1124 | Joint4=1079 | GUID=497248a4-e68b-4140-87b8-51f528c5bfd4 |
| Area=1044 | Joint1=1079 | Joint2=1124 | Joint3=1125 | Joint4=1080 | GUID=85f09f3d-4d12-4869-a682-0decee3d3f4e |
| Area=1045 | Joint1=1080 | Joint2=1125 | Joint3=1126 | Joint4=1081 | GUID=c62260ce-8b35-4f57-93c7-943fc4acf45c |
| Area=1046 | Joint1=1081 | Joint2=1126 | Joint3=1127 | Joint4=1082 | GUID=bd1d4666-33f9-4034-b346-57f92e776ae5 |
| Area=1047 | Joint1=1082 | Joint2=1127 | Joint3=1128 | Joint4=1083 | GUID=d1af8fe9-02fb-46de-b890-c594b9cf94d4 |
| Area=1048 | Joint1=1083 | Joint2=1128 | Joint3=1129 | Joint4=1084 | GUID=87768b49-ed39-434e-baf6-76dc7892c4d4 |
| Area=1049 | Joint1=1084 | Joint2=1129 | Joint3=1130 | Joint4=1085 | GUID=cdf6b06b-6908-4eb7-9663-e9caa9984f2d |
| Area=1050 | Joint1=1085 | Joint2=1130 | Joint3=1131 | Joint4=1086 | GUID=f91560a5-7a72-4df8-9974-34da12b5fcd4 |
| Area=1051 | Joint1=1086 | Joint2=1131 | Joint3=1132 | Joint4=1087 | GUID=9a9133d2-dd7f-489f-9a80-0e7d7adae7ba |
| Area=1052 | Joint1=1087 | Joint2=1132 | Joint3=1133 | Joint4=1088 | GUID=69aceb63-6380-4749-9065-b80487388eda |
| Area=1053 | Joint1=1088 | Joint2=1133 | Joint3=1134 | Joint4=1089 | GUID=59242791-59e1-4a39-b940-555c02588b06 |
| Area=1054 | Joint1=1089 | Joint2=1134 | Joint3=1135 | Joint4=1090 | GUID=655aa054-9877-4214-ae5d-d610654eb43c |
| Area=1055 | Joint1=1090 | Joint2=1135 | Joint3=1136 | Joint4=1091 | GUID=b404fe18-e491-4790-b937-4c8b984c21a2 |
| Area=1056 | Joint1=1091 | Joint2=1136 | Joint3=1137 | Joint4=1092 | GUID=d42c61c4-61b8-403c-bebd-2fc8589d1d3e |
| Area=1057 | Joint1=1092 | Joint2=1137 | Joint3=1138 | Joint4=1093 | GUID=0fbd1a9c-3b32-4961-be9c-51ae033020fd |
| Area=1058 | Joint1=1094 | Joint2=1139 | Joint3=1140 | Joint4=1095 | GUID=4aac29b7-8df4-4471-a723-9c022755e4f  |
| Area=1059 | Joint1=1095 | Joint2=1140 | Joint3=1141 | Joint4=1096 | GUID=25207e5a-246d-4376-bcb2-92500ec0fe01 |
| Area=1060 | Joint1=1096 | Joint2=1141 | Joint3=1142 | Joint4=1097 | GUID=d5fb704e-f24c-4bc4-8491-2139916e50f7 |
| Area=1061 | Joint1=1097 | Joint2=1142 | Joint3=1143 | Joint4=1098 | GUID=65d0077b-ef1a-4543-adda-7c6c9f0d8003 |
| Area=1062 | Joint1=1098 | Joint2=1143 | Joint3=1144 | Joint4=1099 | GUID=42ea9724-b3df-46dc-877b-cebc8e017e85 |
| Area=1063 | Joint1=1099 | Joint2=1144 | Joint3=1145 | Joint4=1100 | GUID=dd008e59-c385-4170-8870-932b054ed441 |
| Area=1064 | Joint1=1100 | Joint2=1145 | Joint3=1146 | Joint4=1101 | GUID=9762f1e1-1556-4ba3-bc05-f0121317f066 |
| Area=1065 | Joint1=1101 | Joint2=1146 | Joint3=1147 | Joint4=1102 | GUID=07fa5b16-fc04-42d3-adc9-6f5aa2b410e6 |
| Area=1066 | Joint1=1102 | Joint2=1147 | Joint3=1148 | Joint4=1103 | GUID=886fc9f1-9bd9-4d5d-b27d-9dc2d3960c8b |
| Area=1067 | Joint1=1103 | Joint2=1148 | Joint3=1149 | Joint4=1104 | GUID=f2f89f68-8e0e-40ab-bc8d-2fd8848d002e |
| Area=1068 | Joint1=1104 | Joint2=1149 | Joint3=1150 | Joint4=1105 | GUID=16869a06-a7f0-4119-9511-f483635427be |
| Area=1069 | Joint1=1105 | Joint2=1150 | Joint3=1151 | Joint4=1106 | GUID=f72e182c-be70-4718-8966-060ba034c612 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=1070 | Joint1=1106 | Joint2=1151 | Joint3=1152 | Joint4=1107 | GUID=991112a5-0615-4259-bb93-1059182c30c0 |
| Area=1071 | Joint1=1107 | Joint2=1152 | Joint3=1153 | Joint4=1108 | GUID=9a1230f9-f8c8-4f61-bba3-7debb75c47c7 |
| Area=1072 | Joint1=1108 | Joint2=1153 | Joint3=1154 | Joint4=1109 | GUID=5469d5db-685e-48a4-a427-a644ca3955c7 |
| Area=1073 | Joint1=1109 | Joint2=1154 | Joint3=1155 | Joint4=1110 | GUID=4055cd2e-db94-4e2a-8729-edf9a91e998c |
| Area=1074 | Joint1=1110 | Joint2=1155 | Joint3=1156 | Joint4=1111 | GUID=b46ba131-74ea-49f9-ba4e-d66d8ecd7298 |
| Area=1075 | Joint1=1111 | Joint2=1156 | Joint3=1157 | Joint4=1112 | GUID=4d45b0da-6cfe-47c3-b5c5-a6c76f374f1e |
| Area=1076 | Joint1=1112 | Joint2=1157 | Joint3=1158 | Joint4=1113 | GUID=0686fa85-9d05-428e-bfe5-5f4a93d32984 |
| Area=1077 | Joint1=1113 | Joint2=1158 | Joint3=1159 | Joint4=1114 | GUID=8ac759f6-1070-4379-aa94-575290ca895b |
| Area=1078 | Joint1=1114 | Joint2=1159 | Joint3=1160 | Joint4=1115 | GUID=a1524e0d-6230-4fd9-a62d-04110e81a243 |
| Area=1079 | Joint1=1115 | Joint2=1160 | Joint3=1161 | Joint4=1116 | GUID=f53ca2c7-a523-4872-8db9-ccd16370136a |
| Area=1080 | Joint1=1116 | Joint2=1161 | Joint3=1162 | Joint4=1117 | GUID=71ec1d99-7606-4972-af2e-0a2ecada2f21 |
| Area=1081 | Joint1=1117 | Joint2=1162 | Joint3=1163 | Joint4=1118 | GUID=10f92b92-b4f9-4b91-a548-a30ab431dfae |
| Area=1082 | Joint1=1118 | Joint2=1163 | Joint3=1164 | Joint4=1119 | GUID=5a89d691-b120-4d4d-bf00-85a8f49419f9 |
| Area=1083 | Joint1=1119 | Joint2=1164 | Joint3=1165 | Joint4=1120 | GUID=69ade1c5-dbe9-4db9-9b1f-aab02a0dcad5 |
| Area=1084 | Joint1=1120 | Joint2=1165 | Joint3=1166 | Joint4=1121 | GUID=50ab2670-e0a0-4fb2-8fe0-049df2c6bec5 |
| Area=1085 | Joint1=1121 | Joint2=1166 | Joint3=1167 | Joint4=1122 | GUID=802137e7-fa7e-4adb-84fa-eceda6271d76 |
| Area=1086 | Joint1=1122 | Joint2=1167 | Joint3=1168 | Joint4=1123 | GUID=0359417e-d35b-4080-929e-da191107e82b |
| Area=1087 | Joint1=1123 | Joint2=1168 | Joint3=1169 | Joint4=1124 | GUID=f9bcd843-5aae-41c4-834c-ccf0dcd2271c |
| Area=1088 | Joint1=1124 | Joint2=1169 | Joint3=1170 | Joint4=1125 | GUID=5e84518a-ab1c-4f52-9e78-6de0f14e9cde |
| Area=1089 | Joint1=1125 | Joint2=1170 | Joint3=1171 | Joint4=1126 | GUID=dcb995aa-d69a-403d-869b-9e00a3b4c3a7 |
| Area=1090 | Joint1=1126 | Joint2=1171 | Joint3=1172 | Joint4=1127 | GUID=1ed583d4-7ccc-4f22-b09a-c6e684c55282 |
| Area=1091 | Joint1=1127 | Joint2=1172 | Joint3=1173 | Joint4=1128 | GUID=1bcdda3d-a974-411c-a5d8-98ada7ad793d |
| Area=1092 | Joint1=1128 | Joint2=1173 | Joint3=1174 | Joint4=1129 | GUID=68a8eb11-435d-41c4-b1f5-ee2d77fa0518 |
| Area=1093 | Joint1=1129 | Joint2=1174 | Joint3=1175 | Joint4=1130 | GUID=ac8eb987-6e1a-48ec-b264-fbc324fa13ae |
| Area=1094 | Joint1=1130 | Joint2=1175 | Joint3=1176 | Joint4=1131 | GUID=9e3a1a22-159c-4e5c-9591-e9519d4a7d5c |
| Area=1095 | Joint1=1131 | Joint2=1176 | Joint3=1177 | Joint4=1132 | GUID=4f0038c3-7b37-43ee-bd6d-f2671fa8b72a |
| Area=1096 | Joint1=1132 | Joint2=1177 | Joint3=1178 | Joint4=1133 | GUID=227d6af9-e16c-4cf9-90c3-f9e6b799fb5f |
| Area=1097 | Joint1=1133 | Joint2=1178 | Joint3=1179 | Joint4=1134 | GUID=c2855bc2-0f38-4f3d-8ef2-d2b555eeebab |
| Area=1098 | Joint1=1134 | Joint2=1179 | Joint3=1180 | Joint4=1135 | GUID=d4d21789-1d89-42e2-896e-67fb50dacc40 |
| Area=1099 | Joint1=1135 | Joint2=1180 | Joint3=1181 | Joint4=1136 | GUID=62ae4611-279d-42f8-aae4-544b317a2418 |
| Area=1100 | Joint1=1136 | Joint2=1181 | Joint3=1182 | Joint4=1137 | GUID=0c7c94a7-b43f-4c24-bb52-d12fa2ec9c0d |
| Area=1101 | Joint1=1137 | Joint2=1182 | Joint3=1183 | Joint4=1138 | GUID=d6d34125-94c6-4975-8624-f9c54248fbad |
| Area=1102 | Joint1=1139 | Joint2=1184 | Joint3=1185 | Joint4=1140 | GUID=0a6616a5-7cd7-4ccb-ad9b-2789bada2158 |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=1103 Joint1=1140 Joint2=1185 Joint3=1186 Joint4=1141 GUID=8db7c76f-0d29-4a1c-8579-f2bffb1989b1  
Area=1104 Joint1=1141 Joint2=1186 Joint3=1187 Joint4=1142 GUID=266829f1-7690-4df1-a276-72e156bcfd13  
Area=1105 Joint1=1142 Joint2=1187 Joint3=1188 Joint4=1143 GUID=a57230c4-a93d-470f-b119-99992a4c72f9  
Area=1106 Joint1=1143 Joint2=1188 Joint3=1189 Joint4=1144 GUID=4fba082d-e830-4f84-8d1d-5e49cd99c361  
Area=1107 Joint1=1144 Joint2=1189 Joint3=1190 Joint4=1145 GUID=347edf9e-eb0d-44f2-9646-e7cf0718064a  
Area=1108 Joint1=1145 Joint2=1190 Joint3=1191 Joint4=1146 GUID=45930523-4ce4-4f14-954f-aebad9589c74  
Area=1109 Joint1=1146 Joint2=1191 Joint3=1192 Joint4=1147 GUID=d77b67cd-f561-4a5b-861b-d2ccfe36753c  
Area=1110 Joint1=1147 Joint2=1192 Joint3=1193 Joint4=1148 GUID=8851d92b-4bce-484c-b0c9-d3c71f2e792b  
Area=1111 Joint1=1148 Joint2=1193 Joint3=1194 Joint4=1149 GUID=d8e61dc4-9c63-4678-a2ef-d228f66a86cd  
Area=1112 Joint1=1149 Joint2=1194 Joint3=1195 Joint4=1150 GUID=6b60c974-9f3f-4e9c-8228-e0ccda63bfad  
Area=1113 Joint1=1150 Joint2=1195 Joint3=1196 Joint4=1151 GUID=b09b3f6e-be21-418d-bf71-2b81c9302f66  
Area=1114 Joint1=1151 Joint2=1196 Joint3=1197 Joint4=1152 GUID=191fca49-6d27-4fec-bcfe-7488d53be1ae  
Area=1115 Joint1=1152 Joint2=1197 Joint3=1198 Joint4=1153 GUID=85f06301-21cc-4d73-ac3b-f778c9f43838  
Area=1116 Joint1=1153 Joint2=1198 Joint3=1199 Joint4=1154 GUID=e465a44f-cf73-44eb-9951-c11a7ad0043f  
Area=1117 Joint1=1154 Joint2=1199 Joint3=1200 Joint4=1155 GUID=220e0663-ba84-43ad-b168-74f5fb7b2b85  
Area=1118 Joint1=1155 Joint2=1200 Joint3=1201 Joint4=1156 GUID=0436c0c8-c5b1-4d2e-8d1f-6f8b85adfb4  
Area=1119 Joint1=1156 Joint2=1201 Joint3=1202 Joint4=1157 GUID=692aff89-8793-45e4-bc0a-f4d76bff9375  
Area=1120 Joint1=1157 Joint2=1202 Joint3=1203 Joint4=1158 GUID=45ebe0e1-4e41-4fcc-862f-499d3730e5a7  
Area=1121 Joint1=1158 Joint2=1203 Joint3=1204 Joint4=1159 GUID=e5701025-6b70-4e84-ad89-6dfd2f9dbf81  
Area=1122 Joint1=1159 Joint2=1204 Joint3=1205 Joint4=1160 GUID=91d1a406-779f-4680-b3ed-77cc0b6c0cb6  
Area=1123 Joint1=1160 Joint2=1205 Joint3=1206 Joint4=1161 GUID=f296a359-90b7-4876-b073-9e2301d68ff2  
Area=1124 Joint1=1161 Joint2=1206 Joint3=1207 Joint4=1162 GUID=3472a9fd-6f91-4390-9098-3d300be04889  
Area=1125 Joint1=1162 Joint2=1207 Joint3=1208 Joint4=1163 GUID=4bca23d6-85ba-43c7-aabd-ef915fe57c97  
Area=1126 Joint1=1163 Joint2=1208 Joint3=1209 Joint4=1164 GUID=9899507f-cde6-4145-91cd-a1ef7e68fda0  
Area=1127 Joint1=1164 Joint2=1209 Joint3=1210 Joint4=1165 GUID=cd839ac6-983e-495e-b50b-4dc028fa5bd4  
Area=1128 Joint1=1165 Joint2=1210 Joint3=1211 Joint4=1166 GUID=1bea5001-afea-48c0-b312-f50097bb1aef  
Area=1129 Joint1=1166 Joint2=1211 Joint3=1212 Joint4=1167 GUID=b38c29be-7509-4d65-910b-5ccca3a758bc  
Area=1130 Joint1=1167 Joint2=1212 Joint3=1213 Joint4=1168 GUID=12452d30-4f72-46f6-b205-24bffce9db37  
Area=1131 Joint1=1168 Joint2=1213 Joint3=1214 Joint4=1169 GUID=6759b639-34d3-46d4-90d7-434230915196  
Area=1132 Joint1=1169 Joint2=1214 Joint3=1215 Joint4=1170 GUID=79bf87fd-2928-46c5-a537-c8f5801ca562  
Area=1133 Joint1=1170 Joint2=1215 Joint3=1216 Joint4=1171 GUID=034605ff-c420-4c65-a912-54e55ae9d9c4  
Area=1134 Joint1=1171 Joint2=1216 Joint3=1217 Joint4=1172 GUID=a2513b55-1d3f-4a62-9b96-e71f156a05c4  
Area=1135 Joint1=1172 Joint2=1217 Joint3=1218 Joint4=1173 GUID=9d39dbb8-9dbf-4e1f-9f7a-7deefcea01d6  
Area=1136 Joint1=1173 Joint2=1218 Joint3=1219 Joint4=1174 GUID=ba405053-4267-4744-96ad-d382d255c121  
Area=1137 Joint1=1174 Joint2=1219 Joint3=1220 Joint4=1175 GUID=127f7fff-111e-4cd4-b86e-8c0a7da94a8a  
Area=1138 Joint1=1175 Joint2=1220 Joint3=1221 Joint4=1176 GUID=daa4102f-78b3-4fa6-9fd5-bd1d999859b2  
Area=1139 Joint1=1176 Joint2=1221 Joint3=1222 Joint4=1177 GUID=7611db16-2d81-4433-864e-1e4f364d099f  
Area=1140 Joint1=1177 Joint2=1222 Joint3=1223 Joint4=1178 GUID=53e674f0-9e9d-4480-9835-df02265f1905



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                            |
|-----------|-------------|-------------|-------------|-------------|--------------------------------------------|
| Area=1141 | Joint1=1178 | Joint2=1223 | Joint3=1224 | Joint4=1179 | GUID=078786c8-57e2-401e-8362-6171ad502cb3  |
| Area=1142 | Joint1=1179 | Joint2=1224 | Joint3=1225 | Joint4=1180 | GUID=27ada41c-d443-409c-ad74-5992def00c88  |
| Area=1143 | Joint1=1180 | Joint2=1225 | Joint3=1226 | Joint4=1181 | GUID=38c98bcf-0528-4aa8-bb3d-f979f06daa60  |
| Area=1144 | Joint1=1181 | Joint2=1226 | Joint3=1227 | Joint4=1182 | GUID=b48ca2b9-358d-46e0-bb7c-444e7d5fb4fb  |
| Area=1145 | Joint1=1182 | Joint2=1227 | Joint3=1228 | Joint4=1183 | GUID=666d274f-ccac-46d3-bb90-7d70a91e22d0  |
| Area=1146 | Joint1=1184 | Joint2=1229 | Joint3=1230 | Joint4=1185 | GUID=8f09806e-25bd-41de-bbbf-f6c73d1bcd59  |
| Area=1147 | Joint1=1185 | Joint2=1230 | Joint3=1231 | Joint4=1186 | GUID=daceb656-98a1-441c-bd57-d889cfbec393  |
| Area=1148 | Joint1=1186 | Joint2=1231 | Joint3=1232 | Joint4=1187 | GUID=cf238286-b127-4d9b-b976-0f82ecafcb881 |
| Area=1149 | Joint1=1187 | Joint2=1232 | Joint3=1233 | Joint4=1188 | GUID=145ed2bf-4242-4645-8cc4-4f3bb56ac27f  |
| Area=1150 | Joint1=1188 | Joint2=1233 | Joint3=1234 | Joint4=1189 | GUID=60ae77be-9fcc-4160-a717-bc8ee1acd543  |
| Area=1151 | Joint1=1189 | Joint2=1234 | Joint3=1235 | Joint4=1190 | GUID=29a0e487-4bac-49c2-9f2d-c4891a2ce386  |
| Area=1152 | Joint1=1190 | Joint2=1235 | Joint3=1236 | Joint4=1191 | GUID=5419ea67-8848-4e9c-873a-b74d76730709  |
| Area=1153 | Joint1=1191 | Joint2=1236 | Joint3=1237 | Joint4=1192 | GUID=cf35b8cd-bcdf-4a5d-9a0c-5b005c7bd729  |
| Area=1154 | Joint1=1192 | Joint2=1237 | Joint3=1238 | Joint4=1193 | GUID=845e7e56-f844-42c4-967a-317bd54ebb52  |
| Area=1155 | Joint1=1193 | Joint2=1238 | Joint3=1239 | Joint4=1194 | GUID=377ff0ce-15a6-4413-a38a-f07f9505ddb7  |
| Area=1156 | Joint1=1194 | Joint2=1239 | Joint3=1240 | Joint4=1195 | GUID=6e8704f0-cd8e-48bd-9b7f-82ec02b8a009  |
| Area=1157 | Joint1=1195 | Joint2=1240 | Joint3=1241 | Joint4=1196 | GUID=26724526-75da-415b-bbe0-088f8105b5e0  |
| Area=1158 | Joint1=1196 | Joint2=1241 | Joint3=1242 | Joint4=1197 | GUID=8d058ad7-487f-40c1-a763-bf6bf9ba48f2  |
| Area=1159 | Joint1=1197 | Joint2=1242 | Joint3=1243 | Joint4=1198 | GUID=d0df7b83-7616-418d-9a5a-738f68fb78f2  |
| Area=1160 | Joint1=1198 | Joint2=1243 | Joint3=1244 | Joint4=1199 | GUID=e6e06774-da92-40bf-9122-f5f2035a2aaa  |
| Area=1161 | Joint1=1199 | Joint2=1244 | Joint3=1245 | Joint4=1200 | GUID=8315d52b-ce5d-4cdc-838b-e7786b7e8afc  |
| Area=1162 | Joint1=1200 | Joint2=1245 | Joint3=1246 | Joint4=1201 | GUID=0f5dc463-c8ce-415f-b399-f2a09ceb8e9c  |
| Area=1163 | Joint1=1201 | Joint2=1246 | Joint3=1247 | Joint4=1202 | GUID=c3d434b0-5687-41ae-8b8c-981ca841125d  |
| Area=1164 | Joint1=1202 | Joint2=1247 | Joint3=1248 | Joint4=1203 | GUID=daf656b1-a8bb-4673-a6f1-7c088505c3d6  |
| Area=1165 | Joint1=1203 | Joint2=1248 | Joint3=1249 | Joint4=1204 | GUID=6e8b3f22-11bb-46f0-a129-a07f903ba67d  |
| Area=1166 | Joint1=1204 | Joint2=1249 | Joint3=1250 | Joint4=1205 | GUID=ddb2bbe6-7be8-4f55-a39f-170644df300e  |
| Area=1167 | Joint1=1205 | Joint2=1250 | Joint3=1251 | Joint4=1206 | GUID=71ce312c-21ac-4375-875c-f0d8466557f6  |
| Area=1168 | Joint1=1206 | Joint2=1251 | Joint3=1252 | Joint4=1207 | GUID=3d6f21fa-b1de-416e-9200-4972534ed240  |
| Area=1169 | Joint1=1207 | Joint2=1252 | Joint3=1253 | Joint4=1208 | GUID=dad75293-fce3-4587-bb2d-84b91d86d971  |
| Area=1170 | Joint1=1208 | Joint2=1253 | Joint3=1254 | Joint4=1209 | GUID=7bb90a0b-cc78-4038-963a-a8a3f2026665  |
| Area=1171 | Joint1=1209 | Joint2=1254 | Joint3=1255 | Joint4=1210 | GUID=b52ce825-3121-4a3b-905a-528ff5f79845  |
| Area=1172 | Joint1=1210 | Joint2=1255 | Joint3=1256 | Joint4=1211 | GUID=cc21490a-2315-4555-953a-c5661cfb0fd9  |
| Area=1173 | Joint1=1211 | Joint2=1256 | Joint3=1257 | Joint4=1212 | GUID=0397b05b-a465-43b5-a86d-c2b1bf2e4a44  |
| Area=1174 | Joint1=1212 | Joint2=1257 | Joint3=1258 | Joint4=1213 | GUID=1983aa18-8543-47ab-a536-3cae7b3554e1  |
| Area=1175 | Joint1=1213 | Joint2=1258 | Joint3=1259 | Joint4=1214 | GUID=80b10ffe-b5c9-42e8-94e3-5274276b9219  |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                            |
|---------------------------|-------------|-------------|-------------|-------------|--------------------------------------------|
| Area=1176<br>41eed2ac2f1  | Joint1=1214 | Joint2=1259 | Joint3=1260 | Joint4=1215 | GUID=d0f215b5-a873-4a2a-9e33-              |
| Area=1177<br>c99de158a336 | Joint1=1215 | Joint2=1260 | Joint3=1261 | Joint4=1216 | GUID=5421027f-1cfa-4c1d-9ab9-              |
| Area=1178                 | Joint1=1216 | Joint2=1261 | Joint3=1262 | Joint4=1217 | GUID=cd36c490-a02c-4c93-afd8-9420853ae3f3  |
| Area=1179                 | Joint1=1217 | Joint2=1262 | Joint3=1263 | Joint4=1218 | GUID=a67281eb-ef9b-4d57-b298-3a8aff8ea7cf  |
| Area=1180                 | Joint1=1218 | Joint2=1263 | Joint3=1264 | Joint4=1219 | GUID=5b7c73f0-f08e-443a-b1f7-490573142f78  |
| Area=1181<br>41b1d5ed3f94 | Joint1=1219 | Joint2=1264 | Joint3=1265 | Joint4=1220 | GUID=7c7b8e78-8ae5-426d-a398-              |
| Area=1182<br>1c646741d41f | Joint1=1220 | Joint2=1265 | Joint3=1266 | Joint4=1221 | GUID=b57c07a2-655d-48a8-8555-              |
| Area=1183                 | Joint1=1221 | Joint2=1266 | Joint3=1267 | Joint4=1222 | GUID=f8521076-5c06-430f-be3b-22f29391e475  |
| Area=1184                 | Joint1=1222 | Joint2=1267 | Joint3=1268 | Joint4=1223 | GUID=66b2027e-4ae1-43cf-bff3-b91eb7cea5af  |
| Area=1185<br>08aac15b252a | Joint1=1223 | Joint2=1268 | Joint3=1269 | Joint4=1224 | GUID=71ecaf0d-10d6-45be-b620-              |
| Area=1186<br>0350e0c2d773 | Joint1=1224 | Joint2=1269 | Joint3=1270 | Joint4=1225 | GUID=91da1716-316b-4a1a-a2a7-              |
| Area=1187<br>8c03a8d84fbc | Joint1=1225 | Joint2=1270 | Joint3=1271 | Joint4=1226 | GUID=7e8f7040-84b7-476d-b650-              |
| Area=1188                 | Joint1=1226 | Joint2=1271 | Joint3=1272 | Joint4=1227 | GUID=39600e7a-ad14-4194-9fbd-0876ff00cb3e  |
| Area=1189<br>7066bf57bac6 | Joint1=1227 | Joint2=1272 | Joint3=1273 | Joint4=1228 | GUID=3e61b719-06ea-4404-af46-              |
| Area=1190                 | Joint1=1229 | Joint2=1274 | Joint3=1275 | Joint4=1230 | GUID=a0e00e3f-8c4a-4218-8d77-34883ef65f50  |
| Area=1191                 | Joint1=1230 | Joint2=1275 | Joint3=1276 | Joint4=1231 | GUID=517ff44b-e2c3-48d4-a04e-758a809aa2fc  |
| Area=1192<br>877b8415eaea | Joint1=1231 | Joint2=1276 | Joint3=1277 | Joint4=1232 | GUID=fbc9f945-b89c-4822-a1b2-              |
| Area=1193<br>8838f55356cf | Joint1=1232 | Joint2=1277 | Joint3=1278 | Joint4=1233 | GUID=e0151584-c75b-4756-b707-              |
| Area=1194<br>f1cbb06d2c0b | Joint1=1233 | Joint2=1278 | Joint3=1279 | Joint4=1234 | GUID=543fe600-8ba1-430d-8199-              |
| Area=1195                 | Joint1=1234 | Joint2=1279 | Joint3=1280 | Joint4=1235 | GUID=c8bbbede3-ccfc-4892-81f4-539cd3c54b9c |
| Area=1196<br>5b093c5be473 | Joint1=1235 | Joint2=1280 | Joint3=1281 | Joint4=1236 | GUID=1965e5b2-865e-4fb0-a408-              |
| Area=1197                 | Joint1=1236 | Joint2=1281 | Joint3=1282 | Joint4=1237 | GUID=0da5d43f-1386-4361-b216-fbb6881df0d1  |
| Area=1198<br>89d6a1045785 | Joint1=1237 | Joint2=1282 | Joint3=1283 | Joint4=1238 | GUID=d25ebad4-357d-43a4-8d7f-              |
| Area=1199                 | Joint1=1238 | Joint2=1283 | Joint3=1284 | Joint4=1239 | GUID=ce9acc4a-026b-4b31-9aaf-a5b4e0c95caf  |
| Area=1200                 | Joint1=1239 | Joint2=1284 | Joint3=1285 | Joint4=1240 | GUID=8044e88c-75cf-4082-a2f9-2fff529c9460  |
| Area=1201                 | Joint1=1240 | Joint2=1285 | Joint3=1286 | Joint4=1241 | GUID=f1e257f1-23fb-4c51-9039-5780c0a951a0  |
| Area=1202<br>4e5b90dad59e | Joint1=1241 | Joint2=1286 | Joint3=1287 | Joint4=1242 | GUID=2a9334d0-2007-405a-b398-              |
| Area=1203<br>b02e0802cea9 | Joint1=1242 | Joint2=1287 | Joint3=1288 | Joint4=1243 | GUID=b062b236-7633-4f1e-8983-              |
| Area=1204<br>f71300d0c575 | Joint1=1243 | Joint2=1288 | Joint3=1289 | Joint4=1244 | GUID=9516a54b-5582-4140-872f-              |
| Area=1205<br>18bb2a65d44f | Joint1=1244 | Joint2=1289 | Joint3=1290 | Joint4=1245 | GUID=1eda01e0-47a4-4b4a-8594-              |
| Area=1206<br>d87d0264e946 | Joint1=1245 | Joint2=1290 | Joint3=1291 | Joint4=1246 | GUID=16d468b1-be72-41a0-bbbbc-             |
| Area=1207<br>b40c6af1cba2 | Joint1=1246 | Joint2=1291 | Joint3=1292 | Joint4=1247 | GUID=6ad7b242-26bc-446f-9873-              |
| Area=1208<br>2d361da91cd9 | Joint1=1247 | Joint2=1292 | Joint3=1293 | Joint4=1248 | GUID=ecc24250-e641-4a7f-a0db-              |
| Area=1209<br>9847a208a00a | Joint1=1248 | Joint2=1293 | Joint3=1294 | Joint4=1249 | GUID=f17ba5e7-0df2-470d-a5a5-              |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=1210 | Joint1=1249 | Joint2=1294 | Joint3=1295 | Joint4=1250 | GUID=d1f62771-4adf-4f0e-9520-106339da361b |
| Area=1211 | Joint1=1250 | Joint2=1295 | Joint3=1296 | Joint4=1251 | GUID=562e6504-5faf-4023-a902-3c24f1c3634e |
| Area=1212 | Joint1=1251 | Joint2=1296 | Joint3=1297 | Joint4=1252 | GUID=90ef5129-7838-45f6-a93f-657b0a13332a |
| Area=1213 | Joint1=1252 | Joint2=1297 | Joint3=1298 | Joint4=1253 | GUID=42ab6b3f-28a4-4a3f-a597-be3addb8c371 |
| Area=1214 | Joint1=1253 | Joint2=1298 | Joint3=1299 | Joint4=1254 | GUID=a3175a73-0cf2-4d4d-96d8-28d8dfca7720 |
| Area=1215 | Joint1=1254 | Joint2=1299 | Joint3=1300 | Joint4=1255 | GUID=1c7ac851-5606-4b43-9d19-9f3b008154d3 |
| Area=1216 | Joint1=1255 | Joint2=1300 | Joint3=1301 | Joint4=1256 | GUID=73af37ec-1692-49af-8be3-684b1493bbf2 |
| Area=1217 | Joint1=1256 | Joint2=1301 | Joint3=1302 | Joint4=1257 | GUID=38640937-9a71-4584-922a-11aa1fddf755 |
| Area=1218 | Joint1=1257 | Joint2=1302 | Joint3=1303 | Joint4=1258 | GUID=36e7304e-2999-4f03-85be-0b49e6f5ee55 |
| Area=1219 | Joint1=1258 | Joint2=1303 | Joint3=1304 | Joint4=1259 | GUID=77c55b62-d402-4bd2-881a-68dcbf140e56 |
| Area=1220 | Joint1=1259 | Joint2=1304 | Joint3=1305 | Joint4=1260 | GUID=f1bc760b-1953-4cba-9ef9-7d75065419e5 |
| Area=1221 | Joint1=1260 | Joint2=1305 | Joint3=1306 | Joint4=1261 | GUID=bc873d57-38ee-4728-b579-165d997d72a1 |
| Area=1222 | Joint1=1261 | Joint2=1306 | Joint3=1307 | Joint4=1262 | GUID=8e66bd5f-2c5f-41b0-9c15-a58e82179b9b |
| Area=1223 | Joint1=1262 | Joint2=1307 | Joint3=1308 | Joint4=1263 | GUID=bd60a355-71e0-4216-a062-1b936001d107 |
| Area=1224 | Joint1=1263 | Joint2=1308 | Joint3=1309 | Joint4=1264 | GUID=660070ab-330d-4e37-b67a-b29bef2490fb |
| Area=1225 | Joint1=1264 | Joint2=1309 | Joint3=1310 | Joint4=1265 | GUID=97d2f88c-9ffa-4821-b7b5-16d835044273 |
| Area=1226 | Joint1=1265 | Joint2=1310 | Joint3=1311 | Joint4=1266 | GUID=3ccbac72-d05b-4d55-9779-8d5a35550430 |
| Area=1227 | Joint1=1266 | Joint2=1311 | Joint3=1312 | Joint4=1267 | GUID=6b20b379-652f-40bf-add8-53bf5f397704 |
| Area=1228 | Joint1=1267 | Joint2=1312 | Joint3=1313 | Joint4=1268 | GUID=3288a4d9-cdef-49e6-832d-a8689cfc9d53 |
| Area=1229 | Joint1=1268 | Joint2=1313 | Joint3=1314 | Joint4=1269 | GUID=82e83c0e-9922-450b-b8b5-9d84b29b41b8 |
| Area=1230 | Joint1=1269 | Joint2=1314 | Joint3=1315 | Joint4=1270 | GUID=49ef923b-e8a4-459c-aacf-6fd15435bb5b |
| Area=1231 | Joint1=1270 | Joint2=1315 | Joint3=1316 | Joint4=1271 | GUID=e0cee433-d117-434b-a676-47e4d48b9dab |
| Area=1232 | Joint1=1271 | Joint2=1316 | Joint3=1317 | Joint4=1272 | GUID=e8f80fec-932b-495a-8e50-4c1a5b56a5b8 |
| Area=1233 | Joint1=1272 | Joint2=1317 | Joint3=1318 | Joint4=1273 | GUID=15126a48-ec8e-4f1d-88a1-a69af5ee7d79 |
| Area=1234 | Joint1=1274 | Joint2=1319 | Joint3=1320 | Joint4=1275 | GUID=61903817-faed-4b32-aaa6-ec90cc53483a |
| Area=1235 | Joint1=1275 | Joint2=1320 | Joint3=1321 | Joint4=1276 | GUID=db2f0631-6a97-4157-bbd2-c7a914d06d79 |
| Area=1236 | Joint1=1276 | Joint2=1321 | Joint3=1322 | Joint4=1277 | GUID=c690059e-85b9-45ad-b284-36d4372b03d3 |
| Area=1237 | Joint1=1277 | Joint2=1322 | Joint3=1323 | Joint4=1278 | GUID=ad327ed2-1d15-4733-a2cd-2b36d9058da5 |
| Area=1238 | Joint1=1278 | Joint2=1323 | Joint3=1324 | Joint4=1279 | GUID=3d9ed0dd-a167-46de-b1e2-374171d41821 |
| Area=1239 | Joint1=1279 | Joint2=1324 | Joint3=1325 | Joint4=1280 | GUID=d52d9828-c333-49fb-911f-74b66c5abf8c |
| Area=1240 | Joint1=1280 | Joint2=1325 | Joint3=1326 | Joint4=1281 | GUID=b355d431-b7c0-4921-8934-e1fd1fbcef6a |
| Area=1241 | Joint1=1281 | Joint2=1326 | Joint3=1327 | Joint4=1282 | GUID=97c0f6d3-9dd1-4194-a00c-4fc798d4491f |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=1242<br>2e56431311c9 | Joint1=1282 | Joint2=1327 | Joint3=1328 | Joint4=1283 | GUID=d7c4883e-a1aa-49a2-8b49-             |
| Area=1243<br>b97121c19d27 | Joint1=1283 | Joint2=1328 | Joint3=1329 | Joint4=1284 | GUID=7e2979e5-e06c-4e95-9d7c-             |
| Area=1244<br>092cb85f1316 | Joint1=1284 | Joint2=1329 | Joint3=1330 | Joint4=1285 | GUID=5c296d89-5749-4b55-adfb-             |
| Area=1245<br>7377abc9365a | Joint1=1285 | Joint2=1330 | Joint3=1331 | Joint4=1286 | GUID=0835c88f-9fab-4d1e-9454-             |
| Area=1246                 | Joint1=1286 | Joint2=1331 | Joint3=1332 | Joint4=1287 | GUID=48418f22-c1b9-42ff-ad4b-e1ca4bb3d2f6 |
| Area=1247<br>ea1b45c97427 | Joint1=1287 | Joint2=1332 | Joint3=1333 | Joint4=1288 | GUID=3af8b819-ac08-4576-8511-             |
| Area=1248<br>33d7f694a663 | Joint1=1288 | Joint2=1333 | Joint3=1334 | Joint4=1289 | GUID=5f04a818-a98a-4d64-be55-             |
| Area=1249<br>2a84b0c8d7e0 | Joint1=1289 | Joint2=1334 | Joint3=1335 | Joint4=1290 | GUID=23399b71-6c47-40c4-802b-             |
| Area=1250<br>b346ae9e67b1 | Joint1=1290 | Joint2=1335 | Joint3=1336 | Joint4=1291 | GUID=594123d0-5f83-4636-b4e2-             |
| Area=1251<br>0e32dc50d44b | Joint1=1291 | Joint2=1336 | Joint3=1337 | Joint4=1292 | GUID=b5f8e3b3-40a4-4eed-a1ba-             |
| Area=1252                 | Joint1=1292 | Joint2=1337 | Joint3=1338 | Joint4=1293 | GUID=7afe3389-55df-46ba-a72d-1f2549c5f0c0 |
| Area=1253                 | Joint1=1293 | Joint2=1338 | Joint3=1339 | Joint4=1294 | GUID=0b655692-cddf-48cc-952b-f480953bce04 |
| Area=1254<br>d9d2c96becba | Joint1=1294 | Joint2=1339 | Joint3=1340 | Joint4=1295 | GUID=8199a72b-65b4-4992-8acf-             |
| Area=1255                 | Joint1=1295 | Joint2=1340 | Joint3=1341 | Joint4=1296 | GUID=c88f6077-fa8f-4470-8024-cb676f73bf0d |
| Area=1256                 | Joint1=1296 | Joint2=1341 | Joint3=1342 | Joint4=1297 | GUID=c446bf57-7987-4d44-8f9d-c573afab127c |
| Area=1257                 | Joint1=1297 | Joint2=1342 | Joint3=1343 | Joint4=1298 | GUID=791c20b7-a9f3-4990-a2b2-f3a745052f6b |
| Area=1258                 | Joint1=1298 | Joint2=1343 | Joint3=1344 | Joint4=1299 | GUID=bc5e12f8-2ecd-4156-b532-1297f8e5ffb0 |
| Area=1259<br>90e4865b06e3 | Joint1=1299 | Joint2=1344 | Joint3=1345 | Joint4=1300 | GUID=474d7d34-dfdd-42d4-ac87-             |
| Area=1260<br>8c038a828821 | Joint1=1300 | Joint2=1345 | Joint3=1346 | Joint4=1301 | GUID=d54ca0b0-d756-4dc4-985d-             |
| Area=1261                 | Joint1=1301 | Joint2=1346 | Joint3=1347 | Joint4=1302 | GUID=d194ba01-28f7-46bb-9dde-104635ff4203 |
| Area=1262<br>a8c5707dddbf | Joint1=1302 | Joint2=1347 | Joint3=1348 | Joint4=1303 | GUID=58173deb-bb40-483f-9977-             |
| Area=1263                 | Joint1=1303 | Joint2=1348 | Joint3=1349 | Joint4=1304 | GUID=9afa1826-d82d-44a8-83eb-d2f05f517818 |
| Area=1264<br>a17016182c7a | Joint1=1304 | Joint2=1349 | Joint3=1350 | Joint4=1305 | GUID=0fe18aa0-0634-4bfd-8132-             |
| Area=1265<br>1bbaa98525ac | Joint1=1305 | Joint2=1350 | Joint3=1351 | Joint4=1306 | GUID=cd08d398-4110-4ae5-b6ef-             |
| Area=1266                 | Joint1=1306 | Joint2=1351 | Joint3=1352 | Joint4=1307 | GUID=8eb7fb98-3f30-457c-8a1a-ef3a397facfe |
| Area=1267                 | Joint1=1307 | Joint2=1352 | Joint3=1353 | Joint4=1308 | GUID=0f2dcfed-502f-4324-9abc-e053d94a6084 |
| Area=1268<br>4a7bc67ddad2 | Joint1=1308 | Joint2=1353 | Joint3=1354 | Joint4=1309 | GUID=6a1e07c3-29c1-4b44-b9bf-             |
| Area=1269<br>bf722e12941c | Joint1=1309 | Joint2=1354 | Joint3=1355 | Joint4=1310 | GUID=194bda8a-2ad8-4f0b-a765-             |
| Area=1270                 | Joint1=1310 | Joint2=1355 | Joint3=1356 | Joint4=1311 | GUID=9e62feeb-7d25-4452-ae5f-83535b1efd73 |
| Area=1271<br>04bc8fa8d16e | Joint1=1311 | Joint2=1356 | Joint3=1357 | Joint4=1312 | GUID=e7e17750-5e7b-40ad-a10d-             |
| Area=1272                 | Joint1=1312 | Joint2=1357 | Joint3=1358 | Joint4=1313 | GUID=49297cc3-c914-4189-80f0-fbf3547b954a |
| Area=1273                 | Joint1=1313 | Joint2=1358 | Joint3=1359 | Joint4=1314 | GUID=b65710dd-59f4-44f0-bcde-4c6b56382fdb |
| Area=1274<br>1eab7b48a4c0 | Joint1=1314 | Joint2=1359 | Joint3=1360 | Joint4=1315 | GUID=9d4d3acf-d199-40cc-985a-             |
| Area=1275<br>7c11fc93da   | Joint1=1315 | Joint2=1360 | Joint3=1361 | Joint4=1316 | GUID=3c9392a6-d60b-4874-8836-             |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=1276<br>bf75b2f6bd24 | Joint1=1316 | Joint2=1361 | Joint3=1362 | Joint4=1317 | GUID=410c7963-8a06-4e31-8008-             |
| Area=1277<br>5b226628de16 | Joint1=1317 | Joint2=1362 | Joint3=1363 | Joint4=1318 | GUID=ccab7607-878e-48cf-a8b9-             |
| Area=1278                 | Joint1=1319 | Joint2=1364 | Joint3=1365 | Joint4=1320 | GUID=9ec2c673-c450-42ff-86c4-5f72d9b068dd |
| Area=1279<br>44eaefdc5a99 | Joint1=1320 | Joint2=1365 | Joint3=1366 | Joint4=1321 | GUID=835bbbed1-9b98-4ec3-a44c-            |
| Area=1280<br>c12edf971410 | Joint1=1321 | Joint2=1366 | Joint3=1367 | Joint4=1322 | GUID=80c74c81-6a1a-4455-ae38-             |
| Area=1281<br>c931f77a7a50 | Joint1=1322 | Joint2=1367 | Joint3=1368 | Joint4=1323 | GUID=ecf235ad-ea9b-460a-99c0-             |
| Area=1282<br>e228447fdf24 | Joint1=1323 | Joint2=1368 | Joint3=1369 | Joint4=1324 | GUID=13251319-0a5e-459d-8a05-             |
| Area=1283<br>e4a6da4b9128 | Joint1=1324 | Joint2=1369 | Joint3=1370 | Joint4=1325 | GUID=daa2e784-a492-46fd-a4cc-             |
| Area=1284                 | Joint1=1325 | Joint2=1370 | Joint3=1371 | Joint4=1326 | GUID=9f077738-f5c4-4967-b13c-20b7fd518a9d |
| Area=1285                 | Joint1=1326 | Joint2=1371 | Joint3=1372 | Joint4=1327 | GUID=6a2466dd-b0d7-48aa-8a42-0fa1df53794f |
| Area=1286<br>a1029d2212da | Joint1=1327 | Joint2=1372 | Joint3=1373 | Joint4=1328 | GUID=eeaf7c6d-1834-426f-bc55-             |
| Area=1287                 | Joint1=1328 | Joint2=1373 | Joint3=1374 | Joint4=1329 | GUID=e6aa4ac7-037f-47e7-a3f5-11b5900bbaf7 |
| Area=1288<br>aa9c936210b0 | Joint1=1329 | Joint2=1374 | Joint3=1375 | Joint4=1330 | GUID=0f6647cd-8263-424e-8b6a-             |
| Area=1289<br>c92aac4068ee | Joint1=1330 | Joint2=1375 | Joint3=1376 | Joint4=1331 | GUID=3a5d8856-6386-4707-898b-             |
| Area=1290<br>c6be30178859 | Joint1=1331 | Joint2=1376 | Joint3=1377 | Joint4=1332 | GUID=1f4ab88d-d53d-46de-a0cb-             |
| Area=1291                 | Joint1=1332 | Joint2=1377 | Joint3=1378 | Joint4=1333 | GUID=ff04bf4f-4815-4f28-accf-48dc2c6c1c96 |
| Area=1292<br>dfa786916346 | Joint1=1333 | Joint2=1378 | Joint3=1379 | Joint4=1334 | GUID=50e595ad-ec13-477a-9abd-             |
| Area=1293<br>d305ce173073 | Joint1=1334 | Joint2=1379 | Joint3=1380 | Joint4=1335 | GUID=0cf08b41-d202-478f-9162-             |
| Area=1294<br>5de9df87a3e0 | Joint1=1335 | Joint2=1380 | Joint3=1381 | Joint4=1336 | GUID=6db058a1-419d-41c6-a533-             |
| Area=1295                 | Joint1=1336 | Joint2=1381 | Joint3=1382 | Joint4=1337 | GUID=51b5fd7c-15fe-48d0-ae41-08ef7e857f11 |
| Area=1296<br>c861fed6704e | Joint1=1337 | Joint2=1382 | Joint3=1383 | Joint4=1338 | GUID=73afbdc2-02e5-46ba-a734-             |
| Area=1297<br>25a9426c5b19 | Joint1=1338 | Joint2=1383 | Joint3=1384 | Joint4=1339 | GUID=46c10aa7-681b-4ee7-8572-             |
| Area=1298<br>1b36f06bb3a1 | Joint1=1339 | Joint2=1384 | Joint3=1385 | Joint4=1340 | GUID=51a04d0c-fa48-4711-88ae-             |
| Area=1299<br>c9bf55e634e2 | Joint1=1340 | Joint2=1385 | Joint3=1386 | Joint4=1341 | GUID=1afa81db-777c-4cbd-9693-             |
| Area=1300                 | Joint1=1341 | Joint2=1386 | Joint3=1387 | Joint4=1342 | GUID=6c8436e7-d8a5-4fcc-b020-fdd70c01276e |
| Area=1301<br>160572b6b533 | Joint1=1342 | Joint2=1387 | Joint3=1388 | Joint4=1343 | GUID=be832eaf-2510-4074-aac8-             |
| Area=1302<br>83f267c33980 | Joint1=1343 | Joint2=1388 | Joint3=1389 | Joint4=1344 | GUID=021107ce-d29d-474b-bf56-             |
| Area=1303<br>c8864a25295a | Joint1=1344 | Joint2=1389 | Joint3=1390 | Joint4=1345 | GUID=77c9c0d3-5a03-4701-9009-             |
| Area=1304<br>758f52db42e1 | Joint1=1345 | Joint2=1390 | Joint3=1391 | Joint4=1346 | GUID=ce1a01c8-c0e3-4d54-8b09-             |
| Area=1305<br>31df2a46bb65 | Joint1=1346 | Joint2=1391 | Joint3=1392 | Joint4=1347 | GUID=b54009a2-803e-4d2e-ba55-             |
| Area=1306                 | Joint1=1347 | Joint2=1392 | Joint3=1393 | Joint4=1348 | GUID=9f4bf36e-b04f-4434-9d1a-341db81974b8 |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=1307 | Joint1=1348 | Joint2=1393 | Joint3=1394 | Joint4=1349 | GUID=9ebe9e8a-27c5-414e-a0d6-860385895a7e |
| Area=1308 | Joint1=1349 | Joint2=1394 | Joint3=1395 | Joint4=1350 | GUID=dc4a2c8e-0981-42fd-a164-4058e80eb50f |
| Area=1309 | Joint1=1350 | Joint2=1395 | Joint3=1396 | Joint4=1351 | GUID=a0f2f351-d599-4f06-9a3e-26d86f16d991 |
| Area=1310 | Joint1=1351 | Joint2=1396 | Joint3=1397 | Joint4=1352 | GUID=488108c8-8805-43e8-bdc5-04eba42675c5 |
| Area=1311 | Joint1=1352 | Joint2=1397 | Joint3=1398 | Joint4=1353 | GUID=dd10d7aa-fed1-4a0c-8198-3de0e09fd5b6 |
| Area=1312 | Joint1=1353 | Joint2=1398 | Joint3=1399 | Joint4=1354 | GUID=c343410b-7246-4fe9-99fa-4c0017f4ea08 |
| Area=1313 | Joint1=1354 | Joint2=1399 | Joint3=1400 | Joint4=1355 | GUID=1ea52818-44d2-4472-b598-02474d58b205 |
| Area=1314 | Joint1=1355 | Joint2=1400 | Joint3=1401 | Joint4=1356 | GUID=42163d5f-8fe4-4abe-9f1a-5649e357b357 |
| Area=1315 | Joint1=1356 | Joint2=1401 | Joint3=1402 | Joint4=1357 | GUID=62ff2625-024c-413d-9a2b-590fe9977fee |
| Area=1316 | Joint1=1357 | Joint2=1402 | Joint3=1403 | Joint4=1358 | GUID=e815904a-4cd0-4061-8344-44ef06df8801 |
| Area=1317 | Joint1=1358 | Joint2=1403 | Joint3=1404 | Joint4=1359 | GUID=65321bd9-edbc-4a43-b458-771a4c50f6a9 |
| Area=1318 | Joint1=1359 | Joint2=1404 | Joint3=1405 | Joint4=1360 | GUID=bbd76b96-d857-4599-9829-3f16d367d2c0 |
| Area=1319 | Joint1=1360 | Joint2=1405 | Joint3=1406 | Joint4=1361 | GUID=592f065d-2f03-473f-a7b9-05bdd5622d41 |
| Area=1320 | Joint1=1361 | Joint2=1406 | Joint3=1407 | Joint4=1362 | GUID=021a73e6-e7a5-4215-9f7b-a6aa0a7d91af |
| Area=1321 | Joint1=1362 | Joint2=1407 | Joint3=1408 | Joint4=1363 | GUID=d9a39862-46eb-4cef-ae96-da7129368a6f |
| Area=1322 | Joint1=1364 | Joint2=1409 | Joint3=1410 | Joint4=1365 | GUID=cc158154-a017-4af9-a48e-8a629893d0d1 |
| Area=1323 | Joint1=1365 | Joint2=1410 | Joint3=1411 | Joint4=1366 | GUID=c8086c21-660e-411d-9536-b94cae375cff |
| Area=1324 | Joint1=1366 | Joint2=1411 | Joint3=1412 | Joint4=1367 | GUID=222f59fd-b024-4cb5-b4b5-d35b24cead23 |
| Area=1325 | Joint1=1367 | Joint2=1412 | Joint3=1413 | Joint4=1368 | GUID=59f2cdc8-b5cc-47d2-acfc-15ba0664320a |
| Area=1326 | Joint1=1368 | Joint2=1413 | Joint3=1414 | Joint4=1369 | GUID=4f4644bf-3ba8-4d3c-8033-85796ddea601 |
| Area=1327 | Joint1=1369 | Joint2=1414 | Joint3=1415 | Joint4=1370 | GUID=35ba5846-9a55-4f57-af71-448bf8c4cb9d |
| Area=1328 | Joint1=1370 | Joint2=1415 | Joint3=1416 | Joint4=1371 | GUID=2b0062dc-9c80-4835-9865-0907d6133f75 |
| Area=1329 | Joint1=1371 | Joint2=1416 | Joint3=1417 | Joint4=1372 | GUID=d34ff1ba-e043-40c6-a8d3-28f6b3ec3f75 |
| Area=1330 | Joint1=1372 | Joint2=1417 | Joint3=1418 | Joint4=1373 | GUID=5a0f785b-ba28-4ba1-8030-c98e63ef6aac |
| Area=1331 | Joint1=1373 | Joint2=1418 | Joint3=1419 | Joint4=1374 | GUID=8d9c0e0c-3c63-4e25-91e0-b682f3e0ae71 |
| Area=1332 | Joint1=1374 | Joint2=1419 | Joint3=1420 | Joint4=1375 | GUID=d51e0117-08be-4a50-ba2b-eaf78da923c0 |
| Area=1333 | Joint1=1375 | Joint2=1420 | Joint3=1421 | Joint4=1376 | GUID=8c135c95-fc2a-483b-83a0-118454dd97f0 |
| Area=1334 | Joint1=1376 | Joint2=1421 | Joint3=1422 | Joint4=1377 | GUID=6089356c-096e-47c2-9a5b-15612b12b4fc |
| Area=1335 | Joint1=1377 | Joint2=1422 | Joint3=1423 | Joint4=1378 | GUID=4d24f23d-6ed5-4878-93ce-14664f685f57 |
| Area=1336 | Joint1=1378 | Joint2=1423 | Joint3=1424 | Joint4=1379 | GUID=9ba5bee4-a327-449d-9d11-fa55b28ba471 |
| Area=1337 | Joint1=1379 | Joint2=1424 | Joint3=1425 | Joint4=1380 | GUID=37413d7c-a565-409b-8bdb-1bcc0af6d392 |
| Area=1338 | Joint1=1380 | Joint2=1425 | Joint3=1426 | Joint4=1381 | GUID=5feed7a5-90c3-4cea-9039-ae695af0358f |
| Area=1339 | Joint1=1381 | Joint2=1426 | Joint3=1427 | Joint4=1382 | GUID=d1f3aa2b-095b-4489-b5a1-f6e0a7348a66 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=1340 Joint1=1382 Joint2=1427 Joint3=1428 Joint4=1383 GUID=ba36f06b-e480-4950-8f36-6a2da7acb056

Area=1341 Joint1=1383 Joint2=1428 Joint3=1429 Joint4=1384 GUID=8b917cfb-ef0f-4f47-9c65-1016c3004ddf

Area=1342 Joint1=1384 Joint2=1429 Joint3=1430 Joint4=1385 GUID=d4529b38-efb-4298-b0a8-da6360d971bf

Area=1343 Joint1=1385 Joint2=1430 Joint3=1431 Joint4=1386 GUID=07968c6f-5552-4f2d-ba0a-94aabfa7e0e3

Area=1344 Joint1=1386 Joint2=1431 Joint3=1432 Joint4=1387 GUID=620475ad-ad28-4ab4-a518-8ad65894d3cc

Area=1345 Joint1=1387 Joint2=1432 Joint3=1433 Joint4=1388 GUID=3064c66e-11eb-4631-b491-1af151e4eeea

Area=1346 Joint1=1388 Joint2=1433 Joint3=1434 Joint4=1389 GUID=0f605dca-3f3b-48d1-b259-b5cf7d8c7802

Area=1347 Joint1=1389 Joint2=1434 Joint3=1435 Joint4=1390 GUID=dd8c0221-eac3-4489-9eec-40acd5d553cf

Area=1348 Joint1=1390 Joint2=1435 Joint3=1436 Joint4=1391 GUID=94974cfd-9e26-49be-9e46-69d07d7ab477

Area=1349 Joint1=1391 Joint2=1436 Joint3=1437 Joint4=1392 GUID=3a29b163-c595-479b-a424-238c916e2de9

Area=1350 Joint1=1392 Joint2=1437 Joint3=1438 Joint4=1393 GUID=53af6399-4572-4b5d-8f88-0f112a80e446

Area=1351 Joint1=1393 Joint2=1438 Joint3=1439 Joint4=1394 GUID=d8361981-15bb-4a9d-9153-3d6b1d79bdfd

Area=1352 Joint1=1394 Joint2=1439 Joint3=1440 Joint4=1395 GUID=212faae7-5223-489f-b7fb-204554e91568

Area=1353 Joint1=1395 Joint2=1440 Joint3=1441 Joint4=1396 GUID=9cdbc809-15e4-49c3-9413-6f7890906fc1

Area=1354 Joint1=1396 Joint2=1441 Joint3=1442 Joint4=1397 GUID=471f4744-d342-4c18-bc62-77b0bfc27f9

Area=1355 Joint1=1397 Joint2=1442 Joint3=1443 Joint4=1398 GUID=96313120-fa02-4848-abf3-1d1962785ff7

Area=1356 Joint1=1398 Joint2=1443 Joint3=1444 Joint4=1399 GUID=a7a25300-7fed-4ee5-99c3-1795c6f43024

Area=1357 Joint1=1399 Joint2=1444 Joint3=1445 Joint4=1400 GUID=4f91f2a4-acf6-49b5-ac58-3d6a3fefacf5

Area=1358 Joint1=1400 Joint2=1445 Joint3=1446 Joint4=1401 GUID=9a5c2dcf-cafb-4c90-b1fe-97765ad0b675

Area=1359 Joint1=1401 Joint2=1446 Joint3=1447 Joint4=1402 GUID=dec9ad4e-e1fc-4ad4-beff-5d408f82bbba

Area=1360 Joint1=1402 Joint2=1447 Joint3=1448 Joint4=1403 GUID=b4ef4282-cac6-43ef-acf0-18596db8a79e

Area=1361 Joint1=1403 Joint2=1448 Joint3=1449 Joint4=1404 GUID=1878f368-8ab4-469d-a968-b1f44c9ed4b4

Area=1362 Joint1=1404 Joint2=1449 Joint3=1450 Joint4=1405 GUID=3e2bf24c-62cf-4327-99e4-0ecf1a210c46

Area=1363 Joint1=1405 Joint2=1450 Joint3=1451 Joint4=1406 GUID=2174a3f1-d66e-4b56-bc3c-57066dfa24cf

Area=1364 Joint1=1406 Joint2=1451 Joint3=1452 Joint4=1407 GUID=e5728b63-ed62-4ad8-882b-bce1f52fa9bf

Area=1365 Joint1=1407 Joint2=1452 Joint3=1453 Joint4=1408 GUID=c5b184db-8079-450c-9722-0045cfb927b7

Area=1366 Joint1=1409 Joint2=1454 Joint3=1455 Joint4=1410 GUID=c626d313-fd8d-4ae5-8efb-72e687b21c51

Area=1367 Joint1=1410 Joint2=1455 Joint3=1456 Joint4=1411 GUID=c86253b1-81af-4fca-8482-727e3f2cf9b0

Area=1368 Joint1=1411 Joint2=1456 Joint3=1457 Joint4=1412 GUID=86381fbb-5061-4720-8551-73789efc9bc4

Area=1369 Joint1=1412 Joint2=1457 Joint3=1458 Joint4=1413 GUID=8f11f63c-4549-4b47-9b8a-dcfcc134800a

Area=1370 Joint1=1413 Joint2=1458 Joint3=1459 Joint4=1414 GUID=7a8e363f-2ed9-4576-87bd-fb7bca156450

Area=1371 Joint1=1414 Joint2=1459 Joint3=1460 Joint4=1415 GUID=e284b980-febc-40b4-87e4-cdc874c8f289

Area=1372 Joint1=1415 Joint2=1460 Joint3=1461 Joint4=1416 GUID=b0b385cb-2771-4949-a27e-a515ab9d0ba6

Area=1373 Joint1=1416 Joint2=1461 Joint3=1462 Joint4=1417 GUID=2fd82443-018d-4465-83ce-81025350e15d

Area=1374 Joint1=1417 Joint2=1462 Joint3=1463 Joint4=1418 GUID=b5636834-a176-4b07-8ca4-3c2a305af164

Area=1375 Joint1=1418 Joint2=1463 Joint3=1464 Joint4=1419 GUID=7c4c1496-9ff6-4064-ba66-6e0a381e9c14

Area=1376 Joint1=1419 Joint2=1464 Joint3=1465 Joint4=1420 GUID=d21de4d4-8af3-4fb8-a3f5-4d194033a262

Area=1377 Joint1=1420 Joint2=1465 Joint3=1466 Joint4=1421 GUID=c1f09a1a-e87a-4fba-8f14-e4e65e281166

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=1378<br>b03630e4f51e | Joint1=1421 | Joint2=1466 | Joint3=1467 | Joint4=1422 | GUID=04cb1318-52a5-432c-bdbd-             |
| Area=1379<br>1d55abdf3c3  | Joint1=1422 | Joint2=1467 | Joint3=1468 | Joint4=1423 | GUID=ecc7114d-a1f8-4144-86d7-             |
| Area=1380<br>9da528757582 | Joint1=1423 | Joint2=1468 | Joint3=1469 | Joint4=1424 | GUID=cb56ae54-1a6c-4ff5-a66c-             |
| Area=1381<br>be621f534e0c | Joint1=1424 | Joint2=1469 | Joint3=1470 | Joint4=1425 | GUID=4c49aa39-2fd3-4ce2-980e-             |
| Area=1382                 | Joint1=1425 | Joint2=1470 | Joint3=1471 | Joint4=1426 | GUID=f8a4e5bb-73bb-4d0f-ba9d-fad191b5a67e |
| Area=1383<br>2c469f0fa21b | Joint1=1426 | Joint2=1471 | Joint3=1472 | Joint4=1427 | GUID=c9b7e695-97c2-483d-a681-             |
| Area=1384                 | Joint1=1427 | Joint2=1472 | Joint3=1473 | Joint4=1428 | GUID=51b746aa-8420-4e65-a951-54f1a826f80f |
| Area=1385<br>4a507edbaef7 | Joint1=1428 | Joint2=1473 | Joint3=1474 | Joint4=1429 | GUID=3974d0b7-ae20-4799-b6cc-             |
| Area=1386<br>5ca841cb8731 | Joint1=1429 | Joint2=1474 | Joint3=1475 | Joint4=1430 | GUID=94d5fe14-e55c-4493-9b69-             |
| Area=1387<br>9254c11d1a49 | Joint1=1430 | Joint2=1475 | Joint3=1476 | Joint4=1431 | GUID=4647bbf9-3cc1-4238-97a8-             |
| Area=1388<br>e51058c3d46e | Joint1=1431 | Joint2=1476 | Joint3=1477 | Joint4=1432 | GUID=ddbc93ad-03e9-463c-83ab-             |
| Area=1389<br>629c4ede75c3 | Joint1=1432 | Joint2=1477 | Joint3=1478 | Joint4=1433 | GUID=300039af-a6d3-45a0-ae8c-             |
| Area=1390<br>f0ea4e202d86 | Joint1=1433 | Joint2=1478 | Joint3=1479 | Joint4=1434 | GUID=ddcccd64-36a3-49a1-8d62-             |
| Area=1391<br>02cb7e9944f6 | Joint1=1434 | Joint2=1479 | Joint3=1480 | Joint4=1435 | GUID=a8330367-5742-45b4-a194-             |
| Area=1392<br>0424863ba776 | Joint1=1435 | Joint2=1480 | Joint3=1481 | Joint4=1436 | GUID=1d2efc9f-aecd-4c3a-a534-             |
| Area=1393<br>3a740e4ee6a9 | Joint1=1436 | Joint2=1481 | Joint3=1482 | Joint4=1437 | GUID=cd84171b-4a97-4953-aff7-             |
| Area=1394<br>265db760a59d | Joint1=1437 | Joint2=1482 | Joint3=1483 | Joint4=1438 | GUID=e2534947-a143-4c9e-8a7e-             |
| Area=1395                 | Joint1=1438 | Joint2=1483 | Joint3=1484 | Joint4=1439 | GUID=80f1aa6d-531f-4cd0-9c37-4c404010f05e |
| Area=1396<br>daa75befeec1 | Joint1=1439 | Joint2=1484 | Joint3=1485 | Joint4=1440 | GUID=62e8e3b8-1713-4468-9df5-             |
| Area=1397<br>5ee8b13a93ac | Joint1=1440 | Joint2=1485 | Joint3=1486 | Joint4=1441 | GUID=047615ba-bc63-46d9-8fb6-             |
| Area=1398<br>4aba1292d93b | Joint1=1441 | Joint2=1486 | Joint3=1487 | Joint4=1442 | GUID=378ae5d5-a1e3-496e-af93-             |
| Area=1399<br>c80ea29bde06 | Joint1=1442 | Joint2=1487 | Joint3=1488 | Joint4=1443 | GUID=267dd11b-db2f-474b-a816-             |
| Area=1400<br>48632f4cbec6 | Joint1=1443 | Joint2=1488 | Joint3=1489 | Joint4=1444 | GUID=02a04c69-a757-4ec5-9eea-             |
| Area=1401<br>01632829da73 | Joint1=1444 | Joint2=1489 | Joint3=1490 | Joint4=1445 | GUID=f0f68722-b08a-4dbc-bcdc-             |
| Area=1402                 | Joint1=1445 | Joint2=1490 | Joint3=1491 | Joint4=1446 | GUID=f88c45ef-d379-413f-962f-ab0919364be2 |
| Area=1403<br>12a623922dd5 | Joint1=1446 | Joint2=1491 | Joint3=1492 | Joint4=1447 | GUID=bae221dc-e49a-4f35-89ae-             |
| Area=1404                 | Joint1=1447 | Joint2=1492 | Joint3=1493 | Joint4=1448 | GUID=5c89f20e-cced-4792-a868-69f27607d5f4 |
| Area=1405<br>5ba5ee5e112f | Joint1=1448 | Joint2=1493 | Joint3=1494 | Joint4=1449 | GUID=1098bc21-f5b5-49dd-921a-             |
| Area=1406                 | Joint1=1449 | Joint2=1494 | Joint3=1495 | Joint4=1450 | GUID=59c6e422-bdc2-421f-9f16-bef905ad7070 |
| Area=1407<br>012c507f1b8e | Joint1=1450 | Joint2=1495 | Joint3=1496 | Joint4=1451 | GUID=38428814-7034-4c74-bc3a-             |
| Area=1408                 | Joint1=1451 | Joint2=1496 | Joint3=1497 | Joint4=1452 | GUID=e7931ff0-9dae-40e1-b1bc-674ff18ae19f |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=1409<br>393b7a2db0d4 | Joint1=1452 | Joint2=1497 | Joint3=1498 | Joint4=1453 | GUID=000f8679-21ab-43a3-a865-             |
| Area=1410<br>a028e3af2902 | Joint1=1454 | Joint2=1499 | Joint3=1500 | Joint4=1455 | GUID=0d881dc2-9b87-4f56-8830-             |
| Area=1411<br>18f0e01dee99 | Joint1=1455 | Joint2=1500 | Joint3=1501 | Joint4=1456 | GUID=c5903faa-c0ed-4ea9-8e9e-             |
| Area=1412                 | Joint1=1456 | Joint2=1501 | Joint3=1502 | Joint4=1457 | GUID=c9df50fb-bcf6-4fb5-b128-5a7b5daba0b7 |
| Area=1413                 | Joint1=1457 | Joint2=1502 | Joint3=1503 | Joint4=1458 | GUID=da3cfbc5-b1fe-4131-b9ef-20e0520cefdb |
| Area=1414<br>b72112375bb4 | Joint1=1458 | Joint2=1503 | Joint3=1504 | Joint4=1459 | GUID=d6fdd1d0-c191-4980-b303-             |
| Area=1415                 | Joint1=1459 | Joint2=1504 | Joint3=1505 | Joint4=1460 | GUID=810b18a7-8ff3-4108-a04c-da7e3fffa1e2 |
| Area=1416                 | Joint1=1460 | Joint2=1505 | Joint3=1506 | Joint4=1461 | GUID=2204dc6f-f720-49f5-86d6-351d1ca224cd |
| Area=1417<br>3ac5102d5099 | Joint1=1461 | Joint2=1506 | Joint3=1507 | Joint4=1462 | GUID=317b7509-04ee-4b7a-ab4e-             |
| Area=1418                 | Joint1=1462 | Joint2=1507 | Joint3=1508 | Joint4=1463 | GUID=4c8bb27f-63af-45c2-8336-eda24dd83b8f |
| Area=1419<br>ea54ad11828b | Joint1=1463 | Joint2=1508 | Joint3=1509 | Joint4=1464 | GUID=ce27b237-5368-4b7a-b603-             |
| Area=1420<br>07e4ff81d0e2 | Joint1=1464 | Joint2=1509 | Joint3=1510 | Joint4=1465 | GUID=2aa8311a-8a69-4a36-a63d-             |
| Area=1421                 | Joint1=1465 | Joint2=1510 | Joint3=1511 | Joint4=1466 | GUID=47ab3318-6d2d-4009-81ee-36f752fe53f3 |
| Area=1422<br>2f7d1e35e9f9 | Joint1=1466 | Joint2=1511 | Joint3=1512 | Joint4=1467 | GUID=49155cad-d8e0-4288-8dea-             |
| Area=1423<br>70aaf8432045 | Joint1=1467 | Joint2=1512 | Joint3=1513 | Joint4=1468 | GUID=0728c242-56f7-4e7a-ae8-              |
| Area=1424<br>060c1a597314 | Joint1=1468 | Joint2=1513 | Joint3=1514 | Joint4=1469 | GUID=86a1c549-51b1-4136-9f78-             |
| Area=1425                 | Joint1=1469 | Joint2=1514 | Joint3=1515 | Joint4=1470 | GUID=b1d5df3b-65f5-45b8-948c-17f6e221854b |
| Area=1426<br>2a18f0a0ef1a | Joint1=1470 | Joint2=1515 | Joint3=1516 | Joint4=1471 | GUID=bc45c243-14b2-41e2-8510-             |
| Area=1427<br>977a12ecfb3e | Joint1=1471 | Joint2=1516 | Joint3=1517 | Joint4=1472 | GUID=b597b12c-e172-4548-933b-             |
| Area=1428                 | Joint1=1472 | Joint2=1517 | Joint3=1518 | Joint4=1473 | GUID=fe74e47a-5333-4dd3-bf85-fe40c93c6c4d |
| Area=1429                 | Joint1=1473 | Joint2=1518 | Joint3=1519 | Joint4=1474 | GUID=83a59c93-9e60-4fd1-bb2a-9f415a7ad9f4 |
| Area=1430<br>261a6a567444 | Joint1=1474 | Joint2=1519 | Joint3=1520 | Joint4=1475 | GUID=136a1e2e-eaf7-4e2b-b9a8-             |
| Area=1431<br>967b376a712c | Joint1=1475 | Joint2=1520 | Joint3=1521 | Joint4=1476 | GUID=31eb8bb3-cbbe-4b38-a1db-             |
| Area=1432<br>668f090e5727 | Joint1=1476 | Joint2=1521 | Joint3=1522 | Joint4=1477 | GUID=de6f2715-14a8-4c08-8e87-             |
| Area=1433<br>35233ea14bf0 | Joint1=1477 | Joint2=1522 | Joint3=1523 | Joint4=1478 | GUID=742bed68-0c0b-43fc-a05c-             |
| Area=1434                 | Joint1=1478 | Joint2=1523 | Joint3=1524 | Joint4=1479 | GUID=fdacefdc-57af-43c9-8e5d-698388ebf67a |
| Area=1435<br>da69a4dcd080 | Joint1=1479 | Joint2=1524 | Joint3=1525 | Joint4=1480 | GUID=3824476f-53e6-48bc-a743-             |
| Area=1436                 | Joint1=1480 | Joint2=1525 | Joint3=1526 | Joint4=1481 | GUID=4ccb2995-8581-4bce-94af-fcb1a43dd6b2 |
| Area=1437<br>896998a2c94c | Joint1=1481 | Joint2=1526 | Joint3=1527 | Joint4=1482 | GUID=b8c0c879-24f8-462e-8926-             |
| Area=1438                 | Joint1=1482 | Joint2=1527 | Joint3=1528 | Joint4=1483 | GUID=6f77e239-1117-4494-8fa2-54fd8c2bb05e |
| Area=1439<br>e933e6bc619e | Joint1=1483 | Joint2=1528 | Joint3=1529 | Joint4=1484 | GUID=5f4b4d01-4788-4756-9015-             |
| Area=1440                 | Joint1=1484 | Joint2=1529 | Joint3=1530 | Joint4=1485 | GUID=3a897bfe-6722-41ba-a745-e8a45794f36f |
| Area=1441<br>b9b515241105 | Joint1=1485 | Joint2=1530 | Joint3=1531 | Joint4=1486 | GUID=3b650bc9-b9a7-4ef0-84fe-             |
| Area=1442<br>2bedf8a31591 | Joint1=1486 | Joint2=1531 | Joint3=1532 | Joint4=1487 | GUID=12c12e50-3843-4a3a-9997-             |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=1443 | Joint1=1487 | Joint2=1532 | Joint3=1533 | Joint4=1488 | GUID=5e245531-5133-4954-9265-4cd9f19cb284 |
| Area=1444 | Joint1=1488 | Joint2=1533 | Joint3=1534 | Joint4=1489 | GUID=99400f79-f191-4bd9-bfb1-778834360525 |
| Area=1445 | Joint1=1489 | Joint2=1534 | Joint3=1535 | Joint4=1490 | GUID=95818aa0-db2a-4113-af1a-70357a63c79e |
| Area=1446 | Joint1=1490 | Joint2=1535 | Joint3=1536 | Joint4=1491 | GUID=8690c777-6f11-470f-a348-b3fc8b6cadcc |
| Area=1447 | Joint1=1491 | Joint2=1536 | Joint3=1537 | Joint4=1492 | GUID=57c18d16-c27b-4e1f-81a8-265e6972c4fa |
| Area=1448 | Joint1=1492 | Joint2=1537 | Joint3=1538 | Joint4=1493 | GUID=d3def176-f7b0-413f-93e0-ebc6e709d816 |
| Area=1449 | Joint1=1493 | Joint2=1538 | Joint3=1539 | Joint4=1494 | GUID=59d77ae3-2e97-4685-a0d0-9d233b86fea9 |
| Area=1450 | Joint1=1494 | Joint2=1539 | Joint3=1540 | Joint4=1495 | GUID=ce56dd75-9e8b-4f62-ab89-c2a6101d1643 |
| Area=1451 | Joint1=1495 | Joint2=1540 | Joint3=1541 | Joint4=1496 | GUID=d6c5e3f1-6926-4bbd-8084-b36a3e649680 |
| Area=1452 | Joint1=1496 | Joint2=1541 | Joint3=1542 | Joint4=1497 | GUID=4d42bea0-afbf-445e-b312-8bf883d9e719 |
| Area=1453 | Joint1=1497 | Joint2=1542 | Joint3=1543 | Joint4=1498 | GUID=024c45b1-cb00-4346-8d3a-8e4ae2f87985 |
| Area=1454 | Joint1=1499 | Joint2=1544 | Joint3=1545 | Joint4=1500 | GUID=5c56f036-00ce-454c-acd5-c46ae81db249 |
| Area=1455 | Joint1=1500 | Joint2=1545 | Joint3=1546 | Joint4=1501 | GUID=3a113fd1-a6db-4367-a2a6-a3c04b16d774 |
| Area=1456 | Joint1=1501 | Joint2=1546 | Joint3=1547 | Joint4=1502 | GUID=e5edc5cc-5412-40db-a50c-b47e2c4fd149 |
| Area=1457 | Joint1=1502 | Joint2=1547 | Joint3=1548 | Joint4=1503 | GUID=e0406c87-a965-4d87-9a71-195bf2e95d31 |
| Area=1458 | Joint1=1503 | Joint2=1548 | Joint3=1549 | Joint4=1504 | GUID=9ae4146d-df17-4b9f-b4c7-78cedac69374 |
| Area=1459 | Joint1=1504 | Joint2=1549 | Joint3=1550 | Joint4=1505 | GUID=d3210c81-c344-427f-88da-a1b3791f4587 |
| Area=1460 | Joint1=1505 | Joint2=1550 | Joint3=1551 | Joint4=1506 | GUID=90062d7f-df8a-43b1-97d7-aeda357ffa12 |
| Area=1461 | Joint1=1506 | Joint2=1551 | Joint3=1552 | Joint4=1507 | GUID=d6ab8a00-7d20-431b-af8f-29978d820d84 |
| Area=1462 | Joint1=1507 | Joint2=1552 | Joint3=1553 | Joint4=1508 | GUID=55f496d8-243f-4247-9bb2-ad046124b5d1 |
| Area=1463 | Joint1=1508 | Joint2=1553 | Joint3=1554 | Joint4=1509 | GUID=abfd9629-df09-41ce-8483-8bb9005b08bf |
| Area=1464 | Joint1=1509 | Joint2=1554 | Joint3=1555 | Joint4=1510 | GUID=98326031-d019-45bd-8adb-c502a3402ed0 |
| Area=1465 | Joint1=1510 | Joint2=1555 | Joint3=1556 | Joint4=1511 | GUID=47e03009-c214-41cc-b748-27e4a1aa2abd |
| Area=1466 | Joint1=1511 | Joint2=1556 | Joint3=1557 | Joint4=1512 | GUID=15430b71-449d-44ae-9039-71efd88cd23d |
| Area=1467 | Joint1=1512 | Joint2=1557 | Joint3=1558 | Joint4=1513 | GUID=2d8726fb-6f68-42e2-bb28-133e4ca61007 |
| Area=1468 | Joint1=1513 | Joint2=1558 | Joint3=1559 | Joint4=1514 | GUID=c5ac8a3-a52d-4c9c-bf20-b45b5550d6fc  |
| Area=1469 | Joint1=1514 | Joint2=1559 | Joint3=1560 | Joint4=1515 | GUID=1348f9ac-675e-4b45-92a7-c1f9474844d8 |
| Area=1470 | Joint1=1515 | Joint2=1560 | Joint3=1561 | Joint4=1516 | GUID=aba4e684-f9d4-4a3c-8c9d-7b6380bdacc0 |
| Area=1471 | Joint1=1516 | Joint2=1561 | Joint3=1562 | Joint4=1517 | GUID=0edcd50e-a76a-4359-8b3b-9254ac2e2a82 |
| Area=1472 | Joint1=1517 | Joint2=1562 | Joint3=1563 | Joint4=1518 | GUID=39aa642b-f942-4dd1-868c-bba621de6ed2 |
| Area=1473 | Joint1=1518 | Joint2=1563 | Joint3=1564 | Joint4=1519 | GUID=2d580315-02c1-49dd-b172-7fcd446b2b67 |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=1474<br>aa859f2c0bf4 | Joint1=1519 | Joint2=1564 | Joint3=1565 | Joint4=1520 | GUID=c979e25d-961a-4162-85c1-             |
| Area=1475<br>7550a84a43b1 | Joint1=1520 | Joint2=1565 | Joint3=1566 | Joint4=1521 | GUID=75ebb183-85d5-40ee-a243-             |
| Area=1476                 | Joint1=1521 | Joint2=1566 | Joint3=1567 | Joint4=1522 | GUID=780a5608-18ef-4fe2-8b5a-7c2f1cc8c221 |
| Area=1477                 | Joint1=1522 | Joint2=1567 | Joint3=1568 | Joint4=1523 | GUID=f15fa7e0-a0f6-45c0-a004-50c833e0fa04 |
| Area=1478<br>3203668e2dc0 | Joint1=1523 | Joint2=1568 | Joint3=1569 | Joint4=1524 | GUID=625888e0-f7c5-46de-84e6-             |
| Area=1479<br>2dedd04b288b | Joint1=1524 | Joint2=1569 | Joint3=1570 | Joint4=1525 | GUID=92aaa279-0a3c-4d42-88fa-             |
| Area=1480<br>92bc0007a424 | Joint1=1525 | Joint2=1570 | Joint3=1571 | Joint4=1526 | GUID=b7cb2eb1-dfc7-4527-90f8-             |
| Area=1481<br>ca61b59466bf | Joint1=1526 | Joint2=1571 | Joint3=1572 | Joint4=1527 | GUID=64c84688-cc56-416d-9127-             |
| Area=1482                 | Joint1=1527 | Joint2=1572 | Joint3=1573 | Joint4=1528 | GUID=395314e2-deb7-4376-800d-19fc9afb277f |
| Area=1483<br>1de9dd2f2d92 | Joint1=1528 | Joint2=1573 | Joint3=1574 | Joint4=1529 | GUID=54263de5-abaa-4f16-b746-             |
| Area=1484<br>a018b5208491 | Joint1=1529 | Joint2=1574 | Joint3=1575 | Joint4=1530 | GUID=1efe93d7-ea35-4a07-bd32-             |
| Area=1485<br>e604b264ee34 | Joint1=1530 | Joint2=1575 | Joint3=1576 | Joint4=1531 | GUID=3c53bdf6-85fd-4008-8c25-             |
| Area=1486<br>b5c0e122daa4 | Joint1=1531 | Joint2=1576 | Joint3=1577 | Joint4=1532 | GUID=5758ab81-fc46-4d3d-be18-             |
| Area=1487                 | Joint1=1532 | Joint2=1577 | Joint3=1578 | Joint4=1533 | GUID=8da032db-1918-47e2-8e70-8a7bf6b6f9ef |
| Area=1488                 | Joint1=1533 | Joint2=1578 | Joint3=1579 | Joint4=1534 | GUID=f1fb872c-2312-4cba-b9b3-a3c2a3cbdc3f |
| Area=1489                 | Joint1=1534 | Joint2=1579 | Joint3=1580 | Joint4=1535 | GUID=c5f9468f-9fd6-4380-9eb2-b6de94d67a4a |
| Area=1490<br>75260294554e | Joint1=1535 | Joint2=1580 | Joint3=1581 | Joint4=1536 | GUID=88e01ab2-f404-43ec-9a79-             |
| Area=1491<br>b89000c62d81 | Joint1=1536 | Joint2=1581 | Joint3=1582 | Joint4=1537 | GUID=013cca6c-8af8-4373-9c0e-             |
| Area=1492<br>098b238a791f | Joint1=1537 | Joint2=1582 | Joint3=1583 | Joint4=1538 | GUID=7a2667a6-051f-4042-a53c-             |
| Area=1493<br>020a24c3b320 | Joint1=1538 | Joint2=1583 | Joint3=1584 | Joint4=1539 | GUID=e472acb6-a24d-45fe-8a43-             |
| Area=1494<br>99cd1e39030a | Joint1=1539 | Joint2=1584 | Joint3=1585 | Joint4=1540 | GUID=4aabfd7a-dd10-41ae-af71-             |
| Area=1495<br>73a0d28e20a2 | Joint1=1540 | Joint2=1585 | Joint3=1586 | Joint4=1541 | GUID=156fe535-7b9f-4b36-b838-             |
| Area=1496                 | Joint1=1541 | Joint2=1586 | Joint3=1587 | Joint4=1542 | GUID=be061322-ce99-4a41-a483-2f75fae14f7c |
| Area=1497<br>6aaadabef7cf | Joint1=1542 | Joint2=1587 | Joint3=1588 | Joint4=1543 | GUID=be5812e3-48da-47e6-88bc-             |
| Area=1498<br>9aae58202334 | Joint1=1544 | Joint2=1589 | Joint3=1590 | Joint4=1545 | GUID=601e7fde-0ab5-4099-b2ee-             |
| Area=1499<br>c8aca74e961a | Joint1=1545 | Joint2=1590 | Joint3=1591 | Joint4=1546 | GUID=25965d80-cc2b-4ed7-ac9c-             |
| Area=1500<br>e3e8a609e535 | Joint1=1546 | Joint2=1591 | Joint3=1592 | Joint4=1547 | GUID=b502c75b-46f4-4974-b6df-             |
| Area=1501<br>206869f27f0b | Joint1=1547 | Joint2=1592 | Joint3=1593 | Joint4=1548 | GUID=b9789b47-c9c9-43bc-bd23-             |
| Area=1502<br>107c9c3ac369 | Joint1=1548 | Joint2=1593 | Joint3=1594 | Joint4=1549 | GUID=9ae6379e-3d98-4896-919d-             |
| Area=1503                 | Joint1=1549 | Joint2=1594 | Joint3=1595 | Joint4=1550 | GUID=45fd6b9a-4685-4f9d-840f-defe84b2d5bd |
| Area=1504<br>0026319c6676 | Joint1=1550 | Joint2=1595 | Joint3=1596 | Joint4=1551 | GUID=bb5032e2-73cf-405f-b102-             |
| Area=1505                 | Joint1=1551 | Joint2=1596 | Joint3=1597 | Joint4=1552 | GUID=eaf29077-1f7c-440b-8655-b04c371efa90 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=1506 | Joint1=1552 | Joint2=1597 | Joint3=1598 | Joint4=1553 | GUID=fcd33b8e-849f-49ac-ae33-bdfbfb4ff58b |
| Area=1507 | Joint1=1553 | Joint2=1598 | Joint3=1599 | Joint4=1554 | GUID=89651681-d033-470e-b6be-250f34ad41fa |
| Area=1508 | Joint1=1554 | Joint2=1599 | Joint3=1600 | Joint4=1555 | GUID=16c0f340-f305-4ae0-87bd-b5aaa5968d94 |
| Area=1509 | Joint1=1555 | Joint2=1600 | Joint3=1601 | Joint4=1556 | GUID=5fece036-2fca-4021-8199-81780e3fd93f |
| Area=1510 | Joint1=1556 | Joint2=1601 | Joint3=1602 | Joint4=1557 | GUID=80bde4f4-b605-4faf-b3e7-cd587ac6f61a |
| Area=1511 | Joint1=1557 | Joint2=1602 | Joint3=1603 | Joint4=1558 | GUID=b628648a-8c27-4a3b-96d4-eed0f3da2249 |
| Area=1512 | Joint1=1558 | Joint2=1603 | Joint3=1604 | Joint4=1559 | GUID=a2c13e18-aec1-4521-985d-436c58e0f15a |
| Area=1513 | Joint1=1559 | Joint2=1604 | Joint3=1605 | Joint4=1560 | GUID=e5d56e5e-ae0-4d0a-9f57-d04023fb5c27  |
| Area=1514 | Joint1=1560 | Joint2=1605 | Joint3=1606 | Joint4=1561 | GUID=94777510-f755-4e2c-8f38-2c4023b11cfb |
| Area=1515 | Joint1=1561 | Joint2=1606 | Joint3=1607 | Joint4=1562 | GUID=df980639-aa97-422a-baca-3e70d4f91bbf |
| Area=1516 | Joint1=1562 | Joint2=1607 | Joint3=1608 | Joint4=1563 | GUID=d96b844d-9533-4548-9552-0c6eac467d75 |
| Area=1517 | Joint1=1563 | Joint2=1608 | Joint3=1609 | Joint4=1564 | GUID=6fad0bb6-c46c-4712-aba0-b29d971cb96e |
| Area=1518 | Joint1=1564 | Joint2=1609 | Joint3=1610 | Joint4=1565 | GUID=5c10603a-9de6-4155-9201-2be9560a571b |
| Area=1519 | Joint1=1565 | Joint2=1610 | Joint3=1611 | Joint4=1566 | GUID=b4b05d23-38f7-44b8-be67-d0c315dfdb02 |
| Area=1520 | Joint1=1566 | Joint2=1611 | Joint3=1612 | Joint4=1567 | GUID=f67ceb92-bd6d-48ab-93d8-0f1c5e7fc37d |
| Area=1521 | Joint1=1567 | Joint2=1612 | Joint3=1613 | Joint4=1568 | GUID=2ed90c2c-0756-49d1-8d5a-e9bf283381be |
| Area=1522 | Joint1=1568 | Joint2=1613 | Joint3=1614 | Joint4=1569 | GUID=542d3fad-78fa-4208-96e6-674c5b11efca |
| Area=1523 | Joint1=1569 | Joint2=1614 | Joint3=1615 | Joint4=1570 | GUID=6298d608-cc3c-4c4e-a7d2-0996b2e62aa8 |
| Area=1524 | Joint1=1570 | Joint2=1615 | Joint3=1616 | Joint4=1571 | GUID=71569b51-b1d4-40c4-9218-b0405cb53d1a |
| Area=1525 | Joint1=1571 | Joint2=1616 | Joint3=1617 | Joint4=1572 | GUID=55690bc0-135e-4dca-ba7f-61e6dc7df75e |
| Area=1526 | Joint1=1572 | Joint2=1617 | Joint3=1618 | Joint4=1573 | GUID=ce91bd09-7c1c-4612-996e-b568fc0c7be9 |
| Area=1527 | Joint1=1573 | Joint2=1618 | Joint3=1619 | Joint4=1574 | GUID=3db6faa8-7bee-4408-ae5a-6f3a8696f281 |
| Area=1528 | Joint1=1574 | Joint2=1619 | Joint3=1620 | Joint4=1575 | GUID=74cc99d8-35c9-49e2-ba39-64b5eca86451 |
| Area=1529 | Joint1=1575 | Joint2=1620 | Joint3=1621 | Joint4=1576 | GUID=bce96bd4-a286-433c-8a57-7fe3c75ea238 |
| Area=1530 | Joint1=1576 | Joint2=1621 | Joint3=1622 | Joint4=1577 | GUID=4d7084e1-ac91-4171-b2ec-e29e79e51f7b |
| Area=1531 | Joint1=1577 | Joint2=1622 | Joint3=1623 | Joint4=1578 | GUID=5b0caeb8-d369-494a-b6ed-477086069cf3 |
| Area=1532 | Joint1=1578 | Joint2=1623 | Joint3=1624 | Joint4=1579 | GUID=41966663-471d-4f0b-8a5a-c2ae256f14da |
| Area=1533 | Joint1=1579 | Joint2=1624 | Joint3=1625 | Joint4=1580 | GUID=4a04ee52-8a5f-45a3-ae01-03f7b2c3f9c3 |
| Area=1534 | Joint1=1580 | Joint2=1625 | Joint3=1626 | Joint4=1581 | GUID=2d639819-79fb-43e5-8943-a5d5dfa25d0  |
| Area=1535 | Joint1=1581 | Joint2=1626 | Joint3=1627 | Joint4=1582 | GUID=9c5fb6c2-447d-47d7-a47a-2799c014a5e1 |
| Area=1536 | Joint1=1582 | Joint2=1627 | Joint3=1628 | Joint4=1583 | GUID=6d6f8592-5dcb-4f06-b639-583caf777dd8 |
| Area=1537 | Joint1=1583 | Joint2=1628 | Joint3=1629 | Joint4=1584 | GUID=59c49273-cc7a-418f-a220-7edc89c38f94 |
| Area=1538 | Joint1=1584 | Joint2=1629 | Joint3=1630 | Joint4=1585 | GUID=27cb4ca9-483d-46af-8e2f-a0b9e9f4b008 |
| Area=1539 | Joint1=1585 | Joint2=1630 | Joint3=1631 | Joint4=1586 | GUID=579f0692-37f0-4631-b8ef-fe48f1ba8d4c |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                            |             |             |             |             |                                           |
|----------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=1540<br>f7c62b63069e  | Joint1=1586 | Joint2=1631 | Joint3=1632 | Joint4=1587 | GUID=c10728a0-219f-4ea4-8488-             |
| Area=1541                  | Joint1=1587 | Joint2=1632 | Joint3=1633 | Joint4=1588 | GUID=a6dd14aa-6237-4c91-8dfc-82c0b08d0cf6 |
| Area=1542<br>7bcbcb2a210   | Joint1=1589 | Joint2=1634 | Joint3=1635 | Joint4=1590 | GUID=954b49a7-da44-4dc6-829f-             |
| Area=1543<br>6d1b6383f7bb  | Joint1=1590 | Joint2=1635 | Joint3=1636 | Joint4=1591 | GUID=18661140-808a-4597-b95e-             |
| Area=1544<br>dd4bb7be99d4  | Joint1=1591 | Joint2=1636 | Joint3=1637 | Joint4=1592 | GUID=09c79cab-699b-4189-93a5-             |
| Area=1545<br>70226006c660  | Joint1=1592 | Joint2=1637 | Joint3=1638 | Joint4=1593 | GUID=65a77195-370e-450c-8d7f-             |
| Area=1546<br>c784ae98297e  | Joint1=1593 | Joint2=1638 | Joint3=1639 | Joint4=1594 | GUID=083f7062-2726-4f26-a525-             |
| Area=1547<br>ab30129d2f3b  | Joint1=1594 | Joint2=1639 | Joint3=1640 | Joint4=1595 | GUID=62ea1f78-ac23-4a2c-aec7-             |
| Area=1548<br>0a7d727080ec  | Joint1=1595 | Joint2=1640 | Joint3=1641 | Joint4=1596 | GUID=c24ec1a1-2e5b-488b-8cb1-             |
| Area=1549<br>a4814a36e3b6  | Joint1=1596 | Joint2=1641 | Joint3=1642 | Joint4=1597 | GUID=5432d312-9f45-4f2b-8ec3-             |
| Area=1550<br>a4356306676f  | Joint1=1597 | Joint2=1642 | Joint3=1643 | Joint4=1598 | GUID=30c3ce33-4637-4140-b38f-             |
| Area=1551<br>55ca76bc8756  | Joint1=1598 | Joint2=1643 | Joint3=1644 | Joint4=1599 | GUID=d5d9617c-b994-4095-9767-             |
| Area=1552<br>0626cc713918  | Joint1=1599 | Joint2=1644 | Joint3=1645 | Joint4=1600 | GUID=e7a4290a-f3e3-4729-bf51-             |
| Area=1553<br>74a5dd834f63  | Joint1=1600 | Joint2=1645 | Joint3=1646 | Joint4=1601 | GUID=87d29b28-7556-48de-bb8f-             |
| Area=1554                  | Joint1=1601 | Joint2=1646 | Joint3=1647 | Joint4=1602 | GUID=7de6d41f-2e69-48fe-925a-ebf60d549751 |
| Area=1555<br>2278f4d70944  | Joint1=1602 | Joint2=1647 | Joint3=1648 | Joint4=1603 | GUID=66847a4b-58c1-4618-a3e1-             |
| Area=1556<br>499e16f5da87  | Joint1=1603 | Joint2=1648 | Joint3=1649 | Joint4=1604 | GUID=51751ba1-49d0-46cd-a6bc-             |
| Area=1557<br>e1beb493d92a  | Joint1=1604 | Joint2=1649 | Joint3=1650 | Joint4=1605 | GUID=8b59c85f-ddae-4557-9e28-             |
| Area=1558                  | Joint1=1605 | Joint2=1650 | Joint3=1651 | Joint4=1606 | GUID=e8cd6c76-59cb-403e-b0df-817f0783c74e |
| Area=1559<br>de7539b5774d  | Joint1=1606 | Joint2=1651 | Joint3=1652 | Joint4=1607 | GUID=e4acbb08-b246-49f0-b720-             |
| Area=1560<br>3abbbfae807a1 | Joint1=1607 | Joint2=1652 | Joint3=1653 | Joint4=1608 | GUID=ae777864-fa01-41cb-9443-             |
| Area=1561                  | Joint1=1608 | Joint2=1653 | Joint3=1654 | Joint4=1609 | GUID=f05fe952-dd03-4f46-aca9-43eeb9a2a86b |
| Area=1562                  | Joint1=1609 | Joint2=1654 | Joint3=1655 | Joint4=1610 | GUID=cb484eba-f367-4f1e-8d8c-74542e21166f |
| Area=1563<br>bc3b00f55537  | Joint1=1610 | Joint2=1655 | Joint3=1656 | Joint4=1611 | GUID=c5d0f4b6-456e-42c3-8048-             |
| Area=1564                  | Joint1=1611 | Joint2=1656 | Joint3=1657 | Joint4=1612 | GUID=f1be5f63-487a-4d7c-b4f4-fdaec1b22a5b |
| Area=1565                  | Joint1=1612 | Joint2=1657 | Joint3=1658 | Joint4=1613 | GUID=f6545340-fdf8-44e8-8091-5cc1c1286714 |
| Area=1566<br>eaa141488e12  | Joint1=1613 | Joint2=1658 | Joint3=1659 | Joint4=1614 | GUID=bdd0810e-66d0-4ed2-81ad-             |
| Area=1567<br>3d4080e98093  | Joint1=1614 | Joint2=1659 | Joint3=1660 | Joint4=1615 | GUID=961352f0-db9a-4802-8138-             |
| Area=1568<br>6ac4c34fb50b  | Joint1=1615 | Joint2=1660 | Joint3=1661 | Joint4=1616 | GUID=2b09c124-0f9e-45bd-8263-             |
| Area=1569<br>3d0db1589c28  | Joint1=1616 | Joint2=1661 | Joint3=1662 | Joint4=1617 | GUID=0655d339-560f-410b-9cdb-             |
| Area=1570                  | Joint1=1617 | Joint2=1662 | Joint3=1663 | Joint4=1618 | GUID=28f1a888-a70b-4d12-8a2e-f27e4bf5bb6c |
| Area=1571                  | Joint1=1618 | Joint2=1663 | Joint3=1664 | Joint4=1619 | GUID=d89ddfb7-340f-4d72-86d6-311735cf83ac |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                            |
|-----------|-------------|-------------|-------------|-------------|--------------------------------------------|
| Area=1572 | Joint1=1619 | Joint2=1664 | Joint3=1665 | Joint4=1620 | GUID=4897ea2f-892a-4351-9dfa-26e3de7b0d55  |
| Area=1573 | Joint1=1620 | Joint2=1665 | Joint3=1666 | Joint4=1621 | GUID=d256f911-84d3-460f-92f4-f0efdad6a114  |
| Area=1574 | Joint1=1621 | Joint2=1666 | Joint3=1667 | Joint4=1622 | GUID=07a0f7a8-bd56-4601-b8ff-5623f0820239  |
| Area=1575 | Joint1=1622 | Joint2=1667 | Joint3=1668 | Joint4=1623 | GUID=e05462eb-b727-4c49-9680-a20107bc4023  |
| Area=1576 | Joint1=1623 | Joint2=1668 | Joint3=1669 | Joint4=1624 | GUID=e614a03c-88d3-4fe2-9ebd-7b54ab2e074b  |
| Area=1577 | Joint1=1624 | Joint2=1669 | Joint3=1670 | Joint4=1625 | GUID=6dab4fbe-a679-436e-a7e3-a3f045195905  |
| Area=1578 | Joint1=1625 | Joint2=1670 | Joint3=1671 | Joint4=1626 | GUID=b77a392b-3f6f-4b16-bfab-706293555935  |
| Area=1579 | Joint1=1626 | Joint2=1671 | Joint3=1672 | Joint4=1627 | GUID=d294860d-6022-4726-99fb-56843948c1d7  |
| Area=1580 | Joint1=1627 | Joint2=1672 | Joint3=1673 | Joint4=1628 | GUID=baa73869-a16f-4fd8-9d77-312e2883c6ad  |
| Area=1581 | Joint1=1628 | Joint2=1673 | Joint3=1674 | Joint4=1629 | GUID=b606a4ea-84c4-4c5d-ab7d-e13abe7248c4  |
| Area=1582 | Joint1=1629 | Joint2=1674 | Joint3=1675 | Joint4=1630 | GUID=c2df9ad1-914a-43f3-8f0c-f04b70e3f982  |
| Area=1583 | Joint1=1630 | Joint2=1675 | Joint3=1676 | Joint4=1631 | GUID=6da90c33-edd4-4a65-9501-8ee24840b148  |
| Area=1584 | Joint1=1631 | Joint2=1676 | Joint3=1677 | Joint4=1632 | GUID=1675a4cc-8b6f-4207-adf9-9a88df24e835  |
| Area=1585 | Joint1=1632 | Joint2=1677 | Joint3=1678 | Joint4=1633 | GUID=cb605172-203a-4779-97e5-a11be424af24  |
| Area=1586 | Joint1=1634 | Joint2=1679 | Joint3=1680 | Joint4=1635 | GUID=967401ab-e863-4705-a9cb-1f249ac933aa  |
| Area=1587 | Joint1=1635 | Joint2=1680 | Joint3=1681 | Joint4=1636 | GUID=52fc2396-4570-41ca-a94e-3602865a7fa2  |
| Area=1588 | Joint1=1636 | Joint2=1681 | Joint3=1682 | Joint4=1637 | GUID=63532a22-93e4-466b-b4f0-180fc098f733  |
| Area=1589 | Joint1=1637 | Joint2=1682 | Joint3=1683 | Joint4=1638 | GUID=6a487e6f-74e9-42e6-964f-2edb020feceb  |
| Area=1590 | Joint1=1638 | Joint2=1683 | Joint3=1684 | Joint4=1639 | GUID=4aa961a8-f492-47c0-8943-90978dc1ad16  |
| Area=1591 | Joint1=1639 | Joint2=1684 | Joint3=1685 | Joint4=1640 | GUID=4098a32e-6819-4ac8-8495-7c0514dc527d  |
| Area=1592 | Joint1=1640 | Joint2=1685 | Joint3=1686 | Joint4=1641 | GUID=1bfb0fc-5af4-4a1a-b6e5-755f670b99f4   |
| Area=1593 | Joint1=1641 | Joint2=1686 | Joint3=1687 | Joint4=1642 | GUID=a613146e-206a-4471-997c-11ef1f1cc694  |
| Area=1594 | Joint1=1642 | Joint2=1687 | Joint3=1688 | Joint4=1643 | GUID=51ace4b4-7233-4f11-a630-a1ba0be4aeac  |
| Area=1595 | Joint1=1643 | Joint2=1688 | Joint3=1689 | Joint4=1644 | GUID=f021d1d7-de18-4d59-93f0-e3bfbfbf11d2c |
| Area=1596 | Joint1=1644 | Joint2=1689 | Joint3=1690 | Joint4=1645 | GUID=1b36b5a0-11bb-409d-bf98-2bf02127c040  |
| Area=1597 | Joint1=1645 | Joint2=1690 | Joint3=1691 | Joint4=1646 | GUID=a1291b4d-9414-45fd-bdec-376aeaf9a982  |
| Area=1598 | Joint1=1646 | Joint2=1691 | Joint3=1692 | Joint4=1647 | GUID=43658b90-d534-4731-817e-839ac4e333cf  |
| Area=1599 | Joint1=1647 | Joint2=1692 | Joint3=1693 | Joint4=1648 | GUID=d14cd006-0855-4b9d-bf17-3e7ecdc4bb29  |
| Area=1600 | Joint1=1648 | Joint2=1693 | Joint3=1694 | Joint4=1649 | GUID=0c4ab31f-b4fe-44a7-8b54-3346fd508826  |
| Area=1601 | Joint1=1649 | Joint2=1694 | Joint3=1695 | Joint4=1650 | GUID=7ccd3733-cfb9-4e16-91db-a5fcebbaac2b  |
| Area=1602 | Joint1=1650 | Joint2=1695 | Joint3=1696 | Joint4=1651 | GUID=7b5b60af-717b-41f7-88a4-1a18ed793b8b  |
| Area=1603 | Joint1=1651 | Joint2=1696 | Joint3=1697 | Joint4=1652 | GUID=efc7071d-c718-44d9-bfe3-667a9a501609  |
| Area=1604 | Joint1=1652 | Joint2=1697 | Joint3=1698 | Joint4=1653 | GUID=5f223164-be94-4c2a-82b5-db945e63e710  |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=1605 | Joint1=1653 | Joint2=1698 | Joint3=1699 | Joint4=1654 | GUID=a12759c3-f3e3-40d8-8474-76ed5d944941 |
| Area=1606 | Joint1=1654 | Joint2=1699 | Joint3=1700 | Joint4=1655 | GUID=dc4d77f9-6119-4081-bcd8-06f553725338 |
| Area=1607 | Joint1=1655 | Joint2=1700 | Joint3=1701 | Joint4=1656 | GUID=dc3c4c8e-04b8-4a5b-9ab6-a8dd14b11dba |
| Area=1608 | Joint1=1656 | Joint2=1701 | Joint3=1702 | Joint4=1657 | GUID=77a6e7aa-340e-43e3-afbf-1d2374e5cc77 |
| Area=1609 | Joint1=1657 | Joint2=1702 | Joint3=1703 | Joint4=1658 | GUID=4d7747df-d9c2-4e58-97de-a76dd0951d1b |
| Area=1610 | Joint1=1658 | Joint2=1703 | Joint3=1704 | Joint4=1659 | GUID=1f77e802-e375-47af-86b3-42c97acc12b0 |
| Area=1611 | Joint1=1659 | Joint2=1704 | Joint3=1705 | Joint4=1660 | GUID=0b918b54-5d9b-47f2-beb6-00a244e91cbb |
| Area=1612 | Joint1=1660 | Joint2=1705 | Joint3=1706 | Joint4=1661 | GUID=d54aa976-a9aa-40b8-8b1a-dd7433a2a4b0 |
| Area=1613 | Joint1=1661 | Joint2=1706 | Joint3=1707 | Joint4=1662 | GUID=5e2443f8-7636-4f75-b0d1-9a1b85002041 |
| Area=1614 | Joint1=1662 | Joint2=1707 | Joint3=1708 | Joint4=1663 | GUID=41aae34c-8f4a-4066-bd62-b49b3a6d309f |
| Area=1615 | Joint1=1663 | Joint2=1708 | Joint3=1709 | Joint4=1664 | GUID=2cc241a2-8672-42ea-9b4f-cf08c48d6edf |
| Area=1616 | Joint1=1664 | Joint2=1709 | Joint3=1710 | Joint4=1665 | GUID=d6b51468-e0b6-4b90-a537-3642033ef94a |
| Area=1617 | Joint1=1665 | Joint2=1710 | Joint3=1711 | Joint4=1666 | GUID=3c3a2cc7-2c4a-4974-b6ae-f6439fb1dbf1 |
| Area=1618 | Joint1=1666 | Joint2=1711 | Joint3=1712 | Joint4=1667 | GUID=1f9ce519-2111-4534-b078-f7b4601881bf |
| Area=1619 | Joint1=1667 | Joint2=1712 | Joint3=1713 | Joint4=1668 | GUID=5fe95433-89be-4f5d-ad02-ac10f2d67821 |
| Area=1620 | Joint1=1668 | Joint2=1713 | Joint3=1714 | Joint4=1669 | GUID=4ab7c0f3-f9d8-49c3-98a4-6e496a6b0416 |
| Area=1621 | Joint1=1669 | Joint2=1714 | Joint3=1715 | Joint4=1670 | GUID=59f646df-6c2d-4b50-bad7-48f0ed50e74f |
| Area=1622 | Joint1=1670 | Joint2=1715 | Joint3=1716 | Joint4=1671 | GUID=77235413-984f-4951-a470-baef9a3f2cd  |
| Area=1623 | Joint1=1671 | Joint2=1716 | Joint3=1717 | Joint4=1672 | GUID=75c2f5be-10f7-4550-9a14-84835982696b |
| Area=1624 | Joint1=1672 | Joint2=1717 | Joint3=1718 | Joint4=1673 | GUID=17e036ec-005c-4a95-b20b-3e178228dda1 |
| Area=1625 | Joint1=1673 | Joint2=1718 | Joint3=1719 | Joint4=1674 | GUID=7eae9326-71e4-4ccf-b373-a0874f229d76 |
| Area=1626 | Joint1=1674 | Joint2=1719 | Joint3=1720 | Joint4=1675 | GUID=b28f98ef-7c40-423e-aeab-6598822c17f0 |
| Area=1627 | Joint1=1675 | Joint2=1720 | Joint3=1721 | Joint4=1676 | GUID=f6db001e-642b-4e1e-a3ed-27e634145fcc |
| Area=1628 | Joint1=1676 | Joint2=1721 | Joint3=1722 | Joint4=1677 | GUID=32f0f730-e9e7-4647-bb9e-3de05de216a7 |
| Area=1629 | Joint1=1677 | Joint2=1722 | Joint3=1723 | Joint4=1678 | GUID=86b0e9c1-60d5-4897-a03f-98c049611d1c |
| Area=1630 | Joint1=1679 | Joint2=1724 | Joint3=1725 | Joint4=1680 | GUID=25eac179-3026-4d6f-8ef0-a5bfb838cdf  |
| Area=1631 | Joint1=1680 | Joint2=1725 | Joint3=1726 | Joint4=1681 | GUID=c8cbb8f3-1b7e-4a5e-9d3c-055db34c0d08 |
| Area=1632 | Joint1=1681 | Joint2=1726 | Joint3=1727 | Joint4=1682 | GUID=3091bc49-1ca0-4880-8c2b-298533707787 |
| Area=1633 | Joint1=1682 | Joint2=1727 | Joint3=1728 | Joint4=1683 | GUID=9aa5777f-1402-480b-9c3e-2d2ac89753eb |
| Area=1634 | Joint1=1683 | Joint2=1728 | Joint3=1729 | Joint4=1684 | GUID=c8aafa28-30e8-42e1-afba-a9f9c9c68cb1 |
| Area=1635 | Joint1=1684 | Joint2=1729 | Joint3=1730 | Joint4=1685 | GUID=3af616dd-781e-4359-b803-8ae07d784473 |
| Area=1636 | Joint1=1685 | Joint2=1730 | Joint3=1731 | Joint4=1686 | GUID=2809e5fd-7055-4a30-9a61-91383727a1d0 |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=1637 | Joint1=1686 | Joint2=1731 | Joint3=1732 | Joint4=1687 | GUID=cdbed873-84d9-42e8-b0b6-ff8a222477d8 |
| Area=1638 | Joint1=1687 | Joint2=1732 | Joint3=1733 | Joint4=1688 | GUID=4f825d91-b753-4221-bf01-9eb05da43141 |
| Area=1639 | Joint1=1688 | Joint2=1733 | Joint3=1734 | Joint4=1689 | GUID=1ac17ac-fe38-4d2f-8185-3ac28d2fc081  |
| Area=1640 | Joint1=1689 | Joint2=1734 | Joint3=1735 | Joint4=1690 | GUID=3d718700-4161-489f-aecd-2a37eef85efd |
| Area=1641 | Joint1=1690 | Joint2=1735 | Joint3=1736 | Joint4=1691 | GUID=03f25356-47f9-4311-a775-3d976903e517 |
| Area=1642 | Joint1=1691 | Joint2=1736 | Joint3=1737 | Joint4=1692 | GUID=b62158b3-13f2-42db-a44f-4fabd27af524 |
| Area=1643 | Joint1=1692 | Joint2=1737 | Joint3=1738 | Joint4=1693 | GUID=924846a5-3085-4754-a66b-7cc51018fed2 |
| Area=1644 | Joint1=1693 | Joint2=1738 | Joint3=1739 | Joint4=1694 | GUID=988664fb-6295-48cf-95f5-72e99373ef98 |
| Area=1645 | Joint1=1694 | Joint2=1739 | Joint3=1740 | Joint4=1695 | GUID=34e54e5e-7aad-4156-a0e4-bb2e68057f54 |
| Area=1646 | Joint1=1695 | Joint2=1740 | Joint3=1741 | Joint4=1696 | GUID=06185d64-f0d8-4e64-9ed0-5e10ce057878 |
| Area=1647 | Joint1=1696 | Joint2=1741 | Joint3=1742 | Joint4=1697 | GUID=e1e70221-82b0-44d5-b6a5-4154a45276c9 |
| Area=1648 | Joint1=1697 | Joint2=1742 | Joint3=1743 | Joint4=1698 | GUID=de8768e9-0809-474d-b09b-c6bd5835cc86 |
| Area=1649 | Joint1=1698 | Joint2=1743 | Joint3=1744 | Joint4=1699 | GUID=ce4d6414-1067-42e5-85e8-1bbb26282a92 |
| Area=1650 | Joint1=1699 | Joint2=1744 | Joint3=1745 | Joint4=1700 | GUID=905429df-810e-45e9-a94f-e6e63c6746d3 |
| Area=1651 | Joint1=1700 | Joint2=1745 | Joint3=1746 | Joint4=1701 | GUID=ba2ed2c5-5b60-415a-9a3c-b29b84993e8b |
| Area=1652 | Joint1=1701 | Joint2=1746 | Joint3=1747 | Joint4=1702 | GUID=b1507542-35e8-4f84-9388-f43ed93c9768 |
| Area=1653 | Joint1=1702 | Joint2=1747 | Joint3=1748 | Joint4=1703 | GUID=23f34476-724e-47f5-8926-71b365ff6230 |
| Area=1654 | Joint1=1703 | Joint2=1748 | Joint3=1749 | Joint4=1704 | GUID=d321ed1a-c367-48e2-be70-dfa2eef22205 |
| Area=1655 | Joint1=1704 | Joint2=1749 | Joint3=1750 | Joint4=1705 | GUID=49395569-3075-462a-8a9f-35839e2f44f1 |
| Area=1656 | Joint1=1705 | Joint2=1750 | Joint3=1751 | Joint4=1706 | GUID=e5d0cef9-6e72-4055-905a-72a9954681ea |
| Area=1657 | Joint1=1706 | Joint2=1751 | Joint3=1752 | Joint4=1707 | GUID=12bb1347-8a0a-4ea7-a1cd-691f812af067 |
| Area=1658 | Joint1=1707 | Joint2=1752 | Joint3=1753 | Joint4=1708 | GUID=e0386353-b2ed-42d1-b66e-10100e8518f2 |
| Area=1659 | Joint1=1708 | Joint2=1753 | Joint3=1754 | Joint4=1709 | GUID=c8c85848-81b5-4d12-8c6c-466c91eff2d7 |
| Area=1660 | Joint1=1709 | Joint2=1754 | Joint3=1755 | Joint4=1710 | GUID=6d03d605-0ebe-4a62-8bc1-f8f95e467678 |
| Area=1661 | Joint1=1710 | Joint2=1755 | Joint3=1756 | Joint4=1711 | GUID=a0873920-b0c5-4335-8382-f1501bfd5916 |
| Area=1662 | Joint1=1711 | Joint2=1756 | Joint3=1757 | Joint4=1712 | GUID=0d9ef3ed-97d1-4625-a1aa-298b601f0814 |
| Area=1663 | Joint1=1712 | Joint2=1757 | Joint3=1758 | Joint4=1713 | GUID=af8eedb1-f6f8-4ba8-8069-aa78c5887c9a |
| Area=1664 | Joint1=1713 | Joint2=1758 | Joint3=1759 | Joint4=1714 | GUID=2bbb051f-6ff2-41a7-a639-359c6a534fbe |
| Area=1665 | Joint1=1714 | Joint2=1759 | Joint3=1760 | Joint4=1715 | GUID=c6379a41-4531-4662-9e1a-a7f3c89c0221 |
| Area=1666 | Joint1=1715 | Joint2=1760 | Joint3=1761 | Joint4=1716 | GUID=8a218018-c02c-4b41-861e-658336d89651 |
| Area=1667 | Joint1=1716 | Joint2=1761 | Joint3=1762 | Joint4=1717 | GUID=ff168419-ef02-4fef-b218-3a949b90d6b6 |
| Area=1668 | Joint1=1717 | Joint2=1762 | Joint3=1763 | Joint4=1718 | GUID=64c6b5de-751e-4ced-adc5-266ff3103f4  |
| Area=1669 | Joint1=1718 | Joint2=1763 | Joint3=1764 | Joint4=1719 | GUID=cb9b7775-5ece-46ce-a97f-25bc2d1f53e3 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=1670 | Joint1=1719 | Joint2=1764 | Joint3=1765 | Joint4=1720 | GUID=4b2554fe-0a9b-4ca7-8a95-c09c1c465197 |
| Area=1671 | Joint1=1720 | Joint2=1765 | Joint3=1766 | Joint4=1721 | GUID=22451090-8596-416e-991c-6d5ca9b61de2 |
| Area=1672 | Joint1=1721 | Joint2=1766 | Joint3=1767 | Joint4=1722 | GUID=17bc142d-ff42-4cf0-a605-cc31afb6b1f2 |
| Area=1673 | Joint1=1722 | Joint2=1767 | Joint3=1768 | Joint4=1723 | GUID=0dd18037-b9c0-4263-9ed8-cd13dda48d4b |
| Area=1674 | Joint1=1724 | Joint2=1769 | Joint3=1770 | Joint4=1725 | GUID=919401fd-a85d-42de-bb75-0a3fc17ad8d9 |
| Area=1675 | Joint1=1725 | Joint2=1770 | Joint3=1771 | Joint4=1726 | GUID=365aff90-c73a-4ca8-96a7-8c67e8657715 |
| Area=1676 | Joint1=1726 | Joint2=1771 | Joint3=1772 | Joint4=1727 | GUID=b97ce640-16ff-4d0e-9e5b-2d47817d2a7d |
| Area=1677 | Joint1=1727 | Joint2=1772 | Joint3=1773 | Joint4=1728 | GUID=1da302c0-1f11-485f-96f5-8553215a00cb |
| Area=1678 | Joint1=1728 | Joint2=1773 | Joint3=1774 | Joint4=1729 | GUID=a8d8eb7a-da4e-434b-b2ea-3139bd34ad76 |
| Area=1679 | Joint1=1729 | Joint2=1774 | Joint3=1775 | Joint4=1730 | GUID=3cb9d7c3-c408-4135-8acd-993c432a7af3 |
| Area=1680 | Joint1=1730 | Joint2=1775 | Joint3=1776 | Joint4=1731 | GUID=80898ac0-71cc-4ba1-9bc5-59bbcbabea77 |
| Area=1681 | Joint1=1731 | Joint2=1776 | Joint3=1777 | Joint4=1732 | GUID=113f2ddc-21b7-48b3-b7fb-9e1c91f3d75f |
| Area=1682 | Joint1=1732 | Joint2=1777 | Joint3=1778 | Joint4=1733 | GUID=45acf457-d8f6-4d7f-9f60-8cb84ea6cd0c |
| Area=1683 | Joint1=1733 | Joint2=1778 | Joint3=1779 | Joint4=1734 | GUID=f541188c-2c35-4a36-8ce4-2eec77c94fbd |
| Area=1684 | Joint1=1734 | Joint2=1779 | Joint3=1780 | Joint4=1735 | GUID=8aec6326-3daf-4a5f-8a4f-c893ac3c2491 |
| Area=1685 | Joint1=1735 | Joint2=1780 | Joint3=1781 | Joint4=1736 | GUID=330e3bf4-1443-4a25-b651-7512e0b0080f |
| Area=1686 | Joint1=1736 | Joint2=1781 | Joint3=1782 | Joint4=1737 | GUID=35b30933-4c58-4cc5-a3c3-0e2ff21051a3 |
| Area=1687 | Joint1=1737 | Joint2=1782 | Joint3=1783 | Joint4=1738 | GUID=7c33e04e-2b17-4833-aed3-aa6c42948588 |
| Area=1688 | Joint1=1738 | Joint2=1783 | Joint3=1784 | Joint4=1739 | GUID=e609006a-cd56-4021-9c71-da3d6643c808 |
| Area=1689 | Joint1=1739 | Joint2=1784 | Joint3=1785 | Joint4=1740 | GUID=be360929-d9b4-43c5-b464-73cbdc814afc |
| Area=1690 | Joint1=1740 | Joint2=1785 | Joint3=1786 | Joint4=1741 | GUID=5e323d0f-e8a0-4fd5-a6e5-a1626e1fd6f5 |
| Area=1691 | Joint1=1741 | Joint2=1786 | Joint3=1787 | Joint4=1742 | GUID=8f044f79-71b1-4949-bca2-408274f62cdd |
| Area=1692 | Joint1=1742 | Joint2=1787 | Joint3=1788 | Joint4=1743 | GUID=2227fac5-d637-4977-aba2-d892aa98ed95 |
| Area=1693 | Joint1=1743 | Joint2=1788 | Joint3=1789 | Joint4=1744 | GUID=eb31294e-b8df-4c19-b185-40f9d08cf1bd |
| Area=1694 | Joint1=1744 | Joint2=1789 | Joint3=1790 | Joint4=1745 | GUID=ad1c49be-4f79-46d7-843e-b06aeaa470a0 |
| Area=1695 | Joint1=1745 | Joint2=1790 | Joint3=1791 | Joint4=1746 | GUID=76486d26-e818-4163-9ed3-e44bd1807a19 |
| Area=1696 | Joint1=1746 | Joint2=1791 | Joint3=1792 | Joint4=1747 | GUID=e5b702bc-e75f-457f-9a5d-49b755708bd0 |
| Area=1697 | Joint1=1747 | Joint2=1792 | Joint3=1793 | Joint4=1748 | GUID=6031fcc3-14c2-4341-8697-c29e8139e280 |
| Area=1698 | Joint1=1748 | Joint2=1793 | Joint3=1794 | Joint4=1749 | GUID=d8690528-3b3c-4d8c-ada7-6c6e88771e77 |
| Area=1699 | Joint1=1749 | Joint2=1794 | Joint3=1795 | Joint4=1750 | GUID=dd95440b-337b-49c8-b98f-04868b8aff68 |
| Area=1700 | Joint1=1750 | Joint2=1795 | Joint3=1796 | Joint4=1751 | GUID=17e3f406-a18d-41b5-829d-5b06f1c5b2eb |
| Area=1701 | Joint1=1751 | Joint2=1796 | Joint3=1797 | Joint4=1752 | GUID=a6d6cd47-cc87-44e4-8015-6f1edca2d8f6 |
| Area=1702 | Joint1=1752 | Joint2=1797 | Joint3=1798 | Joint4=1753 | GUID=3cfef5b7-f94a-458f-a4b1-0dda3b30b760 |
| Area=1703 | Joint1=1753 | Joint2=1798 | Joint3=1799 | Joint4=1754 | GUID=e953ace6-a668-4591-afad-af24f590bad7 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=1704 | Joint1=1754 | Joint2=1799 | Joint3=1800 | Joint4=1755 | GUID=b615c9fc-43e8-4579-87ed-35780f809695 |
| Area=1705 | Joint1=1755 | Joint2=1800 | Joint3=1801 | Joint4=1756 | GUID=c08c1b54-c359-48f6-acc7-19b614ec6300 |
| Area=1706 | Joint1=1756 | Joint2=1801 | Joint3=1802 | Joint4=1757 | GUID=d4bc738f-787e-4b4e-a988-49103340fed5 |
| Area=1707 | Joint1=1757 | Joint2=1802 | Joint3=1803 | Joint4=1758 | GUID=8799f8f7-f0f4-43d1-a9b9-3109f01d19e3 |
| Area=1708 | Joint1=1758 | Joint2=1803 | Joint3=1804 | Joint4=1759 | GUID=e56158b5-72e9-4600-8051-5650dd26256d |
| Area=1709 | Joint1=1759 | Joint2=1804 | Joint3=1805 | Joint4=1760 | GUID=01d579a7-4f5e-4a15-90d8-30e275929100 |
| Area=1710 | Joint1=1760 | Joint2=1805 | Joint3=1806 | Joint4=1761 | GUID=1e713bef-3e0d-4cd8-9efe-3c7a4a35dd10 |
| Area=1711 | Joint1=1761 | Joint2=1806 | Joint3=1807 | Joint4=1762 | GUID=24fe1580-2c4c-42cd-880d-17ffe7a75d7c |
| Area=1712 | Joint1=1762 | Joint2=1807 | Joint3=1808 | Joint4=1763 | GUID=b869be79-6a0d-4c89-8c42-dd8551619ee3 |
| Area=1713 | Joint1=1763 | Joint2=1808 | Joint3=1809 | Joint4=1764 | GUID=71fcb09d-35d8-45ac-b4ad-8625f82291f9 |
| Area=1714 | Joint1=1764 | Joint2=1809 | Joint3=1810 | Joint4=1765 | GUID=c6c6ae3e-ae2-4908-b79b-19e5958832d2  |
| Area=1715 | Joint1=1765 | Joint2=1810 | Joint3=1811 | Joint4=1766 | GUID=8f5f7e41-c2c1-4cc0-9d23-025e4a20bd32 |
| Area=1716 | Joint1=1766 | Joint2=1811 | Joint3=1812 | Joint4=1767 | GUID=458d731f-668c-4300-83d1-a3b4bee2941f |
| Area=1717 | Joint1=1767 | Joint2=1812 | Joint3=1813 | Joint4=1768 | GUID=07384f87-de27-48bf-86b1-270badf8f906 |
| Area=1718 | Joint1=1769 | Joint2=1814 | Joint3=1815 | Joint4=1770 | GUID=9a9e745d-e219-4f2f-ae8d-0793328b9ced |
| Area=1719 | Joint1=1770 | Joint2=1815 | Joint3=1816 | Joint4=1771 | GUID=16e490b1-bbe8-4cba-a0cf-983b2fdd659f |
| Area=1720 | Joint1=1771 | Joint2=1816 | Joint3=1817 | Joint4=1772 | GUID=f8c3395d-cbde-49ca-8dae-e90a01330086 |
| Area=1721 | Joint1=1772 | Joint2=1817 | Joint3=1818 | Joint4=1773 | GUID=50ada673-bf4a-436e-be20-1275178f06ee |
| Area=1722 | Joint1=1773 | Joint2=1818 | Joint3=1819 | Joint4=1774 | GUID=1b0733c1-ff9f-4b63-856a-794fb59acfb4 |
| Area=1723 | Joint1=1774 | Joint2=1819 | Joint3=1820 | Joint4=1775 | GUID=d15f2e5e-6e9e-4ffb-bceb-a75407dd49c6 |
| Area=1724 | Joint1=1775 | Joint2=1820 | Joint3=1821 | Joint4=1776 | GUID=a55547d3-f9d8-4870-89aa-1f46bf9ebc87 |
| Area=1725 | Joint1=1776 | Joint2=1821 | Joint3=1822 | Joint4=1777 | GUID=07e99407-bb99-45df-8cac-fb255db211cd |
| Area=1726 | Joint1=1777 | Joint2=1822 | Joint3=1823 | Joint4=1778 | GUID=e755a03f-f52e-45e3-aef2-4a2d716a5ac5 |
| Area=1727 | Joint1=1778 | Joint2=1823 | Joint3=1824 | Joint4=1779 | GUID=2e2afa2c-42fd-486a-a606-368a7906fea3 |
| Area=1728 | Joint1=1779 | Joint2=1824 | Joint3=1825 | Joint4=1780 | GUID=48a6e35c-dde9-49eb-b7a5-116e853c2ed3 |
| Area=1729 | Joint1=1780 | Joint2=1825 | Joint3=1826 | Joint4=1781 | GUID=66872bd9-279a-4959-ab59-e11e34dae05c |
| Area=1730 | Joint1=1781 | Joint2=1826 | Joint3=1827 | Joint4=1782 | GUID=714250c5-7e48-4237-8c53-7854dbbac20a |
| Area=1731 | Joint1=1782 | Joint2=1827 | Joint3=1828 | Joint4=1783 | GUID=32d2da09-64ca-484d-9b10-972c5d3bc800 |
| Area=1732 | Joint1=1783 | Joint2=1828 | Joint3=1829 | Joint4=1784 | GUID=ae50d93e-1c66-4cb3-bc60-f8c3841fe9c9 |
| Area=1733 | Joint1=1784 | Joint2=1829 | Joint3=1830 | Joint4=1785 | GUID=6d1acf33-3886-4e3a-a1bb-0da29f4f379d |
| Area=1734 | Joint1=1785 | Joint2=1830 | Joint3=1831 | Joint4=1786 | GUID=0afa0d13-1b34-44f4-92a1-d12ff77d9eae |
| Area=1735 | Joint1=1786 | Joint2=1831 | Joint3=1832 | Joint4=1787 | GUID=1ef4ec68-062c-4aa3-ad36-f14ac779e2ef |
| Area=1736 | Joint1=1787 | Joint2=1832 | Joint3=1833 | Joint4=1788 | GUID=2debe8d4-4944-470a-8e41-8ae2b2f02def |
| Area=1737 | Joint1=1788 | Joint2=1833 | Joint3=1834 | Joint4=1789 | GUID=b1ffea01-0d14-4a9d-be10-121ef7de3c04 |
| Area=1738 | Joint1=1789 | Joint2=1834 | Joint3=1835 | Joint4=1790 | GUID=5e1bcc85-5ca7-4508-b46c-99b2e754275b |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=1739<br>3326878bed8f | Joint1=1790 | Joint2=1835 | Joint3=1836 | Joint4=1791 | GUID=4ce7602d-2415-4fb6-a78e-             |
| Area=1740<br>70cbbd5cbdef | Joint1=1791 | Joint2=1836 | Joint3=1837 | Joint4=1792 | GUID=64271846-760a-45fd-8d72-             |
| Area=1741<br>191a2ec0783b | Joint1=1792 | Joint2=1837 | Joint3=1838 | Joint4=1793 | GUID=a16cebc-b87b6-4dd5-909f-             |
| Area=1742                 | Joint1=1793 | Joint2=1838 | Joint3=1839 | Joint4=1794 | GUID=05176306-89ae-40fc-aa9a-ca7df8c6ac71 |
| Area=1743<br>ed9a9c12ca5b | Joint1=1794 | Joint2=1839 | Joint3=1840 | Joint4=1795 | GUID=164474f4-6f06-484a-87b6-             |
| Area=1744<br>dbef2c443e01 | Joint1=1795 | Joint2=1840 | Joint3=1841 | Joint4=1796 | GUID=05bea42c-172e-4564-a19a-             |
| Area=1745<br>fc0962d7e060 | Joint1=1796 | Joint2=1841 | Joint3=1842 | Joint4=1797 | GUID=f5187861-3335-4b49-88dc-             |
| Area=1746<br>5d43db2620c6 | Joint1=1797 | Joint2=1842 | Joint3=1843 | Joint4=1798 | GUID=9009d05f-31c4-42cd-b745-             |
| Area=1747                 | Joint1=1798 | Joint2=1843 | Joint3=1844 | Joint4=1799 | GUID=51e57ace-1cf1-46a4-afc4-cb905eb1f6e9 |
| Area=1748<br>baba4dda421b | Joint1=1799 | Joint2=1844 | Joint3=1845 | Joint4=1800 | GUID=9ee1b406-4a0a-4b42-b162-             |
| Area=1749                 | Joint1=1800 | Joint2=1845 | Joint3=1846 | Joint4=1801 | GUID=99f89ad7-6a7e-487c-ad25-0ecf8ea87af9 |
| Area=1750                 | Joint1=1801 | Joint2=1846 | Joint3=1847 | Joint4=1802 | GUID=b248cfe8-414f-41d0-ab71-2c332c3971ca |
| Area=1751                 | Joint1=1802 | Joint2=1847 | Joint3=1848 | Joint4=1803 | GUID=396f4fc8-d345-4996-b7dc-adaa846f2b3d |
| Area=1752<br>412454e51425 | Joint1=1803 | Joint2=1848 | Joint3=1849 | Joint4=1804 | GUID=45ab3e4e-7587-4088-93fa-             |
| Area=1753                 | Joint1=1804 | Joint2=1849 | Joint3=1850 | Joint4=1805 | GUID=90277cfd-9fd8-446c-adf2-d6f2417e36cf |
| Area=1754<br>d5918df9142d | Joint1=1805 | Joint2=1850 | Joint3=1851 | Joint4=1806 | GUID=de599758-8767-4677-99b4-             |
| Area=1755<br>d47c76b16a8a | Joint1=1806 | Joint2=1851 | Joint3=1852 | Joint4=1807 | GUID=80161aa0-ade7-4d20-b7b1-             |
| Area=1756<br>e3cd33366f27 | Joint1=1807 | Joint2=1852 | Joint3=1853 | Joint4=1808 | GUID=cb3f7848-9d60-4e20-a100-             |
| Area=1757<br>858b17bb3667 | Joint1=1808 | Joint2=1853 | Joint3=1854 | Joint4=1809 | GUID=efe6ed86-6e64-4b11-8e7c-             |
| Area=1758                 | Joint1=1809 | Joint2=1854 | Joint3=1855 | Joint4=1810 | GUID=ba737b9b-f57a-45ef-aaea-4cef20408679 |
| Area=1759                 | Joint1=1810 | Joint2=1855 | Joint3=1856 | Joint4=1811 | GUID=51e136ff-8e80-4246-b1b3-584f7d8d25a3 |
| Area=1760                 | Joint1=1811 | Joint2=1856 | Joint3=1857 | Joint4=1812 | GUID=70d3bac1-4437-4fc7-817c-38fc97499b2e |
| Area=1761<br>c6dd9433a529 | Joint1=1812 | Joint2=1857 | Joint3=1858 | Joint4=1813 | GUID=2d9bd76b-38d8-438f-80d8-             |
| Area=1762<br>71a52be1e090 | Joint1=1814 | Joint2=1859 | Joint3=1860 | Joint4=1815 | GUID=68c1c561-da6c-4351-843b-             |
| Area=1763<br>9701886340ee | Joint1=1815 | Joint2=1860 | Joint3=1861 | Joint4=1816 | GUID=69961e46-14dd-4f0e-9353-             |
| Area=1764<br>ec8149666a60 | Joint1=1816 | Joint2=1861 | Joint3=1862 | Joint4=1817 | GUID=3013d82b-cf82-45e3-b72c-             |
| Area=1765<br>66603654a6df | Joint1=1817 | Joint2=1862 | Joint3=1863 | Joint4=1818 | GUID=914388d3-1aee-4cdc-a6e6-             |
| Area=1766<br>81bb6de45c54 | Joint1=1818 | Joint2=1863 | Joint3=1864 | Joint4=1819 | GUID=5ef3ae0d-bd34-4603-b835-             |
| Area=1767<br>056c112d8b6d | Joint1=1819 | Joint2=1864 | Joint3=1865 | Joint4=1820 | GUID=77fa7bc0-370d-438e-b055-             |
| Area=1768<br>2cb110c6b006 | Joint1=1820 | Joint2=1865 | Joint3=1866 | Joint4=1821 | GUID=8c30ba35-3fbd-41d9-b08f-             |
| Area=1769<br>087ec2ee94a4 | Joint1=1821 | Joint2=1866 | Joint3=1867 | Joint4=1822 | GUID=19cd25a8-d195-4e2c-a1df-             |
| Area=1770<br>0d05ee49b61e | Joint1=1822 | Joint2=1867 | Joint3=1868 | Joint4=1823 | GUID=62c0ebc0-7247-4fcb-8246-             |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=1771<br>310201d039aa | Joint1=1823 | Joint2=1868 | Joint3=1869 | Joint4=1824 | GUID=d0399cb5-5442-4c1e-bc63-             |
| Area=1772<br>e5a3e93887d7 | Joint1=1824 | Joint2=1869 | Joint3=1870 | Joint4=1825 | GUID=ab9d297a-2548-47ae-8d34-             |
| Area=1773<br>d89823aafec  | Joint1=1825 | Joint2=1870 | Joint3=1871 | Joint4=1826 | GUID=51521ae3-89b1-4d3d-9c00-             |
| Area=1774                 | Joint1=1826 | Joint2=1871 | Joint3=1872 | Joint4=1827 | GUID=f4d45a1f-86d4-4e96-8020-bdba7195fef3 |
| Area=1775<br>0120118cd5c4 | Joint1=1827 | Joint2=1872 | Joint3=1873 | Joint4=1828 | GUID=5b28cf45-ae5d-4be5-8f01-             |
| Area=1776<br>74d4fe5a9813 | Joint1=1828 | Joint2=1873 | Joint3=1874 | Joint4=1829 | GUID=deadc76d-5656-4784-bcfe-             |
| Area=1777<br>c8401acc1495 | Joint1=1829 | Joint2=1874 | Joint3=1875 | Joint4=1830 | GUID=09f0e04f-323a-4087-bbd9-             |
| Area=1778<br>36579a284d02 | Joint1=1830 | Joint2=1875 | Joint3=1876 | Joint4=1831 | GUID=7c98c198-ae7e-4b0d-82e7-             |
| Area=1779<br>5f535a05cfe1 | Joint1=1831 | Joint2=1876 | Joint3=1877 | Joint4=1832 | GUID=36aa0472-7c63-46eb-a67e-             |
| Area=1780<br>31901efae1ea | Joint1=1832 | Joint2=1877 | Joint3=1878 | Joint4=1833 | GUID=82ef800c-a759-4836-a584-             |
| Area=1781                 | Joint1=1833 | Joint2=1878 | Joint3=1879 | Joint4=1834 | GUID=f211b579-dba6-4693-b062-9e10ff51c401 |
| Area=1782<br>6f98a72c19d7 | Joint1=1834 | Joint2=1879 | Joint3=1880 | Joint4=1835 | GUID=67119692-2c7e-47af-87a1-             |
| Area=1783<br>c7f596d0e99c | Joint1=1835 | Joint2=1880 | Joint3=1881 | Joint4=1836 | GUID=8d84e52c-e1c9-407b-b1da-             |
| Area=1784                 | Joint1=1836 | Joint2=1881 | Joint3=1882 | Joint4=1837 | GUID=74c5afc6-a6f4-4da9-a6e1-07f05076dd44 |
| Area=1785<br>942d0303bca1 | Joint1=1837 | Joint2=1882 | Joint3=1883 | Joint4=1838 | GUID=e66d7bfd-86c9-4bec-87ae-             |
| Area=1786                 | Joint1=1838 | Joint2=1883 | Joint3=1884 | Joint4=1839 | GUID=b5342b93-3204-439c-8acb-f7a5477c94cf |
| Area=1787<br>6454bae8ab22 | Joint1=1839 | Joint2=1884 | Joint3=1885 | Joint4=1840 | GUID=e3afa8b1-4117-4b85-a009-             |
| Area=1788                 | Joint1=1840 | Joint2=1885 | Joint3=1886 | Joint4=1841 | GUID=d34aaf81-29f9-4d0a-b809-db3c2e35f06d |
| Area=1789<br>b6da2c07823f | Joint1=1841 | Joint2=1886 | Joint3=1887 | Joint4=1842 | GUID=be4dd056-20d7-4856-b55a-             |
| Area=1790<br>b8aca26801aa | Joint1=1842 | Joint2=1887 | Joint3=1888 | Joint4=1843 | GUID=edbd16a4-665b-4c59-babe-             |
| Area=1791<br>5f75158304d3 | Joint1=1843 | Joint2=1888 | Joint3=1889 | Joint4=1844 | GUID=6cf504c1-08d7-4947-90e9-             |
| Area=1792                 | Joint1=1844 | Joint2=1889 | Joint3=1890 | Joint4=1845 | GUID=f5f07f10-867a-4e83-a4c9-04339e67af12 |
| Area=1793<br>f7391c66bca9 | Joint1=1845 | Joint2=1890 | Joint3=1891 | Joint4=1846 | GUID=8a2d319c-c10a-4333-a8b9-             |
| Area=1794<br>274beb33f22c | Joint1=1846 | Joint2=1891 | Joint3=1892 | Joint4=1847 | GUID=5387d915-e6a1-461e-90d7-             |
| Area=1795<br>2299c8ad786a | Joint1=1847 | Joint2=1892 | Joint3=1893 | Joint4=1848 | GUID=a26929de-1fd4-4ed0-99b7-             |
| Area=1796<br>252508832e28 | Joint1=1848 | Joint2=1893 | Joint3=1894 | Joint4=1849 | GUID=467167d1-7b18-4203-89f0-             |
| Area=1797<br>42f362cdc325 | Joint1=1849 | Joint2=1894 | Joint3=1895 | Joint4=1850 | GUID=6a1df134-d14c-40de-8280-             |
| Area=1798                 | Joint1=1850 | Joint2=1895 | Joint3=1896 | Joint4=1851 | GUID=29fe2c8c-26ce-489f-a695-a92bc4b8da5b |
| Area=1799<br>dd508b9392ef | Joint1=1851 | Joint2=1896 | Joint3=1897 | Joint4=1852 | GUID=8568d0a9-944e-4859-9ef0-             |
| Area=1800<br>e14ef0967949 | Joint1=1852 | Joint2=1897 | Joint3=1898 | Joint4=1853 | GUID=e1ab17e2-38c5-4a04-b700-             |
| Area=1801<br>53d45d2ab897 | Joint1=1853 | Joint2=1898 | Joint3=1899 | Joint4=1854 | GUID=3a467aee-1b20-446e-8678-             |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=1802 | Joint1=1854 | Joint2=1899 | Joint3=1900 | Joint4=1855 | GUID=ce548b76-5521-45e9-9d0a-2e8f011658d4 |
| Area=1803 | Joint1=1855 | Joint2=1900 | Joint3=1901 | Joint4=1856 | GUID=0d3a4fe7-0679-4dc4-8bfb-001dff17417b |
| Area=1804 | Joint1=1856 | Joint2=1901 | Joint3=1902 | Joint4=1857 | GUID=1cca7794-d1d6-4f3b-8710-8b348a83ebc6 |
| Area=1805 | Joint1=1857 | Joint2=1902 | Joint3=1903 | Joint4=1858 | GUID=c40cd7f1-3d74-4266-ac79-bd869b838306 |
| Area=1806 | Joint1=1859 | Joint2=1904 | Joint3=1905 | Joint4=1860 | GUID=0600bb2e-aea6-4ceb-8020-99f7e8847dae |
| Area=1807 | Joint1=1860 | Joint2=1905 | Joint3=1906 | Joint4=1861 | GUID=744be4ff-bef8-43f0-8fd0-5e36258f79c8 |
| Area=1808 | Joint1=1861 | Joint2=1906 | Joint3=1907 | Joint4=1862 | GUID=2582079a-cc08-40f2-975e-28603ba49714 |
| Area=1809 | Joint1=1862 | Joint2=1907 | Joint3=1908 | Joint4=1863 | GUID=9398839a-02bd-4a99-9486-09a68361458a |
| Area=1810 | Joint1=1863 | Joint2=1908 | Joint3=1909 | Joint4=1864 | GUID=e99f344a-6809-4a6e-82e2-734ef4deb12  |
| Area=1811 | Joint1=1864 | Joint2=1909 | Joint3=1910 | Joint4=1865 | GUID=5a8c0a99-21aa-4c38-8d76-c4d147899483 |
| Area=1812 | Joint1=1865 | Joint2=1910 | Joint3=1911 | Joint4=1866 | GUID=01ea4f5b-5f13-49d9-abe3-7e2d1fb4ede7 |
| Area=1813 | Joint1=1866 | Joint2=1911 | Joint3=1912 | Joint4=1867 | GUID=47ca960d-c184-4151-97b3-67ff88d9213c |
| Area=1814 | Joint1=1867 | Joint2=1912 | Joint3=1913 | Joint4=1868 | GUID=8855b64b-cae4-424d-af7b-11d417824792 |
| Area=1815 | Joint1=1868 | Joint2=1913 | Joint3=1914 | Joint4=1869 | GUID=c62702e2-7345-44e3-be3d-8f6ea08a3814 |
| Area=1816 | Joint1=1869 | Joint2=1914 | Joint3=1915 | Joint4=1870 | GUID=94a532f2-8954-40b5-a488-56a3686e8d58 |
| Area=1817 | Joint1=1870 | Joint2=1915 | Joint3=1916 | Joint4=1871 | GUID=ef467a73-c154-4f17-acd8-34132742b1be |
| Area=1818 | Joint1=1871 | Joint2=1916 | Joint3=1917 | Joint4=1872 | GUID=137cac4d-6382-408f-aad6-1dc3c7be7a52 |
| Area=1819 | Joint1=1872 | Joint2=1917 | Joint3=1918 | Joint4=1873 | GUID=b6161fc3-4a61-438e-b07d-09ddb2c0b77c |
| Area=1820 | Joint1=1873 | Joint2=1918 | Joint3=1919 | Joint4=1874 | GUID=27e3920e-1e45-4490-b7f3-72599020a66e |
| Area=1821 | Joint1=1874 | Joint2=1919 | Joint3=1920 | Joint4=1875 | GUID=42ffbc5d-02aa-426d-a2cb-684cf2a2cb7c |
| Area=1822 | Joint1=1875 | Joint2=1920 | Joint3=1921 | Joint4=1876 | GUID=8df9c506-450f-4461-bdd7-6cdc4468a209 |
| Area=1823 | Joint1=1876 | Joint2=1921 | Joint3=1922 | Joint4=1877 | GUID=ebb6a480-d285-42ea-8731-d9559019168e |
| Area=1824 | Joint1=1877 | Joint2=1922 | Joint3=1923 | Joint4=1878 | GUID=a4edaa4a-4219-447d-b2cf-b6c9297b8192 |
| Area=1825 | Joint1=1878 | Joint2=1923 | Joint3=1924 | Joint4=1879 | GUID=991a0454-cf8f-4c1e-9448-7cb47f8ac162 |
| Area=1826 | Joint1=1879 | Joint2=1924 | Joint3=1925 | Joint4=1880 | GUID=a7254e0c-c4f7-4b42-ad06-c7c214a4bf07 |
| Area=1827 | Joint1=1880 | Joint2=1925 | Joint3=1926 | Joint4=1881 | GUID=f9d82849-c0a2-4d96-85a0-10b586a78eed |
| Area=1828 | Joint1=1881 | Joint2=1926 | Joint3=1927 | Joint4=1882 | GUID=6cae065d-4ab8-4322-9472-1758b3205183 |
| Area=1829 | Joint1=1882 | Joint2=1927 | Joint3=1928 | Joint4=1883 | GUID=12d12a17-5f62-4410-9210-6bea89f1733d |
| Area=1830 | Joint1=1883 | Joint2=1928 | Joint3=1929 | Joint4=1884 | GUID=a14f00c2-8867-44e3-8056-24bb91e60bc2 |
| Area=1831 | Joint1=1884 | Joint2=1929 | Joint3=1930 | Joint4=1885 | GUID=ec5ef44e-5443-4073-992f-8f662cce9027 |
| Area=1832 | Joint1=1885 | Joint2=1930 | Joint3=1931 | Joint4=1886 | GUID=658738f0-4548-4389-b319-96f46a56d4e7 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=1833 | Joint1=1886 | Joint2=1931 | Joint3=1932 | Joint4=1887 | GUID=3b2bf503-c562-4158-a8f5-b919d8b451c0 |
| Area=1834 | Joint1=1887 | Joint2=1932 | Joint3=1933 | Joint4=1888 | GUID=607513d6-df9a-42cb-9362-f84c1e94f74c |
| Area=1835 | Joint1=1888 | Joint2=1933 | Joint3=1934 | Joint4=1889 | GUID=1507e9d4-a225-424d-a577-cc31a204a8b8 |
| Area=1836 | Joint1=1889 | Joint2=1934 | Joint3=1935 | Joint4=1890 | GUID=89541466-5bea-423b-8439-6abdc6d601de |
| Area=1837 | Joint1=1890 | Joint2=1935 | Joint3=1936 | Joint4=1891 | GUID=7dba007e-0ecc-4786-8d28-acf66ac76fc3 |
| Area=1838 | Joint1=1891 | Joint2=1936 | Joint3=1937 | Joint4=1892 | GUID=2bfc87a4-f328-442f-a07f-13da6f4474cc |
| Area=1839 | Joint1=1892 | Joint2=1937 | Joint3=1938 | Joint4=1893 | GUID=dfba6280-f215-4ef3-be9e-385293e0e20d |
| Area=1840 | Joint1=1893 | Joint2=1938 | Joint3=1939 | Joint4=1894 | GUID=da075f4a-474b-46e2-811e-b38af8189964 |
| Area=1841 | Joint1=1894 | Joint2=1939 | Joint3=1940 | Joint4=1895 | GUID=f66d3566-086f-4806-b4ef-a8dd2df72f2f |
| Area=1842 | Joint1=1895 | Joint2=1940 | Joint3=1941 | Joint4=1896 | GUID=d47cce02-bda2-4db5-b9e3-b1f6ef54dc22 |
| Area=1843 | Joint1=1896 | Joint2=1941 | Joint3=1942 | Joint4=1897 | GUID=1533e700-fb0d-4239-ad92-d7247ab09ac4 |
| Area=1844 | Joint1=1897 | Joint2=1942 | Joint3=1943 | Joint4=1898 | GUID=b00c6b44-9e34-4a05-b2f0-4bccbb1bc1b5 |
| Area=1845 | Joint1=1898 | Joint2=1943 | Joint3=1944 | Joint4=1899 | GUID=d40f8656-8979-472c-bf55-94fe271e2c2b |
| Area=1846 | Joint1=1899 | Joint2=1944 | Joint3=1945 | Joint4=1900 | GUID=d3f202af-79b1-4fc8-9367-6bfc6cf599f7 |
| Area=1847 | Joint1=1900 | Joint2=1945 | Joint3=1946 | Joint4=1901 | GUID=9b92a126-344e-4d2b-9b8a-cf8b539062dd |
| Area=1848 | Joint1=1901 | Joint2=1946 | Joint3=1947 | Joint4=1902 | GUID=28700aaf-2b68-4605-9de8-552ca09555c6 |
| Area=1849 | Joint1=1902 | Joint2=1947 | Joint3=1948 | Joint4=1903 | GUID=6d7c27b6-9211-4d93-8b94-278f5a81b8bd |
| Area=1850 | Joint1=1904 | Joint2=1949 | Joint3=1950 | Joint4=1905 | GUID=6b38e6e9-607c-4544-a5dd-d8e1b6e490ed |
| Area=1851 | Joint1=1905 | Joint2=1950 | Joint3=1951 | Joint4=1906 | GUID=9a744b32-9460-47a7-8eae-13274c67939b |
| Area=1852 | Joint1=1906 | Joint2=1951 | Joint3=1952 | Joint4=1907 | GUID=b10f5f03-8e53-4f76-868e-e463705ee983 |
| Area=1853 | Joint1=1907 | Joint2=1952 | Joint3=1953 | Joint4=1908 | GUID=907024d3-61f9-40a7-9f12-46143ba2e42b |
| Area=1854 | Joint1=1908 | Joint2=1953 | Joint3=1954 | Joint4=1909 | GUID=c4c0311e-2c3c-46a1-992a-02c6e16c9869 |
| Area=1855 | Joint1=1909 | Joint2=1954 | Joint3=1955 | Joint4=1910 | GUID=d6c93c3a-30ff-49d2-9b24-14093207b4ac |
| Area=1856 | Joint1=1910 | Joint2=1955 | Joint3=1956 | Joint4=1911 | GUID=12486139-9233-4c2d-9e2e-6688c7657694 |
| Area=1857 | Joint1=1911 | Joint2=1956 | Joint3=1957 | Joint4=1912 | GUID=aa1b3690-abfc-47ac-906e-b406e2652b97 |
| Area=1858 | Joint1=1912 | Joint2=1957 | Joint3=1958 | Joint4=1913 | GUID=a35a899b-7081-4d98-803d-d982b1c369b6 |
| Area=1859 | Joint1=1913 | Joint2=1958 | Joint3=1959 | Joint4=1914 | GUID=f78a8e42-eaef-4e38-8487-a4de9a12c314 |
| Area=1860 | Joint1=1914 | Joint2=1959 | Joint3=1960 | Joint4=1915 | GUID=a8588001-7e6b-4a1b-89ea-0abcd1261531 |
| Area=1861 | Joint1=1915 | Joint2=1960 | Joint3=1961 | Joint4=1916 | GUID=2fef71c9-b918-42a9-ba00-5a48d7ac5622 |
| Area=1862 | Joint1=1916 | Joint2=1961 | Joint3=1962 | Joint4=1917 | GUID=3db5641a-f0cd-4f0b-bb10-384f2e41ffa0 |
| Area=1863 | Joint1=1917 | Joint2=1962 | Joint3=1963 | Joint4=1918 | GUID=18e2257e-6771-4080-b92f-be64f25fe636 |
| Area=1864 | Joint1=1918 | Joint2=1963 | Joint3=1964 | Joint4=1919 | GUID=c74f1571-0f48-4b6d-8f55-821eb9294aa3 |
| Area=1865 | Joint1=1919 | Joint2=1964 | Joint3=1965 | Joint4=1920 | GUID=f39f8916-d02c-4581-b8d6-a5b08e005cda |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=1866<br>ffe836b016e0 | Joint1=1920 | Joint2=1965 | Joint3=1966 | Joint4=1921 | GUID=a6586680-45a6-4cd5-a653-             |
| Area=1867<br>d2b70c16103a | Joint1=1921 | Joint2=1966 | Joint3=1967 | Joint4=1922 | GUID=4666448d-1926-4c55-b600-             |
| Area=1868<br>bb89b346829a | Joint1=1922 | Joint2=1967 | Joint3=1968 | Joint4=1923 | GUID=d3e84a21-b615-4deb-a26b-             |
| Area=1869<br>4240c901a95f | Joint1=1923 | Joint2=1968 | Joint3=1969 | Joint4=1924 | GUID=6921fc36-4de4-4327-9c04-             |
| Area=1870<br>2e4637726955 | Joint1=1924 | Joint2=1969 | Joint3=1970 | Joint4=1925 | GUID=e519e680-6256-4606-a1bd-             |
| Area=1871                 | Joint1=1925 | Joint2=1970 | Joint3=1971 | Joint4=1926 | GUID=c183a04e-7e41-4cd3-936c-e8df408ffea  |
| Area=1872<br>c04e934e8fda | Joint1=1926 | Joint2=1971 | Joint3=1972 | Joint4=1927 | GUID=b2692e9a-3714-4109-a4a9-             |
| Area=1873                 | Joint1=1927 | Joint2=1972 | Joint3=1973 | Joint4=1928 | GUID=0ff6009b-bfa3-447c-b03b-980ac98d58ee |
| Area=1874<br>17210538828d | Joint1=1928 | Joint2=1973 | Joint3=1974 | Joint4=1929 | GUID=3e2a7374-54a9-4fbd-8e89-             |
| Area=1875<br>a8443676a141 | Joint1=1929 | Joint2=1974 | Joint3=1975 | Joint4=1930 | GUID=5c4eabf9-fe68-441a-a814-             |
| Area=1876                 | Joint1=1930 | Joint2=1975 | Joint3=1976 | Joint4=1931 | GUID=f3ab725f-f984-4f19-a14c-5942e6c5f88e |
| Area=1877<br>3cdcd0437e52 | Joint1=1931 | Joint2=1976 | Joint3=1977 | Joint4=1932 | GUID=51f620e4-7cd3-40b9-aeae-             |
| Area=1878                 | Joint1=1932 | Joint2=1977 | Joint3=1978 | Joint4=1933 | GUID=f45568bc-27fe-460d-9aba-613d4c433fbc |
| Area=1879<br>7dc47c6d7cc6 | Joint1=1933 | Joint2=1978 | Joint3=1979 | Joint4=1934 | GUID=189f4d8b-92e9-437c-ae51-             |
| Area=1880<br>8e2df653997c | Joint1=1934 | Joint2=1979 | Joint3=1980 | Joint4=1935 | GUID=603f3273-14cd-410d-aa91-             |
| Area=1881                 | Joint1=1935 | Joint2=1980 | Joint3=1981 | Joint4=1936 | GUID=734d1527-9c2f-4ee7-9c7c-00f7d49d17cb |
| Area=1882<br>40337091d9ad | Joint1=1936 | Joint2=1981 | Joint3=1982 | Joint4=1937 | GUID=37119b95-0945-4dcd-8faa-             |
| Area=1883<br>5c3756b724d1 | Joint1=1937 | Joint2=1982 | Joint3=1983 | Joint4=1938 | GUID=7ec37f5d-2f7b-4877-8a81-             |
| Area=1884                 | Joint1=1938 | Joint2=1983 | Joint3=1984 | Joint4=1939 | GUID=db5aed15-d2fc-4596-97bf-5e491c84793f |
| Area=1885<br>8b13517443ec | Joint1=1939 | Joint2=1984 | Joint3=1985 | Joint4=1940 | GUID=3068e848-b9b4-4780-896d-             |
| Area=1886<br>10c50a8d8d93 | Joint1=1940 | Joint2=1985 | Joint3=1986 | Joint4=1941 | GUID=7185ec44-42de-43ef-9d98-             |
| Area=1887<br>a08ae98bec3f | Joint1=1941 | Joint2=1986 | Joint3=1987 | Joint4=1942 | GUID=4794c6b0-831d-4754-83e0-             |
| Area=1888                 | Joint1=1942 | Joint2=1987 | Joint3=1988 | Joint4=1943 | GUID=cd027b1d-a6ec-4022-b10f-8c352acfe0a0 |
| Area=1889<br>2ab97fbf5be3 | Joint1=1943 | Joint2=1988 | Joint3=1989 | Joint4=1944 | GUID=3c14833b-9314-440e-a081-             |
| Area=1890<br>d0f551d8d384 | Joint1=1944 | Joint2=1989 | Joint3=1990 | Joint4=1945 | GUID=db937837-02ec-43f8-be4b-             |
| Area=1891<br>62638be91fe2 | Joint1=1945 | Joint2=1990 | Joint3=1991 | Joint4=1946 | GUID=139c939b-512e-4871-b835-             |
| Area=1892<br>5d3237a93cae | Joint1=1946 | Joint2=1991 | Joint3=1992 | Joint4=1947 | GUID=3136ef2e-1e07-4e75-b22a-             |
| Area=1893<br>e0f83b6141e5 | Joint1=1947 | Joint2=1992 | Joint3=1993 | Joint4=1948 | GUID=339735d3-9095-466f-ae66-             |
| Area=1894                 | Joint1=1949 | Joint2=15   | Joint3=1994 | Joint4=1950 | GUID=b07aaf95-d75f-49eb-983c-fc04b757d2a1 |
| Area=1895<br>23bb2905cec5 | Joint1=1950 | Joint2=1994 | Joint3=1995 | Joint4=1951 | GUID=931ca168-4cc7-4ea2-8234-             |
| Area=1896<br>04355cb427d6 | Joint1=1951 | Joint2=1995 | Joint3=1996 | Joint4=1952 | GUID=896b54af-9a24-4973-b777-             |
| Area=1897                 | Joint1=1952 | Joint2=1996 | Joint3=1997 | Joint4=1953 | GUID=e4d0737e-78f9-4197-ae8f-eff14ab8743b |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=1898<br>87a8a00fdcc5 | Joint1=1953 | Joint2=1997 | Joint3=1998 | Joint4=1954 | GUID=d2e05e8a-21db-4804-bbcd-             |
| Area=1899<br>99dadb0542b  | Joint1=1954 | Joint2=1998 | Joint3=1999 | Joint4=1955 | GUID=10ac165a-086e-4547-8d64-             |
| Area=1900<br>75432d452381 | Joint1=1955 | Joint2=1999 | Joint3=2000 | Joint4=1956 | GUID=24f17b12-6371-468a-a4a9-             |
| Area=1901<br>e759eb906014 | Joint1=1956 | Joint2=2000 | Joint3=2001 | Joint4=1957 | GUID=10215572-3cb8-4ca5-bdd2-             |
| Area=1902<br>a9baf5797a96 | Joint1=1957 | Joint2=2001 | Joint3=2002 | Joint4=1958 | GUID=4da1b366-6a03-47aa-885e-             |
| Area=1903<br>bf7815b556cd | Joint1=1958 | Joint2=2002 | Joint3=2003 | Joint4=1959 | GUID=a6656eb9-8219-466a-b109-             |
| Area=1904<br>ca08f84593a8 | Joint1=1959 | Joint2=2003 | Joint3=2004 | Joint4=1960 | GUID=9a39ed2d-dcd1-4222-8429-             |
| Area=1905                 | Joint1=1960 | Joint2=2004 | Joint3=2005 | Joint4=1961 | GUID=33549805-e217-4942-b0ea-882f45fefdd4 |
| Area=1906<br>0a2961aab123 | Joint1=1961 | Joint2=2005 | Joint3=2006 | Joint4=1962 | GUID=62a34f3e-08e1-45e2-a666-             |
| Area=1907<br>d2eb05a1a9df | Joint1=1962 | Joint2=2006 | Joint3=2007 | Joint4=1963 | GUID=95bb486b-467d-45b3-bbd2-             |
| Area=1908<br>434a40c18e2f | Joint1=1963 | Joint2=2007 | Joint3=2008 | Joint4=1964 | GUID=e38b1f28-3071-4960-9704-             |
| Area=1909<br>705b9dd37e0f | Joint1=1964 | Joint2=2008 | Joint3=2009 | Joint4=1965 | GUID=345680a5-a6bc-4daa-a7f1-             |
| Area=1910<br>86609132c0c9 | Joint1=1965 | Joint2=2009 | Joint3=2010 | Joint4=1966 | GUID=ce55cb93-4548-4e26-8291-             |
| Area=1911                 | Joint1=1966 | Joint2=2010 | Joint3=2011 | Joint4=1967 | GUID=5a2ffcd7-9ccb-4f97-99a6-43bbe2855771 |
| Area=1912<br>db8668d07414 | Joint1=1967 | Joint2=2011 | Joint3=2012 | Joint4=1968 | GUID=394883a3-8180-4bf8-95a5-             |
| Area=1913<br>2b23c9e130e7 | Joint1=1968 | Joint2=2012 | Joint3=2013 | Joint4=1969 | GUID=a81a0374-7299-4d9d-b139-             |
| Area=1914<br>751c36fba44b | Joint1=1969 | Joint2=2013 | Joint3=2014 | Joint4=1970 | GUID=bac6b4b1-0c03-43a6-849a-             |
| Area=1915<br>273d6ad24c90 | Joint1=1970 | Joint2=2014 | Joint3=2015 | Joint4=1971 | GUID=c5e996a8-e118-4ca6-af3d-             |
| Area=1916<br>4603b373127a | Joint1=1971 | Joint2=2015 | Joint3=2016 | Joint4=1972 | GUID=9b5daf48-cb78-4a25-b8cb-             |
| Area=1917<br>89a46a5465a0 | Joint1=1972 | Joint2=2016 | Joint3=2017 | Joint4=1973 | GUID=a810d036-2f61-4da7-8ae0-             |
| Area=1918<br>e479dc1b4c76 | Joint1=1973 | Joint2=2017 | Joint3=2018 | Joint4=1974 | GUID=25914d8c-1534-45d2-9411-             |
| Area=1919<br>b16d7c542d3d | Joint1=1974 | Joint2=2018 | Joint3=2019 | Joint4=1975 | GUID=87118441-e30b-4ec3-93f6-             |
| Area=1920<br>6bededdab868 | Joint1=1975 | Joint2=2019 | Joint3=2020 | Joint4=1976 | GUID=876a27b6-4449-4cb1-8d1b-             |
| Area=1921<br>0735ee2a4e5a | Joint1=1976 | Joint2=2020 | Joint3=2021 | Joint4=1977 | GUID=ec0e6174-6fb8-4a0a-a7dd-             |
| Area=1922<br>53cd55402d50 | Joint1=1977 | Joint2=2021 | Joint3=2022 | Joint4=1978 | GUID=ce582ae1-0165-4afa-8ab5-             |
| Area=1923<br>554dcaba663b | Joint1=1978 | Joint2=2022 | Joint3=2023 | Joint4=1979 | GUID=c090d6ba-bc0e-4b5b-97fe-             |
| Area=1924                 | Joint1=1979 | Joint2=2023 | Joint3=2024 | Joint4=1980 | GUID=7b033f5c-fb80-4fca-91cb-a572ef0e19d7 |
| Area=1925                 | Joint1=1980 | Joint2=2024 | Joint3=2025 | Joint4=1981 | GUID=bf020810-c1bf-4760-b42d-88c37968731f |
| Area=1926<br>4181da2169f6 | Joint1=1981 | Joint2=2025 | Joint3=2026 | Joint4=1982 | GUID=cec293b3-8db7-47c1-b137-             |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=1927<br>b15e0e315103 | Joint1=1982 | Joint2=2026 | Joint3=2027 | Joint4=1983 | GUID=bec21e5c-ac4a-4e16-8dab-             |
| Area=1928<br>aed1371d01f0 | Joint1=1983 | Joint2=2027 | Joint3=2028 | Joint4=1984 | GUID=91d7366b-2970-4967-b53e-             |
| Area=1929<br>3084770fb3f3 | Joint1=1984 | Joint2=2028 | Joint3=2029 | Joint4=1985 | GUID=41a83b33-e2b9-4159-aec7-             |
| Area=1930                 | Joint1=1985 | Joint2=2029 | Joint3=2030 | Joint4=1986 | GUID=0c926044-8697-4f85-9f3e-34a5df55f043 |
| Area=1931<br>801501252556 | Joint1=1986 | Joint2=2030 | Joint3=2031 | Joint4=1987 | GUID=6ba30c99-a882-4624-bdc1-             |
| Area=1932<br>f85dd6ad7216 | Joint1=1987 | Joint2=2031 | Joint3=2032 | Joint4=1988 | GUID=1ba6a7de-71e2-4e1b-98cd-             |
| Area=1933<br>61625ad16471 | Joint1=1988 | Joint2=2032 | Joint3=2033 | Joint4=1989 | GUID=3831d388-61e6-4df0-9f96-             |
| Area=1934<br>9e0ad1f2d54c | Joint1=1989 | Joint2=2033 | Joint3=2034 | Joint4=1990 | GUID=9face95e-a58c-4199-a357-             |
| Area=1935<br>e68a262bfc8b | Joint1=1990 | Joint2=2034 | Joint3=2035 | Joint4=1991 | GUID=0c222a42-20f0-45b8-bd24-             |
| Area=1936<br>782b94ab109c | Joint1=1991 | Joint2=2035 | Joint3=2036 | Joint4=1992 | GUID=f5ad9968-d949-4b13-9c01-             |
| Area=1937                 | Joint1=1992 | Joint2=2036 | Joint3=4    | Joint4=1993 | GUID=b536e514-1c77-4e70-9754-3e4579627d66 |
| Area=1938                 | Joint1=2088 | Joint2=2089 | Joint3=2090 | Joint4=2091 | GUID=fe84bceb-992c-467f-b421-e754e98ecc70 |
| Area=1939                 | Joint1=2091 | Joint2=2090 | Joint3=2092 | Joint4=2093 | GUID=0526e848-c5b7-4f4a-acc0-42c2e9b79dfa |
| Area=1940                 | Joint1=2093 | Joint2=2092 | Joint3=2094 | Joint4=2095 | GUID=ef1ab07d-c5bf-46ab-887a-d816ef1dce41 |
| Area=1941                 | Joint1=2095 | Joint2=2094 | Joint3=2096 | Joint4=2097 | GUID=c5ae61bc-e38c-4836-aaef-a9e7b89f9f23 |
| Area=1942<br>6daea310726b | Joint1=2097 | Joint2=2096 | Joint3=2098 | Joint4=2099 | GUID=151720d7-bf03-4ca0-8e4f-             |
| Area=1943<br>7e7a10b86628 | Joint1=2099 | Joint2=2098 | Joint3=2100 | Joint4=2101 | GUID=5de6db98-4475-4351-8c92-             |
| Area=1944<br>ad1e615262eb | Joint1=2101 | Joint2=2100 | Joint3=2102 | Joint4=2103 | GUID=e116a2b2-75b3-46da-8826-             |
| Area=1945                 | Joint1=2103 | Joint2=2102 | Joint3=2104 | Joint4=2105 | GUID=b71b424c-605b-43da-964c-b20fa3624aff |
| Area=1946                 | Joint1=2105 | Joint2=2104 | Joint3=2106 | Joint4=2107 | GUID=5bc3a4e4-ffc9-4084-aada-cd3cef2d42e9 |
| Area=1947<br>930eeb887099 | Joint1=2107 | Joint2=2106 | Joint3=2108 | Joint4=2109 | GUID=e9d5513f-7fcb-4cbb-81ec-             |
| Area=1948<br>d15d07f2ebb7 | Joint1=2109 | Joint2=2108 | Joint3=2110 | Joint4=2111 | GUID=5bb9dc4e-ea3d-44c2-ba1f-             |
| Area=1949<br>e310643a616b | Joint1=2111 | Joint2=2110 | Joint3=2112 | Joint4=2113 | GUID=95cce740-30c0-4bda-a634-             |
| Area=1950                 | Joint1=2113 | Joint2=2112 | Joint3=2114 | Joint4=2115 | GUID=fa0ff764-f6ef-4dcb-8894-f61226f9a4ed |
| Area=1951                 | Joint1=2115 | Joint2=2114 | Joint3=2116 | Joint4=2117 | GUID=32cc42b1-ff35-4155-ad7c-c0da88e9b8d6 |
| Area=1952                 | Joint1=2117 | Joint2=2116 | Joint3=2118 | Joint4=2119 | GUID=ae152080-d8ff-4f2b-a603-36c67c47ef79 |
| Area=1953<br>bd387e327e76 | Joint1=2119 | Joint2=2118 | Joint3=2120 | Joint4=2121 | GUID=7b76acb8-6cd4-40e2-8d24-             |
| Area=1954<br>214e75cb22f0 | Joint1=2121 | Joint2=2120 | Joint3=2122 | Joint4=2123 | GUID=8a1325b7-d5e9-4351-b4e1-             |
| Area=1955<br>daf7fb052abd | Joint1=2123 | Joint2=2122 | Joint3=2124 | Joint4=2125 | GUID=013d7424-0dc3-4046-b888-             |
| Area=1956<br>644eb87ba1be | Joint1=2125 | Joint2=2124 | Joint3=2126 | Joint4=2127 | GUID=39642d81-39da-47e3-be59-             |
| Area=1957<br>26334978a504 | Joint1=2127 | Joint2=2126 | Joint3=2128 | Joint4=2129 | GUID=ae9c7719-c2be-4036-b862-             |
| Area=1958                 | Joint1=2129 | Joint2=2128 | Joint3=2130 | Joint4=2131 | GUID=cf90e9e8-65ce-400a-8288-44ad0ffe6f99 |
| Area=1959                 | Joint1=2131 | Joint2=2130 | Joint3=2132 | Joint4=2133 | GUID=e2a6ecfa-59a8-46c5-a85e-7065c5caae1f |
| Area=1960                 | Joint1=2133 | Joint2=2132 | Joint3=2134 | Joint4=2135 | GUID=b8a89342-6f9d-4335-b85a-7157dd3ff8bf |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=1961<br>35cee4c7a8fa | Joint1=2135 | Joint2=2134 | Joint3=2136 | Joint4=2137 | GUID=ac483249-70f1-40b7-b1d9-             |
| Area=1962<br>cd6910a22745 | Joint1=2137 | Joint2=2136 | Joint3=2138 | Joint4=2139 | GUID=aca66a67-28ef-4e5d-ba04-             |
| Area=1963<br>14a6e78e4fad | Joint1=2139 | Joint2=2138 | Joint3=2140 | Joint4=2141 | GUID=be9963ca-6ac0-4f6e-983d-             |
| Area=1964                 | Joint1=2141 | Joint2=2140 | Joint3=2142 | Joint4=2143 | GUID=bc362ee9-bebf-4fd2-ae16-87c3a8a9fd7d |
| Area=1965                 | Joint1=2143 | Joint2=2142 | Joint3=2144 | Joint4=2145 | GUID=826e254f-fbd2-45cb-9513-fc9dd68f6bc3 |
| Area=1966                 | Joint1=2145 | Joint2=2144 | Joint3=2146 | Joint4=2147 | GUID=b23a0f56-6e07-40a6-abd8-b463c0f47fe0 |
| Area=1967                 | Joint1=2147 | Joint2=2146 | Joint3=2148 | Joint4=2149 | GUID=8b2a2345-f455-414b-b4fb-f3fc7848752d |
| Area=1968<br>88dc73b880ab | Joint1=2149 | Joint2=2148 | Joint3=2150 | Joint4=2151 | GUID=1f36f39a-a536-489b-94d4-             |
| Area=1969                 | Joint1=2151 | Joint2=2150 | Joint3=2152 | Joint4=2153 | GUID=902899fc-78af-40f1-ab78-0ed5ae38d78c |
| Area=1970<br>e7acd8801a6f | Joint1=2153 | Joint2=2152 | Joint3=2154 | Joint4=2155 | GUID=375d293b-2ee0-48ba-bb8e-             |
| Area=1971<br>a9b59f91b4be | Joint1=2155 | Joint2=2154 | Joint3=2156 | Joint4=2157 | GUID=b363ab7d-ac83-411d-95a3-             |
| Area=1972                 | Joint1=2157 | Joint2=2156 | Joint3=2158 | Joint4=2159 | GUID=a964ebec-0bda-49e5-bc84-1802f9ca9f0c |
| Area=1973<br>e85b6f69d489 | Joint1=2159 | Joint2=2158 | Joint3=2160 | Joint4=2161 | GUID=d56e3b6f-8b88-4138-880b-             |
| Area=1974<br>cca34a9b5c60 | Joint1=2161 | Joint2=2160 | Joint3=2162 | Joint4=2163 | GUID=c663ee4e-097f-412b-adab-             |
| Area=1975<br>cc0fed03e5b4 | Joint1=2163 | Joint2=2162 | Joint3=2164 | Joint4=2165 | GUID=cd8827cb-b977-4b43-9b48-             |
| Area=1976                 | Joint1=2165 | Joint2=2164 | Joint3=2166 | Joint4=2167 | GUID=303d144b-1331-46f8-a224-f34eb55feac0 |
| Area=1977<br>e61d40533b3b | Joint1=2167 | Joint2=2166 | Joint3=2168 | Joint4=2169 | GUID=9dac8167-69d2-453f-bed5-             |
| Area=1978<br>9786ae88638a | Joint1=2169 | Joint2=2168 | Joint3=2170 | Joint4=2171 | GUID=c6e0a881-3c48-4bbc-91a8-             |
| Area=1979<br>5711b61ceecc | Joint1=2171 | Joint2=2170 | Joint3=2172 | Joint4=2173 | GUID=9995b70d-75e6-4a4b-bc82-             |
| Area=1980                 | Joint1=2173 | Joint2=2172 | Joint3=2174 | Joint4=2175 | GUID=0b632f5c-9a52-4342-95f6-af4410977ee0 |
| Area=1981                 | Joint1=2175 | Joint2=2174 | Joint3=2176 | Joint4=2086 | GUID=31b9ab37-b83d-4faa-bf13-3d1effa78c57 |
| Area=1982<br>840d76656f72 | Joint1=2089 | Joint2=2177 | Joint3=2178 | Joint4=2090 | GUID=45b1a101-2f7d-45c4-a8db-             |
| Area=1983<br>c6cbb85955a  | Joint1=2090 | Joint2=2178 | Joint3=2179 | Joint4=2092 | GUID=f322f239-0d88-4d65-9a74-             |
| Area=1984<br>e49d79d5d0a6 | Joint1=2092 | Joint2=2179 | Joint3=2180 | Joint4=2094 | GUID=ecb8b0fc-a525-4d0f-81a4-             |
| Area=1985<br>d38b1654a35b | Joint1=2094 | Joint2=2180 | Joint3=2181 | Joint4=2096 | GUID=dc34fb68-f784-4953-b9e7-             |
| Area=1986<br>94af87006aa1 | Joint1=2096 | Joint2=2181 | Joint3=2182 | Joint4=2098 | GUID=88c854d7-cea3-4eec-a11b-             |
| Area=1987<br>e40a28ad2ba0 | Joint1=2098 | Joint2=2182 | Joint3=2183 | Joint4=2100 | GUID=a53873f2-5518-44dc-80fd-             |
| Area=1988                 | Joint1=2100 | Joint2=2183 | Joint3=2184 | Joint4=2102 | GUID=df81315c-5a12-4649-8f03-fe3408ca96bb |
| Area=1989<br>7086e8bea3a3 | Joint1=2102 | Joint2=2184 | Joint3=2185 | Joint4=2104 | GUID=3ed195ef-0577-4906-9dfa-             |
| Area=1990                 | Joint1=2104 | Joint2=2185 | Joint3=2186 | Joint4=2106 | GUID=96681455-af06-462b-a44c-e2d96ffe334c |
| Area=1991<br>f8dc230aedd6 | Joint1=2106 | Joint2=2186 | Joint3=2187 | Joint4=2108 | GUID=f0a11964-acd6-43d6-b3d8-             |
| Area=1992<br>1176b3e95bf9 | Joint1=2108 | Joint2=2187 | Joint3=2188 | Joint4=2110 | GUID=96e065e1-7753-4319-9c76-             |
| Area=1993<br>9ceb378a993e | Joint1=2110 | Joint2=2188 | Joint3=2189 | Joint4=2112 | GUID=2ed48976-d4f0-4008-94b5-             |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=1994<br>884f2eb9bbba | Joint1=2112 | Joint2=2189 | Joint3=2190 | Joint4=2114 | GUID=d844b8d4-fbd8-449b-8997-             |
| Area=1995<br>649f6e657bed | Joint1=2114 | Joint2=2190 | Joint3=2191 | Joint4=2116 | GUID=3d645ec6-650e-4c9d-82b2-             |
| Area=1996                 | Joint1=2116 | Joint2=2191 | Joint3=2192 | Joint4=2118 | GUID=7d548048-5ae8-4fd4-81df-5d05a716fa7c |
| Area=1997                 | Joint1=2118 | Joint2=2192 | Joint3=2193 | Joint4=2120 | GUID=af9719b2-f06e-4bea-8b05-f92fdc24ca27 |
| Area=1998<br>a40de4266072 | Joint1=2120 | Joint2=2193 | Joint3=2194 | Joint4=2122 | GUID=712b6b14-5a1a-44a5-bf5b-             |
| Area=1999<br>c407b62aeaec | Joint1=2122 | Joint2=2194 | Joint3=2195 | Joint4=2124 | GUID=df109693-eeec-4695-be2f-             |
| Area=2000<br>b8c9a3573d2b | Joint1=2124 | Joint2=2195 | Joint3=2196 | Joint4=2126 | GUID=002d4816-21e9-49bc-b7f5-             |
| Area=2001                 | Joint1=2126 | Joint2=2196 | Joint3=2197 | Joint4=2128 | GUID=ffbea35d-26bf-4194-b357-cb5afc58677f |
| Area=2002<br>94db6440051a | Joint1=2128 | Joint2=2197 | Joint3=2198 | Joint4=2130 | GUID=ebaaa9f5-a3c0-4cef-ba80-             |
| Area=2003<br>44501a751b4d | Joint1=2130 | Joint2=2198 | Joint3=2199 | Joint4=2132 | GUID=7ef1270d-487d-4e04-8a23-             |
| Area=2004<br>458e249993e3 | Joint1=2132 | Joint2=2199 | Joint3=2200 | Joint4=2134 | GUID=b76dd40f-e18e-43ed-acb3-             |
| Area=2005                 | Joint1=2134 | Joint2=2200 | Joint3=2201 | Joint4=2136 | GUID=6458f392-abab-442a-ad91-8f3f973198f9 |
| Area=2006<br>2e4b6aead968 | Joint1=2136 | Joint2=2201 | Joint3=2202 | Joint4=2138 | GUID=3de54905-0cab-47ed-bc7e-             |
| Area=2007<br>298440ea97d4 | Joint1=2138 | Joint2=2202 | Joint3=2203 | Joint4=2140 | GUID=a555b382-552b-4195-95f6-             |
| Area=2008                 | Joint1=2140 | Joint2=2203 | Joint3=2204 | Joint4=2142 | GUID=3496bc53-d329-412e-99ee-6fc7feed2f8c |
| Area=2009<br>080bd64508b9 | Joint1=2142 | Joint2=2204 | Joint3=2205 | Joint4=2144 | GUID=d3e34cc3-03fd-469a-bc85-             |
| Area=2010<br>d09248dd4bb8 | Joint1=2144 | Joint2=2205 | Joint3=2206 | Joint4=2146 | GUID=13173ea7-9a7a-45f6-9609-             |
| Area=2011<br>0a20e9ea7d6b | Joint1=2146 | Joint2=2206 | Joint3=2207 | Joint4=2148 | GUID=7d455814-c469-4bf6-87b8-             |
| Area=2012<br>3dde9a113977 | Joint1=2148 | Joint2=2207 | Joint3=2208 | Joint4=2150 | GUID=9f4dc7ad-8d12-4ad3-9779-             |
| Area=2013<br>5091b239a095 | Joint1=2150 | Joint2=2208 | Joint3=2209 | Joint4=2152 | GUID=6c9f86d0-f79b-459c-9576-             |
| Area=2014<br>f46ecf33ad8a | Joint1=2152 | Joint2=2209 | Joint3=2210 | Joint4=2154 | GUID=3a642eae-a246-4b62-bbba-             |
| Area=2015                 | Joint1=2154 | Joint2=2210 | Joint3=2211 | Joint4=2156 | GUID=26406f72-587b-4f18-a45b-2fdaeb2b486e |
| Area=2016<br>186af0c0e172 | Joint1=2156 | Joint2=2211 | Joint3=2212 | Joint4=2158 | GUID=0e2a0159-4bd9-487d-bc6e-             |
| Area=2017<br>84604d86aff8 | Joint1=2158 | Joint2=2212 | Joint3=2213 | Joint4=2160 | GUID=3eead14c-b6ea-4724-9b5b-             |
| Area=2018                 | Joint1=2160 | Joint2=2213 | Joint3=2214 | Joint4=2162 | GUID=a004bf15-8147-4b2e-9cf2-486d530ef720 |
| Area=2019                 | Joint1=2162 | Joint2=2214 | Joint3=2215 | Joint4=2164 | GUID=bfc7fc1-a1d2-450e-8844-df78ad9b4e2b  |
| Area=2020<br>61963ed1eb64 | Joint1=2164 | Joint2=2215 | Joint3=2216 | Joint4=2166 | GUID=948d5eea-b9a4-4b2d-80f6-             |
| Area=2021<br>b9baefc22ab9 | Joint1=2166 | Joint2=2216 | Joint3=2217 | Joint4=2168 | GUID=50a82e0b-97bb-4ea8-a4ae-             |
| Area=2022<br>add06478598f | Joint1=2168 | Joint2=2217 | Joint3=2218 | Joint4=2170 | GUID=3ade2394-74d2-4145-8071-             |
| Area=2023<br>2c8d09469147 | Joint1=2170 | Joint2=2218 | Joint3=2219 | Joint4=2172 | GUID=e395d723-3302-44e6-aa61-             |
| Area=2024<br>2b48d05ce594 | Joint1=2172 | Joint2=2219 | Joint3=2220 | Joint4=2174 | GUID=d9b93d5a-cad7-4c60-b2ee-             |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=2025<br>83862a958164 | Joint1=2174 | Joint2=2220 | Joint3=2221 | Joint4=2176 | GUID=315d7e07-4f77-47cd-8f3e-             |
| Area=2026<br>47c3d7e95222 | Joint1=2177 | Joint2=2222 | Joint3=2223 | Joint4=2178 | GUID=3860e3c8-9b27-4e6c-a7a6-             |
| Area=2027<br>5090007cc6ee | Joint1=2178 | Joint2=2223 | Joint3=2224 | Joint4=2179 | GUID=6897a1a0-ec0b-48f9-9e8a-             |
| Area=2028<br>941945ba0ee5 | Joint1=2179 | Joint2=2224 | Joint3=2225 | Joint4=2180 | GUID=b7872ede-9b2e-496f-a740-             |
| Area=2029                 | Joint1=2180 | Joint2=2225 | Joint3=2226 | Joint4=2181 | GUID=af676447-1f9b-45ef-930e-64d84b8f0b19 |
| Area=2030<br>602c74c9ee62 | Joint1=2181 | Joint2=2226 | Joint3=2227 | Joint4=2182 | GUID=e81739d2-bc0e-4b45-929b-             |
| Area=2031<br>dfa5b56ef416 | Joint1=2182 | Joint2=2227 | Joint3=2228 | Joint4=2183 | GUID=439ed35a-7375-4906-a5c7-             |
| Area=2032<br>3f1dce0f5a43 | Joint1=2183 | Joint2=2228 | Joint3=2229 | Joint4=2184 | GUID=82306715-d128-4582-9cbd-             |
| Area=2033<br>8babfa12036e | Joint1=2184 | Joint2=2229 | Joint3=2230 | Joint4=2185 | GUID=3415f76c-d318-475a-8268-             |
| Area=2034                 | Joint1=2185 | Joint2=2230 | Joint3=2231 | Joint4=2186 | GUID=c4fbd155-bd54-42f1-b754-f489ce256676 |
| Area=2035<br>07b1d5428dfa | Joint1=2186 | Joint2=2231 | Joint3=2232 | Joint4=2187 | GUID=0ecb32cb-9192-4b02-97d6-             |
| Area=2036<br>a32217ac0135 | Joint1=2187 | Joint2=2232 | Joint3=2233 | Joint4=2188 | GUID=ccc8c8ba-f9c2-43be-b1e8-             |
| Area=2037<br>6942515c6959 | Joint1=2188 | Joint2=2233 | Joint3=2234 | Joint4=2189 | GUID=fd4aaf39-b6db-498e-a019-             |
| Area=2038<br>0f3c76492264 | Joint1=2189 | Joint2=2234 | Joint3=2235 | Joint4=2190 | GUID=99530370-e424-4cde-99d9-             |
| Area=2039<br>a72579234912 | Joint1=2190 | Joint2=2235 | Joint3=2236 | Joint4=2191 | GUID=3783efbc-899b-4e89-9b0d-             |
| Area=2040<br>b3994b707276 | Joint1=2191 | Joint2=2236 | Joint3=2237 | Joint4=2192 | GUID=0f1d084c-9b0d-48b3-a0ac-             |
| Area=2041<br>d07f18629bd8 | Joint1=2192 | Joint2=2237 | Joint3=2238 | Joint4=2193 | GUID=7ab313f6-1065-46d9-a626-             |
| Area=2042<br>8317684523ab | Joint1=2193 | Joint2=2238 | Joint3=2239 | Joint4=2194 | GUID=efb03cc0-9a39-44a5-aa70-             |
| Area=2043<br>d78164ed4b70 | Joint1=2194 | Joint2=2239 | Joint3=2240 | Joint4=2195 | GUID=64874ef8-cc04-4b8d-9f6b-             |
| Area=2044                 | Joint1=2195 | Joint2=2240 | Joint3=2241 | Joint4=2196 | GUID=ceff8a28-4412-4f74-9cd1-86594d5e0709 |
| Area=2045                 | Joint1=2196 | Joint2=2241 | Joint3=2242 | Joint4=2197 | GUID=0492202a-87c3-4ff6-bf72-3d459387c4da |
| Area=2046                 | Joint1=2197 | Joint2=2242 | Joint3=2243 | Joint4=2198 | GUID=f24fa14b-bfca-4c32-a601-c045f5dbe063 |
| Area=2047<br>e9f710077a4f | Joint1=2198 | Joint2=2243 | Joint3=2244 | Joint4=2199 | GUID=62acd4bb-8148-4b2e-ae8a-             |
| Area=2048<br>41a00ea52bf5 | Joint1=2199 | Joint2=2244 | Joint3=2245 | Joint4=2200 | GUID=380d2352-0334-4c7f-ac1b-             |
| Area=2049<br>d8e368d31774 | Joint1=2200 | Joint2=2245 | Joint3=2246 | Joint4=2201 | GUID=e7dc5796-9362-440c-967c-             |
| Area=2050<br>51cbe31dc682 | Joint1=2201 | Joint2=2246 | Joint3=2247 | Joint4=2202 | GUID=d88506a3-a69e-4f45-9257-             |
| Area=2051<br>55dd90a96e38 | Joint1=2202 | Joint2=2247 | Joint3=2248 | Joint4=2203 | GUID=029a095c-fba6-4aac-b077-             |
| Area=2052<br>c091531d49bc | Joint1=2203 | Joint2=2248 | Joint3=2249 | Joint4=2204 | GUID=58fbc970-5e1e-4eed-8d7f-             |
| Area=2053<br>3c2145efb8cc | Joint1=2204 | Joint2=2249 | Joint3=2250 | Joint4=2205 | GUID=1bc3b15d-1b75-4c7e-8ecc-             |
| Area=2054<br>9fcd4b680b42 | Joint1=2205 | Joint2=2250 | Joint3=2251 | Joint4=2206 | GUID=de37d9fb-917d-4e24-8cd7-             |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=2055<br>f302d5d10a6c | Joint1=2206 | Joint2=2251 | Joint3=2252 | Joint4=2207 | GUID=aef105b7-ace2-4e64-a901-             |
| Area=2056<br>54b624f49191 | Joint1=2207 | Joint2=2252 | Joint3=2253 | Joint4=2208 | GUID=2b315e38-d16b-4bfe-b00e-             |
| Area=2057<br>cb0c910f73d4 | Joint1=2208 | Joint2=2253 | Joint3=2254 | Joint4=2209 | GUID=15202224-0965-4fd5-b11d-             |
| Area=2058                 | Joint1=2209 | Joint2=2254 | Joint3=2255 | Joint4=2210 | GUID=d699109c-15c7-4aa2-bfc2-de374cf9d19a |
| Area=2059<br>a804b073990e | Joint1=2210 | Joint2=2255 | Joint3=2256 | Joint4=2211 | GUID=2d9a477c-c356-43f0-977f-             |
| Area=2060                 | Joint1=2211 | Joint2=2256 | Joint3=2257 | Joint4=2212 | GUID=8fe2cfc6-57a3-4b6f-8b54-35477c2d5c42 |
| Area=2061<br>ce4542b99b99 | Joint1=2212 | Joint2=2257 | Joint3=2258 | Joint4=2213 | GUID=750d9d91-b26b-4574-b4c0-             |
| Area=2062<br>2be5b71a29e2 | Joint1=2213 | Joint2=2258 | Joint3=2259 | Joint4=2214 | GUID=610fa419-be3e-4ae3-8834-             |
| Area=2063<br>7ba957084bcc | Joint1=2214 | Joint2=2259 | Joint3=2260 | Joint4=2215 | GUID=6a690c2b-496c-4ee3-b15f-             |
| Area=2064<br>4d3befd9a3e4 | Joint1=2215 | Joint2=2260 | Joint3=2261 | Joint4=2216 | GUID=ce29448e-8e80-4be3-9954-             |
| Area=2065<br>ce20a2816a98 | Joint1=2216 | Joint2=2261 | Joint3=2262 | Joint4=2217 | GUID=966e21ee-8edb-460f-9a78-             |
| Area=2066<br>c88bc32545eb | Joint1=2217 | Joint2=2262 | Joint3=2263 | Joint4=2218 | GUID=65b3449d-d060-46af-983a-             |
| Area=2067                 | Joint1=2218 | Joint2=2263 | Joint3=2264 | Joint4=2219 | GUID=55a06fc0-df7f-45fc-9c03-366a05f66dcc |
| Area=2068<br>9b83d87e09bb | Joint1=2219 | Joint2=2264 | Joint3=2265 | Joint4=2220 | GUID=86387b0d-e84d-412c-b8b2-             |
| Area=2069<br>2eed4cd27634 | Joint1=2220 | Joint2=2265 | Joint3=2266 | Joint4=2221 | GUID=a67b83c8-36a8-465c-afde-             |
| Area=2070<br>5dd232d9c746 | Joint1=2222 | Joint2=2267 | Joint3=2268 | Joint4=2223 | GUID=90b22d22-284d-426b-b439-             |
| Area=2071<br>f08a5d1b228a | Joint1=2223 | Joint2=2268 | Joint3=2269 | Joint4=2224 | GUID=64f1340d-0e5b-4d5d-8e32-             |
| Area=2072                 | Joint1=2224 | Joint2=2269 | Joint3=2270 | Joint4=2225 | GUID=3dca271d-d9da-4d63-93ff-8569d9840afc |
| Area=2073                 | Joint1=2225 | Joint2=2270 | Joint3=2271 | Joint4=2226 | GUID=ed285f2c-39c7-4b84-9b50-81a6f208c02c |
| Area=2074                 | Joint1=2226 | Joint2=2271 | Joint3=2272 | Joint4=2227 | GUID=1241b09f-c498-4128-af5d-f841825213f8 |
| Area=2075<br>3d1607b1156d | Joint1=2227 | Joint2=2272 | Joint3=2273 | Joint4=2228 | GUID=0ade2d61-e488-468d-8a01-             |
| Area=2076<br>c8a7067c9ee5 | Joint1=2228 | Joint2=2273 | Joint3=2274 | Joint4=2229 | GUID=6128e440-cd40-4716-8387-             |
| Area=2077                 | Joint1=2229 | Joint2=2274 | Joint3=2275 | Joint4=2230 | GUID=b282889d-d508-4b11-bc6f-14019cff43ff |
| Area=2078                 | Joint1=2230 | Joint2=2275 | Joint3=2276 | Joint4=2231 | GUID=a273f577-fab4-4e74-9e96-d2f7cbe715f4 |
| Area=2079<br>d7298dd49ec1 | Joint1=2231 | Joint2=2276 | Joint3=2277 | Joint4=2232 | GUID=714cc674-bf57-4ba0-ad4d-             |
| Area=2080                 | Joint1=2232 | Joint2=2277 | Joint3=2278 | Joint4=2233 | GUID=0a69cf65-5b7c-472d-88b6-c4029c01f9ee |
| Area=2081<br>1f49d369dd06 | Joint1=2233 | Joint2=2278 | Joint3=2279 | Joint4=2234 | GUID=5114955f-7b11-473a-886a-             |
| Area=2082<br>be41fd9b0621 | Joint1=2234 | Joint2=2279 | Joint3=2280 | Joint4=2235 | GUID=7f9e0169-edb6-4aa0-8cd8-             |
| Area=2083<br>9a18006324cd | Joint1=2235 | Joint2=2280 | Joint3=2281 | Joint4=2236 | GUID=bb1c1a3b-ee7f-4fcd-812b-             |
| Area=2084                 | Joint1=2236 | Joint2=2281 | Joint3=2282 | Joint4=2237 | GUID=bf2990cf-375e-4d89-966f-c22b25695eff |
| Area=2085<br>b3d72f9788f4 | Joint1=2237 | Joint2=2282 | Joint3=2283 | Joint4=2238 | GUID=adeec59b-17ee-4c8d-bed5-             |
| Area=2086<br>46b3a16f3ac5 | Joint1=2238 | Joint2=2283 | Joint3=2284 | Joint4=2239 | GUID=ab59a6a9-1ba8-43fc-8a73-             |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=2087 | Joint1=2239 | Joint2=2284 | Joint3=2285 | Joint4=2240 | GUID=13f5d6ad-b74b-4adc-885a-b091ca2560c0 |
| Area=2088 | Joint1=2240 | Joint2=2285 | Joint3=2286 | Joint4=2241 | GUID=07748583-ac86-43fd-9286-0cafdfadf880 |
| Area=2089 | Joint1=2241 | Joint2=2286 | Joint3=2287 | Joint4=2242 | GUID=17e516d8-d126-4323-8d35-9b73d3b6aec4 |
| Area=2090 | Joint1=2242 | Joint2=2287 | Joint3=2288 | Joint4=2243 | GUID=c4cbc243-2bf5-4bcf-8c38-79bbcec62133 |
| Area=2091 | Joint1=2243 | Joint2=2288 | Joint3=2289 | Joint4=2244 | GUID=98583c9c-78c7-49c3-ad67-fc03716822a6 |
| Area=2092 | Joint1=2244 | Joint2=2289 | Joint3=2290 | Joint4=2245 | GUID=4b2d82d9-b6f9-43d2-930f-6ed7d8e48d68 |
| Area=2093 | Joint1=2245 | Joint2=2290 | Joint3=2291 | Joint4=2246 | GUID=3b09447e-8e3c-4226-9e6d-8494bde4da1  |
| Area=2094 | Joint1=2246 | Joint2=2291 | Joint3=2292 | Joint4=2247 | GUID=2132aede-6304-4e5c-bb86-536597294ec9 |
| Area=2095 | Joint1=2247 | Joint2=2292 | Joint3=2293 | Joint4=2248 | GUID=e94d5358-0938-4d48-bc19-34714e65f5ca |
| Area=2096 | Joint1=2248 | Joint2=2293 | Joint3=2294 | Joint4=2249 | GUID=0c73dced-aa80-41c1-9db3-95e8ed73c832 |
| Area=2097 | Joint1=2249 | Joint2=2294 | Joint3=2295 | Joint4=2250 | GUID=1bb9ecf4-1169-44ba-9776-8be374d1fa3a |
| Area=2098 | Joint1=2250 | Joint2=2295 | Joint3=2296 | Joint4=2251 | GUID=e1f14fa8-525e-42b2-a294-063b798796e5 |
| Area=2099 | Joint1=2251 | Joint2=2296 | Joint3=2297 | Joint4=2252 | GUID=72a4f322-c338-45bb-a534-10a97b4af55f |
| Area=2100 | Joint1=2252 | Joint2=2297 | Joint3=2298 | Joint4=2253 | GUID=53f626d9-e18c-4689-a2e7-6503c64b82c4 |
| Area=2101 | Joint1=2253 | Joint2=2298 | Joint3=2299 | Joint4=2254 | GUID=38233c98-9110-41dc-b8ff-5597c70f4ae0 |
| Area=2102 | Joint1=2254 | Joint2=2299 | Joint3=2300 | Joint4=2255 | GUID=f6c1c5d7-d6ef-4348-b022-3f2bedcf7057 |
| Area=2103 | Joint1=2255 | Joint2=2300 | Joint3=2301 | Joint4=2256 | GUID=46532aca-3fa2-4578-94de-e54c66738bfb |
| Area=2104 | Joint1=2256 | Joint2=2301 | Joint3=2302 | Joint4=2257 | GUID=5aef209b-83ef-44a0-aca7-0f978a787307 |
| Area=2105 | Joint1=2257 | Joint2=2302 | Joint3=2303 | Joint4=2258 | GUID=da2595a6-81ca-4187-b4ab-db09a5b6d0d7 |
| Area=2106 | Joint1=2258 | Joint2=2303 | Joint3=2304 | Joint4=2259 | GUID=028ae409-ec7a-4c33-9d3b-c6dfb1540868 |
| Area=2107 | Joint1=2259 | Joint2=2304 | Joint3=2305 | Joint4=2260 | GUID=17400cba-1c95-4996-a8e7-87f309385ff0 |
| Area=2108 | Joint1=2260 | Joint2=2305 | Joint3=2306 | Joint4=2261 | GUID=8e09e258-25bc-4b56-84db-1c24ee28738d |
| Area=2109 | Joint1=2261 | Joint2=2306 | Joint3=2307 | Joint4=2262 | GUID=2ee4f35d-ae6a-4486-9580-d13f65e83487 |
| Area=2110 | Joint1=2262 | Joint2=2307 | Joint3=2308 | Joint4=2263 | GUID=e5d4a926-89ff-4cfc-8572-edc0f6882cf3 |
| Area=2111 | Joint1=2263 | Joint2=2308 | Joint3=2309 | Joint4=2264 | GUID=80e33797-6c0e-4a89-b4be-5b099ad0d0d6 |
| Area=2112 | Joint1=2264 | Joint2=2309 | Joint3=2310 | Joint4=2265 | GUID=c2750366-0632-411f-ab25-198b61f42277 |
| Area=2113 | Joint1=2265 | Joint2=2310 | Joint3=2311 | Joint4=2266 | GUID=10f68af2-d930-4375-a3d7-7348833a42aa |
| Area=2114 | Joint1=2267 | Joint2=2312 | Joint3=2313 | Joint4=2268 | GUID=4f26a3dc-e249-4373-bb83-c83f52ad6363 |
| Area=2115 | Joint1=2268 | Joint2=2313 | Joint3=2314 | Joint4=2269 | GUID=f57bd6c3-134e-4824-9027-d22a331e724e |
| Area=2116 | Joint1=2269 | Joint2=2314 | Joint3=2315 | Joint4=2270 | GUID=5cc4f472-b57c-497b-a50b-aabef35d6c57 |
| Area=2117 | Joint1=2270 | Joint2=2315 | Joint3=2316 | Joint4=2271 | GUID=46e1c88e-fe02-4b72-9b75-7eae0e057d36 |
| Area=2118 | Joint1=2271 | Joint2=2316 | Joint3=2317 | Joint4=2272 | GUID=80ed6d40-2bfc-4d97-9f0e-103aa35324ec |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=2119<br>6fc07f0b1d0e | Joint1=2272 | Joint2=2317 | Joint3=2318 | Joint4=2273 | GUID=07a71634-3192-4c81-a978-             |
| Area=2120<br>8cd6a20cc9ae | Joint1=2273 | Joint2=2318 | Joint3=2319 | Joint4=2274 | GUID=a63e5eec-d3c7-4255-b91d-             |
| Area=2121<br>88d653443718 | Joint1=2274 | Joint2=2319 | Joint3=2320 | Joint4=2275 | GUID=bd0de811-3516-4372-8e24-             |
| Area=2122<br>e037f3bf4431 | Joint1=2275 | Joint2=2320 | Joint3=2321 | Joint4=2276 | GUID=dd3ab039-e673-49c3-b8c3-             |
| Area=2123                 | Joint1=2276 | Joint2=2321 | Joint3=2322 | Joint4=2277 | GUID=f1b51587-0e8f-41ce-95ba-ce952d92448f |
| Area=2124                 | Joint1=2277 | Joint2=2322 | Joint3=2323 | Joint4=2278 | GUID=ff2f2430-055e-4c6b-aa44-037437b2dd29 |
| Area=2125<br>317c7e35db12 | Joint1=2278 | Joint2=2323 | Joint3=2324 | Joint4=2279 | GUID=5c9a8107-9fb4-43c6-9f09-             |
| Area=2126<br>199c0c3ca3b5 | Joint1=2279 | Joint2=2324 | Joint3=2325 | Joint4=2280 | GUID=ee62620e-ad10-46dd-a65b-             |
| Area=2127                 | Joint1=2280 | Joint2=2325 | Joint3=2326 | Joint4=2281 | GUID=3f7971cc-5375-4e04-bfc7-92aadaa034f4 |
| Area=2128<br>247d13c63462 | Joint1=2281 | Joint2=2326 | Joint3=2327 | Joint4=2282 | GUID=89534c7f-719e-49ea-8b1d-             |
| Area=2129<br>7b97fca80459 | Joint1=2282 | Joint2=2327 | Joint3=2328 | Joint4=2283 | GUID=64ca937c-8ed2-4931-bf69-             |
| Area=2130<br>e407b8e66886 | Joint1=2283 | Joint2=2328 | Joint3=2329 | Joint4=2284 | GUID=45756352-3148-4fd8-8907-             |
| Area=2131<br>5c400a1c64ce | Joint1=2284 | Joint2=2329 | Joint3=2330 | Joint4=2285 | GUID=05a9a23c-45cb-486e-8a49-             |
| Area=2132<br>817a3621047d | Joint1=2285 | Joint2=2330 | Joint3=2331 | Joint4=2286 | GUID=ced26f57-b31e-4144-bb23-             |
| Area=2133<br>fec99f5b95d1 | Joint1=2286 | Joint2=2331 | Joint3=2332 | Joint4=2287 | GUID=68a37087-79c9-463e-84e9-             |
| Area=2134                 | Joint1=2287 | Joint2=2332 | Joint3=2333 | Joint4=2288 | GUID=1ddfb441-5de5-412f-87eb-3cdadaf34ade |
| Area=2135                 | Joint1=2288 | Joint2=2333 | Joint3=2334 | Joint4=2289 | GUID=e399cf58-dd4f-4ff7-aa2c-be030ee78cad |
| Area=2136                 | Joint1=2289 | Joint2=2334 | Joint3=2335 | Joint4=2290 | GUID=e5bf4d62-60a5-4ffb-a0b7-fe3e6af828d8 |
| Area=2137<br>e2750d67c6a1 | Joint1=2290 | Joint2=2335 | Joint3=2336 | Joint4=2291 | GUID=f8eca28b-d260-4cc4-978c-             |
| Area=2138<br>9b6f6e289b9a | Joint1=2291 | Joint2=2336 | Joint3=2337 | Joint4=2292 | GUID=97bdda00-04e8-4db3-b63a-             |
| Area=2139<br>80001500ab6f | Joint1=2292 | Joint2=2337 | Joint3=2338 | Joint4=2293 | GUID=d20649e8-40de-4957-a578-             |
| Area=2140                 | Joint1=2293 | Joint2=2338 | Joint3=2339 | Joint4=2294 | GUID=0dc0497b-3f60-44fe-b7f1-f1a1bcc1598b |
| Area=2141<br>a6b47b333991 | Joint1=2294 | Joint2=2339 | Joint3=2340 | Joint4=2295 | GUID=fe5c38db-708c-4da4-9365-             |
| Area=2142<br>3efc8bbd1117 | Joint1=2295 | Joint2=2340 | Joint3=2341 | Joint4=2296 | GUID=c5ec77b6-76a8-4d1a-90ec-             |
| Area=2143<br>0ab3d951e857 | Joint1=2296 | Joint2=2341 | Joint3=2342 | Joint4=2297 | GUID=f34495e5-c553-4dbd-b7f8-             |
| Area=2144<br>008430080376 | Joint1=2297 | Joint2=2342 | Joint3=2343 | Joint4=2298 | GUID=6041b096-44bd-4b4b-b34f-             |
| Area=2145<br>5b527d53a4fb | Joint1=2298 | Joint2=2343 | Joint3=2344 | Joint4=2299 | GUID=c31e41a0-0930-450f-b473-             |
| Area=2146<br>c7a755cb4e7c | Joint1=2299 | Joint2=2344 | Joint3=2345 | Joint4=2300 | GUID=781abcee-7e01-48ef-b191-             |
| Area=2147<br>cc3e157db575 | Joint1=2300 | Joint2=2345 | Joint3=2346 | Joint4=2301 | GUID=d504ba96-4252-467f-941f-             |
| Area=2148<br>afb6283a9d5e | Joint1=2301 | Joint2=2346 | Joint3=2347 | Joint4=2302 | GUID=46851ef0-2c49-41ac-bba2-             |
| Area=2149                 | Joint1=2302 | Joint2=2347 | Joint3=2348 | Joint4=2303 | GUID=938f0072-88b9-466e-9d90-f61f05d2bd57 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=2150<br>5e0c75d9adc5 | Joint1=2303 | Joint2=2348 | Joint3=2349 | Joint4=2304 | GUID=ce1157e2-d2b1-4881-b201-             |
| Area=2151<br>494dac7e9b26 | Joint1=2304 | Joint2=2349 | Joint3=2350 | Joint4=2305 | GUID=33b703b5-9f40-4028-bdd5-             |
| Area=2152<br>f4a0e37b65a4 | Joint1=2305 | Joint2=2350 | Joint3=2351 | Joint4=2306 | GUID=8d913eee-bbe9-4a49-b7fa-             |
| Area=2153                 | Joint1=2306 | Joint2=2351 | Joint3=2352 | Joint4=2307 | GUID=882811c8-9666-4c07-952e-3477fb2f2f30 |
| Area=2154<br>2570dfb9a53b | Joint1=2307 | Joint2=2352 | Joint3=2353 | Joint4=2308 | GUID=6298c984-f158-4ab5-9628-             |
| Area=2155                 | Joint1=2308 | Joint2=2353 | Joint3=2354 | Joint4=2309 | GUID=f7f8b954-e6dc-45fa-97f1-6eb4cb943791 |
| Area=2156                 | Joint1=2309 | Joint2=2354 | Joint3=2355 | Joint4=2310 | GUID=f811acc8-13ec-4202-bc84-155a8f1a72ab |
| Area=2157<br>1d75ee4d6e1b | Joint1=2310 | Joint2=2355 | Joint3=2356 | Joint4=2311 | GUID=94206b92-8a18-439f-be20-             |
| Area=2158<br>e023155f485d | Joint1=2312 | Joint2=2357 | Joint3=2358 | Joint4=2313 | GUID=30847c5a-4f8e-440e-a315-             |
| Area=2159                 | Joint1=2313 | Joint2=2358 | Joint3=2359 | Joint4=2314 | GUID=3eee7100-a3e2-46c1-8f82-3de8f69c703f |
| Area=2160<br>e2172d06beea | Joint1=2314 | Joint2=2359 | Joint3=2360 | Joint4=2315 | GUID=5407c41e-e42f-4419-9b84-             |
| Area=2161<br>c7c6acfd3954 | Joint1=2315 | Joint2=2360 | Joint3=2361 | Joint4=2316 | GUID=51b7ad12-8191-421c-8964-             |
| Area=2162<br>0d02c95cb8de | Joint1=2316 | Joint2=2361 | Joint3=2362 | Joint4=2317 | GUID=0d3b7e80-eb7a-4852-892e-             |
| Area=2163                 | Joint1=2317 | Joint2=2362 | Joint3=2363 | Joint4=2318 | GUID=7620df50-1b5b-445c-84fd-75a5fed67765 |
| Area=2164<br>66dbc865bb08 | Joint1=2318 | Joint2=2363 | Joint3=2364 | Joint4=2319 | GUID=ceacb5a9-d858-4933-ba3b-             |
| Area=2165                 | Joint1=2319 | Joint2=2364 | Joint3=2365 | Joint4=2320 | GUID=49b8dff2-10db-4359-a9fa-7302891e1ebc |
| Area=2166<br>215220ed7092 | Joint1=2320 | Joint2=2365 | Joint3=2366 | Joint4=2321 | GUID=90d77a53-fc2c-4981-807d-             |
| Area=2167<br>3b49ab4595c4 | Joint1=2321 | Joint2=2366 | Joint3=2367 | Joint4=2322 | GUID=92b9044d-e1d3-485f-901d-             |
| Area=2168                 | Joint1=2322 | Joint2=2367 | Joint3=2368 | Joint4=2323 | GUID=ee1ba316-9ca7-40af-9bf7-c81f9f071c95 |
| Area=2169<br>0b2577900257 | Joint1=2323 | Joint2=2368 | Joint3=2369 | Joint4=2324 | GUID=fcebeeca-cd0d-4666-b945-             |
| Area=2170<br>10c786815173 | Joint1=2324 | Joint2=2369 | Joint3=2370 | Joint4=2325 | GUID=cd5d87cb-ae13-474f-bede-             |
| Area=2171                 | Joint1=2325 | Joint2=2370 | Joint3=2371 | Joint4=2326 | GUID=02114eec-0cc3-47c3-9cf8-3febd392988f |
| Area=2172                 | Joint1=2326 | Joint2=2371 | Joint3=2372 | Joint4=2327 | GUID=38f381ef-bbe0-4654-b421-8b40ab8f8e8f |
| Area=2173<br>2c2c3ca97d4c | Joint1=2327 | Joint2=2372 | Joint3=2373 | Joint4=2328 | GUID=77d6ba8d-7c14-4515-81d1-             |
| Area=2174<br>85f3e2e0693e | Joint1=2328 | Joint2=2373 | Joint3=2374 | Joint4=2329 | GUID=8e526d66-0ee6-4a99-8f67-             |
| Area=2175<br>ab11d32ea5b8 | Joint1=2329 | Joint2=2374 | Joint3=2375 | Joint4=2330 | GUID=8a690816-2071-4774-b9a4-             |
| Area=2176<br>925a8d228fcc | Joint1=2330 | Joint2=2375 | Joint3=2376 | Joint4=2331 | GUID=8b9db7c7-255d-45e2-b215-             |
| Area=2177<br>4bb965e9b372 | Joint1=2331 | Joint2=2376 | Joint3=2377 | Joint4=2332 | GUID=561f241d-94b2-4fbb-ac0a-             |
| Area=2178<br>6f606b7a2630 | Joint1=2332 | Joint2=2377 | Joint3=2378 | Joint4=2333 | GUID=bc03061c-29cb-4941-96b3-             |
| Area=2179<br>f48a54321578 | Joint1=2333 | Joint2=2378 | Joint3=2379 | Joint4=2334 | GUID=e4bab6a2-631e-4d9b-853b-             |
| Area=2180                 | Joint1=2334 | Joint2=2379 | Joint3=2380 | Joint4=2335 | GUID=260e7866-afbb-4c1f-9cad-3f0589284889 |
| Area=2181<br>93da7f791942 | Joint1=2335 | Joint2=2380 | Joint3=2381 | Joint4=2336 | GUID=53e8389c-6e0c-4a4f-a1e5-             |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=2182<br>451d6af1a847 | Joint1=2336 | Joint2=2381 | Joint3=2382 | Joint4=2337 | GUID=fa117222-6730-4cc1-a6c1-             |
| Area=2183<br>7bb67312a452 | Joint1=2337 | Joint2=2382 | Joint3=2383 | Joint4=2338 | GUID=d4a1531e-0f3b-46f1-93c5-             |
| Area=2184<br>2add09fe224c | Joint1=2338 | Joint2=2383 | Joint3=2384 | Joint4=2339 | GUID=38d9acad-bd6a-4226-83da-             |
| Area=2185                 | Joint1=2339 | Joint2=2384 | Joint3=2385 | Joint4=2340 | GUID=22cc9e7b-4b66-4cfc-9bf0-96237f4c1329 |
| Area=2186                 | Joint1=2340 | Joint2=2385 | Joint3=2386 | Joint4=2341 | GUID=015179ff-3343-455a-82f7-7ab303099779 |
| Area=2187<br>5362c91dd425 | Joint1=2341 | Joint2=2386 | Joint3=2387 | Joint4=2342 | GUID=87924239-773f-4099-bde3-             |
| Area=2188<br>02d4f5d4ed85 | Joint1=2342 | Joint2=2387 | Joint3=2388 | Joint4=2343 | GUID=0e77d751-7a53-422b-a391-             |
| Area=2189                 | Joint1=2343 | Joint2=2388 | Joint3=2389 | Joint4=2344 | GUID=15b75bc8-fa2b-4b3d-ab4a-fff89de19c0e |
| Area=2190<br>87d5b865ac7a | Joint1=2344 | Joint2=2389 | Joint3=2390 | Joint4=2345 | GUID=ff1859c4-a391-40bd-b887-             |
| Area=2191<br>a7058e147aed | Joint1=2345 | Joint2=2390 | Joint3=2391 | Joint4=2346 | GUID=66555426-59bd-4cfd-b405-             |
| Area=2192<br>17d369e31864 | Joint1=2346 | Joint2=2391 | Joint3=2392 | Joint4=2347 | GUID=cf0eb1da-b6a1-451f-820a-             |
| Area=2193                 | Joint1=2347 | Joint2=2392 | Joint3=2393 | Joint4=2348 | GUID=2851ccc0-c8af-45fb-876e-3247f004958a |
| Area=2194<br>e7321d890a3d | Joint1=2348 | Joint2=2393 | Joint3=2394 | Joint4=2349 | GUID=581f6568-d33b-4269-8818-             |
| Area=2195                 | Joint1=2349 | Joint2=2394 | Joint3=2395 | Joint4=2350 | GUID=fa2e7f57-d4c0-4e1f-9ae2-50af9e68e977 |
| Area=2196<br>001a442f77ac | Joint1=2350 | Joint2=2395 | Joint3=2396 | Joint4=2351 | GUID=c8a7067d-2fc0-46bb-815a-             |
| Area=2197<br>3f5fa1c71a88 | Joint1=2351 | Joint2=2396 | Joint3=2397 | Joint4=2352 | GUID=d2a3bea2-ae9a-4136-8ed4-             |
| Area=2198<br>8f9d0604f7ac | Joint1=2352 | Joint2=2397 | Joint3=2398 | Joint4=2353 | GUID=03ad8684-14e1-4941-9b4b-             |
| Area=2199<br>28ef85300757 | Joint1=2353 | Joint2=2398 | Joint3=2399 | Joint4=2354 | GUID=c0b52655-347b-48cd-995c-             |
| Area=2200                 | Joint1=2354 | Joint2=2399 | Joint3=2400 | Joint4=2355 | GUID=35dce964-0d45-4f3c-936c-24c41fc04924 |
| Area=2201<br>520e68dade2a | Joint1=2355 | Joint2=2400 | Joint3=2401 | Joint4=2356 | GUID=c1aec7fb-b61d-417b-857a-             |
| Area=2202<br>ea4bc6885b0e | Joint1=2357 | Joint2=2402 | Joint3=2403 | Joint4=2358 | GUID=723c3f9d-41f3-4003-8b88-             |
| Area=2203<br>e7d2e4a4a0ea | Joint1=2358 | Joint2=2403 | Joint3=2404 | Joint4=2359 | GUID=5e3a54ec-3703-480f-b7a3-             |
| Area=2204<br>3072fe2dfdad | Joint1=2359 | Joint2=2404 | Joint3=2405 | Joint4=2360 | GUID=2e8ea803-cc38-473c-8a0b-             |
| Area=2205<br>6b54c2119488 | Joint1=2360 | Joint2=2405 | Joint3=2406 | Joint4=2361 | GUID=d3ab8ef6-86d5-4223-a592-             |
| Area=2206<br>5acd8919e153 | Joint1=2361 | Joint2=2406 | Joint3=2407 | Joint4=2362 | GUID=feaa85e8-307d-4029-b315-             |
| Area=2207<br>271b849de1c7 | Joint1=2362 | Joint2=2407 | Joint3=2408 | Joint4=2363 | GUID=5a4eb16d-42d7-4390-b8b3-             |
| Area=2208                 | Joint1=2363 | Joint2=2408 | Joint3=2409 | Joint4=2364 | GUID=e3df6114-dc84-44b7-a21f-53628a0278f5 |
| Area=2209<br>1a3717c8a53e | Joint1=2364 | Joint2=2409 | Joint3=2410 | Joint4=2365 | GUID=30547463-85c5-4923-9301-             |
| Area=2210                 | Joint1=2365 | Joint2=2410 | Joint3=2411 | Joint4=2366 | GUID=1e2cd9e9-fad0-43f1-975b-852cabe7e8cc |
| Area=2211<br>bada506e455b | Joint1=2366 | Joint2=2411 | Joint3=2412 | Joint4=2367 | GUID=a12d82f9-4ab4-4a8a-8eb1-             |
| Area=2212<br>52c72063e481 | Joint1=2367 | Joint2=2412 | Joint3=2413 | Joint4=2368 | GUID=8b9b1cc5-b1a3-4539-a668-             |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=2213<br>ee863faf3ac1 | Joint1=2368 | Joint2=2413 | Joint3=2414 | Joint4=2369 | GUID=d8148293-47e8-40e7-a643-             |
| Area=2214<br>13592bb2d07e | Joint1=2369 | Joint2=2414 | Joint3=2415 | Joint4=2370 | GUID=5c58e0cc-0380-4336-878a-             |
| Area=2215                 | Joint1=2370 | Joint2=2415 | Joint3=2416 | Joint4=2371 | GUID=509f877c-f287-4081-964b-f27ea28a545a |
| Area=2216                 | Joint1=2371 | Joint2=2416 | Joint3=2417 | Joint4=2372 | GUID=20d6a1b8-36ff-49c3-8568-f9b92ec2e0c4 |
| Area=2217                 | Joint1=2372 | Joint2=2417 | Joint3=2418 | Joint4=2373 | GUID=f7924f0c-630e-45c2-9652-6a529cd79fcd |
| Area=2218<br>ab8f7b80b64d | Joint1=2373 | Joint2=2418 | Joint3=2419 | Joint4=2374 | GUID=ab2e5469-ea7c-44c3-8268-             |
| Area=2219<br>51b9b6836cba | Joint1=2374 | Joint2=2419 | Joint3=2420 | Joint4=2375 | GUID=0c5761e7-e6ac-4cfb-a2aa-             |
| Area=2220                 | Joint1=2375 | Joint2=2420 | Joint3=2421 | Joint4=2376 | GUID=69e3457c-2632-4f6c-b4f1-24ab3cfe8bc4 |
| Area=2221<br>53e01c8d5c3b | Joint1=2376 | Joint2=2421 | Joint3=2422 | Joint4=2377 | GUID=ff5d781d-aa02-4d9b-a0ec-             |
| Area=2222<br>7480c0e8d58f | Joint1=2377 | Joint2=2422 | Joint3=2423 | Joint4=2378 | GUID=573320ee-db9e-40a2-8416-             |
| Area=2223<br>101222b0cbc1 | Joint1=2378 | Joint2=2423 | Joint3=2424 | Joint4=2379 | GUID=50f35a42-5c0b-430c-add9-             |
| Area=2224<br>ac9e5b266d69 | Joint1=2379 | Joint2=2424 | Joint3=2425 | Joint4=2380 | GUID=0cdccbc0-a9e9-47e0-ad1d-             |
| Area=2225<br>f66ede10e748 | Joint1=2380 | Joint2=2425 | Joint3=2426 | Joint4=2381 | GUID=447c8217-0779-49aa-b547-             |
| Area=2226                 | Joint1=2381 | Joint2=2426 | Joint3=2427 | Joint4=2382 | GUID=e2441617-8c74-4ed1-ad4f-b5bb96f896f6 |
| Area=2227<br>b570fad26140 | Joint1=2382 | Joint2=2427 | Joint3=2428 | Joint4=2383 | GUID=c6a1cbcb-daa7-4572-8e69-             |
| Area=2228                 | Joint1=2383 | Joint2=2428 | Joint3=2429 | Joint4=2384 | GUID=6568502c-820f-4328-87ff-8d9c82261d74 |
| Area=2229<br>fd8c3863d1c8 | Joint1=2384 | Joint2=2429 | Joint3=2430 | Joint4=2385 | GUID=51cda320-9321-4231-ad7d-             |
| Area=2230<br>b620cc7d208e | Joint1=2385 | Joint2=2430 | Joint3=2431 | Joint4=2386 | GUID=b23a3a64-aba6-4382-8e65-             |
| Area=2231<br>79208de5be52 | Joint1=2386 | Joint2=2431 | Joint3=2432 | Joint4=2387 | GUID=defcd223-48b1-45ce-a161-             |
| Area=2232<br>e6e770cf1412 | Joint1=2387 | Joint2=2432 | Joint3=2433 | Joint4=2388 | GUID=e6168be0-a70e-4165-ae15-             |
| Area=2233                 | Joint1=2388 | Joint2=2433 | Joint3=2434 | Joint4=2389 | GUID=13fb073b-b9e7-4acc-9611-5b9c8b6f8fa8 |
| Area=2234<br>1451bb1afae1 | Joint1=2389 | Joint2=2434 | Joint3=2435 | Joint4=2390 | GUID=0950f290-856b-4557-a678-             |
| Area=2235<br>86021d6fa938 | Joint1=2390 | Joint2=2435 | Joint3=2436 | Joint4=2391 | GUID=64115041-6409-4e02-9bf7-             |
| Area=2236<br>4e96ce379bff | Joint1=2391 | Joint2=2436 | Joint3=2437 | Joint4=2392 | GUID=40072381-7300-4300-855e-             |
| Area=2237<br>eaa26762f29c | Joint1=2392 | Joint2=2437 | Joint3=2438 | Joint4=2393 | GUID=b468401a-4677-433c-b893-             |
| Area=2238<br>247f121db8a8 | Joint1=2393 | Joint2=2438 | Joint3=2439 | Joint4=2394 | GUID=2e351dd0-47a0-44d0-bceb-             |
| Area=2239                 | Joint1=2394 | Joint2=2439 | Joint3=2440 | Joint4=2395 | GUID=22dfdeb1-ede6-4dac-878b-f6c2784dbf25 |
| Area=2240<br>430aad2c47f5 | Joint1=2395 | Joint2=2440 | Joint3=2441 | Joint4=2396 | GUID=b6e84abf-879b-425a-bec8-             |
| Area=2241<br>a3a41a27513d | Joint1=2396 | Joint2=2441 | Joint3=2442 | Joint4=2397 | GUID=4c984894-7020-436b-bd83-             |
| Area=2242                 | Joint1=2397 | Joint2=2442 | Joint3=2443 | Joint4=2398 | GUID=3c67cebf-e12c-4222-aad1-ccc58bf59d7c |
| Area=2243<br>18f98ee7b1db | Joint1=2398 | Joint2=2443 | Joint3=2444 | Joint4=2399 | GUID=ecb27a96-9ef1-4d82-bb0a-             |
| Area=2244<br>ab77b1410834 | Joint1=2399 | Joint2=2444 | Joint3=2445 | Joint4=2400 | GUID=3e8c0354-846f-4c54-8fe0-             |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=2245<br>3f14a0c014ea | Joint1=2400 | Joint2=2445 | Joint3=2446 | Joint4=2401 | GUID=5b439053-eeeb-431e-8115-             |
| Area=2246<br>6c4d5a1ddba0 | Joint1=2402 | Joint2=2447 | Joint3=2448 | Joint4=2403 | GUID=c6e90973-ae48-4f82-9065-             |
| Area=2247                 | Joint1=2403 | Joint2=2448 | Joint3=2449 | Joint4=2404 | GUID=36563961-bf3b-4413-b3b0-3fab9006d8fc |
| Area=2248                 | Joint1=2404 | Joint2=2449 | Joint3=2450 | Joint4=2405 | GUID=7f5e184f-d799-4984-bbb7-b42a5b0fd90a |
| Area=2249<br>539dd35ccd12 | Joint1=2405 | Joint2=2450 | Joint3=2451 | Joint4=2406 | GUID=031aac84-910f-42f1-b813-             |
| Area=2250<br>e499d30e722d | Joint1=2406 | Joint2=2451 | Joint3=2452 | Joint4=2407 | GUID=bccecf36-f006-43ee-ab04-             |
| Area=2251<br>c0bcda1db1f3 | Joint1=2407 | Joint2=2452 | Joint3=2453 | Joint4=2408 | GUID=419ba788-0513-4e82-985f-             |
| Area=2252<br>8f04f98b66e6 | Joint1=2408 | Joint2=2453 | Joint3=2454 | Joint4=2409 | GUID=a8d79589-b070-444b-8d3c-             |
| Area=2253<br>6d0c107f38e5 | Joint1=2409 | Joint2=2454 | Joint3=2455 | Joint4=2410 | GUID=84387b64-7cec-4b80-aa8a-             |
| Area=2254<br>81217b45535c | Joint1=2410 | Joint2=2455 | Joint3=2456 | Joint4=2411 | GUID=3150dac1-f8c6-475a-8976-             |
| Area=2255<br>8ba2e4c43522 | Joint1=2411 | Joint2=2456 | Joint3=2457 | Joint4=2412 | GUID=baa4fd10-afe4-4ede-9a62-             |
| Area=2256                 | Joint1=2412 | Joint2=2457 | Joint3=2458 | Joint4=2413 | GUID=e239bff1-1b77-460f-b795-1075798df860 |
| Area=2257<br>c8a3cb61de6a | Joint1=2413 | Joint2=2458 | Joint3=2459 | Joint4=2414 | GUID=42104bf0-00d4-428b-b46d-             |
| Area=2258<br>578f36640087 | Joint1=2414 | Joint2=2459 | Joint3=2460 | Joint4=2415 | GUID=6937cc37-2a98-4e26-a6c0-             |
| Area=2259<br>0a69dc5e4a14 | Joint1=2415 | Joint2=2460 | Joint3=2461 | Joint4=2416 | GUID=61189401-bb55-4b20-9d59-             |
| Area=2260<br>22c0eccd9ca1 | Joint1=2416 | Joint2=2461 | Joint3=2462 | Joint4=2417 | GUID=ece51f6d-d4cd-499a-a35b-             |
| Area=2261                 | Joint1=2417 | Joint2=2462 | Joint3=2463 | Joint4=2418 | GUID=85608edf-fd2c-41be-b949-8f989833da16 |
| Area=2262<br>7e3014b8f654 | Joint1=2418 | Joint2=2463 | Joint3=2464 | Joint4=2419 | GUID=75332f98-e27e-493d-adb5-             |
| Area=2263                 | Joint1=2419 | Joint2=2464 | Joint3=2465 | Joint4=2420 | GUID=78e6be67-3fa6-4ffe-96c3-cf9f085e7ec3 |
| Area=2264<br>eb007ac8642e | Joint1=2420 | Joint2=2465 | Joint3=2466 | Joint4=2421 | GUID=5ae0d9fb-604c-42ca-ba0e-             |
| Area=2265<br>7d561ac31c69 | Joint1=2421 | Joint2=2466 | Joint3=2467 | Joint4=2422 | GUID=a3c2614c-7e4e-4a39-96b4-             |
| Area=2266<br>10508c5269fa | Joint1=2422 | Joint2=2467 | Joint3=2468 | Joint4=2423 | GUID=2ae2b470-109f-4328-909c-             |
| Area=2267<br>75f442752de0 | Joint1=2423 | Joint2=2468 | Joint3=2469 | Joint4=2424 | GUID=fbc9e910-1310-4c28-98ad-             |
| Area=2268                 | Joint1=2424 | Joint2=2469 | Joint3=2470 | Joint4=2425 | GUID=1448f30a-652a-4b84-b91c-f877f28320ab |
| Area=2269<br>d02497215db0 | Joint1=2425 | Joint2=2470 | Joint3=2471 | Joint4=2426 | GUID=381a777d-0148-4211-ad76-             |
| Area=2270                 | Joint1=2426 | Joint2=2471 | Joint3=2472 | Joint4=2427 | GUID=9d86a2dd-f42c-43e7-918f-7dfad8c83ec3 |
| Area=2271<br>c1707e024d15 | Joint1=2427 | Joint2=2472 | Joint3=2473 | Joint4=2428 | GUID=80d53251-74a3-4270-af33-             |
| Area=2272<br>01e4de73c91a | Joint1=2428 | Joint2=2473 | Joint3=2474 | Joint4=2429 | GUID=b38e5f43-9d0a-46ae-919e-             |
| Area=2273<br>2f698f658c7c | Joint1=2429 | Joint2=2474 | Joint3=2475 | Joint4=2430 | GUID=a437b36a-774d-4952-bb0b-             |
| Area=2274<br>ee1a86374808 | Joint1=2430 | Joint2=2475 | Joint3=2476 | Joint4=2431 | GUID=9aa9557b-c4eb-429b-bf8e-             |
| Area=2275<br>1c2ecc863df1 | Joint1=2431 | Joint2=2476 | Joint3=2477 | Joint4=2432 | GUID=3790c7ad-30ee-4db2-b667-             |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=2276<br>eefbd797c130 | Joint1=2432 | Joint2=2477 | Joint3=2478 | Joint4=2433 | GUID=78728f62-c30b-4688-976a-             |
| Area=2277<br>f286b763028f | Joint1=2433 | Joint2=2478 | Joint3=2479 | Joint4=2434 | GUID=25c2d692-2634-4701-be46-             |
| Area=2278<br>5ea581a9a9a2 | Joint1=2434 | Joint2=2479 | Joint3=2480 | Joint4=2435 | GUID=69c50a08-9fa4-40e7-ae05-             |
| Area=2279<br>5843b2edc404 | Joint1=2435 | Joint2=2480 | Joint3=2481 | Joint4=2436 | GUID=83b0f111-5ecc-47db-9b6a-             |
| Area=2280<br>e3396c8b2885 | Joint1=2436 | Joint2=2481 | Joint3=2482 | Joint4=2437 | GUID=8e71b414-5982-40f6-831d-             |
| Area=2281<br>9daed7625ede | Joint1=2437 | Joint2=2482 | Joint3=2483 | Joint4=2438 | GUID=bf72b1e3-9a99-4d3a-bfeb-             |
| Area=2282<br>3a8702cf34bb | Joint1=2438 | Joint2=2483 | Joint3=2484 | Joint4=2439 | GUID=c608a9e4-c5aa-481e-8509-             |
| Area=2283<br>48738fae8e12 | Joint1=2439 | Joint2=2484 | Joint3=2485 | Joint4=2440 | GUID=0ba3e1d2-2386-46f2-8b31-             |
| Area=2284<br>5c4b12a019d1 | Joint1=2440 | Joint2=2485 | Joint3=2486 | Joint4=2441 | GUID=4dbdc74d-adb7-444e-abdf-             |
| Area=2285                 | Joint1=2441 | Joint2=2486 | Joint3=2487 | Joint4=2442 | GUID=35f39043-dbf6-4cb4-a3c7-907fbc98185f |
| Area=2286                 | Joint1=2442 | Joint2=2487 | Joint3=2488 | Joint4=2443 | GUID=af227790-ee03-421f-ae86-e1cfae5b7db1 |
| Area=2287<br>0955d6fa2c94 | Joint1=2443 | Joint2=2488 | Joint3=2489 | Joint4=2444 | GUID=bb28a651-e343-4635-bb6a-             |
| Area=2288                 | Joint1=2444 | Joint2=2489 | Joint3=2490 | Joint4=2445 | GUID=145ca96a-67bf-449a-b07f-1c86f0c34114 |
| Area=2289<br>c035fe356be6 | Joint1=2445 | Joint2=2490 | Joint3=2491 | Joint4=2446 | GUID=fb8e217e-5307-414b-bb3a-             |
| Area=2290<br>7e2a524a148b | Joint1=2447 | Joint2=2492 | Joint3=2493 | Joint4=2448 | GUID=85a47cbd-9052-4f58-a284-             |
| Area=2291                 | Joint1=2448 | Joint2=2493 | Joint3=2494 | Joint4=2449 | GUID=770fbe6e-eab7-4f97-9f05-111bfab4ee60 |
| Area=2292<br>e1a1d8291a07 | Joint1=2449 | Joint2=2494 | Joint3=2495 | Joint4=2450 | GUID=ef45d427-138a-4110-8c99-             |
| Area=2293<br>a3d57babc18b | Joint1=2450 | Joint2=2495 | Joint3=2496 | Joint4=2451 | GUID=f95738e8-601f-4029-8b9d-             |
| Area=2294                 | Joint1=2451 | Joint2=2496 | Joint3=2497 | Joint4=2452 | GUID=fdc6cdb2-170d-4d5f-b82e-f720129280f1 |
| Area=2295                 | Joint1=2452 | Joint2=2497 | Joint3=2498 | Joint4=2453 | GUID=132341f4-a438-4234-9ff3-7f4e99e3b177 |
| Area=2296<br>b9f5e8ee9161 | Joint1=2453 | Joint2=2498 | Joint3=2499 | Joint4=2454 | GUID=43a19b03-40ba-459a-bec4-             |
| Area=2297                 | Joint1=2454 | Joint2=2499 | Joint3=2500 | Joint4=2455 | GUID=6d95effb-49ff-4f92-9299-c071622e495d |
| Area=2298<br>d2d2e728c056 | Joint1=2455 | Joint2=2500 | Joint3=2501 | Joint4=2456 | GUID=f08b562e-bd80-47b8-b141-             |
| Area=2299<br>53b20bd5ccc8 | Joint1=2456 | Joint2=2501 | Joint3=2502 | Joint4=2457 | GUID=ab1eeef7-1e92-40d6-bd23-             |
| Area=2300<br>4e3dd0900993 | Joint1=2457 | Joint2=2502 | Joint3=2503 | Joint4=2458 | GUID=9a6480cc-c451-49c3-80fa-             |
| Area=2301                 | Joint1=2458 | Joint2=2503 | Joint3=2504 | Joint4=2459 | GUID=255f0fed-768f-4a41-823d-6e27aa511858 |
| Area=2302<br>5749ca19d2f9 | Joint1=2459 | Joint2=2504 | Joint3=2505 | Joint4=2460 | GUID=ae85fcdd-2191-42e2-aaeb-             |
| Area=2303<br>687486a9a75b | Joint1=2460 | Joint2=2505 | Joint3=2506 | Joint4=2461 | GUID=d2800848-7ff6-4986-a883-             |
| Area=2304<br>2638b2676eae | Joint1=2461 | Joint2=2506 | Joint3=2507 | Joint4=2462 | GUID=119ba561-a7e0-4360-badf-             |
| Area=2305<br>3908549cb1f0 | Joint1=2462 | Joint2=2507 | Joint3=2508 | Joint4=2463 | GUID=d7851e3e-e24b-4a7c-b43e-             |
| Area=2306                 | Joint1=2463 | Joint2=2508 | Joint3=2509 | Joint4=2464 | GUID=55481726-ec16-4afd-97d4-c9d3fb3437f5 |
| Area=2307                 | Joint1=2464 | Joint2=2509 | Joint3=2510 | Joint4=2465 | GUID=958ffc3a-8ea9-4b19-be33-288e5f17183a |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=2308 | Joint1=2465 | Joint2=2510 | Joint3=2511 | Joint4=2466 | GUID=2126b9f3-7574-4361-9f2a-6b418642329c |
| Area=2309 | Joint1=2466 | Joint2=2511 | Joint3=2512 | Joint4=2467 | GUID=e5c07b92-2b82-42e1-a1e2-89c3b40d3cc4 |
| Area=2310 | Joint1=2467 | Joint2=2512 | Joint3=2513 | Joint4=2468 | GUID=a70fb045-d061-4fca-bccf-3955883efbae |
| Area=2311 | Joint1=2468 | Joint2=2513 | Joint3=2514 | Joint4=2469 | GUID=10603d6d-19fb-48ff-839a-42c195289adf |
| Area=2312 | Joint1=2469 | Joint2=2514 | Joint3=2515 | Joint4=2470 | GUID=e46092ef-591c-4a2c-94b9-831987793ff1 |
| Area=2313 | Joint1=2470 | Joint2=2515 | Joint3=2516 | Joint4=2471 | GUID=715f29fb-1798-4dc4-9f7b-62cc3b1e9ff2 |
| Area=2314 | Joint1=2471 | Joint2=2516 | Joint3=2517 | Joint4=2472 | GUID=9e472374-a91a-402d-b3cd-66dde650d1a0 |
| Area=2315 | Joint1=2472 | Joint2=2517 | Joint3=2518 | Joint4=2473 | GUID=25abab82-5c2c-4a62-b874-18076617fa0a |
| Area=2316 | Joint1=2473 | Joint2=2518 | Joint3=2519 | Joint4=2474 | GUID=62473dae-6898-4fb4-b28f-cd7a842f7329 |
| Area=2317 | Joint1=2474 | Joint2=2519 | Joint3=2520 | Joint4=2475 | GUID=0302315b-3d8c-45ff-a25b-d3088a30a7b0 |
| Area=2318 | Joint1=2475 | Joint2=2520 | Joint3=2521 | Joint4=2476 | GUID=94ff4f2d-d1f4-4ef6-96d3-113dde1d4fb5 |
| Area=2319 | Joint1=2476 | Joint2=2521 | Joint3=2522 | Joint4=2477 | GUID=51e989e1-5a53-4f50-af44-bad19234478a |
| Area=2320 | Joint1=2477 | Joint2=2522 | Joint3=2523 | Joint4=2478 | GUID=5f8774e7-8b4d-44f8-b149-8386eb80031a |
| Area=2321 | Joint1=2478 | Joint2=2523 | Joint3=2524 | Joint4=2479 | GUID=5ac28798-6fae-4e83-8a43-0dbdf42a6c9c |
| Area=2322 | Joint1=2479 | Joint2=2524 | Joint3=2525 | Joint4=2480 | GUID=eed9019b-0dc2-45bd-aeb0-7825588b371c |
| Area=2323 | Joint1=2480 | Joint2=2525 | Joint3=2526 | Joint4=2481 | GUID=7d23c7db-2ce4-47b3-8e26-43d5da93f6e9 |
| Area=2324 | Joint1=2481 | Joint2=2526 | Joint3=2527 | Joint4=2482 | GUID=34145baa-1224-4790-b1e3-f837a92ccf33 |
| Area=2325 | Joint1=2482 | Joint2=2527 | Joint3=2528 | Joint4=2483 | GUID=688c0086-c285-4b2a-b94e-370cfaa5072f |
| Area=2326 | Joint1=2483 | Joint2=2528 | Joint3=2529 | Joint4=2484 | GUID=2e9c2019-6e18-4ad1-862b-b28cafee5bd5 |
| Area=2327 | Joint1=2484 | Joint2=2529 | Joint3=2530 | Joint4=2485 | GUID=229ae0f8-ba1b-41cb-97aa-cded5f9652aa |
| Area=2328 | Joint1=2485 | Joint2=2530 | Joint3=2531 | Joint4=2486 | GUID=48e8a512-ed51-49f7-911a-a5e92fe6dd67 |
| Area=2329 | Joint1=2486 | Joint2=2531 | Joint3=2532 | Joint4=2487 | GUID=daebcfb5-3395-4f32-b190-5740c498b53e |
| Area=2330 | Joint1=2487 | Joint2=2532 | Joint3=2533 | Joint4=2488 | GUID=f5a3fcd8-182d-43ac-abcd-e500898f4300 |
| Area=2331 | Joint1=2488 | Joint2=2533 | Joint3=2534 | Joint4=2489 | GUID=aa934724-1a77-4256-9306-6254d1da668b |
| Area=2332 | Joint1=2489 | Joint2=2534 | Joint3=2535 | Joint4=2490 | GUID=b53536af-42ec-4df1-b561-371d71421a94 |
| Area=2333 | Joint1=2490 | Joint2=2535 | Joint3=2536 | Joint4=2491 | GUID=de74048f-4d02-46af-a81a-f4468cffe5b  |
| Area=2334 | Joint1=2492 | Joint2=2537 | Joint3=2538 | Joint4=2493 | GUID=1d2d11e5-c33e-4f36-9152-26967074588b |
| Area=2335 | Joint1=2493 | Joint2=2538 | Joint3=2539 | Joint4=2494 | GUID=9e60b413-a4fc-4267-b6b5-7d5bd94738e0 |
| Area=2336 | Joint1=2494 | Joint2=2539 | Joint3=2540 | Joint4=2495 | GUID=ad37a068-9cfb-45db-94d5-fd86e3c16e26 |
| Area=2337 | Joint1=2495 | Joint2=2540 | Joint3=2541 | Joint4=2496 | GUID=bf430647-8441-43c7-a468-1ff437ecaa04 |
| Area=2338 | Joint1=2496 | Joint2=2541 | Joint3=2542 | Joint4=2497 | GUID=18bf3fcb-a071-45a2-bc1e-dcb4b2516382 |
| Area=2339 | Joint1=2497 | Joint2=2542 | Joint3=2543 | Joint4=2498 | GUID=38102f47-3695-4a9e-a079-f8174f5a8ebf |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=2340<br>a7e246e815fe | Joint1=2498 | Joint2=2543 | Joint3=2544 | Joint4=2499 | GUID=443a355e-ba52-4361-92a2-             |
| Area=2341                 | Joint1=2499 | Joint2=2544 | Joint3=2545 | Joint4=2500 | GUID=7def3ff8-b995-43e5-8408-d121fc529335 |
| Area=2342<br>b9b609ec9947 | Joint1=2500 | Joint2=2545 | Joint3=2546 | Joint4=2501 | GUID=3c763e71-7961-44e2-a812-             |
| Area=2343<br>b96f9e6d4ce9 | Joint1=2501 | Joint2=2546 | Joint3=2547 | Joint4=2502 | GUID=adbd40c3-8061-42d2-a73c-             |
| Area=2344<br>9618b3382b22 | Joint1=2502 | Joint2=2547 | Joint3=2548 | Joint4=2503 | GUID=54762d31-f7ac-4e4a-a0d4-             |
| Area=2345<br>226426ffd937 | Joint1=2503 | Joint2=2548 | Joint3=2549 | Joint4=2504 | GUID=86c69071-b3d7-48b0-b63b-             |
| Area=2346<br>587d41b46826 | Joint1=2504 | Joint2=2549 | Joint3=2550 | Joint4=2505 | GUID=7c08d93f-b6a2-4088-b86f-             |
| Area=2347                 | Joint1=2505 | Joint2=2550 | Joint3=2551 | Joint4=2506 | GUID=aa4a4b79-d98b-4555-aff0-1f7dcb141b52 |
| Area=2348<br>6037aa3af3c7 | Joint1=2506 | Joint2=2551 | Joint3=2552 | Joint4=2507 | GUID=75620836-4490-4df9-b59d-             |
| Area=2349                 | Joint1=2507 | Joint2=2552 | Joint3=2553 | Joint4=2508 | GUID=1b1f524f-bd06-4284-9770-0eedb7fbf722 |
| Area=2350<br>7b08460c7542 | Joint1=2508 | Joint2=2553 | Joint3=2554 | Joint4=2509 | GUID=caef0499-22eb-4f0e-b684-             |
| Area=2351<br>f72aeef5a513 | Joint1=2509 | Joint2=2554 | Joint3=2555 | Joint4=2510 | GUID=6663e194-4199-49d1-98b0-             |
| Area=2352<br>a77c8fe17fd6 | Joint1=2510 | Joint2=2555 | Joint3=2556 | Joint4=2511 | GUID=a20ca925-2314-4975-b129-             |
| Area=2353                 | Joint1=2511 | Joint2=2556 | Joint3=2557 | Joint4=2512 | GUID=e098d2ff-cd1a-4f6a-baa1-520c432abd13 |
| Area=2354                 | Joint1=2512 | Joint2=2557 | Joint3=2558 | Joint4=2513 | GUID=7048c6ea-c2e5-4b97-8e53-8fe76ff10bc3 |
| Area=2355<br>1442a0ee8b8c | Joint1=2513 | Joint2=2558 | Joint3=2559 | Joint4=2514 | GUID=8ce1e886-e3d5-402c-8ed8-             |
| Area=2356                 | Joint1=2514 | Joint2=2559 | Joint3=2560 | Joint4=2515 | GUID=04091d45-66dc-4caf-9690-5f9c84692bf5 |
| Area=2357<br>a1c8d482950b | Joint1=2515 | Joint2=2560 | Joint3=2561 | Joint4=2516 | GUID=f1868764-c801-4dfc-92ab-             |
| Area=2358<br>66d1606af769 | Joint1=2516 | Joint2=2561 | Joint3=2562 | Joint4=2517 | GUID=bedb44d3-635b-4dca-ac70-             |
| Area=2359<br>15fc44a38a88 | Joint1=2517 | Joint2=2562 | Joint3=2563 | Joint4=2518 | GUID=95788a94-c3f7-41da-ba19-             |
| Area=2360<br>114361962c2e | Joint1=2518 | Joint2=2563 | Joint3=2564 | Joint4=2519 | GUID=1c7227b7-c488-408d-8dbf-             |
| Area=2361<br>b6926f4828d4 | Joint1=2519 | Joint2=2564 | Joint3=2565 | Joint4=2520 | GUID=c953c697-e855-40fd-9132-             |
| Area=2362<br>1dedeaa698f5 | Joint1=2520 | Joint2=2565 | Joint3=2566 | Joint4=2521 | GUID=0a5718a0-d23d-44b6-8af6-             |
| Area=2363                 | Joint1=2521 | Joint2=2566 | Joint3=2567 | Joint4=2522 | GUID=a76a51a6-f848-404d-94b2-df9f1d94717f |
| Area=2364                 | Joint1=2522 | Joint2=2567 | Joint3=2568 | Joint4=2523 | GUID=1dede3ea-2acf-45b7-86f6-bcf56a785502 |
| Area=2365<br>2cc47f409eeb | Joint1=2523 | Joint2=2568 | Joint3=2569 | Joint4=2524 | GUID=8eeaa22f-7397-4b51-86c4-             |
| Area=2366<br>cb6460b4b035 | Joint1=2524 | Joint2=2569 | Joint3=2570 | Joint4=2525 | GUID=fc31b6e1-5d58-42ac-9b7c-             |
| Area=2367<br>3816ed4677d8 | Joint1=2525 | Joint2=2570 | Joint3=2571 | Joint4=2526 | GUID=87aba57f-a0bf-4133-b627-             |
| Area=2368<br>0943305076c5 | Joint1=2526 | Joint2=2571 | Joint3=2572 | Joint4=2527 | GUID=9b70e4b5-be38-4b17-b588-             |
| Area=2369<br>adf3b0f168eb | Joint1=2527 | Joint2=2572 | Joint3=2573 | Joint4=2528 | GUID=3336e900-6255-4541-a8d3-             |
| Area=2370                 | Joint1=2528 | Joint2=2573 | Joint3=2574 | Joint4=2529 | GUID=d96ebfce-9f8e-4cc3-94c2-3503fca9ed14 |
| Area=2371<br>3810b4f20c11 | Joint1=2529 | Joint2=2574 | Joint3=2575 | Joint4=2530 | GUID=a117348f-5e79-43e9-88ae-             |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=2372 Joint1=2530 Joint2=2575 Joint3=2576 Joint4=2531 GUID=e48e0f12-658f-440f-bf32-521cce6fac48  
Area=2373 Joint1=2531 Joint2=2576 Joint3=2577 Joint4=2532 GUID=e9bcdcf3c-84a1-47cf-b4e5-000cfb37dac4  
Area=2374 Joint1=2532 Joint2=2577 Joint3=2578 Joint4=2533 GUID=39649fdc-9f1e-4c70-b26a-f54a18e47209  
Area=2375 Joint1=2533 Joint2=2578 Joint3=2579 Joint4=2534 GUID=5cfd7dcb-8c29-4dfb-a43b-333ce375cad7  
Area=2376 Joint1=2534 Joint2=2579 Joint3=2580 Joint4=2535 GUID=22d07000-135e-42ef-8174-ca35461d2892  
Area=2377 Joint1=2535 Joint2=2580 Joint3=2581 Joint4=2536 GUID=e7144c35-e739-4664-8a96-730c73535437  
Area=2378 Joint1=2537 Joint2=2582 Joint3=2583 Joint4=2538 GUID=a6d79cb3-28e0-45bf-8903-6ff67ed313fd  
Area=2379 Joint1=2538 Joint2=2583 Joint3=2584 Joint4=2539 GUID=402ccd18-e43d-4626-bcf0-12915d4f38c0  
Area=2380 Joint1=2539 Joint2=2584 Joint3=2585 Joint4=2540 GUID=12c133ac-7729-4c3a-87c3-423cd372a777  
Area=2381 Joint1=2540 Joint2=2585 Joint3=2586 Joint4=2541 GUID=d0873c65-3e62-4b88-9a5f-e09f5052cca6  
Area=2382 Joint1=2541 Joint2=2586 Joint3=2587 Joint4=2542 GUID=5d7066a7-d0bf-45fb-9071-1252b9ac942e  
Area=2383 Joint1=2542 Joint2=2587 Joint3=2588 Joint4=2543 GUID=e22d9ca9-0a2b-4736-a41e-f8111c8b9db9  
Area=2384 Joint1=2543 Joint2=2588 Joint3=2589 Joint4=2544 GUID=25b39d81-4a9a-4ae3-a321-50984f64df95  
Area=2385 Joint1=2544 Joint2=2589 Joint3=2590 Joint4=2545 GUID=3a7ab52b-7c8c-4ba1-9b53-941ae136927b  
Area=2386 Joint1=2545 Joint2=2590 Joint3=2591 Joint4=2546 GUID=ea07e059-ccc9-49cb-aff8-c409090e0646  
Area=2387 Joint1=2546 Joint2=2591 Joint3=2592 Joint4=2547 GUID=12920531-7490-4b83-993e-0687899dbbed  
Area=2388 Joint1=2547 Joint2=2592 Joint3=2593 Joint4=2548 GUID=a47f6c58-0de0-477f-99a3-a4997ca6b3ad  
Area=2389 Joint1=2548 Joint2=2593 Joint3=2594 Joint4=2549 GUID=d98a57b9-fe12-4710-944a-b4065e3d758d  
Area=2390 Joint1=2549 Joint2=2594 Joint3=2595 Joint4=2550 GUID=6e70b3ac-d1a3-4bf9-a115-7f2779ff1c41  
Area=2391 Joint1=2550 Joint2=2595 Joint3=2596 Joint4=2551 GUID=666e3960-0a7a-4249-a8d4-76d9230ff0cd  
Area=2392 Joint1=2551 Joint2=2596 Joint3=2597 Joint4=2552 GUID=b7b44526-018c-441d-b0f7-2a99baf4cc71  
Area=2393 Joint1=2552 Joint2=2597 Joint3=2598 Joint4=2553 GUID=64f360a5-44c8-44ff-9e0a-6f02e25f219f  
Area=2394 Joint1=2553 Joint2=2598 Joint3=2599 Joint4=2554 GUID=1c00f678-302b-4445-a55d-828125fe828e  
Area=2395 Joint1=2554 Joint2=2599 Joint3=2600 Joint4=2555 GUID=bdfe85d9-3127-4ec7-8d24-a3a2c46a9946  
Area=2396 Joint1=2555 Joint2=2600 Joint3=2601 Joint4=2556 GUID=12cffeaf-9282-440f-9f23-146635fbf471  
Area=2397 Joint1=2556 Joint2=2601 Joint3=2602 Joint4=2557 GUID=a15d61c1-5102-41e2-a325-7f5512420a88  
Area=2398 Joint1=2557 Joint2=2602 Joint3=2603 Joint4=2558 GUID=baa81357-fe74-425d-8c9a-b966ca8875f5  
Area=2399 Joint1=2558 Joint2=2603 Joint3=2604 Joint4=2559 GUID=c4dd1487-8fe8-4f7d-8209-82608bf7e52e  
Area=2400 Joint1=2559 Joint2=2604 Joint3=2605 Joint4=2560 GUID=c21037b6-803d-413f-8317-92c0b011dd1c  
Area=2401 Joint1=2560 Joint2=2605 Joint3=2606 Joint4=2561 GUID=686fea29-fc8e-4238-bc11-ed6f66617859  
Area=2402 Joint1=2561 Joint2=2606 Joint3=2607 Joint4=2562 GUID=a8cf34f7-cf6b-4945-8947-c11e1f5eff8d  
Area=2403 Joint1=2562 Joint2=2607 Joint3=2608 Joint4=2563 GUID=382f4fb8-d75c-4995-8eec-d04de19ead64  
Area=2404 Joint1=2563 Joint2=2608 Joint3=2609 Joint4=2564 GUID=dd5188e6-e4cf-4798-b2f2-1979860808fb  
Area=2405 Joint1=2564 Joint2=2609 Joint3=2610 Joint4=2565 GUID=b99692ac-f2a7-43de-8ebb-c7eachbf34883  
Area=2406 Joint1=2565 Joint2=2610 Joint3=2611 Joint4=2566 GUID=04ecf6f6-66fe-4f73-bc42-0b93e8c94225



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=2407<br>baca3ccbd645 | Joint1=2566 | Joint2=2611 | Joint3=2612 | Joint4=2567 | GUID=f9744375-38be-4230-a246-             |
| Area=2408                 | Joint1=2567 | Joint2=2612 | Joint3=2613 | Joint4=2568 | GUID=9d7ff7a2-979a-46b6-999e-5e15dbe9fd0e |
| Area=2409<br>7244f71b95c3 | Joint1=2568 | Joint2=2613 | Joint3=2614 | Joint4=2569 | GUID=493e7355-b97c-4440-aeeb-             |
| Area=2410<br>d88b71095338 | Joint1=2569 | Joint2=2614 | Joint3=2615 | Joint4=2570 | GUID=0d79c1f9-4255-4659-b5bb-             |
| Area=2411<br>dbd810efb515 | Joint1=2570 | Joint2=2615 | Joint3=2616 | Joint4=2571 | GUID=6b4e0ed2-aca8-495c-8ebb-             |
| Area=2412                 | Joint1=2571 | Joint2=2616 | Joint3=2617 | Joint4=2572 | GUID=1dacecf4-f133-4fb2-9f29-f61792512c00 |
| Area=2413<br>1fe256915d2a | Joint1=2572 | Joint2=2617 | Joint3=2618 | Joint4=2573 | GUID=852a7094-ebcc-4fdc-aae0-             |
| Area=2414                 | Joint1=2573 | Joint2=2618 | Joint3=2619 | Joint4=2574 | GUID=dee19895-73b2-4f27-b941-893674ffdbbd |
| Area=2415                 | Joint1=2574 | Joint2=2619 | Joint3=2620 | Joint4=2575 | GUID=451fbaf7-c952-42aa-84ca-1bac7fb23292 |
| Area=2416                 | Joint1=2575 | Joint2=2620 | Joint3=2621 | Joint4=2576 | GUID=6896a32b-4eea-4ea8-b00d-6455cff30b3f |
| Area=2417<br>a907a95da65c | Joint1=2576 | Joint2=2621 | Joint3=2622 | Joint4=2577 | GUID=3359ebda-dd11-4fc5-a5a6-             |
| Area=2418                 | Joint1=2577 | Joint2=2622 | Joint3=2623 | Joint4=2578 | GUID=3fca90ff-bbf1-4929-bc91-e1644239d35f |
| Area=2419                 | Joint1=2578 | Joint2=2623 | Joint3=2624 | Joint4=2579 | GUID=f6bbbf82-67b4-44d6-8379-4643359831ef |
| Area=2420                 | Joint1=2579 | Joint2=2624 | Joint3=2625 | Joint4=2580 | GUID=fb3feb5b-a809-44e0-b448-af2f37ce3d84 |
| Area=2421<br>757f0c49de4d | Joint1=2580 | Joint2=2625 | Joint3=2626 | Joint4=2581 | GUID=b278c5e8-546e-4073-8639-             |
| Area=2422<br>21a3e8bf99dd | Joint1=2582 | Joint2=2627 | Joint3=2628 | Joint4=2583 | GUID=69d49f2c-49a9-495b-b281-             |
| Area=2423<br>fba2582dd8d  | Joint1=2583 | Joint2=2628 | Joint3=2629 | Joint4=2584 | GUID=d18ecd60-3d92-4bd4-afae-             |
| Area=2424<br>8b36c086415c | Joint1=2584 | Joint2=2629 | Joint3=2630 | Joint4=2585 | GUID=646341b1-6b45-4f39-98e5-             |
| Area=2425<br>b7ae202e8ed5 | Joint1=2585 | Joint2=2630 | Joint3=2631 | Joint4=2586 | GUID=a85487e2-5c72-4823-b0a0-             |
| Area=2426                 | Joint1=2586 | Joint2=2631 | Joint3=2632 | Joint4=2587 | GUID=668b6ede-7acf-4bfe-9030-7d005cf2c952 |
| Area=2427<br>130949a273ea | Joint1=2587 | Joint2=2632 | Joint3=2633 | Joint4=2588 | GUID=a2efba4e-b5fd-4a94-bb33-             |
| Area=2428<br>9e9250b415a0 | Joint1=2588 | Joint2=2633 | Joint3=2634 | Joint4=2589 | GUID=9c664592-cbe3-47ab-b6a9-             |
| Area=2429                 | Joint1=2589 | Joint2=2634 | Joint3=2635 | Joint4=2590 | GUID=749cf047-35e0-4961-8dcf-3960ef5bb8a1 |
| Area=2430<br>aa47470dcc06 | Joint1=2590 | Joint2=2635 | Joint3=2636 | Joint4=2591 | GUID=20412ed2-4afc-4ae7-b7d7-             |
| Area=2431<br>7ecee6306fe7 | Joint1=2591 | Joint2=2636 | Joint3=2637 | Joint4=2592 | GUID=a33e5cb1-0311-49e2-86ab-             |
| Area=2432<br>4a6d74de8427 | Joint1=2592 | Joint2=2637 | Joint3=2638 | Joint4=2593 | GUID=d3be5319-3835-47cf-bea9-             |
| Area=2433                 | Joint1=2593 | Joint2=2638 | Joint3=2639 | Joint4=2594 | GUID=f3a9b444-f142-4843-bb9b-25cf0acc8c40 |
| Area=2434<br>d116a70032be | Joint1=2594 | Joint2=2639 | Joint3=2640 | Joint4=2595 | GUID=ac31a189-76ac-4b75-ad97-             |
| Area=2435                 | Joint1=2595 | Joint2=2640 | Joint3=2641 | Joint4=2596 | GUID=f56ff575-6922-4a67-b06d-7570b6d12117 |
| Area=2436                 | Joint1=2596 | Joint2=2641 | Joint3=2642 | Joint4=2597 | GUID=b989cef8-c6ab-48d7-9b82-88ffe73956ad |
| Area=2437<br>9de1e462a4c3 | Joint1=2597 | Joint2=2642 | Joint3=2643 | Joint4=2598 | GUID=c007a609-c366-4e18-96e0-             |
| Area=2438<br>ac1175b9c144 | Joint1=2598 | Joint2=2643 | Joint3=2644 | Joint4=2599 | GUID=07d67701-bdde-438a-be25-             |
| Area=2439<br>b94ab2269828 | Joint1=2599 | Joint2=2644 | Joint3=2645 | Joint4=2600 | GUID=4d778df7-6a9d-48ba-8bab-             |
| Area=2440<br>d0789a23df11 | Joint1=2600 | Joint2=2645 | Joint3=2646 | Joint4=2601 | GUID=da9dd049-303d-4abd-be14-             |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=2441 | Joint1=2601 | Joint2=2646 | Joint3=2647 | Joint4=2602 | GUID=de53b23c-fe90-497e-ba0c-254df8ea4042 |
| Area=2442 | Joint1=2602 | Joint2=2647 | Joint3=2648 | Joint4=2603 | GUID=ae9e1b08-22e7-4c84-8506-c9fccf8ae9e2 |
| Area=2443 | Joint1=2603 | Joint2=2648 | Joint3=2649 | Joint4=2604 | GUID=8584a144-7509-4766-aead-a7b5fa73e3ba |
| Area=2444 | Joint1=2604 | Joint2=2649 | Joint3=2650 | Joint4=2605 | GUID=36652cdd-bce8-491f-a08a-3af3b9a30a22 |
| Area=2445 | Joint1=2605 | Joint2=2650 | Joint3=2651 | Joint4=2606 | GUID=d3cc5567-bfd5-4e3f-93e9-e382c69b8c85 |
| Area=2446 | Joint1=2606 | Joint2=2651 | Joint3=2652 | Joint4=2607 | GUID=2735680b-8261-44d6-ad09-fc9669215594 |
| Area=2447 | Joint1=2607 | Joint2=2652 | Joint3=2653 | Joint4=2608 | GUID=2b7c0101-a0b8-473b-8fc6-f1edffcfcd59 |
| Area=2448 | Joint1=2608 | Joint2=2653 | Joint3=2654 | Joint4=2609 | GUID=9a87a05d-6724-4980-aa35-0a2cd5735a39 |
| Area=2449 | Joint1=2609 | Joint2=2654 | Joint3=2655 | Joint4=2610 | GUID=cdeed268-4c6e-4a40-905b-68e3c51e3809 |
| Area=2450 | Joint1=2610 | Joint2=2655 | Joint3=2656 | Joint4=2611 | GUID=93f4b34e-9aab-4a5d-837c-5515f85ba188 |
| Area=2451 | Joint1=2611 | Joint2=2656 | Joint3=2657 | Joint4=2612 | GUID=cf279bd4-b8f3-4421-b658-06e29095aa03 |
| Area=2452 | Joint1=2612 | Joint2=2657 | Joint3=2658 | Joint4=2613 | GUID=046b4a43-e06e-45f7-8d9b-dc2307da6e66 |
| Area=2453 | Joint1=2613 | Joint2=2658 | Joint3=2659 | Joint4=2614 | GUID=c28daa17-6e0c-49d6-9f60-812fa08a16f2 |
| Area=2454 | Joint1=2614 | Joint2=2659 | Joint3=2660 | Joint4=2615 | GUID=fa6b21b1-11ca-4120-aae5-47e6188ea372 |
| Area=2455 | Joint1=2615 | Joint2=2660 | Joint3=2661 | Joint4=2616 | GUID=b539ca9a-6074-4964-ba3d-2a32155c8f05 |
| Area=2456 | Joint1=2616 | Joint2=2661 | Joint3=2662 | Joint4=2617 | GUID=16c387f9-6497-4829-891c-2dca756eff2a |
| Area=2457 | Joint1=2617 | Joint2=2662 | Joint3=2663 | Joint4=2618 | GUID=ee27e415-2ea9-4114-bcdf-f9868c3610de |
| Area=2458 | Joint1=2618 | Joint2=2663 | Joint3=2664 | Joint4=2619 | GUID=c7f57188-89da-4194-90ed-898ca1e755b1 |
| Area=2459 | Joint1=2619 | Joint2=2664 | Joint3=2665 | Joint4=2620 | GUID=83d445ac-69bd-4254-aeaf-3055745f9373 |
| Area=2460 | Joint1=2620 | Joint2=2665 | Joint3=2666 | Joint4=2621 | GUID=6fe25dbc-fbc8-4ad5-8d19-b988acdd00d1 |
| Area=2461 | Joint1=2621 | Joint2=2666 | Joint3=2667 | Joint4=2622 | GUID=cb76f8c3-a977-4b79-8c0b-deb5ade35ac0 |
| Area=2462 | Joint1=2622 | Joint2=2667 | Joint3=2668 | Joint4=2623 | GUID=756ad78c-13eb-470a-b614-377331a3ea57 |
| Area=2463 | Joint1=2623 | Joint2=2668 | Joint3=2669 | Joint4=2624 | GUID=0092dadb-6f62-42b8-aa7f-f111a3200b93 |
| Area=2464 | Joint1=2624 | Joint2=2669 | Joint3=2670 | Joint4=2625 | GUID=ee6ffab8-7d32-422e-ba68-79b5bfb76177 |
| Area=2465 | Joint1=2625 | Joint2=2670 | Joint3=2671 | Joint4=2626 | GUID=5b6cddb3-a913-4d7c-9193-9f2ae0bf291b |
| Area=2466 | Joint1=2627 | Joint2=2672 | Joint3=2673 | Joint4=2628 | GUID=2cc2563e-1901-4b11-b453-5e856091628a |
| Area=2467 | Joint1=2628 | Joint2=2673 | Joint3=2674 | Joint4=2629 | GUID=5f0a6c68-3d44-4ab6-bbfd-8a59e40f06c6 |
| Area=2468 | Joint1=2629 | Joint2=2674 | Joint3=2675 | Joint4=2630 | GUID=6c7a74d9-a62e-4d66-b932-7d2422d8687a |
| Area=2469 | Joint1=2630 | Joint2=2675 | Joint3=2676 | Joint4=2631 | GUID=e5710150-17da-4210-aabc-5b8b4551c424 |
| Area=2470 | Joint1=2631 | Joint2=2676 | Joint3=2677 | Joint4=2632 | GUID=eba9cac4-0e12-4359-bee7-195bd2c555ab |
| Area=2471 | Joint1=2632 | Joint2=2677 | Joint3=2678 | Joint4=2633 | GUID=0074ce1a-fa4b-4f03-84c9-532d9ca5ff81 |
| Area=2472 | Joint1=2633 | Joint2=2678 | Joint3=2679 | Joint4=2634 | GUID=6043516b-f7da-4f54-8afe-6f8cf34ffdc3 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=2473 | Joint1=2634 | Joint2=2679 | Joint3=2680 | Joint4=2635 | GUID=99e98c48-43a1-476d-98e7-123c1068ef8f |
| Area=2474 | Joint1=2635 | Joint2=2680 | Joint3=2681 | Joint4=2636 | GUID=36be0174-c70e-4ef2-b239-e01cdfae0f0c |
| Area=2475 | Joint1=2636 | Joint2=2681 | Joint3=2682 | Joint4=2637 | GUID=28561b28-d272-4b19-804a-18e974acfcad |
| Area=2476 | Joint1=2637 | Joint2=2682 | Joint3=2683 | Joint4=2638 | GUID=56821f07-9e5e-4aaa-8ca6-6020f34fbb66 |
| Area=2477 | Joint1=2638 | Joint2=2683 | Joint3=2684 | Joint4=2639 | GUID=d8c3626a-02ea-4144-87be-9c6e6f4b80a2 |
| Area=2478 | Joint1=2639 | Joint2=2684 | Joint3=2685 | Joint4=2640 | GUID=547132f4-f4c9-4656-bf4a-ad4c1f2b5ec6 |
| Area=2479 | Joint1=2640 | Joint2=2685 | Joint3=2686 | Joint4=2641 | GUID=90152ae1-b90e-41f8-830f-0b64a935c1e3 |
| Area=2480 | Joint1=2641 | Joint2=2686 | Joint3=2687 | Joint4=2642 | GUID=90bb15a6-9297-4d25-8907-31a248ce264d |
| Area=2481 | Joint1=2642 | Joint2=2687 | Joint3=2688 | Joint4=2643 | GUID=672e95d6-8a88-460f-b007-0e6d923994eb |
| Area=2482 | Joint1=2643 | Joint2=2688 | Joint3=2689 | Joint4=2644 | GUID=65f8f423-b973-4738-be64-3693e53deb16 |
| Area=2483 | Joint1=2644 | Joint2=2689 | Joint3=2690 | Joint4=2645 | GUID=a3c8a3b9-6a28-4735-9b0c-902a0f8597d1 |
| Area=2484 | Joint1=2645 | Joint2=2690 | Joint3=2691 | Joint4=2646 | GUID=df29ef4f-b269-437b-ad02-ddb2ce0c3224 |
| Area=2485 | Joint1=2646 | Joint2=2691 | Joint3=2692 | Joint4=2647 | GUID=e21f1505-c1e6-4d8b-8474-42171b65b695 |
| Area=2486 | Joint1=2647 | Joint2=2692 | Joint3=2693 | Joint4=2648 | GUID=cb0b39ba-ec5d-4982-be17-33b02cc58da7 |
| Area=2487 | Joint1=2648 | Joint2=2693 | Joint3=2694 | Joint4=2649 | GUID=ea8e228d-3370-4acc-a2f2-2d9dfe8db7c3 |
| Area=2488 | Joint1=2649 | Joint2=2694 | Joint3=2695 | Joint4=2650 | GUID=4f1d2bdb-8900-4bec-9052-879f32abb59c |
| Area=2489 | Joint1=2650 | Joint2=2695 | Joint3=2696 | Joint4=2651 | GUID=e15c01ca-8c2b-4205-b540-39c8e0cd897c |
| Area=2490 | Joint1=2651 | Joint2=2696 | Joint3=2697 | Joint4=2652 | GUID=ceec7170-ea19-4a1f-b903-d89444999289 |
| Area=2491 | Joint1=2652 | Joint2=2697 | Joint3=2698 | Joint4=2653 | GUID=1ad126a7-6524-49c2-8dae-0e12423ce064 |
| Area=2492 | Joint1=2653 | Joint2=2698 | Joint3=2699 | Joint4=2654 | GUID=67a50904-444e-4a04-8f59-e5db9e932342 |
| Area=2493 | Joint1=2654 | Joint2=2699 | Joint3=2700 | Joint4=2655 | GUID=c6bdfcaf-2a5c-444d-a279-74586f9c4232 |
| Area=2494 | Joint1=2655 | Joint2=2700 | Joint3=2701 | Joint4=2656 | GUID=fef380f2-c446-4e3d-a95f-07f09e1b2b6d |
| Area=2495 | Joint1=2656 | Joint2=2701 | Joint3=2702 | Joint4=2657 | GUID=bdb9ccf3-eebb-494a-a30d-4e923846c150 |
| Area=2496 | Joint1=2657 | Joint2=2702 | Joint3=2703 | Joint4=2658 | GUID=0ec0e250-2460-47e6-88da-21b5f67f1048 |
| Area=2497 | Joint1=2658 | Joint2=2703 | Joint3=2704 | Joint4=2659 | GUID=96eafac3-ac8a-4763-9f34-2605b6100a0b |
| Area=2498 | Joint1=2659 | Joint2=2704 | Joint3=2705 | Joint4=2660 | GUID=16670af5-ccaa-49ce-8e48-eb4ef1aec558 |
| Area=2499 | Joint1=2660 | Joint2=2705 | Joint3=2706 | Joint4=2661 | GUID=e14b6788-e7f2-46ba-90b9-a3eba76d7e00 |
| Area=2500 | Joint1=2661 | Joint2=2706 | Joint3=2707 | Joint4=2662 | GUID=ef080bc5-3cf0-417b-b4e3-1b1167ec7c14 |
| Area=2501 | Joint1=2662 | Joint2=2707 | Joint3=2708 | Joint4=2663 | GUID=1681b38a-2e80-458b-b159-3eff06bc6bc4 |
| Area=2502 | Joint1=2663 | Joint2=2708 | Joint3=2709 | Joint4=2664 | GUID=48ab6a87-010f-4de1-b988-4d3e2b2794fc |
| Area=2503 | Joint1=2664 | Joint2=2709 | Joint3=2710 | Joint4=2665 | GUID=afddde56-8644-41ce-ac71-574a48566542 |
| Area=2504 | Joint1=2665 | Joint2=2710 | Joint3=2711 | Joint4=2666 | GUID=9e63a00e-c7f8-4bf8-bc08-da0f328265bb |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=2505 Joint1=2666 Joint2=2711 Joint3=2712 Joint4=2667 GUID=d4f3d293-ee56-47e9-a371-e3dae4830bcc

Area=2506 Joint1=2667 Joint2=2712 Joint3=2713 Joint4=2668 GUID=b80f6fbb-f828-4f52-ae26-0c6af12d8a53

Area=2507 Joint1=2668 Joint2=2713 Joint3=2714 Joint4=2669 GUID=1a8b354f-c3a7-4f34-8a56-5d89f78b5801

Area=2508 Joint1=2669 Joint2=2714 Joint3=2715 Joint4=2670 GUID=4ef158a5-98d3-4859-ac05-7242884ae0df

Area=2509 Joint1=2670 Joint2=2715 Joint3=2716 Joint4=2671 GUID=b71abd8b-a43b-431f-a286-727e207075d1

Area=2510 Joint1=2672 Joint2=2717 Joint3=2718 Joint4=2673 GUID=1a7f51e3-1f40-41e6-9f4f-79f2dcfe67e9

Area=2511 Joint1=2673 Joint2=2718 Joint3=2719 Joint4=2674 GUID=da773e72-0f9f-4af7-9887-37d5ecb03575

Area=2512 Joint1=2674 Joint2=2719 Joint3=2720 Joint4=2675 GUID=f28f084f-33d0-48ba-ad6b-11851ab1b90f

Area=2513 Joint1=2675 Joint2=2720 Joint3=2721 Joint4=2676 GUID=05574179-2ba7-49db-9eb2-6049f9fd942f

Area=2514 Joint1=2676 Joint2=2721 Joint3=2722 Joint4=2677 GUID=f7f2cf2f-b862-4f30-a323-a00621ab37db

Area=2515 Joint1=2677 Joint2=2722 Joint3=2723 Joint4=2678 GUID=a0f9fd9c-b8b6-4e7d-9c8a-ca69c5edc0ed

Area=2516 Joint1=2678 Joint2=2723 Joint3=2724 Joint4=2679 GUID=20f5d133-b97e-4e3d-b015-dfb57096b5a4

Area=2517 Joint1=2679 Joint2=2724 Joint3=2725 Joint4=2680 GUID=87aff601-0958-40d1-afa7-632699af960a

Area=2518 Joint1=2680 Joint2=2725 Joint3=2726 Joint4=2681 GUID=d532e125-a77d-4fa0-a722-194f925a5fa7

Area=2519 Joint1=2681 Joint2=2726 Joint3=2727 Joint4=2682 GUID=c3c97940-a521-4b08-89d0-0bc0a87f3363

Area=2520 Joint1=2682 Joint2=2727 Joint3=2728 Joint4=2683 GUID=c83832ce-8721-4a1f-9e8d-33c43af7f5b4

Area=2521 Joint1=2683 Joint2=2728 Joint3=2729 Joint4=2684 GUID=c6939961-5385-487f-980e-2a3c0a8c54e1

Area=2522 Joint1=2684 Joint2=2729 Joint3=2730 Joint4=2685 GUID=e749913e-c23e-4770-9eb4-6606abb600a1

Area=2523 Joint1=2685 Joint2=2730 Joint3=2731 Joint4=2686 GUID=302b76f6-535e-4a8d-b3fd-937f1b5ab210

Area=2524 Joint1=2686 Joint2=2731 Joint3=2732 Joint4=2687 GUID=5a6f7a1e-ac02-4b4d-bd6e-75dad40a8d07

Area=2525 Joint1=2687 Joint2=2732 Joint3=2733 Joint4=2688 GUID=b1f0c352-692f-49f9-a21c-ff5e77feae3e

Area=2526 Joint1=2688 Joint2=2733 Joint3=2734 Joint4=2689 GUID=69fcc792-556c-43f1-9c39-dae0ed10eb81

Area=2527 Joint1=2689 Joint2=2734 Joint3=2735 Joint4=2690 GUID=a3d9fa4c-7776-4f6a-8454-56c01a5a4e39

Area=2528 Joint1=2690 Joint2=2735 Joint3=2736 Joint4=2691 GUID=c9d8c10b-1b6a-4ddf-a74b-6851aa067e70

Area=2529 Joint1=2691 Joint2=2736 Joint3=2737 Joint4=2692 GUID=3c81d028-5318-47e6-9531-f5143ea5fbc9

Area=2530 Joint1=2692 Joint2=2737 Joint3=2738 Joint4=2693 GUID=df628a16-3f0b-478d-aa61-e179d21f266e

Area=2531 Joint1=2693 Joint2=2738 Joint3=2739 Joint4=2694 GUID=1d70f481-3ea2-421f-8d7c-9072b05a4746

Area=2532 Joint1=2694 Joint2=2739 Joint3=2740 Joint4=2695 GUID=52b851b9-c538-469d-aff7-903ad3f07fba

Area=2533 Joint1=2695 Joint2=2740 Joint3=2741 Joint4=2696 GUID=845da0bd-dd45-49bd-93ef-a296679f6823

Area=2534 Joint1=2696 Joint2=2741 Joint3=2742 Joint4=2697 GUID=318be644-4f78-4243-bc8d-0ffca365e92b

Area=2535 Joint1=2697 Joint2=2742 Joint3=2743 Joint4=2698 GUID=d83ca426-f20d-4539-9162-38ddc57ea48f

Area=2536 Joint1=2698 Joint2=2743 Joint3=2744 Joint4=2699 GUID=003030fd-07a6-4271-b360-beb41aead458

Area=2537 Joint1=2699 Joint2=2744 Joint3=2745 Joint4=2700 GUID=4ba0bd59-6230-455c-8f4f-15955fe339ff

Area=2538 Joint1=2700 Joint2=2745 Joint3=2746 Joint4=2701 GUID=c8ab9fea-442f-4c58-901c-1179c59f8f04

Area=2539 Joint1=2701 Joint2=2746 Joint3=2747 Joint4=2702 GUID=460bdaf9-2a92-4ea2-82df-c8e77eca9a10

Area=2540 Joint1=2702 Joint2=2747 Joint3=2748 Joint4=2703 GUID=487f799c-e5d4-4e41-b341-ea9b69396544

Area=2541 Joint1=2703 Joint2=2748 Joint3=2749 Joint4=2704 GUID=7eaaef865-a9a2-4bc8-bd3f-e3a16207029d

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=2542 | Joint1=2704 | Joint2=2749 | Joint3=2750 | Joint4=2705 | GUID=f5f7c0c1-6391-45c3-88e9-df338f860e71 |
| Area=2543 | Joint1=2705 | Joint2=2750 | Joint3=2751 | Joint4=2706 | GUID=3dd696e9-a56b-44fe-a5df-4151f3ec95a4 |
| Area=2544 | Joint1=2706 | Joint2=2751 | Joint3=2752 | Joint4=2707 | GUID=9706ecc5-6923-4fd4-8cc3-ec32874157b6 |
| Area=2545 | Joint1=2707 | Joint2=2752 | Joint3=2753 | Joint4=2708 | GUID=eb04b35c-d80e-4bd9-b488-2bd8efc2fdc7 |
| Area=2546 | Joint1=2708 | Joint2=2753 | Joint3=2754 | Joint4=2709 | GUID=f511ea23-0c9b-47d8-ae2-7909f6908f8b  |
| Area=2547 | Joint1=2709 | Joint2=2754 | Joint3=2755 | Joint4=2710 | GUID=b88f8d12-7710-42ec-870d-31e74611560c |
| Area=2548 | Joint1=2710 | Joint2=2755 | Joint3=2756 | Joint4=2711 | GUID=7b89b443-09d2-49bd-a6b9-1e262bdc3e48 |
| Area=2549 | Joint1=2711 | Joint2=2756 | Joint3=2757 | Joint4=2712 | GUID=91ecd51d-8aa0-43b1-a777-40e04f5f90ea |
| Area=2550 | Joint1=2712 | Joint2=2757 | Joint3=2758 | Joint4=2713 | GUID=e733be90-e2b7-40a5-941c-b5eb95f688d6 |
| Area=2551 | Joint1=2713 | Joint2=2758 | Joint3=2759 | Joint4=2714 | GUID=a23f3469-5c17-4103-b5c3-b188914a3e4f |
| Area=2552 | Joint1=2714 | Joint2=2759 | Joint3=2760 | Joint4=2715 | GUID=7cfd9047-f6e8-46ef-b9ff-7a9d64a62752 |
| Area=2553 | Joint1=2715 | Joint2=2760 | Joint3=2761 | Joint4=2716 | GUID=5652d7b2-cee1-4212-b3fd-a4d285007308 |
| Area=2554 | Joint1=2717 | Joint2=2762 | Joint3=2763 | Joint4=2718 | GUID=89c6c3ea-ef91-4c89-bddb-11320fe1d733 |
| Area=2555 | Joint1=2718 | Joint2=2763 | Joint3=2764 | Joint4=2719 | GUID=711e4e97-0ef1-4fac-ac13-cf789654458d |
| Area=2556 | Joint1=2719 | Joint2=2764 | Joint3=2765 | Joint4=2720 | GUID=25d228d1-3e76-4748-98fc-00ce5f699583 |
| Area=2557 | Joint1=2720 | Joint2=2765 | Joint3=2766 | Joint4=2721 | GUID=cd6284b9-98fd-4830-8d3a-ad9b02c767fc |
| Area=2558 | Joint1=2721 | Joint2=2766 | Joint3=2767 | Joint4=2722 | GUID=1353869f-d390-4555-bd07-d3e787ced93c |
| Area=2559 | Joint1=2722 | Joint2=2767 | Joint3=2768 | Joint4=2723 | GUID=17428be9-8d2a-4ffb-a209-9f79286cee91 |
| Area=2560 | Joint1=2723 | Joint2=2768 | Joint3=2769 | Joint4=2724 | GUID=b21570ab-2e7c-40f2-b709-5017b2e524aa |
| Area=2561 | Joint1=2724 | Joint2=2769 | Joint3=2770 | Joint4=2725 | GUID=a44a6877-aa20-4655-8aaf-92a267407fc0 |
| Area=2562 | Joint1=2725 | Joint2=2770 | Joint3=2771 | Joint4=2726 | GUID=7d682384-ed58-4db3-9e17-c83a5ed107e9 |
| Area=2563 | Joint1=2726 | Joint2=2771 | Joint3=2772 | Joint4=2727 | GUID=944fe50d-f283-4c62-98d6-a9d617341ae7 |
| Area=2564 | Joint1=2727 | Joint2=2772 | Joint3=2773 | Joint4=2728 | GUID=cfab0254-05e2-47d7-8605-f4927747b6d5 |
| Area=2565 | Joint1=2728 | Joint2=2773 | Joint3=2774 | Joint4=2729 | GUID=f1e558a3-7ac5-4da0-934b-03b872f51fb5 |
| Area=2566 | Joint1=2729 | Joint2=2774 | Joint3=2775 | Joint4=2730 | GUID=893ff719-ebec-446d-ba27-18c160095b09 |
| Area=2567 | Joint1=2730 | Joint2=2775 | Joint3=2776 | Joint4=2731 | GUID=7d617173-7001-42ec-a282-a64bc44144bf |
| Area=2568 | Joint1=2731 | Joint2=2776 | Joint3=2777 | Joint4=2732 | GUID=f13e3ec5-c801-41b2-95e4-613381923059 |
| Area=2569 | Joint1=2732 | Joint2=2777 | Joint3=2778 | Joint4=2733 | GUID=aab8e861-1e24-473a-96f0-2bbb457c27c4 |
| Area=2570 | Joint1=2733 | Joint2=2778 | Joint3=2779 | Joint4=2734 | GUID=f55598d5-abcb-4ad7-abc8-4164ef49eace |
| Area=2571 | Joint1=2734 | Joint2=2779 | Joint3=2780 | Joint4=2735 | GUID=b605ceb7-418a-4846-9ca3-92273c052b08 |
| Area=2572 | Joint1=2735 | Joint2=2780 | Joint3=2781 | Joint4=2736 | GUID=850f2a18-dec7-4bb3-8d00-e929fd6e1c45 |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                            |
|-----------|-------------|-------------|-------------|-------------|--------------------------------------------|
| Area=2573 | Joint1=2736 | Joint2=2781 | Joint3=2782 | Joint4=2737 | GUID=335096e1-444d-42ec-a2a6-851fc030f9d1  |
| Area=2574 | Joint1=2737 | Joint2=2782 | Joint3=2783 | Joint4=2738 | GUID=ae278757-cdef-4aba-b363-36414ec1f890  |
| Area=2575 | Joint1=2738 | Joint2=2783 | Joint3=2784 | Joint4=2739 | GUID=dd924638-f177-4d44-928d-e96a448d172e  |
| Area=2576 | Joint1=2739 | Joint2=2784 | Joint3=2785 | Joint4=2740 | GUID=f603dea0-dbb4-49c3-a793-e5ea3f7d657f  |
| Area=2577 | Joint1=2740 | Joint2=2785 | Joint3=2786 | Joint4=2741 | GUID=4f27ecd0-2356-4d00-9782-9f85d1484a5c  |
| Area=2578 | Joint1=2741 | Joint2=2786 | Joint3=2787 | Joint4=2742 | GUID=683bc2e5-1964-46d7-95fd-eb7c64100ade  |
| Area=2579 | Joint1=2742 | Joint2=2787 | Joint3=2788 | Joint4=2743 | GUID=c16f4783-c98d-4c59-8408-ae50d93a033f  |
| Area=2580 | Joint1=2743 | Joint2=2788 | Joint3=2789 | Joint4=2744 | GUID=806d2983-263a-4188-9222-5396059e4c5b  |
| Area=2581 | Joint1=2744 | Joint2=2789 | Joint3=2790 | Joint4=2745 | GUID=cd679f4b-eb02-4412-93d2-a694096c2ef7  |
| Area=2582 | Joint1=2745 | Joint2=2790 | Joint3=2791 | Joint4=2746 | GUID=15c4f0cd-243a-4135-a910-1cd826c13214  |
| Area=2583 | Joint1=2746 | Joint2=2791 | Joint3=2792 | Joint4=2747 | GUID=bdc7c5e8-d18f-411b-b0d4-f8405fca7558  |
| Area=2584 | Joint1=2747 | Joint2=2792 | Joint3=2793 | Joint4=2748 | GUID=4b5263cb-24f2-46f9-bfc3-e39a29eb2b08  |
| Area=2585 | Joint1=2748 | Joint2=2793 | Joint3=2794 | Joint4=2749 | GUID=05085e6b-dc13-4f62-8098-7189bdbbeb995 |
| Area=2586 | Joint1=2749 | Joint2=2794 | Joint3=2795 | Joint4=2750 | GUID=1806808f-ed64-451d-b4c3-9fcab6f74ff4  |
| Area=2587 | Joint1=2750 | Joint2=2795 | Joint3=2796 | Joint4=2751 | GUID=bc2531af-7630-46f6-98d9-33673ff91ce3  |
| Area=2588 | Joint1=2751 | Joint2=2796 | Joint3=2797 | Joint4=2752 | GUID=23cc3f75-eb75-4bc4-90ea-c5ef1f683f0d  |
| Area=2589 | Joint1=2752 | Joint2=2797 | Joint3=2798 | Joint4=2753 | GUID=c57adcd-b-647a-4612-8b29-6e12c1947d75 |
| Area=2590 | Joint1=2753 | Joint2=2798 | Joint3=2799 | Joint4=2754 | GUID=ccae9a0c-4e29-4516-b378-7072fdcf55f8  |
| Area=2591 | Joint1=2754 | Joint2=2799 | Joint3=2800 | Joint4=2755 | GUID=665441c9-9e47-4b87-b1cd-4034dd4eaa5e  |
| Area=2592 | Joint1=2755 | Joint2=2800 | Joint3=2801 | Joint4=2756 | GUID=06c9f1bd-ce96-44e5-b51d-c3faa8f0a368  |
| Area=2593 | Joint1=2756 | Joint2=2801 | Joint3=2802 | Joint4=2757 | GUID=bf8be4c4-8c2c-4590-8ebc-7b4c16eea8b7  |
| Area=2594 | Joint1=2757 | Joint2=2802 | Joint3=2803 | Joint4=2758 | GUID=a2316463-55a4-4d3a-a39d-b8e9da923b26  |
| Area=2595 | Joint1=2758 | Joint2=2803 | Joint3=2804 | Joint4=2759 | GUID=1fb18253-2c81-46c9-8bba-f797b1d78b8c  |
| Area=2596 | Joint1=2759 | Joint2=2804 | Joint3=2805 | Joint4=2760 | GUID=b22f04a2-568a-48ef-bb08-b9d8f07847cf  |
| Area=2597 | Joint1=2760 | Joint2=2805 | Joint3=2806 | Joint4=2761 | GUID=188790ad-9853-4080-a836-89a6fd264481  |
| Area=2598 | Joint1=2762 | Joint2=2807 | Joint3=2808 | Joint4=2763 | GUID=6cb972b0-26e8-429d-ae78-9f63eebc1c56  |
| Area=2599 | Joint1=2763 | Joint2=2808 | Joint3=2809 | Joint4=2764 | GUID=75c4f2ea-e7c6-4198-9238-aeebec5fbf34  |
| Area=2600 | Joint1=2764 | Joint2=2809 | Joint3=2810 | Joint4=2765 | GUID=b7274b52-b447-4731-ac48-7f80a6229c93  |
| Area=2601 | Joint1=2765 | Joint2=2810 | Joint3=2811 | Joint4=2766 | GUID=e50cbcc8-3b17-40c4-b8a0-3d350465d97c  |
| Area=2602 | Joint1=2766 | Joint2=2811 | Joint3=2812 | Joint4=2767 | GUID=f594e725-0155-4ece-8ca3-ba305019811f  |
| Area=2603 | Joint1=2767 | Joint2=2812 | Joint3=2813 | Joint4=2768 | GUID=1c87255a-ed1c-47d4-9426-9f735e49a93a  |
| Area=2604 | Joint1=2768 | Joint2=2813 | Joint3=2814 | Joint4=2769 | GUID=5e102e6a-ad90-4af3-8cf5-59209868174e  |
| Area=2605 | Joint1=2769 | Joint2=2814 | Joint3=2815 | Joint4=2770 | GUID=5acf34fc-5bb3-4c9f-bf8e-cba076553ce8  |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=2606<br>91da2a97ccab | Joint1=2770 | Joint2=2815 | Joint3=2816 | Joint4=2771 | GUID=620b2640-dc0c-481a-95cf-             |
| Area=2607                 | Joint1=2771 | Joint2=2816 | Joint3=2817 | Joint4=2772 | GUID=8dd76d37-6b6f-4a2e-b6fe-985611fb029c |
| Area=2608<br>7392dc076b53 | Joint1=2772 | Joint2=2817 | Joint3=2818 | Joint4=2773 | GUID=7cc7cb7e-d005-4918-9f22-             |
| Area=2609<br>171ed7dfad57 | Joint1=2773 | Joint2=2818 | Joint3=2819 | Joint4=2774 | GUID=aa00b394-9295-483b-b7b6-             |
| Area=2610<br>bced29b79647 | Joint1=2774 | Joint2=2819 | Joint3=2820 | Joint4=2775 | GUID=a85146fd-6a5c-49a8-a8e4-             |
| Area=2611<br>f9d306d466e1 | Joint1=2775 | Joint2=2820 | Joint3=2821 | Joint4=2776 | GUID=e2fd63a4-7444-4025-a7b9-             |
| Area=2612<br>d35c7a32fba4 | Joint1=2776 | Joint2=2821 | Joint3=2822 | Joint4=2777 | GUID=36222963-ce75-4fd3-bc2e-             |
| Area=2613<br>b60367d77817 | Joint1=2777 | Joint2=2822 | Joint3=2823 | Joint4=2778 | GUID=04b96e20-63f0-40e5-af34-             |
| Area=2614                 | Joint1=2778 | Joint2=2823 | Joint3=2824 | Joint4=2779 | GUID=ba35d79c-b66f-4f45-b455-683d518105fa |
| Area=2615<br>0e0a03bb3a5b | Joint1=2779 | Joint2=2824 | Joint3=2825 | Joint4=2780 | GUID=07c0d499-d833-45ca-95c5-             |
| Area=2616<br>d72845b17144 | Joint1=2780 | Joint2=2825 | Joint3=2826 | Joint4=2781 | GUID=f228560e-51b1-451c-b59e-             |
| Area=2617<br>bb4842cf3490 | Joint1=2781 | Joint2=2826 | Joint3=2827 | Joint4=2782 | GUID=91cb794e-ef26-49e3-b5d2-             |
| Area=2618<br>68ddf02f27e8 | Joint1=2782 | Joint2=2827 | Joint3=2828 | Joint4=2783 | GUID=232d6be1-07c8-432a-967e-             |
| Area=2619                 | Joint1=2783 | Joint2=2828 | Joint3=2829 | Joint4=2784 | GUID=d9eab23a-f1e1-4f5b-9f98-b9aa62bbe472 |
| Area=2620<br>7d863d772440 | Joint1=2784 | Joint2=2829 | Joint3=2830 | Joint4=2785 | GUID=cc7a5703-a6bb-4470-b18c-             |
| Area=2621<br>e44e6008e73c | Joint1=2785 | Joint2=2830 | Joint3=2831 | Joint4=2786 | GUID=e4ea57a8-f899-4a5e-989b-             |
| Area=2622                 | Joint1=2786 | Joint2=2831 | Joint3=2832 | Joint4=2787 | GUID=3f359530-0167-4c03-b5f5-3d2f4c2b7a03 |
| Area=2623<br>6489fb551c7b | Joint1=2787 | Joint2=2832 | Joint3=2833 | Joint4=2788 | GUID=d38bb96f-c010-427e-ad88-             |
| Area=2624<br>5cd889563f3e | Joint1=2788 | Joint2=2833 | Joint3=2834 | Joint4=2789 | GUID=ad92fded-0eeb-4d71-8bbc-             |
| Area=2625<br>ad1938ebee95 | Joint1=2789 | Joint2=2834 | Joint3=2835 | Joint4=2790 | GUID=068ad24e-0c9d-47bd-afe3-             |
| Area=2626<br>b0c50181e8e2 | Joint1=2790 | Joint2=2835 | Joint3=2836 | Joint4=2791 | GUID=7167be25-e6e5-45e8-877a-             |
| Area=2627<br>878d3e04d653 | Joint1=2791 | Joint2=2836 | Joint3=2837 | Joint4=2792 | GUID=c86af71c-ef57-4033-a5be-             |
| Area=2628                 | Joint1=2792 | Joint2=2837 | Joint3=2838 | Joint4=2793 | GUID=8a4f42df-f7a9-4b03-b220-3be534b6d31a |
| Area=2629                 | Joint1=2793 | Joint2=2838 | Joint3=2839 | Joint4=2794 | GUID=bb00f0cd-4085-4fc7-b2b7-5426145fba3b |
| Area=2630<br>32a23bac9c1b | Joint1=2794 | Joint2=2839 | Joint3=2840 | Joint4=2795 | GUID=f37d111d-7e56-47cd-a6ae-             |
| Area=2631<br>8d8f89d7bb75 | Joint1=2795 | Joint2=2840 | Joint3=2841 | Joint4=2796 | GUID=a30b0952-d9bd-4542-a336-             |
| Area=2632<br>fa97613bb270 | Joint1=2796 | Joint2=2841 | Joint3=2842 | Joint4=2797 | GUID=a6d5c9ab-1c26-4362-be1d-             |
| Area=2633<br>80cfd334095a | Joint1=2797 | Joint2=2842 | Joint3=2843 | Joint4=2798 | GUID=e1eb18b6-ca39-4b3c-83a9-             |
| Area=2634<br>22fe4d28d947 | Joint1=2798 | Joint2=2843 | Joint3=2844 | Joint4=2799 | GUID=61583775-20fd-41cb-b41d-             |
| Area=2635<br>1c08ca5964e0 | Joint1=2799 | Joint2=2844 | Joint3=2845 | Joint4=2800 | GUID=1abd8687-7e1c-4a30-9c4c-             |
| Area=2636                 | Joint1=2800 | Joint2=2845 | Joint3=2846 | Joint4=2801 | GUID=c3d1790e-adf0-4c5e-8e48-56ff645f3859 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=2637<br>c07170f2492a | Joint1=2801 | Joint2=2846 | Joint3=2847 | Joint4=2802 | GUID=1a081975-299e-421e-bbaf-             |
| Area=2638<br>8c973cb8fbf0 | Joint1=2802 | Joint2=2847 | Joint3=2848 | Joint4=2803 | GUID=eb18a84a-9651-4bb9-9354-             |
| Area=2639                 | Joint1=2803 | Joint2=2848 | Joint3=2849 | Joint4=2804 | GUID=097633ff-292d-49c1-a23b-032f85d90277 |
| Area=2640<br>8eaaa06a10e4 | Joint1=2804 | Joint2=2849 | Joint3=2850 | Joint4=2805 | GUID=d69463d4-1221-46da-8bb3-             |
| Area=2641<br>93e5f0727875 | Joint1=2805 | Joint2=2850 | Joint3=2851 | Joint4=2806 | GUID=a330abc3-406c-4bd7-b2f8-             |
| Area=2642<br>ec11ba2e8cdd | Joint1=2807 | Joint2=2852 | Joint3=2853 | Joint4=2808 | GUID=e60b7c59-5278-41cf-bca6-             |
| Area=2643<br>a46e91aa0d42 | Joint1=2808 | Joint2=2853 | Joint3=2854 | Joint4=2809 | GUID=8a2364a0-7ba9-4e39-8b39-             |
| Area=2644                 | Joint1=2809 | Joint2=2854 | Joint3=2855 | Joint4=2810 | GUID=bc98460c-0bf6-4ca6-bd25-f54a7c2f441b |
| Area=2645<br>9c38be06574d | Joint1=2810 | Joint2=2855 | Joint3=2856 | Joint4=2811 | GUID=4637e696-c156-4559-89ba-             |
| Area=2646<br>c8be21e8d170 | Joint1=2811 | Joint2=2856 | Joint3=2857 | Joint4=2812 | GUID=d417b3a4-14db-43d4-8a66-             |
| Area=2647<br>374ae0e1e373 | Joint1=2812 | Joint2=2857 | Joint3=2858 | Joint4=2813 | GUID=8f8b8c9c-206a-4a34-8ad1-             |
| Area=2648<br>010bd256c2e7 | Joint1=2813 | Joint2=2858 | Joint3=2859 | Joint4=2814 | GUID=2c8061cb-f1f3-4bbd-a605-             |
| Area=2649<br>a7bbfb6d6181 | Joint1=2814 | Joint2=2859 | Joint3=2860 | Joint4=2815 | GUID=d24be00d-54c7-4dc9-b1a0-             |
| Area=2650<br>986e89ca9c2e | Joint1=2815 | Joint2=2860 | Joint3=2861 | Joint4=2816 | GUID=e85fd27e-ead1-4c4b-94d4-             |
| Area=2651<br>94978689fae6 | Joint1=2816 | Joint2=2861 | Joint3=2862 | Joint4=2817 | GUID=d889427c-9153-4331-bfdc-             |
| Area=2652<br>1d9712c060fe | Joint1=2817 | Joint2=2862 | Joint3=2863 | Joint4=2818 | GUID=18e98b18-0db3-4aca-b07c-             |
| Area=2653                 | Joint1=2818 | Joint2=2863 | Joint3=2864 | Joint4=2819 | GUID=5cd981cc-81ff-4af6-aae6-920a2cdd3542 |
| Area=2654<br>2b60030c3799 | Joint1=2819 | Joint2=2864 | Joint3=2865 | Joint4=2820 | GUID=1e7bae58-c372-466c-8c02-             |
| Area=2655<br>c269e96645e7 | Joint1=2820 | Joint2=2865 | Joint3=2866 | Joint4=2821 | GUID=573e4e72-521d-4eab-ba40-             |
| Area=2656<br>4f32dcba3a8b | Joint1=2821 | Joint2=2866 | Joint3=2867 | Joint4=2822 | GUID=668595d7-19cf-47c0-9521-             |
| Area=2657<br>959a7059eb7a | Joint1=2822 | Joint2=2867 | Joint3=2868 | Joint4=2823 | GUID=0313efbb-4562-4c88-b387-             |
| Area=2658                 | Joint1=2823 | Joint2=2868 | Joint3=2869 | Joint4=2824 | GUID=f73d9558-3f53-428d-baf0-f0d01bde5313 |
| Area=2659<br>78c69555e19a | Joint1=2824 | Joint2=2869 | Joint3=2870 | Joint4=2825 | GUID=c9a1c793-637c-4c91-8738-             |
| Area=2660<br>9c3d7368a17f | Joint1=2825 | Joint2=2870 | Joint3=2871 | Joint4=2826 | GUID=a32871ba-b3ca-4dd2-8343-             |
| Area=2661<br>aeb2cc97607a | Joint1=2826 | Joint2=2871 | Joint3=2872 | Joint4=2827 | GUID=47b2e25f-da84-4c38-933b-             |
| Area=2662<br>7257c00c9341 | Joint1=2827 | Joint2=2872 | Joint3=2873 | Joint4=2828 | GUID=c0657908-ef86-4558-a3ba-             |
| Area=2663<br>0796785fbe69 | Joint1=2828 | Joint2=2873 | Joint3=2874 | Joint4=2829 | GUID=449a5da3-3760-4ae5-a355-             |
| Area=2664                 | Joint1=2829 | Joint2=2874 | Joint3=2875 | Joint4=2830 | GUID=a0f44fe1-b01e-4d9d-82fe-db903ed9831e |
| Area=2665<br>80122519328d | Joint1=2830 | Joint2=2875 | Joint3=2876 | Joint4=2831 | GUID=d2c2aec3-347e-4426-89b0-             |
| Area=2666<br>a7be7e151f4b | Joint1=2831 | Joint2=2876 | Joint3=2877 | Joint4=2832 | GUID=bbc6732f-12b7-49be-a933-             |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=2667 Joint1=2832 Joint2=2877 Joint3=2878 Joint4=2833 GUID=f6f132b4-d410-413c-9f7c-15f2163acbe4  
Area=2668 Joint1=2833 Joint2=2878 Joint3=2879 Joint4=2834 GUID=9ca9fcca-f561-4f77-86fd-aeae0c1883bd  
Area=2669 Joint1=2834 Joint2=2879 Joint3=2880 Joint4=2835 GUID=99b5d770-95c2-475f-8629-5dc6840d1092  
Area=2670 Joint1=2835 Joint2=2880 Joint3=2881 Joint4=2836 GUID=78b21f9e-afdd-4498-9f33-50b01b1669f6  
Area=2671 Joint1=2836 Joint2=2881 Joint3=2882 Joint4=2837 GUID=3ddda577-3e67-4b3b-8f61-52a128215de9  
Area=2672 Joint1=2837 Joint2=2882 Joint3=2883 Joint4=2838 GUID=78c4eda2-030a-4c6f-8d67-573ff5f4a104  
Area=2673 Joint1=2838 Joint2=2883 Joint3=2884 Joint4=2839 GUID=11615e88-a1b5-4659-96ec-ab7f583fd991  
Area=2674 Joint1=2839 Joint2=2884 Joint3=2885 Joint4=2840 GUID=5b693625-f099-4b4d-97f2-62dff857938  
Area=2675 Joint1=2840 Joint2=2885 Joint3=2886 Joint4=2841 GUID=72b2af2f-5ff4-4c7b-b245-6a6e4d38667b  
Area=2676 Joint1=2841 Joint2=2886 Joint3=2887 Joint4=2842 GUID=c98dbf19-6314-40c3-9e7c-0f0903d317a7  
Area=2677 Joint1=2842 Joint2=2887 Joint3=2888 Joint4=2843 GUID=649a2ab0-f95a-4227-a0c2-f6bc50e21154  
Area=2678 Joint1=2843 Joint2=2888 Joint3=2889 Joint4=2844 GUID=f143e95b-d509-4b32-bf34-dff9e86b6fed  
Area=2679 Joint1=2844 Joint2=2889 Joint3=2890 Joint4=2845 GUID=9a7c21f7-ebbb-417d-9c9f-8cf303ede424  
Area=2680 Joint1=2845 Joint2=2890 Joint3=2891 Joint4=2846 GUID=92f2e804-30f4-49b1-b559-b370f669479c  
Area=2681 Joint1=2846 Joint2=2891 Joint3=2892 Joint4=2847 GUID=cd12ea14-e1bd-4400-9aa5-35ec770fd935  
Area=2682 Joint1=2847 Joint2=2892 Joint3=2893 Joint4=2848 GUID=76541a75-7d0c-4276-bb7b-8210d02dc522  
Area=2683 Joint1=2848 Joint2=2893 Joint3=2894 Joint4=2849 GUID=726e752a-c97b-4e07-bf03-675b6102dba4  
Area=2684 Joint1=2849 Joint2=2894 Joint3=2895 Joint4=2850 GUID=fc0596e6-e724-481b-8c31-47b9025e0d3b  
Area=2685 Joint1=2850 Joint2=2895 Joint3=2896 Joint4=2851 GUID=418b09e2-f8da-47c1-be44-deb74537c007  
Area=2686 Joint1=2852 Joint2=2897 Joint3=2898 Joint4=2853 GUID=1dcc12ef-1150-4d68-9a15-31c679ecf39a  
Area=2687 Joint1=2853 Joint2=2898 Joint3=2899 Joint4=2854 GUID=50cff192-8ade-4295-b744-6d8d823038d8  
Area=2688 Joint1=2854 Joint2=2899 Joint3=2900 Joint4=2855 GUID=d70558aa-1774-4956-b608-3e409a680aa8  
Area=2689 Joint1=2855 Joint2=2900 Joint3=2901 Joint4=2856 GUID=7e0d312f-a961-45bb-a53c-acb773f31177  
Area=2690 Joint1=2856 Joint2=2901 Joint3=2902 Joint4=2857 GUID=e5d2da9f-43d0-4c29-9c26-3dd74f53ddf6  
Area=2691 Joint1=2857 Joint2=2902 Joint3=2903 Joint4=2858 GUID=56f6601f-0d8f-4398-82c3-73aa2a076d1a  
Area=2692 Joint1=2858 Joint2=2903 Joint3=2904 Joint4=2859 GUID=ae864079-c819-4ea4-9864-7deffabeddb9  
Area=2693 Joint1=2859 Joint2=2904 Joint3=2905 Joint4=2860 GUID=4fa413a1-6dc8-4d3b-a0f7-dcb71e02d463  
Area=2694 Joint1=2860 Joint2=2905 Joint3=2906 Joint4=2861 GUID=c001eaa9-e2d6-4418-aa8f-3e7e81ae54ae  
Area=2695 Joint1=2861 Joint2=2906 Joint3=2907 Joint4=2862 GUID=7f685ed4-c021-41ff-a8f5-0f5561285be7  
Area=2696 Joint1=2862 Joint2=2907 Joint3=2908 Joint4=2863 GUID=8bcfa2c1-3fff-4fda-a0c2-bd4f8e705bcd  
Area=2697 Joint1=2863 Joint2=2908 Joint3=2909 Joint4=2864 GUID=40fd89e5-e3e1-4131-8eff-a8f444cf837b  
Area=2698 Joint1=2864 Joint2=2909 Joint3=2910 Joint4=2865 GUID=3f695e25-65f1-4c53-b5b5-e313a26952e6  
Area=2699 Joint1=2865 Joint2=2910 Joint3=2911 Joint4=2866 GUID=fae35067-7aa0-477a-b94a-f09ae0498537  
Area=2700 Joint1=2866 Joint2=2911 Joint3=2912 Joint4=2867 GUID=6366e22e-2113-48cb-be4c-961c3697d0f4  
Area=2701 Joint1=2867 Joint2=2912 Joint3=2913 Joint4=2868 GUID=d8c70997-bee0-4418-a365-f172a7f55acf  
Area=2702 Joint1=2868 Joint2=2913 Joint3=2914 Joint4=2869 GUID=d5ed4900-4f7b-4c51-81d8-b5f8dd84f204

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=2703<br>d2609047d2bf | Joint1=2869 | Joint2=2914 | Joint3=2915 | Joint4=2870 | GUID=d1858030-dc5c-4fca-b0b4-             |
| Area=2704                 | Joint1=2870 | Joint2=2915 | Joint3=2916 | Joint4=2871 | GUID=9f60862b-7751-4faf-a357-a9f8585f6146 |
| Area=2705<br>8c29ea9c36e2 | Joint1=2871 | Joint2=2916 | Joint3=2917 | Joint4=2872 | GUID=1059348d-74b4-4c16-8013-             |
| Area=2706<br>25e881035012 | Joint1=2872 | Joint2=2917 | Joint3=2918 | Joint4=2873 | GUID=3b9b3780-226e-4b73-9f0b-             |
| Area=2707<br>daaf408cc57e | Joint1=2873 | Joint2=2918 | Joint3=2919 | Joint4=2874 | GUID=0064f2b2-e727-454a-8dbc-             |
| Area=2708                 | Joint1=2874 | Joint2=2919 | Joint3=2920 | Joint4=2875 | GUID=fac19d01-1a42-413b-b2a6-f8ab2a5fc137 |
| Area=2709<br>cb94dee0843c | Joint1=2875 | Joint2=2920 | Joint3=2921 | Joint4=2876 | GUID=e677f887-d425-43d2-a334-             |
| Area=2710<br>c944d6bf7434 | Joint1=2876 | Joint2=2921 | Joint3=2922 | Joint4=2877 | GUID=a8c37ab8-a569-4d05-86b5-             |
| Area=2711<br>3b942bab88e4 | Joint1=2877 | Joint2=2922 | Joint3=2923 | Joint4=2878 | GUID=e5dc3036-eb47-4c13-be0c-             |
| Area=2712<br>c7953558d2c4 | Joint1=2878 | Joint2=2923 | Joint3=2924 | Joint4=2879 | GUID=feb0c203-320b-43c3-82c5-             |
| Area=2713<br>1bd765d3986d | Joint1=2879 | Joint2=2924 | Joint3=2925 | Joint4=2880 | GUID=aaf2a095-802a-46c3-98b6-             |
| Area=2714<br>457c03b35748 | Joint1=2880 | Joint2=2925 | Joint3=2926 | Joint4=2881 | GUID=668dda90-06ef-4cb8-b9fe-             |
| Area=2715<br>9e4c072ce78e | Joint1=2881 | Joint2=2926 | Joint3=2927 | Joint4=2882 | GUID=d2811863-636a-401b-a64e-             |
| Area=2716<br>bf4be71b8ceb | Joint1=2882 | Joint2=2927 | Joint3=2928 | Joint4=2883 | GUID=9c2c2a4d-e778-4aa7-a801-             |
| Area=2717                 | Joint1=2883 | Joint2=2928 | Joint3=2929 | Joint4=2884 | GUID=fcda5eef-5df4-4702-a79b-7262949787c0 |
| Area=2718<br>804ed81d6fdf | Joint1=2884 | Joint2=2929 | Joint3=2930 | Joint4=2885 | GUID=5964e3c0-1a8c-4009-a8e8-             |
| Area=2719<br>d2bd2e10baa5 | Joint1=2885 | Joint2=2930 | Joint3=2931 | Joint4=2886 | GUID=b67d4381-5b52-4923-9299-             |
| Area=2720                 | Joint1=2886 | Joint2=2931 | Joint3=2932 | Joint4=2887 | GUID=5537e40b-18f6-4ff5-85c4-ea8dc5f3b116 |
| Area=2721                 | Joint1=2887 | Joint2=2932 | Joint3=2933 | Joint4=2888 | GUID=f79e4137-f08e-4749-aceb-a95f28f764cc |
| Area=2722<br>c0344a0de534 | Joint1=2888 | Joint2=2933 | Joint3=2934 | Joint4=2889 | GUID=8700e427-950c-4f10-a906-             |
| Area=2723<br>35f3e13e92a2 | Joint1=2889 | Joint2=2934 | Joint3=2935 | Joint4=2890 | GUID=b4295d80-17f6-4a0e-a5be-             |
| Area=2724                 | Joint1=2890 | Joint2=2935 | Joint3=2936 | Joint4=2891 | GUID=a4b38104-f030-49c6-abbe-f8d8c2c5abf6 |
| Area=2725<br>64aa789735c2 | Joint1=2891 | Joint2=2936 | Joint3=2937 | Joint4=2892 | GUID=35f1ef7a-d9c2-4034-b746-             |
| Area=2726<br>a67878c4a8b4 | Joint1=2892 | Joint2=2937 | Joint3=2938 | Joint4=2893 | GUID=1cd1d049-7658-40c0-adab-             |
| Area=2727<br>1a5d4862eb6e | Joint1=2893 | Joint2=2938 | Joint3=2939 | Joint4=2894 | GUID=5a4637ba-2c96-4716-84c1-             |
| Area=2728<br>662030cbfd29 | Joint1=2894 | Joint2=2939 | Joint3=2940 | Joint4=2895 | GUID=6b483aca-223d-48c7-a83c-             |
| Area=2729<br>e87b41c636a3 | Joint1=2895 | Joint2=2940 | Joint3=2941 | Joint4=2896 | GUID=5a561503-db55-4d1e-8042-             |
| Area=2730                 | Joint1=2897 | Joint2=2942 | Joint3=2943 | Joint4=2898 | GUID=1fde2b64-5da9-4fe2-b67c-bf079c0d36d7 |
| Area=2731                 | Joint1=2898 | Joint2=2943 | Joint3=2944 | Joint4=2899 | GUID=ef46a75c-1dd2-42f4-a1b3-4dfa2b18e8fa |
| Area=2732                 | Joint1=2899 | Joint2=2944 | Joint3=2945 | Joint4=2900 | GUID=bac369bf-f77b-4fe4-a239-099f68afb956 |
| Area=2733<br>7a85afeddb5  | Joint1=2900 | Joint2=2945 | Joint3=2946 | Joint4=2901 | GUID=b89f6eb3-c9d6-41a0-9106-             |
| Area=2734                 | Joint1=2901 | Joint2=2946 | Joint3=2947 | Joint4=2902 | GUID=dffbeb61-afb5-462a-8d56-e6cd25c2045b |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=2735<br>3b1d96c8f29c | Joint1=2902 | Joint2=2947 | Joint3=2948 | Joint4=2903 | GUID=6a101875-cc17-41be-8c66-             |
| Area=2736<br>2648268d09a7 | Joint1=2903 | Joint2=2948 | Joint3=2949 | Joint4=2904 | GUID=e4066af8-5c36-4a59-bf47-             |
| Area=2737                 | Joint1=2904 | Joint2=2949 | Joint3=2950 | Joint4=2905 | GUID=89371328-726d-4f80-8f39-427a0e46709f |
| Area=2738<br>a61b59cac8a0 | Joint1=2905 | Joint2=2950 | Joint3=2951 | Joint4=2906 | GUID=c3adec40-1124-415f-826d-             |
| Area=2739<br>7965c62ed080 | Joint1=2906 | Joint2=2951 | Joint3=2952 | Joint4=2907 | GUID=ba3f0b72-91bf-4b69-a574-             |
| Area=2740                 | Joint1=2907 | Joint2=2952 | Joint3=2953 | Joint4=2908 | GUID=ae1cf53f-36a5-4787-9da4-8bdb11af769e |
| Area=2741<br>2c8f012eead6 | Joint1=2908 | Joint2=2953 | Joint3=2954 | Joint4=2909 | GUID=7d95bbb6-39d3-42d1-9a1a-             |
| Area=2742<br>a66961314811 | Joint1=2909 | Joint2=2954 | Joint3=2955 | Joint4=2910 | GUID=390b97c8-a1df-4fb4-90ad-             |
| Area=2743<br>d275d7a4cc8c | Joint1=2910 | Joint2=2955 | Joint3=2956 | Joint4=2911 | GUID=b4069036-07fc-4e56-be9d-             |
| Area=2744<br>607d560ac359 | Joint1=2911 | Joint2=2956 | Joint3=2957 | Joint4=2912 | GUID=940cb976-4570-419a-8f17-             |
| Area=2745<br>540b2eb7d5f3 | Joint1=2912 | Joint2=2957 | Joint3=2958 | Joint4=2913 | GUID=9af48491-a140-437e-901a-             |
| Area=2746<br>afe9996110ce | Joint1=2913 | Joint2=2958 | Joint3=2959 | Joint4=2914 | GUID=eb66ac12-d277-4024-814e-             |
| Area=2747                 | Joint1=2914 | Joint2=2959 | Joint3=2960 | Joint4=2915 | GUID=fcc6b325-53ef-41b7-a0f8-50c3fa7629e1 |
| Area=2748                 | Joint1=2915 | Joint2=2960 | Joint3=2961 | Joint4=2916 | GUID=4176cbee-5848-4f1f-8655-d45813fec184 |
| Area=2749<br>b89bd421507c | Joint1=2916 | Joint2=2961 | Joint3=2962 | Joint4=2917 | GUID=64b704cb-06ef-4762-acd0-             |
| Area=2750                 | Joint1=2917 | Joint2=2962 | Joint3=2963 | Joint4=2918 | GUID=23fef60e-e5f7-45fa-8214-0d5cf5ce8e53 |
| Area=2751                 | Joint1=2918 | Joint2=2963 | Joint3=2964 | Joint4=2919 | GUID=d05b78c4-ffc6-4e5f-ac94-09d742754e04 |
| Area=2752<br>57931b5923bd | Joint1=2919 | Joint2=2964 | Joint3=2965 | Joint4=2920 | GUID=5ba3b7f7-d08e-4d73-9729-             |
| Area=2753<br>649ac292bb0c | Joint1=2920 | Joint2=2965 | Joint3=2966 | Joint4=2921 | GUID=333e8c43-4acc-419e-8bf4-             |
| Area=2754<br>941d2277cc66 | Joint1=2921 | Joint2=2966 | Joint3=2967 | Joint4=2922 | GUID=25e4717c-76fa-4607-b1b2-             |
| Area=2755<br>4d3444918109 | Joint1=2922 | Joint2=2967 | Joint3=2968 | Joint4=2923 | GUID=b80fa1a9-b761-4a18-ac5f-             |
| Area=2756<br>0be2a9f742d0 | Joint1=2923 | Joint2=2968 | Joint3=2969 | Joint4=2924 | GUID=f8987e86-dee8-4cc7-a3ac-             |
| Area=2757<br>a4bae2d5262a | Joint1=2924 | Joint2=2969 | Joint3=2970 | Joint4=2925 | GUID=d47b5d64-8249-4b92-bae7-             |
| Area=2758<br>43ac1cf442a5 | Joint1=2925 | Joint2=2970 | Joint3=2971 | Joint4=2926 | GUID=2aaeb0ae-fb76-49ab-b307-             |
| Area=2759<br>2955a6be9e7b | Joint1=2926 | Joint2=2971 | Joint3=2972 | Joint4=2927 | GUID=65cae87b-f163-4d60-add9-             |
| Area=2760                 | Joint1=2927 | Joint2=2972 | Joint3=2973 | Joint4=2928 | GUID=b9614660-c046-4940-8c58-afd93bfaafae |
| Area=2761<br>ae6177c396d6 | Joint1=2928 | Joint2=2973 | Joint3=2974 | Joint4=2929 | GUID=8686bcd6-7fef-4a03-beb5-             |
| Area=2762<br>8d66cfd1656  | Joint1=2929 | Joint2=2974 | Joint3=2975 | Joint4=2930 | GUID=1a70e17e-4197-4465-9940-             |
| Area=2763<br>00db2cc51edc | Joint1=2930 | Joint2=2975 | Joint3=2976 | Joint4=2931 | GUID=42858ad1-5fd4-48e9-b59b-             |
| Area=2764<br>68a05e6d56a6 | Joint1=2931 | Joint2=2976 | Joint3=2977 | Joint4=2932 | GUID=689545b8-105f-4bbc-a91b-             |
| Area=2765<br>e4ce90f4a935 | Joint1=2932 | Joint2=2977 | Joint3=2978 | Joint4=2933 | GUID=29364e1d-b878-4b87-9260-             |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=2766 | Joint1=2933 | Joint2=2978 | Joint3=2979 | Joint4=2934 | GUID=fbf40ea2-bf5b-491b-be2a-60c44f6f630c |
| Area=2767 | Joint1=2934 | Joint2=2979 | Joint3=2980 | Joint4=2935 | GUID=4be3da10-e600-46be-bec6-0547d0693d9e |
| Area=2768 | Joint1=2935 | Joint2=2980 | Joint3=2981 | Joint4=2936 | GUID=74908dea-e06f-4435-bfd1-f4c7d3a5f478 |
| Area=2769 | Joint1=2936 | Joint2=2981 | Joint3=2982 | Joint4=2937 | GUID=f2c8ed8c-9c65-4e6c-88cf-d3b147cd8b69 |
| Area=2770 | Joint1=2937 | Joint2=2982 | Joint3=2983 | Joint4=2938 | GUID=50be745e-2d9d-4c49-abae-690fb1c59a84 |
| Area=2771 | Joint1=2938 | Joint2=2983 | Joint3=2984 | Joint4=2939 | GUID=630980e9-9e56-47ad-9094-d6a33609ae1e |
| Area=2772 | Joint1=2939 | Joint2=2984 | Joint3=2985 | Joint4=2940 | GUID=095ed142-98bf-4d3d-a6cd-8ed4d2cccb00 |
| Area=2773 | Joint1=2940 | Joint2=2985 | Joint3=2986 | Joint4=2941 | GUID=eb7f761a-f9dd-46a7-966c-8ad2e42905cc |
| Area=2774 | Joint1=2942 | Joint2=2987 | Joint3=2988 | Joint4=2943 | GUID=25158859-dca1-4081-83a3-4e6fe1d892b7 |
| Area=2775 | Joint1=2943 | Joint2=2988 | Joint3=2989 | Joint4=2944 | GUID=3305a95e-0f8f-4e13-a70f-eed08f0875e3 |
| Area=2776 | Joint1=2944 | Joint2=2989 | Joint3=2990 | Joint4=2945 | GUID=8b0d6c25-fa6a-44e4-9ee1-9d0288dce640 |
| Area=2777 | Joint1=2945 | Joint2=2990 | Joint3=2991 | Joint4=2946 | GUID=903b122a-3ce5-40e9-b741-a0baa298d319 |
| Area=2778 | Joint1=2946 | Joint2=2991 | Joint3=2992 | Joint4=2947 | GUID=65ca389b-dae6-4867-a0fa-c7201c983ccb |
| Area=2779 | Joint1=2947 | Joint2=2992 | Joint3=2993 | Joint4=2948 | GUID=620a64c4-131a-40ab-91a5-416f5655a63a |
| Area=2780 | Joint1=2948 | Joint2=2993 | Joint3=2994 | Joint4=2949 | GUID=ab14ac65-e629-4a42-a440-d561b9eb2937 |
| Area=2781 | Joint1=2949 | Joint2=2994 | Joint3=2995 | Joint4=2950 | GUID=76115875-4203-453e-b29d-1b252f9654ee |
| Area=2782 | Joint1=2950 | Joint2=2995 | Joint3=2996 | Joint4=2951 | GUID=08c83b77-8fa7-452d-968a-a0e5bc267170 |
| Area=2783 | Joint1=2951 | Joint2=2996 | Joint3=2997 | Joint4=2952 | GUID=cec5c923-6941-4e58-80cc-947127438723 |
| Area=2784 | Joint1=2952 | Joint2=2997 | Joint3=2998 | Joint4=2953 | GUID=6f77f9c8-372e-4b79-bfbc-0bd147ade68a |
| Area=2785 | Joint1=2953 | Joint2=2998 | Joint3=2999 | Joint4=2954 | GUID=8f5b842b-5bdb-47be-96c2-92e0c5330d27 |
| Area=2786 | Joint1=2954 | Joint2=2999 | Joint3=3000 | Joint4=2955 | GUID=93632a3c-ff84-4329-9ea6-02e55fa137ff |
| Area=2787 | Joint1=2955 | Joint2=3000 | Joint3=3001 | Joint4=2956 | GUID=9741f6bf-b61d-4f71-a642-0589195aa3f9 |
| Area=2788 | Joint1=2956 | Joint2=3001 | Joint3=3002 | Joint4=2957 | GUID=be9263c4-43cf-4f2d-9094-735bad62d095 |
| Area=2789 | Joint1=2957 | Joint2=3002 | Joint3=3003 | Joint4=2958 | GUID=0f9b9584-0ebe-476b-b52a-f3c1e13108aa |
| Area=2790 | Joint1=2958 | Joint2=3003 | Joint3=3004 | Joint4=2959 | GUID=23f60096-ff02-4d5b-9024-4c4fc73abae6 |
| Area=2791 | Joint1=2959 | Joint2=3004 | Joint3=3005 | Joint4=2960 | GUID=f23ba470-f64f-4baa-bb4c-64ef81e93276 |
| Area=2792 | Joint1=2960 | Joint2=3005 | Joint3=3006 | Joint4=2961 | GUID=66edd9dc-2134-47d1-828d-d2cb958b9992 |
| Area=2793 | Joint1=2961 | Joint2=3006 | Joint3=3007 | Joint4=2962 | GUID=ee6769a9-3283-4405-b76b-c22c2b58a1ef |
| Area=2794 | Joint1=2962 | Joint2=3007 | Joint3=3008 | Joint4=2963 | GUID=a29c1fa2-2428-4572-8a38-208b27b679eb |
| Area=2795 | Joint1=2963 | Joint2=3008 | Joint3=3009 | Joint4=2964 | GUID=7a3144f2-8888-4a88-86a7-77fd7796c9c  |
| Area=2796 | Joint1=2964 | Joint2=3009 | Joint3=3010 | Joint4=2965 | GUID=aa5ba976-5c01-4243-90d4-68cb9ecd9d65 |
| Area=2797 | Joint1=2965 | Joint2=3010 | Joint3=3011 | Joint4=2966 | GUID=6c1c8042-84ef-4b7f-938d-b1bac33081d4 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=2798<br>5d70c9078250 | Joint1=2966 | Joint2=3011 | Joint3=3012 | Joint4=2967 | GUID=b8bc37b7-f414-403c-a789-             |
| Area=2799<br>7d5b8de3e089 | Joint1=2967 | Joint2=3012 | Joint3=3013 | Joint4=2968 | GUID=214e7b3e-cb8b-4b66-aa00-             |
| Area=2800                 | Joint1=2968 | Joint2=3013 | Joint3=3014 | Joint4=2969 | GUID=fe7206af-cb24-49d1-bc37-b2f13809ee84 |
| Area=2801<br>deae1bc5f592 | Joint1=2969 | Joint2=3014 | Joint3=3015 | Joint4=2970 | GUID=bdc006fb-b386-4b32-a808-             |
| Area=2802<br>e2a775872564 | Joint1=2970 | Joint2=3015 | Joint3=3016 | Joint4=2971 | GUID=579ea7f4-d1d2-43d0-b180-             |
| Area=2803                 | Joint1=2971 | Joint2=3016 | Joint3=3017 | Joint4=2972 | GUID=fb8d77e3-fed1-4cf0-b8ce-b958e74c99a1 |
| Area=2804<br>4c350ee04e80 | Joint1=2972 | Joint2=3017 | Joint3=3018 | Joint4=2973 | GUID=983cd14d-f7d2-44d8-a286-             |
| Area=2805<br>5fd9ad449504 | Joint1=2973 | Joint2=3018 | Joint3=3019 | Joint4=2974 | GUID=99138bbb-7a98-4449-983c-             |
| Area=2806<br>eb9b10fd0e75 | Joint1=2974 | Joint2=3019 | Joint3=3020 | Joint4=2975 | GUID=049c726e-3e74-4ec9-af5b-             |
| Area=2807<br>44903ee366d6 | Joint1=2975 | Joint2=3020 | Joint3=3021 | Joint4=2976 | GUID=d924d2b4-c16d-4aa7-9ac3-             |
| Area=2808<br>07ea3c3c6b53 | Joint1=2976 | Joint2=3021 | Joint3=3022 | Joint4=2977 | GUID=b2c314f0-6d42-47e9-a361-             |
| Area=2809<br>f48dbf5ba3d5 | Joint1=2977 | Joint2=3022 | Joint3=3023 | Joint4=2978 | GUID=c064a32b-b957-44ee-bad2-             |
| Area=2810<br>76066c9e9a3b | Joint1=2978 | Joint2=3023 | Joint3=3024 | Joint4=2979 | GUID=932b4de1-d3de-43b2-af09-             |
| Area=2811<br>d239bd107e1e | Joint1=2979 | Joint2=3024 | Joint3=3025 | Joint4=2980 | GUID=68a3fb82-0e1a-4b45-a051-             |
| Area=2812<br>01468232b16c | Joint1=2980 | Joint2=3025 | Joint3=3026 | Joint4=2981 | GUID=0e83eb2b-e202-467b-9134-             |
| Area=2813<br>8eeaf346e9f1 | Joint1=2981 | Joint2=3026 | Joint3=3027 | Joint4=2982 | GUID=949cd332-3096-41de-ba5e-             |
| Area=2814                 | Joint1=2982 | Joint2=3027 | Joint3=3028 | Joint4=2983 | GUID=0846dfad-2628-403b-b52e-93dfaddf6132 |
| Area=2815<br>3af17f52ea62 | Joint1=2983 | Joint2=3028 | Joint3=3029 | Joint4=2984 | GUID=eed29546-6c45-41b9-aa76-             |
| Area=2816<br>77609b86d4b7 | Joint1=2984 | Joint2=3029 | Joint3=3030 | Joint4=2985 | GUID=000ae80b-89a8-4fc5-988f-             |
| Area=2817<br>7f652036c9bb | Joint1=2985 | Joint2=3030 | Joint3=3031 | Joint4=2986 | GUID=40096824-6c3e-4774-9d3d-             |
| Area=2818<br>d49306c54562 | Joint1=2987 | Joint2=3032 | Joint3=3033 | Joint4=2988 | GUID=d203fd14-a1f2-4c04-be00-             |
| Area=2819<br>7193c3a5339c | Joint1=2988 | Joint2=3033 | Joint3=3034 | Joint4=2989 | GUID=d57f90d1-9d80-44e9-b3f7-             |
| Area=2820<br>9232ce2ac40e | Joint1=2989 | Joint2=3034 | Joint3=3035 | Joint4=2990 | GUID=36d19c60-841a-4c25-9691-             |
| Area=2821<br>7165400bd8b0 | Joint1=2990 | Joint2=3035 | Joint3=3036 | Joint4=2991 | GUID=d8ce9c1f-6441-4941-8f51-             |
| Area=2822<br>b67e61699d0b | Joint1=2991 | Joint2=3036 | Joint3=3037 | Joint4=2992 | GUID=7dc27792-71a9-4bc2-b61d-             |
| Area=2823<br>42ac187375c8 | Joint1=2992 | Joint2=3037 | Joint3=3038 | Joint4=2993 | GUID=67a2f37b-061f-4cae-8097-             |
| Area=2824<br>1ee1d1b09c1d | Joint1=2993 | Joint2=3038 | Joint3=3039 | Joint4=2994 | GUID=2faea309-3630-4f1e-ae1e-             |
| Area=2825                 | Joint1=2994 | Joint2=3039 | Joint3=3040 | Joint4=2995 | GUID=220bfa49-9d2e-4a59-aa4e-bf46a89f7b5b |
| Area=2826<br>400238263579 | Joint1=2995 | Joint2=3040 | Joint3=3041 | Joint4=2996 | GUID=6f5b8b6b-e0b3-45df-97ab-             |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=2827<br>408641176fd6 | Joint1=2996 | Joint2=3041 | Joint3=3042 | Joint4=2997 | GUID=ed892e43-45b3-4dc1-9924-             |
| Area=2828<br>85322b3077b9 | Joint1=2997 | Joint2=3042 | Joint3=3043 | Joint4=2998 | GUID=46be7d1e-5ade-4a15-8920-             |
| Area=2829<br>31cba0b4f6e0 | Joint1=2998 | Joint2=3043 | Joint3=3044 | Joint4=2999 | GUID=8eb8b47c-5222-469f-9867-             |
| Area=2830                 | Joint1=2999 | Joint2=3044 | Joint3=3045 | Joint4=3000 | GUID=a43feb12-1f9d-4970-81e0-069b946408fb |
| Area=2831                 | Joint1=3000 | Joint2=3045 | Joint3=3046 | Joint4=3001 | GUID=3835dff8-53b1-4311-92ba-0da706fed8e1 |
| Area=2832<br>37cf8909c102 | Joint1=3001 | Joint2=3046 | Joint3=3047 | Joint4=3002 | GUID=5368ac57-b4b3-404d-ac0e-             |
| Area=2833<br>66147e7318b5 | Joint1=3002 | Joint2=3047 | Joint3=3048 | Joint4=3003 | GUID=1917d3e8-9b02-40af-865f-             |
| Area=2834<br>51af81a264d2 | Joint1=3003 | Joint2=3048 | Joint3=3049 | Joint4=3004 | GUID=3b711a2a-0ebd-4797-9813-             |
| Area=2835                 | Joint1=3004 | Joint2=3049 | Joint3=3050 | Joint4=3005 | GUID=cf9f8f19-4656-40a2-b46a-516ddaed5ecd |
| Area=2836<br>3ebc180285d2 | Joint1=3005 | Joint2=3050 | Joint3=3051 | Joint4=3006 | GUID=fed18ef0-31a4-4720-b3ed-             |
| Area=2837<br>b8c7135d58cb | Joint1=3006 | Joint2=3051 | Joint3=3052 | Joint4=3007 | GUID=96524e83-912b-46f6-8a16-             |
| Area=2838<br>e70b0ca0fcb3 | Joint1=3007 | Joint2=3052 | Joint3=3053 | Joint4=3008 | GUID=efec7a7e-5297-43ed-ae86-             |
| Area=2839<br>553e7019a8cb | Joint1=3008 | Joint2=3053 | Joint3=3054 | Joint4=3009 | GUID=73ba3240-db42-4dc4-b628-             |
| Area=2840<br>b85a41a83cc0 | Joint1=3009 | Joint2=3054 | Joint3=3055 | Joint4=3010 | GUID=b03e9c50-bbd8-47fe-aac8-             |
| Area=2841<br>6b58713c537c | Joint1=3010 | Joint2=3055 | Joint3=3056 | Joint4=3011 | GUID=d89ba885-78a7-4930-991e-             |
| Area=2842                 | Joint1=3011 | Joint2=3056 | Joint3=3057 | Joint4=3012 | GUID=fb504daf-8966-4a7a-b965-a9dfdd7f3b34 |
| Area=2843                 | Joint1=3012 | Joint2=3057 | Joint3=3058 | Joint4=3013 | GUID=40083799-7249-4a93-a51f-3c3773f2fc05 |
| Area=2844<br>7ae460fd509d | Joint1=3013 | Joint2=3058 | Joint3=3059 | Joint4=3014 | GUID=c0b2115e-a9b0-4a0c-a241-             |
| Area=2845                 | Joint1=3014 | Joint2=3059 | Joint3=3060 | Joint4=3015 | GUID=84ac35da-298f-447e-8c6f-b1a3511a7af5 |
| Area=2846<br>9de002ee7d3d | Joint1=3015 | Joint2=3060 | Joint3=3061 | Joint4=3016 | GUID=0738e4e8-4c33-4dee-8cfb-             |
| Area=2847                 | Joint1=3016 | Joint2=3061 | Joint3=3062 | Joint4=3017 | GUID=b59ff70c-ec70-45e5-a253-4603f704fb90 |
| Area=2848<br>ed13d4e038d6 | Joint1=3017 | Joint2=3062 | Joint3=3063 | Joint4=3018 | GUID=7dd56504-2d5c-40a4-be96-             |
| Area=2849<br>3d4d09a61618 | Joint1=3018 | Joint2=3063 | Joint3=3064 | Joint4=3019 | GUID=9d4dc5f7-66cd-4ea9-97a1-             |
| Area=2850<br>d3b59ccaf43c | Joint1=3019 | Joint2=3064 | Joint3=3065 | Joint4=3020 | GUID=72d48a82-f54a-4b50-9106-             |
| Area=2851                 | Joint1=3020 | Joint2=3065 | Joint3=3066 | Joint4=3021 | GUID=9a6fe403-3cff-4a54-803a-44fe45d557a4 |
| Area=2852<br>daaea3e6b27e | Joint1=3021 | Joint2=3066 | Joint3=3067 | Joint4=3022 | GUID=aa02f2a5-ab40-4321-b85d-             |
| Area=2853                 | Joint1=3022 | Joint2=3067 | Joint3=3068 | Joint4=3023 | GUID=576a2d11-07a3-4399-9f0f-0d6ffa3ff9b5 |
| Area=2854<br>fa5f5413684a | Joint1=3023 | Joint2=3068 | Joint3=3069 | Joint4=3024 | GUID=0db12a72-2567-4031-853c-             |
| Area=2855<br>630fcb49ac9e | Joint1=3024 | Joint2=3069 | Joint3=3070 | Joint4=3025 | GUID=3c448aa4-a4ab-46b2-8893-             |
| Area=2856                 | Joint1=3025 | Joint2=3070 | Joint3=3071 | Joint4=3026 | GUID=b37e887b-cc48-45ef-afa0-a7bcd006b32  |
| Area=2857<br>e35a938c4c21 | Joint1=3026 | Joint2=3071 | Joint3=3072 | Joint4=3027 | GUID=06a6c43b-ea47-42c2-abd6-             |
| Area=2858<br>089c92d74542 | Joint1=3027 | Joint2=3072 | Joint3=3073 | Joint4=3028 | GUID=44be2ddd-9db9-4274-bf54-             |
| Area=2859                 | Joint1=3028 | Joint2=3073 | Joint3=3074 | Joint4=3029 | GUID=21c0c4fa-ed50-43c7-a5b1-f0a4d61f0a05 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=2860 Joint1=3029 Joint2=3074 Joint3=3075 Joint4=3030 GUID=45185262-1c39-4f12-89aa-7926f93fccd7  
Area=2861 Joint1=3030 Joint2=3075 Joint3=3076 Joint4=3031 GUID=d6439bbf-97ec-49dc-b997-0f479a98fe9b  
Area=2862 Joint1=3032 Joint2=3077 Joint3=3078 Joint4=3033 GUID=85cd83c5-cbf6-4ad9-bf0e-901620036738  
Area=2863 Joint1=3033 Joint2=3078 Joint3=3079 Joint4=3034 GUID=f183a996-106f-4825-9b76-d3193efa5f6a  
Area=2864 Joint1=3034 Joint2=3079 Joint3=3080 Joint4=3035 GUID=024b82c9-3cdf-4c81-b1ff-f2797c050c8e  
Area=2865 Joint1=3035 Joint2=3080 Joint3=3081 Joint4=3036 GUID=9866a2aa-53b8-4de0-980b-a42ededb6edb  
Area=2866 Joint1=3036 Joint2=3081 Joint3=3082 Joint4=3037 GUID=af1e662f-9a8a-4574-badf-dbbb40e5bda7  
Area=2867 Joint1=3037 Joint2=3082 Joint3=3083 Joint4=3038 GUID=c95395fd-23b4-4ea0-a940-acc03cbfc1ec  
Area=2868 Joint1=3038 Joint2=3083 Joint3=3084 Joint4=3039 GUID=e5a1c623-0a64-4c4d-ac3c-dd376ea2471a  
Area=2869 Joint1=3039 Joint2=3084 Joint3=3085 Joint4=3040 GUID=6b50146a-c748-4085-9987-fd5ecc6d967c  
Area=2870 Joint1=3040 Joint2=3085 Joint3=3086 Joint4=3041 GUID=6dedbe89-bf27-4362-81e9-04f96d11396a  
Area=2871 Joint1=3041 Joint2=3086 Joint3=3087 Joint4=3042 GUID=d2c8b411-0ba4-44cf-96e1-242bed586693  
Area=2872 Joint1=3042 Joint2=3087 Joint3=3088 Joint4=3043 GUID=c6cd3c9d-2290-4c0e-8f3a-071f11b2781f  
Area=2873 Joint1=3043 Joint2=3088 Joint3=3089 Joint4=3044 GUID=4c12f463-0e4c-4442-a06d-75085c317b60  
Area=2874 Joint1=3044 Joint2=3089 Joint3=3090 Joint4=3045 GUID=07012611-4c3a-4549-9bc4-9f2635361645  
Area=2875 Joint1=3045 Joint2=3090 Joint3=3091 Joint4=3046 GUID=52169522-d421-46a4-8493-d2ea6615aeab  
Area=2876 Joint1=3046 Joint2=3091 Joint3=3092 Joint4=3047 GUID=2d822052-98a7-49cf-aa67-0ea3025288f0  
Area=2877 Joint1=3047 Joint2=3092 Joint3=3093 Joint4=3048 GUID=0963747d-9512-4d4c-8749-4426840f1ece  
Area=2878 Joint1=3048 Joint2=3093 Joint3=3094 Joint4=3049 GUID=40bcc41b-1be5-4366-bdd6-3abe88ce4345  
Area=2879 Joint1=3049 Joint2=3094 Joint3=3095 Joint4=3050 GUID=561acfa5-103a-4155-ac1c-2ba9f29d463a  
Area=2880 Joint1=3050 Joint2=3095 Joint3=3096 Joint4=3051 GUID=891d2d84-d317-41df-a9f4-d674be089883  
Area=2881 Joint1=3051 Joint2=3096 Joint3=3097 Joint4=3052 GUID=046ac524-df58-45c4-8f5b-41e8ba1ae5ab  
Area=2882 Joint1=3052 Joint2=3097 Joint3=3098 Joint4=3053 GUID=9c3d9fd1-4276-4a2c-b9c1-aa3e76a181ff  
Area=2883 Joint1=3053 Joint2=3098 Joint3=8 Joint4=3054 GUID=67570d6c-731e-486e-97d3-8a2f2c25457d  
Area=2884 Joint1=3054 Joint2=8 Joint3=3099 Joint4=3055 GUID=d8433eab-5539-415d-886c-d0fbf5c66e01  
Area=2885 Joint1=3055 Joint2=3099 Joint3=3100 Joint4=3056 GUID=a71052f2-b621-4c39-8fc5-781eb04a9671  
Area=2886 Joint1=3056 Joint2=3100 Joint3=3101 Joint4=3057 GUID=5468819d-7a85-48ba-b23c-6831a45e86f9  
Area=2887 Joint1=3057 Joint2=3101 Joint3=3102 Joint4=3058 GUID=ab0402ec-af59-475d-b9eb-5cc6fcb0f93b  
Area=2888 Joint1=3058 Joint2=3102 Joint3=3103 Joint4=3059 GUID=4a7870e2-9320-416a-9c9c-f6b1c3cce752  
Area=2889 Joint1=3059 Joint2=3103 Joint3=3104 Joint4=3060 GUID=6d9e34f0-14f3-4099-a0d4-a8d61d3b6412  
Area=2890 Joint1=3060 Joint2=3104 Joint3=3105 Joint4=3061 GUID=9b5d4013-84c6-4957-b5bf-315894adfcc5  
Area=2891 Joint1=3061 Joint2=3105 Joint3=3106 Joint4=3062 GUID=4df91340-14e7-47bf-a460-be9afa052a90  
Area=2892 Joint1=3062 Joint2=3106 Joint3=3107 Joint4=3063 GUID=37184feb-87da-41ff-8c9e-0ef5702bfc1b  
Area=2893 Joint1=3063 Joint2=3107 Joint3=3108 Joint4=3064 GUID=ab23efee-2038-47bd-8021-885e3912a507



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=2894 | Joint1=3064 | Joint2=3108 | Joint3=3109 | Joint4=3065 | GUID=4b5310bb-b418-44fb-b315-839aa12d50ed |
| Area=2895 | Joint1=3065 | Joint2=3109 | Joint3=3110 | Joint4=3066 | GUID=53878f6b-4c23-42c4-8cd8-d1373fc8f714 |
| Area=2896 | Joint1=3066 | Joint2=3110 | Joint3=3111 | Joint4=3067 | GUID=1066e1b1-d330-4b2c-823c-d5354ffae0cf |
| Area=2897 | Joint1=3067 | Joint2=3111 | Joint3=3112 | Joint4=3068 | GUID=aafdf2d-acb4-4591-b4b0-f648d557d133  |
| Area=2898 | Joint1=3068 | Joint2=3112 | Joint3=3113 | Joint4=3069 | GUID=bae6f99d-21d6-4676-9633-854c1358b2ad |
| Area=2899 | Joint1=3069 | Joint2=3113 | Joint3=3114 | Joint4=3070 | GUID=bf05400b-e9ae-48b7-9a47-73d32877bc33 |
| Area=2900 | Joint1=3070 | Joint2=3114 | Joint3=3115 | Joint4=3071 | GUID=320b3631-da18-468d-a180-9048f5d577ba |
| Area=2901 | Joint1=3071 | Joint2=3115 | Joint3=3116 | Joint4=3072 | GUID=0ed921ff-1038-46e2-959a-d4fd46e8202f |
| Area=2902 | Joint1=3072 | Joint2=3116 | Joint3=3117 | Joint4=3073 | GUID=db52d60d-cd27-457c-afe9-406c511a6d5d |
| Area=2903 | Joint1=3073 | Joint2=3117 | Joint3=3118 | Joint4=3074 | GUID=80d4f56b-84b0-4e3d-be9b-a317d977d4e9 |
| Area=2904 | Joint1=3074 | Joint2=3118 | Joint3=3119 | Joint4=3075 | GUID=182ba765-bc3a-4e76-a500-a8230a3b60a8 |
| Area=2905 | Joint1=3075 | Joint2=3119 | Joint3=3120 | Joint4=3076 | GUID=5ad3de59-4a72-4881-9632-6df75f8ce9f8 |
| Area=2906 | Joint1=3077 | Joint2=3121 | Joint3=3122 | Joint4=3078 | GUID=09160806-a832-49c5-8a2a-8702889db55  |
| Area=2907 | Joint1=3078 | Joint2=3122 | Joint3=3123 | Joint4=3079 | GUID=8211a18a-c3b9-48a5-9c48-2cddf13fe844 |
| Area=2908 | Joint1=3079 | Joint2=3123 | Joint3=3124 | Joint4=3080 | GUID=a12cd2f9-6201-4a44-978b-4da78b8e676b |
| Area=2909 | Joint1=3080 | Joint2=3124 | Joint3=3125 | Joint4=3081 | GUID=1e680379-018d-4bd5-87da-9653cde368a4 |
| Area=2910 | Joint1=3081 | Joint2=3125 | Joint3=3126 | Joint4=3082 | GUID=4b691248-22a1-43a8-8cb5-7613832b4928 |
| Area=2911 | Joint1=3082 | Joint2=3126 | Joint3=3127 | Joint4=3083 | GUID=e7a5d72b-31c2-41be-8cca-3e37ba233197 |
| Area=2912 | Joint1=3083 | Joint2=3127 | Joint3=3128 | Joint4=3084 | GUID=dd0e3430-0739-4738-b2f3-2f57f6c1e561 |
| Area=2913 | Joint1=3084 | Joint2=3128 | Joint3=3129 | Joint4=3085 | GUID=bb06d751-1328-433c-8d94-0c40f920eab3 |
| Area=2914 | Joint1=3085 | Joint2=3129 | Joint3=3130 | Joint4=3086 | GUID=768d06b4-72e5-4894-b839-290c7409cd51 |
| Area=2915 | Joint1=3086 | Joint2=3130 | Joint3=3131 | Joint4=3087 | GUID=2068c98e-201b-4ee0-a3a8-5c2928d61a35 |
| Area=2916 | Joint1=3087 | Joint2=3131 | Joint3=3132 | Joint4=3088 | GUID=3627ddfe-abdf-4c06-a1b1-520c558dd7e8 |
| Area=2917 | Joint1=3088 | Joint2=3132 | Joint3=3133 | Joint4=3089 | GUID=f53da028-f3d8-4e33-835f-2d7791f1a0e8 |
| Area=2918 | Joint1=3089 | Joint2=3133 | Joint3=3134 | Joint4=3090 | GUID=88d05489-73ff-4de6-a221-c414f87ea364 |
| Area=2919 | Joint1=3090 | Joint2=3134 | Joint3=3135 | Joint4=3091 | GUID=2aff5211-d22d-4b89-b5f6-d6d76d8c088e |
| Area=2920 | Joint1=3091 | Joint2=3135 | Joint3=3136 | Joint4=3092 | GUID=0cf838e8-022c-4e52-9030-89a62ba851b5 |
| Area=2921 | Joint1=3092 | Joint2=3136 | Joint3=3137 | Joint4=3093 | GUID=98a69d99-4ac4-4193-a747-b6cd4d5f0b81 |
| Area=2922 | Joint1=3093 | Joint2=3137 | Joint3=3138 | Joint4=3094 | GUID=5ba3bd61-3e24-4e20-a7a4-15fe92b468c9 |
| Area=2923 | Joint1=3094 | Joint2=3138 | Joint3=3139 | Joint4=3095 | GUID=f2cce4b4-659d-4a49-8378-681c89da68c9 |
| Area=2924 | Joint1=3095 | Joint2=3139 | Joint3=3140 | Joint4=3096 | GUID=442f69cc-5d86-4e28-9c0b-2fcfccb90b62 |
| Area=2925 | Joint1=3096 | Joint2=3140 | Joint3=3141 | Joint4=3097 | GUID=d3e347c2-2cec-4d46-ad5f-2579ff08a10b |
| Area=2926 | Joint1=3097 | Joint2=3141 | Joint3=3142 | Joint4=3098 | GUID=50f3489f-729a-4525-a661-5186355fb7da |
| Area=2927 | Joint1=3098 | Joint2=3142 | Joint3=3143 | Joint4=8    | GUID=ae6bb9a5-11de-4da4-9194-56d3534af8d6 |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=2928 Joint1=8 Joint2=3143 Joint3=3144 Joint4=3099 GUID=6cf353ab-e2d5-4883-b9be-08d7b5d78081  
Area=2929 Joint1=3099 Joint2=3144 Joint3=3145 Joint4=3100 GUID=07f2f03b-dd13-42dc-a5b2-f3c74a1f60b9  
Area=2930 Joint1=3100 Joint2=3145 Joint3=3146 Joint4=3101 GUID=4b8147e6-ca23-49be-9271-ecd3b2443db5  
Area=2931 Joint1=3101 Joint2=3146 Joint3=3147 Joint4=3102 GUID=5eb0bfcd-c2dc-462a-b938-824e0c6a92d9  
Area=2932 Joint1=3102 Joint2=3147 Joint3=3148 Joint4=3103 GUID=7f9b00bd-335e-46af-9e02-d15a8a8c05d6  
Area=2933 Joint1=3103 Joint2=3148 Joint3=3149 Joint4=3104 GUID=b581dbdb-312b-4139-9e09-2cbca278260c  
Area=2934 Joint1=3104 Joint2=3149 Joint3=3150 Joint4=3105 GUID=8a71a0ed-e82e-4180-9cc3-d298ac5bd521  
Area=2935 Joint1=3105 Joint2=3150 Joint3=3151 Joint4=3106 GUID=f8aa1f4f-c62c-477d-8a6d-ccd3c32e6ecf  
Area=2936 Joint1=3106 Joint2=3151 Joint3=3152 Joint4=3107 GUID=55e2ae2e-f4e3-4965-9f0d-9c764525f6f4  
Area=2937 Joint1=3107 Joint2=3152 Joint3=3153 Joint4=3108 GUID=cabf8773-9bf1-4ec5-aac0-26d2ca46a589  
Area=2938 Joint1=3108 Joint2=3153 Joint3=3154 Joint4=3109 GUID=c8f69481-e165-4f24-af2c-739f0c0c372c  
Area=2939 Joint1=3109 Joint2=3154 Joint3=3155 Joint4=3110 GUID=64d9d022-f317-496c-8266-a8672a076871  
Area=2940 Joint1=3110 Joint2=3155 Joint3=3156 Joint4=3111 GUID=c64f601a-3da3-4165-a94b-dcf525e11443  
Area=2941 Joint1=3111 Joint2=3156 Joint3=3157 Joint4=3112 GUID=06e55914-45b5-4a6c-9996-984db556e18c  
Area=2942 Joint1=3112 Joint2=3157 Joint3=3158 Joint4=3113 GUID=712d245a-5604-4a38-8bdd-406937710694  
Area=2943 Joint1=3113 Joint2=3158 Joint3=3159 Joint4=3114 GUID=652a90be-80d4-4c26-bfe2-c93572f208ea  
Area=2944 Joint1=3114 Joint2=3159 Joint3=3160 Joint4=3115 GUID=19748a1a-959d-488f-8582-afbb74f32c37  
Area=2945 Joint1=3115 Joint2=3160 Joint3=3161 Joint4=3116 GUID=1305faa4-7b3d-4eef-9019-cbfc897aa845  
Area=2946 Joint1=3116 Joint2=3161 Joint3=3162 Joint4=3117 GUID=c678c369-ff26-4526-89a8-e9c1602706fa  
Area=2947 Joint1=3117 Joint2=3162 Joint3=3163 Joint4=3118 GUID=e2bcd03e-cdee-426d-a621-e6a7bbda61f2  
Area=2948 Joint1=3118 Joint2=3163 Joint3=3164 Joint4=3119 GUID=e59fc75c-a3f5-4c9e-b88b-a86f23a3989c  
Area=2949 Joint1=3119 Joint2=3164 Joint3=3165 Joint4=3120 GUID=bfd9d2bf-66dd-4764-8d3e-66f2622440f5  
Area=2950 Joint1=3121 Joint2=3166 Joint3=3167 Joint4=3122 GUID=34a0051c-a67c-4db7-9e6b-0d0b691bdccc  
Area=2951 Joint1=3122 Joint2=3167 Joint3=3168 Joint4=3123 GUID=8c4fb583-bd1c-4fcb-b25b-0e5b61725706  
Area=2952 Joint1=3123 Joint2=3168 Joint3=3169 Joint4=3124 GUID=0419f1c6-80b8-4b5f-a11f-8c793ea45f9a  
Area=2953 Joint1=3124 Joint2=3169 Joint3=3170 Joint4=3125 GUID=8a3be4bb-481a-4105-bfc1-5fe82284e002  
Area=2954 Joint1=3125 Joint2=3170 Joint3=3171 Joint4=3126 GUID=5bdf4506-6e67-4cdd-b557-d38b19afea22  
Area=2955 Joint1=3126 Joint2=3171 Joint3=3172 Joint4=3127 GUID=6f7c93fd-13f7-4d2a-b3d6-4c2d2850576b  
Area=2956 Joint1=3127 Joint2=3172 Joint3=3173 Joint4=3128 GUID=e9175561-776e-42b5-b0b5-c94570bd23f2  
Area=2957 Joint1=3128 Joint2=3173 Joint3=3174 Joint4=3129 GUID=66e40194-575c-4efc-9bd5-5b376fa15910  
Area=2958 Joint1=3129 Joint2=3174 Joint3=3175 Joint4=3130 GUID=76e0a230-2f4c-40e8-a8c1-e00c6283db69  
Area=2959 Joint1=3130 Joint2=3175 Joint3=3176 Joint4=3131 GUID=d1b9abb8-a833-41c6-9c91-8ad68e8e46ce  
Area=2960 Joint1=3131 Joint2=3176 Joint3=3177 Joint4=3132 GUID=e434b5da-a56d-4d46-850c-7237f8c33c16  
Area=2961 Joint1=3132 Joint2=3177 Joint3=3178 Joint4=3133 GUID=27cfd67c-d1e2-4de9-8a77-5d8fc242cbb9  
Area=2962 Joint1=3133 Joint2=3178 Joint3=3179 Joint4=3134 GUID=1e6ffce7-5231-40bc-80cb-c3b1f6372e80

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=2963 | Joint1=3134 | Joint2=3179 | Joint3=3180 | Joint4=3135 | GUID=ed77acf3-6f5d-4b33-8146-fe4ddb143426 |
| Area=2964 | Joint1=3135 | Joint2=3180 | Joint3=3181 | Joint4=3136 | GUID=2113fc0a-6071-403f-a2b0-a0033e282ce9 |
| Area=2965 | Joint1=3136 | Joint2=3181 | Joint3=3182 | Joint4=3137 | GUID=1c9b4851-a633-482d-a88a-779af382b976 |
| Area=2966 | Joint1=3137 | Joint2=3182 | Joint3=3183 | Joint4=3138 | GUID=22d8015e-1dae-4b2f-a1e4-ab258761f88a |
| Area=2967 | Joint1=3138 | Joint2=3183 | Joint3=3184 | Joint4=3139 | GUID=7f1643e8-7bae-463d-9d32-0413d53a638c |
| Area=2968 | Joint1=3139 | Joint2=3184 | Joint3=3185 | Joint4=3140 | GUID=bdb39577-d046-4c5f-9346-2e2972027f1c |
| Area=2969 | Joint1=3140 | Joint2=3185 | Joint3=3186 | Joint4=3141 | GUID=ec49f564-c825-4830-a88f-d54b79ec294a |
| Area=2970 | Joint1=3141 | Joint2=3186 | Joint3=3187 | Joint4=3142 | GUID=2e186238-8156-401d-8f0a-414acacb5eed |
| Area=2971 | Joint1=3142 | Joint2=3187 | Joint3=3188 | Joint4=3143 | GUID=0f2c749e-ce25-4756-a3d6-9f7badf0b6b3 |
| Area=2972 | Joint1=3143 | Joint2=3188 | Joint3=3189 | Joint4=3144 | GUID=5eff386a-1d2c-4d45-b381-90b7dc2f5c55 |
| Area=2973 | Joint1=3144 | Joint2=3189 | Joint3=3190 | Joint4=3145 | GUID=f2cf921b-fccd-4ebb-b3a1-b8f85838cc25 |
| Area=2974 | Joint1=3145 | Joint2=3190 | Joint3=3191 | Joint4=3146 | GUID=68784efb-db04-4f8c-9b4b-4568ed98d7c0 |
| Area=2975 | Joint1=3146 | Joint2=3191 | Joint3=3192 | Joint4=3147 | GUID=df539e4a-71df-4c70-b9f0-3e3b05399869 |
| Area=2976 | Joint1=3147 | Joint2=3192 | Joint3=3193 | Joint4=3148 | GUID=af2ba8f9-7ea5-4490-a5bb-b06ad91a7168 |
| Area=2977 | Joint1=3148 | Joint2=3193 | Joint3=3194 | Joint4=3149 | GUID=5d12621b-1153-4876-9d36-8b547d7826c3 |
| Area=2978 | Joint1=3149 | Joint2=3194 | Joint3=3195 | Joint4=3150 | GUID=ebf98a32-e44a-4baa-9994-cb96f39d5392 |
| Area=2979 | Joint1=3150 | Joint2=3195 | Joint3=3196 | Joint4=3151 | GUID=ed1a70ab-a6ac-4202-8ccb-73a7a2002da0 |
| Area=2980 | Joint1=3151 | Joint2=3196 | Joint3=3197 | Joint4=3152 | GUID=f492c9e9-7a2d-4b82-b414-9c6cf2a9bcb6 |
| Area=2981 | Joint1=3152 | Joint2=3197 | Joint3=3198 | Joint4=3153 | GUID=5b393bc4-25f6-48d5-a880-644f6a2e6730 |
| Area=2982 | Joint1=3153 | Joint2=3198 | Joint3=3199 | Joint4=3154 | GUID=af3eb372-b760-4a29-bbdc-6709c6ea6727 |
| Area=2983 | Joint1=3154 | Joint2=3199 | Joint3=3200 | Joint4=3155 | GUID=f228bbaf-66fe-4eb4-9b97-c43b8f1d55b1 |
| Area=2984 | Joint1=3155 | Joint2=3200 | Joint3=3201 | Joint4=3156 | GUID=c010ee9e-e7c5-41d0-9ddd-8cdce0a576f1 |
| Area=2985 | Joint1=3156 | Joint2=3201 | Joint3=3202 | Joint4=3157 | GUID=14cee07b-5ef7-44b0-bf61-e6dae2fa359c |
| Area=2986 | Joint1=3157 | Joint2=3202 | Joint3=3203 | Joint4=3158 | GUID=c688c676-f109-479c-a248-e77a17122086 |
| Area=2987 | Joint1=3158 | Joint2=3203 | Joint3=3204 | Joint4=3159 | GUID=13f438c4-9885-48ee-9e21-1359d965ee81 |
| Area=2988 | Joint1=3159 | Joint2=3204 | Joint3=3205 | Joint4=3160 | GUID=e88d65a8-8613-4544-aea5-575ad70850fd |
| Area=2989 | Joint1=3160 | Joint2=3205 | Joint3=3206 | Joint4=3161 | GUID=01a46acf-db2f-4d0a-9dbb-0f499a625b67 |
| Area=2990 | Joint1=3161 | Joint2=3206 | Joint3=3207 | Joint4=3162 | GUID=ff7fd760-50f8-4076-b45a-b4c97425a5b6 |
| Area=2991 | Joint1=3162 | Joint2=3207 | Joint3=3208 | Joint4=3163 | GUID=a12fdb5d-471e-4e38-857e-19be508acdd3 |
| Area=2992 | Joint1=3163 | Joint2=3208 | Joint3=3209 | Joint4=3164 | GUID=24f8ea23-c4e7-4c93-ba00-9d41f16ce51b |
| Area=2993 | Joint1=3164 | Joint2=3209 | Joint3=3210 | Joint4=3165 | GUID=f7164ef4-299e-4b5c-85e8-f8818ccc2046 |
| Area=2994 | Joint1=3166 | Joint2=3211 | Joint3=3212 | Joint4=3167 | GUID=31c4b89a-82cc-4b2d-8fdc-1436ce79297e |
| Area=2995 | Joint1=3167 | Joint2=3212 | Joint3=3213 | Joint4=3168 | GUID=a3d9cf3d-979a-4d61-bfe3-e254334621f8 |
| Area=2996 | Joint1=3168 | Joint2=3213 | Joint3=3214 | Joint4=3169 | GUID=e124fac2-73ed-4a75-afac-1b7dc4dac074 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=2997 Joint1=3169 Joint2=3214 Joint3=3215 Joint4=3170 GUID=85c01a46-327c-4619-9a32-f8f43cf47fd5  
Area=2998 Joint1=3170 Joint2=3215 Joint3=3216 Joint4=3171 GUID=c85725d1-180d-4740-94c1-383d1545056e  
Area=2999 Joint1=3171 Joint2=3216 Joint3=3217 Joint4=3172 GUID=8be88fc4-818f-4877-9316-bc6ecbaf9180  
Area=3000 Joint1=3172 Joint2=3217 Joint3=3218 Joint4=3173 GUID=9dd39ea5-d5b6-4a33-bdbe-ed6772662e69  
Area=3001 Joint1=3173 Joint2=3218 Joint3=3219 Joint4=3174 GUID=c907afc9-1485-4eaf-8a7d-4c17c0e84330  
Area=3002 Joint1=3174 Joint2=3219 Joint3=3220 Joint4=3175 GUID=cc745bf3-659f-4961-9f7b-77e991c1b29f  
Area=3003 Joint1=3175 Joint2=3220 Joint3=3221 Joint4=3176 GUID=f0fff4d0-98b4-448d-804a-b6fafedde405  
Area=3004 Joint1=3176 Joint2=3221 Joint3=3222 Joint4=3177 GUID=8e81ad1f-14eb-44b6-98b6-94da02ed45b2  
Area=3005 Joint1=3177 Joint2=3222 Joint3=3223 Joint4=3178 GUID=22703e50-38c2-43c8-95a3-d3a90df0ec7f  
Area=3006 Joint1=3178 Joint2=3223 Joint3=3224 Joint4=3179 GUID=04fb097c-1333-4da4-8ecc-b94df67b8588  
Area=3007 Joint1=3179 Joint2=3224 Joint3=3225 Joint4=3180 GUID=7d0e5c20-2a25-49ff-9bc8-c57dc7fba56b  
Area=3008 Joint1=3180 Joint2=3225 Joint3=3226 Joint4=3181 GUID=f5e2ff3d-25f0-4ced-bf06-cd66292fe539  
Area=3009 Joint1=3181 Joint2=3226 Joint3=3227 Joint4=3182 GUID=feac279a-bfd3-4bd2-bff4-f361e2e6fea4  
Area=3010 Joint1=3182 Joint2=3227 Joint3=3228 Joint4=3183 GUID=8ca08aee-78a2-4718-a00e-28f9ed95c280  
Area=3011 Joint1=3183 Joint2=3228 Joint3=3229 Joint4=3184 GUID=bc40ab0b-6918-47ed-8369-063850d4da4e  
Area=3012 Joint1=3184 Joint2=3229 Joint3=3230 Joint4=3185 GUID=b7f80efb-cb1d-496a-8c85-94bba0e3593c  
Area=3013 Joint1=3185 Joint2=3230 Joint3=3231 Joint4=3186 GUID=69a0a312-a6f3-49c2-9c6d-28494dcb2831  
Area=3014 Joint1=3186 Joint2=3231 Joint3=3232 Joint4=3187 GUID=1a2e9370-ed70-4724-a243-e6bd0f471e1e  
Area=3015 Joint1=3187 Joint2=3232 Joint3=3233 Joint4=3188 GUID=82ff6fbb-596a-4289-9639-7070974717e7  
Area=3016 Joint1=3188 Joint2=3233 Joint3=3234 Joint4=3189 GUID=3eb32ea0-0aa7-418e-b434-e1f6b18ea099  
Area=3017 Joint1=3189 Joint2=3234 Joint3=3235 Joint4=3190 GUID=38f20497-39a1-478f-aa12-d1a421e905e3  
Area=3018 Joint1=3190 Joint2=3235 Joint3=3236 Joint4=3191 GUID=2b0bb462-549b-4a87-9c28-1bd0fe5a6e2b  
Area=3019 Joint1=3191 Joint2=3236 Joint3=3237 Joint4=3192 GUID=64d00528-09c1-4da7-96cb-fbaa8126c237  
Area=3020 Joint1=3192 Joint2=3237 Joint3=3238 Joint4=3193 GUID=a44c7abb-919a-44ce-b25c-55138bd2be39  
Area=3021 Joint1=3193 Joint2=3238 Joint3=3239 Joint4=3194 GUID=374b6908-c851-4623-b7f6-39fb897d5c43  
Area=3022 Joint1=3194 Joint2=3239 Joint3=3240 Joint4=3195 GUID=728cad9b-6a0e-445c-849d-2f5efd97a136  
Area=3023 Joint1=3195 Joint2=3240 Joint3=3241 Joint4=3196 GUID=bb49dade-2624-4502-8e7b-9f4c5b3037d7  
Area=3024 Joint1=3196 Joint2=3241 Joint3=3242 Joint4=3197 GUID=11d3663e-1d9d-42b0-a094-f7ecd38acf4d  
Area=3025 Joint1=3197 Joint2=3242 Joint3=3243 Joint4=3198 GUID=c312ea4a-3e9d-403a-ae58-82460c5ae7e0  
Area=3026 Joint1=3198 Joint2=3243 Joint3=3244 Joint4=3199 GUID=9c39f11e-02f4-44c7-a905-a41467bf0fc9  
Area=3027 Joint1=3199 Joint2=3244 Joint3=3245 Joint4=3200 GUID=33a3a900-813b-4730-814c-4f01ab306d34  
Area=3028 Joint1=3200 Joint2=3245 Joint3=3246 Joint4=3201 GUID=c7efd182-c4a8-466e-8396-d34338b95eb2

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=3029<br>2e7babccb03c | Joint1=3201 | Joint2=3246 | Joint3=3247 | Joint4=3202 | GUID=10648595-5e1d-42c2-b8b7-             |
| Area=3030<br>b1db7c83d936 | Joint1=3202 | Joint2=3247 | Joint3=3248 | Joint4=3203 | GUID=3be984fb-64dc-4c3b-88f4-             |
| Area=3031<br>38a77a3b4470 | Joint1=3203 | Joint2=3248 | Joint3=3249 | Joint4=3204 | GUID=5758bd3e-5526-4007-ac4a-             |
| Area=3032<br>7a97eb09a4aa | Joint1=3204 | Joint2=3249 | Joint3=3250 | Joint4=3205 | GUID=388a2d97-579e-4856-8106-             |
| Area=3033<br>13e93b317f56 | Joint1=3205 | Joint2=3250 | Joint3=3251 | Joint4=3206 | GUID=e97e18c2-ad9e-43b5-81fc-             |
| Area=3034<br>0de0a50e813e | Joint1=3206 | Joint2=3251 | Joint3=3252 | Joint4=3207 | GUID=09781f23-1312-4e1a-b637-             |
| Area=3035                 | Joint1=3207 | Joint2=3252 | Joint3=3253 | Joint4=3208 | GUID=93f622f8-ca19-47c2-80a7-331f3951adbd |
| Area=3036                 | Joint1=3208 | Joint2=3253 | Joint3=3254 | Joint4=3209 | GUID=778b543c-45f1-4702-a7a1-2dcddf3af45a |
| Area=3037<br>e9307457395e | Joint1=3209 | Joint2=3254 | Joint3=3255 | Joint4=3210 | GUID=ecc4ec05-b382-441c-9237-             |
| Area=3038                 | Joint1=3211 | Joint2=3256 | Joint3=3257 | Joint4=3212 | GUID=3c2db01f-7146-46a7-8c4a-32eefe4eff17 |
| Area=3039<br>0b9211a83969 | Joint1=3212 | Joint2=3257 | Joint3=3258 | Joint4=3213 | GUID=41181ac4-3836-4a94-a0fa-             |
| Area=3040<br>1ab9c29c29cf | Joint1=3213 | Joint2=3258 | Joint3=3259 | Joint4=3214 | GUID=01584876-4478-45cd-8e7b-             |
| Area=3041                 | Joint1=3214 | Joint2=3259 | Joint3=3260 | Joint4=3215 | GUID=82c9e54a-ff6f-40be-bdf8-e41c4f9a2dc5 |
| Area=3042<br>23e51051084f | Joint1=3215 | Joint2=3260 | Joint3=3261 | Joint4=3216 | GUID=449993c3-6d8d-4925-8b3e-             |
| Area=3043<br>8a36347e83e0 | Joint1=3216 | Joint2=3261 | Joint3=3262 | Joint4=3217 | GUID=a98200bb-0936-4169-a258-             |
| Area=3044<br>fe0a23b98149 | Joint1=3217 | Joint2=3262 | Joint3=3263 | Joint4=3218 | GUID=38771047-d89f-40e7-ba58-             |
| Area=3045<br>bb62f71af1bc | Joint1=3218 | Joint2=3263 | Joint3=3264 | Joint4=3219 | GUID=ee5de425-beb1-4728-be89-             |
| Area=3046<br>01fde46356c3 | Joint1=3219 | Joint2=3264 | Joint3=3265 | Joint4=3220 | GUID=cc91c9ad-c546-47da-852e-             |
| Area=3047<br>f2bd79e2266a | Joint1=3220 | Joint2=3265 | Joint3=3266 | Joint4=3221 | GUID=d36c2c6d-e53a-41a7-bb25-             |
| Area=3048                 | Joint1=3221 | Joint2=3266 | Joint3=3267 | Joint4=3222 | GUID=23be1d8b-8a6f-4b41-9a43-f3f25c7c9471 |
| Area=3049<br>18a7f5e280fd | Joint1=3222 | Joint2=3267 | Joint3=3268 | Joint4=3223 | GUID=4d68c4ba-03dd-430c-a073-             |
| Area=3050<br>731b174b4b41 | Joint1=3223 | Joint2=3268 | Joint3=3269 | Joint4=3224 | GUID=e4cc5048-088e-45a0-845e-             |
| Area=3051<br>b6c6e176f036 | Joint1=3224 | Joint2=3269 | Joint3=3270 | Joint4=3225 | GUID=1174c421-1510-4de8-9a32-             |
| Area=3052<br>0ac2b92340e0 | Joint1=3225 | Joint2=3270 | Joint3=3271 | Joint4=3226 | GUID=2a3e71ca-3b70-48c0-8a2e-             |
| Area=3053<br>b884ac5c9955 | Joint1=3226 | Joint2=3271 | Joint3=3272 | Joint4=3227 | GUID=761559d2-8b67-4db4-8f10-             |
| Area=3054                 | Joint1=3227 | Joint2=3272 | Joint3=3273 | Joint4=3228 | GUID=02bb6f73-5ce1-4713-8ff1-5302369c4290 |
| Area=3055                 | Joint1=3228 | Joint2=3273 | Joint3=3274 | Joint4=3229 | GUID=08a15f51-50ed-41fc-ad6a-890f4ab65a2a |
| Area=3056<br>093b1d69e985 | Joint1=3229 | Joint2=3274 | Joint3=3275 | Joint4=3230 | GUID=241b8394-032f-4cda-8083-             |
| Area=3057<br>2c45a7b2df6f | Joint1=3230 | Joint2=3275 | Joint3=3276 | Joint4=3231 | GUID=dc703bed-952e-4ee2-8b94-             |
| Area=3058<br>ae5a4a8bf8c8 | Joint1=3231 | Joint2=3276 | Joint3=3277 | Joint4=3232 | GUID=2a72bf0d-7a32-4be1-9ae5-             |
| Area=3059<br>3b39fa42aad5 | Joint1=3232 | Joint2=3277 | Joint3=3278 | Joint4=3233 | GUID=23b777b0-b379-4795-9c80-             |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=3060 | Joint1=3233 | Joint2=3278 | Joint3=3279 | Joint4=3234 | GUID=b388af99-a622-4b71-8ca7-8d710bc0f8de |
| Area=3061 | Joint1=3234 | Joint2=3279 | Joint3=3280 | Joint4=3235 | GUID=5f4d656c-2af6-4b7f-95b6-9c355a6b4552 |
| Area=3062 | Joint1=3235 | Joint2=3280 | Joint3=3281 | Joint4=3236 | GUID=bd2aa424-93a1-4f42-a1df-e93a6e54af4c |
| Area=3063 | Joint1=3236 | Joint2=3281 | Joint3=3282 | Joint4=3237 | GUID=1c125b9a-be56-463f-b7a4-226b836f7c1d |
| Area=3064 | Joint1=3237 | Joint2=3282 | Joint3=3283 | Joint4=3238 | GUID=ed233ea2-0b39-46be-a427-130c68d3868c |
| Area=3065 | Joint1=3238 | Joint2=3283 | Joint3=3284 | Joint4=3239 | GUID=3e786256-a213-4274-955b-a64b4a96c33b |
| Area=3066 | Joint1=3239 | Joint2=3284 | Joint3=3285 | Joint4=3240 | GUID=57c443d4-aff1-4f81-8698-3f44480ea88e |
| Area=3067 | Joint1=3240 | Joint2=3285 | Joint3=3286 | Joint4=3241 | GUID=ad2b77c1-6be6-4bcc-98f8-e3e5435fcdcc |
| Area=3068 | Joint1=3241 | Joint2=3286 | Joint3=3287 | Joint4=3242 | GUID=39bf6bfd-5c69-410a-8580-98c011773ee8 |
| Area=3069 | Joint1=3242 | Joint2=3287 | Joint3=3288 | Joint4=3243 | GUID=93f5796b-24b0-4834-a682-bc64d0ba2273 |
| Area=3070 | Joint1=3243 | Joint2=3288 | Joint3=3289 | Joint4=3244 | GUID=18b9909a-3faa-44bf-bc33-f6166deb3a3a |
| Area=3071 | Joint1=3244 | Joint2=3289 | Joint3=3290 | Joint4=3245 | GUID=252b5eb1-bb22-40f3-b266-9fcad4366551 |
| Area=3072 | Joint1=3245 | Joint2=3290 | Joint3=3291 | Joint4=3246 | GUID=7d2d6a28-fc72-4570-9c13-f14edf8fec41 |
| Area=3073 | Joint1=3246 | Joint2=3291 | Joint3=3292 | Joint4=3247 | GUID=816ec4c4-a693-4bc2-a286-0c70f08ade14 |
| Area=3074 | Joint1=3247 | Joint2=3292 | Joint3=3293 | Joint4=3248 | GUID=c35820fe-fdd7-40d2-9b50-736c67d391d3 |
| Area=3075 | Joint1=3248 | Joint2=3293 | Joint3=3294 | Joint4=3249 | GUID=87e59e3d-7cbb-4bc6-b73b-5cca5e82a8b1 |
| Area=3076 | Joint1=3249 | Joint2=3294 | Joint3=3295 | Joint4=3250 | GUID=783d4530-dcf8-4c91-b9e0-fb3b1bf39c38 |
| Area=3077 | Joint1=3250 | Joint2=3295 | Joint3=3296 | Joint4=3251 | GUID=d1f78140-f92c-40ff-8a4b-e7bd1017e4d3 |
| Area=3078 | Joint1=3251 | Joint2=3296 | Joint3=3297 | Joint4=3252 | GUID=6c7f9bc3-a3c0-4392-8ea2-e5d667fca3ec |
| Area=3079 | Joint1=3252 | Joint2=3297 | Joint3=3298 | Joint4=3253 | GUID=2e2796dd-b6be-45c3-8a40-fcc1058e5a68 |
| Area=3080 | Joint1=3253 | Joint2=3298 | Joint3=3299 | Joint4=3254 | GUID=bf46c40e-2f5c-4bd5-af04-7c5e3dd19c0a |
| Area=3081 | Joint1=3254 | Joint2=3299 | Joint3=3300 | Joint4=3255 | GUID=ef6b8d7e-70f2-413c-88fa-83f69904604b |
| Area=3082 | Joint1=3256 | Joint2=3301 | Joint3=3302 | Joint4=3257 | GUID=69b13f11-7aa0-47a2-a596-b8b519de9f77 |
| Area=3083 | Joint1=3257 | Joint2=3302 | Joint3=3303 | Joint4=3258 | GUID=6fa99826-987b-45e0-baf0-5be62ef9a842 |
| Area=3084 | Joint1=3258 | Joint2=3303 | Joint3=3304 | Joint4=3259 | GUID=6e1696a4-407e-47da-bcd5-53af920a4daf |
| Area=3085 | Joint1=3259 | Joint2=3304 | Joint3=3305 | Joint4=3260 | GUID=8a0fc2b5-d5ed-4643-9c6e-9b22716c18df |
| Area=3086 | Joint1=3260 | Joint2=3305 | Joint3=3306 | Joint4=3261 | GUID=9b6e9682-690d-4600-8d01-b335c535dc21 |
| Area=3087 | Joint1=3261 | Joint2=3306 | Joint3=3307 | Joint4=3262 | GUID=42e95866-1ec7-48fc-b6f2-a52b33d02f65 |
| Area=3088 | Joint1=3262 | Joint2=3307 | Joint3=3308 | Joint4=3263 | GUID=aa5df761-6235-4dc3-b134-c9843ce01422 |
| Area=3089 | Joint1=3263 | Joint2=3308 | Joint3=3309 | Joint4=3264 | GUID=6636375b-3a55-4f55-87fb-f7492f1ea191 |
| Area=3090 | Joint1=3264 | Joint2=3309 | Joint3=3310 | Joint4=3265 | GUID=2dcfe5ea-0e06-4ad5-ae97-35abe752c13d |
| Area=3091 | Joint1=3265 | Joint2=3310 | Joint3=3311 | Joint4=3266 | GUID=79fd04c6-b142-4185-9599-396543c43dd3 |
| Area=3092 | Joint1=3266 | Joint2=3311 | Joint3=3312 | Joint4=3267 | GUID=88676cf4-b2fa-415d-ad38-520e8f5a3d8c |
| Area=3093 | Joint1=3267 | Joint2=3312 | Joint3=3313 | Joint4=3268 | GUID=33d5d0fb-6b3d-4a16-97f0-a0b7a0ab0931 |
| Area=3094 | Joint1=3268 | Joint2=3313 | Joint3=3314 | Joint4=3269 | GUID=f8fdc2ef-9570-42d6-a0c9-42860212ae0a |
| Area=3095 | Joint1=3269 | Joint2=3314 | Joint3=3315 | Joint4=3270 | GUID=483639cf-1ffe-4f55-aff6-794a37c713b4 |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=3096<br>f14b3b0e19fb | Joint1=3270 | Joint2=3315 | Joint3=3316 | Joint4=3271 | GUID=050a5244-4645-48d0-98c7-             |
| Area=3097<br>1292bb8bdd5b | Joint1=3271 | Joint2=3316 | Joint3=3317 | Joint4=3272 | GUID=dd8b10ba-3658-4357-b3e6-             |
| Area=3098                 | Joint1=3272 | Joint2=3317 | Joint3=3318 | Joint4=3273 | GUID=d5363fba-00aa-4269-bf14-d8cbf2d818a2 |
| Area=3099<br>82e046416ac6 | Joint1=3273 | Joint2=3318 | Joint3=3319 | Joint4=3274 | GUID=1504d90c-4417-4d87-b8b5-             |
| Area=3100<br>e23b778a6fbd | Joint1=3274 | Joint2=3319 | Joint3=3320 | Joint4=3275 | GUID=74a4c2bb-2f65-406b-bbb5-             |
| Area=3101                 | Joint1=3275 | Joint2=3320 | Joint3=3321 | Joint4=3276 | GUID=8099caf2-f08a-42ae-8f89-a46e9974c303 |
| Area=3102<br>96c0d253b07a | Joint1=3276 | Joint2=3321 | Joint3=3322 | Joint4=3277 | GUID=75453ce3-4e6c-4e4e-bbd6-             |
| Area=3103<br>53c03631d08d | Joint1=3277 | Joint2=3322 | Joint3=3323 | Joint4=3278 | GUID=02d41e49-f65c-4af2-a8eb-             |
| Area=3104<br>23713093c5a5 | Joint1=3278 | Joint2=3323 | Joint3=3324 | Joint4=3279 | GUID=bafeddbb-bb86-4eae-b7fb-             |
| Area=3105<br>ae0c35be9c21 | Joint1=3279 | Joint2=3324 | Joint3=3325 | Joint4=3280 | GUID=ae6ef41b-83f1-46b0-94b0-             |
| Area=3106<br>6040c3f3b3f6 | Joint1=3280 | Joint2=3325 | Joint3=3326 | Joint4=3281 | GUID=478951c1-333d-402e-8233-             |
| Area=3107<br>0a230fc03410 | Joint1=3281 | Joint2=3326 | Joint3=3327 | Joint4=3282 | GUID=2692ed95-d98d-48cd-9cf5-             |
| Area=3108<br>8db7412b3da9 | Joint1=3282 | Joint2=3327 | Joint3=3328 | Joint4=3283 | GUID=15cb8d2d-c9e7-4506-b75c-             |
| Area=3109<br>38174ff73505 | Joint1=3283 | Joint2=3328 | Joint3=3329 | Joint4=3284 | GUID=be8d133c-03c6-4437-8a42-             |
| Area=3110                 | Joint1=3284 | Joint2=3329 | Joint3=3330 | Joint4=3285 | GUID=d52f7972-93b1-4155-bf09-4fc9f7d8f24f |
| Area=3111<br>ac7983bb3aad | Joint1=3285 | Joint2=3330 | Joint3=3331 | Joint4=3286 | GUID=0bee10f0-2d8d-43de-ae2-              |
| Area=3112<br>d58905792d9a | Joint1=3286 | Joint2=3331 | Joint3=3332 | Joint4=3287 | GUID=1eda1efd-99e6-479c-b754-             |
| Area=3113<br>2a9c9ccb5305 | Joint1=3287 | Joint2=3332 | Joint3=3333 | Joint4=3288 | GUID=67d26ec5-4943-45c0-81ed-             |
| Area=3114<br>09d01fb9a126 | Joint1=3288 | Joint2=3333 | Joint3=3334 | Joint4=3289 | GUID=0502ea17-c041-4eaa-b7d6-             |
| Area=3115                 | Joint1=3289 | Joint2=3334 | Joint3=3335 | Joint4=3290 | GUID=0f1f249a-9049-437f-aa56-3cb8cec0fd3e |
| Area=3116<br>cb05099b3fbe | Joint1=3290 | Joint2=3335 | Joint3=3336 | Joint4=3291 | GUID=a4d80954-4758-43c5-9d74-             |
| Area=3117<br>7cb336faba76 | Joint1=3291 | Joint2=3336 | Joint3=3337 | Joint4=3292 | GUID=d2ebd321-8efb-4e59-bae5-             |
| Area=3118<br>e3f15e527224 | Joint1=3292 | Joint2=3337 | Joint3=3338 | Joint4=3293 | GUID=2eb8a032-e505-42d0-94d7-             |
| Area=3119                 | Joint1=3293 | Joint2=3338 | Joint3=3339 | Joint4=3294 | GUID=6ec2cacd-df64-415f-b86f-b19eb9782d89 |
| Area=3120<br>7c1498e3d96e | Joint1=3294 | Joint2=3339 | Joint3=3340 | Joint4=3295 | GUID=13659e8a-4af7-4fb4-b9e4-             |
| Area=3121                 | Joint1=3295 | Joint2=3340 | Joint3=3341 | Joint4=3296 | GUID=ff17994a-c15a-4f9e-b9f1-2ceb4549c4c3 |
| Area=3122<br>a572c77f8468 | Joint1=3296 | Joint2=3341 | Joint3=3342 | Joint4=3297 | GUID=81888063-1fdc-4bb2-9d1e-             |
| Area=3123<br>edba1f206b3b | Joint1=3297 | Joint2=3342 | Joint3=3343 | Joint4=3298 | GUID=8a692072-5161-4c32-a6b2-             |
| Area=3124<br>0a8fe86a0d26 | Joint1=3298 | Joint2=3343 | Joint3=3344 | Joint4=3299 | GUID=fb5c925a-4aaa-402a-928e-             |
| Area=3125<br>0ef9113d9dbe | Joint1=3299 | Joint2=3344 | Joint3=3345 | Joint4=3300 | GUID=77bec5fd-5164-4a38-a583-             |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=3126 | Joint1=3301 | Joint2=3346 | Joint3=3347 | Joint4=3302 | GUID=536998c7-079a-4fd4-a565-648ac0ec159b |
| Area=3127 | Joint1=3302 | Joint2=3347 | Joint3=3348 | Joint4=3303 | GUID=5b0b0a51-fc45-409d-9a6c-25c4f2f9973d |
| Area=3128 | Joint1=3303 | Joint2=3348 | Joint3=3349 | Joint4=3304 | GUID=1ad4e322-d0a8-48ce-bf50-1289ddc13589 |
| Area=3129 | Joint1=3304 | Joint2=3349 | Joint3=3350 | Joint4=3305 | GUID=399a1770-bb78-4f72-a6bf-507880c88b9f |
| Area=3130 | Joint1=3305 | Joint2=3350 | Joint3=3351 | Joint4=3306 | GUID=3f6be164-c1e7-4460-b4b5-87917365534a |
| Area=3131 | Joint1=3306 | Joint2=3351 | Joint3=3352 | Joint4=3307 | GUID=ce2fdead-b2af-44e6-9702-f95b6490e669 |
| Area=3132 | Joint1=3307 | Joint2=3352 | Joint3=3353 | Joint4=3308 | GUID=17da7443-73d7-4654-90cd-12be1b7cedb6 |
| Area=3133 | Joint1=3308 | Joint2=3353 | Joint3=3354 | Joint4=3309 | GUID=4aa46f0d-77a9-4aaf-baf1-d26809b8c059 |
| Area=3134 | Joint1=3309 | Joint2=3354 | Joint3=3355 | Joint4=3310 | GUID=5e408d7d-3ceb-426d-8767-7aff0f0c4874 |
| Area=3135 | Joint1=3310 | Joint2=3355 | Joint3=3356 | Joint4=3311 | GUID=05a90d49-e093-4147-b285-0ff052ab0cce |
| Area=3136 | Joint1=3311 | Joint2=3356 | Joint3=3357 | Joint4=3312 | GUID=32142f91-8c75-45da-86b9-12bbdbcf9ebb |
| Area=3137 | Joint1=3312 | Joint2=3357 | Joint3=3358 | Joint4=3313 | GUID=e9325a2c-52f1-4302-8925-3e6ce5866ed1 |
| Area=3138 | Joint1=3313 | Joint2=3358 | Joint3=3359 | Joint4=3314 | GUID=e8d1f67a-394c-44b1-9187-d52fa51c2272 |
| Area=3139 | Joint1=3314 | Joint2=3359 | Joint3=3360 | Joint4=3315 | GUID=597d34f7-8edf-4377-a6ee-702e2121e41d |
| Area=3140 | Joint1=3315 | Joint2=3360 | Joint3=3361 | Joint4=3316 | GUID=c597e271-534e-45f0-a082-2d0804664d01 |
| Area=3141 | Joint1=3316 | Joint2=3361 | Joint3=3362 | Joint4=3317 | GUID=748e7bf7-87a1-401f-a98b-29107cd86eb5 |
| Area=3142 | Joint1=3317 | Joint2=3362 | Joint3=3363 | Joint4=3318 | GUID=84f66647-0db2-4b75-96a1-412162bb93f0 |
| Area=3143 | Joint1=3318 | Joint2=3363 | Joint3=3364 | Joint4=3319 | GUID=7334bbac-e091-47ce-8a97-7894951baf92 |
| Area=3144 | Joint1=3319 | Joint2=3364 | Joint3=3365 | Joint4=3320 | GUID=fc80aaad-be9e-4ce1-b456-ebb4785063cd |
| Area=3145 | Joint1=3320 | Joint2=3365 | Joint3=3366 | Joint4=3321 | GUID=42792e97-749f-48d6-8aa7-feeccf18cb58 |
| Area=3146 | Joint1=3321 | Joint2=3366 | Joint3=3367 | Joint4=3322 | GUID=50f8db3e-afd1-4dc6-84ee-ab666d319bde |
| Area=3147 | Joint1=3322 | Joint2=3367 | Joint3=3368 | Joint4=3323 | GUID=1298edaf-f8bf-4ad0-9b2f-38fca10a40c3 |
| Area=3148 | Joint1=3323 | Joint2=3368 | Joint3=3369 | Joint4=3324 | GUID=067605b9-1a4f-4a8e-a7b9-ce00a567e3e7 |
| Area=3149 | Joint1=3324 | Joint2=3369 | Joint3=3370 | Joint4=3325 | GUID=da286bfb-3b12-4657-b03d-0b38a0520aea |
| Area=3150 | Joint1=3325 | Joint2=3370 | Joint3=3371 | Joint4=3326 | GUID=f68310bc-2db5-45a4-8739-6d2db45d40ee |
| Area=3151 | Joint1=3326 | Joint2=3371 | Joint3=3372 | Joint4=3327 | GUID=a9ca09a4-fe1f-4e94-af4b-3fa241f866d7 |
| Area=3152 | Joint1=3327 | Joint2=3372 | Joint3=3373 | Joint4=3328 | GUID=a0284c0d-961c-4b98-b3df-493ca213bf04 |
| Area=3153 | Joint1=3328 | Joint2=3373 | Joint3=3374 | Joint4=3329 | GUID=a3b54b4f-ebc5-4fd5-9855-3b54e7719c30 |
| Area=3154 | Joint1=3329 | Joint2=3374 | Joint3=3375 | Joint4=3330 | GUID=7c7d721b-0a9e-4ec7-a8b4-bc83c8c02420 |
| Area=3155 | Joint1=3330 | Joint2=3375 | Joint3=3376 | Joint4=3331 | GUID=09e25f76-cd9c-41b8-b803-d627a799f82f |
| Area=3156 | Joint1=3331 | Joint2=3376 | Joint3=3377 | Joint4=3332 | GUID=ed022d84-4972-4520-b5ae-5351e3ceed82 |
| Area=3157 | Joint1=3332 | Joint2=3377 | Joint3=3378 | Joint4=3333 | GUID=709d1261-bd2b-4784-9478-b06e4980e612 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=3158<br>ceede4dc7272 | Joint1=3333 | Joint2=3378 | Joint3=3379 | Joint4=3334 | GUID=be308ab9-76e3-4fa2-9436-             |
| Area=3159<br>d6079e503b34 | Joint1=3334 | Joint2=3379 | Joint3=3380 | Joint4=3335 | GUID=2c53e31d-a273-4966-8394-             |
| Area=3160<br>14f612a94d4a | Joint1=3335 | Joint2=3380 | Joint3=3381 | Joint4=3336 | GUID=19e25c56-8b3e-4aa7-94c5-             |
| Area=3161<br>5f3e2c2e6c2b | Joint1=3336 | Joint2=3381 | Joint3=3382 | Joint4=3337 | GUID=e04d26e8-cc9b-4db7-987e-             |
| Area=3162                 | Joint1=3337 | Joint2=3382 | Joint3=3383 | Joint4=3338 | GUID=177bfe11-114d-4d43-ab56-a6d93df54fe2 |
| Area=3163                 | Joint1=3338 | Joint2=3383 | Joint3=3384 | Joint4=3339 | GUID=cb85bf26-447f-4892-9c7a-fd5f585e9242 |
| Area=3164                 | Joint1=3339 | Joint2=3384 | Joint3=3385 | Joint4=3340 | GUID=b3bef545-ad55-46ff-b00f-3b3c7e3405b9 |
| Area=3165<br>0e550699a056 | Joint1=3340 | Joint2=3385 | Joint3=3386 | Joint4=3341 | GUID=f31300a2-153e-4be0-bf0c-             |
| Area=3166<br>669d9bd947c1 | Joint1=3341 | Joint2=3386 | Joint3=3387 | Joint4=3342 | GUID=6bc2b80e-c1af-4790-9a58-             |
| Area=3167<br>ed40ab3b4ed2 | Joint1=3342 | Joint2=3387 | Joint3=3388 | Joint4=3343 | GUID=e895d110-a3a8-4b4f-8785-             |
| Area=3168                 | Joint1=3343 | Joint2=3388 | Joint3=3389 | Joint4=3344 | GUID=fed50c63-ffef-4d55-b1ac-b13b44b7b017 |
| Area=3169<br>f2eb3ab045f5 | Joint1=3344 | Joint2=3389 | Joint3=3390 | Joint4=3345 | GUID=b5965065-d98e-4279-b439-             |
| Area=3170                 | Joint1=3346 | Joint2=3391 | Joint3=3392 | Joint4=3347 | GUID=1e84503f-3f17-4632-b19a-a92843f5ce14 |
| Area=3171<br>41a38140d8db | Joint1=3347 | Joint2=3392 | Joint3=3393 | Joint4=3348 | GUID=48ec355b-a775-42e6-93ec-             |
| Area=3172                 | Joint1=3348 | Joint2=3393 | Joint3=3394 | Joint4=3349 | GUID=ee5fd922-a0ff-4854-b9ce-0b3929ae6894 |
| Area=3173<br>65067a5e8e2a | Joint1=3349 | Joint2=3394 | Joint3=3395 | Joint4=3350 | GUID=40e022a1-1a7b-493c-ad09-             |
| Area=3174                 | Joint1=3350 | Joint2=3395 | Joint3=3396 | Joint4=3351 | GUID=f8b5dc95-83b5-48ff-821c-f8d521b9edd9 |
| Area=3175                 | Joint1=3351 | Joint2=3396 | Joint3=3397 | Joint4=3352 | GUID=eda570a8-4fff-4fb8-999b-68403a00b778 |
| Area=3176                 | Joint1=3352 | Joint2=3397 | Joint3=3398 | Joint4=3353 | GUID=fec9d5b3-04ef-446f-9ab8-039fb4085393 |
| Area=3177                 | Joint1=3353 | Joint2=3398 | Joint3=3399 | Joint4=3354 | GUID=f8f51a60-5fff-4e63-b7bb-2d11f81931eb |
| Area=3178<br>ff7237157ddc | Joint1=3354 | Joint2=3399 | Joint3=3400 | Joint4=3355 | GUID=14ec0693-2044-4513-926c-             |
| Area=3179                 | Joint1=3355 | Joint2=3400 | Joint3=3401 | Joint4=3356 | GUID=df7a2d21-db89-479f-9c5d-378004686f39 |
| Area=3180<br>68ad71f04571 | Joint1=3356 | Joint2=3401 | Joint3=3402 | Joint4=3357 | GUID=0502f418-08e7-4eab-bd9a-             |
| Area=3181<br>dfb855d22c4c | Joint1=3357 | Joint2=3402 | Joint3=3403 | Joint4=3358 | GUID=4226796a-7a88-4863-bc10-             |
| Area=3182<br>83a3a51907ec | Joint1=3358 | Joint2=3403 | Joint3=3404 | Joint4=3359 | GUID=d949bea2-c26e-42dc-a476-             |
| Area=3183<br>8166d9c27a46 | Joint1=3359 | Joint2=3404 | Joint3=3405 | Joint4=3360 | GUID=a6eaa494-0890-4101-9c04-             |
| Area=3184<br>12055f66ae8a | Joint1=3360 | Joint2=3405 | Joint3=3406 | Joint4=3361 | GUID=3e7a47ea-d332-4986-a150-             |
| Area=3185                 | Joint1=3361 | Joint2=3406 | Joint3=3407 | Joint4=3362 | GUID=e7c376d4-eb94-46be-8d1f-9fdd0260d94f |
| Area=3186<br>49bdcbbe7192 | Joint1=3362 | Joint2=3407 | Joint3=3408 | Joint4=3363 | GUID=f5a06175-020b-4db9-8846-             |
| Area=3187                 | Joint1=3363 | Joint2=3408 | Joint3=3409 | Joint4=3364 | GUID=efae8f3e-1f6c-4e78-89e9-56b2ba288db5 |
| Area=3188<br>6bcd1814c890 | Joint1=3364 | Joint2=3409 | Joint3=3410 | Joint4=3365 | GUID=5f317492-a705-4683-942e-             |
| Area=3189<br>c1d1a4135847 | Joint1=3365 | Joint2=3410 | Joint3=3411 | Joint4=3366 | GUID=19965981-ba16-4173-ad5b-             |
| Area=3190<br>79fc155ece55 | Joint1=3366 | Joint2=3411 | Joint3=3412 | Joint4=3367 | GUID=b20d3759-d87b-4c0b-81b8-             |
| Area=3191<br>f197081a76c5 | Joint1=3367 | Joint2=3412 | Joint3=3413 | Joint4=3368 | GUID=31a742a2-23cb-4959-af69-             |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=3192 | Joint1=3368 | Joint2=3413 | Joint3=3414 | Joint4=3369 | GUID=d30ab409-62d3-44c0-91cd-3e09c171abe0 |
| Area=3193 | Joint1=3369 | Joint2=3414 | Joint3=3415 | Joint4=3370 | GUID=d65761af-adc0-45bd-af30-efdd75afef2f |
| Area=3194 | Joint1=3370 | Joint2=3415 | Joint3=3416 | Joint4=3371 | GUID=0e371364-7909-4b17-abef-02e263454b0b |
| Area=3195 | Joint1=3371 | Joint2=3416 | Joint3=3417 | Joint4=3372 | GUID=a220524f-e426-4d5c-819e-0dd8b0d9c08a |
| Area=3196 | Joint1=3372 | Joint2=3417 | Joint3=3418 | Joint4=3373 | GUID=4608fc97-b4b0-43d5-9e39-e0766080ebe4 |
| Area=3197 | Joint1=3373 | Joint2=3418 | Joint3=3419 | Joint4=3374 | GUID=b17783e1-8b4a-412f-bbfc-ef08d14b70bf |
| Area=3198 | Joint1=3374 | Joint2=3419 | Joint3=3420 | Joint4=3375 | GUID=78af2278-ed12-4149-9085-08a5d4e1ed19 |
| Area=3199 | Joint1=3375 | Joint2=3420 | Joint3=3421 | Joint4=3376 | GUID=068d5221-8185-4c8b-9fdc-dbeebc2e2e9b |
| Area=3200 | Joint1=3376 | Joint2=3421 | Joint3=3422 | Joint4=3377 | GUID=76b64bc9-46d7-4a2b-ac36-1f1cde40591d |
| Area=3201 | Joint1=3377 | Joint2=3422 | Joint3=3423 | Joint4=3378 | GUID=c70d6982-837f-4647-a9ce-97e54be5706e |
| Area=3202 | Joint1=3378 | Joint2=3423 | Joint3=3424 | Joint4=3379 | GUID=cb06a2c4-a099-4926-9427-ba3afe051953 |
| Area=3203 | Joint1=3379 | Joint2=3424 | Joint3=3425 | Joint4=3380 | GUID=bce3d79e-c193-4869-ae97-89a83bbf4ec3 |
| Area=3204 | Joint1=3380 | Joint2=3425 | Joint3=3426 | Joint4=3381 | GUID=3b9ad65c-001a-4d90-bdb3-e272c71026fc |
| Area=3205 | Joint1=3381 | Joint2=3426 | Joint3=3427 | Joint4=3382 | GUID=80ab5a43-5289-4611-84e3-142cc990bf57 |
| Area=3206 | Joint1=3382 | Joint2=3427 | Joint3=3428 | Joint4=3383 | GUID=900527ef-7ea1-44c5-81b3-48f9850009f1 |
| Area=3207 | Joint1=3383 | Joint2=3428 | Joint3=3429 | Joint4=3384 | GUID=582f81d2-9bdd-4b50-94be-7b45b6ab42ff |
| Area=3208 | Joint1=3384 | Joint2=3429 | Joint3=3430 | Joint4=3385 | GUID=cf411413-7d3a-4f47-817a-bbd98f0bdc9f |
| Area=3209 | Joint1=3385 | Joint2=3430 | Joint3=3431 | Joint4=3386 | GUID=57348dde-728e-4449-b088-0a0e84d47fb3 |
| Area=3210 | Joint1=3386 | Joint2=3431 | Joint3=3432 | Joint4=3387 | GUID=32e9ad35-a8cc-4fd6-bc79-a4e60a671b99 |
| Area=3211 | Joint1=3387 | Joint2=3432 | Joint3=3433 | Joint4=3388 | GUID=9aabaad6-eca7-4eaf-a81e-00adcca6b630 |
| Area=3212 | Joint1=3388 | Joint2=3433 | Joint3=3434 | Joint4=3389 | GUID=66af81a5-874d-4af9-88fb-db02794722f9 |
| Area=3213 | Joint1=3389 | Joint2=3434 | Joint3=3435 | Joint4=3390 | GUID=ddbffd0-6366-4c70-acfa-f01b2f2062d6  |
| Area=3214 | Joint1=3391 | Joint2=3436 | Joint3=3437 | Joint4=3392 | GUID=4b213a2e-1595-4f95-8553-2cd4651f5ea9 |
| Area=3215 | Joint1=3392 | Joint2=3437 | Joint3=3438 | Joint4=3393 | GUID=f8260c78-bc6a-4e07-9663-7107cf6d6f0b |
| Area=3216 | Joint1=3393 | Joint2=3438 | Joint3=3439 | Joint4=3394 | GUID=cd9fc20f-1b57-4a55-975e-33f1dfb402a9 |
| Area=3217 | Joint1=3394 | Joint2=3439 | Joint3=3440 | Joint4=3395 | GUID=f476776c-130c-4929-99b5-bf3f1a850d49 |
| Area=3218 | Joint1=3395 | Joint2=3440 | Joint3=3441 | Joint4=3396 | GUID=eaea3c40-1666-4efa-92de-8b2828f2de0f |
| Area=3219 | Joint1=3396 | Joint2=3441 | Joint3=3442 | Joint4=3397 | GUID=c1c1bfc5-97c4-4f82-9877-001e8e076775 |
| Area=3220 | Joint1=3397 | Joint2=3442 | Joint3=3443 | Joint4=3398 | GUID=a132f2cc-59fa-4628-9ace-491b8a67a66a |
| Area=3221 | Joint1=3398 | Joint2=3443 | Joint3=3444 | Joint4=3399 | GUID=5d2690d9-ff0b-4605-b224-3e90ab265434 |
| Area=3222 | Joint1=3399 | Joint2=3444 | Joint3=3445 | Joint4=3400 | GUID=79b9b547-e6da-4623-9115-32db6c14229d |
| Area=3223 | Joint1=3400 | Joint2=3445 | Joint3=3446 | Joint4=3401 | GUID=62105402-7f82-44fa-828c-398686480252 |
| Area=3224 | Joint1=3401 | Joint2=3446 | Joint3=3447 | Joint4=3402 | GUID=0841918c-4be8-41d9-bc58-56891ad88334 |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=3225 | Joint1=3402 | Joint2=3447 | Joint3=3448 | Joint4=3403 | GUID=b455f6ed-d77b-44d8-addd-4040cefc4261 |
| Area=3226 | Joint1=3403 | Joint2=3448 | Joint3=3449 | Joint4=3404 | GUID=74904fab-a8f2-4d0f-b2ae-81084c6a6bea |
| Area=3227 | Joint1=3404 | Joint2=3449 | Joint3=3450 | Joint4=3405 | GUID=711a4144-e0da-4668-b8e8-ee8cce1c7b3e |
| Area=3228 | Joint1=3405 | Joint2=3450 | Joint3=3451 | Joint4=3406 | GUID=3d14b9b2-559c-49da-ac79-6a89f3f2b744 |
| Area=3229 | Joint1=3406 | Joint2=3451 | Joint3=3452 | Joint4=3407 | GUID=c52b227b-6e22-4444-aa10-1f12889741c4 |
| Area=3230 | Joint1=3407 | Joint2=3452 | Joint3=3453 | Joint4=3408 | GUID=0939d575-de3a-456a-a49d-396cf4bbf3e0 |
| Area=3231 | Joint1=3408 | Joint2=3453 | Joint3=3454 | Joint4=3409 | GUID=91cb73d4-d8c8-4da7-ab06-32f3b5509711 |
| Area=3232 | Joint1=3409 | Joint2=3454 | Joint3=3455 | Joint4=3410 | GUID=80fa9c9b-fae6-405d-adfc-988203421000 |
| Area=3233 | Joint1=3410 | Joint2=3455 | Joint3=3456 | Joint4=3411 | GUID=5d15b876-4ced-4f3e-9bc2-7c5f45641036 |
| Area=3234 | Joint1=3411 | Joint2=3456 | Joint3=3457 | Joint4=3412 | GUID=c4a090d3-2a2a-409c-a45f-8eb12c5ae468 |
| Area=3235 | Joint1=3412 | Joint2=3457 | Joint3=3458 | Joint4=3413 | GUID=755bc566-419c-4e0c-9cab-ff00f43938a0 |
| Area=3236 | Joint1=3413 | Joint2=3458 | Joint3=3459 | Joint4=3414 | GUID=c6b9230f-1f1d-48ed-8a88-9cfac2e71013 |
| Area=3237 | Joint1=3414 | Joint2=3459 | Joint3=3460 | Joint4=3415 | GUID=fcd0e84-04d9-4103-af9a-e9a3f02948c3  |
| Area=3238 | Joint1=3415 | Joint2=3460 | Joint3=3461 | Joint4=3416 | GUID=9b0cfc57-9442-48d1-b023-9fb848436a9c |
| Area=3239 | Joint1=3416 | Joint2=3461 | Joint3=3462 | Joint4=3417 | GUID=206e00fa-fe70-473d-b69d-0ec1ab328bb8 |
| Area=3240 | Joint1=3417 | Joint2=3462 | Joint3=3463 | Joint4=3418 | GUID=4496222b-dc34-4cb7-ae16-4b6ed17528e1 |
| Area=3241 | Joint1=3418 | Joint2=3463 | Joint3=3464 | Joint4=3419 | GUID=c25bcf32-1fcd-4db0-b84e-cc07bc0aaafa |
| Area=3242 | Joint1=3419 | Joint2=3464 | Joint3=3465 | Joint4=3420 | GUID=8e998396-7855-4d39-8b53-bc26fb591f64 |
| Area=3243 | Joint1=3420 | Joint2=3465 | Joint3=3466 | Joint4=3421 | GUID=85e52919-a00a-4661-89e8-a490a7ef9272 |
| Area=3244 | Joint1=3421 | Joint2=3466 | Joint3=3467 | Joint4=3422 | GUID=307dbf6b-6e5f-4a7e-9a81-83505ae3c7ef |
| Area=3245 | Joint1=3422 | Joint2=3467 | Joint3=3468 | Joint4=3423 | GUID=89022da4-0302-4210-ba50-269193aef547 |
| Area=3246 | Joint1=3423 | Joint2=3468 | Joint3=3469 | Joint4=3424 | GUID=e024f94c-33cb-431b-a094-4954681dae42 |
| Area=3247 | Joint1=3424 | Joint2=3469 | Joint3=3470 | Joint4=3425 | GUID=6dc78bcc-fa23-4286-9890-664d0d4fab04 |
| Area=3248 | Joint1=3425 | Joint2=3470 | Joint3=3471 | Joint4=3426 | GUID=b68ccad6-0406-4187-ab90-1336811a3837 |
| Area=3249 | Joint1=3426 | Joint2=3471 | Joint3=3472 | Joint4=3427 | GUID=51a76b6e-b790-47b9-9aac-e4625a4dbac8 |
| Area=3250 | Joint1=3427 | Joint2=3472 | Joint3=3473 | Joint4=3428 | GUID=1fa72d73-0fd3-4fee-a519-020c32e3da65 |
| Area=3251 | Joint1=3428 | Joint2=3473 | Joint3=3474 | Joint4=3429 | GUID=04e9d493-e302-4aa2-ab72-69550702a96d |
| Area=3252 | Joint1=3429 | Joint2=3474 | Joint3=3475 | Joint4=3430 | GUID=aea00ecf-e0be-42cb-871c-151909294388 |
| Area=3253 | Joint1=3430 | Joint2=3475 | Joint3=3476 | Joint4=3431 | GUID=cef0bfec-ded8-4f3d-a872-a934974b5bb3 |
| Area=3254 | Joint1=3431 | Joint2=3476 | Joint3=3477 | Joint4=3432 | GUID=72d5c7d1-893e-41d4-ac21-86c2b8dfe408 |
| Area=3255 | Joint1=3432 | Joint2=3477 | Joint3=3478 | Joint4=3433 | GUID=7b86d075-d514-4e2a-bf3b-ff0530aa387b |
| Area=3256 | Joint1=3433 | Joint2=3478 | Joint3=3479 | Joint4=3434 | GUID=cad67490-88b0-4bf7-8e47-db674463a2e9 |
| Area=3257 | Joint1=3434 | Joint2=3479 | Joint3=3480 | Joint4=3435 | GUID=1c72d198-acac-4636-9f56-c54f5b5089f0 |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=3258 Joint1=3436 Joint2=3481 Joint3=3482 Joint4=3437 GUID=181f76cb-51e8-4f82-89b4-2e1fbbd9d282  
Area=3259 Joint1=3437 Joint2=3482 Joint3=3483 Joint4=3438 GUID=bc6c16f9-9a29-4f4a-a7f9-c5049704941f  
Area=3260 Joint1=3438 Joint2=3483 Joint3=3484 Joint4=3439 GUID=4508aad-8a24-4f2f-8bc4-96f0f674e130  
Area=3261 Joint1=3439 Joint2=3484 Joint3=3485 Joint4=3440 GUID=71552234-d937-4fd4-8b35-f3aa09feccca  
Area=3262 Joint1=3440 Joint2=3485 Joint3=3486 Joint4=3441 GUID=d49306d3-e4f7-47ee-9202-6f442a5c0c4d  
Area=3263 Joint1=3441 Joint2=3486 Joint3=3487 Joint4=3442 GUID=cc4ad7fe-adbc-4f79-bfe5-0f32fd01d351  
Area=3264 Joint1=3442 Joint2=3487 Joint3=3488 Joint4=3443 GUID=40c59099-751a-4e84-920d-b4e22aec8111  
Area=3265 Joint1=3443 Joint2=3488 Joint3=3489 Joint4=3444 GUID=b4765b2e-1636-405d-9708-7cd0204dec11  
Area=3266 Joint1=3444 Joint2=3489 Joint3=3490 Joint4=3445 GUID=fae83d43-c02c-405c-8bc0-c3d062830291  
Area=3267 Joint1=3445 Joint2=3490 Joint3=3491 Joint4=3446 GUID=e0e92bf6-e414-44f2-a275-ac59293daff9  
Area=3268 Joint1=3446 Joint2=3491 Joint3=3492 Joint4=3447 GUID=66574612-51b1-45c4-a248-3c122bb0f4b7  
Area=3269 Joint1=3447 Joint2=3492 Joint3=3493 Joint4=3448 GUID=c45bc1e7-d920-41a3-9161-0d395f46f8c1  
Area=3270 Joint1=3448 Joint2=3493 Joint3=3494 Joint4=3449 GUID=1c5bfa23-ac52-42a4-a8be-21c0ed541d57  
Area=3271 Joint1=3449 Joint2=3494 Joint3=3495 Joint4=3450 GUID=75fdbd3c-cbbe-41aa-9aac-19f7d548e102  
Area=3272 Joint1=3450 Joint2=3495 Joint3=3496 Joint4=3451 GUID=7b1e068a-3fdf-4d4d-99c1-f4e1eb38cfea  
Area=3273 Joint1=3451 Joint2=3496 Joint3=3497 Joint4=3452 GUID=fc3ddb74-fd88-4d72-b9a0-7de7ec37e814  
Area=3274 Joint1=3452 Joint2=3497 Joint3=3498 Joint4=3453 GUID=5847f1e4-ac0b-418a-add8-2ef4ec4be54a  
Area=3275 Joint1=3453 Joint2=3498 Joint3=3499 Joint4=3454 GUID=f85f93d4-32b3-4cdb-9cbb-3bc4219f3ed4  
Area=3276 Joint1=3454 Joint2=3499 Joint3=3500 Joint4=3455 GUID=e24cfc48-3426-498d-8b4d-4159c763b41a  
Area=3277 Joint1=3455 Joint2=3500 Joint3=3501 Joint4=3456 GUID=73b79a27-b4fa-4b58-ace3-373adcd99d74  
Area=3278 Joint1=3456 Joint2=3501 Joint3=3502 Joint4=3457 GUID=45b1cc43-dcf3-498f-b102-656ff85f9da3  
Area=3279 Joint1=3457 Joint2=3502 Joint3=3503 Joint4=3458 GUID=1e6dd661-856a-438a-87c3-328225c43191  
Area=3280 Joint1=3458 Joint2=3503 Joint3=3504 Joint4=3459 GUID=f225adf0-d587-4b71-8fe8-060b80e7751c  
Area=3281 Joint1=3459 Joint2=3504 Joint3=3505 Joint4=3460 GUID=ceae242-5408-4df4-ac29-d7cb36c65ba3  
Area=3282 Joint1=3460 Joint2=3505 Joint3=3506 Joint4=3461 GUID=cfbf84a5-810d-4e09-8e5d-cb3a7e9ff527  
Area=3283 Joint1=3461 Joint2=3506 Joint3=3507 Joint4=3462 GUID=a6e729bc-ee9e-45ea-8722-ffe4b647a5d1  
Area=3284 Joint1=3462 Joint2=3507 Joint3=3508 Joint4=3463 GUID=d58b8ec1-8150-4d42-84af-8cd8605ef8e6  
Area=3285 Joint1=3463 Joint2=3508 Joint3=3509 Joint4=3464 GUID=dc291fcb-de36-485d-ac4e-44eb7cfe98f5  
Area=3286 Joint1=3464 Joint2=3509 Joint3=3510 Joint4=3465 GUID=3d537a37-a0b8-4e47-b64a-16073c8aae63  
Area=3287 Joint1=3465 Joint2=3510 Joint3=3511 Joint4=3466 GUID=768476fd-23bc-4adb-acfc-0e907e1e6b5e  
Area=3288 Joint1=3466 Joint2=3511 Joint3=3512 Joint4=3467 GUID=edfbf256-32c7-4006-984b-f5e99d3eede4  
Area=3289 Joint1=3467 Joint2=3512 Joint3=3513 Joint4=3468 GUID=49f0cf2-f821-4c05-abe9-7b704cd8d6d7  
Area=3290 Joint1=3468 Joint2=3513 Joint3=3514 Joint4=3469 GUID=649cc582-0363-40fc-a1dc-5c22c09cbe0c  
Area=3291 Joint1=3469 Joint2=3514 Joint3=3515 Joint4=3470 GUID=551f1961-7ae7-4c02-abef-e7c52864aedf  
Area=3292 Joint1=3470 Joint2=3515 Joint3=3516 Joint4=3471 GUID=82d44310-2ac9-4c65-b857-0e4a00697d85

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=3293 Joint1=3471 Joint2=3516 Joint3=3517 Joint4=3472 GUID=65e5df00-a5ca-4c29-8010-58a4d046ab90

Area=3294 Joint1=3472 Joint2=3517 Joint3=3518 Joint4=3473 GUID=cb124cf8-6c7b-4f81-9c5f-562a85f6fc2a

Area=3295 Joint1=3473 Joint2=3518 Joint3=3519 Joint4=3474 GUID=38dad803-b7e7-4c54-89f6-7c14eb6bd442

Area=3296 Joint1=3474 Joint2=3519 Joint3=3520 Joint4=3475 GUID=e466fb96-a012-4d38-a672-b1c33543ff6c

Area=3297 Joint1=3475 Joint2=3520 Joint3=3521 Joint4=3476 GUID=1d2cdc19-34f2-43d2-9777-378b8c6c317a

Area=3298 Joint1=3476 Joint2=3521 Joint3=3522 Joint4=3477 GUID=e3147767-4dec-49c8-83a8-fef9b89af625

Area=3299 Joint1=3477 Joint2=3522 Joint3=3523 Joint4=3478 GUID=69f6d810-b1ae-415f-a9df-df84fcdcf8de

Area=3300 Joint1=3478 Joint2=3523 Joint3=3524 Joint4=3479 GUID=2f81e8e8-a465-494a-9090-dcd57956311a

Area=3301 Joint1=3479 Joint2=3524 Joint3=3525 Joint4=3480 GUID=7c8227d0-3f35-4034-a5f5-aa63c34a7ccc

Area=3302 Joint1=3481 Joint2=3526 Joint3=3527 Joint4=3482 GUID=13e07f73-9c61-4251-b11c-68915efbcabc

Area=3303 Joint1=3482 Joint2=3527 Joint3=3528 Joint4=3483 GUID=41803185-4c47-421e-8a9b-94732847ea75

Area=3304 Joint1=3483 Joint2=3528 Joint3=3529 Joint4=3484 GUID=708ed18a-e623-4955-a2df-bc257d90cb50

Area=3305 Joint1=3484 Joint2=3529 Joint3=3530 Joint4=3485 GUID=e0c20b5f-46f4-43cf-b560-e3610bf1a139

Area=3306 Joint1=3485 Joint2=3530 Joint3=3531 Joint4=3486 GUID=643aef7a-7738-498f-a8f8-7b69974943f7

Area=3307 Joint1=3486 Joint2=3531 Joint3=3532 Joint4=3487 GUID=1ded56ef-ce80-4062-aa0a-ee5efcc508b2

Area=3308 Joint1=3487 Joint2=3532 Joint3=3533 Joint4=3488 GUID=fd8764c9-30db-44d3-8f9e-ca4435fa2ffa

Area=3309 Joint1=3488 Joint2=3533 Joint3=3534 Joint4=3489 GUID=3aead5d7-1e8f-4921-b8d1-39a84628327d

Area=3310 Joint1=3489 Joint2=3534 Joint3=3535 Joint4=3490 GUID=70842b11-a546-4113-8aa8-5971a72ae903

Area=3311 Joint1=3490 Joint2=3535 Joint3=3536 Joint4=3491 GUID=2ce2f6cb-2a9e-444b-95e6-46c9775fdee0

Area=3312 Joint1=3491 Joint2=3536 Joint3=3537 Joint4=3492 GUID=e3328199-4640-4f27-99d2-4350a338624b

Area=3313 Joint1=3492 Joint2=3537 Joint3=3538 Joint4=3493 GUID=ca689511-6b4a-47b4-9055-de9ba1cc2857

Area=3314 Joint1=3493 Joint2=3538 Joint3=3539 Joint4=3494 GUID=e60e15cf-8882-4fc4-b335-3c5e0a2da871

Area=3315 Joint1=3494 Joint2=3539 Joint3=3540 Joint4=3495 GUID=e4c7bb6e-e7bd-4f49-86ab-714ff3aeb1da

Area=3316 Joint1=3495 Joint2=3540 Joint3=3541 Joint4=3496 GUID=ee3d78f2-2a37-4f2e-a4be-612ea935824e

Area=3317 Joint1=3496 Joint2=3541 Joint3=3542 Joint4=3497 GUID=85888d6f-fc84-4cd1-be6f-120d627ae044

Area=3318 Joint1=3497 Joint2=3542 Joint3=3543 Joint4=3498 GUID=a1bb959d-aaaf-43d1-bb77-bf358b027c85

Area=3319 Joint1=3498 Joint2=3543 Joint3=3544 Joint4=3499 GUID=f1010cc1-05bc-45bc-aede-40125867c873

Area=3320 Joint1=3499 Joint2=3544 Joint3=3545 Joint4=3500 GUID=0e3a6bc8-8f5c-493b-a4a9-0848afa06eb1

Area=3321 Joint1=3500 Joint2=3545 Joint3=3546 Joint4=3501 GUID=cb959905-3fc6-4b31-895c-3a5d6ef7256e

Area=3322 Joint1=3501 Joint2=3546 Joint3=3547 Joint4=3502 GUID=2e4425b5-53fb-481b-a901-fc568be4e495

Area=3323 Joint1=3502 Joint2=3547 Joint3=3548 Joint4=3503 GUID=3b3af66e-9fa0-4396-888b-3ceda2c02bda

Area=3324 Joint1=3503 Joint2=3548 Joint3=3549 Joint4=3504 GUID=e93c38ba-3cf9-4ec8-8b22-618ba3a87168

Area=3325 Joint1=3504 Joint2=3549 Joint3=3550 Joint4=3505 GUID=cc89f403-e52b-483b-bfc4-27d162c9e24c

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                            |             |             |             |             |                                           |
|----------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=3326<br>5646812dcd2f  | Joint1=3505 | Joint2=3550 | Joint3=3551 | Joint4=3506 | GUID=c7a2c336-4d78-4a3c-9ccd-             |
| Area=3327<br>50da0b1f704a  | Joint1=3506 | Joint2=3551 | Joint3=3552 | Joint4=3507 | GUID=73b315f1-d350-4493-88cb-             |
| Area=3328<br>017c47d9c0bf  | Joint1=3507 | Joint2=3552 | Joint3=3553 | Joint4=3508 | GUID=bcda7b72-6e40-478b-8073-             |
| Area=3329<br>af9195649ce5  | Joint1=3508 | Joint2=3553 | Joint3=3554 | Joint4=3509 | GUID=3b7f6a30-68a6-4a90-b4b6-             |
| Area=3330<br>8acdd95d314d  | Joint1=3509 | Joint2=3554 | Joint3=3555 | Joint4=3510 | GUID=b4986388-1a88-47fb-b140-             |
| Area=3331<br>75354afe5f5be | Joint1=3510 | Joint2=3555 | Joint3=3556 | Joint4=3511 | GUID=9069b469-3467-4557-beab-             |
| Area=3332                  | Joint1=3511 | Joint2=3556 | Joint3=3557 | Joint4=3512 | GUID=d21cc9aa-91f3-4337-a26c-c88bfb145a29 |
| Area=3333<br>a58f0aee3845  | Joint1=3512 | Joint2=3557 | Joint3=3558 | Joint4=3513 | GUID=0c818b4d-1347-4a87-b288-             |
| Area=3334                  | Joint1=3513 | Joint2=3558 | Joint3=3559 | Joint4=3514 | GUID=593590fc-0025-4532-907d-4cf17b03057f |
| Area=3335<br>e22654ab73ee  | Joint1=3514 | Joint2=3559 | Joint3=3560 | Joint4=3515 | GUID=80aa8282-71ac-4078-852e-             |
| Area=3336<br>a48dcd7a6788  | Joint1=3515 | Joint2=3560 | Joint3=3561 | Joint4=3516 | GUID=c9393f78-067e-4d30-aa72-             |
| Area=3337<br>63f4173cec03  | Joint1=3516 | Joint2=3561 | Joint3=3562 | Joint4=3517 | GUID=1b44665c-0ad5-4843-b9c0-             |
| Area=3338<br>c43759ab9500  | Joint1=3517 | Joint2=3562 | Joint3=3563 | Joint4=3518 | GUID=9e98d06a-abad-4e85-a97d-             |
| Area=3339                  | Joint1=3518 | Joint2=3563 | Joint3=3564 | Joint4=3519 | GUID=bc1d732a-f24d-4a5a-af8e-67f7d8cfc89f |
| Area=3340                  | Joint1=3519 | Joint2=3564 | Joint3=3565 | Joint4=3520 | GUID=be70da31-53cc-495e-acb1-f00bb3c70f8c |
| Area=3341<br>9ef2c37b2202  | Joint1=3520 | Joint2=3565 | Joint3=3566 | Joint4=3521 | GUID=ee3c6ddf-17c4-4077-9b24-             |
| Area=3342<br>679678313e74  | Joint1=3521 | Joint2=3566 | Joint3=3567 | Joint4=3522 | GUID=ea804244-70d6-4fea-95f0-             |
| Area=3343                  | Joint1=3522 | Joint2=3567 | Joint3=3568 | Joint4=3523 | GUID=76336a9d-a9fe-44c2-96f9-bb21a3a359bf |
| Area=3344                  | Joint1=3523 | Joint2=3568 | Joint3=3569 | Joint4=3524 | GUID=beac81c2-98e4-4fed-b1fd-75908215f679 |
| Area=3345<br>790d65044ed6  | Joint1=3524 | Joint2=3569 | Joint3=3570 | Joint4=3525 | GUID=654c5231-3105-4e9c-9c5a-             |
| Area=3346<br>cd3d8bf7f17d  | Joint1=3526 | Joint2=3571 | Joint3=3572 | Joint4=3527 | GUID=3dcb6326-1203-4e67-80a8-             |
| Area=3347                  | Joint1=3527 | Joint2=3572 | Joint3=3573 | Joint4=3528 | GUID=d04cf547-e365-4e45-9ed1-92f59a1f9628 |
| Area=3348<br>985a48e99495  | Joint1=3528 | Joint2=3573 | Joint3=3574 | Joint4=3529 | GUID=91431451-9858-4569-8614-             |
| Area=3349<br>2066168147a6  | Joint1=3529 | Joint2=3574 | Joint3=3575 | Joint4=3530 | GUID=718e43bd-3770-4e48-86e1-             |
| Area=3350<br>027048e1c330  | Joint1=3530 | Joint2=3575 | Joint3=3576 | Joint4=3531 | GUID=6e3093db-61c6-4dd7-8b41-             |
| Area=3351<br>0bf5d5d44585  | Joint1=3531 | Joint2=3576 | Joint3=3577 | Joint4=3532 | GUID=b8bdb5e9-1ce0-4a63-b46e-             |
| Area=3352                  | Joint1=3532 | Joint2=3577 | Joint3=3578 | Joint4=3533 | GUID=19f33dcd-c776-421a-af1b-cfa1b442ce41 |
| Area=3353<br>7b061779481c  | Joint1=3533 | Joint2=3578 | Joint3=3579 | Joint4=3534 | GUID=42120549-a2e6-49f2-b4cc-             |
| Area=3354<br>6ee5977fc8fd  | Joint1=3534 | Joint2=3579 | Joint3=3580 | Joint4=3535 | GUID=238ddaa7-edc3-4141-be49-             |
| Area=3355                  | Joint1=3535 | Joint2=3580 | Joint3=3581 | Joint4=3536 | GUID=09fb7cec-515d-43bf-a46c-106137e5af26 |
| Area=3356<br>3a67280b19d1  | Joint1=3536 | Joint2=3581 | Joint3=3582 | Joint4=3537 | GUID=91e76969-9e19-41af-9520-             |
| Area=3357                  | Joint1=3537 | Joint2=3582 | Joint3=3583 | Joint4=3538 | GUID=f95c807f-bc67-4908-8431-523ca9cb6136 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=3358<br>2150607b8eb4 | Joint1=3538 | Joint2=3583 | Joint3=3584 | Joint4=3539 | GUID=2715a552-14ed-456e-ba4e-             |
| Area=3359<br>a9cd517799a2 | Joint1=3539 | Joint2=3584 | Joint3=3585 | Joint4=3540 | GUID=e3da16c8-eda7-4eb5-83a4-             |
| Area=3360<br>a5a82c1be4e6 | Joint1=3540 | Joint2=3585 | Joint3=3586 | Joint4=3541 | GUID=683be1ec-4211-4990-ae3d-             |
| Area=3361<br>84d912d58c7d | Joint1=3541 | Joint2=3586 | Joint3=3587 | Joint4=3542 | GUID=b54b79b3-74d8-4b46-8e42-             |
| Area=3362<br>4722efd6a70b | Joint1=3542 | Joint2=3587 | Joint3=3588 | Joint4=3543 | GUID=b74b4d30-c319-4796-aa17-             |
| Area=3363<br>ddcc4807e927 | Joint1=3543 | Joint2=3588 | Joint3=3589 | Joint4=3544 | GUID=5a890348-15f2-4f55-884e-             |
| Area=3364                 | Joint1=3544 | Joint2=3589 | Joint3=3590 | Joint4=3545 | GUID=4aa24828-8ff7-492c-841d-6dbf493e7124 |
| Area=3365<br>39b37cdb0adb | Joint1=3545 | Joint2=3590 | Joint3=3591 | Joint4=3546 | GUID=226197ce-0e0e-4c3a-8c91-             |
| Area=3366<br>8e1de01c176d | Joint1=3546 | Joint2=3591 | Joint3=3592 | Joint4=3547 | GUID=6487f0fc-3b40-41d6-b136-             |
| Area=3367<br>3129a53d0315 | Joint1=3547 | Joint2=3592 | Joint3=3593 | Joint4=3548 | GUID=1c2182f0-1be5-4ae9-bad3-             |
| Area=3368                 | Joint1=3548 | Joint2=3593 | Joint3=3594 | Joint4=3549 | GUID=b2fa6f87-ef36-4f26-b06f-018e121b5734 |
| Area=3369<br>45279e8a365c | Joint1=3549 | Joint2=3594 | Joint3=3595 | Joint4=3550 | GUID=aa594a15-b6a9-40c9-beb8-             |
| Area=3370<br>3a48ef988b7d | Joint1=3550 | Joint2=3595 | Joint3=3596 | Joint4=3551 | GUID=4f410066-8e0a-449d-ad74-             |
| Area=3371                 | Joint1=3551 | Joint2=3596 | Joint3=3597 | Joint4=3552 | GUID=47f053ce-15d2-4f98-84a7-1f4cd7d230b3 |
| Area=3372<br>8d9cfd33338e | Joint1=3552 | Joint2=3597 | Joint3=3598 | Joint4=3553 | GUID=5090f931-4eca-44ce-a626-             |
| Area=3373<br>e6c709ed15aa | Joint1=3553 | Joint2=3598 | Joint3=3599 | Joint4=3554 | GUID=786185bd-63a0-43cc-9643-             |
| Area=3374<br>dab95b83eab8 | Joint1=3554 | Joint2=3599 | Joint3=3600 | Joint4=3555 | GUID=7d776388-088e-467d-b76a-             |
| Area=3375                 | Joint1=3555 | Joint2=3600 | Joint3=3601 | Joint4=3556 | GUID=91e7a42c-23ac-4a92-a763-8f4a25fd5f03 |
| Area=3376<br>04663aad33e  | Joint1=3556 | Joint2=3601 | Joint3=3602 | Joint4=3557 | GUID=8065b9c4-7227-436f-be8f-             |
| Area=3377                 | Joint1=3557 | Joint2=3602 | Joint3=3603 | Joint4=3558 | GUID=ff5b497d-9f5c-45b3-b148-1e09e07f9ff2 |
| Area=3378                 | Joint1=3558 | Joint2=3603 | Joint3=3604 | Joint4=3559 | GUID=f51772f4-45e3-4fa5-9fa6-e5ca1713f122 |
| Area=3379                 | Joint1=3559 | Joint2=3604 | Joint3=3605 | Joint4=3560 | GUID=76f7ce6d-9262-49fd-afc7-bd55098bd9e1 |
| Area=3380<br>84003b0acd0b | Joint1=3560 | Joint2=3605 | Joint3=3606 | Joint4=3561 | GUID=b818deb2-95b8-4a47-a1c5-             |
| Area=3381                 | Joint1=3561 | Joint2=3606 | Joint3=3607 | Joint4=3562 | GUID=121f4cb2-ef16-481e-919f-c22949588266 |
| Area=3382<br>88d85770bce7 | Joint1=3562 | Joint2=3607 | Joint3=3608 | Joint4=3563 | GUID=380a64a3-8e46-4d5d-b49c-             |
| Area=3383<br>d389db510abd | Joint1=3563 | Joint2=3608 | Joint3=3609 | Joint4=3564 | GUID=260ac8e4-cc4a-4e20-b4d4-             |
| Area=3384                 | Joint1=3564 | Joint2=3609 | Joint3=3610 | Joint4=3565 | GUID=7aadcb0f-e59c-493f-8614-ad70f7f95b3a |
| Area=3385<br>fc8db1299882 | Joint1=3565 | Joint2=3610 | Joint3=3611 | Joint4=3566 | GUID=3327f072-62ad-4297-b1b5-             |
| Area=3386<br>9eb78678d6d6 | Joint1=3566 | Joint2=3611 | Joint3=3612 | Joint4=3567 | GUID=42ba1f30-f663-4594-ab65-             |
| Area=3387                 | Joint1=3567 | Joint2=3612 | Joint3=3613 | Joint4=3568 | GUID=fcdbe1e5-3e84-4f84-b928-1ea4c9d9cd8c |
| Area=3388<br>d626095fce12 | Joint1=3568 | Joint2=3613 | Joint3=3614 | Joint4=3569 | GUID=22a78844-b1c2-4a02-9167-             |
| Area=3389                 | Joint1=3569 | Joint2=3614 | Joint3=3615 | Joint4=3570 | GUID=0f9b1058-f1a6-42a6-bb4c-a3e5f5c1715f |
| Area=3390<br>20e7af6f852e | Joint1=3571 | Joint2=3616 | Joint3=3617 | Joint4=3572 | GUID=c457364e-1c10-4968-8c92-             |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                            |
|-----------|-------------|-------------|-------------|-------------|--------------------------------------------|
| Area=3391 | Joint1=3572 | Joint2=3617 | Joint3=3618 | Joint4=3573 | GUID=e8702bd6-b022-413f-8a16-194396b4d737  |
| Area=3392 | Joint1=3573 | Joint2=3618 | Joint3=3619 | Joint4=3574 | GUID=25ff17b3-9a44-4e6e-a1ba-1bd28155eaf0  |
| Area=3393 | Joint1=3574 | Joint2=3619 | Joint3=3620 | Joint4=3575 | GUID=2d5708b4-12d6-4a13-a3e9-60cc3d222e53  |
| Area=3394 | Joint1=3575 | Joint2=3620 | Joint3=3621 | Joint4=3576 | GUID=609c2f7a-c207-42c2-bd61-66e07221bc5d  |
| Area=3395 | Joint1=3576 | Joint2=3621 | Joint3=3622 | Joint4=3577 | GUID=ada18096-0409-475d-8162-8b93947ce9b9  |
| Area=3396 | Joint1=3577 | Joint2=3622 | Joint3=3623 | Joint4=3578 | GUID=925c430e-bc7c-4a7e-9655-4997872b29fd  |
| Area=3397 | Joint1=3578 | Joint2=3623 | Joint3=3624 | Joint4=3579 | GUID=7ca102dc-280c-4d0e-8129-1db9c3501efa  |
| Area=3398 | Joint1=3579 | Joint2=3624 | Joint3=3625 | Joint4=3580 | GUID=23325e88-a720-494f-93a5-24b2fb3f8b11  |
| Area=3399 | Joint1=3580 | Joint2=3625 | Joint3=3626 | Joint4=3581 | GUID=07f22fa6-87d2-4c95-9e60-66f4b5e42edb  |
| Area=3400 | Joint1=3581 | Joint2=3626 | Joint3=3627 | Joint4=3582 | GUID=80e63b62-895f-4ff5-8a25-374ebc647d3e  |
| Area=3401 | Joint1=3582 | Joint2=3627 | Joint3=3628 | Joint4=3583 | GUID=c4efc66a-7fff-4ec4-9cff-814f7e8b63b7  |
| Area=3402 | Joint1=3583 | Joint2=3628 | Joint3=3629 | Joint4=3584 | GUID=3a1973a3-4a0c-42b1-aa37-a78a057d1aa1  |
| Area=3403 | Joint1=3584 | Joint2=3629 | Joint3=3630 | Joint4=3585 | GUID=0a00ebe4-44ff-493b-9426-3d1d2f8fcece  |
| Area=3404 | Joint1=3585 | Joint2=3630 | Joint3=3631 | Joint4=3586 | GUID=81632a2e-3036-4982-9d12-765d98c832ee  |
| Area=3405 | Joint1=3586 | Joint2=3631 | Joint3=3632 | Joint4=3587 | GUID=b3aa4810-98a9-4b07-b2ba-1ea9e261dbff  |
| Area=3406 | Joint1=3587 | Joint2=3632 | Joint3=3633 | Joint4=3588 | GUID=d6e496b4-f5f4-4b99-b322-0f749e9e5984  |
| Area=3407 | Joint1=3588 | Joint2=3633 | Joint3=3634 | Joint4=3589 | GUID=283b85a4-13db-49f7-aaf3-e78e45d3b8b4  |
| Area=3408 | Joint1=3589 | Joint2=3634 | Joint3=3635 | Joint4=3590 | GUID=f92d08af-9b73-467d-a989-dd542e4df052  |
| Area=3409 | Joint1=3590 | Joint2=3635 | Joint3=3636 | Joint4=3591 | GUID=d897fc11-bb32-496f-89d8-13ccc647d5a9  |
| Area=3410 | Joint1=3591 | Joint2=3636 | Joint3=3637 | Joint4=3592 | GUID=abbce45d-e433-43bc-9382-8c5dbd54d126  |
| Area=3411 | Joint1=3592 | Joint2=3637 | Joint3=3638 | Joint4=3593 | GUID=245c0211-5677-4b45-bc8e-7df81fc51828  |
| Area=3412 | Joint1=3593 | Joint2=3638 | Joint3=3639 | Joint4=3594 | GUID=533fbe29-c9b3-41d1-9f6d-af1d52d97564  |
| Area=3413 | Joint1=3594 | Joint2=3639 | Joint3=3640 | Joint4=3595 | GUID=6f1d8f21-5c4c-4b50-bc14-0c26168a08a8  |
| Area=3414 | Joint1=3595 | Joint2=3640 | Joint3=3641 | Joint4=3596 | GUID=469d0b41-5309-4202-81f6-a93b0340c52a  |
| Area=3415 | Joint1=3596 | Joint2=3641 | Joint3=3642 | Joint4=3597 | GUID=4282642f-e1a6-4f20-ac61-79a924844e7c  |
| Area=3416 | Joint1=3597 | Joint2=3642 | Joint3=3643 | Joint4=3598 | GUID=9b11c614-3ec6-4f78-bb7a-6f6be4a083ff4 |
| Area=3417 | Joint1=3598 | Joint2=3643 | Joint3=3644 | Joint4=3599 | GUID=243b1673-b807-48fa-bd58-0c7f107ffd1f  |
| Area=3418 | Joint1=3599 | Joint2=3644 | Joint3=3645 | Joint4=3600 | GUID=daf6fd9-b1fc-4983-8433-ac74f4912e97   |
| Area=3419 | Joint1=3600 | Joint2=3645 | Joint3=3646 | Joint4=3601 | GUID=0427b49b-7026-49d9-b78c-631d6e397a09  |
| Area=3420 | Joint1=3601 | Joint2=3646 | Joint3=3647 | Joint4=3602 | GUID=c628fc8c-f531-410d-a182-05b65d4f786b  |
| Area=3421 | Joint1=3602 | Joint2=3647 | Joint3=3648 | Joint4=3603 | GUID=da27386f-25d5-4992-8663-a0e728bec220  |
| Area=3422 | Joint1=3603 | Joint2=3648 | Joint3=3649 | Joint4=3604 | GUID=09fd4fdc-fd85-43ac-846b-b3ca867f5404  |
| Area=3423 | Joint1=3604 | Joint2=3649 | Joint3=3650 | Joint4=3605 | GUID=04ec3208-6ad3-4301-b7b8-7e0914ce72eb  |
| Area=3424 | Joint1=3605 | Joint2=3650 | Joint3=3651 | Joint4=3606 | GUID=de687548-35e2-4036-be93-8345ff41b6e1  |
| Area=3425 | Joint1=3606 | Joint2=3651 | Joint3=3652 | Joint4=3607 | GUID=b770cf15-dc57-4069-a307-f9358fcd3536  |
| Area=3426 | Joint1=3607 | Joint2=3652 | Joint3=3653 | Joint4=3608 | GUID=447e8d4c-ce24-47be-a8a5-0c9f96a1929c  |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=3427<br>b99771e3d1d0 | Joint1=3608 | Joint2=3653 | Joint3=3654 | Joint4=3609 | GUID=e0b98349-1f18-46ae-a5e5-             |
| Area=3428<br>d01b98b9822a | Joint1=3609 | Joint2=3654 | Joint3=3655 | Joint4=3610 | GUID=b213e0e4-6269-444c-a654-             |
| Area=3429                 | Joint1=3610 | Joint2=3655 | Joint3=3656 | Joint4=3611 | GUID=1ca6f8fc-52fe-45bb-a0f6-f8fc7fbad1a2 |
| Area=3430<br>f5b793e6444b | Joint1=3611 | Joint2=3656 | Joint3=3657 | Joint4=3612 | GUID=82f5d752-52d6-4d98-b4c6-             |
| Area=3431<br>b8a6c92dcd95 | Joint1=3612 | Joint2=3657 | Joint3=3658 | Joint4=3613 | GUID=3f9dc460-35ea-4871-8aa1-             |
| Area=3432<br>a3e8515abc34 | Joint1=3613 | Joint2=3658 | Joint3=3659 | Joint4=3614 | GUID=f184b454-63af-4e58-9d18-             |
| Area=3433<br>d5651de78f20 | Joint1=3614 | Joint2=3659 | Joint3=3660 | Joint4=3615 | GUID=91345968-b30a-4cc8-b414-             |
| Area=3434<br>ea619d5ac25d | Joint1=3616 | Joint2=3661 | Joint3=3662 | Joint4=3617 | GUID=8f1b9829-54f9-4bb3-be68-             |
| Area=3435<br>88ba4d3498e7 | Joint1=3617 | Joint2=3662 | Joint3=3663 | Joint4=3618 | GUID=b70f1a71-1fd8-4b3d-8347-             |
| Area=3436                 | Joint1=3618 | Joint2=3663 | Joint3=3664 | Joint4=3619 | GUID=fd127c76-3a81-4739-9b72-3f51f3bba0fc |
| Area=3437<br>1c05e7c75d27 | Joint1=3619 | Joint2=3664 | Joint3=3665 | Joint4=3620 | GUID=2b0ce1c9-940e-4140-8e67-             |
| Area=3438                 | Joint1=3620 | Joint2=3665 | Joint3=3666 | Joint4=3621 | GUID=f9889742-aa66-439a-a0c7-fab0f13b9e44 |
| Area=3439<br>58e79e166494 | Joint1=3621 | Joint2=3666 | Joint3=3667 | Joint4=3622 | GUID=f2568bf5-45cc-45ad-bdcb-             |
| Area=3440<br>440187df5c0b | Joint1=3622 | Joint2=3667 | Joint3=3668 | Joint4=3623 | GUID=93ed810a-05d3-4d7f-8344-             |
| Area=3441                 | Joint1=3623 | Joint2=3668 | Joint3=3669 | Joint4=3624 | GUID=67cf08e4-cfc7-4c7f-84b7-08717af05b25 |
| Area=3442<br>948a45e9d208 | Joint1=3624 | Joint2=3669 | Joint3=3670 | Joint4=3625 | GUID=cd3474b6-0f80-4946-8980-             |
| Area=3443<br>57ba523b9bbd | Joint1=3625 | Joint2=3670 | Joint3=3671 | Joint4=3626 | GUID=c123c134-c7ac-439d-81da-             |
| Area=3444<br>665a94e5a2e5 | Joint1=3626 | Joint2=3671 | Joint3=3672 | Joint4=3627 | GUID=7829f3f5-168d-4ed8-9627-             |
| Area=3445<br>9747b727e9ad | Joint1=3627 | Joint2=3672 | Joint3=3673 | Joint4=3628 | GUID=9f7cf936-b1b6-44a4-90ac-             |
| Area=3446                 | Joint1=3628 | Joint2=3673 | Joint3=3674 | Joint4=3629 | GUID=57fa6eff-f516-4a9f-a7ac-16b814f86438 |
| Area=3447                 | Joint1=3629 | Joint2=3674 | Joint3=3675 | Joint4=3630 | GUID=0676ee0f-2c91-4552-b88f-80e97e6144f2 |
| Area=3448<br>4b7b7db792e2 | Joint1=3630 | Joint2=3675 | Joint3=3676 | Joint4=3631 | GUID=06a6e123-b2d7-4bc4-9a71-             |
| Area=3449<br>2edce0b4287f | Joint1=3631 | Joint2=3676 | Joint3=3677 | Joint4=3632 | GUID=e98cbaac-7ddf-4d34-a92d-             |
| Area=3450                 | Joint1=3632 | Joint2=3677 | Joint3=3678 | Joint4=3633 | GUID=beb95e0b-ff2f-4341-9317-6b5db26bbf1f |
| Area=3451<br>15f1bc08cc0a | Joint1=3633 | Joint2=3678 | Joint3=3679 | Joint4=3634 | GUID=d6817017-594c-4726-8485-             |
| Area=3452<br>0dcf0e1cfd41 | Joint1=3634 | Joint2=3679 | Joint3=3680 | Joint4=3635 | GUID=934359e5-4359-44a6-9516-             |
| Area=3453                 | Joint1=3635 | Joint2=3680 | Joint3=3681 | Joint4=3636 | GUID=6921a717-46ff-4174-93a2-be0f17910ecb |
| Area=3454<br>0ad693a37fb0 | Joint1=3636 | Joint2=3681 | Joint3=3682 | Joint4=3637 | GUID=184462c9-2de4-43c1-bdda-             |
| Area=3455<br>7c73d57b9ddb | Joint1=3637 | Joint2=3682 | Joint3=3683 | Joint4=3638 | GUID=224bfd64-b571-4420-9bed-             |
| Area=3456                 | Joint1=3638 | Joint2=3683 | Joint3=3684 | Joint4=3639 | GUID=3362d748-5ef3-418b-8dcf-837ac5dfb972 |
| Area=3457<br>9da6b48ca1fe | Joint1=3639 | Joint2=3684 | Joint3=3685 | Joint4=3640 | GUID=67c27f17-c5d9-4b0e-b216-             |
| Area=3458<br>1eed8bf81b9f | Joint1=3640 | Joint2=3685 | Joint3=3686 | Joint4=3641 | GUID=6ce24b33-28a3-4ebb-8706-             |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=3459<br>089dbb93f7bd | Joint1=3641 | Joint2=3686 | Joint3=3687 | Joint4=3642 | GUID=31da9662-f3b3-4d7e-bbd8-             |
| Area=3460<br>9bb9faa6e9b7 | Joint1=3642 | Joint2=3687 | Joint3=3688 | Joint4=3643 | GUID=15e8e51c-943c-48b6-a93f-             |
| Area=3461<br>dcc3b29e9865 | Joint1=3643 | Joint2=3688 | Joint3=3689 | Joint4=3644 | GUID=b63c03d9-3f7c-47c3-ac70-             |
| Area=3462                 | Joint1=3644 | Joint2=3689 | Joint3=3690 | Joint4=3645 | GUID=df99a642-9654-4406-aad9-28ffe9436bd5 |
| Area=3463<br>d2773aa128de | Joint1=3645 | Joint2=3690 | Joint3=3691 | Joint4=3646 | GUID=7dd35964-d7a9-41c4-bf04-             |
| Area=3464<br>7a89bb36f40d | Joint1=3646 | Joint2=3691 | Joint3=3692 | Joint4=3647 | GUID=d84da08a-1a1e-4ada-ba6a-             |
| Area=3465<br>8aa2261415f6 | Joint1=3647 | Joint2=3692 | Joint3=3693 | Joint4=3648 | GUID=81b7bdd8-811f-4bc4-bd61-             |
| Area=3466<br>e31b52955b7d | Joint1=3648 | Joint2=3693 | Joint3=3694 | Joint4=3649 | GUID=c9d65be4-210c-482a-b174-             |
| Area=3467                 | Joint1=3649 | Joint2=3694 | Joint3=3695 | Joint4=3650 | GUID=50c0fb36-11ea-4ff9-8b5c-d66a08f04342 |
| Area=3468                 | Joint1=3650 | Joint2=3695 | Joint3=3696 | Joint4=3651 | GUID=cbddcf10-1433-481f-bb7f-fe4a69b8a1c8 |
| Area=3469<br>058a1176378d | Joint1=3651 | Joint2=3696 | Joint3=3697 | Joint4=3652 | GUID=164e54fc-d791-459a-84d9-             |
| Area=3470<br>d61b7ddd1c83 | Joint1=3652 | Joint2=3697 | Joint3=3698 | Joint4=3653 | GUID=966c5611-4931-473b-89ed-             |
| Area=3471                 | Joint1=3653 | Joint2=3698 | Joint3=3699 | Joint4=3654 | GUID=542bc2ff-56cb-4911-90e1-f81d0d5dfccd |
| Area=3472<br>10aeea7efd72 | Joint1=3654 | Joint2=3699 | Joint3=3700 | Joint4=3655 | GUID=91716e7b-4ec1-4d34-b324-             |
| Area=3473<br>7a5dfae51d4d | Joint1=3655 | Joint2=3700 | Joint3=3701 | Joint4=3656 | GUID=e2117e68-e877-4ee9-a4f6-             |
| Area=3474<br>982ea4ac4266 | Joint1=3656 | Joint2=3701 | Joint3=3702 | Joint4=3657 | GUID=a429fa73-60c3-42e0-8a79-             |
| Area=3475<br>9302935c2806 | Joint1=3657 | Joint2=3702 | Joint3=3703 | Joint4=3658 | GUID=beb13549-7fa3-4677-887e-             |
| Area=3476<br>0ca7835a074b | Joint1=3658 | Joint2=3703 | Joint3=3704 | Joint4=3659 | GUID=d81b2505-b46b-44ae-a8a7-             |
| Area=3477<br>ac729c713349 | Joint1=3659 | Joint2=3704 | Joint3=3705 | Joint4=3660 | GUID=42b7c8d7-0229-4bdc-94ae-             |
| Area=3478<br>13a976b7b628 | Joint1=3661 | Joint2=3706 | Joint3=3707 | Joint4=3662 | GUID=1b005a24-e9c2-48c4-8860-             |
| Area=3479<br>2d6b3aa791f8 | Joint1=3662 | Joint2=3707 | Joint3=3708 | Joint4=3663 | GUID=13c56c48-7df3-4348-843d-             |
| Area=3480<br>613d35c6e39c | Joint1=3663 | Joint2=3708 | Joint3=3709 | Joint4=3664 | GUID=53ac15a4-72c3-4868-b22e-             |
| Area=3481<br>626d991c6deb | Joint1=3664 | Joint2=3709 | Joint3=3710 | Joint4=3665 | GUID=33d4bb0b-7a3b-4e82-a553-             |
| Area=3482<br>e10837d1cd34 | Joint1=3665 | Joint2=3710 | Joint3=3711 | Joint4=3666 | GUID=f1931ded-374a-492c-9a95-             |
| Area=3483<br>5da5343559e8 | Joint1=3666 | Joint2=3711 | Joint3=3712 | Joint4=3667 | GUID=147eae17-9cae-4ff9-90e6-             |
| Area=3484<br>38d2883e3622 | Joint1=3667 | Joint2=3712 | Joint3=3713 | Joint4=3668 | GUID=6328e678-cc28-43f6-b512-             |
| Area=3485<br>2fa33393122d | Joint1=3668 | Joint2=3713 | Joint3=3714 | Joint4=3669 | GUID=e5743c08-d4f1-4be3-9477-             |
| Area=3486<br>8f94926a66e5 | Joint1=3669 | Joint2=3714 | Joint3=3715 | Joint4=3670 | GUID=908b48c2-813f-442a-9d78-             |
| Area=3487                 | Joint1=3670 | Joint2=3715 | Joint3=3716 | Joint4=3671 | GUID=2c7f8707-63a4-442a-8e72-e2f57fd8fdaa |
| Area=3488<br>bec418af9458 | Joint1=3671 | Joint2=3716 | Joint3=3717 | Joint4=3672 | GUID=b2c2bde7-c1b2-4783-b64e-             |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=3489 Joint1=3672 Joint2=3717 Joint3=3718 Joint4=3673 GUID=8565cc27-4f35-4b8d-9973-b437fc301c61  
Area=3490 Joint1=3673 Joint2=3718 Joint3=3719 Joint4=3674 GUID=560a6354-28b7-4175-a356-dbd94478a2c  
Area=3491 Joint1=3674 Joint2=3719 Joint3=3720 Joint4=3675 GUID=46d2ee5f-bd67-4bdd-8520-d8cfa0a0f069  
Area=3492 Joint1=3675 Joint2=3720 Joint3=3721 Joint4=3676 GUID=ac3a6ec6-84f6-4cf7-96ec-d510e1299ed9  
Area=3493 Joint1=3676 Joint2=3721 Joint3=3722 Joint4=3677 GUID=b5a02f33-88d0-4344-aa50-5131d0892a25  
Area=3494 Joint1=3677 Joint2=3722 Joint3=3723 Joint4=3678 GUID=d4596ea0-be73-4fcb-aa7a-4b1a4f3f47d3  
Area=3495 Joint1=3678 Joint2=3723 Joint3=3724 Joint4=3679 GUID=e91690fd-157b-4015-b468-2009bd4f078c  
Area=3496 Joint1=3679 Joint2=3724 Joint3=3725 Joint4=3680 GUID=ec20bc65-b207-4bc3-ae32-b05b8b9b208c  
Area=3497 Joint1=3680 Joint2=3725 Joint3=3726 Joint4=3681 GUID=08637ef4-9e94-4741-b656-96760a219cd1  
Area=3498 Joint1=3681 Joint2=3726 Joint3=3727 Joint4=3682 GUID=9521b490-b5a8-4b08-874a-b56fca794a72  
Area=3499 Joint1=3682 Joint2=3727 Joint3=3728 Joint4=3683 GUID=f7feedcd-3e24-45a9-993c-00f29978aad5  
Area=3500 Joint1=3683 Joint2=3728 Joint3=3729 Joint4=3684 GUID=11de0ce4-4fdd-4901-afc5-f558014d85f8  
Area=3501 Joint1=3684 Joint2=3729 Joint3=3730 Joint4=3685 GUID=b27d6f04-33e9-4864-a54e-2f5d1114682e  
Area=3502 Joint1=3685 Joint2=3730 Joint3=3731 Joint4=3686 GUID=f77b71d6-d399-4397-be44-77e5891cf3fa  
Area=3503 Joint1=3686 Joint2=3731 Joint3=3732 Joint4=3687 GUID=9b89eefb-d391-4968-9cf1-92da837aa82a  
Area=3504 Joint1=3687 Joint2=3732 Joint3=3733 Joint4=3688 GUID=4827e269-d2fc-4857-8e66-dff83e95e901  
Area=3505 Joint1=3688 Joint2=3733 Joint3=3734 Joint4=3689 GUID=47a11ed6-03ec-43cc-861b-fe47efa39089  
Area=3506 Joint1=3689 Joint2=3734 Joint3=3735 Joint4=3690 GUID=44ffd9f5-285b-444e-9f69-787281714f6e  
Area=3507 Joint1=3690 Joint2=3735 Joint3=3736 Joint4=3691 GUID=2e1dfc2c-f353-411a-bcc2-0c894388b8a2  
Area=3508 Joint1=3691 Joint2=3736 Joint3=3737 Joint4=3692 GUID=f65333e0-0149-41d8-994c-75e1fa126164  
Area=3509 Joint1=3692 Joint2=3737 Joint3=3738 Joint4=3693 GUID=52c78a68-6274-4347-8c52-75db9f30b1ca  
Area=3510 Joint1=3693 Joint2=3738 Joint3=3739 Joint4=3694 GUID=3b51819b-4f3e-4e6b-8747-8183d5f2dbc8  
Area=3511 Joint1=3694 Joint2=3739 Joint3=3740 Joint4=3695 GUID=bbb2df71-320d-414b-b878-5750f7973e7a  
Area=3512 Joint1=3695 Joint2=3740 Joint3=3741 Joint4=3696 GUID=767be67b-14e7-487c-970a-41dd44687154  
Area=3513 Joint1=3696 Joint2=3741 Joint3=3742 Joint4=3697 GUID=86595a3f-dd38-42a8-af2f-344172fbd2d2  
Area=3514 Joint1=3697 Joint2=3742 Joint3=3743 Joint4=3698 GUID=5f372ada-0920-4d59-8759-99181652995d  
Area=3515 Joint1=3698 Joint2=3743 Joint3=3744 Joint4=3699 GUID=2d0c286e-55b3-4bb2-ac07-009977f10186  
Area=3516 Joint1=3699 Joint2=3744 Joint3=3745 Joint4=3700 GUID=96ceec60-30cf-40e8-a1e0-a55220f530c8  
Area=3517 Joint1=3700 Joint2=3745 Joint3=3746 Joint4=3701 GUID=67fe05aa-1619-4016-aac3-33936941e133  
Area=3518 Joint1=3701 Joint2=3746 Joint3=3747 Joint4=3702 GUID=dbd4692d-8f48-4107-8ffe-9e4e4f0481c3  
Area=3519 Joint1=3702 Joint2=3747 Joint3=3748 Joint4=3703 GUID=57564ddd-1846-4d5e-b060-42e29a68b902  
Area=3520 Joint1=3703 Joint2=3748 Joint3=3749 Joint4=3704 GUID=5b2236b2-98cc-4269-8450-bee4766bf881  
Area=3521 Joint1=3704 Joint2=3749 Joint3=3750 Joint4=3705 GUID=89c8a68e-a691-4dfd-af5a-5f288268c4b6  
Area=3522 Joint1=3706 Joint2=3751 Joint3=3752 Joint4=3707 GUID=306132ca-eb63-4391-8eb4-593033ae3c62

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=3523 | Joint1=3707 | Joint2=3752 | Joint3=3753 | Joint4=3708 | GUID=a470bf4c-9c7b-4a59-8a30-e21ea775e69a |
| Area=3524 | Joint1=3708 | Joint2=3753 | Joint3=3754 | Joint4=3709 | GUID=97df5f2e-08ce-4bbb-83fd-8b9220babcdh |
| Area=3525 | Joint1=3709 | Joint2=3754 | Joint3=3755 | Joint4=3710 | GUID=a23f8c5f-fbd5-46b4-8502-9a1497328011 |
| Area=3526 | Joint1=3710 | Joint2=3755 | Joint3=3756 | Joint4=3711 | GUID=0f82dec8-02d6-42d5-818d-5f77c312ead4 |
| Area=3527 | Joint1=3711 | Joint2=3756 | Joint3=3757 | Joint4=3712 | GUID=65656c81-5d71-407c-aa0c-cb5d8e032271 |
| Area=3528 | Joint1=3712 | Joint2=3757 | Joint3=3758 | Joint4=3713 | GUID=352e970e-3c08-483a-8144-8fbc8df5f908 |
| Area=3529 | Joint1=3713 | Joint2=3758 | Joint3=3759 | Joint4=3714 | GUID=20d3facb-7c58-44ec-85bc-15828a073bfd |
| Area=3530 | Joint1=3714 | Joint2=3759 | Joint3=3760 | Joint4=3715 | GUID=f19ad7da-8f42-4272-914a-9312d53f52b5 |
| Area=3531 | Joint1=3715 | Joint2=3760 | Joint3=3761 | Joint4=3716 | GUID=053cb3c0-22d0-4ff1-a383-03afd0db0a4e |
| Area=3532 | Joint1=3716 | Joint2=3761 | Joint3=3762 | Joint4=3717 | GUID=75e1008f-22ba-4f18-bb14-6b2625245e87 |
| Area=3533 | Joint1=3717 | Joint2=3762 | Joint3=3763 | Joint4=3718 | GUID=f3c8be5c-a339-4e82-a9f1-00882f899364 |
| Area=3534 | Joint1=3718 | Joint2=3763 | Joint3=3764 | Joint4=3719 | GUID=6c418d29-2023-40c6-ac55-7b7df0252a23 |
| Area=3535 | Joint1=3719 | Joint2=3764 | Joint3=3765 | Joint4=3720 | GUID=517f2c17-a810-4440-a2a1-22398e1ba6b5 |
| Area=3536 | Joint1=3720 | Joint2=3765 | Joint3=3766 | Joint4=3721 | GUID=1b95d6ec-a0ae-4523-a6f9-73e58821a984 |
| Area=3537 | Joint1=3721 | Joint2=3766 | Joint3=3767 | Joint4=3722 | GUID=4d47c7e1-3db0-4399-8fe3-486d1ca18ff4 |
| Area=3538 | Joint1=3722 | Joint2=3767 | Joint3=3768 | Joint4=3723 | GUID=1261185e-80cb-4427-b626-953ece5fde76 |
| Area=3539 | Joint1=3723 | Joint2=3768 | Joint3=3769 | Joint4=3724 | GUID=e629b235-047c-4dfa-a0c4-21b637299f72 |
| Area=3540 | Joint1=3724 | Joint2=3769 | Joint3=3770 | Joint4=3725 | GUID=6c7ab405-4321-404a-a939-540134f5e280 |
| Area=3541 | Joint1=3725 | Joint2=3770 | Joint3=3771 | Joint4=3726 | GUID=2f20d435-826b-4276-a349-8038eb755d55 |
| Area=3542 | Joint1=3726 | Joint2=3771 | Joint3=3772 | Joint4=3727 | GUID=9c2285fd-cd5b-4b0d-8705-ed644ac4a19  |
| Area=3543 | Joint1=3727 | Joint2=3772 | Joint3=3773 | Joint4=3728 | GUID=881fc616-adde-4aec-98e4-7ff08ca3bad7 |
| Area=3544 | Joint1=3728 | Joint2=3773 | Joint3=3774 | Joint4=3729 | GUID=6f49f70e-097f-4e14-9716-65fdeb5fec21 |
| Area=3545 | Joint1=3729 | Joint2=3774 | Joint3=3775 | Joint4=3730 | GUID=67e83cdd-f160-4be9-ac0a-9e864f5d52f4 |
| Area=3546 | Joint1=3730 | Joint2=3775 | Joint3=3776 | Joint4=3731 | GUID=5ac7cfea-3282-485e-8b96-ef76ed105239 |
| Area=3547 | Joint1=3731 | Joint2=3776 | Joint3=3777 | Joint4=3732 | GUID=064d9ab3-295c-4d66-9688-6c50ce6d16a1 |
| Area=3548 | Joint1=3732 | Joint2=3777 | Joint3=3778 | Joint4=3733 | GUID=0730436b-e756-4e2b-ad25-922bb67b9bd6 |
| Area=3549 | Joint1=3733 | Joint2=3778 | Joint3=3779 | Joint4=3734 | GUID=1ab73c07-9b94-4f08-9831-9196f13d448d |
| Area=3550 | Joint1=3734 | Joint2=3779 | Joint3=3780 | Joint4=3735 | GUID=4999afbc-84fd-40bf-bfe6-0bed81a0aa76 |
| Area=3551 | Joint1=3735 | Joint2=3780 | Joint3=3781 | Joint4=3736 | GUID=6cb86071-1c6f-47a3-9e6c-ad0ca7d3e378 |
| Area=3552 | Joint1=3736 | Joint2=3781 | Joint3=3782 | Joint4=3737 | GUID=e3e76ee1-2bae-475b-9eca-275a09b0fde2 |
| Area=3553 | Joint1=3737 | Joint2=3782 | Joint3=3783 | Joint4=3738 | GUID=f20bca26-10ea-452e-9bdc-9bb8dc04742a |
| Area=3554 | Joint1=3738 | Joint2=3783 | Joint3=3784 | Joint4=3739 | GUID=0cdfb108-51fd-471d-a570-a8c829d624bc |
| Area=3555 | Joint1=3739 | Joint2=3784 | Joint3=3785 | Joint4=3740 | GUID=6f0d3d7c-1295-45c3-82c3-1451e028adec |
| Area=3556 | Joint1=3740 | Joint2=3785 | Joint3=3786 | Joint4=3741 | GUID=99f6aaaf-5429-48bb-8f18-cc476698b5ae |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=3557<br>76d9a22282cf | Joint1=3741 | Joint2=3786 | Joint3=3787 | Joint4=3742 | GUID=c8da9e74-dc0c-4c82-a398-             |
| Area=3558                 | Joint1=3742 | Joint2=3787 | Joint3=3788 | Joint4=3743 | GUID=b46b9df4-6eb9-43ff-9d17-be1c68c195ea |
| Area=3559<br>683dd68d53c8 | Joint1=3743 | Joint2=3788 | Joint3=3789 | Joint4=3744 | GUID=d1bb09fa-e581-401a-8fb3-             |
| Area=3560<br>0ca05fee3c01 | Joint1=3744 | Joint2=3789 | Joint3=3790 | Joint4=3745 | GUID=1b281503-50bd-47c8-aed2-             |
| Area=3561<br>eb693ffae8a0 | Joint1=3745 | Joint2=3790 | Joint3=3791 | Joint4=3746 | GUID=68e4d096-c6c1-4d36-aa17-             |
| Area=3562<br>342b29c4a363 | Joint1=3746 | Joint2=3791 | Joint3=3792 | Joint4=3747 | GUID=3fe3b936-5b53-43e5-82ec-             |
| Area=3563<br>654ca5207065 | Joint1=3747 | Joint2=3792 | Joint3=3793 | Joint4=3748 | GUID=12332efa-13f9-4035-a38d-             |
| Area=3564<br>7a20309f41b5 | Joint1=3748 | Joint2=3793 | Joint3=3794 | Joint4=3749 | GUID=bd4959ad-5090-40dc-af52-             |
| Area=3565                 | Joint1=3749 | Joint2=3794 | Joint3=3795 | Joint4=3750 | GUID=21e815e6-d1d9-48bd-86f7-f61f98ba0911 |
| Area=3566<br>97d7e99c803d | Joint1=3751 | Joint2=3796 | Joint3=3797 | Joint4=3752 | GUID=6f1167b7-711c-49ab-bd9b-             |
| Area=3567<br>c64750a5e797 | Joint1=3752 | Joint2=3797 | Joint3=3798 | Joint4=3753 | GUID=2c798e0f-fddc-43a4-939e-             |
| Area=3568<br>cb7248d2d149 | Joint1=3753 | Joint2=3798 | Joint3=3799 | Joint4=3754 | GUID=52475c19-6616-4560-bae5-             |
| Area=3569                 | Joint1=3754 | Joint2=3799 | Joint3=3800 | Joint4=3755 | GUID=5db305d4-4812-4550-8f2c-3b808f68f556 |
| Area=3570<br>72a19c347586 | Joint1=3755 | Joint2=3800 | Joint3=3801 | Joint4=3756 | GUID=52b38154-9e2e-4c31-a354-             |
| Area=3571                 | Joint1=3756 | Joint2=3801 | Joint3=3802 | Joint4=3757 | GUID=1b861c39-eee0-451f-a7ff-57d1ae91af84 |
| Area=3572<br>c59c73a727f5 | Joint1=3757 | Joint2=3802 | Joint3=3803 | Joint4=3758 | GUID=a0240407-d362-4e25-8b5e-             |
| Area=3573<br>4dc31a7fedac | Joint1=3758 | Joint2=3803 | Joint3=3804 | Joint4=3759 | GUID=5eb86409-837c-480e-9b49-             |
| Area=3574                 | Joint1=3759 | Joint2=3804 | Joint3=3805 | Joint4=3760 | GUID=d851f495-ea0b-463f-90b2-210b9d57a7fb |
| Area=3575<br>cd5c5319cff6 | Joint1=3760 | Joint2=3805 | Joint3=3806 | Joint4=3761 | GUID=291098d7-6d43-4d8d-840d-             |
| Area=3576                 | Joint1=3761 | Joint2=3806 | Joint3=3807 | Joint4=3762 | GUID=bdcdc5dc-acca-476f-82e2-4e75bfb36454 |
| Area=3577<br>d5ac581f04b1 | Joint1=3762 | Joint2=3807 | Joint3=3808 | Joint4=3763 | GUID=642a55d2-36de-4637-8c10-             |
| Area=3578<br>05c0eac23cec | Joint1=3763 | Joint2=3808 | Joint3=3809 | Joint4=3764 | GUID=2840b61a-8373-42ac-84e8-             |
| Area=3579                 | Joint1=3764 | Joint2=3809 | Joint3=3810 | Joint4=3765 | GUID=69307a8d-a1fc-4018-859e-befb17f72f4c |
| Area=3580<br>2317c1dfdc24 | Joint1=3765 | Joint2=3810 | Joint3=3811 | Joint4=3766 | GUID=becc7994-7e29-423c-bba1-             |
| Area=3581                 | Joint1=3766 | Joint2=3811 | Joint3=3812 | Joint4=3767 | GUID=736fc97f-90ea-46c2-ae8c-865f35ce5cc8 |
| Area=3582<br>e71037605b64 | Joint1=3767 | Joint2=3812 | Joint3=3813 | Joint4=3768 | GUID=0bafc98f-c539-4128-b5c2-             |
| Area=3583<br>eab5cb378f2c | Joint1=3768 | Joint2=3813 | Joint3=3814 | Joint4=3769 | GUID=abcbaf5e-1389-485d-8370-             |
| Area=3584                 | Joint1=3769 | Joint2=3814 | Joint3=3815 | Joint4=3770 | GUID=64ea7991-3f0b-4928-901a-d9d81bf7f61b |
| Area=3585<br>2c29b502e4ee | Joint1=3770 | Joint2=3815 | Joint3=3816 | Joint4=3771 | GUID=325155e9-c91d-4dc2-8104-             |
| Area=3586<br>bb1e673976e4 | Joint1=3771 | Joint2=3816 | Joint3=3817 | Joint4=3772 | GUID=30bf4a09-ccf8-4867-8c4a-             |
| Area=3587<br>5da602487af0 | Joint1=3772 | Joint2=3817 | Joint3=3818 | Joint4=3773 | GUID=67b8b07a-6499-4d69-aba6-             |
| Area=3588<br>8167b0f22060 | Joint1=3773 | Joint2=3818 | Joint3=3819 | Joint4=3774 | GUID=e7d980d4-6509-47bd-83ef-             |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                            |
|-----------|-------------|-------------|-------------|-------------|--------------------------------------------|
| Area=3589 | Joint1=3774 | Joint2=3819 | Joint3=3820 | Joint4=3775 | GUID=1932ac05-a955-400f-9b4d-7c107613bc4b  |
| Area=3590 | Joint1=3775 | Joint2=3820 | Joint3=3821 | Joint4=3776 | GUID=178cf736-b3ce-4c99-a4bd-018c5a45235a  |
| Area=3591 | Joint1=3776 | Joint2=3821 | Joint3=3822 | Joint4=3777 | GUID=280feab6-e95e-4269-9010-ec430179a4d6  |
| Area=3592 | Joint1=3777 | Joint2=3822 | Joint3=3823 | Joint4=3778 | GUID=8bc3096f-78c2-4311-ad20-04e4df475c3b  |
| Area=3593 | Joint1=3778 | Joint2=3823 | Joint3=3824 | Joint4=3779 | GUID=290e4368-84e0-45c4-88cd-daa0069f229d  |
| Area=3594 | Joint1=3779 | Joint2=3824 | Joint3=3825 | Joint4=3780 | GUID=d5a5a0a8-3961-42ae-a917-2f17e9f8bebe8 |
| Area=3595 | Joint1=3780 | Joint2=3825 | Joint3=3826 | Joint4=3781 | GUID=ccd471a1-63b0-45fa-9810-2eb58b779e10  |
| Area=3596 | Joint1=3781 | Joint2=3826 | Joint3=3827 | Joint4=3782 | GUID=b0292b4e-454d-4c0f-97bd-6ac215c1d92a  |
| Area=3597 | Joint1=3782 | Joint2=3827 | Joint3=3828 | Joint4=3783 | GUID=37a11db2-8548-402e-8405-0db5f8f2acd4  |
| Area=3598 | Joint1=3783 | Joint2=3828 | Joint3=3829 | Joint4=3784 | GUID=3de60530-f504-406d-85f6-8b2421da6692  |
| Area=3599 | Joint1=3784 | Joint2=3829 | Joint3=3830 | Joint4=3785 | GUID=c57ce808-084c-4a38-b9cf-6c4145a942c2  |
| Area=3600 | Joint1=3785 | Joint2=3830 | Joint3=3831 | Joint4=3786 | GUID=af12b70c-fba0-4afc-869a-8c0f345ca790  |
| Area=3601 | Joint1=3786 | Joint2=3831 | Joint3=3832 | Joint4=3787 | GUID=264b3e23-60a7-4d14-86dd-886c8165e19f  |
| Area=3602 | Joint1=3787 | Joint2=3832 | Joint3=3833 | Joint4=3788 | GUID=0a25fe08-b415-438b-b7af-31be572e04ce  |
| Area=3603 | Joint1=3788 | Joint2=3833 | Joint3=3834 | Joint4=3789 | GUID=66d11d8b-cb6c-4982-8f32-b4ffd161635d  |
| Area=3604 | Joint1=3789 | Joint2=3834 | Joint3=3835 | Joint4=3790 | GUID=70b3c07b-d481-4e5f-93c3-2eb336195b94  |
| Area=3605 | Joint1=3790 | Joint2=3835 | Joint3=3836 | Joint4=3791 | GUID=c1a4ae4d-61a9-4bc8-b281-07f8785a50f0  |
| Area=3606 | Joint1=3791 | Joint2=3836 | Joint3=3837 | Joint4=3792 | GUID=4ad739cf-d44d-46ce-8233-76578676c274  |
| Area=3607 | Joint1=3792 | Joint2=3837 | Joint3=3838 | Joint4=3793 | GUID=0348ed4b-6a25-4eb9-a07b-0537caedf4fc  |
| Area=3608 | Joint1=3793 | Joint2=3838 | Joint3=3839 | Joint4=3794 | GUID=b75f7905-a05e-4fa2-8272-417961ac581e  |
| Area=3609 | Joint1=3794 | Joint2=3839 | Joint3=3840 | Joint4=3795 | GUID=9560afcd-48f9-46cb-b0b2-2f52730cc081  |
| Area=3610 | Joint1=3796 | Joint2=3841 | Joint3=3842 | Joint4=3797 | GUID=631a8d92-4e76-4c96-bea0-6db2309ed719  |
| Area=3611 | Joint1=3797 | Joint2=3842 | Joint3=3843 | Joint4=3798 | GUID=4bb4f7a7-f02c-4f7e-bb38-e796f084d903  |
| Area=3612 | Joint1=3798 | Joint2=3843 | Joint3=3844 | Joint4=3799 | GUID=99d6905f-2965-42f7-84cd-59e5ac419b77  |
| Area=3613 | Joint1=3799 | Joint2=3844 | Joint3=3845 | Joint4=3800 | GUID=b8c4dca9-9f03-42a6-843e-d25058bbee6b  |
| Area=3614 | Joint1=3800 | Joint2=3845 | Joint3=3846 | Joint4=3801 | GUID=18423f2f-089f-48cf-9090-e55970e93147  |
| Area=3615 | Joint1=3801 | Joint2=3846 | Joint3=3847 | Joint4=3802 | GUID=d137b2b1-08b2-4924-9dde-3f3886a34c20  |
| Area=3616 | Joint1=3802 | Joint2=3847 | Joint3=3848 | Joint4=3803 | GUID=9816e90b-62e2-4910-b4f7-e31aab8f7a3c  |
| Area=3617 | Joint1=3803 | Joint2=3848 | Joint3=3849 | Joint4=3804 | GUID=e1369f8e-5955-42bd-9897-1605686a9801  |
| Area=3618 | Joint1=3804 | Joint2=3849 | Joint3=3850 | Joint4=3805 | GUID=aedf1220-0db1-48ff-b664-c8e3465a6ea5  |
| Area=3619 | Joint1=3805 | Joint2=3850 | Joint3=3851 | Joint4=3806 | GUID=b8decdfc-becc-4d3e-89fc-5d69a2ede65c  |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                            |
|---------------------------|-------------|-------------|-------------|-------------|--------------------------------------------|
| Area=3620<br>25ced43772e2 | Joint1=3806 | Joint2=3851 | Joint3=3852 | Joint4=3807 | GUID=97e4a2ef-9162-45c6-b193-              |
| Area=3621<br>e3e1544e8544 | Joint1=3807 | Joint2=3852 | Joint3=3853 | Joint4=3808 | GUID=ad4167a1-feca-43ad-91ca-              |
| Area=3622<br>4c1354f8c7d6 | Joint1=3808 | Joint2=3853 | Joint3=3854 | Joint4=3809 | GUID=052cc961-732e-4c98-883c-              |
| Area=3623                 | Joint1=3809 | Joint2=3854 | Joint3=3855 | Joint4=3810 | GUID=f6c9877d-d99a-4c3d-afdd-3ed859fc5d3f  |
| Area=3624<br>642a6a9e6f1c | Joint1=3810 | Joint2=3855 | Joint3=3856 | Joint4=3811 | GUID=c4b9c5c1-5d9d-4d21-8629-              |
| Area=3625<br>da28b0e2b04e | Joint1=3811 | Joint2=3856 | Joint3=3857 | Joint4=3812 | GUID=1b21a189-9113-4791-813f-              |
| Area=3626<br>46e70a5da546 | Joint1=3812 | Joint2=3857 | Joint3=3858 | Joint4=3813 | GUID=9f7be526-2a53-4b33-9ecd-              |
| Area=3627<br>5bea61111474 | Joint1=3813 | Joint2=3858 | Joint3=3859 | Joint4=3814 | GUID=e2e17de7-8781-4899-b0c7-              |
| Area=3628<br>be67ab8af9fb | Joint1=3814 | Joint2=3859 | Joint3=3860 | Joint4=3815 | GUID=dd022e9d-9433-4a80-8ca4-              |
| Area=3629<br>7f69645a64af | Joint1=3815 | Joint2=3860 | Joint3=3861 | Joint4=3816 | GUID=40ca3ed4-445d-425a-8ade-              |
| Area=3630<br>802e258161f6 | Joint1=3816 | Joint2=3861 | Joint3=3862 | Joint4=3817 | GUID=bdf1094a-a9b8-4010-8478-              |
| Area=3631<br>63b13f24d0c4 | Joint1=3817 | Joint2=3862 | Joint3=3863 | Joint4=3818 | GUID=7aca6847-0e1e-43c0-b581-              |
| Area=3632                 | Joint1=3818 | Joint2=3863 | Joint3=3864 | Joint4=3819 | GUID=37a95f0f-0894-485e-9f79-a2a761938c5a  |
| Area=3633<br>84969d5644a3 | Joint1=3819 | Joint2=3864 | Joint3=3865 | Joint4=3820 | GUID=490fa73c-d6f0-4de0-908b-              |
| Area=3634<br>6d608a424be9 | Joint1=3820 | Joint2=3865 | Joint3=3866 | Joint4=3821 | GUID=a6cfaecf-0a49-4960-8e13-              |
| Area=3635<br>89171e3d88fc | Joint1=3821 | Joint2=3866 | Joint3=3867 | Joint4=3822 | GUID=8267f816-16ac-4929-8ee1-              |
| Area=3636                 | Joint1=3822 | Joint2=3867 | Joint3=3868 | Joint4=3823 | GUID=1ec67fd9-27ee-45fb-a411-3d56f7934320  |
| Area=3637<br>c8e6114a7fe2 | Joint1=3823 | Joint2=3868 | Joint3=3869 | Joint4=3824 | GUID=98d46ec9-69bc-4032-a2f3-              |
| Area=3638<br>c2ddfd6e06f  | Joint1=3824 | Joint2=3869 | Joint3=3870 | Joint4=3825 | GUID=c01ab36b-43b4-48bb-9d52-              |
| Area=3639                 | Joint1=3825 | Joint2=3870 | Joint3=3871 | Joint4=3826 | GUID=7b74bbcb-a590-4c91-bb09-bdfcf3f3f830  |
| Area=3640                 | Joint1=3826 | Joint2=3871 | Joint3=3872 | Joint4=3827 | GUID=7f7ca87f-1a98-4430-a1cb-22f421f7d334  |
| Area=3641                 | Joint1=3827 | Joint2=3872 | Joint3=3873 | Joint4=3828 | GUID=194f4289-13f7-4668-81bb-5ef12c4fc459  |
| Area=3642<br>1d7efc43ea19 | Joint1=3828 | Joint2=3873 | Joint3=3874 | Joint4=3829 | GUID=468747a7-6ddc-4759-bd9c-              |
| Area=3643<br>979dbd8b4cc3 | Joint1=3829 | Joint2=3874 | Joint3=3875 | Joint4=3830 | GUID=60a80636-3d3c-43f4-af2a-              |
| Area=3644<br>53120e3136ae | Joint1=3830 | Joint2=3875 | Joint3=3876 | Joint4=3831 | GUID=e0101165-54d9-494d-9e1c-              |
| Area=3645<br>694f59e60130 | Joint1=3831 | Joint2=3876 | Joint3=3877 | Joint4=3832 | GUID=05d06eba-c75b-408a-8d21-              |
| Area=3646<br>a48ab7905c9e | Joint1=3832 | Joint2=3877 | Joint3=3878 | Joint4=3833 | GUID=b3c7ab9c-84ac-42b2-8504-              |
| Area=3647<br>f903490c6e4c | Joint1=3833 | Joint2=3878 | Joint3=3879 | Joint4=3834 | GUID=dcaceb4c-ca4c-4eb3-b440-              |
| Area=3648                 | Joint1=3834 | Joint2=3879 | Joint3=3880 | Joint4=3835 | GUID=db49029d-7acb-4f64-9c84-a460ddeff6d61 |
| Area=3649                 | Joint1=3835 | Joint2=3880 | Joint3=3881 | Joint4=3836 | GUID=327d0f4a-5454-498b-a2b7-bc51f4c14f57  |
| Area=3650<br>d954ba40d0d5 | Joint1=3836 | Joint2=3881 | Joint3=3882 | Joint4=3837 | GUID=0d68c068-8159-4cf3-92ec-              |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                            |
|-----------|-------------|-------------|-------------|-------------|--------------------------------------------|
| Area=3651 | Joint1=3837 | Joint2=3882 | Joint3=3883 | Joint4=3838 | GUID=44ed18dc-db7a-4fe0-a629-6a07e6954332  |
| Area=3652 | Joint1=3838 | Joint2=3883 | Joint3=3884 | Joint4=3839 | GUID=c2b079b9-acb7-4938-9fbf-20e081f14bae  |
| Area=3653 | Joint1=3839 | Joint2=3884 | Joint3=3885 | Joint4=3840 | GUID=ae9437a3-89f4-4444-ba27-ee8ec1f7ab3f  |
| Area=3654 | Joint1=3841 | Joint2=3886 | Joint3=3887 | Joint4=3842 | GUID=624d27a6-2364-44f4-9c09-e8cda7a34a70  |
| Area=3655 | Joint1=3842 | Joint2=3887 | Joint3=3888 | Joint4=3843 | GUID=e4066040-fd90-4df3-97e7-bbbcbcb54fa30 |
| Area=3656 | Joint1=3843 | Joint2=3888 | Joint3=3889 | Joint4=3844 | GUID=82a8b4aa-2834-4b29-8f05-cba63ef2171c  |
| Area=3657 | Joint1=3844 | Joint2=3889 | Joint3=3890 | Joint4=3845 | GUID=d8e6d4c2-18b0-4ba5-b38d-51a0fdc5e0d6  |
| Area=3658 | Joint1=3845 | Joint2=3890 | Joint3=3891 | Joint4=3846 | GUID=d2567d42-5d92-4079-94ae-671438634e32  |
| Area=3659 | Joint1=3846 | Joint2=3891 | Joint3=3892 | Joint4=3847 | GUID=bd61a6cc-6b0e-4e19-9d98-ea9f7aa97e1b  |
| Area=3660 | Joint1=3847 | Joint2=3892 | Joint3=3893 | Joint4=3848 | GUID=098d69bf-4595-4836-897a-838c879a934f  |
| Area=3661 | Joint1=3848 | Joint2=3893 | Joint3=3894 | Joint4=3849 | GUID=df84f649-631b-4995-9c8f-ac62bb85a334  |
| Area=3662 | Joint1=3849 | Joint2=3894 | Joint3=3895 | Joint4=3850 | GUID=36f3783f-9003-447c-95da-ced66ed3b7a3  |
| Area=3663 | Joint1=3850 | Joint2=3895 | Joint3=3896 | Joint4=3851 | GUID=28f28475-5276-4827-9af1-30ddecdd96e3  |
| Area=3664 | Joint1=3851 | Joint2=3896 | Joint3=3897 | Joint4=3852 | GUID=b85b3198-4867-4bfc-87da-56e80075a0d0  |
| Area=3665 | Joint1=3852 | Joint2=3897 | Joint3=3898 | Joint4=3853 | GUID=e25b7587-7196-4ea8-bcbe-348d8ffae9a   |
| Area=3666 | Joint1=3853 | Joint2=3898 | Joint3=3899 | Joint4=3854 | GUID=5abac691-7c7d-4b31-a768-7d427b7c4326  |
| Area=3667 | Joint1=3854 | Joint2=3899 | Joint3=3900 | Joint4=3855 | GUID=c010e80a-5407-472a-8e2e-41fa059cfc80  |
| Area=3668 | Joint1=3855 | Joint2=3900 | Joint3=3901 | Joint4=3856 | GUID=c2794439-f55c-4e74-b440-944d31ed1efa  |
| Area=3669 | Joint1=3856 | Joint2=3901 | Joint3=3902 | Joint4=3857 | GUID=f9aeeba9-f2ec-4851-9dfd-2e0e0e8c376c  |
| Area=3670 | Joint1=3857 | Joint2=3902 | Joint3=3903 | Joint4=3858 | GUID=e1d0da86-c3bf-4f96-a3be-021358e207ed  |
| Area=3671 | Joint1=3858 | Joint2=3903 | Joint3=3904 | Joint4=3859 | GUID=107e0ecc-ee38-4b0c-aa54-de4bbb02ea32  |
| Area=3672 | Joint1=3859 | Joint2=3904 | Joint3=3905 | Joint4=3860 | GUID=a0ee25c4-06b1-4147-be37-f687ecf45f3a  |
| Area=3673 | Joint1=3860 | Joint2=3905 | Joint3=3906 | Joint4=3861 | GUID=38098f9f-6d2a-4eee-9e9f-d211a191c424  |
| Area=3674 | Joint1=3861 | Joint2=3906 | Joint3=3907 | Joint4=3862 | GUID=d3f778d6-2f77-4128-9963-0e46b87d47df  |
| Area=3675 | Joint1=3862 | Joint2=3907 | Joint3=3908 | Joint4=3863 | GUID=2cdd7a1c-c23b-430b-bdf4-c0599f51dac3  |
| Area=3676 | Joint1=3863 | Joint2=3908 | Joint3=3909 | Joint4=3864 | GUID=331136e6-bc19-42b0-9594-40c3a18d46e3  |
| Area=3677 | Joint1=3864 | Joint2=3909 | Joint3=3910 | Joint4=3865 | GUID=7e3edd7a-a3db-46a2-baf3-a023d67f2c28  |
| Area=3678 | Joint1=3865 | Joint2=3910 | Joint3=3911 | Joint4=3866 | GUID=748fc273-29cd-499d-8aa0-82bfa0bcdfda  |
| Area=3679 | Joint1=3866 | Joint2=3911 | Joint3=3912 | Joint4=3867 | GUID=0e06c312-f196-4c73-a420-54f8b6680fb7  |
| Area=3680 | Joint1=3867 | Joint2=3912 | Joint3=3913 | Joint4=3868 | GUID=7868b8e6-2b40-4175-81c5-cd877ad95460  |
| Area=3681 | Joint1=3868 | Joint2=3913 | Joint3=3914 | Joint4=3869 | GUID=104d070e-c2d0-43e1-b64f-df008b2bc234  |
| Area=3682 | Joint1=3869 | Joint2=3914 | Joint3=3915 | Joint4=3870 | GUID=f3046dc0-daf5-42ec-ae18-c296d349f692  |
| Area=3683 | Joint1=3870 | Joint2=3915 | Joint3=3916 | Joint4=3871 | GUID=f4e6b5ba-de3c-411e-bd0a-7b8bdecee4de  |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=3684<br>92e7d3ba3578 | Joint1=3871 | Joint2=3916 | Joint3=3917 | Joint4=3872 | GUID=b8aebf01-7d3f-460a-8718-             |
| Area=3685<br>edb3609cb651 | Joint1=3872 | Joint2=3917 | Joint3=3918 | Joint4=3873 | GUID=78c22afe-56a5-4b30-938e-             |
| Area=3686<br>ee82e5884837 | Joint1=3873 | Joint2=3918 | Joint3=3919 | Joint4=3874 | GUID=b37d1f38-262d-41e6-9e7f-             |
| Area=3687<br>a87ae6c8ea7c | Joint1=3874 | Joint2=3919 | Joint3=3920 | Joint4=3875 | GUID=b078a9bf-ccca-484d-a173-             |
| Area=3688                 | Joint1=3875 | Joint2=3920 | Joint3=3921 | Joint4=3876 | GUID=bec26ac6-c11c-4cb4-96e2-a7fe9e66e94f |
| Area=3689<br>a78486c5e4ab | Joint1=3876 | Joint2=3921 | Joint3=3922 | Joint4=3877 | GUID=6c18d3e3-e208-4efe-83cb-             |
| Area=3690<br>fc050b2b04d7 | Joint1=3877 | Joint2=3922 | Joint3=3923 | Joint4=3878 | GUID=31699e8c-8d00-467c-9817-             |
| Area=3691                 | Joint1=3878 | Joint2=3923 | Joint3=3924 | Joint4=3879 | GUID=8f6d2251-4d91-4fb9-a2ed-8f9b43c931b0 |
| Area=3692<br>cc8b0b138de2 | Joint1=3879 | Joint2=3924 | Joint3=3925 | Joint4=3880 | GUID=b0a33438-e559-470f-aa86-             |
| Area=3693<br>010a8206259e | Joint1=3880 | Joint2=3925 | Joint3=3926 | Joint4=3881 | GUID=0671d65a-85a1-4891-94d5-             |
| Area=3694<br>395c0b0ea543 | Joint1=3881 | Joint2=3926 | Joint3=3927 | Joint4=3882 | GUID=c9d3a074-11a9-4072-a1ab-             |
| Area=3695<br>3d4d38ccabd5 | Joint1=3882 | Joint2=3927 | Joint3=3928 | Joint4=3883 | GUID=412975e6-83fd-4dfa-a532-             |
| Area=3696<br>f6386ecd8988 | Joint1=3883 | Joint2=3928 | Joint3=3929 | Joint4=3884 | GUID=f0a0562a-5144-4ea1-aa1d-             |
| Area=3697<br>663b91a803f0 | Joint1=3884 | Joint2=3929 | Joint3=3930 | Joint4=3885 | GUID=6edfc303-6d0a-4e5e-b9d0-             |
| Area=3698<br>9381f119e3a9 | Joint1=3886 | Joint2=3931 | Joint3=3932 | Joint4=3887 | GUID=1e3d9eb9-61c2-4c11-b4d8-             |
| Area=3699<br>c1f95055a860 | Joint1=3887 | Joint2=3932 | Joint3=3933 | Joint4=3888 | GUID=f700b318-0962-40d5-be83-             |
| Area=3700<br>e8b242c44ee1 | Joint1=3888 | Joint2=3933 | Joint3=3934 | Joint4=3889 | GUID=f5e66952-89bf-420b-b0ad-             |
| Area=3701<br>bbbb66e5220c | Joint1=3889 | Joint2=3934 | Joint3=3935 | Joint4=3890 | GUID=7848276e-365d-45bf-9749-             |
| Area=3702                 | Joint1=3890 | Joint2=3935 | Joint3=3936 | Joint4=3891 | GUID=3106b5f0-fade-47f8-80cf-eed180a84bfa |
| Area=3703                 | Joint1=3891 | Joint2=3936 | Joint3=3937 | Joint4=3892 | GUID=714bf5b0-d48a-4ebc-a224-fef522921d5e |
| Area=3704<br>55ea6fafce39 | Joint1=3892 | Joint2=3937 | Joint3=3938 | Joint4=3893 | GUID=d1be2d0c-56b6-4aa3-9081-             |
| Area=3705                 | Joint1=3893 | Joint2=3938 | Joint3=3939 | Joint4=3894 | GUID=fd121554-3f1b-48c5-b32a-af6916edd471 |
| Area=3706                 | Joint1=3894 | Joint2=3939 | Joint3=3940 | Joint4=3895 | GUID=ead5f41e-9f0a-4d12-b2a3-faa7a26926a7 |
| Area=3707<br>f535b63236d0 | Joint1=3895 | Joint2=3940 | Joint3=3941 | Joint4=3896 | GUID=950ed48d-e09e-4e0a-93ac-             |
| Area=3708<br>2c3e75b5e1ea | Joint1=3896 | Joint2=3941 | Joint3=3942 | Joint4=3897 | GUID=d785a81a-5147-4261-8ef1-             |
| Area=3709                 | Joint1=3897 | Joint2=3942 | Joint3=3943 | Joint4=3898 | GUID=d84c3ce3-1c3e-48fe-b175-ef87d27a99ce |
| Area=3710                 | Joint1=3898 | Joint2=3943 | Joint3=3944 | Joint4=3899 | GUID=9b7bb12a-c5b5-40b0-a25f-41ecbffe9549 |
| Area=3711<br>b7e6a9db6274 | Joint1=3899 | Joint2=3944 | Joint3=3945 | Joint4=3900 | GUID=8667fd81-40c4-43ab-9fb3-             |
| Area=3712<br>916491e1bbf5 | Joint1=3900 | Joint2=3945 | Joint3=3946 | Joint4=3901 | GUID=fb831751-c17c-46ee-aa0c-             |
| Area=3713<br>b902c0f6ba19 | Joint1=3901 | Joint2=3946 | Joint3=3947 | Joint4=3902 | GUID=ecec8180-3316-4114-b12d-             |
| Area=3714                 | Joint1=3902 | Joint2=3947 | Joint3=3948 | Joint4=3903 | GUID=b67fc0e2-da4c-430b-a7b2-434183c0ffee |
| Area=3715<br>f96e0969d571 | Joint1=3903 | Joint2=3948 | Joint3=3949 | Joint4=3904 | GUID=6469fd0-607e-4461-b472-              |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=3716<br>2303d2050ce3 | Joint1=3904 | Joint2=3949 | Joint3=3950 | Joint4=3905 | GUID=31e87036-dc4e-4f92-a91f-             |
| Area=3717<br>e7ef527b84ad | Joint1=3905 | Joint2=3950 | Joint3=3951 | Joint4=3906 | GUID=3958df47-92ac-402b-b8ca-             |
| Area=3718<br>243f3722bda1 | Joint1=3906 | Joint2=3951 | Joint3=3952 | Joint4=3907 | GUID=0b536626-6c3a-4b71-82ef-             |
| Area=3719<br>2c7700603117 | Joint1=3907 | Joint2=3952 | Joint3=3953 | Joint4=3908 | GUID=ca6cfdd3-362f-4d58-a903-             |
| Area=3720<br>fcec89054489 | Joint1=3908 | Joint2=3953 | Joint3=3954 | Joint4=3909 | GUID=b897ad52-73cb-4b78-9e09-             |
| Area=3721                 | Joint1=3909 | Joint2=3954 | Joint3=3955 | Joint4=3910 | GUID=ba23c3e1-6f5e-4da9-ab1b-76e8704eff18 |
| Area=3722<br>6138d3a214b1 | Joint1=3910 | Joint2=3955 | Joint3=3956 | Joint4=3911 | GUID=07505b50-bd65-4573-898a-             |
| Area=3723<br>7c3a98a7ba10 | Joint1=3911 | Joint2=3956 | Joint3=3957 | Joint4=3912 | GUID=91b584bf-8cbf-4c53-9246-             |
| Area=3724<br>d07dcbe0948c | Joint1=3912 | Joint2=3957 | Joint3=3958 | Joint4=3913 | GUID=df4560a0-4479-4e6e-a05e-             |
| Area=3725<br>591917434d32 | Joint1=3913 | Joint2=3958 | Joint3=3959 | Joint4=3914 | GUID=144ed82f-1dc0-4e10-910d-             |
| Area=3726<br>e6f4b3a21e0b | Joint1=3914 | Joint2=3959 | Joint3=3960 | Joint4=3915 | GUID=a07da70c-3807-4845-abcc-             |
| Area=3727<br>a3609304cbe0 | Joint1=3915 | Joint2=3960 | Joint3=3961 | Joint4=3916 | GUID=d4465409-7210-45d4-9832-             |
| Area=3728<br>e45fa3677384 | Joint1=3916 | Joint2=3961 | Joint3=3962 | Joint4=3917 | GUID=b759b919-f9a9-4666-9385-             |
| Area=3729<br>eb0e53b9467a | Joint1=3917 | Joint2=3962 | Joint3=3963 | Joint4=3918 | GUID=d2b5a160-a70f-4dcf-ab85-             |
| Area=3730<br>bd1874102911 | Joint1=3918 | Joint2=3963 | Joint3=3964 | Joint4=3919 | GUID=518bbf68-5f44-437a-acc7-             |
| Area=3731<br>933b092d8f3c | Joint1=3919 | Joint2=3964 | Joint3=3965 | Joint4=3920 | GUID=24053c30-89dd-4396-89d1-             |
| Area=3732<br>7519cbf7bec0 | Joint1=3920 | Joint2=3965 | Joint3=3966 | Joint4=3921 | GUID=e34e244f-6478-4015-a414-             |
| Area=3733<br>7718a13b9e54 | Joint1=3921 | Joint2=3966 | Joint3=3967 | Joint4=3922 | GUID=815f0139-d2d1-4d24-a9f0-             |
| Area=3734<br>616558435482 | Joint1=3922 | Joint2=3967 | Joint3=3968 | Joint4=3923 | GUID=c6a3dda3-98c5-48f6-a463-             |
| Area=3735<br>8f1484927d8a | Joint1=3923 | Joint2=3968 | Joint3=3969 | Joint4=3924 | GUID=687d839e-2721-4a9e-9158-             |
| Area=3736<br>cf353daeb98c | Joint1=3924 | Joint2=3969 | Joint3=3970 | Joint4=3925 | GUID=d46e5bc3-6117-4197-8357-             |
| Area=3737<br>4a902898892f | Joint1=3925 | Joint2=3970 | Joint3=3971 | Joint4=3926 | GUID=e4b828f8-1b2e-4263-a541-             |
| Area=3738<br>2a8de1c2ac2d | Joint1=3926 | Joint2=3971 | Joint3=3972 | Joint4=3927 | GUID=04c3f46e-9b8b-4759-a377-             |
| Area=3739<br>7a03c0bb775c | Joint1=3927 | Joint2=3972 | Joint3=3973 | Joint4=3928 | GUID=db1a05df-99bd-465e-bdaf-             |
| Area=3740<br>5d7c960c4e2a | Joint1=3928 | Joint2=3973 | Joint3=3974 | Joint4=3929 | GUID=5e34ec2a-8fde-4ce5-8555-             |
| Area=3741<br>96c181085175 | Joint1=3929 | Joint2=3974 | Joint3=3975 | Joint4=3930 | GUID=ad6aeff3-e88e-48ec-86d5-             |
| Area=3742<br>703f254a7fe5 | Joint1=3931 | Joint2=3976 | Joint3=3977 | Joint4=3932 | GUID=773d56b4-2e2b-4b5b-8c37-             |
| Area=3743<br>5ef8ede30166 | Joint1=3932 | Joint2=3977 | Joint3=3978 | Joint4=3933 | GUID=80f9406d-26a5-4240-8e6a-             |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=3744 | Joint1=3933 | Joint2=3978 | Joint3=3979 | Joint4=3934 | GUID=4c8a6f73-b097-4070-85fb-027ac4d90afe |
| Area=3745 | Joint1=3934 | Joint2=3979 | Joint3=3980 | Joint4=3935 | GUID=f05eaa62-e960-4bc4-8c03-81b25c69418d |
| Area=3746 | Joint1=3935 | Joint2=3980 | Joint3=3981 | Joint4=3936 | GUID=3a47aa25-a8b3-44c0-a2fc-c19764a09503 |
| Area=3747 | Joint1=3936 | Joint2=3981 | Joint3=3982 | Joint4=3937 | GUID=1782efe4-463b-491d-883f-e5e3969cfbf8 |
| Area=3748 | Joint1=3937 | Joint2=3982 | Joint3=3983 | Joint4=3938 | GUID=dc427154-750f-4df2-b59a-411d1b8e3cc5 |
| Area=3749 | Joint1=3938 | Joint2=3983 | Joint3=3984 | Joint4=3939 | GUID=8bcdd743-fbda-44c2-ac02-73d001ece621 |
| Area=3750 | Joint1=3939 | Joint2=3984 | Joint3=3985 | Joint4=3940 | GUID=39291bc3-3e30-4071-ab0d-0bb4c356c31c |
| Area=3751 | Joint1=3940 | Joint2=3985 | Joint3=3986 | Joint4=3941 | GUID=8398b767-b245-414e-93b4-9c31d07c8aa2 |
| Area=3752 | Joint1=3941 | Joint2=3986 | Joint3=3987 | Joint4=3942 | GUID=983c096f-ae3c-4732-9c7b-9a3837b6b600 |
| Area=3753 | Joint1=3942 | Joint2=3987 | Joint3=3988 | Joint4=3943 | GUID=22c24dbb-e820-4aeb-8f6f-13dba3244beb |
| Area=3754 | Joint1=3943 | Joint2=3988 | Joint3=3989 | Joint4=3944 | GUID=2ee3dc25-e8ec-4511-9cb7-e51d8f1fa5c1 |
| Area=3755 | Joint1=3944 | Joint2=3989 | Joint3=3990 | Joint4=3945 | GUID=e74f9b4a-dedb-45f3-be7f-efc040616850 |
| Area=3756 | Joint1=3945 | Joint2=3990 | Joint3=3991 | Joint4=3946 | GUID=f0f99e5c-e123-468d-8e8e-4479159796cc |
| Area=3757 | Joint1=3946 | Joint2=3991 | Joint3=3992 | Joint4=3947 | GUID=bf31a74c-dcda-49c3-843c-83a000941862 |
| Area=3758 | Joint1=3947 | Joint2=3992 | Joint3=3993 | Joint4=3948 | GUID=811eb274-663a-49f4-bd50-7dec061ea42d |
| Area=3759 | Joint1=3948 | Joint2=3993 | Joint3=3994 | Joint4=3949 | GUID=e88ed1f8-d13e-4ee3-9c1e-98c7d03ccd87 |
| Area=3760 | Joint1=3949 | Joint2=3994 | Joint3=3995 | Joint4=3950 | GUID=7856ea90-cbbc-4d78-ba82-a2186baf9984 |
| Area=3761 | Joint1=3950 | Joint2=3995 | Joint3=3996 | Joint4=3951 | GUID=6673b11e-15df-4b89-ac7e-48c4742e385a |
| Area=3762 | Joint1=3951 | Joint2=3996 | Joint3=3997 | Joint4=3952 | GUID=2c9e0e31-39e2-4f44-9607-795fbd6ea568 |
| Area=3763 | Joint1=3952 | Joint2=3997 | Joint3=3998 | Joint4=3953 | GUID=df8d069d-508f-410e-8e80-8a94f1d6938e |
| Area=3764 | Joint1=3953 | Joint2=3998 | Joint3=3999 | Joint4=3954 | GUID=86f13314-12d0-4e7d-bf7a-f0c234c98b45 |
| Area=3765 | Joint1=3954 | Joint2=3999 | Joint3=4000 | Joint4=3955 | GUID=4fc30158-e6f2-48e7-a05d-eabe7d5da080 |
| Area=3766 | Joint1=3955 | Joint2=4000 | Joint3=4001 | Joint4=3956 | GUID=96ec9b52-f29b-47ed-86e1-14ba6d97d05e |
| Area=3767 | Joint1=3956 | Joint2=4001 | Joint3=4002 | Joint4=3957 | GUID=4f772a88-75e2-4536-a3f6-74f0cf4f521a |
| Area=3768 | Joint1=3957 | Joint2=4002 | Joint3=4003 | Joint4=3958 | GUID=3e77a26b-4262-46f0-8359-a0f7be16183f |
| Area=3769 | Joint1=3958 | Joint2=4003 | Joint3=4004 | Joint4=3959 | GUID=3067ba6b-6893-4348-a7be-fad932b24e90 |
| Area=3770 | Joint1=3959 | Joint2=4004 | Joint3=4005 | Joint4=3960 | GUID=414d8e60-8f24-400d-86f1-016bf9a575ff |
| Area=3771 | Joint1=3960 | Joint2=4005 | Joint3=4006 | Joint4=3961 | GUID=8a408228-272b-4771-9df6-c66596ea80ad |
| Area=3772 | Joint1=3961 | Joint2=4006 | Joint3=4007 | Joint4=3962 | GUID=66b45099-731c-4917-8866-d2322373c41f |
| Area=3773 | Joint1=3962 | Joint2=4007 | Joint3=4008 | Joint4=3963 | GUID=02bd4b0a-cbf2-4d9b-b8b1-5524f3e9848a |
| Area=3774 | Joint1=3963 | Joint2=4008 | Joint3=4009 | Joint4=3964 | GUID=0116d538-6037-4043-9f59-6f2808ad0fad |
| Area=3775 | Joint1=3964 | Joint2=4009 | Joint3=4010 | Joint4=3965 | GUID=ecbefe48-3f02-4451-bc31-4bc830f50a1c |
| Area=3776 | Joint1=3965 | Joint2=4010 | Joint3=4011 | Joint4=3966 | GUID=2cb79104-55ad-41a0-a276-1ef98605f6ad |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=3777 | Joint1=3966 | Joint2=4011 | Joint3=4012 | Joint4=3967 | GUID=eca8df3c-c344-4694-ad70-f97e01e3b829 |
| Area=3778 | Joint1=3967 | Joint2=4012 | Joint3=4013 | Joint4=3968 | GUID=672f4ac6-dad2-4ff6-987a-f56ec7faf83f |
| Area=3779 | Joint1=3968 | Joint2=4013 | Joint3=4014 | Joint4=3969 | GUID=fc4dc5ec-3931-4235-ad6d-4f8864900657 |
| Area=3780 | Joint1=3969 | Joint2=4014 | Joint3=4015 | Joint4=3970 | GUID=d811bd59-1f63-42da-b4f0-b0f164ed9862 |
| Area=3781 | Joint1=3970 | Joint2=4015 | Joint3=4016 | Joint4=3971 | GUID=3689681f-b3df-4fd2-a26b-856e8996aa69 |
| Area=3782 | Joint1=3971 | Joint2=4016 | Joint3=4017 | Joint4=3972 | GUID=f62fa87a-f590-4ee4-a6e1-0e3aa9dc6e3d |
| Area=3783 | Joint1=3972 | Joint2=4017 | Joint3=4018 | Joint4=3973 | GUID=8fb5063b-3b7e-4fde-bb83-877caf24a0da |
| Area=3784 | Joint1=3973 | Joint2=4018 | Joint3=4019 | Joint4=3974 | GUID=53627ba2-b748-4517-9693-5b474151ed41 |
| Area=3785 | Joint1=3974 | Joint2=4019 | Joint3=4020 | Joint4=3975 | GUID=9002ccd3-55fa-43cf-b371-2da108d69e38 |
| Area=3786 | Joint1=3976 | Joint2=4021 | Joint3=4022 | Joint4=3977 | GUID=f077d83f-e505-4716-b378-d6357dd20eb8 |
| Area=3787 | Joint1=3977 | Joint2=4022 | Joint3=4023 | Joint4=3978 | GUID=e3511d8d-6995-4ba1-930f-713a4047af57 |
| Area=3788 | Joint1=3978 | Joint2=4023 | Joint3=4024 | Joint4=3979 | GUID=aa86a66e-3f69-4fd1-8b08-5c8b68d1436c |
| Area=3789 | Joint1=3979 | Joint2=4024 | Joint3=4025 | Joint4=3980 | GUID=914025e9-96bf-49d8-8155-0ca18bb65c31 |
| Area=3790 | Joint1=3980 | Joint2=4025 | Joint3=4026 | Joint4=3981 | GUID=85d999a7-c288-4060-9600-0a477726c595 |
| Area=3791 | Joint1=3981 | Joint2=4026 | Joint3=4027 | Joint4=3982 | GUID=7573810a-0a49-40d8-a6ea-5b10a5d84d36 |
| Area=3792 | Joint1=3982 | Joint2=4027 | Joint3=4028 | Joint4=3983 | GUID=21a776cf-c901-4e29-b188-ba7f0a6bc029 |
| Area=3793 | Joint1=3983 | Joint2=4028 | Joint3=4029 | Joint4=3984 | GUID=1735f0a5-f9ac-4add-a080-58365f85f1ba |
| Area=3794 | Joint1=3984 | Joint2=4029 | Joint3=4030 | Joint4=3985 | GUID=c5842be4-5447-4f88-ac5b-1e6856e5cf27 |
| Area=3795 | Joint1=3985 | Joint2=4030 | Joint3=4031 | Joint4=3986 | GUID=39b7805e-0bd6-4299-a534-71416d62d807 |
| Area=3796 | Joint1=3986 | Joint2=4031 | Joint3=4032 | Joint4=3987 | GUID=fa71e1a1-65b4-4bac-bf00-805130292d81 |
| Area=3797 | Joint1=3987 | Joint2=4032 | Joint3=4033 | Joint4=3988 | GUID=6f1e885b-7ade-4a40-9b6b-f5d167cc4796 |
| Area=3798 | Joint1=3988 | Joint2=4033 | Joint3=4034 | Joint4=3989 | GUID=45658b32-6888-44f9-b8c2-e72205d58807 |
| Area=3799 | Joint1=3989 | Joint2=4034 | Joint3=4035 | Joint4=3990 | GUID=10910d95-3e0d-4bcb-9d0c-251ce20aa6ff |
| Area=3800 | Joint1=3990 | Joint2=4035 | Joint3=4036 | Joint4=3991 | GUID=8f8fce59-c7fa-48a2-9764-91f1bd95d263 |
| Area=3801 | Joint1=3991 | Joint2=4036 | Joint3=4037 | Joint4=3992 | GUID=d4d43019-7aa8-4143-a012-be32a56e856f |
| Area=3802 | Joint1=3992 | Joint2=4037 | Joint3=4038 | Joint4=3993 | GUID=3d690191-ea48-42d9-9b2d-ad7d5849e4bb |
| Area=3803 | Joint1=3993 | Joint2=4038 | Joint3=4039 | Joint4=3994 | GUID=6d807aaa-99fb-4b42-af26-0d97b96fc11c |
| Area=3804 | Joint1=3994 | Joint2=4039 | Joint3=4040 | Joint4=3995 | GUID=8b28d12e-5ca7-4ec0-97fb-568e5596fa0f |
| Area=3805 | Joint1=3995 | Joint2=4040 | Joint3=4041 | Joint4=3996 | GUID=4dad49f0-99a9-40ac-92f8-c547d93cdd7f |
| Area=3806 | Joint1=3996 | Joint2=4041 | Joint3=4042 | Joint4=3997 | GUID=af04da14-9832-492e-a186-3134c821ec0a |
| Area=3807 | Joint1=3997 | Joint2=4042 | Joint3=4043 | Joint4=3998 | GUID=374e9f8a-1d8f-4f31-8e1b-cedae25ebf1f |
| Area=3808 | Joint1=3998 | Joint2=4043 | Joint3=4044 | Joint4=3999 | GUID=b5ee0abe-6ff9-4f0a-8d72-f36fbf420274 |
| Area=3809 | Joint1=3999 | Joint2=4044 | Joint3=4045 | Joint4=4000 | GUID=0a83db37-0848-4661-9b92-8cf8be6b4d56 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=3810 | Joint1=4000 | Joint2=4045 | Joint3=4046 | Joint4=4001 | GUID=9546e073-be51-4a5e-b73b-8d3cbcaa65ee |
| Area=3811 | Joint1=4001 | Joint2=4046 | Joint3=4047 | Joint4=4002 | GUID=c4a1db8f-9de5-4ad6-8f1f-169b1da82770 |
| Area=3812 | Joint1=4002 | Joint2=4047 | Joint3=4048 | Joint4=4003 | GUID=12bd7f30-8e43-449d-bb97-b565b0ca3302 |
| Area=3813 | Joint1=4003 | Joint2=4048 | Joint3=4049 | Joint4=4004 | GUID=552d4910-32cc-43c7-b7e5-b3a8488bca05 |
| Area=3814 | Joint1=4004 | Joint2=4049 | Joint3=4050 | Joint4=4005 | GUID=8867ae78-e488-45f4-bcfe-4713e93acb6b |
| Area=3815 | Joint1=4005 | Joint2=4050 | Joint3=4051 | Joint4=4006 | GUID=81954f59-b57f-4ca6-9ad9-a9194b6e4162 |
| Area=3816 | Joint1=4006 | Joint2=4051 | Joint3=4052 | Joint4=4007 | GUID=bb394adc-6941-4d2c-afba-81f8c1dd6418 |
| Area=3817 | Joint1=4007 | Joint2=4052 | Joint3=4053 | Joint4=4008 | GUID=7744bd68-89f5-4e80-a2cb-d86b689bb5d7 |
| Area=3818 | Joint1=4008 | Joint2=4053 | Joint3=4054 | Joint4=4009 | GUID=277adf53-5974-4261-b425-bf52da113125 |
| Area=3819 | Joint1=4009 | Joint2=4054 | Joint3=4055 | Joint4=4010 | GUID=3f91a16e-ef50-40b4-be9b-127148a76eb0 |
| Area=3820 | Joint1=4010 | Joint2=4055 | Joint3=4056 | Joint4=4011 | GUID=5429eefe-e0d5-442c-827d-87c890f46f7a |
| Area=3821 | Joint1=4011 | Joint2=4056 | Joint3=4057 | Joint4=4012 | GUID=ae250cdf-73e1-489c-a952-755f8bf94fbd |
| Area=3822 | Joint1=4012 | Joint2=4057 | Joint3=4058 | Joint4=4013 | GUID=c9bdd002-eb0b-45cb-b5e3-c654b105c70c |
| Area=3823 | Joint1=4013 | Joint2=4058 | Joint3=4059 | Joint4=4014 | GUID=89551ef3-4a69-40d6-b348-c88192a85b5d |
| Area=3824 | Joint1=4014 | Joint2=4059 | Joint3=4060 | Joint4=4015 | GUID=38cbcb0c-e37a-4c5d-9b57-300310372be0 |
| Area=3825 | Joint1=4015 | Joint2=4060 | Joint3=4061 | Joint4=4016 | GUID=f9524d11-62de-475d-8440-a5d2454b3a0d |
| Area=3826 | Joint1=4016 | Joint2=4061 | Joint3=4062 | Joint4=4017 | GUID=8d1c341a-5cca-4377-a768-d02e4c4ed179 |
| Area=3827 | Joint1=4017 | Joint2=4062 | Joint3=4063 | Joint4=4018 | GUID=9dd586b8-0318-4744-a7cc-6b4398dc6089 |
| Area=3828 | Joint1=4018 | Joint2=4063 | Joint3=4064 | Joint4=4019 | GUID=5502c8b1-39e0-4478-a000-5efa068e7b3e |
| Area=3829 | Joint1=4019 | Joint2=4064 | Joint3=4065 | Joint4=4020 | GUID=60369ba2-a145-4802-a63e-e4cce12edbb7 |
| Area=3830 | Joint1=4021 | Joint2=2087 | Joint3=4066 | Joint4=4022 | GUID=09f4919c-ee0a-49d7-95db-5fd7fea3663a |
| Area=3831 | Joint1=4022 | Joint2=4066 | Joint3=4067 | Joint4=4023 | GUID=c40a1289-e401-4dd3-b8f8-93bfa7d31a12 |
| Area=3832 | Joint1=4023 | Joint2=4067 | Joint3=4068 | Joint4=4024 | GUID=34911759-e0d8-477d-8f05-8e6d0e95f56f |
| Area=3833 | Joint1=4024 | Joint2=4068 | Joint3=4069 | Joint4=4025 | GUID=8f011df1-53ab-4216-8671-212693b4b8d1 |
| Area=3834 | Joint1=4025 | Joint2=4069 | Joint3=4070 | Joint4=4026 | GUID=7689a6a1-df24-49ec-869c-9fad0b3e5a9f |
| Area=3835 | Joint1=4026 | Joint2=4070 | Joint3=4071 | Joint4=4027 | GUID=99c58202-70b7-4558-8d17-072e42c426a7 |
| Area=3836 | Joint1=4027 | Joint2=4071 | Joint3=4072 | Joint4=4028 | GUID=d93a4069-3924-43b6-98c5-b31fd90562da |
| Area=3837 | Joint1=4028 | Joint2=4072 | Joint3=4073 | Joint4=4029 | GUID=b3496954-7d65-48b2-8a2a-749b23b3641c |
| Area=3838 | Joint1=4029 | Joint2=4073 | Joint3=4074 | Joint4=4030 | GUID=a5d40578-589d-4730-bb74-76433624dcef |
| Area=3839 | Joint1=4030 | Joint2=4074 | Joint3=4075 | Joint4=4031 | GUID=d254e107-f674-43bb-89fe-a6d179e21694 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=3840<br>2988b85ce8b5 | Joint1=4031 | Joint2=4075 | Joint3=4076 | Joint4=4032 | GUID=473940f2-28ca-43de-b009-             |
| Area=3841<br>a10b878be34d | Joint1=4032 | Joint2=4076 | Joint3=4077 | Joint4=4033 | GUID=14269fa9-10b4-4ab0-806c-             |
| Area=3842<br>1cd60b3a486c | Joint1=4033 | Joint2=4077 | Joint3=4078 | Joint4=4034 | GUID=9f79efb0-912a-4ca1-88e0-             |
| Area=3843<br>ae2857154aa0 | Joint1=4034 | Joint2=4078 | Joint3=4079 | Joint4=4035 | GUID=93bbea15-3f58-4fb0-bc8b-             |
| Area=3844<br>ef197705aeef | Joint1=4035 | Joint2=4079 | Joint3=4080 | Joint4=4036 | GUID=665b9543-89ce-4505-b274-             |
| Area=3845<br>30bed2287a6b | Joint1=4036 | Joint2=4080 | Joint3=4081 | Joint4=4037 | GUID=11f4ed34-580c-4f74-ab64-             |
| Area=3846<br>6d51fa11a331 | Joint1=4037 | Joint2=4081 | Joint3=4082 | Joint4=4038 | GUID=10035682-b6ae-4125-80e4-             |
| Area=3847<br>3fe6b3657e77 | Joint1=4038 | Joint2=4082 | Joint3=4083 | Joint4=4039 | GUID=b6500dca-b0f3-4258-b954-             |
| Area=3848<br>179196dbc7e5 | Joint1=4039 | Joint2=4083 | Joint3=4084 | Joint4=4040 | GUID=614afdd2-90ca-4a10-9f15-             |
| Area=3849                 | Joint1=4040 | Joint2=4084 | Joint3=4085 | Joint4=4041 | GUID=4fb63758-7e28-42ae-a8a2-c2a1553dff43 |
| Area=3850<br>b2d0a6601049 | Joint1=4041 | Joint2=4085 | Joint3=4086 | Joint4=4042 | GUID=6d395303-f782-4954-b5dc-             |
| Area=3851<br>42af073dcba7 | Joint1=4042 | Joint2=4086 | Joint3=4087 | Joint4=4043 | GUID=a4a4330e-b111-4098-bb1a-             |
| Area=3852                 | Joint1=4043 | Joint2=4087 | Joint3=4088 | Joint4=4044 | GUID=8ca362f5-5ed0-4bbf-9a4c-499726eb918f |
| Area=3853<br>93c0f176044d | Joint1=4044 | Joint2=4088 | Joint3=4089 | Joint4=4045 | GUID=e7f04bda-a9d4-4b0c-836a-             |
| Area=3854<br>7bb72d37d048 | Joint1=4045 | Joint2=4089 | Joint3=4090 | Joint4=4046 | GUID=6414f41b-b683-4d83-80e6-             |
| Area=3855                 | Joint1=4046 | Joint2=4090 | Joint3=4091 | Joint4=4047 | GUID=00fdc8a4-174b-4dc2-9ab1-2f17c0fa1f90 |
| Area=3856<br>a08dd149027e | Joint1=4047 | Joint2=4091 | Joint3=4092 | Joint4=4048 | GUID=497ef5b8-8110-4dde-b62d-             |
| Area=3857                 | Joint1=4048 | Joint2=4092 | Joint3=4093 | Joint4=4049 | GUID=c6295cf0-0df9-4464-8b57-b95488dcb57c |
| Area=3858<br>f54905277ae6 | Joint1=4049 | Joint2=4093 | Joint3=4094 | Joint4=4050 | GUID=d9cafa2c-ce98-485e-b37e-             |
| Area=3859                 | Joint1=4050 | Joint2=4094 | Joint3=4095 | Joint4=4051 | GUID=3d85944a-7841-485f-bef2-950140f79b9f |
| Area=3860<br>079052404ac6 | Joint1=4051 | Joint2=4095 | Joint3=4096 | Joint4=4052 | GUID=c6163d6e-ef63-415a-94f9-             |
| Area=3861<br>37e22a70bba3 | Joint1=4052 | Joint2=4096 | Joint3=4097 | Joint4=4053 | GUID=a57a9250-2e98-4119-ba2d-             |
| Area=3862<br>e2de289bcb1e | Joint1=4053 | Joint2=4097 | Joint3=4098 | Joint4=4054 | GUID=576e969b-5995-4135-899a-             |
| Area=3863<br>ecec49e90c06 | Joint1=4054 | Joint2=4098 | Joint3=4099 | Joint4=4055 | GUID=b9ac389c-e688-461e-9359-             |
| Area=3864                 | Joint1=4055 | Joint2=4099 | Joint3=4100 | Joint4=4056 | GUID=ff8fab84-9967-4709-8058-26b101dba221 |
| Area=3865<br>47d33e2505c0 | Joint1=4056 | Joint2=4100 | Joint3=4101 | Joint4=4057 | GUID=a1f5979d-b6ca-49ed-a378-             |
| Area=3866<br>7cc9d58206e1 | Joint1=4057 | Joint2=4101 | Joint3=4102 | Joint4=4058 | GUID=949c848d-64ff-4381-897d-             |
| Area=3867<br>1bcf8acac65a | Joint1=4058 | Joint2=4102 | Joint3=4103 | Joint4=4059 | GUID=4bd9d75a-7a72-49e4-80d8-             |
| Area=3868                 | Joint1=4059 | Joint2=4103 | Joint3=4104 | Joint4=4060 | GUID=4f8c40d2-6f07-48c2-ab78-1a9775f70784 |
| Area=3869<br>ea0118721c96 | Joint1=4060 | Joint2=4104 | Joint3=4105 | Joint4=4061 | GUID=af465540-02dc-43d2-8d80-             |
| Area=3870<br>411f173963c4 | Joint1=4061 | Joint2=4105 | Joint3=4106 | Joint4=4062 | GUID=9a06e0b4-775a-4b26-b112-             |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                            |
|-----------|-------------|-------------|-------------|-------------|--------------------------------------------|
| Area=3871 | Joint1=4062 | Joint2=4106 | Joint3=4107 | Joint4=4063 | GUID=a5428bbd-e1f6-4937-88ea-7184290d4dbb  |
| Area=3872 | Joint1=4063 | Joint2=4107 | Joint3=4108 | Joint4=4064 | GUID=473821e2-aaa3-49c6-ae58-4bffa2785151e |
| Area=3873 | Joint1=4064 | Joint2=4108 | Joint3=2085 | Joint4=4065 | GUID=bae8d801-c0c2-4f99-82f6-32037cfa8ea5  |
| Area=3875 | Joint1=4160 | Joint2=4161 | Joint3=4162 | Joint4=4163 | GUID=a217ab93-5b9e-4f89-9dd2-6b6372b694ab  |
| Area=3876 | Joint1=4163 | Joint2=4162 | Joint3=4164 | Joint4=4165 | GUID=bd90d9bc-c79d-4961-a643-adee760bb5aa  |
| Area=3877 | Joint1=4165 | Joint2=4164 | Joint3=4166 | Joint4=4167 | GUID=5221babf-9891-47e4-8bec-5bc498b4ff2c  |
| Area=3878 | Joint1=4167 | Joint2=4166 | Joint3=4168 | Joint4=4169 | GUID=3b91af02-d021-4787-a7e5-26266ce4a868  |
| Area=3879 | Joint1=4169 | Joint2=4168 | Joint3=4170 | Joint4=4171 | GUID=64b7bdca-a649-4fdb-b280-b4c3f4c46eb3  |
| Area=3880 | Joint1=4171 | Joint2=4170 | Joint3=4172 | Joint4=4173 | GUID=f0d79a24-e197-4088-8495-5c2d468c20b3  |
| Area=3881 | Joint1=4173 | Joint2=4172 | Joint3=4174 | Joint4=4175 | GUID=6bbf75f1-7aa3-42cb-af78-0cf3ee86633e  |
| Area=3882 | Joint1=4175 | Joint2=4174 | Joint3=4176 | Joint4=4177 | GUID=0de928bf-bf75-4a77-8b86-1eac89683b12  |
| Area=3883 | Joint1=4177 | Joint2=4176 | Joint3=4178 | Joint4=4179 | GUID=da71ab66-e358-4343-ae81-2dc1596a250c  |
| Area=3884 | Joint1=4179 | Joint2=4178 | Joint3=4180 | Joint4=4181 | GUID=344b04d3-1de4-4fd9-b532-b8cd92dd534d  |
| Area=3885 | Joint1=4181 | Joint2=4180 | Joint3=4182 | Joint4=4183 | GUID=ed339042-1de5-4fbf-8b38-c2220f81b9d1  |
| Area=3886 | Joint1=4183 | Joint2=4182 | Joint3=4184 | Joint4=4185 | GUID=f8b4eb22-460c-426b-b86a-d9f19e428953  |
| Area=3887 | Joint1=4185 | Joint2=4184 | Joint3=4186 | Joint4=4187 | GUID=a1e68f46-2a0c-4737-9a49-0164a4ba00ff  |
| Area=3888 | Joint1=4187 | Joint2=4186 | Joint3=4188 | Joint4=4189 | GUID=b5f12e37-e51c-4092-a56d-8aec08945a8c  |
| Area=3889 | Joint1=4189 | Joint2=4188 | Joint3=4190 | Joint4=4191 | GUID=daf41ad6-eaeb-4fd8-b006-b23737e039a5  |
| Area=3890 | Joint1=4191 | Joint2=4190 | Joint3=4192 | Joint4=4193 | GUID=91f2d08a-5c56-4de7-bc1f-a010ed2b29e8  |
| Area=3891 | Joint1=4193 | Joint2=4192 | Joint3=4194 | Joint4=4195 | GUID=0090ac51-38d2-4f02-b6d4-831b8678550f  |
| Area=3892 | Joint1=4195 | Joint2=4194 | Joint3=4196 | Joint4=4197 | GUID=cd853614-8984-45eb-ad96-db52f8b398fb  |
| Area=3893 | Joint1=4197 | Joint2=4196 | Joint3=4198 | Joint4=4199 | GUID=63c86bf5-b8d1-4d7a-91c2-39d7b2a978c8  |
| Area=3894 | Joint1=4199 | Joint2=4198 | Joint3=4200 | Joint4=4201 | GUID=f12fb2b5-1aad-42d4-9f68-6e2aed39a579  |
| Area=3895 | Joint1=4201 | Joint2=4200 | Joint3=4202 | Joint4=4203 | GUID=ff78b065-8715-4d75-bec9-2e6f7475a8d2  |
| Area=3896 | Joint1=4203 | Joint2=4202 | Joint3=4204 | Joint4=4205 | GUID=525441a5-e50d-4e74-adde-eafee73f556f  |
| Area=3897 | Joint1=4205 | Joint2=4204 | Joint3=4206 | Joint4=4207 | GUID=5cdcaac0-05c7-4d1d-9d34-9e942de8e129  |
| Area=3898 | Joint1=4207 | Joint2=4206 | Joint3=4208 | Joint4=4209 | GUID=f306c9c3-9911-414c-8934-13f1e37af434  |
| Area=3899 | Joint1=4209 | Joint2=4208 | Joint3=4210 | Joint4=4211 | GUID=721b5871-16e9-4c66-95af-c490be7582c0  |
| Area=3900 | Joint1=4211 | Joint2=4210 | Joint3=4212 | Joint4=4213 | GUID=e3692e0e-57dd-4114-a308-4bc31ce0a7ac  |
| Area=3901 | Joint1=4213 | Joint2=4212 | Joint3=4214 | Joint4=4215 | GUID=23d4982e-36c6-416d-ba55-68ae3d4a21e7  |
| Area=3902 | Joint1=4215 | Joint2=4214 | Joint3=4216 | Joint4=4217 | GUID=0272369a-2c29-4e8c-b868-b31485c89606  |
| Area=3903 | Joint1=4217 | Joint2=4216 | Joint3=4218 | Joint4=4219 | GUID=846023c7-f101-4fd5-af20-77b3ee56d4f8  |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=3904<br>426e1b9165b2 | Joint1=4219 | Joint2=4218 | Joint3=4220 | Joint4=4221 | GUID=0574f982-732b-4bc1-b54d-             |
| Area=3905<br>db559d66bce5 | Joint1=4221 | Joint2=4220 | Joint3=4222 | Joint4=4223 | GUID=abdbc878-e9c7-47e5-b2c0-             |
| Area=3906<br>3dacac16167b | Joint1=4223 | Joint2=4222 | Joint3=4224 | Joint4=4225 | GUID=d97b338d-1760-4c01-9040-             |
| Area=3907<br>72fe4dcc1aed | Joint1=4225 | Joint2=4224 | Joint3=4226 | Joint4=4227 | GUID=1ab4a31c-262c-4b90-a607-             |
| Area=3908<br>bd579894cc72 | Joint1=4227 | Joint2=4226 | Joint3=4228 | Joint4=4229 | GUID=816ca790-8a82-43b9-a40e-             |
| Area=3909                 | Joint1=4229 | Joint2=4228 | Joint3=4230 | Joint4=4231 | GUID=66d1f1c6-75a4-49bf-a287-df127fcde430 |
| Area=3910<br>608fd44030ed | Joint1=4231 | Joint2=4230 | Joint3=4232 | Joint4=4233 | GUID=34c71118-8151-4514-9642-             |
| Area=3911<br>2b3422246e95 | Joint1=4233 | Joint2=4232 | Joint3=4234 | Joint4=4235 | GUID=24bcd0b5-6178-405f-a478-             |
| Area=3912                 | Joint1=4235 | Joint2=4234 | Joint3=4236 | Joint4=4237 | GUID=ba4e097d-1c9d-4e4f-864d-da4dfa26f048 |
| Area=3913                 | Joint1=4237 | Joint2=4236 | Joint3=4238 | Joint4=4239 | GUID=958d59ec-8563-4be3-9cfc-7d64c227c3f1 |
| Area=3914<br>b22712d511e2 | Joint1=4239 | Joint2=4238 | Joint3=4240 | Joint4=4241 | GUID=7fbc28e6-d80c-415e-ab21-             |
| Area=3915                 | Joint1=4241 | Joint2=4240 | Joint3=4242 | Joint4=4243 | GUID=50cd96c5-c0ac-4f11-b5f6-6b2029e9c519 |
| Area=3916<br>6db2198b417a | Joint1=4243 | Joint2=4242 | Joint3=4244 | Joint4=4245 | GUID=f6b2e4a1-6b4a-4e5e-ac29-             |
| Area=3917<br>1df3bd0ab641 | Joint1=4245 | Joint2=4244 | Joint3=4246 | Joint4=4247 | GUID=01bda8e0-951a-47ac-9115-             |
| Area=3918                 | Joint1=4247 | Joint2=4246 | Joint3=4248 | Joint4=4249 | GUID=1c7e471a-99bc-41bf-98cb-3ec640d20f06 |
| Area=3919<br>be29356fd038 | Joint1=4249 | Joint2=4248 | Joint3=4250 | Joint4=4251 | GUID=c996708b-5c43-444f-99ea-             |
| Area=3920<br>832012ad380c | Joint1=4251 | Joint2=4250 | Joint3=4252 | Joint4=4158 | GUID=bc4de864-2e6e-4de0-a0c4-             |
| Area=3921                 | Joint1=4161 | Joint2=4253 | Joint3=4254 | Joint4=4162 | GUID=9c2ccd3f-ccb3-4de3-96e6-f3b9f2acb900 |
| Area=3922                 | Joint1=4162 | Joint2=4254 | Joint3=4255 | Joint4=4164 | GUID=cf530fc5-db43-4298-8fae-6bda54735cfa |
| Area=3923                 | Joint1=4164 | Joint2=4255 | Joint3=4256 | Joint4=4166 | GUID=d16c56c4-fd3d-43af-84d1-a6dd40cf7be3 |
| Area=3924                 | Joint1=4166 | Joint2=4256 | Joint3=4257 | Joint4=4168 | GUID=0e0cc5fc-473f-4d2a-884c-f078f72997d7 |
| Area=3925<br>75d79895603e | Joint1=4168 | Joint2=4257 | Joint3=4258 | Joint4=4170 | GUID=ebf6cd4f-bc32-4c33-bd76-             |
| Area=3926<br>e44ba216b2b2 | Joint1=4170 | Joint2=4258 | Joint3=4259 | Joint4=4172 | GUID=72aca648-ce2a-40b8-bdda-             |
| Area=3927<br>34962046d89c | Joint1=4172 | Joint2=4259 | Joint3=4260 | Joint4=4174 | GUID=c83b7e5f-9550-49b5-a1a4-             |
| Area=3928<br>a9ed705f9d49 | Joint1=4174 | Joint2=4260 | Joint3=4261 | Joint4=4176 | GUID=1e9c6d6d-41f4-4482-995e-             |
| Area=3929<br>aebdca01ec99 | Joint1=4176 | Joint2=4261 | Joint3=4262 | Joint4=4178 | GUID=13b6af63-4ce9-478e-b9d3-             |
| Area=3930                 | Joint1=4178 | Joint2=4262 | Joint3=4263 | Joint4=4180 | GUID=7de05d05-be44-4427-bf40-4cbcb2f429f4 |
| Area=3931<br>68f360d5e3cb | Joint1=4180 | Joint2=4263 | Joint3=4264 | Joint4=4182 | GUID=1de44922-b165-4d07-87c3-             |
| Area=3932<br>4033318b01ba | Joint1=4182 | Joint2=4264 | Joint3=4265 | Joint4=4184 | GUID=a7079ae4-f118-44d1-a432-             |
| Area=3933                 | Joint1=4184 | Joint2=4265 | Joint3=4266 | Joint4=4186 | GUID=cff0b30d-ba97-46f4-bca8-4b27276dc954 |
| Area=3934<br>b619d80d46a7 | Joint1=4186 | Joint2=4266 | Joint3=4267 | Joint4=4188 | GUID=895b055e-cec5-4313-bc33-             |
| Area=3935<br>475c06695841 | Joint1=4188 | Joint2=4267 | Joint3=4268 | Joint4=4190 | GUID=69793930-b70d-4886-b2a9-             |
| Area=3936<br>e5c062a98da9 | Joint1=4190 | Joint2=4268 | Joint3=4269 | Joint4=4192 | GUID=30609ab9-0e5c-4fdd-b2f4-             |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=3937<br>5663623825a5 | Joint1=4192 | Joint2=4269 | Joint3=4270 | Joint4=4194 | GUID=800a6b41-4472-4e6c-bbfa-             |
| Area=3938<br>9b369241bb8d | Joint1=4194 | Joint2=4270 | Joint3=4271 | Joint4=4196 | GUID=6240e21a-36f9-487a-820a-             |
| Area=3939                 | Joint1=4196 | Joint2=4271 | Joint3=4272 | Joint4=4198 | GUID=cd3609af-6219-4bf2-800b-62ad14c74fb4 |
| Area=3940<br>b19ef6ae5b38 | Joint1=4198 | Joint2=4272 | Joint3=4273 | Joint4=4200 | GUID=b8921dd5-f3ce-404d-9bb5-             |
| Area=3941                 | Joint1=4200 | Joint2=4273 | Joint3=4274 | Joint4=4202 | GUID=5c1cdf1b-0ef9-4776-bf63-23cb4c1891fb |
| Area=3942<br>7d836482a251 | Joint1=4202 | Joint2=4274 | Joint3=4275 | Joint4=4204 | GUID=a3d32c1d-db88-4888-959a-             |
| Area=3943<br>1b0668537d9d | Joint1=4204 | Joint2=4275 | Joint3=4276 | Joint4=4206 | GUID=f7e3bdb0-94d6-4e5d-bd90-             |
| Area=3944<br>268f56225d1c | Joint1=4206 | Joint2=4276 | Joint3=4277 | Joint4=4208 | GUID=4b858915-6117-4207-867f-             |
| Area=3945                 | Joint1=4208 | Joint2=4277 | Joint3=4278 | Joint4=4210 | GUID=b511b94b-0abf-47fd-b817-2df7e37323b9 |
| Area=3946                 | Joint1=4210 | Joint2=4278 | Joint3=4279 | Joint4=4212 | GUID=2b16790c-70f2-468c-8176-f5aa44cc4be7 |
| Area=3947<br>75661c26a3f9 | Joint1=4212 | Joint2=4279 | Joint3=4280 | Joint4=4214 | GUID=b120373d-ddad-4823-b17f-             |
| Area=3948<br>b83ad0caaace | Joint1=4214 | Joint2=4280 | Joint3=4281 | Joint4=4216 | GUID=2e0be75e-6f2d-40dc-90dc-             |
| Area=3949<br>0858d3518bc4 | Joint1=4216 | Joint2=4281 | Joint3=4282 | Joint4=4218 | GUID=455df9ab-f8da-4ec4-89aa-             |
| Area=3950<br>a011a3d6a50b | Joint1=4218 | Joint2=4282 | Joint3=4283 | Joint4=4220 | GUID=5be5966f-3053-4bad-9e17-             |
| Area=3951<br>0208267a01e3 | Joint1=4220 | Joint2=4283 | Joint3=4284 | Joint4=4222 | GUID=185c1ad3-3e76-4b9a-99de-             |
| Area=3952<br>b9f19c5e6607 | Joint1=4222 | Joint2=4284 | Joint3=4285 | Joint4=4224 | GUID=3715da2f-b782-4d2d-abd0-             |
| Area=3953<br>bac985287d88 | Joint1=4224 | Joint2=4285 | Joint3=4286 | Joint4=4226 | GUID=86a490c6-21e0-4c8c-af7b-             |
| Area=3954                 | Joint1=4226 | Joint2=4286 | Joint3=4287 | Joint4=4228 | GUID=c7936386-13fe-4267-b0d8-0c9bfdf54363 |
| Area=3955<br>f15115a6cce5 | Joint1=4228 | Joint2=4287 | Joint3=4288 | Joint4=4230 | GUID=30525453-4413-4767-864e-             |
| Area=3956                 | Joint1=4230 | Joint2=4288 | Joint3=4289 | Joint4=4232 | GUID=fc34c3b6-54a6-4fe0-ac35-175ef635a738 |
| Area=3957<br>893dee93a2f4 | Joint1=4232 | Joint2=4289 | Joint3=4290 | Joint4=4234 | GUID=1d951a58-c2b5-4760-85c5-             |
| Area=3958<br>0576e546bf49 | Joint1=4234 | Joint2=4290 | Joint3=4291 | Joint4=4236 | GUID=83d64178-574f-40e8-91ac-             |
| Area=3959                 | Joint1=4236 | Joint2=4291 | Joint3=4292 | Joint4=4238 | GUID=3fbda8e6-99eb-44fb-b6f7-ffc0ce5c4456 |
| Area=3960<br>6e3edf04967e | Joint1=4238 | Joint2=4292 | Joint3=4293 | Joint4=4240 | GUID=bb8ee629-9ea6-492b-a311-             |
| Area=3961                 | Joint1=4240 | Joint2=4293 | Joint3=4294 | Joint4=4242 | GUID=dff7ea10-31cb-4f92-916d-b065703b7e5b |
| Area=3962<br>8b65bd382b66 | Joint1=4242 | Joint2=4294 | Joint3=4295 | Joint4=4244 | GUID=44ee6459-0f11-4d57-bdfe-             |
| Area=3963<br>9bbc34170805 | Joint1=4244 | Joint2=4295 | Joint3=4296 | Joint4=4246 | GUID=430bef89-80fa-4759-b600-             |
| Area=3964<br>52186dbd2569 | Joint1=4246 | Joint2=4296 | Joint3=4297 | Joint4=4248 | GUID=ab40754e-946a-4918-8f37-             |
| Area=3965<br>536698e0a51e | Joint1=4248 | Joint2=4297 | Joint3=4298 | Joint4=4250 | GUID=4dfa6bad-4590-430e-9479-             |
| Area=3966<br>00b8693c5c6c | Joint1=4250 | Joint2=4298 | Joint3=4299 | Joint4=4252 | GUID=7cd94d3b-50f8-46ce-be9c-             |
| Area=3967                 | Joint1=4253 | Joint2=4300 | Joint3=4301 | Joint4=4254 | GUID=60de150d-cf81-4330-9d2e-14e4735ff0f5 |
| Area=3968<br>5b643c488c63 | Joint1=4254 | Joint2=4301 | Joint3=4302 | Joint4=4255 | GUID=20dd51f7-c81d-451e-ab5e-             |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=3969<br>b8b19678047e | Joint1=4255 | Joint2=4302 | Joint3=4303 | Joint4=4256 | GUID=026dbe70-6ca2-490b-b3ab-             |
| Area=3970<br>7eca97f2d71a | Joint1=4256 | Joint2=4303 | Joint3=4304 | Joint4=4257 | GUID=a9c41079-6b02-4cb2-9705-             |
| Area=3971<br>885fc34d584f | Joint1=4257 | Joint2=4304 | Joint3=4305 | Joint4=4258 | GUID=32a6b071-d433-43ac-bd9d-             |
| Area=3972<br>f0e75d1670a8 | Joint1=4258 | Joint2=4305 | Joint3=4306 | Joint4=4259 | GUID=23fe0442-01b3-4740-9d65-             |
| Area=3973                 | Joint1=4259 | Joint2=4306 | Joint3=4307 | Joint4=4260 | GUID=93364a05-b5e4-4cfb-a2fa-ab1fd08e588a |
| Area=3974<br>1b2101fc295a | Joint1=4260 | Joint2=4307 | Joint3=4308 | Joint4=4261 | GUID=5c0a15fb-92a9-47dc-a12a-             |
| Area=3975<br>a4472c9f306a | Joint1=4261 | Joint2=4308 | Joint3=4309 | Joint4=4262 | GUID=cbc4ada4-568d-4f82-b7e4-             |
| Area=3976<br>1c03e27812fc | Joint1=4262 | Joint2=4309 | Joint3=4310 | Joint4=4263 | GUID=0820a062-1f72-4230-ba1e-             |
| Area=3977<br>be8b4ac9a763 | Joint1=4263 | Joint2=4310 | Joint3=4311 | Joint4=4264 | GUID=c089ea67-ba10-400b-9987-             |
| Area=3978<br>956cba2659dd | Joint1=4264 | Joint2=4311 | Joint3=4312 | Joint4=4265 | GUID=f26c0427-d238-43b3-a48f-             |
| Area=3979<br>53c1cf610f53 | Joint1=4265 | Joint2=4312 | Joint3=4313 | Joint4=4266 | GUID=1059e980-d698-4223-b1c9-             |
| Area=3980<br>3d6445784779 | Joint1=4266 | Joint2=4313 | Joint3=4314 | Joint4=4267 | GUID=bc813d9e-4e26-4647-9786-             |
| Area=3981<br>82647124df5c | Joint1=4267 | Joint2=4314 | Joint3=4315 | Joint4=4268 | GUID=dbbc3360-24b3-4506-b186-             |
| Area=3982<br>890ad84471d8 | Joint1=4268 | Joint2=4315 | Joint3=4316 | Joint4=4269 | GUID=cb3aee48-2f4e-4639-9abd-             |
| Area=3983<br>5e65a680de87 | Joint1=4269 | Joint2=4316 | Joint3=4317 | Joint4=4270 | GUID=8c0359e1-27a1-43a1-b76d-             |
| Area=3984<br>2539172a4f46 | Joint1=4270 | Joint2=4317 | Joint3=4318 | Joint4=4271 | GUID=a1f043a2-0a43-49d7-8a6e-             |
| Area=3985<br>35d082a6d9ee | Joint1=4271 | Joint2=4318 | Joint3=4319 | Joint4=4272 | GUID=78c6c0c7-d685-434d-8f0e-             |
| Area=3986<br>30ba29131ac2 | Joint1=4272 | Joint2=4319 | Joint3=4320 | Joint4=4273 | GUID=1043e1b0-3d47-481b-8b63-             |
| Area=3987                 | Joint1=4273 | Joint2=4320 | Joint3=4321 | Joint4=4274 | GUID=6c4caa34-e3ea-44f2-b43d-79139fcc7fa4 |
| Area=3988<br>886235bbad8c | Joint1=4274 | Joint2=4321 | Joint3=4322 | Joint4=4275 | GUID=596d3dc4-c9c5-4c76-a7bc-             |
| Area=3989<br>a0ae23875b17 | Joint1=4275 | Joint2=4322 | Joint3=4323 | Joint4=4276 | GUID=6b035bc2-f29b-4e3f-927e-             |
| Area=3990<br>bc736a8c336d | Joint1=4276 | Joint2=4323 | Joint3=4324 | Joint4=4277 | GUID=28535656-5e35-46bc-b276-             |
| Area=3991<br>6e4ff5228c2b | Joint1=4277 | Joint2=4324 | Joint3=4325 | Joint4=4278 | GUID=9a73262b-2d9c-4210-b701-             |
| Area=3992<br>aa0e9fb6a36b | Joint1=4278 | Joint2=4325 | Joint3=4326 | Joint4=4279 | GUID=cbfb14b5-0358-4a5e-a1be-             |
| Area=3993                 | Joint1=4279 | Joint2=4326 | Joint3=4327 | Joint4=4280 | GUID=95c6f522-6ef6-4cd3-85ce-ea215119ac93 |
| Area=3994                 | Joint1=4280 | Joint2=4327 | Joint3=4328 | Joint4=4281 | GUID=36f1fb0b-47f9-4819-876f-bc1b966e383f |
| Area=3995<br>a94d40270a13 | Joint1=4281 | Joint2=4328 | Joint3=4329 | Joint4=4282 | GUID=1d204bee-0e97-432e-9fd4-             |
| Area=3996<br>71bdb96d3960 | Joint1=4282 | Joint2=4329 | Joint3=4330 | Joint4=4283 | GUID=4278caf5-094f-45e9-85ae-             |
| Area=3997<br>d4eb1a0e01c6 | Joint1=4283 | Joint2=4330 | Joint3=4331 | Joint4=4284 | GUID=702e1093-4556-421e-889c-             |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=3998<br>4f129054917c | Joint1=4284 | Joint2=4331 | Joint3=4332 | Joint4=4285 | GUID=360c3702-032c-47db-8a9d-             |
| Area=3999<br>f9610e4763cc | Joint1=4285 | Joint2=4332 | Joint3=4333 | Joint4=4286 | GUID=1dda7a6e-6e97-4e18-a994-             |
| Area=4000                 | Joint1=4286 | Joint2=4333 | Joint3=4334 | Joint4=4287 | GUID=f7623ff5-05be-4e90-9f52-86193d711b02 |
| Area=4001<br>d91c93549191 | Joint1=4287 | Joint2=4334 | Joint3=4335 | Joint4=4288 | GUID=c3efb422-212b-4487-b61e-             |
| Area=4002                 | Joint1=4288 | Joint2=4335 | Joint3=4336 | Joint4=4289 | GUID=d15fec59-ffef-4748-9810-578cc52e561c |
| Area=4003<br>cb05666f3666 | Joint1=4289 | Joint2=4336 | Joint3=4337 | Joint4=4290 | GUID=edd213d9-939a-40b9-b847-             |
| Area=4004<br>a6ea8da68139 | Joint1=4290 | Joint2=4337 | Joint3=4338 | Joint4=4291 | GUID=cda7324a-647d-453d-890d-             |
| Area=4005<br>4607fe2e586f | Joint1=4291 | Joint2=4338 | Joint3=4339 | Joint4=4292 | GUID=a62ee746-2e83-4722-bb6a-             |
| Area=4006<br>db569c3acc21 | Joint1=4292 | Joint2=4339 | Joint3=4340 | Joint4=4293 | GUID=714bfcc8-2cba-4399-872c-             |
| Area=4007<br>e9ad5b52f210 | Joint1=4293 | Joint2=4340 | Joint3=4341 | Joint4=4294 | GUID=c7e49ec4-dc9e-407e-9ae9-             |
| Area=4008<br>2f4b737152c4 | Joint1=4294 | Joint2=4341 | Joint3=4342 | Joint4=4295 | GUID=143c539d-0c23-4b74-a61e-             |
| Area=4009<br>da42e3c983ad | Joint1=4295 | Joint2=4342 | Joint3=4343 | Joint4=4296 | GUID=be2f1c7a-1bf6-4c3a-ae89-             |
| Area=4010                 | Joint1=4296 | Joint2=4343 | Joint3=4344 | Joint4=4297 | GUID=05c43141-ff16-425e-bc71-734443f0cd5c |
| Area=4011                 | Joint1=4297 | Joint2=4344 | Joint3=4345 | Joint4=4298 | GUID=f889759f-526b-4c2e-ad95-3d4295f1fa6c |
| Area=4012<br>66a5e548d0f8 | Joint1=4298 | Joint2=4345 | Joint3=4346 | Joint4=4299 | GUID=38bba29e-045e-48c3-b6cc-             |
| Area=4013                 | Joint1=4300 | Joint2=4347 | Joint3=4348 | Joint4=4301 | GUID=f62bea96-aaf3-457f-9cc7-e155e4fa2968 |
| Area=4014<br>2cae2cbdddef | Joint1=4301 | Joint2=4348 | Joint3=4349 | Joint4=4302 | GUID=04e28405-68f4-4b2b-b089-             |
| Area=4015<br>7a4a68ca5a56 | Joint1=4302 | Joint2=4349 | Joint3=4350 | Joint4=4303 | GUID=410d9b29-a2ae-4283-9855-             |
| Area=4016<br>e3ddce0a4c72 | Joint1=4303 | Joint2=4350 | Joint3=4351 | Joint4=4304 | GUID=a433ec9a-73fd-4805-9c88-             |
| Area=4017<br>87edecde9bf0 | Joint1=4304 | Joint2=4351 | Joint3=4352 | Joint4=4305 | GUID=3674f9ee-752d-4276-a81e-             |
| Area=4018<br>7545879ae196 | Joint1=4305 | Joint2=4352 | Joint3=4353 | Joint4=4306 | GUID=b2f26db4-07ea-4c86-8733-             |
| Area=4019<br>12a93e227868 | Joint1=4306 | Joint2=4353 | Joint3=4354 | Joint4=4307 | GUID=c784067e-50d1-44e7-a4e3-             |
| Area=4020                 | Joint1=4307 | Joint2=4354 | Joint3=4355 | Joint4=4308 | GUID=fb636268-5bc5-450c-bab5-def90f7b99ca |
| Area=4021<br>34c32a22c30a | Joint1=4308 | Joint2=4355 | Joint3=4356 | Joint4=4309 | GUID=1ad16938-ad73-4a2f-8a42-             |
| Area=4022                 | Joint1=4309 | Joint2=4356 | Joint3=4357 | Joint4=4310 | GUID=b14f79ab-2de6-4f67-936f-d3d4b9d0453a |
| Area=4023<br>13714a1c027a | Joint1=4310 | Joint2=4357 | Joint3=4358 | Joint4=4311 | GUID=7907e94c-f231-4a35-98b4-             |
| Area=4024<br>505142561b2d | Joint1=4311 | Joint2=4358 | Joint3=4359 | Joint4=4312 | GUID=38d922ee-4a83-4478-8c20-             |
| Area=4025<br>911419b8b7ed | Joint1=4312 | Joint2=4359 | Joint3=4360 | Joint4=4313 | GUID=ed4c014b-00c1-4a48-8102-             |
| Area=4026                 | Joint1=4313 | Joint2=4360 | Joint3=4361 | Joint4=4314 | GUID=fb760603-cb3a-48b7-b73a-b4566f6fb16b |
| Area=4027                 | Joint1=4314 | Joint2=4361 | Joint3=4362 | Joint4=4315 | GUID=f9739f7e-03f6-4775-ab06-d92ea1ec1eee |
| Area=4028                 | Joint1=4315 | Joint2=4362 | Joint3=4363 | Joint4=4316 | GUID=f80f12f4-09fd-4c78-9df1-a038b1daaa5e |
| Area=4029<br>8c5509904693 | Joint1=4316 | Joint2=4363 | Joint3=4364 | Joint4=4317 | GUID=337e921d-d247-4b35-9b3a-             |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=4030 | Joint1=4317 | Joint2=4364 | Joint3=4365 | Joint4=4318 | GUID=e08c9829-2b92-4294-92b0-20e29fafe095 |
| Area=4031 | Joint1=4318 | Joint2=4365 | Joint3=4366 | Joint4=4319 | GUID=66dafd42-8faf-4af5-9be6-a88d0dc84ba4 |
| Area=4032 | Joint1=4319 | Joint2=4366 | Joint3=4367 | Joint4=4320 | GUID=8e300bcd-b86e-47af-89a0-2afbd191dd37 |
| Area=4033 | Joint1=4320 | Joint2=4367 | Joint3=4368 | Joint4=4321 | GUID=70a8425f-cd0e-4a89-b073-35766751b324 |
| Area=4034 | Joint1=4321 | Joint2=4368 | Joint3=4369 | Joint4=4322 | GUID=264d7574-57a3-4f85-af26-1fadc58580c2 |
| Area=4035 | Joint1=4322 | Joint2=4369 | Joint3=4370 | Joint4=4323 | GUID=243e4204-c9a5-477f-a5a2-ba594d80791b |
| Area=4036 | Joint1=4323 | Joint2=4370 | Joint3=4371 | Joint4=4324 | GUID=135e0477-600c-4285-bd87-6362c5f4dff5 |
| Area=4037 | Joint1=4324 | Joint2=4371 | Joint3=4372 | Joint4=4325 | GUID=6317dd28-f908-4d5d-b4d0-34580d733957 |
| Area=4038 | Joint1=4325 | Joint2=4372 | Joint3=4373 | Joint4=4326 | GUID=20d91368-fe78-48e1-95b3-361c1fc5f408 |
| Area=4039 | Joint1=4326 | Joint2=4373 | Joint3=4374 | Joint4=4327 | GUID=a5c9a10f-3261-42f6-a6a3-74a579b355a9 |
| Area=4040 | Joint1=4327 | Joint2=4374 | Joint3=4375 | Joint4=4328 | GUID=3edadc6d-6944-43fe-a691-96eea900bfb0 |
| Area=4041 | Joint1=4328 | Joint2=4375 | Joint3=4376 | Joint4=4329 | GUID=db4f61b3-0729-447f-8591-8f8110a22c5f |
| Area=4042 | Joint1=4329 | Joint2=4376 | Joint3=4377 | Joint4=4330 | GUID=85264409-a304-4369-837a-e52ae6d24330 |
| Area=4043 | Joint1=4330 | Joint2=4377 | Joint3=4378 | Joint4=4331 | GUID=73ebc689-e70b-4028-b638-b04bc592bc74 |
| Area=4044 | Joint1=4331 | Joint2=4378 | Joint3=4379 | Joint4=4332 | GUID=ed7be1fa-6b3b-4f17-8a61-5b086eca6dcb |
| Area=4045 | Joint1=4332 | Joint2=4379 | Joint3=4380 | Joint4=4333 | GUID=f544a7d5-289b-451a-aa82-306b4e4e366e |
| Area=4046 | Joint1=4333 | Joint2=4380 | Joint3=4381 | Joint4=4334 | GUID=fe5f709c-8544-4fd4-ae54-94fed8369737 |
| Area=4047 | Joint1=4334 | Joint2=4381 | Joint3=4382 | Joint4=4335 | GUID=5d29f830-54b7-4d6c-b038-de23c02d80d5 |
| Area=4048 | Joint1=4335 | Joint2=4382 | Joint3=4383 | Joint4=4336 | GUID=d6cc2a5f-9304-4b39-b737-5863bb851763 |
| Area=4049 | Joint1=4336 | Joint2=4383 | Joint3=4384 | Joint4=4337 | GUID=b29cc546-e8ae-438c-a89e-8c86f697645a |
| Area=4050 | Joint1=4337 | Joint2=4384 | Joint3=4385 | Joint4=4338 | GUID=19368038-2212-4625-92de-2a6d8f6bc243 |
| Area=4051 | Joint1=4338 | Joint2=4385 | Joint3=4386 | Joint4=4339 | GUID=d0e516bd-5ca9-43d5-ab04-0f647c9440d9 |
| Area=4052 | Joint1=4339 | Joint2=4386 | Joint3=4387 | Joint4=4340 | GUID=8cb80cd9-452c-4e50-91e3-0522384ed9c6 |
| Area=4053 | Joint1=4340 | Joint2=4387 | Joint3=4388 | Joint4=4341 | GUID=8b9bd372-d56b-4823-8986-00bca78e6df8 |
| Area=4054 | Joint1=4341 | Joint2=4388 | Joint3=4389 | Joint4=4342 | GUID=8353febb-7303-47b9-bf2c-440198e7bea7 |
| Area=4055 | Joint1=4342 | Joint2=4389 | Joint3=4390 | Joint4=4343 | GUID=720f98dd-f259-4aaf-bee2-c5df30e64ae4 |
| Area=4056 | Joint1=4343 | Joint2=4390 | Joint3=4391 | Joint4=4344 | GUID=962e130e-ebec-4b4e-bb76-d0dddef80d1e |
| Area=4057 | Joint1=4344 | Joint2=4391 | Joint3=4392 | Joint4=4345 | GUID=998b41fa-6bb0-4c20-96bb-71d7dc12c3a5 |
| Area=4058 | Joint1=4345 | Joint2=4392 | Joint3=4393 | Joint4=4346 | GUID=3ade9cd0-0b37-4e90-ab1d-03b350cf7bc0 |
| Area=4059 | Joint1=4347 | Joint2=4394 | Joint3=4395 | Joint4=4348 | GUID=84535e7c-006d-4893-9841-b02d35bc598f |
| Area=4060 | Joint1=4348 | Joint2=4395 | Joint3=4396 | Joint4=4349 | GUID=dacd328a-79b1-492a-af40-d30abcd4e691 |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=4061 | Joint1=4349 | Joint2=4396 | Joint3=4397 | Joint4=4350 | GUID=2b5f91fe-0a7a-4925-a32b-726764f2a376 |
| Area=4062 | Joint1=4350 | Joint2=4397 | Joint3=4398 | Joint4=4351 | GUID=4004c256-87fe-4738-86b9-de6b2024cc21 |
| Area=4063 | Joint1=4351 | Joint2=4398 | Joint3=4399 | Joint4=4352 | GUID=26dbdbe0-d28b-471b-900b-9513d6d6ad8d |
| Area=4064 | Joint1=4352 | Joint2=4399 | Joint3=4400 | Joint4=4353 | GUID=7ac53536-f124-4c36-bd5e-da1e43ba3243 |
| Area=4065 | Joint1=4353 | Joint2=4400 | Joint3=4401 | Joint4=4354 | GUID=5fd09ed4-2795-4ff0-8b8e-1708816f661b |
| Area=4066 | Joint1=4354 | Joint2=4401 | Joint3=4402 | Joint4=4355 | GUID=dc94430b-3719-4113-8771-7cb2292e250b |
| Area=4067 | Joint1=4355 | Joint2=4402 | Joint3=4403 | Joint4=4356 | GUID=ad271166-3505-414c-b5e2-7ac5b501a7ce |
| Area=4068 | Joint1=4356 | Joint2=4403 | Joint3=4404 | Joint4=4357 | GUID=63762a8a-e166-4d3c-bcc5-10c639b0107f |
| Area=4069 | Joint1=4357 | Joint2=4404 | Joint3=4405 | Joint4=4358 | GUID=d1900f95-3419-4ace-afd0-6f164fbe9952 |
| Area=4070 | Joint1=4358 | Joint2=4405 | Joint3=4406 | Joint4=4359 | GUID=1cf06e32-bbf1-44e2-8eae-fe010b623fa2 |
| Area=4071 | Joint1=4359 | Joint2=4406 | Joint3=4407 | Joint4=4360 | GUID=72393cc3-3a0a-4b60-bfd8-b5813ff5f661 |
| Area=4072 | Joint1=4360 | Joint2=4407 | Joint3=4408 | Joint4=4361 | GUID=79c6f300-0067-4154-b9da-1278fba0bbf1 |
| Area=4073 | Joint1=4361 | Joint2=4408 | Joint3=4409 | Joint4=4362 | GUID=ccccf5f8-63fe-4fe6-a3fc-d8d3b5875cc3 |
| Area=4074 | Joint1=4362 | Joint2=4409 | Joint3=4410 | Joint4=4363 | GUID=66db2fb0-9a78-4449-923c-580b137cf8e4 |
| Area=4075 | Joint1=4363 | Joint2=4410 | Joint3=4411 | Joint4=4364 | GUID=476364e8-1626-4cca-9313-5be4ab6695fe |
| Area=4076 | Joint1=4364 | Joint2=4411 | Joint3=4412 | Joint4=4365 | GUID=8801e6cc-9a1a-4ad9-b168-3224ff423639 |
| Area=4077 | Joint1=4365 | Joint2=4412 | Joint3=4413 | Joint4=4366 | GUID=bc97fb9-f439-4dff-a7b6-305690341892  |
| Area=4078 | Joint1=4366 | Joint2=4413 | Joint3=4414 | Joint4=4367 | GUID=9bf0e3c1-3c5e-43e3-b603-dbb441ae679d |
| Area=4079 | Joint1=4367 | Joint2=4414 | Joint3=4415 | Joint4=4368 | GUID=8310fd10-7236-4786-bba9-03f69355629b |
| Area=4080 | Joint1=4368 | Joint2=4415 | Joint3=4416 | Joint4=4369 | GUID=9c6c2a09-be69-4bdd-9542-a96cfa27b3d  |
| Area=4081 | Joint1=4369 | Joint2=4416 | Joint3=4417 | Joint4=4370 | GUID=9a70c5b1-305a-4a39-b15a-e1d1ce7d50b3 |
| Area=4082 | Joint1=4370 | Joint2=4417 | Joint3=4418 | Joint4=4371 | GUID=2fb6c052-59bd-4476-b675-20c6f1bbc186 |
| Area=4083 | Joint1=4371 | Joint2=4418 | Joint3=4419 | Joint4=4372 | GUID=ad1a662d-892c-4af4-92ef-18ce59cc75c3 |
| Area=4084 | Joint1=4372 | Joint2=4419 | Joint3=4420 | Joint4=4373 | GUID=7bb3629e-1b2a-49fc-b97e-42e39be8f2c4 |
| Area=4085 | Joint1=4373 | Joint2=4420 | Joint3=4421 | Joint4=4374 | GUID=44048606-366e-402d-8105-5edfc2664478 |
| Area=4086 | Joint1=4374 | Joint2=4421 | Joint3=4422 | Joint4=4375 | GUID=87be7918-0e8a-417b-a625-fd3ee73743f6 |
| Area=4087 | Joint1=4375 | Joint2=4422 | Joint3=4423 | Joint4=4376 | GUID=de3b86db-816d-4d6c-bcb0-fa5b5105cd4b |
| Area=4088 | Joint1=4376 | Joint2=4423 | Joint3=4424 | Joint4=4377 | GUID=28b69874-642a-46bd-887d-54518fe63247 |
| Area=4089 | Joint1=4377 | Joint2=4424 | Joint3=4425 | Joint4=4378 | GUID=457cf1c6-0f33-4585-ba36-61b7fea0bbfd |
| Area=4090 | Joint1=4378 | Joint2=4425 | Joint3=4426 | Joint4=4379 | GUID=2bbd81fb-659f-4d59-b1eb-3df820d24523 |
| Area=4091 | Joint1=4379 | Joint2=4426 | Joint3=4427 | Joint4=4380 | GUID=8a818b9e-48c7-4ffd-b1e7-a6ac88ea0593 |
| Area=4092 | Joint1=4380 | Joint2=4427 | Joint3=4428 | Joint4=4381 | GUID=e823f928-05e5-4485-8563-704c7c176529 |
| Area=4093 | Joint1=4381 | Joint2=4428 | Joint3=4429 | Joint4=4382 | GUID=d6967d0c-a6dc-4761-8a8e-78f4a86821bd |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=4094 Joint1=4382 Joint2=4429 Joint3=4430 Joint4=4383 GUID=b66aaaec-6c8f-407d-b997-1ef5f3fb7e16  
Area=4095 Joint1=4383 Joint2=4430 Joint3=4431 Joint4=4384 GUID=daca2b3f-e309-4dfb-88a5-55d7f85bd0f0  
Area=4096 Joint1=4384 Joint2=4431 Joint3=4432 Joint4=4385 GUID=b60327e2-6c56-431a-be1f-9a74e38af0da  
Area=4097 Joint1=4385 Joint2=4432 Joint3=4433 Joint4=4386 GUID=ebb1c941-36df-49a4-9ff8-d8bf0b7b01b6  
Area=4098 Joint1=4386 Joint2=4433 Joint3=4434 Joint4=4387 GUID=baf855ae-b584-4c5c-b6cb-526f47b2d1ef  
Area=4099 Joint1=4387 Joint2=4434 Joint3=4435 Joint4=4388 GUID=53164e89-33bf-4749-a117-3a3fbf6f850b  
Area=4100 Joint1=4388 Joint2=4435 Joint3=4436 Joint4=4389 GUID=1d080d48-2eea-4a49-8c70-04108a6ae1fd  
Area=4101 Joint1=4389 Joint2=4436 Joint3=4437 Joint4=4390 GUID=c595f82b-02de-455f-9652-c555c8bd703f  
Area=4102 Joint1=4390 Joint2=4437 Joint3=4438 Joint4=4391 GUID=d4faf6cd-6b3c-4071-ac88-ad692bfddcd3  
Area=4103 Joint1=4391 Joint2=4438 Joint3=4439 Joint4=4392 GUID=ad15f0a1-16b5-4623-bfc6-9e36ace87740  
Area=4104 Joint1=4392 Joint2=4439 Joint3=4440 Joint4=4393 GUID=759307ba-c64f-4a23-9193-c2bf37b01f27  
Area=4105 Joint1=4394 Joint2=4441 Joint3=4442 Joint4=4395 GUID=36e8659f-8aaf-4e09-9fbb-9e6a4134df6d  
Area=4106 Joint1=4395 Joint2=4442 Joint3=4443 Joint4=4396 GUID=e99e9537-bfb0-4739-8a97-a724353d0e9a  
Area=4107 Joint1=4396 Joint2=4443 Joint3=4444 Joint4=4397 GUID=d99638e4-153a-4057-aabe-fd82864f673b  
Area=4108 Joint1=4397 Joint2=4444 Joint3=4445 Joint4=4398 GUID=2c9e3bc1-9555-4c11-a8d0-1d8840e8f73e  
Area=4109 Joint1=4398 Joint2=4445 Joint3=4446 Joint4=4399 GUID=57822ce0-a22b-4a41-b5d1-ad863eeb32da  
Area=4110 Joint1=4399 Joint2=4446 Joint3=4447 Joint4=4400 GUID=3b27eca0-c4d4-4257-9589-362cafc7d92  
Area=4111 Joint1=4400 Joint2=4447 Joint3=4448 Joint4=4401 GUID=d2d8b785-b86f-423e-8c25-1dd9044cdce0  
Area=4112 Joint1=4401 Joint2=4448 Joint3=4449 Joint4=4402 GUID=862db02d-aa24-43c5-b3e7-e3d6f86fad6c  
Area=4113 Joint1=4402 Joint2=4449 Joint3=4450 Joint4=4403 GUID=1d8d6297-9cca-464c-a9f4-b392e5318ca5  
Area=4114 Joint1=4403 Joint2=4450 Joint3=4451 Joint4=4404 GUID=609da080-45c7-406f-94f3-a381cc9098dd  
Area=4115 Joint1=4404 Joint2=4451 Joint3=4452 Joint4=4405 GUID=7eb9cb6d-8a52-453f-b943-5272c6cca005  
Area=4116 Joint1=4405 Joint2=4452 Joint3=4453 Joint4=4406 GUID=be38c0ee-f974-4b09-b3ef-963a575e20d8  
Area=4117 Joint1=4406 Joint2=4453 Joint3=4454 Joint4=4407 GUID=5515a239-bfe8-4368-9c24-5fe0138e74ab  
Area=4118 Joint1=4407 Joint2=4454 Joint3=4455 Joint4=4408 GUID=9fbee60a-b95d-4290-92d3-50b1df34ee67  
Area=4119 Joint1=4408 Joint2=4455 Joint3=4456 Joint4=4409 GUID=7b3eb3ec-df0c-476d-866d-682cd31292c9  
Area=4120 Joint1=4409 Joint2=4456 Joint3=4457 Joint4=4410 GUID=742f0a97-1d3f-4d19-997d-5f570a983054  
Area=4121 Joint1=4410 Joint2=4457 Joint3=4458 Joint4=4411 GUID=3bb29c34-2e3b-4b71-8e2b-bb1da97e4dd6  
Area=4122 Joint1=4411 Joint2=4458 Joint3=4459 Joint4=4412 GUID=98d4837d-9502-495b-bf6e-64d762d54f26  
Area=4123 Joint1=4412 Joint2=4459 Joint3=4460 Joint4=4413 GUID=9a59207a-2fd1-493f-932e-3eee46644db4  
Area=4124 Joint1=4413 Joint2=4460 Joint3=4461 Joint4=4414 GUID=6e7dbe67-011f-4a6c-920b-a1487afa0046  
Area=4125 Joint1=4414 Joint2=4461 Joint3=4462 Joint4=4415 GUID=b47a1598-e075-43a9-8f9c-0461d7701e01  
Area=4126 Joint1=4415 Joint2=4462 Joint3=4463 Joint4=4416 GUID=78b0c934-8681-4e6e-90d9-28cf7f8a5803

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=4127 | Joint1=4416 | Joint2=4463 | Joint3=4464 | Joint4=4417 | GUID=3d52741e-5787-4909-b73a-cc636f1a9ac3 |
| Area=4128 | Joint1=4417 | Joint2=4464 | Joint3=4465 | Joint4=4418 | GUID=e0cfabcb-7e45-471f-b842-4e53daf57d1  |
| Area=4129 | Joint1=4418 | Joint2=4465 | Joint3=4466 | Joint4=4419 | GUID=6a6d630a-bbcd-4cde-a290-bd48df82c36e |
| Area=4130 | Joint1=4419 | Joint2=4466 | Joint3=4467 | Joint4=4420 | GUID=7689a0b3-873f-4b35-8dec-9a48dde51c2a |
| Area=4131 | Joint1=4420 | Joint2=4467 | Joint3=4468 | Joint4=4421 | GUID=0d101de1-9fcb-4611-847b-99d75a663e5f |
| Area=4132 | Joint1=4421 | Joint2=4468 | Joint3=4469 | Joint4=4422 | GUID=39d608fa-7683-4368-9c7a-e8fa8a14bc0f |
| Area=4133 | Joint1=4422 | Joint2=4469 | Joint3=4470 | Joint4=4423 | GUID=60255ffe-ff49-471a-825a-83da0c22e52a |
| Area=4134 | Joint1=4423 | Joint2=4470 | Joint3=4471 | Joint4=4424 | GUID=38879795-f1b0-441b-a852-16bb6e1177d7 |
| Area=4135 | Joint1=4424 | Joint2=4471 | Joint3=4472 | Joint4=4425 | GUID=0ba8f300-088c-4901-bab5-d73c07cc39b9 |
| Area=4136 | Joint1=4425 | Joint2=4472 | Joint3=4473 | Joint4=4426 | GUID=184e499a-3baf-4de0-bc8c-15e589c3a4f4 |
| Area=4137 | Joint1=4426 | Joint2=4473 | Joint3=4474 | Joint4=4427 | GUID=878ed97b-d855-4671-af67-107989a1d503 |
| Area=4138 | Joint1=4427 | Joint2=4474 | Joint3=4475 | Joint4=4428 | GUID=05fafdf8-7405-4f23-8868-3ffd7db339c3 |
| Area=4139 | Joint1=4428 | Joint2=4475 | Joint3=4476 | Joint4=4429 | GUID=e62367a5-03c1-4977-b659-cd702e561360 |
| Area=4140 | Joint1=4429 | Joint2=4476 | Joint3=4477 | Joint4=4430 | GUID=5c5573cc-800a-4eec-840d-ed1552377363 |
| Area=4141 | Joint1=4430 | Joint2=4477 | Joint3=4478 | Joint4=4431 | GUID=9ca12e5b-b8a7-45b6-ab48-364549beba63 |
| Area=4142 | Joint1=4431 | Joint2=4478 | Joint3=4479 | Joint4=4432 | GUID=7bbec950-6f3e-4bda-9d11-f2e13c50c5b1 |
| Area=4143 | Joint1=4432 | Joint2=4479 | Joint3=4480 | Joint4=4433 | GUID=28fc44b2-5910-4635-aecd-9c2733c251f6 |
| Area=4144 | Joint1=4433 | Joint2=4480 | Joint3=4481 | Joint4=4434 | GUID=60106949-2e96-4d63-9b5a-3c1c2918f95a |
| Area=4145 | Joint1=4434 | Joint2=4481 | Joint3=4482 | Joint4=4435 | GUID=fb9056bf-aa46-40f0-a943-5d3190aaa9ce |
| Area=4146 | Joint1=4435 | Joint2=4482 | Joint3=4483 | Joint4=4436 | GUID=a202b422-57e5-4913-a148-9291fa8d6132 |
| Area=4147 | Joint1=4436 | Joint2=4483 | Joint3=4484 | Joint4=4437 | GUID=28f8a079-ea1c-4a9c-985e-49108390f71f |
| Area=4148 | Joint1=4437 | Joint2=4484 | Joint3=4485 | Joint4=4438 | GUID=65d05099-505c-4842-b744-8517f7ca3c50 |
| Area=4149 | Joint1=4438 | Joint2=4485 | Joint3=4486 | Joint4=4439 | GUID=46e565ff-fb97-43e4-8469-dbf250fe4e62 |
| Area=4150 | Joint1=4439 | Joint2=4486 | Joint3=4487 | Joint4=4440 | GUID=0ac89f66-b650-41db-84c9-40b7e0667df0 |
| Area=4151 | Joint1=4441 | Joint2=4488 | Joint3=4489 | Joint4=4442 | GUID=d71c543c-c218-46fc-b88e-e00eef92dd29 |
| Area=4152 | Joint1=4442 | Joint2=4489 | Joint3=4490 | Joint4=4443 | GUID=93ec59d7-13d8-4346-ba6e-4966f434cd90 |
| Area=4153 | Joint1=4443 | Joint2=4490 | Joint3=4491 | Joint4=4444 | GUID=f3cb4ffc-a201-4c85-ac90-e220baa3b6e8 |
| Area=4154 | Joint1=4444 | Joint2=4491 | Joint3=4492 | Joint4=4445 | GUID=6fae08ff-920a-4d77-befd-4607d54458d0 |
| Area=4155 | Joint1=4445 | Joint2=4492 | Joint3=4493 | Joint4=4446 | GUID=f719b252-cd31-4550-b562-721951594753 |
| Area=4156 | Joint1=4446 | Joint2=4493 | Joint3=4494 | Joint4=4447 | GUID=91ff13eb-f00d-4aa1-9d40-343cd5f5f00c |
| Area=4157 | Joint1=4447 | Joint2=4494 | Joint3=4495 | Joint4=4448 | GUID=d5a27146-df14-4a9e-ac03-be90775aaca  |
| Area=4158 | Joint1=4448 | Joint2=4495 | Joint3=4496 | Joint4=4449 | GUID=2d859f3a-377a-4ab8-a9d1-b14fdfe5761  |
| Area=4159 | Joint1=4449 | Joint2=4496 | Joint3=4497 | Joint4=4450 | GUID=3c385a28-b555-426c-a543-104503ef9036 |
| Area=4160 | Joint1=4450 | Joint2=4497 | Joint3=4498 | Joint4=4451 | GUID=9bf4d206-1fa5-4f30-be45-1ab09260236b |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=4161<br>8567968f5348 | Joint1=4451 | Joint2=4498 | Joint3=4499 | Joint4=4452 | GUID=0e76f0d7-24c6-4646-bb6c-             |
| Area=4162<br>ee348ace3a1d | Joint1=4452 | Joint2=4499 | Joint3=4500 | Joint4=4453 | GUID=56392af7-f048-48b3-8660-             |
| Area=4163<br>dd67bdf5402b | Joint1=4453 | Joint2=4500 | Joint3=4501 | Joint4=4454 | GUID=c2ea5a9d-8268-4f5a-8949-             |
| Area=4164<br>77b61607b8a4 | Joint1=4454 | Joint2=4501 | Joint3=4502 | Joint4=4455 | GUID=e88a0573-bdf3-4168-a635-             |
| Area=4165                 | Joint1=4455 | Joint2=4502 | Joint3=4503 | Joint4=4456 | GUID=5490f0bb-effb-42da-ae76-1e1698faa8c7 |
| Area=4166<br>68aa98fcc67b | Joint1=4456 | Joint2=4503 | Joint3=4504 | Joint4=4457 | GUID=748402ec-ec0b-4462-b18a-             |
| Area=4167                 | Joint1=4457 | Joint2=4504 | Joint3=4505 | Joint4=4458 | GUID=ebfe6234-71fd-45b8-a338-492ebc1a9f45 |
| Area=4168<br>bd4f156c0c30 | Joint1=4458 | Joint2=4505 | Joint3=4506 | Joint4=4459 | GUID=50b8b1b3-753d-47d5-a187-             |
| Area=4169<br>b4cc1e34a240 | Joint1=4459 | Joint2=4506 | Joint3=4507 | Joint4=4460 | GUID=4e7f382f-6952-465e-b363-             |
| Area=4170                 | Joint1=4460 | Joint2=4507 | Joint3=4508 | Joint4=4461 | GUID=1c6fe9c7-2e1e-43ef-b877-500a40fe90a8 |
| Area=4171                 | Joint1=4461 | Joint2=4508 | Joint3=4509 | Joint4=4462 | GUID=ea18f84a-342b-4b20-9a26-fba44169f524 |
| Area=4172<br>ec238793f35c | Joint1=4462 | Joint2=4509 | Joint3=4510 | Joint4=4463 | GUID=516b1ed1-8ec1-4f1d-977e-             |
| Area=4173<br>36f946284c98 | Joint1=4463 | Joint2=4510 | Joint3=4511 | Joint4=4464 | GUID=10ae5a4b-93a4-4ed0-a4b6-             |
| Area=4174                 | Joint1=4464 | Joint2=4511 | Joint3=4512 | Joint4=4465 | GUID=3e4c28b4-1597-4918-bfba-f8f83d611ece |
| Area=4175<br>59a9dab28ba1 | Joint1=4465 | Joint2=4512 | Joint3=4513 | Joint4=4466 | GUID=7b8072d2-5b2c-481e-b144-             |
| Area=4176                 | Joint1=4466 | Joint2=4513 | Joint3=4514 | Joint4=4467 | GUID=d080f5d7-4e18-495d-9c6f-f39b251f80c8 |
| Area=4177<br>49aad579f42c | Joint1=4467 | Joint2=4514 | Joint3=4515 | Joint4=4468 | GUID=6948383b-e629-417b-909e-             |
| Area=4178<br>eafd6d42bbc7 | Joint1=4468 | Joint2=4515 | Joint3=4516 | Joint4=4469 | GUID=a6569ee6-8776-4467-ab10-             |
| Area=4179                 | Joint1=4469 | Joint2=4516 | Joint3=4517 | Joint4=4470 | GUID=9d247f9d-8ccb-44bf-a4be-b7581af773b8 |
| Area=4180<br>632e8a385b67 | Joint1=4470 | Joint2=4517 | Joint3=4518 | Joint4=4471 | GUID=d590ef61-b8c8-4ee5-ad3c-             |
| Area=4181<br>b88e2e3d3809 | Joint1=4471 | Joint2=4518 | Joint3=4519 | Joint4=4472 | GUID=efd118ad-36b5-4502-b015-             |
| Area=4182<br>9560c86dafda | Joint1=4472 | Joint2=4519 | Joint3=4520 | Joint4=4473 | GUID=6b8631eb-2b6c-4074-a3c2-             |
| Area=4183                 | Joint1=4473 | Joint2=4520 | Joint3=4521 | Joint4=4474 | GUID=92f8dcef-ab78-4f55-b0c8-45835c76a9c9 |
| Area=4184                 | Joint1=4474 | Joint2=4521 | Joint3=4522 | Joint4=4475 | GUID=bac75d5f-d322-4c98-8c64-625cabd315fe |
| Area=4185<br>0168769d17b7 | Joint1=4475 | Joint2=4522 | Joint3=4523 | Joint4=4476 | GUID=4c7661ea-b8e4-4ae8-9ec1-             |
| Area=4186                 | Joint1=4476 | Joint2=4523 | Joint3=4524 | Joint4=4477 | GUID=bee664cf-e6c9-4322-bade-a5981dcaf8ce |
| Area=4187<br>7799e6c9105f | Joint1=4477 | Joint2=4524 | Joint3=4525 | Joint4=4478 | GUID=1bbdda9-6ae6-4a18-aae9-              |
| Area=4188                 | Joint1=4478 | Joint2=4525 | Joint3=4526 | Joint4=4479 | GUID=c56a0e8c-a04e-4ba9-b6e4-44aaf10effac |
| Area=4189                 | Joint1=4479 | Joint2=4526 | Joint3=4527 | Joint4=4480 | GUID=1f5e06f1-8bf0-4df4-84c6-a40ddb42c275 |
| Area=4190<br>76ea7cc6419b | Joint1=4480 | Joint2=4527 | Joint3=4528 | Joint4=4481 | GUID=9cdf8738-2067-4958-8e59-             |
| Area=4191                 | Joint1=4481 | Joint2=4528 | Joint3=4529 | Joint4=4482 | GUID=cce97669-a5ad-4760-961e-a89f2780f1f8 |
| Area=4192<br>1178c3109e3e | Joint1=4482 | Joint2=4529 | Joint3=4530 | Joint4=4483 | GUID=4f23b3bd-3f2c-4108-96ca-             |
| Area=4193<br>46c2926059d9 | Joint1=4483 | Joint2=4530 | Joint3=4531 | Joint4=4484 | GUID=ea5d8491-6fd5-4752-93c3-             |
| Area=4194<br>3f773a1a77c6 | Joint1=4484 | Joint2=4531 | Joint3=4532 | Joint4=4485 | GUID=51a8811a-4406-4e05-9c7e-             |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                            |
|---------------------------|-------------|-------------|-------------|-------------|--------------------------------------------|
| Area=4195<br>55782d16386d | Joint1=4485 | Joint2=4532 | Joint3=4533 | Joint4=4486 | GUID=119277de-5a58-4d3c-8eb0-              |
| Area=4196<br>f5338669c01d | Joint1=4486 | Joint2=4533 | Joint3=4534 | Joint4=4487 | GUID=0e8b94dd-7e13-4aba-9dd2-              |
| Area=4197<br>eb998293cab1 | Joint1=4488 | Joint2=4535 | Joint3=4536 | Joint4=4489 | GUID=32fd2682-d2e1-4e5f-839d-              |
| Area=4198                 | Joint1=4489 | Joint2=4536 | Joint3=4537 | Joint4=4490 | GUID=6b717cd9-fdb7-43c0-a0c3-f9936df16b58  |
| Area=4199                 | Joint1=4490 | Joint2=4537 | Joint3=4538 | Joint4=4491 | GUID=c54c3aac-f635-46c0-aae8-c3af35e31392  |
| Area=4200<br>a88076f57097 | Joint1=4491 | Joint2=4538 | Joint3=4539 | Joint4=4492 | GUID=964af185-5479-42ee-bc19-              |
| Area=4201                 | Joint1=4492 | Joint2=4539 | Joint3=4540 | Joint4=4493 | GUID=bb1bfe8f-e2b5-46db-8f1b-2f2d9197f86b  |
| Area=4202                 | Joint1=4493 | Joint2=4540 | Joint3=4541 | Joint4=4494 | GUID=ebecc196-0b2a-4c8f-9aac-437f8ff3f2fe  |
| Area=4203                 | Joint1=4494 | Joint2=4541 | Joint3=4542 | Joint4=4495 | GUID=fdb4a1a7-d581-4105-ae3d-d4efc5050bfd  |
| Area=4204<br>a24db52d60ce | Joint1=4495 | Joint2=4542 | Joint3=4543 | Joint4=4496 | GUID=433c5350-1969-4190-b400-              |
| Area=4205<br>3019451c21be | Joint1=4496 | Joint2=4543 | Joint3=4544 | Joint4=4497 | GUID=9372f482-4d8d-4203-bd6f-              |
| Area=4206<br>28991aed9c16 | Joint1=4497 | Joint2=4544 | Joint3=4545 | Joint4=4498 | GUID=a6452e6c-04db-44fb-a29f-              |
| Area=4207<br>f781228f0170 | Joint1=4498 | Joint2=4545 | Joint3=4546 | Joint4=4499 | GUID=67ccc19d-8109-4d02-985b-              |
| Area=4208<br>a184c92973df | Joint1=4499 | Joint2=4546 | Joint3=4547 | Joint4=4500 | GUID=d9c44c9e-168e-4fe7-a21e-              |
| Area=4209                 | Joint1=4500 | Joint2=4547 | Joint3=4548 | Joint4=4501 | GUID=bab90f68-efa0-4562-b70c-25c76d3bd4f8  |
| Area=4210<br>88e138f2294d | Joint1=4501 | Joint2=4548 | Joint3=4549 | Joint4=4502 | GUID=49bde47-47cf-4448-803d-               |
| Area=4211<br>87704b129cd0 | Joint1=4502 | Joint2=4549 | Joint3=4550 | Joint4=4503 | GUID=0ac14aa5-2b91-41ea-8188-              |
| Area=4212                 | Joint1=4503 | Joint2=4550 | Joint3=4551 | Joint4=4504 | GUID=3e00d6f8-198e-4fb0-83dc-71f3c4663fe0  |
| Area=4213                 | Joint1=4504 | Joint2=4551 | Joint3=4552 | Joint4=4505 | GUID=6a0d9002-f177-40f2-bf91-834cf75aec23  |
| Area=4214<br>97d7c4e1b1c9 | Joint1=4505 | Joint2=4552 | Joint3=4553 | Joint4=4506 | GUID=99496a3e-4a08-4820-88c5-              |
| Area=4215<br>71ba3ab03819 | Joint1=4506 | Joint2=4553 | Joint3=4554 | Joint4=4507 | GUID=40535fda-4ca3-4da0-ab80-              |
| Area=4216                 | Joint1=4507 | Joint2=4554 | Joint3=4555 | Joint4=4508 | GUID=182e1d21-6473-4cf6-98ef-52c2e41f4029  |
| Area=4217                 | Joint1=4508 | Joint2=4555 | Joint3=4556 | Joint4=4509 | GUID=20323b13-2fde-4307-904f-a69112fbdbe   |
| Area=4218<br>d02ae0f0756e | Joint1=4509 | Joint2=4556 | Joint3=4557 | Joint4=4510 | GUID=fe47cb6e-82db-4504-ba44-              |
| Area=4219                 | Joint1=4510 | Joint2=4557 | Joint3=4558 | Joint4=4511 | GUID=5cbb89ca-f695-46e6-abd9-ac5c16a3fc33  |
| Area=4220<br>51ecc6155d93 | Joint1=4511 | Joint2=4558 | Joint3=4559 | Joint4=4512 | GUID=ac13e518-74f3-410a-819c-              |
| Area=4221<br>052aa57ad093 | Joint1=4512 | Joint2=4559 | Joint3=4560 | Joint4=4513 | GUID=6949025f-19dd-44c7-bfad-              |
| Area=4222                 | Joint1=4513 | Joint2=4560 | Joint3=4561 | Joint4=4514 | GUID=b09d0443-fcf7-4924-b0c1-fe70dbda588d  |
| Area=4223<br>e29abc3f66b5 | Joint1=4514 | Joint2=4561 | Joint3=4562 | Joint4=4515 | GUID=e12a165b-fbd1-42d0-95e4-              |
| Area=4224                 | Joint1=4515 | Joint2=4562 | Joint3=4563 | Joint4=4516 | GUID=50a9ef4e-208a-4cd2-bd8c-eaef0ef43ad4  |
| Area=4225<br>be05042f22ab | Joint1=4516 | Joint2=4563 | Joint3=4564 | Joint4=4517 | GUID=36b67efd-b02a-4c63-996c-              |
| Area=4226                 | Joint1=4517 | Joint2=4564 | Joint3=4565 | Joint4=4518 | GUID=1ea3ca10-1764-4c51-ac44-abbcbcf0b1f2b |
| Area=4227                 | Joint1=4518 | Joint2=4565 | Joint3=4566 | Joint4=4519 | GUID=3fd70bab-a0a9-46e4-86bb-a743d3f0f998  |
| Area=4228<br>9804058afcca | Joint1=4519 | Joint2=4566 | Joint3=4567 | Joint4=4520 | GUID=d4b93752-69a7-420a-ade2-              |
| Area=4229<br>f2609c52c3a2 | Joint1=4520 | Joint2=4567 | Joint3=4568 | Joint4=4521 | GUID=467b6e32-7a5c-408e-988f-              |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=4230<br>6d61b4b84000 | Joint1=4521 | Joint2=4568 | Joint3=4569 | Joint4=4522 | GUID=162c3759-d241-43c3-a13a-             |
| Area=4231<br>148f48b0520b | Joint1=4522 | Joint2=4569 | Joint3=4570 | Joint4=4523 | GUID=a7697cd6-d650-4cef-9da6-             |
| Area=4232<br>082785de8537 | Joint1=4523 | Joint2=4570 | Joint3=4571 | Joint4=4524 | GUID=1ae146b9-c2d3-4c28-84e5-             |
| Area=4233<br>a4d1c217352e | Joint1=4524 | Joint2=4571 | Joint3=4572 | Joint4=4525 | GUID=85104ea3-a688-44c4-a212-             |
| Area=4234                 | Joint1=4525 | Joint2=4572 | Joint3=4573 | Joint4=4526 | GUID=9ecd752d-fc37-4a9d-b60b-4315470acffa |
| Area=4235<br>449ddbba7677 | Joint1=4526 | Joint2=4573 | Joint3=4574 | Joint4=4527 | GUID=8ac52236-3450-4f57-b4a8-             |
| Area=4236<br>16eab3b57608 | Joint1=4527 | Joint2=4574 | Joint3=4575 | Joint4=4528 | GUID=92b5d93d-85bd-4100-82a5-             |
| Area=4237<br>495a43915a9c | Joint1=4528 | Joint2=4575 | Joint3=4576 | Joint4=4529 | GUID=5740becf-5645-4d20-bc92-             |
| Area=4238                 | Joint1=4529 | Joint2=4576 | Joint3=4577 | Joint4=4530 | GUID=a033fd6d-b3da-4f38-bd7f-465672e97f08 |
| Area=4239                 | Joint1=4530 | Joint2=4577 | Joint3=4578 | Joint4=4531 | GUID=22fbaeaa-6aa7-4ea8-b885-0af75d2c0a4f |
| Area=4240<br>17beec2113b1 | Joint1=4531 | Joint2=4578 | Joint3=4579 | Joint4=4532 | GUID=25a0b988-c245-4338-8231-             |
| Area=4241<br>d71623d86551 | Joint1=4532 | Joint2=4579 | Joint3=4580 | Joint4=4533 | GUID=b40ede9e-f844-4881-8dc7-             |
| Area=4242<br>4e411e0cf892 | Joint1=4533 | Joint2=4580 | Joint3=4581 | Joint4=4534 | GUID=35973664-b1ea-47c5-88af-             |
| Area=4243<br>059dcdc8e9d8 | Joint1=4535 | Joint2=4582 | Joint3=4583 | Joint4=4536 | GUID=e628e745-32e3-4b30-b2c9-             |
| Area=4244<br>be70547ccbe0 | Joint1=4536 | Joint2=4583 | Joint3=4584 | Joint4=4537 | GUID=3d3a109c-4755-4c4c-b7ac-             |
| Area=4245<br>a673e0daebd8 | Joint1=4537 | Joint2=4584 | Joint3=4585 | Joint4=4538 | GUID=26cd5885-b5b0-44de-9fdf-             |
| Area=4246                 | Joint1=4538 | Joint2=4585 | Joint3=4586 | Joint4=4539 | GUID=32e446f0-eb2b-450f-8cb0-f3c60816f808 |
| Area=4247<br>e2c699a8bd4a | Joint1=4539 | Joint2=4586 | Joint3=4587 | Joint4=4540 | GUID=245d2e9e-3a30-416b-8c20-             |
| Area=4248<br>bccbb86e17eb | Joint1=4540 | Joint2=4587 | Joint3=4588 | Joint4=4541 | GUID=9af0c9e6-3cd9-428b-8317-             |
| Area=4249<br>75444e084eb2 | Joint1=4541 | Joint2=4588 | Joint3=4589 | Joint4=4542 | GUID=4e6c2c98-3567-4b06-8c74-             |
| Area=4250                 | Joint1=4542 | Joint2=4589 | Joint3=4590 | Joint4=4543 | GUID=54028816-83fc-495a-af9c-4ec0b74e5dce |
| Area=4251<br>462603357805 | Joint1=4543 | Joint2=4590 | Joint3=4591 | Joint4=4544 | GUID=a0989331-f009-4996-8124-             |
| Area=4252<br>e3ced5c70087 | Joint1=4544 | Joint2=4591 | Joint3=4592 | Joint4=4545 | GUID=b3e12c43-3371-4c4f-9d79-             |
| Area=4253                 | Joint1=4545 | Joint2=4592 | Joint3=4593 | Joint4=4546 | GUID=562c6885-76f6-426f-9f8a-9db7afef428e |
| Area=4254<br>7d3563d7844e | Joint1=4546 | Joint2=4593 | Joint3=4594 | Joint4=4547 | GUID=c73454ae-6678-4efa-8953-             |
| Area=4255<br>29b98f633e57 | Joint1=4547 | Joint2=4594 | Joint3=4595 | Joint4=4548 | GUID=b905a98d-c52f-4a73-8c3a-             |
| Area=4256                 | Joint1=4548 | Joint2=4595 | Joint3=4596 | Joint4=4549 | GUID=e4d4974f-cda3-47c2-b4d2-bc7f0228b8f3 |
| Area=4257                 | Joint1=4549 | Joint2=4596 | Joint3=4597 | Joint4=4550 | GUID=311cdf7d-d054-4329-bdfe-5de8362ff773 |
| Area=4258<br>513942e357f8 | Joint1=4550 | Joint2=4597 | Joint3=4598 | Joint4=4551 | GUID=0fc43b29-2a38-49a9-bb3c-             |
| Area=4259<br>8f89390b6e6d | Joint1=4551 | Joint2=4598 | Joint3=4599 | Joint4=4552 | GUID=9ab8725f-817c-429a-8a67-             |
| Area=4260<br>b0d0bb04413a | Joint1=4552 | Joint2=4599 | Joint3=4600 | Joint4=4553 | GUID=db73eb7a-24e7-41bf-b0f2-             |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=4261 | Joint1=4553 | Joint2=4600 | Joint3=4601 | Joint4=4554 | GUID=c9d7721e-3211-478c-a139-efc99a4de809 |
| Area=4262 | Joint1=4554 | Joint2=4601 | Joint3=4602 | Joint4=4555 | GUID=dd6feb80-321f-4b5e-8a31-eed11a473971 |
| Area=4263 | Joint1=4555 | Joint2=4602 | Joint3=4603 | Joint4=4556 | GUID=02d711d7-2533-4d4d-ba76-d55dc6d1fe00 |
| Area=4264 | Joint1=4556 | Joint2=4603 | Joint3=4604 | Joint4=4557 | GUID=8f3449dd-d864-433c-8508-1aefcef2cec0 |
| Area=4265 | Joint1=4557 | Joint2=4604 | Joint3=4605 | Joint4=4558 | GUID=f68c3bf9-a4b6-40dd-b780-05ebe4cc7307 |
| Area=4266 | Joint1=4558 | Joint2=4605 | Joint3=4606 | Joint4=4559 | GUID=c9a2322c-6270-46f6-a710-22cc487cfa79 |
| Area=4267 | Joint1=4559 | Joint2=4606 | Joint3=4607 | Joint4=4560 | GUID=152c9e03-cee9-46ed-9a2e-17290b9db430 |
| Area=4268 | Joint1=4560 | Joint2=4607 | Joint3=4608 | Joint4=4561 | GUID=95e6858f-4c9d-4930-80e6-380ad3e4cf0c |
| Area=4269 | Joint1=4561 | Joint2=4608 | Joint3=4609 | Joint4=4562 | GUID=3df4fc7e-25fa-44bc-a0f5-143ec013f963 |
| Area=4270 | Joint1=4562 | Joint2=4609 | Joint3=4610 | Joint4=4563 | GUID=d8499753-68b0-4b09-9d80-139d9b36c32b |
| Area=4271 | Joint1=4563 | Joint2=4610 | Joint3=4611 | Joint4=4564 | GUID=7a5fbee1-bf9c-42ce-b534-ec5458a2f91b |
| Area=4272 | Joint1=4564 | Joint2=4611 | Joint3=4612 | Joint4=4565 | GUID=50eafa79-2f1d-477a-a7d5-f64c2be8f519 |
| Area=4273 | Joint1=4565 | Joint2=4612 | Joint3=4613 | Joint4=4566 | GUID=25bb089e-48a1-4d3d-a1b8-f4200bcd5747 |
| Area=4274 | Joint1=4566 | Joint2=4613 | Joint3=4614 | Joint4=4567 | GUID=f9aac28b-59bf-40f6-867a-a103f8b6c5cb |
| Area=4275 | Joint1=4567 | Joint2=4614 | Joint3=4615 | Joint4=4568 | GUID=14edd1c1-3a7f-40cd-99a0-f351e067cf5d |
| Area=4276 | Joint1=4568 | Joint2=4615 | Joint3=4616 | Joint4=4569 | GUID=daf31e9e-2e64-4f01-a034-11e380148111 |
| Area=4277 | Joint1=4569 | Joint2=4616 | Joint3=4617 | Joint4=4570 | GUID=a212947e-1a1e-4fce-9166-24748598a09c |
| Area=4278 | Joint1=4570 | Joint2=4617 | Joint3=4618 | Joint4=4571 | GUID=ec5607e1-8230-45cf-bcd0-90ed42c50555 |
| Area=4279 | Joint1=4571 | Joint2=4618 | Joint3=4619 | Joint4=4572 | GUID=cebf533d-9da2-44c2-8dae-6b1c923e97d2 |
| Area=4280 | Joint1=4572 | Joint2=4619 | Joint3=4620 | Joint4=4573 | GUID=c37a5a1e-dbc6-4c88-9ca3-d4a098b3d174 |
| Area=4281 | Joint1=4573 | Joint2=4620 | Joint3=4621 | Joint4=4574 | GUID=48371cd8-bdcf-4d02-b105-844f57b0256e |
| Area=4282 | Joint1=4574 | Joint2=4621 | Joint3=4622 | Joint4=4575 | GUID=68135c3f-29bc-4f1f-9cc1-467c4c2da0ce |
| Area=4283 | Joint1=4575 | Joint2=4622 | Joint3=4623 | Joint4=4576 | GUID=24898d5e-45c1-4099-b1dd-fffa46add494 |
| Area=4284 | Joint1=4576 | Joint2=4623 | Joint3=4624 | Joint4=4577 | GUID=c8669eaf-4e54-4f83-be5a-f6f15116dd11 |
| Area=4285 | Joint1=4577 | Joint2=4624 | Joint3=4625 | Joint4=4578 | GUID=67baed42-4b10-43dd-a9db-c064a02c3a46 |
| Area=4286 | Joint1=4578 | Joint2=4625 | Joint3=4626 | Joint4=4579 | GUID=e995812a-79a2-4809-908e-22c38ae109b7 |
| Area=4287 | Joint1=4579 | Joint2=4626 | Joint3=4627 | Joint4=4580 | GUID=01c152f9-5781-46d8-a076-d76594fd0f61 |
| Area=4288 | Joint1=4580 | Joint2=4627 | Joint3=4628 | Joint4=4581 | GUID=b88a386b-fde7-4386-aa7d-d4b577e7e287 |
| Area=4289 | Joint1=4582 | Joint2=4629 | Joint3=4630 | Joint4=4583 | GUID=70b429b0-3a91-4861-9513-d8a6d0a616ea |
| Area=4290 | Joint1=4583 | Joint2=4630 | Joint3=4631 | Joint4=4584 | GUID=50f4215c-9365-44d7-a6f7-35d63560ddc0 |
| Area=4291 | Joint1=4584 | Joint2=4631 | Joint3=4632 | Joint4=4585 | GUID=b7b49cec-9a42-4ba4-900f-4824ece2b7ec |
| Area=4292 | Joint1=4585 | Joint2=4632 | Joint3=4633 | Joint4=4586 | GUID=ab59ac53-f654-4927-b6e3-73b1821df4ad |
| Area=4293 | Joint1=4586 | Joint2=4633 | Joint3=4634 | Joint4=4587 | GUID=993a9d95-a603-4a38-ba23-63703358760f |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=4294 | Joint1=4587 | Joint2=4634 | Joint3=4635 | Joint4=4588 | GUID=24bb23f3-7b62-4288-8b18-f3bec0aff47a |
| Area=4295 | Joint1=4588 | Joint2=4635 | Joint3=4636 | Joint4=4589 | GUID=5d63aac3-b07e-46bb-aadf-881ace154688 |
| Area=4296 | Joint1=4589 | Joint2=4636 | Joint3=4637 | Joint4=4590 | GUID=e4160148-6ae7-4651-a7b9-45f942788ed8 |
| Area=4297 | Joint1=4590 | Joint2=4637 | Joint3=4638 | Joint4=4591 | GUID=462c20fe-5547-4e85-b1ae-e08d722a816e |
| Area=4298 | Joint1=4591 | Joint2=4638 | Joint3=4639 | Joint4=4592 | GUID=cc4fd8f0-1927-4207-927d-fd981f43c374 |
| Area=4299 | Joint1=4592 | Joint2=4639 | Joint3=4640 | Joint4=4593 | GUID=d778609f-d947-422c-a2d4-73d773184c8b |
| Area=4300 | Joint1=4593 | Joint2=4640 | Joint3=4641 | Joint4=4594 | GUID=59510f63-0b6f-415a-9619-7c494a25dd88 |
| Area=4301 | Joint1=4594 | Joint2=4641 | Joint3=4642 | Joint4=4595 | GUID=1c4dc00e-f49d-44d9-9af8-a4aa864278d9 |
| Area=4302 | Joint1=4595 | Joint2=4642 | Joint3=4643 | Joint4=4596 | GUID=a1cf3b6f-58dc-456d-b46a-5803eb8be9f3 |
| Area=4303 | Joint1=4596 | Joint2=4643 | Joint3=4644 | Joint4=4597 | GUID=609576cc-501f-4111-b1d5-90314c6421a9 |
| Area=4304 | Joint1=4597 | Joint2=4644 | Joint3=4645 | Joint4=4598 | GUID=1fc40201-031b-4981-8760-6d87b6462daf |
| Area=4305 | Joint1=4598 | Joint2=4645 | Joint3=4646 | Joint4=4599 | GUID=07fdb0a3-b936-4c62-9689-e07a745d330f |
| Area=4306 | Joint1=4599 | Joint2=4646 | Joint3=4647 | Joint4=4600 | GUID=c4165734-25c8-49f3-b4ac-34541798a525 |
| Area=4307 | Joint1=4600 | Joint2=4647 | Joint3=4648 | Joint4=4601 | GUID=9e699ec3-ac6f-40f7-a93d-6c1019484864 |
| Area=4308 | Joint1=4601 | Joint2=4648 | Joint3=4649 | Joint4=4602 | GUID=9446ad0e-15c4-454c-a3d7-6b7b4f67b396 |
| Area=4309 | Joint1=4602 | Joint2=4649 | Joint3=4650 | Joint4=4603 | GUID=456a5878-51e4-4dd6-b3f8-5db8ce2f5624 |
| Area=4310 | Joint1=4603 | Joint2=4650 | Joint3=4651 | Joint4=4604 | GUID=2ca792da-8dac-47df-896b-ea9b2b34acc7 |
| Area=4311 | Joint1=4604 | Joint2=4651 | Joint3=4652 | Joint4=4605 | GUID=48d26db0-af2a-4bf8-966c-d3121fde6db1 |
| Area=4312 | Joint1=4605 | Joint2=4652 | Joint3=4653 | Joint4=4606 | GUID=f2082cfe-7c39-4ad0-9470-290eaa0d0978 |
| Area=4313 | Joint1=4606 | Joint2=4653 | Joint3=4654 | Joint4=4607 | GUID=01a07d0c-4c15-4ec6-a49f-0fb5805c05a9 |
| Area=4314 | Joint1=4607 | Joint2=4654 | Joint3=4655 | Joint4=4608 | GUID=a37c8333-1513-4a2c-9d45-aedc7a026    |
| Area=4315 | Joint1=4608 | Joint2=4655 | Joint3=4656 | Joint4=4609 | GUID=aa4e7cb9-1a3b-45c3-ade2-312598b3d4c0 |
| Area=4316 | Joint1=4609 | Joint2=4656 | Joint3=4657 | Joint4=4610 | GUID=99e69f76-fbf6-4d58-b9ce-b600dd64a57c |
| Area=4317 | Joint1=4610 | Joint2=4657 | Joint3=4658 | Joint4=4611 | GUID=df8cbcf4-906d-4783-882c-95ba423612e6 |
| Area=4318 | Joint1=4611 | Joint2=4658 | Joint3=4659 | Joint4=4612 | GUID=024a520b-7174-476a-a500-fd6dcd9fc449 |
| Area=4319 | Joint1=4612 | Joint2=4659 | Joint3=4660 | Joint4=4613 | GUID=23e15812-74d9-4145-bf6e-5b2cefb30063 |
| Area=4320 | Joint1=4613 | Joint2=4660 | Joint3=4661 | Joint4=4614 | GUID=1a4e0a3f-7ac0-4674-b867-2da9ade07939 |
| Area=4321 | Joint1=4614 | Joint2=4661 | Joint3=4662 | Joint4=4615 | GUID=6ebe3d1f-8c65-452d-978e-793a1f887494 |
| Area=4322 | Joint1=4615 | Joint2=4662 | Joint3=4663 | Joint4=4616 | GUID=3cbe8899-2711-450e-b0b8-2a18967815f0 |
| Area=4323 | Joint1=4616 | Joint2=4663 | Joint3=4664 | Joint4=4617 | GUID=e3d37fad-c43d-40eb-8986-0c8b32bf7117 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                            |
|-----------|-------------|-------------|-------------|-------------|--------------------------------------------|
| Area=4324 | Joint1=4617 | Joint2=4664 | Joint3=4665 | Joint4=4618 | GUID=612c17e4-f3e4-4b7d-8814-9cb1db272bb7  |
| Area=4325 | Joint1=4618 | Joint2=4665 | Joint3=4666 | Joint4=4619 | GUID=34fb6aeb-f666-4f7e-b26b-ee4c4d6797c5  |
| Area=4326 | Joint1=4619 | Joint2=4666 | Joint3=4667 | Joint4=4620 | GUID=b5b10795-604e-46fd-a46e-a61d163b76ce  |
| Area=4327 | Joint1=4620 | Joint2=4667 | Joint3=4668 | Joint4=4621 | GUID=e3962eeb-e089-432f-8096-ca6e59655db7  |
| Area=4328 | Joint1=4621 | Joint2=4668 | Joint3=4669 | Joint4=4622 | GUID=c73ce009-20fc-4161-bde4-279224e0816e  |
| Area=4329 | Joint1=4622 | Joint2=4669 | Joint3=4670 | Joint4=4623 | GUID=cdc6a57c-9753-4cf1-82f0-b10264e8327c  |
| Area=4330 | Joint1=4623 | Joint2=4670 | Joint3=4671 | Joint4=4624 | GUID=30287e08-0f61-4091-919c-09e40f803fc0  |
| Area=4331 | Joint1=4624 | Joint2=4671 | Joint3=4672 | Joint4=4625 | GUID=91e8d30f-8741-42c3-969f-50612b923acc  |
| Area=4332 | Joint1=4625 | Joint2=4672 | Joint3=4673 | Joint4=4626 | GUID=be2059d7-7b8e-484b-8fb4-ed7757449604  |
| Area=4333 | Joint1=4626 | Joint2=4673 | Joint3=4674 | Joint4=4627 | GUID=f10f4c99-77f9-491c-a5e8-bed44686de65  |
| Area=4334 | Joint1=4627 | Joint2=4674 | Joint3=4675 | Joint4=4628 | GUID=c830437f-1dd1-457a-a9f0-7e282147688a  |
| Area=4335 | Joint1=4629 | Joint2=4676 | Joint3=4677 | Joint4=4630 | GUID=e806be7c-1720-491c-99ac-40a5c2d7b5f4  |
| Area=4336 | Joint1=4630 | Joint2=4677 | Joint3=4678 | Joint4=4631 | GUID=0f03722c-aa0c-4e3d-b106-520cf17f10bc  |
| Area=4337 | Joint1=4631 | Joint2=4678 | Joint3=4679 | Joint4=4632 | GUID=c189382e-c31a-4823-9617-4bd1bf072ed8  |
| Area=4338 | Joint1=4632 | Joint2=4679 | Joint3=4680 | Joint4=4633 | GUID=c8edff68-52ff-4333-9786-f271aa6c9893  |
| Area=4339 | Joint1=4633 | Joint2=4680 | Joint3=4681 | Joint4=4634 | GUID=d832951c-9637-42b9-bac2-ae093b0080f5  |
| Area=4340 | Joint1=4634 | Joint2=4681 | Joint3=4682 | Joint4=4635 | GUID=5cc39289-f482-4ce0-8c19-6421842facad  |
| Area=4341 | Joint1=4635 | Joint2=4682 | Joint3=4683 | Joint4=4636 | GUID=05984def-58f2-4ce3-a4a4-d3c33c2153f7  |
| Area=4342 | Joint1=4636 | Joint2=4683 | Joint3=4684 | Joint4=4637 | GUID=8a13693c-16f7-4f64-a6d2-9354763876e7  |
| Area=4343 | Joint1=4637 | Joint2=4684 | Joint3=4685 | Joint4=4638 | GUID=7c56824b-6afc-4746-8851-e3360edd03b7  |
| Area=4344 | Joint1=4638 | Joint2=4685 | Joint3=4686 | Joint4=4639 | GUID=92219890-2107-4b80-87b8-68404ad84c7a  |
| Area=4345 | Joint1=4639 | Joint2=4686 | Joint3=4687 | Joint4=4640 | GUID=23cfc6aa-28bb-4b93-ae90-f4ddb6264fc3  |
| Area=4346 | Joint1=4640 | Joint2=4687 | Joint3=4688 | Joint4=4641 | GUID=db6cfe76-e974-4547-acbf-0d597f896157  |
| Area=4347 | Joint1=4641 | Joint2=4688 | Joint3=4689 | Joint4=4642 | GUID=753e5598-3b3f-47c9-826e-9761f2be7af4  |
| Area=4348 | Joint1=4642 | Joint2=4689 | Joint3=4690 | Joint4=4643 | GUID=94033dc1-12aa-4712-af69-730b53edc14d  |
| Area=4349 | Joint1=4643 | Joint2=4690 | Joint3=4691 | Joint4=4644 | GUID=ae82e764-cf7d-4fbb-9590-47d7977d2ec5  |
| Area=4350 | Joint1=4644 | Joint2=4691 | Joint3=4692 | Joint4=4645 | GUID=8b960d81-f2cc-4c6d-86a3-887f6a0672b9  |
| Area=4351 | Joint1=4645 | Joint2=4692 | Joint3=4693 | Joint4=4646 | GUID=2a24b58a-7d32-44ac-8234-08bac5a0b336  |
| Area=4352 | Joint1=4646 | Joint2=4693 | Joint3=4694 | Joint4=4647 | GUID=a2561bd8-0645-4048-9ab6-c91b54ad2b8b  |
| Area=4353 | Joint1=4647 | Joint2=4694 | Joint3=4695 | Joint4=4648 | GUID=3d22bfbfc-003c-41b1-96f4-26a8b8587408 |
| Area=4354 | Joint1=4648 | Joint2=4695 | Joint3=4696 | Joint4=4649 | GUID=4c96f614-d711-4d32-882d-723173a00239  |
| Area=4355 | Joint1=4649 | Joint2=4696 | Joint3=4697 | Joint4=4650 | GUID=0ffcee16-08bf-4d24-a0ad-6242ba6e2743  |
| Area=4356 | Joint1=4650 | Joint2=4697 | Joint3=4698 | Joint4=4651 | GUID=b0536c54-58ca-4ba1-92ec-b11f859ce042  |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=4357<br>60594a65220c | Joint1=4651 | Joint2=4698 | Joint3=4699 | Joint4=4652 | GUID=92694913-2589-4783-a651-             |
| Area=4358<br>d52857168330 | Joint1=4652 | Joint2=4699 | Joint3=4700 | Joint4=4653 | GUID=6e51ff27-d06c-4d07-a11c-             |
| Area=4359<br>ab4ff852ae3a | Joint1=4653 | Joint2=4700 | Joint3=4701 | Joint4=4654 | GUID=80947bcc-2b76-4e9c-bd66-             |
| Area=4360<br>c05dc92b3648 | Joint1=4654 | Joint2=4701 | Joint3=4702 | Joint4=4655 | GUID=d38d0b61-e629-4c5f-bc51-             |
| Area=4361<br>665b0a236b60 | Joint1=4655 | Joint2=4702 | Joint3=4703 | Joint4=4656 | GUID=6624b18a-56ce-4d49-8114-             |
| Area=4362<br>c2c5b15333a0 | Joint1=4656 | Joint2=4703 | Joint3=4704 | Joint4=4657 | GUID=9a17fdd7-1c4a-4aef-9168-             |
| Area=4363<br>243b0b2d4ea5 | Joint1=4657 | Joint2=4704 | Joint3=4705 | Joint4=4658 | GUID=13e0c023-b83b-4c54-be03-             |
| Area=4364                 | Joint1=4658 | Joint2=4705 | Joint3=4706 | Joint4=4659 | GUID=ff077ce2-e728-441f-9882-93e763444817 |
| Area=4365<br>a1f7fc27bc41 | Joint1=4659 | Joint2=4706 | Joint3=4707 | Joint4=4660 | GUID=4152c68a-873d-4a17-9bb0-             |
| Area=4366                 | Joint1=4660 | Joint2=4707 | Joint3=4708 | Joint4=4661 | GUID=ae3bf893-cd2e-49f9-87d0-4bcddccadb05 |
| Area=4367<br>cde08b87b283 | Joint1=4661 | Joint2=4708 | Joint3=4709 | Joint4=4662 | GUID=31928e10-6ced-4a14-8702-             |
| Area=4368<br>b831e0e0d4e8 | Joint1=4662 | Joint2=4709 | Joint3=4710 | Joint4=4663 | GUID=701a89c2-4b9d-49ac-b3c4-             |
| Area=4369<br>31ba1664dd9c | Joint1=4663 | Joint2=4710 | Joint3=4711 | Joint4=4664 | GUID=91ac0e53-29bb-42e9-914b-             |
| Area=4370                 | Joint1=4664 | Joint2=4711 | Joint3=4712 | Joint4=4665 | GUID=40608301-f3f5-4dc1-9b0b-7927667af73d |
| Area=4371<br>648ec31df055 | Joint1=4665 | Joint2=4712 | Joint3=4713 | Joint4=4666 | GUID=86032a9e-5c9c-4ed5-b05b-             |
| Area=4372                 | Joint1=4666 | Joint2=4713 | Joint3=4714 | Joint4=4667 | GUID=0fc02cf4-0c8a-4025-917b-18b4a14dc489 |
| Area=4373                 | Joint1=4667 | Joint2=4714 | Joint3=4715 | Joint4=4668 | GUID=46dd07ad-f628-44c7-8563-ac2cd6f7e9ce |
| Area=4374<br>33b545a12038 | Joint1=4668 | Joint2=4715 | Joint3=4716 | Joint4=4669 | GUID=0ce00bf4-4307-4c1f-9a75-             |
| Area=4375<br>3d23be29ca4a | Joint1=4669 | Joint2=4716 | Joint3=4717 | Joint4=4670 | GUID=653b9036-4a4a-4d51-bed8-             |
| Area=4376<br>36ebc2767531 | Joint1=4670 | Joint2=4717 | Joint3=4718 | Joint4=4671 | GUID=e46098e2-a664-417d-8f51-             |
| Area=4377                 | Joint1=4671 | Joint2=4718 | Joint3=4719 | Joint4=4672 | GUID=645b425f-efa1-4915-8a69-34ffd7e06db8 |
| Area=4378                 | Joint1=4672 | Joint2=4719 | Joint3=4720 | Joint4=4673 | GUID=269ca23b-673f-49f0-987f-a374b7e72848 |
| Area=4379<br>bb11c9b68ca8 | Joint1=4673 | Joint2=4720 | Joint3=4721 | Joint4=4674 | GUID=ab1cebc9-b170-4b17-9e57-             |
| Area=4380                 | Joint1=4674 | Joint2=4721 | Joint3=4722 | Joint4=4675 | GUID=1f360dda-f841-4bf1-a2d2-383b6f0cba7d |
| Area=4381                 | Joint1=4676 | Joint2=4723 | Joint3=4724 | Joint4=4677 | GUID=b7342667-c83f-4c8a-8001-91e4af6f97bc |
| Area=4382                 | Joint1=4677 | Joint2=4724 | Joint3=4725 | Joint4=4678 | GUID=5cc030f2-0ca1-4230-83dc-19290c3df27c |
| Area=4383<br>d9698fd6677d | Joint1=4678 | Joint2=4725 | Joint3=4726 | Joint4=4679 | GUID=d88ea393-c3b8-4be8-9eec-             |
| Area=4384<br>7e44a8896d57 | Joint1=4679 | Joint2=4726 | Joint3=4727 | Joint4=4680 | GUID=63d0958d-6852-42e6-996d-             |
| Area=4385<br>fa8a895dd707 | Joint1=4680 | Joint2=4727 | Joint3=4728 | Joint4=4681 | GUID=13654bfc-8d3c-4877-a10c-             |
| Area=4386<br>545d3437d0ea | Joint1=4681 | Joint2=4728 | Joint3=4729 | Joint4=4682 | GUID=6eb1fe1c-a80f-4ca2-a58d-             |
| Area=4387<br>21b7a96ae37b | Joint1=4682 | Joint2=4729 | Joint3=4730 | Joint4=4683 | GUID=b48c4bb5-60c6-4c2f-9386-             |
| Area=4388                 | Joint1=4683 | Joint2=4730 | Joint3=4731 | Joint4=4684 | GUID=fb8f8815-60f7-434f-8c4c-f53d92fcb2b0 |
| Area=4389                 | Joint1=4684 | Joint2=4731 | Joint3=4732 | Joint4=4685 | GUID=fb458dff-7dae-4cbb-aedf-02cdfc9f95de |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                            |
|---------------------------|-------------|-------------|-------------|-------------|--------------------------------------------|
| Area=4390<br>8c05b97ce3bd | Joint1=4685 | Joint2=4732 | Joint3=4733 | Joint4=4686 | GUID=42ac1638-5391-4d86-8e89-              |
| Area=4391<br>ce22ad4e9b3a | Joint1=4686 | Joint2=4733 | Joint3=4734 | Joint4=4687 | GUID=a5285ca5-b0e4-4ef9-bdc6-              |
| Area=4392                 | Joint1=4687 | Joint2=4734 | Joint3=4735 | Joint4=4688 | GUID=df8f67e7-d890-4d40-8b73-b22a6192e6fd  |
| Area=4393<br>b45ed94e798b | Joint1=4688 | Joint2=4735 | Joint3=4736 | Joint4=4689 | GUID=aabceadc-5580-4847-a43c-              |
| Area=4394<br>201f7face826 | Joint1=4689 | Joint2=4736 | Joint3=4737 | Joint4=4690 | GUID=06c976ae-a91d-42e9-8c15-              |
| Area=4395<br>ed1b706170df | Joint1=4690 | Joint2=4737 | Joint3=4738 | Joint4=4691 | GUID=83801649-f89b-448a-ba8e-              |
| Area=4396<br>6981f2174832 | Joint1=4691 | Joint2=4738 | Joint3=4739 | Joint4=4692 | GUID=7c17f301-2dd6-41c5-84e2-              |
| Area=4397                 | Joint1=4692 | Joint2=4739 | Joint3=4740 | Joint4=4693 | GUID=5a9a2cd9-b22f-4afc-a6a2-c941249eefc5  |
| Area=4398                 | Joint1=4693 | Joint2=4740 | Joint3=4741 | Joint4=4694 | GUID=8b9ffd49-a061-47fc-9506-8074c2a47e8a  |
| Area=4399                 | Joint1=4694 | Joint2=4741 | Joint3=4742 | Joint4=4695 | GUID=9f876928-8325-497f-bf99-276796355b4c  |
| Area=4400<br>a29b0b4c3814 | Joint1=4695 | Joint2=4742 | Joint3=4743 | Joint4=4696 | GUID=27a771fe-eeab-43dd-bbc0-              |
| Area=4401<br>bccc5c4b1774 | Joint1=4696 | Joint2=4743 | Joint3=4744 | Joint4=4697 | GUID=cf497aaa-2361-4224-be7c-              |
| Area=4402<br>961ae38d8251 | Joint1=4697 | Joint2=4744 | Joint3=4745 | Joint4=4698 | GUID=2c7c1b10-0122-4c9a-910a-              |
| Area=4403                 | Joint1=4698 | Joint2=4745 | Joint3=4746 | Joint4=4699 | GUID=6af6a4df-3541-489e-8ad9-61ae1a48f2ce  |
| Area=4404<br>0533548ee12c | Joint1=4699 | Joint2=4746 | Joint3=4747 | Joint4=4700 | GUID=dad34da4-56f6-4eb5-abc4-              |
| Area=4405                 | Joint1=4700 | Joint2=4747 | Joint3=4748 | Joint4=4701 | GUID=6afd9c1d-f1df-4bb2-8938-f590ded97b65  |
| Area=4406<br>f020cef1b0a3 | Joint1=4701 | Joint2=4748 | Joint3=4749 | Joint4=4702 | GUID=44e2084b-8b96-4922-a5e3-              |
| Area=4407<br>d2459a3dd976 | Joint1=4702 | Joint2=4749 | Joint3=4750 | Joint4=4703 | GUID=d976306d-ca49-42ae-ac4e-              |
| Area=4408<br>3dad46b88c7e | Joint1=4703 | Joint2=4750 | Joint3=4751 | Joint4=4704 | GUID=13294c2a-e07f-4409-988e-              |
| Area=4409                 | Joint1=4704 | Joint2=4751 | Joint3=4752 | Joint4=4705 | GUID=4075d44a-afcf-4527-aeefb-d438036787c2 |
| Area=4410                 | Joint1=4705 | Joint2=4752 | Joint3=4753 | Joint4=4706 | GUID=f4e00ff8-fed0-42a2-b176-c872357d2b3e  |
| Area=4411                 | Joint1=4706 | Joint2=4753 | Joint3=4754 | Joint4=4707 | GUID=98575ccc-85c9-4848-bd3f-e108aa221fd7  |
| Area=4412<br>087298bbc439 | Joint1=4707 | Joint2=4754 | Joint3=4755 | Joint4=4708 | GUID=0dee307e-970e-4f0a-a270-              |
| Area=4413<br>c963aa0df91f | Joint1=4708 | Joint2=4755 | Joint3=4756 | Joint4=4709 | GUID=b933eee0-7ccb-476d-a179-              |
| Area=4414<br>c349985ace69 | Joint1=4709 | Joint2=4756 | Joint3=4757 | Joint4=4710 | GUID=9ed42aac-030c-4197-8a80-              |
| Area=4415<br>5a6ca97ce9c1 | Joint1=4710 | Joint2=4757 | Joint3=4758 | Joint4=4711 | GUID=4e891590-7c53-4a13-a40a-              |
| Area=4416<br>30549617ae78 | Joint1=4711 | Joint2=4758 | Joint3=4759 | Joint4=4712 | GUID=dbd93044-84a1-4a11-8fc1-              |
| Area=4417<br>8b109bb005b7 | Joint1=4712 | Joint2=4759 | Joint3=4760 | Joint4=4713 | GUID=5a17f478-ed29-4b5b-9b0d-              |
| Area=4418                 | Joint1=4713 | Joint2=4760 | Joint3=4761 | Joint4=4714 | GUID=12e662ad-d8b5-45b4-8a1c-9f66ea9fbaf4  |
| Area=4419<br>5b72aa620da5 | Joint1=4714 | Joint2=4761 | Joint3=4762 | Joint4=4715 | GUID=fc34c074-fa00-4850-b441-              |
| Area=4420<br>605f62515ae0 | Joint1=4715 | Joint2=4762 | Joint3=4763 | Joint4=4716 | GUID=756ca4e4-e54d-47a1-a58f-              |
| Area=4421                 | Joint1=4716 | Joint2=4763 | Joint3=4764 | Joint4=4717 | GUID=8ca41ccf-eeb1-4b7c-a065-4b0caf12f654  |
| Area=4422                 | Joint1=4717 | Joint2=4764 | Joint3=4765 | Joint4=4718 | GUID=d74b1d31-f50d-4aa7-bcaf-5b5cc0c51520  |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=4423 | Joint1=4718 | Joint2=4765 | Joint3=4766 | Joint4=4719 | GUID=c53d7716-df37-4218-a844-944a0f3036b8 |
| Area=4424 | Joint1=4719 | Joint2=4766 | Joint3=4767 | Joint4=4720 | GUID=0ed8ddea-c5ec-4c25-84e7-2143030550bc |
| Area=4425 | Joint1=4720 | Joint2=4767 | Joint3=4768 | Joint4=4721 | GUID=a1fe101a-18a8-4824-8043-10db5171b009 |
| Area=4426 | Joint1=4721 | Joint2=4768 | Joint3=4769 | Joint4=4722 | GUID=fd6c5ac7-452a-4631-847d-ae0d736717f4 |
| Area=4427 | Joint1=4723 | Joint2=4770 | Joint3=4771 | Joint4=4724 | GUID=b2d6f02e-99ea-469a-b31b-e4c7d105628f |
| Area=4428 | Joint1=4724 | Joint2=4771 | Joint3=4772 | Joint4=4725 | GUID=edae67ca-af05-4814-881b-aced486161f8 |
| Area=4429 | Joint1=4725 | Joint2=4772 | Joint3=4773 | Joint4=4726 | GUID=f022a496-c7f1-4502-ab05-47d99392e1a2 |
| Area=4430 | Joint1=4726 | Joint2=4773 | Joint3=4774 | Joint4=4727 | GUID=416d360a-b6a3-48b3-a3dc-5a9de8bf1580 |
| Area=4431 | Joint1=4727 | Joint2=4774 | Joint3=4775 | Joint4=4728 | GUID=1e1b2b5e-5873-404a-9781-7b41cfe4d7a2 |
| Area=4432 | Joint1=4728 | Joint2=4775 | Joint3=4776 | Joint4=4729 | GUID=3bf085b7-15ac-4f72-9e0c-9afbccd3af9b |
| Area=4433 | Joint1=4729 | Joint2=4776 | Joint3=4777 | Joint4=4730 | GUID=3f240163-659a-44a7-84c1-b69af8f21f9d |
| Area=4434 | Joint1=4730 | Joint2=4777 | Joint3=4778 | Joint4=4731 | GUID=92f3e59b-86f7-4af8-8eb3-2daacf69365b |
| Area=4435 | Joint1=4731 | Joint2=4778 | Joint3=4779 | Joint4=4732 | GUID=61034877-ee68-408e-aa24-d416d3b90ba5 |
| Area=4436 | Joint1=4732 | Joint2=4779 | Joint3=4780 | Joint4=4733 | GUID=6f64a88c-ccdd-49a1-b20a-fe14c8e22dc7 |
| Area=4437 | Joint1=4733 | Joint2=4780 | Joint3=4781 | Joint4=4734 | GUID=eb58bcf4-5447-433a-8bf2-3e1031451223 |
| Area=4438 | Joint1=4734 | Joint2=4781 | Joint3=4782 | Joint4=4735 | GUID=3e164230-5cb0-4c2e-845e-1155d2f4ff79 |
| Area=4439 | Joint1=4735 | Joint2=4782 | Joint3=4783 | Joint4=4736 | GUID=a8bc3397-0966-4978-9d14-309dfcbf66c5 |
| Area=4440 | Joint1=4736 | Joint2=4783 | Joint3=4784 | Joint4=4737 | GUID=81431749-26d5-47eb-9958-3a7d0c288a17 |
| Area=4441 | Joint1=4737 | Joint2=4784 | Joint3=4785 | Joint4=4738 | GUID=f61f68a6-f281-4e71-8fc6-9403132f4397 |
| Area=4442 | Joint1=4738 | Joint2=4785 | Joint3=4786 | Joint4=4739 | GUID=791a82ac-1fb2-41ae-8528-42e33e18a243 |
| Area=4443 | Joint1=4739 | Joint2=4786 | Joint3=4787 | Joint4=4740 | GUID=1af40035-3f88-4163-b21e-ca7b0ef619fe |
| Area=4444 | Joint1=4740 | Joint2=4787 | Joint3=4788 | Joint4=4741 | GUID=61ded62c-d54b-4abb-b2c2-11ba87f36836 |
| Area=4445 | Joint1=4741 | Joint2=4788 | Joint3=4789 | Joint4=4742 | GUID=c455533d-7bf5-4b3c-a03a-2d1222580af9 |
| Area=4446 | Joint1=4742 | Joint2=4789 | Joint3=4790 | Joint4=4743 | GUID=0c516c76-ab73-4774-9639-0bdf0f6b9ded |
| Area=4447 | Joint1=4743 | Joint2=4790 | Joint3=4791 | Joint4=4744 | GUID=3b572d43-2092-4130-9af9-64b0728833fc |
| Area=4448 | Joint1=4744 | Joint2=4791 | Joint3=4792 | Joint4=4745 | GUID=ea68875b-8ec1-47d5-8aa1-70381b568f7d |
| Area=4449 | Joint1=4745 | Joint2=4792 | Joint3=4793 | Joint4=4746 | GUID=68b05bda-7816-415b-90a7-bb5c26879c73 |
| Area=4450 | Joint1=4746 | Joint2=4793 | Joint3=4794 | Joint4=4747 | GUID=514eb736-b3c5-4e73-b6dc-97eb47ca43c8 |
| Area=4451 | Joint1=4747 | Joint2=4794 | Joint3=4795 | Joint4=4748 | GUID=c6afabff-a92e-4163-a8cf-0c6913aaec73 |
| Area=4452 | Joint1=4748 | Joint2=4795 | Joint3=4796 | Joint4=4749 | GUID=ceb41560-7f40-44bd-b5e3-19da4bb389b5 |
| Area=4453 | Joint1=4749 | Joint2=4796 | Joint3=4797 | Joint4=4750 | GUID=9b75a8c3-9361-4b85-9cc0-5ed9bc5013db |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=4454 | Joint1=4750 | Joint2=4797 | Joint3=4798 | Joint4=4751 | GUID=adba0ae8-76d8-4764-8a82-dff2017b94ab |
| Area=4455 | Joint1=4751 | Joint2=4798 | Joint3=4799 | Joint4=4752 | GUID=30941d04-43b6-4dce-8207-07b88743bd72 |
| Area=4456 | Joint1=4752 | Joint2=4799 | Joint3=4800 | Joint4=4753 | GUID=483b73ce-c524-468c-b655-6e890f8d825b |
| Area=4457 | Joint1=4753 | Joint2=4800 | Joint3=4801 | Joint4=4754 | GUID=fc765da9-6243-404f-be6f-0f4181470273 |
| Area=4458 | Joint1=4754 | Joint2=4801 | Joint3=4802 | Joint4=4755 | GUID=e8a00c00-0468-48a3-8061-83a70c532bc1 |
| Area=4459 | Joint1=4755 | Joint2=4802 | Joint3=4803 | Joint4=4756 | GUID=5216ef33-e6af-41b4-8780-fcb4d40d88c3 |
| Area=4460 | Joint1=4756 | Joint2=4803 | Joint3=4804 | Joint4=4757 | GUID=de8273bc-9bcf-4551-a34a-9e5389da338f |
| Area=4461 | Joint1=4757 | Joint2=4804 | Joint3=4805 | Joint4=4758 | GUID=fabdcbe6-f8b8-4ae7-941a-be288890f0f0 |
| Area=4462 | Joint1=4758 | Joint2=4805 | Joint3=4806 | Joint4=4759 | GUID=9830a2d2-ef41-4119-a682-25722f340402 |
| Area=4463 | Joint1=4759 | Joint2=4806 | Joint3=4807 | Joint4=4760 | GUID=3c79938e-dded-41b3-b2bd-3f810a4843bc |
| Area=4464 | Joint1=4760 | Joint2=4807 | Joint3=4808 | Joint4=4761 | GUID=2f99eee4-ec4d-43d6-8bf7-773b8d63978d |
| Area=4465 | Joint1=4761 | Joint2=4808 | Joint3=4809 | Joint4=4762 | GUID=a74122be-98fd-401a-a9d7-6ce547f4f758 |
| Area=4466 | Joint1=4762 | Joint2=4809 | Joint3=4810 | Joint4=4763 | GUID=86854fda-25cb-4ce9-8f06-7432aec790f8 |
| Area=4467 | Joint1=4763 | Joint2=4810 | Joint3=4811 | Joint4=4764 | GUID=4eaed201-40c5-4b89-a072-6f4b45b861d2 |
| Area=4468 | Joint1=4764 | Joint2=4811 | Joint3=4812 | Joint4=4765 | GUID=d5b3b9b6-6755-4ad6-ae22-87d331de4989 |
| Area=4469 | Joint1=4765 | Joint2=4812 | Joint3=4813 | Joint4=4766 | GUID=ed365b40-be61-40b8-80fa-9c7ab9b5fa0e |
| Area=4470 | Joint1=4766 | Joint2=4813 | Joint3=4814 | Joint4=4767 | GUID=2d0c6228-7907-468c-b76e-e6a22058fb8c |
| Area=4471 | Joint1=4767 | Joint2=4814 | Joint3=4815 | Joint4=4768 | GUID=6ff278b4-08dc-4aa9-b41d-34c2120fc786 |
| Area=4472 | Joint1=4768 | Joint2=4815 | Joint3=4816 | Joint4=4769 | GUID=5787f461-2636-4bd1-b971-265e025bbb4d |
| Area=4473 | Joint1=4770 | Joint2=4817 | Joint3=4818 | Joint4=4771 | GUID=ba7500d0-9245-4a96-9f2f-c6b1af049a3c |
| Area=4474 | Joint1=4771 | Joint2=4818 | Joint3=4819 | Joint4=4772 | GUID=469d9982-7b66-422f-803e-d8371db7f50f |
| Area=4475 | Joint1=4772 | Joint2=4819 | Joint3=4820 | Joint4=4773 | GUID=aa40ca8a-5aee-42ad-83d0-fe9634a87df2 |
| Area=4476 | Joint1=4773 | Joint2=4820 | Joint3=4821 | Joint4=4774 | GUID=9d84f1c0-0d8f-43de-a921-64857b52550a |
| Area=4477 | Joint1=4774 | Joint2=4821 | Joint3=4822 | Joint4=4775 | GUID=826ff7f7-82d9-4e87-9ee5-26e18653c1af |
| Area=4478 | Joint1=4775 | Joint2=4822 | Joint3=4823 | Joint4=4776 | GUID=3a7f7b72-cf09-422c-8699-586d67197257 |
| Area=4479 | Joint1=4776 | Joint2=4823 | Joint3=4824 | Joint4=4777 | GUID=e2d19090-c63f-40c4-a04c-919ca954cd91 |
| Area=4480 | Joint1=4777 | Joint2=4824 | Joint3=4825 | Joint4=4778 | GUID=a07ad5ea-54e7-4887-b407-1c975c4513bd |
| Area=4481 | Joint1=4778 | Joint2=4825 | Joint3=4826 | Joint4=4779 | GUID=71e11db3-b7de-4aee-a17a-8fd509864bd6 |
| Area=4482 | Joint1=4779 | Joint2=4826 | Joint3=4827 | Joint4=4780 | GUID=e052c056-9ec0-4e15-8481-4b6b45493f79 |
| Area=4483 | Joint1=4780 | Joint2=4827 | Joint3=4828 | Joint4=4781 | GUID=c67d4de2-afce-408c-a0f1-797da86f04c9 |
| Area=4484 | Joint1=4781 | Joint2=4828 | Joint3=4829 | Joint4=4782 | GUID=e0d4cfd9-0c2a-4a1d-b16b-b1dbab58b4b0 |
| Area=4485 | Joint1=4782 | Joint2=4829 | Joint3=4830 | Joint4=4783 | GUID=9f44b4af-15a7-411b-ba89-14282e205617 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=4486<br>cb7937387976 | Joint1=4783 | Joint2=4830 | Joint3=4831 | Joint4=4784 | GUID=f9919160-6613-4de9-a2f4-             |
| Area=4487<br>b3fc52d3d67f | Joint1=4784 | Joint2=4831 | Joint3=4832 | Joint4=4785 | GUID=02193112-7770-41a1-965c-             |
| Area=4488<br>4094d8720625 | Joint1=4785 | Joint2=4832 | Joint3=4833 | Joint4=4786 | GUID=b4ebfe45-5cad-4c2d-8c64-             |
| Area=4489<br>bbd25e651e83 | Joint1=4786 | Joint2=4833 | Joint3=4834 | Joint4=4787 | GUID=175e9b2e-86d6-4b9b-80a0-             |
| Area=4490                 | Joint1=4787 | Joint2=4834 | Joint3=4835 | Joint4=4788 | GUID=ef791ee6-2139-47f8-9b3f-845691575884 |
| Area=4491                 | Joint1=4788 | Joint2=4835 | Joint3=4836 | Joint4=4789 | GUID=9c463fe6-bd70-445d-8f3b-6f5a6a01a59a |
| Area=4492<br>426518f9b97a | Joint1=4789 | Joint2=4836 | Joint3=4837 | Joint4=4790 | GUID=51ad680a-025c-49e9-bc97-             |
| Area=4493<br>20db7196529b | Joint1=4790 | Joint2=4837 | Joint3=4838 | Joint4=4791 | GUID=a70277e0-966d-4936-b2ec-             |
| Area=4494                 | Joint1=4791 | Joint2=4838 | Joint3=4839 | Joint4=4792 | GUID=3c13c5ee-0e55-44b9-bf31-9acde4bc50f1 |
| Area=4495<br>170784d69b7d | Joint1=4792 | Joint2=4839 | Joint3=4840 | Joint4=4793 | GUID=cca6448f-4132-418b-9287-             |
| Area=4496<br>d6ca069cbd1d | Joint1=4793 | Joint2=4840 | Joint3=4841 | Joint4=4794 | GUID=7a09261b-f290-46c6-9cb4-             |
| Area=4497                 | Joint1=4794 | Joint2=4841 | Joint3=4842 | Joint4=4795 | GUID=88a4ba2f-fb66-4e59-85d8-1f71fde89ab2 |
| Area=4498<br>1c9da779e27c | Joint1=4795 | Joint2=4842 | Joint3=4843 | Joint4=4796 | GUID=3a2b1c6f-8121-46e8-a797-             |
| Area=4499<br>9313d36b87d6 | Joint1=4796 | Joint2=4843 | Joint3=4844 | Joint4=4797 | GUID=0cc4bcb1-9253-4764-8e60-             |
| Area=4500<br>0042c7644607 | Joint1=4797 | Joint2=4844 | Joint3=4845 | Joint4=4798 | GUID=98521643-85a0-4e89-b2bc-             |
| Area=4501<br>a1cb8887a312 | Joint1=4798 | Joint2=4845 | Joint3=4846 | Joint4=4799 | GUID=f538c645-15e3-45eb-a49a-             |
| Area=4502<br>86871655eb5c | Joint1=4799 | Joint2=4846 | Joint3=4847 | Joint4=4800 | GUID=a8c94d0f-d00e-4278-9c1f-             |
| Area=4503<br>98922ea80dd2 | Joint1=4800 | Joint2=4847 | Joint3=4848 | Joint4=4801 | GUID=48fcb09e-f244-42e8-b696-             |
| Area=4504                 | Joint1=4801 | Joint2=4848 | Joint3=4849 | Joint4=4802 | GUID=2f4b04bd-9230-4109-93bf-a95f12817f4e |
| Area=4505<br>39808bfab7be | Joint1=4802 | Joint2=4849 | Joint3=4850 | Joint4=4803 | GUID=82e257d4-f4c7-4ca5-bab3-             |
| Area=4506<br>51eb41ed1902 | Joint1=4803 | Joint2=4850 | Joint3=4851 | Joint4=4804 | GUID=87c5aad3-9ab3-4f01-989f-             |
| Area=4507<br>dca681f05249 | Joint1=4804 | Joint2=4851 | Joint3=4852 | Joint4=4805 | GUID=5c567a19-73df-4002-aae4-             |
| Area=4508<br>89492450f0a7 | Joint1=4805 | Joint2=4852 | Joint3=4853 | Joint4=4806 | GUID=3bd36219-568b-4da6-b960-             |
| Area=4509<br>cd3c07e89a6a | Joint1=4806 | Joint2=4853 | Joint3=4854 | Joint4=4807 | GUID=0ec382a0-0828-420c-8691-             |
| Area=4510<br>66f5bc42ad85 | Joint1=4807 | Joint2=4854 | Joint3=4855 | Joint4=4808 | GUID=e0f54eae-b576-4073-82d9-             |
| Area=4511                 | Joint1=4808 | Joint2=4855 | Joint3=4856 | Joint4=4809 | GUID=a9fca043-54c0-4deb-844d-fa557f23e8b6 |
| Area=4512<br>139521a78321 | Joint1=4809 | Joint2=4856 | Joint3=4857 | Joint4=4810 | GUID=ad20b5e9-96f3-4141-9ee4-             |
| Area=4513                 | Joint1=4810 | Joint2=4857 | Joint3=4858 | Joint4=4811 | GUID=132cf440-1e61-4454-998d-c3cca9e7f87a |
| Area=4514<br>2ec22783e76e | Joint1=4811 | Joint2=4858 | Joint3=4859 | Joint4=4812 | GUID=beacdf88-8282-4291-9649-             |
| Area=4515<br>498ca7122ee9 | Joint1=4812 | Joint2=4859 | Joint3=4860 | Joint4=4813 | GUID=ee82697b-b898-4513-bf91-             |
| Area=4516<br>1b4a4ba0d972 | Joint1=4813 | Joint2=4860 | Joint3=4861 | Joint4=4814 | GUID=9faeda69-d8e6-4eaa-b030-             |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=4517 Joint1=4814 Joint2=4861 Joint3=4862 Joint4=4815 GUID=5877ff69-3518-4f1f-905e-c799eee6bf79  
Area=4518 Joint1=4815 Joint2=4862 Joint3=4863 Joint4=4816 GUID=a45ddac1-2194-43b9-848b-b0c49f78af85  
Area=4519 Joint1=4817 Joint2=4864 Joint3=4865 Joint4=4818 GUID=162dd760-f9d0-47ab-8bf5-ce7e488bb3dc  
Area=4520 Joint1=4818 Joint2=4865 Joint3=4866 Joint4=4819 GUID=eecf5415-2db6-40d0-983b-3befeef56cf4  
Area=4521 Joint1=4819 Joint2=4866 Joint3=4867 Joint4=4820 GUID=2657a3c1-67e6-4353-ab9f-ada6147e0252  
Area=4522 Joint1=4820 Joint2=4867 Joint3=4868 Joint4=4821 GUID=f80498cb-6236-465c-bbf7b-09790ee80dff  
Area=4523 Joint1=4821 Joint2=4868 Joint3=4869 Joint4=4822 GUID=2466bc49-af03-413f-8460-fd57afa98879  
Area=4524 Joint1=4822 Joint2=4869 Joint3=4870 Joint4=4823 GUID=47caf4ac-6ad5-473f-8d7e-c079f257e1bb  
Area=4525 Joint1=4823 Joint2=4870 Joint3=4871 Joint4=4824 GUID=dee66319-cf15-40bc-a7a3-ccdd3510833e  
Area=4526 Joint1=4824 Joint2=4871 Joint3=4872 Joint4=4825 GUID=486a52d0-1afe-4933-bc20-292791bfe6a9  
Area=4527 Joint1=4825 Joint2=4872 Joint3=4873 Joint4=4826 GUID=63a9adb9-a0fd-4000-9e6a-559fc6c7546e  
Area=4528 Joint1=4826 Joint2=4873 Joint3=4874 Joint4=4827 GUID=f423f4d4-c8b0-4925-ada4-04b2f7865332  
Area=4529 Joint1=4827 Joint2=4874 Joint3=4875 Joint4=4828 GUID=04321f8e-1be3-4640-bf67-90f7444868fb  
Area=4530 Joint1=4828 Joint2=4875 Joint3=4876 Joint4=4829 GUID=c212e6b7-0f01-4879-a290-f36a3153b8d9  
Area=4531 Joint1=4829 Joint2=4876 Joint3=4877 Joint4=4830 GUID=81368234-231e-4f8b-93c0-196e5e3ae7fa  
Area=4532 Joint1=4830 Joint2=4877 Joint3=4878 Joint4=4831 GUID=3179ed13-c13f-48e0-b331-08c88247f5e5  
Area=4533 Joint1=4831 Joint2=4878 Joint3=4879 Joint4=4832 GUID=a1ce38a9-3ea9-40ec-9cf6-3930cc6a2641  
Area=4534 Joint1=4832 Joint2=4879 Joint3=4880 Joint4=4833 GUID=71aa1a21-7caa-47ef-a830-0d19c5c2bb59  
Area=4535 Joint1=4833 Joint2=4880 Joint3=4881 Joint4=4834 GUID=7b39ed42-fa72-464f-ab10-0ace670b854b  
Area=4536 Joint1=4834 Joint2=4881 Joint3=4882 Joint4=4835 GUID=684a2c53-c541-471d-a864-d0aa4d023fb6  
Area=4537 Joint1=4835 Joint2=4882 Joint3=4883 Joint4=4836 GUID=b73adf8c-c63d-4385-a229-9dce5dd329ca  
Area=4538 Joint1=4836 Joint2=4883 Joint3=4884 Joint4=4837 GUID=eb9903a7-9e59-4b33-8dd7-12d32ad24c9a  
Area=4539 Joint1=4837 Joint2=4884 Joint3=4885 Joint4=4838 GUID=1536dc4c-0fba-44ef-9581-0411cc2dc152  
Area=4540 Joint1=4838 Joint2=4885 Joint3=4886 Joint4=4839 GUID=adc5f79b-986f-4141-bb6e-43574b85bcc2  
Area=4541 Joint1=4839 Joint2=4886 Joint3=4887 Joint4=4840 GUID=9d74cd9a-efaa-4168-873a-2051bd5feb99  
Area=4542 Joint1=4840 Joint2=4887 Joint3=4888 Joint4=4841 GUID=7c3705b1-2974-4bd3-b023-ea05d339550d  
Area=4543 Joint1=4841 Joint2=4888 Joint3=4889 Joint4=4842 GUID=0dae10b8-646b-4dad-8feb-d6c0ce30b7c1  
Area=4544 Joint1=4842 Joint2=4889 Joint3=4890 Joint4=4843 GUID=a7c3faae-87e8-426d-923d-7cba697c512f  
Area=4545 Joint1=4843 Joint2=4890 Joint3=4891 Joint4=4844 GUID=91db8ed6-d734-4d93-a36c-03125edb48aa  
Area=4546 Joint1=4844 Joint2=4891 Joint3=4892 Joint4=4845 GUID=4062adc4-cc2d-4b81-abd7-2ba3be1d93ac  
Area=4547 Joint1=4845 Joint2=4892 Joint3=4893 Joint4=4846 GUID=3407e761-45ea-47f0-abbf-7d266a63e3b3



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=4548<br>6b68d8aef67a | Joint1=4846 | Joint2=4893 | Joint3=4894 | Joint4=4847 | GUID=651bc29d-5a40-44cf-a517-             |
| Area=4549<br>689d4064c9b6 | Joint1=4847 | Joint2=4894 | Joint3=4895 | Joint4=4848 | GUID=ce785280-3652-4798-9b70-             |
| Area=4550                 | Joint1=4848 | Joint2=4895 | Joint3=4896 | Joint4=4849 | GUID=2e5188f6-cc7f-49ff-9d00-b6742c2f0a02 |
| Area=4551<br>bba9b4e57e8a | Joint1=4849 | Joint2=4896 | Joint3=4897 | Joint4=4850 | GUID=abd8cf7e-eab2-4ace-ae92-             |
| Area=4552<br>a066baf37b4e | Joint1=4850 | Joint2=4897 | Joint3=4898 | Joint4=4851 | GUID=5ed6423e-ad2e-4c08-943f-             |
| Area=4553<br>ef8a99ab3d81 | Joint1=4851 | Joint2=4898 | Joint3=4899 | Joint4=4852 | GUID=173a8e96-8acc-4bc2-8c7c-             |
| Area=4554<br>9d0315f15918 | Joint1=4852 | Joint2=4899 | Joint3=4900 | Joint4=4853 | GUID=3612e313-5e1a-45b4-9155-             |
| Area=4555<br>cdc7c4d93eee | Joint1=4853 | Joint2=4900 | Joint3=4901 | Joint4=4854 | GUID=c013d57a-26cb-4941-ab60-             |
| Area=4556                 | Joint1=4854 | Joint2=4901 | Joint3=4902 | Joint4=4855 | GUID=7a9ccc07-30ca-446f-ac2d-9e0c7d1feeed |
| Area=4557                 | Joint1=4855 | Joint2=4902 | Joint3=4903 | Joint4=4856 | GUID=4f2c016f-ef7e-448e-8aab-2706edf64cb4 |
| Area=4558                 | Joint1=4856 | Joint2=4903 | Joint3=4904 | Joint4=4857 | GUID=fc92ec96-fbd2-459a-a0d0-3cd02ac849bc |
| Area=4559<br>b94b12a81bd2 | Joint1=4857 | Joint2=4904 | Joint3=4905 | Joint4=4858 | GUID=7af4589f-860d-489c-ba45-             |
| Area=4560<br>cd44b8b3b8eb | Joint1=4858 | Joint2=4905 | Joint3=4906 | Joint4=4859 | GUID=3b950d0a-f30d-48e9-aa00-             |
| Area=4561<br>7157c25e62cb | Joint1=4859 | Joint2=4906 | Joint3=4907 | Joint4=4860 | GUID=0678c80b-1a54-4564-9b3a-             |
| Area=4562<br>b27ab65b9173 | Joint1=4860 | Joint2=4907 | Joint3=4908 | Joint4=4861 | GUID=5bd618ef-d98a-4f7a-a71d-             |
| Area=4563<br>176e809abbbe | Joint1=4861 | Joint2=4908 | Joint3=4909 | Joint4=4862 | GUID=c75a1586-6cec-43e7-965e-             |
| Area=4564<br>b56308a89908 | Joint1=4862 | Joint2=4909 | Joint3=4910 | Joint4=4863 | GUID=59f72953-b420-417b-a255-             |
| Area=4565                 | Joint1=4864 | Joint2=4911 | Joint3=4912 | Joint4=4865 | GUID=2f1bd5f4-a1e1-418c-9084-caeeca97c3b  |
| Area=4566<br>7d54ca27db0c | Joint1=4865 | Joint2=4912 | Joint3=4913 | Joint4=4866 | GUID=0b2958ac-bca6-46bf-8787-             |
| Area=4567<br>5d0d0398aecf | Joint1=4866 | Joint2=4913 | Joint3=4914 | Joint4=4867 | GUID=fc2deb16-c4ea-4115-9143-             |
| Area=4568<br>2663b278be1e | Joint1=4867 | Joint2=4914 | Joint3=4915 | Joint4=4868 | GUID=64075059-7184-4a3a-80dd-             |
| Area=4569<br>6bd948c192f3 | Joint1=4868 | Joint2=4915 | Joint3=4916 | Joint4=4869 | GUID=d13318a7-2eeb-4f15-8ba3-             |
| Area=4570<br>4d40c470e23a | Joint1=4869 | Joint2=4916 | Joint3=4917 | Joint4=4870 | GUID=2dd5c3c8-2b3a-4671-8faa-             |
| Area=4571                 | Joint1=4870 | Joint2=4917 | Joint3=4918 | Joint4=4871 | GUID=ff01f367-a82b-4f62-abc5-2e3b040f221f |
| Area=4572                 | Joint1=4871 | Joint2=4918 | Joint3=4919 | Joint4=4872 | GUID=360027f0-7f65-4234-9357-3fbf85985c70 |
| Area=4573<br>45b39241e687 | Joint1=4872 | Joint2=4919 | Joint3=4920 | Joint4=4873 | GUID=5617d4f0-98e2-4ce0-8236-             |
| Area=4574<br>91630ce5da46 | Joint1=4873 | Joint2=4920 | Joint3=4921 | Joint4=4874 | GUID=91818dd1-3843-4895-a300-             |
| Area=4575<br>e01eebee81b7 | Joint1=4874 | Joint2=4921 | Joint3=4922 | Joint4=4875 | GUID=4b5a2450-a33b-43d2-93a9-             |
| Area=4576<br>c1bb6ec20ddc | Joint1=4875 | Joint2=4922 | Joint3=4923 | Joint4=4876 | GUID=51b0276a-5667-4486-8766-             |
| Area=4577                 | Joint1=4876 | Joint2=4923 | Joint3=4924 | Joint4=4877 | GUID=9d38f445-27bc-4f8e-8d01-3f398e96fe7a |
| Area=4578<br>4615c192d17a | Joint1=4877 | Joint2=4924 | Joint3=4925 | Joint4=4878 | GUID=e36ba46b-aa4e-4490-a2c5-             |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=4579 | Joint1=4878 | Joint2=4925 | Joint3=4926 | Joint4=4879 | GUID=4ec15400-5baa-4ece-be86-ef5d69211dfd |
| Area=4580 | Joint1=4879 | Joint2=4926 | Joint3=4927 | Joint4=4880 | GUID=3c2f7a6c-903b-4b10-832a-416cb16c5f62 |
| Area=4581 | Joint1=4880 | Joint2=4927 | Joint3=4928 | Joint4=4881 | GUID=68fa1aae-43d6-4fc3-854a-413eda81bfaf |
| Area=4582 | Joint1=4881 | Joint2=4928 | Joint3=4929 | Joint4=4882 | GUID=b0983862-bac1-452b-b110-b0ed26f7679e |
| Area=4583 | Joint1=4882 | Joint2=4929 | Joint3=4930 | Joint4=4883 | GUID=6d2c5f94-be73-4a65-b7be-429aaaa5da4c |
| Area=4584 | Joint1=4883 | Joint2=4930 | Joint3=4931 | Joint4=4884 | GUID=87a78207-77f4-44e2-9dc2-ee116d74bc4c |
| Area=4585 | Joint1=4884 | Joint2=4931 | Joint3=4932 | Joint4=4885 | GUID=344d19ac-b104-41b6-9b80-6d4e49c9bfc2 |
| Area=4586 | Joint1=4885 | Joint2=4932 | Joint3=4933 | Joint4=4886 | GUID=56c1fb73-f528-47c4-888e-2e0b1b8c8c43 |
| Area=4587 | Joint1=4886 | Joint2=4933 | Joint3=4934 | Joint4=4887 | GUID=9447b994-b50a-4209-9aeb-83ff548fbd52 |
| Area=4588 | Joint1=4887 | Joint2=4934 | Joint3=4935 | Joint4=4888 | GUID=a7bbe352-32ca-497d-b110-0d1ab4505f22 |
| Area=4589 | Joint1=4888 | Joint2=4935 | Joint3=4936 | Joint4=4889 | GUID=f59f7099-779f-40fb-ab88-485921c33e54 |
| Area=4590 | Joint1=4889 | Joint2=4936 | Joint3=4937 | Joint4=4890 | GUID=fc85d9c9-24ad-4385-988c-b28cbadd09e2 |
| Area=4591 | Joint1=4890 | Joint2=4937 | Joint3=4938 | Joint4=4891 | GUID=54a1b03b-1271-43f9-a5ac-7caf4a32f03c |
| Area=4592 | Joint1=4891 | Joint2=4938 | Joint3=4939 | Joint4=4892 | GUID=f1cb8a1e-36d1-40ee-bb64-61945df69f52 |
| Area=4593 | Joint1=4892 | Joint2=4939 | Joint3=4940 | Joint4=4893 | GUID=c6427447-cc5e-4d58-b4fa-1a2b060dda16 |
| Area=4594 | Joint1=4893 | Joint2=4940 | Joint3=4941 | Joint4=4894 | GUID=374c092e-d721-448f-845d-64643a85215b |
| Area=4595 | Joint1=4894 | Joint2=4941 | Joint3=4942 | Joint4=4895 | GUID=3541a05f-bc66-467c-8ab0-9b13d03f0574 |
| Area=4596 | Joint1=4895 | Joint2=4942 | Joint3=4943 | Joint4=4896 | GUID=02faf32f-4ba4-4290-9da7-2e43a85a5ff1 |
| Area=4597 | Joint1=4896 | Joint2=4943 | Joint3=4944 | Joint4=4897 | GUID=2cee6bf6-8294-4b29-aaa1-76cb42886f02 |
| Area=4598 | Joint1=4897 | Joint2=4944 | Joint3=4945 | Joint4=4898 | GUID=19993ceb-0458-420f-8f07-aec43c9728bd |
| Area=4599 | Joint1=4898 | Joint2=4945 | Joint3=4946 | Joint4=4899 | GUID=d7afb9e3-56a8-4ddc-acf3-544f21fba0f  |
| Area=4600 | Joint1=4899 | Joint2=4946 | Joint3=4947 | Joint4=4900 | GUID=1fc32f27-9a05-4a34-a8ae-2d8b1b2add44 |
| Area=4601 | Joint1=4900 | Joint2=4947 | Joint3=4948 | Joint4=4901 | GUID=bb6007e8-0237-4c28-8f7c-01b82f736ceb |
| Area=4602 | Joint1=4901 | Joint2=4948 | Joint3=4949 | Joint4=4902 | GUID=9f936335-d85b-49db-9452-942359affb69 |
| Area=4603 | Joint1=4902 | Joint2=4949 | Joint3=4950 | Joint4=4903 | GUID=9f7dde9f-40c4-41b9-9c23-30230cefbfd8 |
| Area=4604 | Joint1=4903 | Joint2=4950 | Joint3=4951 | Joint4=4904 | GUID=92d74d2d-976c-4989-8ac3-e30f76790ed0 |
| Area=4605 | Joint1=4904 | Joint2=4951 | Joint3=4952 | Joint4=4905 | GUID=bb23a6ce-cfbf-4522-9884-7672e7ee6e78 |
| Area=4606 | Joint1=4905 | Joint2=4952 | Joint3=4953 | Joint4=4906 | GUID=b996fc38-2da7-4f85-9d54-188f6077bfa0 |
| Area=4607 | Joint1=4906 | Joint2=4953 | Joint3=4954 | Joint4=4907 | GUID=8f5b828d-90fb-4b25-a2db-2a4ed6a6045b |
| Area=4608 | Joint1=4907 | Joint2=4954 | Joint3=4955 | Joint4=4908 | GUID=f249f32b-c1cd-465b-add7-88d51d40c558 |
| Area=4609 | Joint1=4908 | Joint2=4955 | Joint3=4956 | Joint4=4909 | GUID=58d0a564-8671-4557-b8f3-37ce344f748e |
| Area=4610 | Joint1=4909 | Joint2=4956 | Joint3=4957 | Joint4=4910 | GUID=6ad8d763-92cc-477f-8946-b19f2142b55f |
| Area=4611 | Joint1=4911 | Joint2=4958 | Joint3=4959 | Joint4=4912 | GUID=d5eb46e0-493a-4bea-b357-b459ff12e4b2 |
| Area=4612 | Joint1=4912 | Joint2=4959 | Joint3=4960 | Joint4=4913 | GUID=7f378758-8e4d-4c3b-956d-b5195b560900 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=4613 Joint1=4913 Joint2=4960 Joint3=4961 Joint4=4914 GUID=be2f06b9-c5ff-4e7f-a438-41c2e441d7c9  
Area=4614 Joint1=4914 Joint2=4961 Joint3=4962 Joint4=4915 GUID=b1df383b-1b0b-4a2f-be3d-d08d3e968d20  
Area=4615 Joint1=4915 Joint2=4962 Joint3=4963 Joint4=4916 GUID=29d8e5d2-4ae9-42f1-8b57-f6ce2f31c9de  
Area=4616 Joint1=4916 Joint2=4963 Joint3=4964 Joint4=4917 GUID=f37b93de-35fb-4339-a1af-1a1cf9d556d6  
Area=4617 Joint1=4917 Joint2=4964 Joint3=4965 Joint4=4918 GUID=6cc796f4-81dd-488d-b646-c1241f56af78  
Area=4618 Joint1=4918 Joint2=4965 Joint3=4966 Joint4=4919 GUID=4c75de8b-d10a-4f8a-bb62-a1873820ef72  
Area=4619 Joint1=4919 Joint2=4966 Joint3=4967 Joint4=4920 GUID=27a88de3-f183-4554-8ac7-f484bf43904d  
Area=4620 Joint1=4920 Joint2=4967 Joint3=4968 Joint4=4921 GUID=31a8207b-d41e-48fd-aec7-bab68cad5a96  
Area=4621 Joint1=4921 Joint2=4968 Joint3=4969 Joint4=4922 GUID=9269a21c-4a9e-48c9-b32b-9b3c6ab23c23  
Area=4622 Joint1=4922 Joint2=4969 Joint3=4970 Joint4=4923 GUID=cecd422e-6c56-4e02-9065-fbfc3dae4ce2  
Area=4623 Joint1=4923 Joint2=4970 Joint3=4971 Joint4=4924 GUID=9e97af3f-7f4e-491d-8ff3-1be0a93e913f  
Area=4624 Joint1=4924 Joint2=4971 Joint3=4972 Joint4=4925 GUID=05b74f56-7532-49a0-abea-297624a2a9a3  
Area=4625 Joint1=4925 Joint2=4972 Joint3=4973 Joint4=4926 GUID=37d88b3e-8bb3-46c9-a0bd-d4f26fd87c2f  
Area=4626 Joint1=4926 Joint2=4973 Joint3=4974 Joint4=4927 GUID=9ca7ec0a-6964-408c-bfab-2612df1739df  
Area=4627 Joint1=4927 Joint2=4974 Joint3=4975 Joint4=4928 GUID=e27894d9-6251-41f8-a106-43baec9f4558  
Area=4628 Joint1=4928 Joint2=4975 Joint3=4976 Joint4=4929 GUID=cee0b65d-2d9e-42f8-bbf0-f1ebdd98dbdb  
Area=4629 Joint1=4929 Joint2=4976 Joint3=4977 Joint4=4930 GUID=6b606c69-048a-4c6d-b585-c1ad6690ddcb  
Area=4630 Joint1=4930 Joint2=4977 Joint3=4978 Joint4=4931 GUID=d7a9d0f3-b5ec-4e1e-af45-2456860a55fd  
Area=4631 Joint1=4931 Joint2=4978 Joint3=4979 Joint4=4932 GUID=a12be42f-e4b5-48bb-9304-bd742c43e239  
Area=4632 Joint1=4932 Joint2=4979 Joint3=4980 Joint4=4933 GUID=3f84bca0-293f-418e-aed3-660ede8bedbf  
Area=4633 Joint1=4933 Joint2=4980 Joint3=4981 Joint4=4934 GUID=1618f2aa-7441-4984-b39b-73f086884205  
Area=4634 Joint1=4934 Joint2=4981 Joint3=4982 Joint4=4935 GUID=d16b6949-b0bf-4e47-ab30-c27853dc154e  
Area=4635 Joint1=4935 Joint2=4982 Joint3=4983 Joint4=4936 GUID=01a03648-f13a-4139-9db9-d852e5803315  
Area=4636 Joint1=4936 Joint2=4983 Joint3=4984 Joint4=4937 GUID=0394196e-1e74-4dad-8d2d-132cee928b08  
Area=4637 Joint1=4937 Joint2=4984 Joint3=4985 Joint4=4938 GUID=5ffa2586-220d-47b6-a9ef-3a1b79a738f8  
Area=4638 Joint1=4938 Joint2=4985 Joint3=4986 Joint4=4939 GUID=eff860ae-2053-405b-995f-f4982edc4b01  
Area=4639 Joint1=4939 Joint2=4986 Joint3=4987 Joint4=4940 GUID=aabc06b6-e6e2-43c5-88be-49653c09eaf7  
Area=4640 Joint1=4940 Joint2=4987 Joint3=4988 Joint4=4941 GUID=24e905cf-9642-448c-bc79-182949617a91  
Area=4641 Joint1=4941 Joint2=4988 Joint3=4989 Joint4=4942 GUID=465d1fab-b73d-48c2-b142-803625a94c67  
Area=4642 Joint1=4942 Joint2=4989 Joint3=4990 Joint4=4943 GUID=741a1426-6e71-4aa2-9e96-b56d71e9bb6b  
Area=4643 Joint1=4943 Joint2=4990 Joint3=4991 Joint4=4944 GUID=15177656-b8e8-4622-9e06-98099394c2fd  
Area=4644 Joint1=4944 Joint2=4991 Joint3=4992 Joint4=4945 GUID=4f50f8c5-dc40-4eb1-81bb-e4b1065a0db4  
Area=4645 Joint1=4945 Joint2=4992 Joint3=4993 Joint4=4946 GUID=9901898d-21d3-4347-b466-460e06cced6a  
Area=4646 Joint1=4946 Joint2=4993 Joint3=4994 Joint4=4947 GUID=67010af4-df31-4dac-88fd-76c6693c9954  
Area=4647 Joint1=4947 Joint2=4994 Joint3=4995 Joint4=4948 GUID=ec1531e5-4ddb-4937-bb1b-c55c6702661e

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                            |
|-----------|-------------|-------------|-------------|-------------|--------------------------------------------|
| Area=4648 | Joint1=4948 | Joint2=4995 | Joint3=4996 | Joint4=4949 | GUID=a3a6e389-ac9b-4ca4-b443-690d8a64d26d  |
| Area=4649 | Joint1=4949 | Joint2=4996 | Joint3=4997 | Joint4=4950 | GUID=0572ff97-3737-4ffa-ab8b-095513756597  |
| Area=4650 | Joint1=4950 | Joint2=4997 | Joint3=4998 | Joint4=4951 | GUID=d288e40d-9242-4c31-854a-acab5bed0a0f  |
| Area=4651 | Joint1=4951 | Joint2=4998 | Joint3=4999 | Joint4=4952 | GUID=b60f2ceb-0eb9-40b9-a02d-54d8f93e24a8  |
| Area=4652 | Joint1=4952 | Joint2=4999 | Joint3=5000 | Joint4=4953 | GUID=89bab36f-d703-4970-87c1-d7929a5a0457  |
| Area=4653 | Joint1=4953 | Joint2=5000 | Joint3=5001 | Joint4=4954 | GUID=a0de5cf4-4f6d-42f6-806c-1f10096169cf  |
| Area=4654 | Joint1=4954 | Joint2=5001 | Joint3=5002 | Joint4=4955 | GUID=2f99b2b9-13b5-4c30-a21c-c489b095ff2f  |
| Area=4655 | Joint1=4955 | Joint2=5002 | Joint3=5003 | Joint4=4956 | GUID=314a1b52-f295-426b-a7cd-f5b82995bf46  |
| Area=4656 | Joint1=4956 | Joint2=5003 | Joint3=5004 | Joint4=4957 | GUID=19ac7105-2437-4df6-af6d-604bc5f9f28d  |
| Area=4657 | Joint1=4958 | Joint2=5005 | Joint3=5006 | Joint4=4959 | GUID=dc6c92b3-1965-454c-b53b-c42753d0bb50  |
| Area=4658 | Joint1=4959 | Joint2=5006 | Joint3=5007 | Joint4=4960 | GUID=b9282280-02f2-4684-b8fe-e42941052e49  |
| Area=4659 | Joint1=4960 | Joint2=5007 | Joint3=5008 | Joint4=4961 | GUID=03e4bfb4-8ff0-48bf-b19f-b44ed0a9b538  |
| Area=4660 | Joint1=4961 | Joint2=5008 | Joint3=5009 | Joint4=4962 | GUID=92cf8d16-346e-45ca-88c1-bd8e955ac514  |
| Area=4661 | Joint1=4962 | Joint2=5009 | Joint3=5010 | Joint4=4963 | GUID=3653ef4b-6ef8-4f90-a319-f8a15dff4024  |
| Area=4662 | Joint1=4963 | Joint2=5010 | Joint3=5011 | Joint4=4964 | GUID=cbe53d68-4c77-4d12-b62d-435ec6847761  |
| Area=4663 | Joint1=4964 | Joint2=5011 | Joint3=5012 | Joint4=4965 | GUID=5628d9e0-4154-43e6-a5db-8c12c2635fdf  |
| Area=4664 | Joint1=4965 | Joint2=5012 | Joint3=5013 | Joint4=4966 | GUID=569aa1e1-f48a-4dab-b748-0bda0f66d545  |
| Area=4665 | Joint1=4966 | Joint2=5013 | Joint3=5014 | Joint4=4967 | GUID=b23d9020-2b13-452f-b07f-6545bc1ca07b  |
| Area=4666 | Joint1=4967 | Joint2=5014 | Joint3=5015 | Joint4=4968 | GUID=e050c878-b87a-4412-a578-274d30ebe5ab  |
| Area=4667 | Joint1=4968 | Joint2=5015 | Joint3=5016 | Joint4=4969 | GUID=b57c2c4c-ccdc-4da2-b953-3726adcd04fc  |
| Area=4668 | Joint1=4969 | Joint2=5016 | Joint3=5017 | Joint4=4970 | GUID=fd74a31a-896b-49ce-9607-3ab66e7cdbb8  |
| Area=4669 | Joint1=4970 | Joint2=5017 | Joint3=5018 | Joint4=4971 | GUID=ea9ccbbdf-6fad-4bf2-a12a-2f95312d7599 |
| Area=4670 | Joint1=4971 | Joint2=5018 | Joint3=5019 | Joint4=4972 | GUID=c78729dc-87af-4aa0-91b0-6ff2d730ec92  |
| Area=4671 | Joint1=4972 | Joint2=5019 | Joint3=5020 | Joint4=4973 | GUID=ea17331e-0bac-4824-80cc-50c3568189ae  |
| Area=4672 | Joint1=4973 | Joint2=5020 | Joint3=5021 | Joint4=4974 | GUID=bac24177-691b-4717-91d8-524cad87b61f  |
| Area=4673 | Joint1=4974 | Joint2=5021 | Joint3=5022 | Joint4=4975 | GUID=fe841de5-eb6a-4d7c-8407-b46e4895f7cd  |
| Area=4674 | Joint1=4975 | Joint2=5022 | Joint3=5023 | Joint4=4976 | GUID=2c9d85e4-d023-44bf-b217-bdfc3b7885b5  |
| Area=4675 | Joint1=4976 | Joint2=5023 | Joint3=5024 | Joint4=4977 | GUID=7c836392-5449-4ca7-b83e-3ff53cc1b2ca  |
| Area=4676 | Joint1=4977 | Joint2=5024 | Joint3=5025 | Joint4=4978 | GUID=e6524e72-d547-4602-b1ec-741a22755e71  |
| Area=4677 | Joint1=4978 | Joint2=5025 | Joint3=5026 | Joint4=4979 | GUID=c0069476-b7ce-472c-a787-3955616b101b  |
| Area=4678 | Joint1=4979 | Joint2=5026 | Joint3=5027 | Joint4=4980 | GUID=01182c91-4dbe-4967-a774-db7c13e0fe20  |
| Area=4679 | Joint1=4980 | Joint2=5027 | Joint3=5028 | Joint4=4981 | GUID=40db2e8f-02b8-4fcc-be44-2b8e87f4fe10  |
| Area=4680 | Joint1=4981 | Joint2=5028 | Joint3=5029 | Joint4=4982 | GUID=1e33bdb7-b07d-41a4-b80b-9b010e492a7e  |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=4681 | Joint1=4982 | Joint2=5029 | Joint3=5030 | Joint4=4983 | GUID=6769a3bd-f9ed-4616-87da-5a90777f3089 |
| Area=4682 | Joint1=4983 | Joint2=5030 | Joint3=5031 | Joint4=4984 | GUID=9575ddd7-f891-45fd-a574-95ace5b4398b |
| Area=4683 | Joint1=4984 | Joint2=5031 | Joint3=5032 | Joint4=4985 | GUID=3c8f9f53-d9e1-424d-8fa6-234fddd6933e |
| Area=4684 | Joint1=4985 | Joint2=5032 | Joint3=5033 | Joint4=4986 | GUID=5996c58e-541a-4514-8a86-9d4e8d35106b |
| Area=4685 | Joint1=4986 | Joint2=5033 | Joint3=5034 | Joint4=4987 | GUID=9a8a19cf-556f-4e5d-ba77-5e47781447ac |
| Area=4686 | Joint1=4987 | Joint2=5034 | Joint3=5035 | Joint4=4988 | GUID=05e5ae3b-4df3-4f87-b951-46e0b284fa13 |
| Area=4687 | Joint1=4988 | Joint2=5035 | Joint3=5036 | Joint4=4989 | GUID=5f9cbfcb-ffd2-4207-90a2-e6c9f0b1b553 |
| Area=4688 | Joint1=4989 | Joint2=5036 | Joint3=5037 | Joint4=4990 | GUID=063594ef-5ec7-4d25-b971-2e5decdd07c5 |
| Area=4689 | Joint1=4990 | Joint2=5037 | Joint3=5038 | Joint4=4991 | GUID=126a048b-b9df-44b1-a9dd-7c45c7edd19d |
| Area=4690 | Joint1=4991 | Joint2=5038 | Joint3=5039 | Joint4=4992 | GUID=b5330e0f-af4c-48f3-a281-6f555db26e19 |
| Area=4691 | Joint1=4992 | Joint2=5039 | Joint3=5040 | Joint4=4993 | GUID=a916d1fc-73b7-4e07-a91d-51dd3425cfd7 |
| Area=4692 | Joint1=4993 | Joint2=5040 | Joint3=5041 | Joint4=4994 | GUID=af2aef3e-6482-4e3e-a901-30219fbddc9c |
| Area=4693 | Joint1=4994 | Joint2=5041 | Joint3=5042 | Joint4=4995 | GUID=39a421aa-6a1d-421f-9fda-abf08a167577 |
| Area=4694 | Joint1=4995 | Joint2=5042 | Joint3=5043 | Joint4=4996 | GUID=984389ac-4228-4f2f-abe0-730f7e0e6f4b |
| Area=4695 | Joint1=4996 | Joint2=5043 | Joint3=5044 | Joint4=4997 | GUID=6f83e1b7-1731-4c65-a3a1-30c1dd962c36 |
| Area=4696 | Joint1=4997 | Joint2=5044 | Joint3=5045 | Joint4=4998 | GUID=0b50881e-70a2-4a7a-acec-0a1ac3acaf7f |
| Area=4697 | Joint1=4998 | Joint2=5045 | Joint3=5046 | Joint4=4999 | GUID=62f3194e-0602-47e5-b2a8-50c779296659 |
| Area=4698 | Joint1=4999 | Joint2=5046 | Joint3=5047 | Joint4=5000 | GUID=d3a26436-4261-4555-99d0-35a90a5da290 |
| Area=4699 | Joint1=5000 | Joint2=5047 | Joint3=5048 | Joint4=5001 | GUID=3dedae68-b596-472a-92af-75790e2478b9 |
| Area=4700 | Joint1=5001 | Joint2=5048 | Joint3=5049 | Joint4=5002 | GUID=1ecd2327-57de-4503-aea3-ded53e10434e |
| Area=4701 | Joint1=5002 | Joint2=5049 | Joint3=5050 | Joint4=5003 | GUID=0533c30f-e322-4c0e-af13-627513a2ac4a |
| Area=4702 | Joint1=5003 | Joint2=5050 | Joint3=5051 | Joint4=5004 | GUID=44bc44e1-4ed6-48fb-b153-e4f72a2e40b4 |
| Area=4703 | Joint1=5005 | Joint2=5052 | Joint3=5053 | Joint4=5006 | GUID=69515186-a91e-42ef-9dd6-0a7ed852ced2 |
| Area=4704 | Joint1=5006 | Joint2=5053 | Joint3=5054 | Joint4=5007 | GUID=7ee2f17e-78b4-41aa-a221-adabaf7c0cb8 |
| Area=4705 | Joint1=5007 | Joint2=5054 | Joint3=5055 | Joint4=5008 | GUID=a773b466-4920-49e2-ad1d-cf1862c2d71b |
| Area=4706 | Joint1=5008 | Joint2=5055 | Joint3=5056 | Joint4=5009 | GUID=c47fa518-6f99-4c28-bc3d-86997a7a1c67 |
| Area=4707 | Joint1=5009 | Joint2=5056 | Joint3=5057 | Joint4=5010 | GUID=2a1e0165-e11f-48e5-ab2b-5e2278082ab6 |
| Area=4708 | Joint1=5010 | Joint2=5057 | Joint3=5058 | Joint4=5011 | GUID=8dd9995a-badc-415b-a853-e5824f994681 |
| Area=4709 | Joint1=5011 | Joint2=5058 | Joint3=5059 | Joint4=5012 | GUID=b35671cd-0d9e-47bf-a14e-abdcc1bf6545 |
| Area=4710 | Joint1=5012 | Joint2=5059 | Joint3=5060 | Joint4=5013 | GUID=c2f88363-e48d-4a08-bf70-a46010552334 |
| Area=4711 | Joint1=5013 | Joint2=5060 | Joint3=5061 | Joint4=5014 | GUID=159f3153-f8b0-49b3-ae7b-de199a4ae815 |
| Area=4712 | Joint1=5014 | Joint2=5061 | Joint3=5062 | Joint4=5015 | GUID=0f477021-29dd-4db3-bf55-190c30d5ffbe |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=4713 | Joint1=5015 | Joint2=5062 | Joint3=5063 | Joint4=5016 | GUID=0bafd8dc-538d-4d2a-8758-94695a0afb6e |
| Area=4714 | Joint1=5016 | Joint2=5063 | Joint3=5064 | Joint4=5017 | GUID=95fb9052-d233-453d-ae8f-87d4e5e673c0 |
| Area=4715 | Joint1=5017 | Joint2=5064 | Joint3=5065 | Joint4=5018 | GUID=775edb99-c5e6-4aad-99e1-af5ba1c56378 |
| Area=4716 | Joint1=5018 | Joint2=5065 | Joint3=5066 | Joint4=5019 | GUID=6693e5f7-ef19-4723-98b4-25ce040fcc5d |
| Area=4717 | Joint1=5019 | Joint2=5066 | Joint3=5067 | Joint4=5020 | GUID=a865d2eb-67b0-4374-bb45-6a62230dcc27 |
| Area=4718 | Joint1=5020 | Joint2=5067 | Joint3=5068 | Joint4=5021 | GUID=e84fb427-8953-421b-bdb2-76fbd4a3b3df |
| Area=4719 | Joint1=5021 | Joint2=5068 | Joint3=5069 | Joint4=5022 | GUID=7e0697ea-f361-4926-850f-ceab29aaf878 |
| Area=4720 | Joint1=5022 | Joint2=5069 | Joint3=5070 | Joint4=5023 | GUID=b71c8599-91ef-4fd0-86f5-11a5c68f7813 |
| Area=4721 | Joint1=5023 | Joint2=5070 | Joint3=5071 | Joint4=5024 | GUID=9f21bfe2-50fd-4432-8525-f4cb13bd30a0 |
| Area=4722 | Joint1=5024 | Joint2=5071 | Joint3=5072 | Joint4=5025 | GUID=06313f5d-7e3d-4167-b6c2-88b3dcb0ca44 |
| Area=4723 | Joint1=5025 | Joint2=5072 | Joint3=5073 | Joint4=5026 | GUID=365c6c86-02cd-4d19-b5b8-a607ed45df6f |
| Area=4724 | Joint1=5026 | Joint2=5073 | Joint3=5074 | Joint4=5027 | GUID=75a7232f-cfd6-40a9-9574-253f93443c51 |
| Area=4725 | Joint1=5027 | Joint2=5074 | Joint3=5075 | Joint4=5028 | GUID=7dec290a-d97b-4e4b-ad0a-d6c1df93b1a7 |
| Area=4726 | Joint1=5028 | Joint2=5075 | Joint3=5076 | Joint4=5029 | GUID=d2cca7b5-dbb0-4702-9409-32aa6a4b1b0d |
| Area=4727 | Joint1=5029 | Joint2=5076 | Joint3=5077 | Joint4=5030 | GUID=fcd40957-414a-43f3-94a2-cbfd91a347f2 |
| Area=4728 | Joint1=5030 | Joint2=5077 | Joint3=5078 | Joint4=5031 | GUID=b6d1ca86-40e2-45e5-a9db-7ab5e106cf44 |
| Area=4729 | Joint1=5031 | Joint2=5078 | Joint3=5079 | Joint4=5032 | GUID=49368373-6865-4fe2-aa10-80cae43933fa |
| Area=4730 | Joint1=5032 | Joint2=5079 | Joint3=5080 | Joint4=5033 | GUID=4422fabb-189e-4884-a88f-f17635144c3d |
| Area=4731 | Joint1=5033 | Joint2=5080 | Joint3=5081 | Joint4=5034 | GUID=2938d54c-050d-4327-a352-eaec111db3f9 |
| Area=4732 | Joint1=5034 | Joint2=5081 | Joint3=5082 | Joint4=5035 | GUID=2d53b3ab-0754-4d5d-93fc-e60092c29f0a |
| Area=4733 | Joint1=5035 | Joint2=5082 | Joint3=5083 | Joint4=5036 | GUID=7633e1e0-4c06-4ce1-9e4b-618397e85880 |
| Area=4734 | Joint1=5036 | Joint2=5083 | Joint3=5084 | Joint4=5037 | GUID=769fcb3a-5aea-4f51-a7a6-0495f67d07e2 |
| Area=4735 | Joint1=5037 | Joint2=5084 | Joint3=5085 | Joint4=5038 | GUID=e353d832-dcb2-4ca3-ad1d-a6edbd283086 |
| Area=4736 | Joint1=5038 | Joint2=5085 | Joint3=5086 | Joint4=5039 | GUID=480dc820-d54b-4aa6-8323-81318e2a3c50 |
| Area=4737 | Joint1=5039 | Joint2=5086 | Joint3=5087 | Joint4=5040 | GUID=ae3ecc52-67cb-49a9-bd0d-a51abceb1518 |
| Area=4738 | Joint1=5040 | Joint2=5087 | Joint3=5088 | Joint4=5041 | GUID=bdda780f-ceb7-48a4-a715-e37a170e5a16 |
| Area=4739 | Joint1=5041 | Joint2=5088 | Joint3=5089 | Joint4=5042 | GUID=a11413b1-58d1-479d-98bd-30298a625b52 |
| Area=4740 | Joint1=5042 | Joint2=5089 | Joint3=5090 | Joint4=5043 | GUID=2891aaff-2664-40ea-8554-2aba1e43c17f |
| Area=4741 | Joint1=5043 | Joint2=5090 | Joint3=5091 | Joint4=5044 | GUID=21b9832d-0ed8-4e80-87a5-d7ceeba9e1e4 |
| Area=4742 | Joint1=5044 | Joint2=5091 | Joint3=5092 | Joint4=5045 | GUID=0cbae036-0c1f-4b14-9026-17d4148ab3d3 |
| Area=4743 | Joint1=5045 | Joint2=5092 | Joint3=5093 | Joint4=5046 | GUID=023ab527-3a37-4b1c-9002-25f518d13572 |
| Area=4744 | Joint1=5046 | Joint2=5093 | Joint3=5094 | Joint4=5047 | GUID=3bfe4c34-d59d-4f4a-9abf-0c51a43caa80 |
| Area=4745 | Joint1=5047 | Joint2=5094 | Joint3=5095 | Joint4=5048 | GUID=d8eb30b6-287d-4f27-847e-72807b5ab2d0 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=4746 Joint1=5048 Joint2=5095 Joint3=5096 Joint4=5049 GUID=f1fe7542-8571-4c2b-8aea-082892ead48f  
Area=4747 Joint1=5049 Joint2=5096 Joint3=5097 Joint4=5050 GUID=c628dca9-795a-4f8a-8efb-8ebe2159f00a  
Area=4748 Joint1=5050 Joint2=5097 Joint3=5098 Joint4=5051 GUID=e24e2794-896b-433a-906e-e92aff7a074c  
Area=4749 Joint1=5052 Joint2=5099 Joint3=5100 Joint4=5053 GUID=77de5986-7cdb-4de0-b883-6d912c1581f3  
Area=4750 Joint1=5053 Joint2=5100 Joint3=5101 Joint4=5054 GUID=086ee8d1-e335-465c-bbfd-f32e4477c0ff  
Area=4751 Joint1=5054 Joint2=5101 Joint3=5102 Joint4=5055 GUID=30ac7179-441c-4a92-88f3-8d25bed8c550  
Area=4752 Joint1=5055 Joint2=5102 Joint3=5103 Joint4=5056 GUID=f83d5d25-6bb5-4300-980e-00b0b87eb754  
Area=4753 Joint1=5056 Joint2=5103 Joint3=5104 Joint4=5057 GUID=999bb1e3-4196-477a-a273-8ef3251594a3  
Area=4754 Joint1=5057 Joint2=5104 Joint3=5105 Joint4=5058 GUID=4a7c9e20-2192-41d8-9ecb-5ab9f40e7dcf  
Area=4755 Joint1=5058 Joint2=5105 Joint3=5106 Joint4=5059 GUID=07001fa0-d327-47de-a729-cbacef7259ee  
Area=4756 Joint1=5059 Joint2=5106 Joint3=5107 Joint4=5060 GUID=659212af-5e78-4c0e-a16a-29eaa00b73d5  
Area=4757 Joint1=5060 Joint2=5107 Joint3=5108 Joint4=5061 GUID=2ccbb50e-0106-4250-ab7d-3c0d652b9c9c  
Area=4758 Joint1=5061 Joint2=5108 Joint3=5109 Joint4=5062 GUID=56758c18-3515-41ef-a40d-d461c68d4792  
Area=4759 Joint1=5062 Joint2=5109 Joint3=5110 Joint4=5063 GUID=1ee3a436-dc1a-440e-b86f-a7dd520866d8  
Area=4760 Joint1=5063 Joint2=5110 Joint3=5111 Joint4=5064 GUID=717bcd05-6114-4395-a133-6d52d26a86f5  
Area=4761 Joint1=5064 Joint2=5111 Joint3=5112 Joint4=5065 GUID=d80ccf8c-ba23-410a-9043-79e8c2f3742f  
Area=4762 Joint1=5065 Joint2=5112 Joint3=5113 Joint4=5066 GUID=4b4cdcd1-0afe-45c4-a3d5-7c981e2a5d17  
Area=4763 Joint1=5066 Joint2=5113 Joint3=5114 Joint4=5067 GUID=3afa6c3f-fc70-43a5-940e-cbfdbe2c0869  
Area=4764 Joint1=5067 Joint2=5114 Joint3=5115 Joint4=5068 GUID=bfc7b7f9-b241-49c1-80fe-35dcbddfbf13  
Area=4765 Joint1=5068 Joint2=5115 Joint3=5116 Joint4=5069 GUID=01cdc1b4-cfd3-42c1-837b-ab4f20971c8a  
Area=4766 Joint1=5069 Joint2=5116 Joint3=5117 Joint4=5070 GUID=070ffd6b-91f5-4949-9780-16a22d8d6af4  
Area=4767 Joint1=5070 Joint2=5117 Joint3=5118 Joint4=5071 GUID=78702451-8c5a-4039-ab5e-a917bfaaf1ee  
Area=4768 Joint1=5071 Joint2=5118 Joint3=5119 Joint4=5072 GUID=b0ed03f7-338e-4006-a82f-b7064857b58a  
Area=4769 Joint1=5072 Joint2=5119 Joint3=5120 Joint4=5073 GUID=7c9be756-8495-46ac-8273-ce288c1dadaa  
Area=4770 Joint1=5073 Joint2=5120 Joint3=5121 Joint4=5074 GUID=f222b3bf-1952-4277-b019-fa46cec74133  
Area=4771 Joint1=5074 Joint2=5121 Joint3=5122 Joint4=5075 GUID=f52c9239-652e-4992-974e-a2b1ed7c9228  
Area=4772 Joint1=5075 Joint2=5122 Joint3=5123 Joint4=5076 GUID=8573fb35-bcd6-4a8a-bf16-c89201794db6  
Area=4773 Joint1=5076 Joint2=5123 Joint3=5124 Joint4=5077 GUID=75ea669c-b2d1-40c6-af71-10c3f5c37af7  
Area=4774 Joint1=5077 Joint2=5124 Joint3=5125 Joint4=5078 GUID=fdb80e2d-7153-4e54-bcf3-41331214aaac  
Area=4775 Joint1=5078 Joint2=5125 Joint3=5126 Joint4=5079 GUID=ae56cdc4-76a7-4b5c-a8bf-4477b2fde13f  
Area=4776 Joint1=5079 Joint2=5126 Joint3=5127 Joint4=5080 GUID=4a792000-7eb7-4de6-b2b5-8c3c12e20ec5  
Area=4777 Joint1=5080 Joint2=5127 Joint3=5128 Joint4=5081 GUID=8de9c8d3-a7c4-4e0d-8919-6f6be72d4a10  
Area=4778 Joint1=5081 Joint2=5128 Joint3=5129 Joint4=5082 GUID=f5b3276c-a797-4a6d-8438-14813e31387d

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=4779 | Joint1=5082 | Joint2=5129 | Joint3=5130 | Joint4=5083 | GUID=c0d299cd-5094-476d-ba23-25484bb637a4 |
| Area=4780 | Joint1=5083 | Joint2=5130 | Joint3=5131 | Joint4=5084 | GUID=7bffb895-8be6-4be7-baca-095fee80d220 |
| Area=4781 | Joint1=5084 | Joint2=5131 | Joint3=5132 | Joint4=5085 | GUID=b33548db-695c-491f-a4d3-b8480d6efc4f |
| Area=4782 | Joint1=5085 | Joint2=5132 | Joint3=5133 | Joint4=5086 | GUID=5de3961a-0d08-429a-8bc9-1e8e39c9fa3f |
| Area=4783 | Joint1=5086 | Joint2=5133 | Joint3=5134 | Joint4=5087 | GUID=6439855f-8662-4f81-acde-a054afe4cb1d |
| Area=4784 | Joint1=5087 | Joint2=5134 | Joint3=5135 | Joint4=5088 | GUID=3ecf2dc8-29ab-4985-a458-7234e7be96ad |
| Area=4785 | Joint1=5088 | Joint2=5135 | Joint3=5136 | Joint4=5089 | GUID=a9400b03-9ea2-48e6-a375-c9ace7015dec |
| Area=4786 | Joint1=5089 | Joint2=5136 | Joint3=5137 | Joint4=5090 | GUID=5ce71e78-99d7-477c-89a1-2868a34aac3c |
| Area=4787 | Joint1=5090 | Joint2=5137 | Joint3=5138 | Joint4=5091 | GUID=8922d18f-a318-4ce4-969c-7cacdd08dfc7 |
| Area=4788 | Joint1=5091 | Joint2=5138 | Joint3=5139 | Joint4=5092 | GUID=842c8f94-481f-465b-987f-2e2e87fdc3fa |
| Area=4789 | Joint1=5092 | Joint2=5139 | Joint3=5140 | Joint4=5093 | GUID=2665db78-1414-4897-912c-0af49c6276b8 |
| Area=4790 | Joint1=5093 | Joint2=5140 | Joint3=5141 | Joint4=5094 | GUID=89c75421-f82d-445e-83b6-4aea45723a8a |
| Area=4791 | Joint1=5094 | Joint2=5141 | Joint3=5142 | Joint4=5095 | GUID=f1420202-bb03-4688-9209-cafaad903ad2 |
| Area=4792 | Joint1=5095 | Joint2=5142 | Joint3=5143 | Joint4=5096 | GUID=4e183b79-344c-472b-9bbf-ebd6f7d32505 |
| Area=4793 | Joint1=5096 | Joint2=5143 | Joint3=5144 | Joint4=5097 | GUID=d3ef44fb-01ff-4b90-a2ca-dc6123e73d33 |
| Area=4794 | Joint1=5097 | Joint2=5144 | Joint3=5145 | Joint4=5098 | GUID=4ce3851f-fedf-4c76-82d8-45a6c7720ccc |
| Area=4795 | Joint1=5099 | Joint2=5146 | Joint3=5147 | Joint4=5100 | GUID=084fd70d-a150-4e4b-8e12-11a54891ec87 |
| Area=4796 | Joint1=5100 | Joint2=5147 | Joint3=5148 | Joint4=5101 | GUID=b173d05a-ad2b-4057-b6b7-2153cde6a46c |
| Area=4797 | Joint1=5101 | Joint2=5148 | Joint3=5149 | Joint4=5102 | GUID=f35d2a52-8b29-41d9-9f8a-e685c5fd88b0 |
| Area=4798 | Joint1=5102 | Joint2=5149 | Joint3=5150 | Joint4=5103 | GUID=16ead845-285c-4547-8494-97b9fbf00674 |
| Area=4799 | Joint1=5103 | Joint2=5150 | Joint3=5151 | Joint4=5104 | GUID=e4c90e0c-9268-4a44-bccc-2051c44e1725 |
| Area=4800 | Joint1=5104 | Joint2=5151 | Joint3=5152 | Joint4=5105 | GUID=cad67d26-aa09-46d1-b663-4e39aec27aff |
| Area=4801 | Joint1=5105 | Joint2=5152 | Joint3=5153 | Joint4=5106 | GUID=07cddc61-4eee-4593-b9ca-f838a101cca1 |
| Area=4802 | Joint1=5106 | Joint2=5153 | Joint3=5154 | Joint4=5107 | GUID=3cdfef1b-6ad3-484d-88d7-4b03ddb095ba |
| Area=4803 | Joint1=5107 | Joint2=5154 | Joint3=5155 | Joint4=5108 | GUID=3f2d9ba6-ec92-4994-89fc-854741837ee4 |
| Area=4804 | Joint1=5108 | Joint2=5155 | Joint3=5156 | Joint4=5109 | GUID=ce99d556-e9e4-46b0-8f2a-cc959a4d61c6 |
| Area=4805 | Joint1=5109 | Joint2=5156 | Joint3=5157 | Joint4=5110 | GUID=db665488-d75e-41d3-9a87-975dd3996308 |
| Area=4806 | Joint1=5110 | Joint2=5157 | Joint3=5158 | Joint4=5111 | GUID=6bd5ff92-a84e-49d6-a690-daa333b3eb0d |
| Area=4807 | Joint1=5111 | Joint2=5158 | Joint3=5159 | Joint4=5112 | GUID=21b357a0-86b3-41fe-9345-ed4ca382c4e3 |
| Area=4808 | Joint1=5112 | Joint2=5159 | Joint3=5160 | Joint4=5113 | GUID=50119f25-38a4-49c1-9349-4b3093c462f9 |
| Area=4809 | Joint1=5113 | Joint2=5160 | Joint3=5161 | Joint4=5114 | GUID=5136a195-03ae-48a8-94c6-4f21446017cf |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=4810<br>e4183598ca17 | Joint1=5114 | Joint2=5161 | Joint3=5162 | Joint4=5115 | GUID=0f393d62-3c0a-4b32-8b61-             |
| Area=4811<br>330721268b3c | Joint1=5115 | Joint2=5162 | Joint3=5163 | Joint4=5116 | GUID=594c5fe6-dde4-4352-9deb-             |
| Area=4812<br>446934b5abf4 | Joint1=5116 | Joint2=5163 | Joint3=5164 | Joint4=5117 | GUID=024dacb6-ba58-4409-860e-             |
| Area=4813<br>a4fe2ec581e8 | Joint1=5117 | Joint2=5164 | Joint3=5165 | Joint4=5118 | GUID=d4c06942-dfa6-4383-ac8d-             |
| Area=4814                 | Joint1=5118 | Joint2=5165 | Joint3=5166 | Joint4=5119 | GUID=fa9ae5fb-9177-4f95-8a99-4f75a7a58da9 |
| Area=4815                 | Joint1=5119 | Joint2=5166 | Joint3=5167 | Joint4=5120 | GUID=9d5a12f7-ef95-4869-a8a6-8c32ebdf756c |
| Area=4816<br>e631879f0c99 | Joint1=5120 | Joint2=5167 | Joint3=5168 | Joint4=5121 | GUID=53ece671-2cdf-45b3-8e7d-             |
| Area=4817                 | Joint1=5121 | Joint2=5168 | Joint3=5169 | Joint4=5122 | GUID=436d27f4-eaef-4889-90fd-a39ec9917495 |
| Area=4818<br>84f384e890c2 | Joint1=5122 | Joint2=5169 | Joint3=5170 | Joint4=5123 | GUID=317b5870-086f-4562-9435-             |
| Area=4819                 | Joint1=5123 | Joint2=5170 | Joint3=5171 | Joint4=5124 | GUID=5db4cf75-8fc1-427f-8382-2056cfe492de |
| Area=4820                 | Joint1=5124 | Joint2=5171 | Joint3=5172 | Joint4=5125 | GUID=6c32116f-31ed-4b16-bd3b-36029af80f5a |
| Area=4821<br>a01b6257338a | Joint1=5125 | Joint2=5172 | Joint3=5173 | Joint4=5126 | GUID=ba274b77-97e7-4203-bc8a-             |
| Area=4822                 | Joint1=5126 | Joint2=5173 | Joint3=5174 | Joint4=5127 | GUID=500674f9-fec4-47f6-91d3-56ef61eb0033 |
| Area=4823<br>b1802aaca734 | Joint1=5127 | Joint2=5174 | Joint3=5175 | Joint4=5128 | GUID=bba68266-7996-4703-a10b-             |
| Area=4824                 | Joint1=5128 | Joint2=5175 | Joint3=5176 | Joint4=5129 | GUID=d6d9df0c-6e22-45c0-adfd-f54730ddbadc |
| Area=4825<br>bf7800d78c58 | Joint1=5129 | Joint2=5176 | Joint3=5177 | Joint4=5130 | GUID=3390831f-4058-4ea3-8e35-             |
| Area=4826                 | Joint1=5130 | Joint2=5177 | Joint3=5178 | Joint4=5131 | GUID=ff98cea5-944f-49bd-a135-ecfd49af6b03 |
| Area=4827<br>2b70e1add6a8 | Joint1=5131 | Joint2=5178 | Joint3=5179 | Joint4=5132 | GUID=8c8ab77f-05ad-4e69-a3a3-             |
| Area=4828<br>df37bb74ec21 | Joint1=5132 | Joint2=5179 | Joint3=5180 | Joint4=5133 | GUID=eb65b535-d731-4080-bb17-             |
| Area=4829<br>b2897d900c6e | Joint1=5133 | Joint2=5180 | Joint3=5181 | Joint4=5134 | GUID=086232c9-44b8-42b6-aedf-             |
| Area=4830<br>0c4d34a0b588 | Joint1=5134 | Joint2=5181 | Joint3=5182 | Joint4=5135 | GUID=4a4c7a8b-094d-427d-82b9-             |
| Area=4831<br>f76c9d4676a4 | Joint1=5135 | Joint2=5182 | Joint3=5183 | Joint4=5136 | GUID=0065a980-8d6e-46b0-8269-             |
| Area=4832<br>b039b82bcbad | Joint1=5136 | Joint2=5183 | Joint3=5184 | Joint4=5137 | GUID=501cf315-2d83-447e-ab6b-             |
| Area=4833<br>337029db0b5c | Joint1=5137 | Joint2=5184 | Joint3=5185 | Joint4=5138 | GUID=88a74aae-3088-45a1-ba35-             |
| Area=4834<br>e5ef099b96d8 | Joint1=5138 | Joint2=5185 | Joint3=5186 | Joint4=5139 | GUID=92c26c16-2398-4317-8d5e-             |
| Area=4835<br>1089080b30ae | Joint1=5139 | Joint2=5186 | Joint3=5187 | Joint4=5140 | GUID=8391092b-6cd7-4590-b9d3-             |
| Area=4836                 | Joint1=5140 | Joint2=5187 | Joint3=5188 | Joint4=5141 | GUID=b593f31d-577a-46ab-83e9-27f1f38b32f6 |
| Area=4837<br>e9f871a8e680 | Joint1=5141 | Joint2=5188 | Joint3=5189 | Joint4=5142 | GUID=be3e5ae8-68c2-4a24-af44-             |
| Area=4838<br>526566e4d433 | Joint1=5142 | Joint2=5189 | Joint3=5190 | Joint4=5143 | GUID=559948db-be88-490e-ace1-             |
| Area=4839<br>4b30b8f5c4da | Joint1=5143 | Joint2=5190 | Joint3=5191 | Joint4=5144 | GUID=9d1a4500-abb6-44b1-89fd-             |
| Area=4840<br>d1186286935a | Joint1=5144 | Joint2=5191 | Joint3=5192 | Joint4=5145 | GUID=19b225f5-b2f4-44ee-8845-             |
| Area=4841<br>bcd41127a4ff | Joint1=5146 | Joint2=5193 | Joint3=5194 | Joint4=5147 | GUID=b0e93887-0b47-4bce-a4a4-             |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=4842<br>a63c1e7fc8c0 | Joint1=5147 | Joint2=5194 | Joint3=5195 | Joint4=5148 | GUID=a9eed14-0ee5-49d0-a564-              |
| Area=4843<br>1659a90f30ca | Joint1=5148 | Joint2=5195 | Joint3=5196 | Joint4=5149 | GUID=8ce271e1-e4d2-4687-b52a-             |
| Area=4844<br>cd37bd7f09d8 | Joint1=5149 | Joint2=5196 | Joint3=5197 | Joint4=5150 | GUID=1541953b-ab55-4f7d-974a-             |
| Area=4845<br>18790a594290 | Joint1=5150 | Joint2=5197 | Joint3=5198 | Joint4=5151 | GUID=030605f5-234a-4b36-8205-             |
| Area=4846<br>a23a70507e34 | Joint1=5151 | Joint2=5198 | Joint3=5199 | Joint4=5152 | GUID=820075bb-7eeb-4515-88d5-             |
| Area=4847                 | Joint1=5152 | Joint2=5199 | Joint3=5200 | Joint4=5153 | GUID=e30bd60d-ed4f-451b-9d11-81108f28df42 |
| Area=4848<br>5d73eacc0fdc | Joint1=5153 | Joint2=5200 | Joint3=5201 | Joint4=5154 | GUID=578d80cb-a1a2-4968-b5a7-             |
| Area=4849<br>29ade0bb86c2 | Joint1=5154 | Joint2=5201 | Joint3=5202 | Joint4=5155 | GUID=98bd5fb3-594f-4d15-8ed9-             |
| Area=4850<br>59b3465b4d39 | Joint1=5155 | Joint2=5202 | Joint3=5203 | Joint4=5156 | GUID=c3eb870a-44fd-426d-be5a-             |
| Area=4851<br>3b0a5dea6dea | Joint1=5156 | Joint2=5203 | Joint3=5204 | Joint4=5157 | GUID=2de3ab78-cca3-46d4-957d-             |
| Area=4852                 | Joint1=5157 | Joint2=5204 | Joint3=5205 | Joint4=5158 | GUID=a6f8f201-d748-4309-97a1-df0944b3a7c1 |
| Area=4853                 | Joint1=5158 | Joint2=5205 | Joint3=5206 | Joint4=5159 | GUID=fcf04f95-a99a-46b9-9490-3b3229befdf5 |
| Area=4854<br>30ae5888d1c5 | Joint1=5159 | Joint2=5206 | Joint3=5207 | Joint4=5160 | GUID=3c3d16f4-cc5c-4b81-b9ed-             |
| Area=4855                 | Joint1=5160 | Joint2=5207 | Joint3=5208 | Joint4=5161 | GUID=506777a2-0eae-475b-bfaf-6b1f83e99d4e |
| Area=4856<br>3d9c90e6ba9b | Joint1=5161 | Joint2=5208 | Joint3=5209 | Joint4=5162 | GUID=a99a78df-6b04-4c2f-a5c4-             |
| Area=4857<br>194a8bb22cf0 | Joint1=5162 | Joint2=5209 | Joint3=5210 | Joint4=5163 | GUID=9457dc1f-61c0-4533-a767-             |
| Area=4858<br>12a8decd16c3 | Joint1=5163 | Joint2=5210 | Joint3=5211 | Joint4=5164 | GUID=2ed13f13-72dc-4ab6-87c7-             |
| Area=4859<br>ee6356f3de29 | Joint1=5164 | Joint2=5211 | Joint3=5212 | Joint4=5165 | GUID=dca508d9-0206-4fcd-b267-             |
| Area=4860<br>36b27ef7d706 | Joint1=5165 | Joint2=5212 | Joint3=5213 | Joint4=5166 | GUID=1903f1c1-8d07-42ab-9441-             |
| Area=4861                 | Joint1=5166 | Joint2=5213 | Joint3=5214 | Joint4=5167 | GUID=86e4db6f-a7b4-41fd-aaa3-9dfcc2970aff |
| Area=4862<br>f1e317f90349 | Joint1=5167 | Joint2=5214 | Joint3=5215 | Joint4=5168 | GUID=e972d620-ea69-46db-8a5a-             |
| Area=4863<br>7423ddd4987  | Joint1=5168 | Joint2=5215 | Joint3=5216 | Joint4=5169 | GUID=22e31895-f2db-423d-8d15-             |
| Area=4864<br>f9e449e62076 | Joint1=5169 | Joint2=5216 | Joint3=5217 | Joint4=5170 | GUID=8cbc8a25-6265-4272-a6c6-             |
| Area=4865<br>a03c090fe976 | Joint1=5170 | Joint2=5217 | Joint3=5218 | Joint4=5171 | GUID=afed50a6-7356-41b4-9d4c-             |
| Area=4866                 | Joint1=5171 | Joint2=5218 | Joint3=5219 | Joint4=5172 | GUID=967b296e-49fa-4feb-9ffb-9c1e70203449 |
| Area=4867                 | Joint1=5172 | Joint2=5219 | Joint3=5220 | Joint4=5173 | GUID=74f5248d-c299-4ddf-ad9f-8426ab1fc3a0 |
| Area=4868<br>e6ccf3f62a89 | Joint1=5173 | Joint2=5220 | Joint3=5221 | Joint4=5174 | GUID=58298319-773e-4280-8e9a-             |
| Area=4869<br>8994db2a6e70 | Joint1=5174 | Joint2=5221 | Joint3=5222 | Joint4=5175 | GUID=272f143d-5bd4-402e-beba-             |
| Area=4870                 | Joint1=5175 | Joint2=5222 | Joint3=5223 | Joint4=5176 | GUID=f4e1cf9b-9c4c-41f4-a736-b645368bcd12 |
| Area=4871<br>f76512b8b0b1 | Joint1=5176 | Joint2=5223 | Joint3=5224 | Joint4=5177 | GUID=ab4e6dcb-e873-4b77-83a3-             |
| Area=4872<br>58e5c714848d | Joint1=5177 | Joint2=5224 | Joint3=5225 | Joint4=5178 | GUID=a3402444-c7d1-49c2-ae68-             |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=4873<br>8d4c18cfb5c7 | Joint1=5178 | Joint2=5225 | Joint3=5226 | Joint4=5179 | GUID=953736fb-08a7-4a5e-9496-             |
| Area=4874<br>8edd93f5892d | Joint1=5179 | Joint2=5226 | Joint3=5227 | Joint4=5180 | GUID=04e1d502-b4c3-416a-8ee8-             |
| Area=4875                 | Joint1=5180 | Joint2=5227 | Joint3=5228 | Joint4=5181 | GUID=5b52a2ba-e832-445c-ab55-9ecf1fab838f |
| Area=4876<br>d11ba5be51b1 | Joint1=5181 | Joint2=5228 | Joint3=5229 | Joint4=5182 | GUID=9605049a-09dc-448f-907f-             |
| Area=4877<br>07dc5da432a2 | Joint1=5182 | Joint2=5229 | Joint3=5230 | Joint4=5183 | GUID=0c15d142-2387-40da-91a5-             |
| Area=4878<br>1ace4e24c5b8 | Joint1=5183 | Joint2=5230 | Joint3=5231 | Joint4=5184 | GUID=455163fe-f784-4012-8130-             |
| Area=4879                 | Joint1=5184 | Joint2=5231 | Joint3=5232 | Joint4=5185 | GUID=af6efd47-8be6-49a3-bb46-2373fca1bf37 |
| Area=4880<br>4d3e93e729d1 | Joint1=5185 | Joint2=5232 | Joint3=5233 | Joint4=5186 | GUID=ebfc534c-fe86-4887-b423-             |
| Area=4881<br>2664204ee225 | Joint1=5186 | Joint2=5233 | Joint3=5234 | Joint4=5187 | GUID=8d6fe6b9-03be-4e3b-9d97-             |
| Area=4882                 | Joint1=5187 | Joint2=5234 | Joint3=5235 | Joint4=5188 | GUID=8ef4d830-3292-414d-8c21-fcaf8951ae98 |
| Area=4883<br>4fa0364ad528 | Joint1=5188 | Joint2=5235 | Joint3=5236 | Joint4=5189 | GUID=fe42c0c1-09e2-4573-8a0b-             |
| Area=4884                 | Joint1=5189 | Joint2=5236 | Joint3=5237 | Joint4=5190 | GUID=a28f54c4-6dc5-4fe3-8bed-4f5f1bcbacca |
| Area=4885<br>cc5a93369d5e | Joint1=5190 | Joint2=5237 | Joint3=5238 | Joint4=5191 | GUID=56c3f7e2-67da-483b-980e-             |
| Area=4886<br>014994094684 | Joint1=5191 | Joint2=5238 | Joint3=5239 | Joint4=5192 | GUID=3f79ca4e-b600-4a45-8c67-             |
| Area=4887                 | Joint1=5193 | Joint2=5240 | Joint3=5241 | Joint4=5194 | GUID=c8779fa5-8ac6-456f-888d-42cef145ef65 |
| Area=4888<br>964d4b5e6c85 | Joint1=5194 | Joint2=5241 | Joint3=5242 | Joint4=5195 | GUID=8657d7d5-a741-4915-94b9-             |
| Area=4889<br>cb7c26cf447a | Joint1=5195 | Joint2=5242 | Joint3=5243 | Joint4=5196 | GUID=f200b9a0-1b35-4db6-93e4-             |
| Area=4890<br>ae0a9ba5d70a | Joint1=5196 | Joint2=5243 | Joint3=5244 | Joint4=5197 | GUID=b712085e-85d4-4cf0-a358-             |
| Area=4891                 | Joint1=5197 | Joint2=5244 | Joint3=5245 | Joint4=5198 | GUID=ca1e1cf9-714c-4abc-9d67-b6a56f4ddff4 |
| Area=4892<br>a04b6099b9b5 | Joint1=5198 | Joint2=5245 | Joint3=5246 | Joint4=5199 | GUID=1aacf35d-55f9-4b38-80eb-             |
| Area=4893                 | Joint1=5199 | Joint2=5246 | Joint3=5247 | Joint4=5200 | GUID=a4a45176-4af8-4269-a6d0-5c55942bf84f |
| Area=4894                 | Joint1=5200 | Joint2=5247 | Joint3=5248 | Joint4=5201 | GUID=28e92e67-f281-496f-bd70-55efe93e6b70 |
| Area=4895<br>7de6fcdc7be9 | Joint1=5201 | Joint2=5248 | Joint3=5249 | Joint4=5202 | GUID=a78e9838-186d-43e3-8d46-             |
| Area=4896                 | Joint1=5202 | Joint2=5249 | Joint3=5250 | Joint4=5203 | GUID=7ed0c0ff-6e65-4057-9da5-28dfec431444 |
| Area=4897<br>8ebc610b1284 | Joint1=5203 | Joint2=5250 | Joint3=5251 | Joint4=5204 | GUID=6971b13c-1d7c-480d-be66-             |
| Area=4898                 | Joint1=5204 | Joint2=5251 | Joint3=5252 | Joint4=5205 | GUID=83b285c5-1ce0-49ed-a6f3-ab7f7feb3f92 |
| Area=4899                 | Joint1=5205 | Joint2=5252 | Joint3=5253 | Joint4=5206 | GUID=6a40efef-40b0-46f8-8a08-cf6ad56e193e |
| Area=4900<br>7963f79e82b9 | Joint1=5206 | Joint2=5253 | Joint3=5254 | Joint4=5207 | GUID=046b4b7a-742f-4e6a-887c-             |
| Area=4901<br>7e12443641f8 | Joint1=5207 | Joint2=5254 | Joint3=5255 | Joint4=5208 | GUID=6ed926d2-b91f-4e0e-b429-             |
| Area=4902<br>26e6a7adb4e2 | Joint1=5208 | Joint2=5255 | Joint3=5256 | Joint4=5209 | GUID=a523d7d3-8998-427d-82be-             |
| Area=4903<br>d5015ee03edd | Joint1=5209 | Joint2=5256 | Joint3=5257 | Joint4=5210 | GUID=31dbef9e-ea4b-4b5f-88a5-             |
| Area=4904<br>51c1335dd4b8 | Joint1=5210 | Joint2=5257 | Joint3=5258 | Joint4=5211 | GUID=2f67632d-9f95-42e0-8144-             |
| Area=4905                 | Joint1=5211 | Joint2=5258 | Joint3=5259 | Joint4=5212 | GUID=afb7c643-f594-4459-83e1-bf37a02876f1 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=4906<br>3d28d210a1d1 | Joint1=5212 | Joint2=5259 | Joint3=5260 | Joint4=5213 | GUID=fe16f2a4-22a2-4800-9234-             |
| Area=4907<br>1c5134bc936a | Joint1=5213 | Joint2=5260 | Joint3=5261 | Joint4=5214 | GUID=1a232429-7430-44a0-8789-             |
| Area=4908<br>df992483d2a9 | Joint1=5214 | Joint2=5261 | Joint3=5262 | Joint4=5215 | GUID=2440133e-36a5-4a26-8800-             |
| Area=4909                 | Joint1=5215 | Joint2=5262 | Joint3=9    | Joint4=5216 | GUID=9bf11863-1c23-45e1-8e4e-34d94001f246 |
| Area=4910                 | Joint1=5216 | Joint2=9    | Joint3=5263 | Joint4=5217 | GUID=202ec462-0535-416f-b59d-1cdc207dc147 |
| Area=4911<br>e0dda4a51e33 | Joint1=5217 | Joint2=5263 | Joint3=5264 | Joint4=5218 | GUID=bc883e0c-6e1c-4826-8d2d-             |
| Area=4912<br>2b31c195986d | Joint1=5218 | Joint2=5264 | Joint3=5265 | Joint4=5219 | GUID=b6970897-0b75-4136-ba80-             |
| Area=4913                 | Joint1=5219 | Joint2=5265 | Joint3=5266 | Joint4=5220 | GUID=b8571fa9-764e-4564-925e-cd0faa621ef9 |
| Area=4914                 | Joint1=5220 | Joint2=5266 | Joint3=5267 | Joint4=5221 | GUID=f6f39fe6-96b2-4180-952d-8eec927e0f5a |
| Area=4915<br>db36945493d3 | Joint1=5221 | Joint2=5267 | Joint3=5268 | Joint4=5222 | GUID=e496c84d-70ef-4b2d-aa14-             |
| Area=4916<br>441b14570a54 | Joint1=5222 | Joint2=5268 | Joint3=5269 | Joint4=5223 | GUID=6aeb1062-a05b-4e1f-8075-             |
| Area=4917<br>2e399a172de6 | Joint1=5223 | Joint2=5269 | Joint3=5270 | Joint4=5224 | GUID=99a51b06-13eb-466f-96d8-             |
| Area=4918<br>caca8b8aa63e | Joint1=5224 | Joint2=5270 | Joint3=5271 | Joint4=5225 | GUID=5ce6fec7-67e4-4a5e-b9aa-             |
| Area=4919                 | Joint1=5225 | Joint2=5271 | Joint3=5272 | Joint4=5226 | GUID=225a6bf8-5fe6-4497-a656-fac665ea1308 |
| Area=4920<br>c72ee2ec289a | Joint1=5226 | Joint2=5272 | Joint3=5273 | Joint4=5227 | GUID=7b4979f1-f90d-4231-a98e-             |
| Area=4921<br>721105701992 | Joint1=5227 | Joint2=5273 | Joint3=5274 | Joint4=5228 | GUID=b4a986ea-abad-4fea-8d0b-             |
| Area=4922<br>9eb7c50d55df | Joint1=5228 | Joint2=5274 | Joint3=5275 | Joint4=5229 | GUID=9ab58348-6149-429c-8a9a-             |
| Area=4923<br>d98cfece69a0 | Joint1=5229 | Joint2=5275 | Joint3=5276 | Joint4=5230 | GUID=cf32e6a5-b4dd-4557-b82e-             |
| Area=4924                 | Joint1=5230 | Joint2=5276 | Joint3=5277 | Joint4=5231 | GUID=8159e15f-a18c-45be-bc82-7a307ef3f970 |
| Area=4925                 | Joint1=5231 | Joint2=5277 | Joint3=5278 | Joint4=5232 | GUID=6f083f42-7c69-4c64-9b06-0291af309b02 |
| Area=4926                 | Joint1=5232 | Joint2=5278 | Joint3=5279 | Joint4=5233 | GUID=fbd07195-5a2e-41c2-b263-d22196df60ef |
| Area=4927<br>a9bc124d2213 | Joint1=5233 | Joint2=5279 | Joint3=5280 | Joint4=5234 | GUID=0ff4a787-63c0-45c5-967a-             |
| Area=4928                 | Joint1=5234 | Joint2=5280 | Joint3=5281 | Joint4=5235 | GUID=47f2a922-25f6-41bf-8296-de940528a6f5 |
| Area=4929<br>82b2a51e5c81 | Joint1=5235 | Joint2=5281 | Joint3=5282 | Joint4=5236 | GUID=d73e37a3-4dee-49a1-998b-             |
| Area=4930                 | Joint1=5236 | Joint2=5282 | Joint3=5283 | Joint4=5237 | GUID=eff17cfe-a25f-41db-9bc5-c1efe79d50f0 |
| Area=4931                 | Joint1=5237 | Joint2=5283 | Joint3=5284 | Joint4=5238 | GUID=5f621182-9427-4e21-84f8-781dabcf6011 |
| Area=4932<br>6b08e7538196 | Joint1=5238 | Joint2=5284 | Joint3=5285 | Joint4=5239 | GUID=13c72424-c0e1-4456-b5bd-             |
| Area=4933                 | Joint1=5240 | Joint2=5286 | Joint3=5287 | Joint4=5241 | GUID=e3e02ce3-12fb-4b7f-8a47-feef7ddbed15 |
| Area=4934<br>24488cdd837f | Joint1=5241 | Joint2=5287 | Joint3=5288 | Joint4=5242 | GUID=4c24dc1e-868a-45cc-9983-             |
| Area=4935<br>b715c821e477 | Joint1=5242 | Joint2=5288 | Joint3=5289 | Joint4=5243 | GUID=9b5441aa-ac61-4266-bde8-             |
| Area=4936<br>44d074ad5e1b | Joint1=5243 | Joint2=5289 | Joint3=5290 | Joint4=5244 | GUID=f24ac65d-cd66-439b-a00a-             |
| Area=4937<br>74ec9954780a | Joint1=5244 | Joint2=5290 | Joint3=5291 | Joint4=5245 | GUID=4e92fa61-7cb0-442f-a93b-             |
| Area=4938<br>d477fb83e990 | Joint1=5245 | Joint2=5291 | Joint3=5292 | Joint4=5246 | GUID=1d61b818-4294-4362-b356-             |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=4939<br>b2d902ec12be | Joint1=5246 | Joint2=5292 | Joint3=5293 | Joint4=5247 | GUID=24fd31c1-8f21-4a97-b512-             |
| Area=4940<br>666f683c5159 | Joint1=5247 | Joint2=5293 | Joint3=5294 | Joint4=5248 | GUID=fce597b3-4608-4405-9920-             |
| Area=4941                 | Joint1=5248 | Joint2=5294 | Joint3=5295 | Joint4=5249 | GUID=fb46b2fd-a2d9-47be-8cb2-d0adaef7c2de |
| Area=4942<br>547395dc8df8 | Joint1=5249 | Joint2=5295 | Joint3=5296 | Joint4=5250 | GUID=0c909604-6296-4d4b-bcf7-             |
| Area=4943<br>60d36aa8f5d7 | Joint1=5250 | Joint2=5296 | Joint3=5297 | Joint4=5251 | GUID=e3ea8c0f-48ec-4a2d-808a-             |
| Area=4944<br>8eddd3e02017 | Joint1=5251 | Joint2=5297 | Joint3=5298 | Joint4=5252 | GUID=9a75eb45-d056-4dd9-93f4-             |
| Area=4945<br>5a3879237658 | Joint1=5252 | Joint2=5298 | Joint3=5299 | Joint4=5253 | GUID=bc22ba8f-f601-4e56-a8ba-             |
| Area=4946                 | Joint1=5253 | Joint2=5299 | Joint3=5300 | Joint4=5254 | GUID=05f30fd0-66ad-4c96-b4dd-4af7d6d6205c |
| Area=4947                 | Joint1=5254 | Joint2=5300 | Joint3=5301 | Joint4=5255 | GUID=84d772b5-60a8-4cac-88a3-f455fda3845f |
| Area=4948<br>64c10086b0e4 | Joint1=5255 | Joint2=5301 | Joint3=5302 | Joint4=5256 | GUID=97abc5df-c2b4-47c5-ae4c-             |
| Area=4949<br>36d177f59c28 | Joint1=5256 | Joint2=5302 | Joint3=5303 | Joint4=5257 | GUID=9082914c-979e-43e1-a150-             |
| Area=4950<br>1ad7e090ee32 | Joint1=5257 | Joint2=5303 | Joint3=5304 | Joint4=5258 | GUID=91f85f28-1eb3-41e0-8d6b-             |
| Area=4951                 | Joint1=5258 | Joint2=5304 | Joint3=5305 | Joint4=5259 | GUID=740ba46d-1e96-4b69-9fcb-ed78656ff33a |
| Area=4952<br>cec79246c5c7 | Joint1=5259 | Joint2=5305 | Joint3=5306 | Joint4=5260 | GUID=34d28d33-ed23-41b9-833c-             |
| Area=4953                 | Joint1=5260 | Joint2=5306 | Joint3=5307 | Joint4=5261 | GUID=6562ff74-27b3-4c7d-a6be-786db154981f |
| Area=4954<br>15ae55464620 | Joint1=5261 | Joint2=5307 | Joint3=5308 | Joint4=5262 | GUID=6fc55d0d-749b-4a0e-be6d-             |
| Area=4955                 | Joint1=5262 | Joint2=5308 | Joint3=5309 | Joint4=9    | GUID=3f8b6673-7c9a-47d7-9140-b1634b4449d5 |
| Area=4956                 | Joint1=9    | Joint2=5309 | Joint3=5310 | Joint4=5263 | GUID=8344641c-196a-40ee-84b9-b13436bf18ec |
| Area=4957                 | Joint1=5263 | Joint2=5310 | Joint3=5311 | Joint4=5264 | GUID=0186ff7c-d783-448a-a7db-0914c6f75a08 |
| Area=4958<br>012719542a69 | Joint1=5264 | Joint2=5311 | Joint3=5312 | Joint4=5265 | GUID=2968537d-243b-4ccb-b6fc-             |
| Area=4959<br>948300a06fa4 | Joint1=5265 | Joint2=5312 | Joint3=5313 | Joint4=5266 | GUID=b9c581e7-50ec-4b93-8897-             |
| Area=4960                 | Joint1=5266 | Joint2=5313 | Joint3=5314 | Joint4=5267 | GUID=b94e8cb6-ff44-4f8d-8efe-0685a5ffa580 |
| Area=4961<br>b5d35e2ad96d | Joint1=5267 | Joint2=5314 | Joint3=5315 | Joint4=5268 | GUID=2e0ea6a8-461d-4918-ae1-              |
| Area=4962<br>1d06ab1c339e | Joint1=5268 | Joint2=5315 | Joint3=5316 | Joint4=5269 | GUID=df5ae10f-ab9b-46a2-a137-             |
| Area=4963<br>cd39ec20989a | Joint1=5269 | Joint2=5316 | Joint3=5317 | Joint4=5270 | GUID=420f5a3d-59e5-492b-a055-             |
| Area=4964<br>a7aea41a95a8 | Joint1=5270 | Joint2=5317 | Joint3=5318 | Joint4=5271 | GUID=d831a342-d6ab-4f87-9af7-             |
| Area=4965<br>a19a26e99caf | Joint1=5271 | Joint2=5318 | Joint3=5319 | Joint4=5272 | GUID=98f43eeb-d831-43be-815e-             |
| Area=4966<br>7d0b5d02d8dd | Joint1=5272 | Joint2=5319 | Joint3=5320 | Joint4=5273 | GUID=cbf69df4-19c7-4aa7-8841-             |
| Area=4967<br>c0f46af24489 | Joint1=5273 | Joint2=5320 | Joint3=5321 | Joint4=5274 | GUID=666e32b7-a5a5-4dd1-bd3c-             |
| Area=4968<br>64dfb76b6c4  | Joint1=5274 | Joint2=5321 | Joint3=5322 | Joint4=5275 | GUID=b304b6b8-f817-4ad6-8935-             |
| Area=4969<br>c9e7eb1c7ce7 | Joint1=5275 | Joint2=5322 | Joint3=5323 | Joint4=5276 | GUID=5f442853-b354-4259-ae07-             |
| Area=4970                 | Joint1=5276 | Joint2=5323 | Joint3=5324 | Joint4=5277 | GUID=d2da1f4b-0b31-4be7-9f2d-87f120e96dd3 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                            |
|---------------------------|-------------|-------------|-------------|-------------|--------------------------------------------|
| Area=4971<br>614b5d67e645 | Joint1=5277 | Joint2=5324 | Joint3=5325 | Joint4=5278 | GUID=83e64469-b1d9-455b-9eff-              |
| Area=4972<br>9675939938ea | Joint1=5278 | Joint2=5325 | Joint3=5326 | Joint4=5279 | GUID=33863e92-75f1-45b3-a0c7-              |
| Area=4973<br>71b1ab02b5d4 | Joint1=5279 | Joint2=5326 | Joint3=5327 | Joint4=5280 | GUID=35acfd43-aa27-464f-b63b-              |
| Area=4974<br>831582ba6c4b | Joint1=5280 | Joint2=5327 | Joint3=5328 | Joint4=5281 | GUID=45dc1f93-58dd-40cd-9395-              |
| Area=4975<br>291dd17bc159 | Joint1=5281 | Joint2=5328 | Joint3=5329 | Joint4=5282 | GUID=8d755fbe-2e14-4cf8-8230-              |
| Area=4976<br>81c1217f7c0d | Joint1=5282 | Joint2=5329 | Joint3=5330 | Joint4=5283 | GUID=ab4cf5e6-1487-4857-927a-              |
| Area=4977                 | Joint1=5283 | Joint2=5330 | Joint3=5331 | Joint4=5284 | GUID=52e5867c-46f8-40db-b0c1-dff00d6b8204  |
| Area=4978<br>bb4d6bbb9108 | Joint1=5284 | Joint2=5331 | Joint3=5332 | Joint4=5285 | GUID=5c40c3a4-5689-4094-ae86-              |
| Area=4979<br>673141b60f94 | Joint1=5286 | Joint2=5333 | Joint3=5334 | Joint4=5287 | GUID=da846724-31ae-4398-84ab-              |
| Area=4980<br>10a9268c28a6 | Joint1=5287 | Joint2=5334 | Joint3=5335 | Joint4=5288 | GUID=700b5170-c8ca-476b-9065-              |
| Area=4981                 | Joint1=5288 | Joint2=5335 | Joint3=5336 | Joint4=5289 | GUID=f67eede2-de40-4fcf-ba0f-c8e2f29b8926  |
| Area=4982<br>3d8a114a5d5b | Joint1=5289 | Joint2=5336 | Joint3=5337 | Joint4=5290 | GUID=1c478410-6b2c-46b4-a714-              |
| Area=4983<br>55093460ec98 | Joint1=5290 | Joint2=5337 | Joint3=5338 | Joint4=5291 | GUID=31ebdede-779f-40e1-bc4a-              |
| Area=4984<br>15da99183fe1 | Joint1=5291 | Joint2=5338 | Joint3=5339 | Joint4=5292 | GUID=01d1740f-b96b-4818-9133-              |
| Area=4985<br>6661aa2c0201 | Joint1=5292 | Joint2=5339 | Joint3=5340 | Joint4=5293 | GUID=72120d0a-a2a0-4d7e-883f-              |
| Area=4986<br>0e695c1b533e | Joint1=5293 | Joint2=5340 | Joint3=5341 | Joint4=5294 | GUID=892dbcb7-7902-4493-b740-              |
| Area=4987                 | Joint1=5294 | Joint2=5341 | Joint3=5342 | Joint4=5295 | GUID=5c9484e1-29f2-4f86-82c1-5877fd5c2d66  |
| Area=4988<br>6c6bbb4ac65a | Joint1=5295 | Joint2=5342 | Joint3=5343 | Joint4=5296 | GUID=a7aebe41-36cc-42ec-82ab-              |
| Area=4989<br>7b1682b970bb | Joint1=5296 | Joint2=5343 | Joint3=5344 | Joint4=5297 | GUID=ce055dd6-11a9-4afc-8853-              |
| Area=4990<br>3c26d0399d4d | Joint1=5297 | Joint2=5344 | Joint3=5345 | Joint4=5298 | GUID=3d086a6c-bfd9-44e3-bf96-              |
| Area=4991                 | Joint1=5298 | Joint2=5345 | Joint3=5346 | Joint4=5299 | GUID=41aca3ad-93c9-4d54-ba4f-467355bacffa  |
| Area=4992<br>c6c44599e20e | Joint1=5299 | Joint2=5346 | Joint3=5347 | Joint4=5300 | GUID=aca365fa-5e18-464d-a69e-              |
| Area=4993                 | Joint1=5300 | Joint2=5347 | Joint3=5348 | Joint4=5301 | GUID=2cfffac05-ed66-495b-8674-557ef40621d3 |
| Area=4994<br>7d383b75160d | Joint1=5301 | Joint2=5348 | Joint3=5349 | Joint4=5302 | GUID=a0e5a3ce-a498-4506-a049-              |
| Area=4995<br>e483ba987067 | Joint1=5302 | Joint2=5349 | Joint3=5350 | Joint4=5303 | GUID=a653bbd2-0ae9-4e63-9b48-              |
| Area=4996<br>6130a82ebbd8 | Joint1=5303 | Joint2=5350 | Joint3=5351 | Joint4=5304 | GUID=5cd43a87-1c79-4452-86ed-              |
| Area=4997<br>33a406f27541 | Joint1=5304 | Joint2=5351 | Joint3=5352 | Joint4=5305 | GUID=5f230ebb-4026-4e2b-be38-              |
| Area=4998<br>702b4361a256 | Joint1=5305 | Joint2=5352 | Joint3=5353 | Joint4=5306 | GUID=d84a9ca6-342b-4b01-b99f-              |
| Area=4999<br>02676faa47ae | Joint1=5306 | Joint2=5353 | Joint3=5354 | Joint4=5307 | GUID=fa2836da-7ee7-4d67-b9b3-              |
| Area=5000<br>99e6ad74474d | Joint1=5307 | Joint2=5354 | Joint3=5355 | Joint4=5308 | GUID=141ca450-bd64-45db-adcc-              |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=5001<br>eb3b80f34443 | Joint1=5308 | Joint2=5355 | Joint3=5356 | Joint4=5309 | GUID=ad3b3d11-a9a8-4aa6-a6b6-             |
| Area=5002<br>063567f3b402 | Joint1=5309 | Joint2=5356 | Joint3=5357 | Joint4=5310 | GUID=ed5e9028-e245-411d-b6f1-             |
| Area=5003                 | Joint1=5310 | Joint2=5357 | Joint3=5358 | Joint4=5311 | GUID=3890dfc3-71fe-41be-a73f-e13085732628 |
| Area=5004<br>ae7aced0694d | Joint1=5311 | Joint2=5358 | Joint3=5359 | Joint4=5312 | GUID=e824b5cc-e9c2-43bf-8216-             |
| Area=5005                 | Joint1=5312 | Joint2=5359 | Joint3=5360 | Joint4=5313 | GUID=6d82255f-6ad4-45ad-bc5a-12f4bc17faa5 |
| Area=5006<br>9d365c440d06 | Joint1=5313 | Joint2=5360 | Joint3=5361 | Joint4=5314 | GUID=3ced1bb7-b7ed-46b3-956d-             |
| Area=5007<br>fe6887030186 | Joint1=5314 | Joint2=5361 | Joint3=5362 | Joint4=5315 | GUID=188c9445-c844-4224-aac1-             |
| Area=5008                 | Joint1=5315 | Joint2=5362 | Joint3=5363 | Joint4=5316 | GUID=c902f807-605e-42b8-a0fb-bb0a0c1f9f06 |
| Area=5009<br>8d9c56a4bb02 | Joint1=5316 | Joint2=5363 | Joint3=5364 | Joint4=5317 | GUID=2f6e2728-d943-4992-b83e-             |
| Area=5010<br>40019f7a1ee4 | Joint1=5317 | Joint2=5364 | Joint3=5365 | Joint4=5318 | GUID=c8d176eb-722e-4dea-ace8-             |
| Area=5011                 | Joint1=5318 | Joint2=5365 | Joint3=5366 | Joint4=5319 | GUID=2da2741a-faef-4591-8975-dd3af039fe1a |
| Area=5012                 | Joint1=5319 | Joint2=5366 | Joint3=5367 | Joint4=5320 | GUID=f709f08e-5c40-4d02-8fa2-f82a647b63c8 |
| Area=5013                 | Joint1=5320 | Joint2=5367 | Joint3=5368 | Joint4=5321 | GUID=ae7e85ac-1fdd-4fa6-8d5a-f260caf6c99b |
| Area=5014                 | Joint1=5321 | Joint2=5368 | Joint3=5369 | Joint4=5322 | GUID=d3a61478-21e0-47c2-9dff-9f34e27871e1 |
| Area=5015                 | Joint1=5322 | Joint2=5369 | Joint3=5370 | Joint4=5323 | GUID=32e707a7-07f0-48fe-b54e-3bf0b895ddb2 |
| Area=5016<br>e9866db21602 | Joint1=5323 | Joint2=5370 | Joint3=5371 | Joint4=5324 | GUID=116ffc01-e9da-41d7-b08e-             |
| Area=5017                 | Joint1=5324 | Joint2=5371 | Joint3=5372 | Joint4=5325 | GUID=ec417eec-ddc4-43fd-8d0d-4eeffe10ddc3 |
| Area=5018<br>276732ab432e | Joint1=5325 | Joint2=5372 | Joint3=5373 | Joint4=5326 | GUID=af53eb7c-add1-4c2e-8adb-             |
| Area=5019<br>834ffa775244 | Joint1=5326 | Joint2=5373 | Joint3=5374 | Joint4=5327 | GUID=34d9a664-34d2-4026-b592-             |
| Area=5020                 | Joint1=5327 | Joint2=5374 | Joint3=5375 | Joint4=5328 | GUID=60cfdc32-a66e-461f-9d7c-84afbad7af3a |
| Area=5021<br>604329180b95 | Joint1=5328 | Joint2=5375 | Joint3=5376 | Joint4=5329 | GUID=a66e526f-88bb-452d-b94a-             |
| Area=5022<br>43387adef168 | Joint1=5329 | Joint2=5376 | Joint3=5377 | Joint4=5330 | GUID=c6575435-89c6-4a49-92bb-             |
| Area=5023<br>e83c2899f64a | Joint1=5330 | Joint2=5377 | Joint3=5378 | Joint4=5331 | GUID=66439428-0e40-43ad-b741-             |
| Area=5024<br>d04483c45637 | Joint1=5331 | Joint2=5378 | Joint3=5379 | Joint4=5332 | GUID=6c3a95a6-60ce-4641-be5c-             |
| Area=5025<br>7045a9141a41 | Joint1=5333 | Joint2=5380 | Joint3=5381 | Joint4=5334 | GUID=ca1e871a-86f1-4522-82ee-             |
| Area=5026<br>25bf90c732d8 | Joint1=5334 | Joint2=5381 | Joint3=5382 | Joint4=5335 | GUID=a0392c48-1e01-4930-bc8b-             |
| Area=5027                 | Joint1=5335 | Joint2=5382 | Joint3=5383 | Joint4=5336 | GUID=f7d80302-ae25-453e-99df-266ca24f0674 |
| Area=5028<br>c0e25ce19da3 | Joint1=5336 | Joint2=5383 | Joint3=5384 | Joint4=5337 | GUID=dbd84c8a-41dc-450e-a739-             |
| Area=5029                 | Joint1=5337 | Joint2=5384 | Joint3=5385 | Joint4=5338 | GUID=7c1ccd47-f406-4127-bf03-91ce171fbf38 |
| Area=5030<br>44c2a259aceb | Joint1=5338 | Joint2=5385 | Joint3=5386 | Joint4=5339 | GUID=7f11c3ab-3ea9-43f9-a661-             |
| Area=5031<br>833b7667417f | Joint1=5339 | Joint2=5386 | Joint3=5387 | Joint4=5340 | GUID=24437d3a-4e1b-4fbd-a96e-             |
| Area=5032<br>fbb6b4a73dae | Joint1=5340 | Joint2=5387 | Joint3=5388 | Joint4=5341 | GUID=446e81bc-8635-4e43-bca4-             |
| Area=5033<br>0b14278938ee | Joint1=5341 | Joint2=5388 | Joint3=5389 | Joint4=5342 | GUID=b617fb13-a8bb-47c9-8e84-             |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=5034<br>d94d47ba3c4f | Joint1=5342 | Joint2=5389 | Joint3=5390 | Joint4=5343 | GUID=64a076d1-8821-44b7-81c9-             |
| Area=5035<br>0b7a0890c9f9 | Joint1=5343 | Joint2=5390 | Joint3=5391 | Joint4=5344 | GUID=6b124e70-ac83-4ad2-9ec3-             |
| Area=5036<br>50b841c8ede5 | Joint1=5344 | Joint2=5391 | Joint3=5392 | Joint4=5345 | GUID=c74ec3ee-b7a7-4f05-9577-             |
| Area=5037<br>c51b36f9c71c | Joint1=5345 | Joint2=5392 | Joint3=5393 | Joint4=5346 | GUID=4d78c28a-cdb4-4a5a-ab54-             |
| Area=5038                 | Joint1=5346 | Joint2=5393 | Joint3=5394 | Joint4=5347 | GUID=90f5dc6f-954f-4b49-9bc3-3b06de4e3466 |
| Area=5039<br>0a16f6f42b67 | Joint1=5347 | Joint2=5394 | Joint3=5395 | Joint4=5348 | GUID=540aa227-50e1-4795-bc8d-             |
| Area=5040                 | Joint1=5348 | Joint2=5395 | Joint3=5396 | Joint4=5349 | GUID=cf0eef1a-def5-4e3b-8e39-5cdbf53594e1 |
| Area=5041<br>c39ee75b77ea | Joint1=5349 | Joint2=5396 | Joint3=5397 | Joint4=5350 | GUID=bd06129c-a29a-44a6-bd3a-             |
| Area=5042<br>351bada7418c | Joint1=5350 | Joint2=5397 | Joint3=5398 | Joint4=5351 | GUID=51fb28ee-e5f5-4a8e-b130-             |
| Area=5043<br>b1df54d4d509 | Joint1=5351 | Joint2=5398 | Joint3=5399 | Joint4=5352 | GUID=4f0e15e9-e4e0-435d-9be8-             |
| Area=5044<br>967454f18761 | Joint1=5352 | Joint2=5399 | Joint3=5400 | Joint4=5353 | GUID=cd01adf3-25b7-40b1-b971-             |
| Area=5045                 | Joint1=5353 | Joint2=5400 | Joint3=5401 | Joint4=5354 | GUID=e8e6c04b-0092-45a0-91fd-8c8f9f05df0a |
| Area=5046<br>267fd5a9841f | Joint1=5354 | Joint2=5401 | Joint3=5402 | Joint4=5355 | GUID=ce49e6a3-3da1-4e60-9635-             |
| Area=5047<br>f13314ba242a | Joint1=5355 | Joint2=5402 | Joint3=5403 | Joint4=5356 | GUID=27d3694c-b1fa-4482-9ec4-             |
| Area=5048<br>1f863a3efcd2 | Joint1=5356 | Joint2=5403 | Joint3=5404 | Joint4=5357 | GUID=9c8b708c-0e40-4198-b477-             |
| Area=5049<br>afc1490438e7 | Joint1=5357 | Joint2=5404 | Joint3=5405 | Joint4=5358 | GUID=2f90105c-aea5-48a9-a61e-             |
| Area=5050<br>068c0e17293c | Joint1=5358 | Joint2=5405 | Joint3=5406 | Joint4=5359 | GUID=a3663a49-d483-40b1-addf-             |
| Area=5051<br>d3cb6db9946a | Joint1=5359 | Joint2=5406 | Joint3=5407 | Joint4=5360 | GUID=22f8c351-a401-4a7b-ad66-             |
| Area=5052<br>1878c8a3d484 | Joint1=5360 | Joint2=5407 | Joint3=5408 | Joint4=5361 | GUID=12235675-6819-44c4-9769-             |
| Area=5053<br>d8532a46e177 | Joint1=5361 | Joint2=5408 | Joint3=5409 | Joint4=5362 | GUID=7fc1aa34-43de-45e8-938b-             |
| Area=5054<br>db44c72a8c23 | Joint1=5362 | Joint2=5409 | Joint3=5410 | Joint4=5363 | GUID=5dea75ff-28c5-4d53-b811-             |
| Area=5055<br>c3bca3ebc107 | Joint1=5363 | Joint2=5410 | Joint3=5411 | Joint4=5364 | GUID=92c134e9-15f4-4e2b-b291-             |
| Area=5056<br>52d08ac9573f | Joint1=5364 | Joint2=5411 | Joint3=5412 | Joint4=5365 | GUID=40e266a7-79ab-4392-9291-             |
| Area=5057<br>9c082b8feb74 | Joint1=5365 | Joint2=5412 | Joint3=5413 | Joint4=5366 | GUID=c944d296-98d5-407c-89f2-             |
| Area=5058<br>83283e8e906d | Joint1=5366 | Joint2=5413 | Joint3=5414 | Joint4=5367 | GUID=23d6f15d-a274-468e-a7c9-             |
| Area=5059<br>efd61966179d | Joint1=5367 | Joint2=5414 | Joint3=5415 | Joint4=5368 | GUID=1aa7b478-6b12-4eba-bb8b-             |
| Area=5060<br>c933f04c0be5 | Joint1=5368 | Joint2=5415 | Joint3=5416 | Joint4=5369 | GUID=00ca9a9c-0452-4b32-911e-             |
| Area=5061                 | Joint1=5369 | Joint2=5416 | Joint3=5417 | Joint4=5370 | GUID=21ae23f5-9fd0-42aa-b126-0ed1d7df55c7 |
| Area=5062                 | Joint1=5370 | Joint2=5417 | Joint3=5418 | Joint4=5371 | GUID=ca8d37fa-e554-434e-898c-7b8c0ff68d68 |
| Area=5063<br>a3c3c1d820dc | Joint1=5371 | Joint2=5418 | Joint3=5419 | Joint4=5372 | GUID=932c4526-4ce3-40e3-84ad-             |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=5064<br>317d82a8542f | Joint1=5372 | Joint2=5419 | Joint3=5420 | Joint4=5373 | GUID=98a975f3-73e5-4224-8580-             |
| Area=5065                 | Joint1=5373 | Joint2=5420 | Joint3=5421 | Joint4=5374 | GUID=ef1aa837-673d-41c0-bc78-f63f1abb1672 |
| Area=5066<br>ebb84f62ba9a | Joint1=5374 | Joint2=5421 | Joint3=5422 | Joint4=5375 | GUID=8a584016-0a48-449d-ad0d-             |
| Area=5067<br>1a9ec7647029 | Joint1=5375 | Joint2=5422 | Joint3=5423 | Joint4=5376 | GUID=79cac1ec-c472-41e8-8b93-             |
| Area=5068<br>740181d4e273 | Joint1=5376 | Joint2=5423 | Joint3=5424 | Joint4=5377 | GUID=fb5ec1a6-017e-455b-aa85-             |
| Area=5069<br>84ea8ef6bdca | Joint1=5377 | Joint2=5424 | Joint3=5425 | Joint4=5378 | GUID=28e7f289-093c-432d-8217-             |
| Area=5070                 | Joint1=5378 | Joint2=5425 | Joint3=5426 | Joint4=5379 | GUID=fe63b9fe-969a-40d7-83e7-f4b540e568c7 |
| Area=5071                 | Joint1=5380 | Joint2=5427 | Joint3=5428 | Joint4=5381 | GUID=f1154493-52df-4eb1-877c-706f1db908d1 |
| Area=5072<br>61c60393412d | Joint1=5381 | Joint2=5428 | Joint3=5429 | Joint4=5382 | GUID=c8f8e486-2e32-408e-bf51-             |
| Area=5073<br>e5b6c53c8d32 | Joint1=5382 | Joint2=5429 | Joint3=5430 | Joint4=5383 | GUID=95e799f8-8493-4b5b-9be5-             |
| Area=5074<br>553b1e534902 | Joint1=5383 | Joint2=5430 | Joint3=5431 | Joint4=5384 | GUID=1a41e50f-7b16-4622-916e-             |
| Area=5075<br>68100cd43d27 | Joint1=5384 | Joint2=5431 | Joint3=5432 | Joint4=5385 | GUID=26df6d01-4bc9-4856-acf6-             |
| Area=5076<br>565253aed355 | Joint1=5385 | Joint2=5432 | Joint3=5433 | Joint4=5386 | GUID=93d2db8e-9bab-4462-9da2-             |
| Area=5077<br>ebe90e1aa1ea | Joint1=5386 | Joint2=5433 | Joint3=5434 | Joint4=5387 | GUID=2ab406f0-00d9-4a24-9fde-             |
| Area=5078<br>0b03069d657e | Joint1=5387 | Joint2=5434 | Joint3=5435 | Joint4=5388 | GUID=cae2ea13-6cc8-458c-a769-             |
| Area=5079<br>23f292984506 | Joint1=5388 | Joint2=5435 | Joint3=5436 | Joint4=5389 | GUID=acddf6aa-b077-4d12-8db5-             |
| Area=5080<br>98d292b8569a | Joint1=5389 | Joint2=5436 | Joint3=5437 | Joint4=5390 | GUID=df94ae50-0088-4036-b208-             |
| Area=5081                 | Joint1=5390 | Joint2=5437 | Joint3=5438 | Joint4=5391 | GUID=502bf606-8fa5-48e9-9e91-f597a581d9e0 |
| Area=5082<br>3ec5e8d2fc2f | Joint1=5391 | Joint2=5438 | Joint3=5439 | Joint4=5392 | GUID=282901d9-7962-4368-8b79-             |
| Area=5083<br>193860f3634a | Joint1=5392 | Joint2=5439 | Joint3=5440 | Joint4=5393 | GUID=9f3d8739-6317-4a99-84e3-             |
| Area=5084                 | Joint1=5393 | Joint2=5440 | Joint3=5441 | Joint4=5394 | GUID=0b1f016e-747e-4fa6-a3f8-f61a41361e12 |
| Area=5085                 | Joint1=5394 | Joint2=5441 | Joint3=5442 | Joint4=5395 | GUID=6bae75b7-9ff0-43bf-b651-ddeea4ab2e14 |
| Area=5086<br>1d3c608d4b97 | Joint1=5395 | Joint2=5442 | Joint3=5443 | Joint4=5396 | GUID=b26ba3de-4811-49d8-addc-             |
| Area=5087                 | Joint1=5396 | Joint2=5443 | Joint3=5444 | Joint4=5397 | GUID=af461cfd-1640-4921-b169-a237fdc150f4 |
| Area=5088                 | Joint1=5397 | Joint2=5444 | Joint3=5445 | Joint4=5398 | GUID=1b40fa65-8e87-4a34-af0c-f4b389fddc1b |
| Area=5089<br>9c03b278f91a | Joint1=5398 | Joint2=5445 | Joint3=5446 | Joint4=5399 | GUID=29d52e38-c0a8-4793-9d88-             |
| Area=5090<br>65e022f2bd93 | Joint1=5399 | Joint2=5446 | Joint3=5447 | Joint4=5400 | GUID=449a5481-c678-468a-94a0-             |
| Area=5091<br>b010df834469 | Joint1=5400 | Joint2=5447 | Joint3=5448 | Joint4=5401 | GUID=28dd08b9-0663-4c17-aa7d-             |
| Area=5092<br>288a119f830b | Joint1=5401 | Joint2=5448 | Joint3=5449 | Joint4=5402 | GUID=408673b6-5335-42c5-a405-             |
| Area=5093                 | Joint1=5402 | Joint2=5449 | Joint3=5450 | Joint4=5403 | GUID=7328be6b-4e69-44c3-97a8-b1cff100388f |
| Area=5094<br>64252ee6f43a | Joint1=5403 | Joint2=5450 | Joint3=5451 | Joint4=5404 | GUID=85a53bfb-8ec1-4572-857a-             |
| Area=5095<br>d1861fd5560c | Joint1=5404 | Joint2=5451 | Joint3=5452 | Joint4=5405 | GUID=59604379-d6fb-4de8-a3bb-             |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=5096 Joint1=5405 Joint2=5452 Joint3=5453 Joint4=5406 GUID=982f17ff-ac49-4e51-aed9-c466bac1e196  
Area=5097 Joint1=5406 Joint2=5453 Joint3=5454 Joint4=5407 GUID=13a67862-c1d8-424d-92a7-56106c5ebfc2  
Area=5098 Joint1=5407 Joint2=5454 Joint3=5455 Joint4=5408 GUID=c8d4579f-bf68-4715-9819-f767695ea5dd  
Area=5099 Joint1=5408 Joint2=5455 Joint3=5456 Joint4=5409 GUID=2c4312c7-6298-4eae-ba05-7ec06934702b  
Area=5100 Joint1=5409 Joint2=5456 Joint3=5457 Joint4=5410 GUID=18af1b05-9db0-4502-8efa-67cf42e4c627  
Area=5101 Joint1=5410 Joint2=5457 Joint3=5458 Joint4=5411 GUID=b6f65060-f325-45cb-875c-f5ff5e6d42d0  
Area=5102 Joint1=5411 Joint2=5458 Joint3=5459 Joint4=5412 GUID=87c547fa-c881-4512-976f-4610c6174e20  
Area=5103 Joint1=5412 Joint2=5459 Joint3=5460 Joint4=5413 GUID=78779193-4e23-4200-93b4-e0495cfc6c82  
Area=5104 Joint1=5413 Joint2=5460 Joint3=5461 Joint4=5414 GUID=46cb73d7-cb06-4376-935d-21e83da08bbf  
Area=5105 Joint1=5414 Joint2=5461 Joint3=5462 Joint4=5415 GUID=73fcd63a-ff21-4de3-aaad-d04cfb72fc93  
Area=5106 Joint1=5415 Joint2=5462 Joint3=5463 Joint4=5416 GUID=35be5c68-048c-4f30-90e9-abc759bdf7a4  
Area=5107 Joint1=5416 Joint2=5463 Joint3=5464 Joint4=5417 GUID=08de6abf-8832-489a-8c36-4959e2d66da6  
Area=5108 Joint1=5417 Joint2=5464 Joint3=5465 Joint4=5418 GUID=5962de25-d7c7-4923-bef5-491a88474cc0  
Area=5109 Joint1=5418 Joint2=5465 Joint3=5466 Joint4=5419 GUID=18e4dd12-edff-45a1-be94-522a463ff7e5  
Area=5110 Joint1=5419 Joint2=5466 Joint3=5467 Joint4=5420 GUID=0f692a53-704a-4e83-9fdf-b6fc0a0f6a46  
Area=5111 Joint1=5420 Joint2=5467 Joint3=5468 Joint4=5421 GUID=31381c84-9ae8-4a16-88e7-cd13d092d0d0  
Area=5112 Joint1=5421 Joint2=5468 Joint3=5469 Joint4=5422 GUID=0560d751-f5be-4cdd-8ee2-35a2640e0485  
Area=5113 Joint1=5422 Joint2=5469 Joint3=5470 Joint4=5423 GUID=85d8e03b-3e73-422a-99bd-1c06de341bf8  
Area=5114 Joint1=5423 Joint2=5470 Joint3=5471 Joint4=5424 GUID=48e0a25f-e60e-41d5-849e-66bdcd7524af  
Area=5115 Joint1=5424 Joint2=5471 Joint3=5472 Joint4=5425 GUID=a28f5e9f-b9f4-447e-ac5a-a115edf62c4e  
Area=5116 Joint1=5425 Joint2=5472 Joint3=5473 Joint4=5426 GUID=a07538ff-b4fe-4ea4-a6b5-6ae31ab3a519  
Area=5117 Joint1=5427 Joint2=5474 Joint3=5475 Joint4=5428 GUID=f8dd21e4-060c-44e4-99d1-935929138ada  
Area=5118 Joint1=5428 Joint2=5475 Joint3=5476 Joint4=5429 GUID=5b7d9c03-6110-438d-a88b-897e470e1fb0  
Area=5119 Joint1=5429 Joint2=5476 Joint3=5477 Joint4=5430 GUID=29ee3dbb-c72e-445a-8d39-75ef02b6f2df  
Area=5120 Joint1=5430 Joint2=5477 Joint3=5478 Joint4=5431 GUID=17ff2267-6992-418b-894a-915406481b68  
Area=5121 Joint1=5431 Joint2=5478 Joint3=5479 Joint4=5432 GUID=84548be2-7151-4e0e-8228-ed7c9fae5179  
Area=5122 Joint1=5432 Joint2=5479 Joint3=5480 Joint4=5433 GUID=77039446-3c7f-40ea-8881-9b3d5995138a  
Area=5123 Joint1=5433 Joint2=5480 Joint3=5481 Joint4=5434 GUID=b4f4ca82-4704-47ea-aeb9-fd98d1e0c186  
Area=5124 Joint1=5434 Joint2=5481 Joint3=5482 Joint4=5435 GUID=a7c867db-71c3-41dd-9c1d-3cdbad03c867  
Area=5125 Joint1=5435 Joint2=5482 Joint3=5483 Joint4=5436 GUID=eed11879-d6ea-4f32-a844-225e34182130  
Area=5126 Joint1=5436 Joint2=5483 Joint3=5484 Joint4=5437 GUID=38d86491-0502-4fb7-84de-e96be620cf6b  
Area=5127 Joint1=5437 Joint2=5484 Joint3=5485 Joint4=5438 GUID=0d19affc-196e-454a-b1a8-d8c27889c19b  
Area=5128 Joint1=5438 Joint2=5485 Joint3=5486 Joint4=5439 GUID=612ce7fc-856c-45e8-81dd-c3f6e6ac5b82

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=5129 | Joint1=5439 | Joint2=5486 | Joint3=5487 | Joint4=5440 | GUID=abb08577-30eb-417d-8fd1-6c4949716b60 |
| Area=5130 | Joint1=5440 | Joint2=5487 | Joint3=5488 | Joint4=5441 | GUID=895c1194-2328-4121-ae91-430a4579fad8 |
| Area=5131 | Joint1=5441 | Joint2=5488 | Joint3=5489 | Joint4=5442 | GUID=84d1ff41-2ddf-4225-a7cb-dbef406447fe |
| Area=5132 | Joint1=5442 | Joint2=5489 | Joint3=5490 | Joint4=5443 | GUID=4a5b738b-b1a2-435d-9b89-70281262f6ab |
| Area=5133 | Joint1=5443 | Joint2=5490 | Joint3=5491 | Joint4=5444 | GUID=22f2d271-4633-409e-8099-3980769b8557 |
| Area=5134 | Joint1=5444 | Joint2=5491 | Joint3=5492 | Joint4=5445 | GUID=cbe4e027-a202-4f80-a13e-17e5ccc655ac |
| Area=5135 | Joint1=5445 | Joint2=5492 | Joint3=5493 | Joint4=5446 | GUID=ac5ef995-f486-48c3-8a6d-0bbe06c3e0a1 |
| Area=5136 | Joint1=5446 | Joint2=5493 | Joint3=5494 | Joint4=5447 | GUID=60e36b6e-6017-49ca-aaf8-4527ed0d196b |
| Area=5137 | Joint1=5447 | Joint2=5494 | Joint3=5495 | Joint4=5448 | GUID=51057964-cdb3-46f7-a13e-f422c8f6ca5c |
| Area=5138 | Joint1=5448 | Joint2=5495 | Joint3=5496 | Joint4=5449 | GUID=026e9ffe-5555-4272-b4c0-12c1bb1a08a3 |
| Area=5139 | Joint1=5449 | Joint2=5496 | Joint3=5497 | Joint4=5450 | GUID=32b9997d-44d7-48d0-9e68-f08418483cfb |
| Area=5140 | Joint1=5450 | Joint2=5497 | Joint3=5498 | Joint4=5451 | GUID=6b45c085-5c94-4e0f-af2e-6d959feb38b1 |
| Area=5141 | Joint1=5451 | Joint2=5498 | Joint3=5499 | Joint4=5452 | GUID=c71aca27-1464-454e-9ef5-ecaab5af70e9 |
| Area=5142 | Joint1=5452 | Joint2=5499 | Joint3=5500 | Joint4=5453 | GUID=8fdd3016-eed1-41a5-b6c9-3ce29bbe81ae |
| Area=5143 | Joint1=5453 | Joint2=5500 | Joint3=5501 | Joint4=5454 | GUID=e4f310f3-68e4-4ef3-8499-4e799e82b0f6 |
| Area=5144 | Joint1=5454 | Joint2=5501 | Joint3=5502 | Joint4=5455 | GUID=2e2a044c-36b8-4f24-a456-4609b1a8ba3e |
| Area=5145 | Joint1=5455 | Joint2=5502 | Joint3=5503 | Joint4=5456 | GUID=e146979c-f8a7-453d-81a7-af94c0d08824 |
| Area=5146 | Joint1=5456 | Joint2=5503 | Joint3=5504 | Joint4=5457 | GUID=ddf2330d-43e9-49ba-ae5b-d02f0dbf1ea9 |
| Area=5147 | Joint1=5457 | Joint2=5504 | Joint3=5505 | Joint4=5458 | GUID=702daea4-c4b7-4b61-8c96-ba58a88a964f |
| Area=5148 | Joint1=5458 | Joint2=5505 | Joint3=5506 | Joint4=5459 | GUID=fa3a26c5-5a43-4a3e-8073-408d528a0954 |
| Area=5149 | Joint1=5459 | Joint2=5506 | Joint3=5507 | Joint4=5460 | GUID=033a48cf-dc56-495f-ad1b-b797ba3adcf5 |
| Area=5150 | Joint1=5460 | Joint2=5507 | Joint3=5508 | Joint4=5461 | GUID=c02a5cc6-77dc-4cc4-8da3-77cb3bc25e6a |
| Area=5151 | Joint1=5461 | Joint2=5508 | Joint3=5509 | Joint4=5462 | GUID=5c185432-c48c-4b74-ad10-a006b3c5bc2d |
| Area=5152 | Joint1=5462 | Joint2=5509 | Joint3=5510 | Joint4=5463 | GUID=fa3fbeb7-2c7c-44a8-b061-58e73907331b |
| Area=5153 | Joint1=5463 | Joint2=5510 | Joint3=5511 | Joint4=5464 | GUID=491a39e0-f860-4c90-ab28-e2484f512bc1 |
| Area=5154 | Joint1=5464 | Joint2=5511 | Joint3=5512 | Joint4=5465 | GUID=78fdb3e-a0cc-4104-b864-f921d59cd959  |
| Area=5155 | Joint1=5465 | Joint2=5512 | Joint3=5513 | Joint4=5466 | GUID=f8285bf8-a5b9-4c10-bc19-3f9c9b530174 |
| Area=5156 | Joint1=5466 | Joint2=5513 | Joint3=5514 | Joint4=5467 | GUID=be8179f1-99d5-4146-af1e-8ecc2b1525ce |
| Area=5157 | Joint1=5467 | Joint2=5514 | Joint3=5515 | Joint4=5468 | GUID=2cbd85fe-5cdd-4800-9c4a-715a45d9514a |
| Area=5158 | Joint1=5468 | Joint2=5515 | Joint3=5516 | Joint4=5469 | GUID=2c7f03c4-e216-43d3-a28f-0a95bc13030b |
| Area=5159 | Joint1=5469 | Joint2=5516 | Joint3=5517 | Joint4=5470 | GUID=5382e72c-6524-40b6-91f7-ca0a87f9afdf |
| Area=5160 | Joint1=5470 | Joint2=5517 | Joint3=5518 | Joint4=5471 | GUID=6e05e493-bf4e-4597-80af-7f1bccd726f  |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=5161 | Joint1=5471 | Joint2=5518 | Joint3=5519 | Joint4=5472 | GUID=5f48d179-be3a-4633-b209-8bd608e5b032 |
| Area=5162 | Joint1=5472 | Joint2=5519 | Joint3=5520 | Joint4=5473 | GUID=303cf7d7-cc77-4c33-a61e-c9cf9456b7b9 |
| Area=5163 | Joint1=5474 | Joint2=5521 | Joint3=5522 | Joint4=5475 | GUID=4b10532c-f550-460e-b1d2-49db6750ff46 |
| Area=5164 | Joint1=5475 | Joint2=5522 | Joint3=5523 | Joint4=5476 | GUID=f5683b9e-2dc4-4e70-a53e-66a3ded86926 |
| Area=5165 | Joint1=5476 | Joint2=5523 | Joint3=5524 | Joint4=5477 | GUID=4d6bc54b-f4e4-489e-a20b-45fb11ae7e9e |
| Area=5166 | Joint1=5477 | Joint2=5524 | Joint3=5525 | Joint4=5478 | GUID=4b32eacd-7c87-466d-a78b-28f33235fcf3 |
| Area=5167 | Joint1=5478 | Joint2=5525 | Joint3=5526 | Joint4=5479 | GUID=e77d400f-0164-4967-9beb-20d250f7dad9 |
| Area=5168 | Joint1=5479 | Joint2=5526 | Joint3=5527 | Joint4=5480 | GUID=d83e4aec-8157-4ef4-bcb5-878acaa0599e |
| Area=5169 | Joint1=5480 | Joint2=5527 | Joint3=5528 | Joint4=5481 | GUID=82ba7e31-4ba0-4126-a0f9-45749d40ad9b |
| Area=5170 | Joint1=5481 | Joint2=5528 | Joint3=5529 | Joint4=5482 | GUID=c57b13a0-06c0-498e-bf62-63edb1920b24 |
| Area=5171 | Joint1=5482 | Joint2=5529 | Joint3=5530 | Joint4=5483 | GUID=ed2e5f94-4fe1-40d1-86b6-ecd7781e2a56 |
| Area=5172 | Joint1=5483 | Joint2=5530 | Joint3=5531 | Joint4=5484 | GUID=58a1ac85-0efd-4c84-9a53-cdff128c8185 |
| Area=5173 | Joint1=5484 | Joint2=5531 | Joint3=5532 | Joint4=5485 | GUID=2be0f0f4-cdeb-4446-bda0-d94ae3a54559 |
| Area=5174 | Joint1=5485 | Joint2=5532 | Joint3=5533 | Joint4=5486 | GUID=9ad371b0-c69d-426a-bb3c-7cc7b9f5ee52 |
| Area=5175 | Joint1=5486 | Joint2=5533 | Joint3=5534 | Joint4=5487 | GUID=b0be8063-be4c-4a0b-9010-6a04481421de |
| Area=5176 | Joint1=5487 | Joint2=5534 | Joint3=5535 | Joint4=5488 | GUID=8d93b000-20eb-4dfc-bb6d-b72689376cef |
| Area=5177 | Joint1=5488 | Joint2=5535 | Joint3=5536 | Joint4=5489 | GUID=7a495592-74cd-4400-ac55-d2bc5253c26a |
| Area=5178 | Joint1=5489 | Joint2=5536 | Joint3=5537 | Joint4=5490 | GUID=11a21465-096b-43ec-a643-89608191a53e |
| Area=5179 | Joint1=5490 | Joint2=5537 | Joint3=5538 | Joint4=5491 | GUID=8725fa7d-ee22-471c-aac9-39467bba11c9 |
| Area=5180 | Joint1=5491 | Joint2=5538 | Joint3=5539 | Joint4=5492 | GUID=bd58c0b3-1dec-40b9-8ee5-401a327ba912 |
| Area=5181 | Joint1=5492 | Joint2=5539 | Joint3=5540 | Joint4=5493 | GUID=a2cb0712-80ad-4696-8276-b5899466eead |
| Area=5182 | Joint1=5493 | Joint2=5540 | Joint3=5541 | Joint4=5494 | GUID=beb2c6cf-3c6a-4786-8385-cb531217b6d9 |
| Area=5183 | Joint1=5494 | Joint2=5541 | Joint3=5542 | Joint4=5495 | GUID=d5f47f8b-e686-405a-bff8-9017898cabda |
| Area=5184 | Joint1=5495 | Joint2=5542 | Joint3=5543 | Joint4=5496 | GUID=8e70361b-dfd4-4ba9-92ef-26e228e6bcd1 |
| Area=5185 | Joint1=5496 | Joint2=5543 | Joint3=5544 | Joint4=5497 | GUID=dd2f5916-4e3f-4b9e-a9d4-91ecdce3be9a |
| Area=5186 | Joint1=5497 | Joint2=5544 | Joint3=5545 | Joint4=5498 | GUID=319f0515-c944-4729-b298-fea11121a174 |
| Area=5187 | Joint1=5498 | Joint2=5545 | Joint3=5546 | Joint4=5499 | GUID=6545d977-c477-4033-bd28-a33cf421ffd3 |
| Area=5188 | Joint1=5499 | Joint2=5546 | Joint3=5547 | Joint4=5500 | GUID=f8a74feb-dcb8-4da2-a92a-0832e755fb6e |
| Area=5189 | Joint1=5500 | Joint2=5547 | Joint3=5548 | Joint4=5501 | GUID=7e614853-483a-44c8-97b9-c1c10c6cbc70 |
| Area=5190 | Joint1=5501 | Joint2=5548 | Joint3=5549 | Joint4=5502 | GUID=cc78e7f1-cd44-4548-9e7c-49d5e4007d49 |
| Area=5191 | Joint1=5502 | Joint2=5549 | Joint3=5550 | Joint4=5503 | GUID=4290bb6f-d6b8-4835-bf67-112c64271713 |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=5192<br>6ee96a622939 | Joint1=5503 | Joint2=5550 | Joint3=5551 | Joint4=5504 | GUID=6578fdfd-a5d0-40de-b28b-             |
| Area=5193<br>9f9c00922461 | Joint1=5504 | Joint2=5551 | Joint3=5552 | Joint4=5505 | GUID=e21d8b16-c22b-4698-8fc2-             |
| Area=5194<br>667b7e713c1b | Joint1=5505 | Joint2=5552 | Joint3=5553 | Joint4=5506 | GUID=78162dae-2dea-4b00-844b-             |
| Area=5195<br>6862d5a3c60e | Joint1=5506 | Joint2=5553 | Joint3=5554 | Joint4=5507 | GUID=68d46bb4-85e4-4ac1-944d-             |
| Area=5196<br>d4f0afa87739 | Joint1=5507 | Joint2=5554 | Joint3=5555 | Joint4=5508 | GUID=c85d5d55-0137-41a7-bc6b-             |
| Area=5197<br>a3025448d9c3 | Joint1=5508 | Joint2=5555 | Joint3=5556 | Joint4=5509 | GUID=8f0cda08-5f1a-44c3-ae70-             |
| Area=5198<br>c2294eb4a044 | Joint1=5509 | Joint2=5556 | Joint3=5557 | Joint4=5510 | GUID=7bb34c33-9ee1-4507-8eac-             |
| Area=5199                 | Joint1=5510 | Joint2=5557 | Joint3=5558 | Joint4=5511 | GUID=c59e3c6f-3dd1-4866-92e6-002cbcd205fc |
| Area=5200<br>ae179d52b998 | Joint1=5511 | Joint2=5558 | Joint3=5559 | Joint4=5512 | GUID=27eedb80-231c-4215-a5a0-             |
| Area=5201<br>82956801460c | Joint1=5512 | Joint2=5559 | Joint3=5560 | Joint4=5513 | GUID=626fa293-d955-4ae4-b4d0-             |
| Area=5202                 | Joint1=5513 | Joint2=5560 | Joint3=5561 | Joint4=5514 | GUID=f8ee0109-bdfc-4324-85fb-270b8117eb28 |
| Area=5203                 | Joint1=5514 | Joint2=5561 | Joint3=5562 | Joint4=5515 | GUID=a02a047f-f2af-4881-a140-931dd1fabbad |
| Area=5204<br>56bba936c713 | Joint1=5515 | Joint2=5562 | Joint3=5563 | Joint4=5516 | GUID=8874b862-b239-47ca-a3d7-             |
| Area=5205                 | Joint1=5516 | Joint2=5563 | Joint3=5564 | Joint4=5517 | GUID=8d89872c-4deb-408c-91cf-f4ebad42e0f6 |
| Area=5206<br>5df31b376cec | Joint1=5517 | Joint2=5564 | Joint3=5565 | Joint4=5518 | GUID=32334bc7-642c-4576-a24d-             |
| Area=5207<br>b5ec8ab415fe | Joint1=5518 | Joint2=5565 | Joint3=5566 | Joint4=5519 | GUID=9637dbea-36d8-4d9a-bbe4-             |
| Area=5208<br>f75a9467d1c7 | Joint1=5519 | Joint2=5566 | Joint3=5567 | Joint4=5520 | GUID=3aee87b7-11b4-4902-a306-             |
| Area=5209<br>6d50caa77094 | Joint1=5521 | Joint2=5568 | Joint3=5569 | Joint4=5522 | GUID=74d176ce-ad38-4fd4-89a8-             |
| Area=5210<br>634487db9c63 | Joint1=5522 | Joint2=5569 | Joint3=5570 | Joint4=5523 | GUID=cf791256-44e0-4550-b64e-             |
| Area=5211<br>0e8d6082b4c4 | Joint1=5523 | Joint2=5570 | Joint3=5571 | Joint4=5524 | GUID=6c2be81d-df21-4a4f-922a-             |
| Area=5212                 | Joint1=5524 | Joint2=5571 | Joint3=5572 | Joint4=5525 | GUID=4bc306f1-b1ac-4649-8c46-a56ecf5302bc |
| Area=5213<br>44b9d6e769d2 | Joint1=5525 | Joint2=5572 | Joint3=5573 | Joint4=5526 | GUID=63826c1c-28a6-4b0d-a4da-             |
| Area=5214<br>31da3d38e17e | Joint1=5526 | Joint2=5573 | Joint3=5574 | Joint4=5527 | GUID=12ef71a5-5700-4b24-becb-             |
| Area=5215<br>11712e6414d6 | Joint1=5527 | Joint2=5574 | Joint3=5575 | Joint4=5528 | GUID=b899a6c6-62f7-4cd3-b8c3-             |
| Area=5216<br>7d7e0fb66ac2 | Joint1=5528 | Joint2=5575 | Joint3=5576 | Joint4=5529 | GUID=130287f8-c4b0-49be-a7aa-             |
| Area=5217<br>83a3fac8b99f | Joint1=5529 | Joint2=5576 | Joint3=5577 | Joint4=5530 | GUID=17978e81-d4d5-46b1-92dc-             |
| Area=5218<br>814eddcfe083 | Joint1=5530 | Joint2=5577 | Joint3=5578 | Joint4=5531 | GUID=0ee2b04d-08f2-4137-8d46-             |
| Area=5219<br>fee56273db87 | Joint1=5531 | Joint2=5578 | Joint3=5579 | Joint4=5532 | GUID=2ccfd2d3-5b06-446a-ad40-             |
| Area=5220                 | Joint1=5532 | Joint2=5579 | Joint3=5580 | Joint4=5533 | GUID=3d8fbc8a-6a7b-42fe-89c9-ed167911ffa0 |
| Area=5221                 | Joint1=5533 | Joint2=5580 | Joint3=5581 | Joint4=5534 | GUID=689c7888-3afa-4b9b-a1aa-85fcef391df9 |
| Area=5222<br>26bbe3aa3686 | Joint1=5534 | Joint2=5581 | Joint3=5582 | Joint4=5535 | GUID=12388bd5-7c75-4986-ac33-             |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=5223 | Joint1=5535 | Joint2=5582 | Joint3=5583 | Joint4=5536 | GUID=a5321ba0-4793-47e0-9352-113f60013252 |
| Area=5224 | Joint1=5536 | Joint2=5583 | Joint3=5584 | Joint4=5537 | GUID=9ab1f480-2171-42cd-b889-defec984aae0 |
| Area=5225 | Joint1=5537 | Joint2=5584 | Joint3=5585 | Joint4=5538 | GUID=b88ed1ad-4ba9-4bc5-935a-3830d41b1f76 |
| Area=5226 | Joint1=5538 | Joint2=5585 | Joint3=5586 | Joint4=5539 | GUID=9415f27c-ed62-43cb-83dd-b4457dc8da61 |
| Area=5227 | Joint1=5539 | Joint2=5586 | Joint3=5587 | Joint4=5540 | GUID=a87a9e2d-1ea8-4f79-8e60-a744ce542d1a |
| Area=5228 | Joint1=5540 | Joint2=5587 | Joint3=5588 | Joint4=5541 | GUID=fa6df8be-1b9c-430c-b667-8e41ea63ba9e |
| Area=5229 | Joint1=5541 | Joint2=5588 | Joint3=5589 | Joint4=5542 | GUID=8292faf5-feb1-42c5-a28b-c4f3593565b6 |
| Area=5230 | Joint1=5542 | Joint2=5589 | Joint3=5590 | Joint4=5543 | GUID=bc35c329-a0c3-4ab2-8e25-b8a56ca40810 |
| Area=5231 | Joint1=5543 | Joint2=5590 | Joint3=5591 | Joint4=5544 | GUID=ca38ed7e-0ded-411c-bf3d-d7e1515c9213 |
| Area=5232 | Joint1=5544 | Joint2=5591 | Joint3=5592 | Joint4=5545 | GUID=7ae63c97-c8f3-4b79-b119-c3b6cb71a5a3 |
| Area=5233 | Joint1=5545 | Joint2=5592 | Joint3=5593 | Joint4=5546 | GUID=10951450-2eea-4af8-927c-8dc95fea8942 |
| Area=5234 | Joint1=5546 | Joint2=5593 | Joint3=5594 | Joint4=5547 | GUID=d59402eb-d6c1-43c5-af26-82d91ab28612 |
| Area=5235 | Joint1=5547 | Joint2=5594 | Joint3=5595 | Joint4=5548 | GUID=2dd39467-b149-4231-b83f-76e5b785d73d |
| Area=5236 | Joint1=5548 | Joint2=5595 | Joint3=5596 | Joint4=5549 | GUID=f35a49f0-14fa-496b-9160-ccb0e8432652 |
| Area=5237 | Joint1=5549 | Joint2=5596 | Joint3=5597 | Joint4=5550 | GUID=90a59fc7-78e4-4e83-a6d9-1f5a83f6180d |
| Area=5238 | Joint1=5550 | Joint2=5597 | Joint3=5598 | Joint4=5551 | GUID=2a38ec43-8a58-4733-8f00-c6616ae1c6cd |
| Area=5239 | Joint1=5551 | Joint2=5598 | Joint3=5599 | Joint4=5552 | GUID=7fca1c0d-4a02-404d-aba2-70bc6dff9d38 |
| Area=5240 | Joint1=5552 | Joint2=5599 | Joint3=5600 | Joint4=5553 | GUID=f47bb534-59eb-4e84-9d4c-940b0437c349 |
| Area=5241 | Joint1=5553 | Joint2=5600 | Joint3=5601 | Joint4=5554 | GUID=6021de32-3dfa-4a32-9659-8f0115b7c601 |
| Area=5242 | Joint1=5554 | Joint2=5601 | Joint3=5602 | Joint4=5555 | GUID=a7246626-16d0-4c90-a95f-7557dbf85f8a |
| Area=5243 | Joint1=5555 | Joint2=5602 | Joint3=5603 | Joint4=5556 | GUID=f8987e6d-4cda-43c9-a8e6-91d0e2d7b9d8 |
| Area=5244 | Joint1=5556 | Joint2=5603 | Joint3=5604 | Joint4=5557 | GUID=9dcdb517-98b1-47a6-8fb2-fd42c14d090c |
| Area=5245 | Joint1=5557 | Joint2=5604 | Joint3=5605 | Joint4=5558 | GUID=ddb5d1af-f9f2-43aa-81fc-4dda94a23509 |
| Area=5246 | Joint1=5558 | Joint2=5605 | Joint3=5606 | Joint4=5559 | GUID=7379f8fc-a9c5-44a0-8f8f-f3a5d1978ecc |
| Area=5247 | Joint1=5559 | Joint2=5606 | Joint3=5607 | Joint4=5560 | GUID=c6400774-8bdb-4605-b489-5fe907e0a162 |
| Area=5248 | Joint1=5560 | Joint2=5607 | Joint3=5608 | Joint4=5561 | GUID=33f4bb93-5492-4856-a291-245d982d0a2b |
| Area=5249 | Joint1=5561 | Joint2=5608 | Joint3=5609 | Joint4=5562 | GUID=bc670df5-4f91-420e-b67a-2df7bb815d38 |
| Area=5250 | Joint1=5562 | Joint2=5609 | Joint3=5610 | Joint4=5563 | GUID=7490350e-dfda-477e-b7e5-0a7379fba353 |
| Area=5251 | Joint1=5563 | Joint2=5610 | Joint3=5611 | Joint4=5564 | GUID=92fcf675-17e9-4fff-ba3a-bddb368bd214 |
| Area=5252 | Joint1=5564 | Joint2=5611 | Joint3=5612 | Joint4=5565 | GUID=9b44c971-d655-4ae5-ae06-6635458fe739 |
| Area=5253 | Joint1=5565 | Joint2=5612 | Joint3=5613 | Joint4=5566 | GUID=2305ed12-52fd-4006-beb9-62908d35307e |
| Area=5254 | Joint1=5566 | Joint2=5613 | Joint3=5614 | Joint4=5567 | GUID=13dd6255-b095-4701-b5e1-fc84b30edca1 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                             |
|-----------|-------------|-------------|-------------|-------------|---------------------------------------------|
| Area=5255 | Joint1=5568 | Joint2=5615 | Joint3=5616 | Joint4=5569 | GUID=1f5c8627-2965-4d72-be37-ce75b2f66097   |
| Area=5256 | Joint1=5569 | Joint2=5616 | Joint3=5617 | Joint4=5570 | GUID=b2b644ea-1aaa-47e8-9429-59d0305e7381   |
| Area=5257 | Joint1=5570 | Joint2=5617 | Joint3=5618 | Joint4=5571 | GUID=6615d265-2f27-4123-addd-3b7f825d04f2   |
| Area=5258 | Joint1=5571 | Joint2=5618 | Joint3=5619 | Joint4=5572 | GUID=5ae18e58-b95d-4e79-9026-bbde5fa5b794   |
| Area=5259 | Joint1=5572 | Joint2=5619 | Joint3=5620 | Joint4=5573 | GUID=1426afd0-25dc-4b1f-9ee0-914b05af4587   |
| Area=5260 | Joint1=5573 | Joint2=5620 | Joint3=5621 | Joint4=5574 | GUID=395029f8-b483-4943-bdf9-262dbb4b1863   |
| Area=5261 | Joint1=5574 | Joint2=5621 | Joint3=5622 | Joint4=5575 | GUID=6cfaab9e-feeaa-46a4-bd4c-61c06a40eccaa |
| Area=5262 | Joint1=5575 | Joint2=5622 | Joint3=5623 | Joint4=5576 | GUID=49631a44-a96f-407f-9945-5b63287eac9c   |
| Area=5263 | Joint1=5576 | Joint2=5623 | Joint3=5624 | Joint4=5577 | GUID=079dd69b-6b4b-44e5-b4fe-939fb1a67be1   |
| Area=5264 | Joint1=5577 | Joint2=5624 | Joint3=5625 | Joint4=5578 | GUID=c65abd35-24a7-4902-af16-306bb982b5b9   |
| Area=5265 | Joint1=5578 | Joint2=5625 | Joint3=5626 | Joint4=5579 | GUID=c333dd5f-e78f-4cca-80de-4b6b4cd1091d   |
| Area=5266 | Joint1=5579 | Joint2=5626 | Joint3=5627 | Joint4=5580 | GUID=80073e29-6ead-4ab3-a9a1-f206318230d4   |
| Area=5267 | Joint1=5580 | Joint2=5627 | Joint3=5628 | Joint4=5581 | GUID=e85672c1-9d67-43fd-8ae4-afb5752c4b78   |
| Area=5268 | Joint1=5581 | Joint2=5628 | Joint3=5629 | Joint4=5582 | GUID=f42ee399-b946-46ee-bbb4-a3bbfb1ec59e   |
| Area=5269 | Joint1=5582 | Joint2=5629 | Joint3=5630 | Joint4=5583 | GUID=0344b920-5a77-4072-ad2f-bef81875852b   |
| Area=5270 | Joint1=5583 | Joint2=5630 | Joint3=5631 | Joint4=5584 | GUID=d3b50701-bf70-4f00-bc13-13403b2af92f   |
| Area=5271 | Joint1=5584 | Joint2=5631 | Joint3=5632 | Joint4=5585 | GUID=c4a85936-42b5-4c81-8427-08cbcf41810c   |
| Area=5272 | Joint1=5585 | Joint2=5632 | Joint3=5633 | Joint4=5586 | GUID=354bd53c-beff-4101-a08e-aacbf79ecf78   |
| Area=5273 | Joint1=5586 | Joint2=5633 | Joint3=5634 | Joint4=5587 | GUID=3ef61d98-2344-444b-9f4b-5115771f5685   |
| Area=5274 | Joint1=5587 | Joint2=5634 | Joint3=5635 | Joint4=5588 | GUID=89bc5458-e9f6-446e-a65d-22a4caadb666   |
| Area=5275 | Joint1=5588 | Joint2=5635 | Joint3=5636 | Joint4=5589 | GUID=96da24d5-ec60-4e8f-b801-78c89e4d7dfc   |
| Area=5276 | Joint1=5589 | Joint2=5636 | Joint3=5637 | Joint4=5590 | GUID=a79a0012-691f-4ab2-9722-3ff430360069   |
| Area=5277 | Joint1=5590 | Joint2=5637 | Joint3=5638 | Joint4=5591 | GUID=f758ba06-53da-4811-a41a-718d21458ec2   |
| Area=5278 | Joint1=5591 | Joint2=5638 | Joint3=5639 | Joint4=5592 | GUID=4fac2af1-e52c-4f9d-82bc-f93bd2908e57   |
| Area=5279 | Joint1=5592 | Joint2=5639 | Joint3=5640 | Joint4=5593 | GUID=b50bd707-a1d4-48cd-9a12-e75b796b18eb   |
| Area=5280 | Joint1=5593 | Joint2=5640 | Joint3=5641 | Joint4=5594 | GUID=3223a300-0f9a-4aac-a5c3-91b4b92ac564   |
| Area=5281 | Joint1=5594 | Joint2=5641 | Joint3=5642 | Joint4=5595 | GUID=17fbfad8-bdbb-48d3-9ff4-50be82ee8eb6   |
| Area=5282 | Joint1=5595 | Joint2=5642 | Joint3=5643 | Joint4=5596 | GUID=77da71a7-45b4-4312-a769-6f587aa705b5   |
| Area=5283 | Joint1=5596 | Joint2=5643 | Joint3=5644 | Joint4=5597 | GUID=d5f6b72e-1963-4c19-8624-482e073eca63   |
| Area=5284 | Joint1=5597 | Joint2=5644 | Joint3=5645 | Joint4=5598 | GUID=400e6b01-ddab-424a-af58-fcb97c3299f8   |
| Area=5285 | Joint1=5598 | Joint2=5645 | Joint3=5646 | Joint4=5599 | GUID=e9b77c1f-a7d2-494d-865c-20a7b79badaa   |
| Area=5286 | Joint1=5599 | Joint2=5646 | Joint3=5647 | Joint4=5600 | GUID=29990dc5-88be-4c24-9ba7-f245bab6ec52   |
| Area=5287 | Joint1=5600 | Joint2=5647 | Joint3=5648 | Joint4=5601 | GUID=9e89488f-8208-4303-8dc4-cff849c4a0af   |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=5288<br>dd20ace0ddb3 | Joint1=5601 | Joint2=5648 | Joint3=5649 | Joint4=5602 | GUID=ebd87f32-0266-4b09-90d9-             |
| Area=5289<br>7f937608d218 | Joint1=5602 | Joint2=5649 | Joint3=5650 | Joint4=5603 | GUID=50df4440-5b42-4e4d-a8e0-             |
| Area=5290<br>35b177919169 | Joint1=5603 | Joint2=5650 | Joint3=5651 | Joint4=5604 | GUID=86fa04a1-7651-47bf-b538-             |
| Area=5291                 | Joint1=5604 | Joint2=5651 | Joint3=5652 | Joint4=5605 | GUID=8bb9615f-fdd6-4bfa-83d2-2511d1f07298 |
| Area=5292<br>b08a9773052b | Joint1=5605 | Joint2=5652 | Joint3=5653 | Joint4=5606 | GUID=f824bed1-4594-49f2-8aac-             |
| Area=5293                 | Joint1=5606 | Joint2=5653 | Joint3=5654 | Joint4=5607 | GUID=4c8e7bb0-aff0-4e62-9536-b078fcfb92a1 |
| Area=5294                 | Joint1=5607 | Joint2=5654 | Joint3=5655 | Joint4=5608 | GUID=23f53466-e195-4fd9-a24f-152ea4d75b8a |
| Area=5295<br>7f6800653c35 | Joint1=5608 | Joint2=5655 | Joint3=5656 | Joint4=5609 | GUID=57152c63-0c5c-4d8d-815c-             |
| Area=5296<br>2b6727dbec33 | Joint1=5609 | Joint2=5656 | Joint3=5657 | Joint4=5610 | GUID=4ba91973-f55c-4d69-9f8d-             |
| Area=5297                 | Joint1=5610 | Joint2=5657 | Joint3=5658 | Joint4=5611 | GUID=140ffa63-b7f5-4acd-9caa-16d6da473db7 |
| Area=5298<br>a53a3d8ca8a8 | Joint1=5611 | Joint2=5658 | Joint3=5659 | Joint4=5612 | GUID=4c7db4a4-5b7d-4750-b6c1-             |
| Area=5299                 | Joint1=5612 | Joint2=5659 | Joint3=5660 | Joint4=5613 | GUID=f8d6501d-5fd6-4bc5-8a63-3a20c45535df |
| Area=5300                 | Joint1=5613 | Joint2=5660 | Joint3=5661 | Joint4=5614 | GUID=95789bdf-82be-4e2c-b5d2-67faf7a5e180 |
| Area=5301                 | Joint1=5615 | Joint2=5662 | Joint3=5663 | Joint4=5616 | GUID=75f356a1-367c-46f4-bc63-19793a8f491d |
| Area=5302<br>654d0d29d74d | Joint1=5616 | Joint2=5663 | Joint3=5664 | Joint4=5617 | GUID=e525a4c1-dc3d-486c-a4c1-             |
| Area=5303                 | Joint1=5617 | Joint2=5664 | Joint3=5665 | Joint4=5618 | GUID=ff7f21b8-4bdc-4a6d-8016-14d6dad3387a |
| Area=5304<br>a7b0dd60b10a | Joint1=5618 | Joint2=5665 | Joint3=5666 | Joint4=5619 | GUID=453993cf-22ae-4529-a804-             |
| Area=5305                 | Joint1=5619 | Joint2=5666 | Joint3=5667 | Joint4=5620 | GUID=deab9f78-9538-481f-8de8-7d6c3041f2a9 |
| Area=5306<br>6c8e95169261 | Joint1=5620 | Joint2=5667 | Joint3=5668 | Joint4=5621 | GUID=79a54df7-fc5d-4e8c-86e9-             |
| Area=5307<br>a02a1be5c9aa | Joint1=5621 | Joint2=5668 | Joint3=5669 | Joint4=5622 | GUID=18b0ef1e-5a93-415e-a0ad-             |
| Area=5308<br>c4c5b17c20aa | Joint1=5622 | Joint2=5669 | Joint3=5670 | Joint4=5623 | GUID=54d75bcc-ef41-4034-9dd4-             |
| Area=5309<br>c5e55f41d25d | Joint1=5623 | Joint2=5670 | Joint3=5671 | Joint4=5624 | GUID=18103a52-a810-4345-92ce-             |
| Area=5310<br>9b471a49ea3c | Joint1=5624 | Joint2=5671 | Joint3=5672 | Joint4=5625 | GUID=c2a3f680-7d6c-4d27-b591-             |
| Area=5311                 | Joint1=5625 | Joint2=5672 | Joint3=5673 | Joint4=5626 | GUID=b39ca6a4-7c12-47fc-ba2b-ebc3f98e702d |
| Area=5312                 | Joint1=5626 | Joint2=5673 | Joint3=5674 | Joint4=5627 | GUID=dce71107-6ce8-47f6-9d3f-cef3e9e78bbb |
| Area=5313                 | Joint1=5627 | Joint2=5674 | Joint3=5675 | Joint4=5628 | GUID=e1676c1d-af29-4d90-b1fc-c189442cd6fd |
| Area=5314<br>3f38e7753851 | Joint1=5628 | Joint2=5675 | Joint3=5676 | Joint4=5629 | GUID=10713a66-e4fa-4310-8492-             |
| Area=5315                 | Joint1=5629 | Joint2=5676 | Joint3=5677 | Joint4=5630 | GUID=9fec4b91-0ef9-410f-9eef-63bf0ec84767 |
| Area=5316                 | Joint1=5630 | Joint2=5677 | Joint3=5678 | Joint4=5631 | GUID=9620bff0-510f-4dbb-98c8-7c86e8ba3d71 |
| Area=5317<br>484111e7f2e2 | Joint1=5631 | Joint2=5678 | Joint3=5679 | Joint4=5632 | GUID=b3719b35-2ab9-46d7-8bf4-             |
| Area=5318<br>d3bab6915ec1 | Joint1=5632 | Joint2=5679 | Joint3=5680 | Joint4=5633 | GUID=2b9a8dd6-1f2d-47f4-8a24-             |
| Area=5319<br>8ea4c2f01854 | Joint1=5633 | Joint2=5680 | Joint3=5681 | Joint4=5634 | GUID=d0a68d8e-466a-4afb-836c-             |
| Area=5320                 | Joint1=5634 | Joint2=5681 | Joint3=5682 | Joint4=5635 | GUID=5f423fb7-8043-4af8-93f7-d5ade5ec4e00 |
| Area=5321                 | Joint1=5635 | Joint2=5682 | Joint3=5683 | Joint4=5636 | GUID=1408ffb0-9e66-415e-9d7c-ff1629898eec |
| Area=5322<br>b570d3b2463c | Joint1=5636 | Joint2=5683 | Joint3=5684 | Joint4=5637 | GUID=751ff87d-bed4-4397-b485-             |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=5323 Joint1=5637 Joint2=5684 Joint3=5685 Joint4=5638 GUID=f6056e6b-17a8-4d35-92ec-e4db3381d396

Area=5324 Joint1=5638 Joint2=5685 Joint3=5686 Joint4=5639 GUID=f8f66f8e-80a1-4ba4-a839-101b8ad97adf

Area=5325 Joint1=5639 Joint2=5686 Joint3=5687 Joint4=5640 GUID=21061b5a-b834-489c-be2d-fb0522036275

Area=5326 Joint1=5640 Joint2=5687 Joint3=5688 Joint4=5641 GUID=3af4d483-ad86-4dae-bd83-14be387dd2e5

Area=5327 Joint1=5641 Joint2=5688 Joint3=5689 Joint4=5642 GUID=f06d229f-516f-4f0e-8e9b-15b8bba400d3

Area=5328 Joint1=5642 Joint2=5689 Joint3=5690 Joint4=5643 GUID=c880be77-1112-46f6-91da-3560f13d2cfe

Area=5329 Joint1=5643 Joint2=5690 Joint3=5691 Joint4=5644 GUID=a83f5c37-286d-4b8e-84f5-c3178aecf83e

Area=5330 Joint1=5644 Joint2=5691 Joint3=5692 Joint4=5645 GUID=703e3065-869e-47e3-b3fe-bddd6c4b5789

Area=5331 Joint1=5645 Joint2=5692 Joint3=5693 Joint4=5646 GUID=2cc414dc-2177-4231-bace-fd9e87aed0f1

Area=5332 Joint1=5646 Joint2=5693 Joint3=5694 Joint4=5647 GUID=c94212eb-3d62-4db1-bd5b-b0a6473ac3f7

Area=5333 Joint1=5647 Joint2=5694 Joint3=5695 Joint4=5648 GUID=07d4b8a8-046d-4a62-9779-41e1602e8f7f

Area=5334 Joint1=5648 Joint2=5695 Joint3=5696 Joint4=5649 GUID=6a1b8410-51da-421f-8dfa-1729b6f409f7

Area=5335 Joint1=5649 Joint2=5696 Joint3=5697 Joint4=5650 GUID=1c96afe7-1d79-454d-ab80-c5de52fc9c8c

Area=5336 Joint1=5650 Joint2=5697 Joint3=5698 Joint4=5651 GUID=8db56dee-fb7b-4b4f-ae8-c0b53f113741

Area=5337 Joint1=5651 Joint2=5698 Joint3=5699 Joint4=5652 GUID=07fa5f1e-6e87-40f5-a9de-bb2f3f0b297c

Area=5338 Joint1=5652 Joint2=5699 Joint3=5700 Joint4=5653 GUID=f7e3d479-bd26-4dba-939c-9fc3ae2572c7

Area=5339 Joint1=5653 Joint2=5700 Joint3=5701 Joint4=5654 GUID=3ba9120a-3d69-4c6f-9361-daa3761fb104

Area=5340 Joint1=5654 Joint2=5701 Joint3=5702 Joint4=5655 GUID=d334cba1-3716-4e98-8cf6-461cba57c86f

Area=5341 Joint1=5655 Joint2=5702 Joint3=5703 Joint4=5656 GUID=eaca5b3b-9a44-4191-9550-f72813e5e27a

Area=5342 Joint1=5656 Joint2=5703 Joint3=5704 Joint4=5657 GUID=a9662727-d57f-4b69-85b0-7a7667c5cf76

Area=5343 Joint1=5657 Joint2=5704 Joint3=5705 Joint4=5658 GUID=fd9a4357-e6a0-4da5-99ac-5807da9e51bc

Area=5344 Joint1=5658 Joint2=5705 Joint3=5706 Joint4=5659 GUID=88bfec24-77ae-4815-ac7e-e0ce2eeda347

Area=5345 Joint1=5659 Joint2=5706 Joint3=5707 Joint4=5660 GUID=f93e7ba0-aac4-4d59-b632-7ae828ffe2f0

Area=5346 Joint1=5660 Joint2=5707 Joint3=5708 Joint4=5661 GUID=c46accd7-722f-44c4-a462-08f60970298c

Area=5347 Joint1=5662 Joint2=5709 Joint3=5710 Joint4=5663 GUID=63764913-7448-48e9-85f0-e619f40c558c

Area=5348 Joint1=5663 Joint2=5710 Joint3=5711 Joint4=5664 GUID=ea53c251-8fb9-4b10-82be-9bb47c87795f

Area=5349 Joint1=5664 Joint2=5711 Joint3=5712 Joint4=5665 GUID=84cda3c6-319e-4c64-9a42-fbe708938645

Area=5350 Joint1=5665 Joint2=5712 Joint3=5713 Joint4=5666 GUID=fdc3e517-c976-48c0-80da-b58cb636ef73

Area=5351 Joint1=5666 Joint2=5713 Joint3=5714 Joint4=5667 GUID=d407deb1-812d-4213-bf05-10c9de999c24

Area=5352 Joint1=5667 Joint2=5714 Joint3=5715 Joint4=5668 GUID=2ac55630-a8c1-4a31-88fb-fc3377a6401c

Area=5353 Joint1=5668 Joint2=5715 Joint3=5716 Joint4=5669 GUID=7d454169-fe56-4007-a1b3-bc4247bf0ada

Area=5354 Joint1=5669 Joint2=5716 Joint3=5717 Joint4=5670 GUID=4172f986-9f07-4ad7-bf2f-8253dcda9f58

Area=5355 Joint1=5670 Joint2=5717 Joint3=5718 Joint4=5671 GUID=35f2b199-90bc-4320-9978-56dbe7aefa35

Area=5356 Joint1=5671 Joint2=5718 Joint3=5719 Joint4=5672 GUID=bbe969b4-27ad-4f99-8e13-8ffd980835cd

Area=5357 Joint1=5672 Joint2=5719 Joint3=5720 Joint4=5673 GUID=8c4223ea-781d-4ec8-93a7-79b841dace86



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=5358<br>bf140eed9c48 | Joint1=5673 | Joint2=5720 | Joint3=5721 | Joint4=5674 | GUID=90096463-b68e-48b4-8462-             |
| Area=5359<br>942ab5e4a4d8 | Joint1=5674 | Joint2=5721 | Joint3=5722 | Joint4=5675 | GUID=97e2263c-da1f-46d8-9449-             |
| Area=5360<br>051f04a83db9 | Joint1=5675 | Joint2=5722 | Joint3=5723 | Joint4=5676 | GUID=813881c8-91ce-42fa-a4a3-             |
| Area=5361<br>68f845602a3d | Joint1=5676 | Joint2=5723 | Joint3=5724 | Joint4=5677 | GUID=a7410632-032c-447c-bde9-             |
| Area=5362<br>34463c021cd7 | Joint1=5677 | Joint2=5724 | Joint3=5725 | Joint4=5678 | GUID=f45e4f38-2919-4502-8b59-             |
| Area=5363                 | Joint1=5678 | Joint2=5725 | Joint3=5726 | Joint4=5679 | GUID=2ed2dcf0-a6f9-4aae-9705-dcd6df362109 |
| Area=5364                 | Joint1=5679 | Joint2=5726 | Joint3=5727 | Joint4=5680 | GUID=8530f65f-5f3b-4c78-ac75-420cfc8bf30  |
| Area=5365<br>afb6c175256d | Joint1=5680 | Joint2=5727 | Joint3=5728 | Joint4=5681 | GUID=5a6637e1-c29e-4a74-b4ee-             |
| Area=5366<br>4c19a96397f4 | Joint1=5681 | Joint2=5728 | Joint3=5729 | Joint4=5682 | GUID=3e3ab5de-66ba-48e2-a3ed-             |
| Area=5367                 | Joint1=5682 | Joint2=5729 | Joint3=5730 | Joint4=5683 | GUID=216cc1fa-b6ed-408f-a8e1-68d56e173f81 |
| Area=5368<br>9b9305240de7 | Joint1=5683 | Joint2=5730 | Joint3=5731 | Joint4=5684 | GUID=c5db41df-3dd6-49a7-9b29-             |
| Area=5369<br>6e7579264b07 | Joint1=5684 | Joint2=5731 | Joint3=5732 | Joint4=5685 | GUID=50288fc1-a0b0-4a10-98e7-             |
| Area=5370<br>e8d0022dc432 | Joint1=5685 | Joint2=5732 | Joint3=5733 | Joint4=5686 | GUID=2da864f7-a331-46d3-a796-             |
| Area=5371<br>a68c341f7061 | Joint1=5686 | Joint2=5733 | Joint3=5734 | Joint4=5687 | GUID=d6e4cdeb-1cb1-4d15-a90b-             |
| Area=5372                 | Joint1=5687 | Joint2=5734 | Joint3=5735 | Joint4=5688 | GUID=62728454-9f0c-4816-9aee-34abd54f0f69 |
| Area=5373                 | Joint1=5688 | Joint2=5735 | Joint3=5736 | Joint4=5689 | GUID=1ea9c95e-a683-4740-bf5d-fbfb2110daa3 |
| Area=5374<br>563b9eeb0200 | Joint1=5689 | Joint2=5736 | Joint3=5737 | Joint4=5690 | GUID=88a1bee8-e72f-414b-aa20-             |
| Area=5375<br>3d039ce373d7 | Joint1=5690 | Joint2=5737 | Joint3=5738 | Joint4=5691 | GUID=59f29532-b2eb-44d5-9ef2-             |
| Area=5376<br>e2d2344d1857 | Joint1=5691 | Joint2=5738 | Joint3=5739 | Joint4=5692 | GUID=84d7246f-e62e-4b6a-bdab-             |
| Area=5377<br>0ec81c1652f3 | Joint1=5692 | Joint2=5739 | Joint3=5740 | Joint4=5693 | GUID=2e67d4b9-a2c2-4a1e-bd14-             |
| Area=5378<br>13969b6c769d | Joint1=5693 | Joint2=5740 | Joint3=5741 | Joint4=5694 | GUID=4a853dbd-d94c-40e8-ab04-             |
| Area=5379                 | Joint1=5694 | Joint2=5741 | Joint3=5742 | Joint4=5695 | GUID=f354c322-046c-4ccf-a953-a76056c3508b |
| Area=5380<br>0d72c72d06eb | Joint1=5695 | Joint2=5742 | Joint3=5743 | Joint4=5696 | GUID=4704cfe-de1e-4648-8092-              |
| Area=5381                 | Joint1=5696 | Joint2=5743 | Joint3=5744 | Joint4=5697 | GUID=09f7afd9-ce5a-4370-9513-43f6f1a99c43 |
| Area=5382<br>d87d0e42e873 | Joint1=5697 | Joint2=5744 | Joint3=5745 | Joint4=5698 | GUID=7cdb9272-2a91-4d98-9d66-             |
| Area=5383<br>d9db3a3cd56d | Joint1=5698 | Joint2=5745 | Joint3=5746 | Joint4=5699 | GUID=17e157e6-e4e2-4dd3-8a80-             |
| Area=5384<br>b9e9926c2e92 | Joint1=5699 | Joint2=5746 | Joint3=5747 | Joint4=5700 | GUID=6a9c060a-1dee-4a07-b5c3-             |
| Area=5385                 | Joint1=5700 | Joint2=5747 | Joint3=5748 | Joint4=5701 | GUID=1b839854-9585-49c5-95be-570f42ee4cff |
| Area=5386<br>3b9adc008d05 | Joint1=5701 | Joint2=5748 | Joint3=5749 | Joint4=5702 | GUID=84649b7a-1116-4680-9319-             |
| Area=5387<br>40ce07d27c46 | Joint1=5702 | Joint2=5749 | Joint3=5750 | Joint4=5703 | GUID=82c20cf9-c57d-4401-8203-             |
| Area=5388<br>8231983ffd2a | Joint1=5703 | Joint2=5750 | Joint3=5751 | Joint4=5704 | GUID=cb48b4aa-2e73-4b9b-95c8-             |
| Area=5389                 | Joint1=5704 | Joint2=5751 | Joint3=5752 | Joint4=5705 | GUID=2bb3cf2a-5dfd-4efd-9bdf-1470a0bb96e1 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=5390<br>101d72c78b51 | Joint1=5705 | Joint2=5752 | Joint3=5753 | Joint4=5706 | GUID=8157d685-02b8-4b8a-a851-             |
| Area=5391<br>833bd76cddcc | Joint1=5706 | Joint2=5753 | Joint3=5754 | Joint4=5707 | GUID=25904284-f221-4449-8d77-             |
| Area=5392                 | Joint1=5707 | Joint2=5754 | Joint3=5755 | Joint4=5708 | GUID=86fd6466-8086-4c26-892b-c2b852f6f2db |
| Area=5393                 | Joint1=5709 | Joint2=5756 | Joint3=5757 | Joint4=5710 | GUID=18b6b91d-cf51-4eff-b838-d8969bd5aad3 |
| Area=5394                 | Joint1=5710 | Joint2=5757 | Joint3=5758 | Joint4=5711 | GUID=e67f5b42-b02e-4299-951c-6e1cedf7cd9f |
| Area=5395<br>b21d12074908 | Joint1=5711 | Joint2=5758 | Joint3=5759 | Joint4=5712 | GUID=c938ba37-f264-4d52-99ab-             |
| Area=5396                 | Joint1=5712 | Joint2=5759 | Joint3=5760 | Joint4=5713 | GUID=cb9fdb44-48af-4600-b331-95d88cd3fda0 |
| Area=5397<br>724dc7ad0412 | Joint1=5713 | Joint2=5760 | Joint3=5761 | Joint4=5714 | GUID=4ef0fb01-b8d7-431b-aed4-             |
| Area=5398                 | Joint1=5714 | Joint2=5761 | Joint3=5762 | Joint4=5715 | GUID=51108006-44dd-42d3-8ab0-cf2bf7d610fb |
| Area=5399                 | Joint1=5715 | Joint2=5762 | Joint3=5763 | Joint4=5716 | GUID=fdb325f9-045b-4d84-84f0-8e9de8fb30fe |
| Area=5400<br>b4b407ecc9ab | Joint1=5716 | Joint2=5763 | Joint3=5764 | Joint4=5717 | GUID=10c923fd-f204-4b49-8aea-             |
| Area=5401<br>5a1c270851cc | Joint1=5717 | Joint2=5764 | Joint3=5765 | Joint4=5718 | GUID=369c7e16-486d-4098-b645-             |
| Area=5402<br>e130b105beea | Joint1=5718 | Joint2=5765 | Joint3=5766 | Joint4=5719 | GUID=f095e814-4f25-4203-ba84-             |
| Area=5403<br>60d2b41ad8ed | Joint1=5719 | Joint2=5766 | Joint3=5767 | Joint4=5720 | GUID=0e1dad5-b452-43f2-af01-              |
| Area=5404                 | Joint1=5720 | Joint2=5767 | Joint3=5768 | Joint4=5721 | GUID=60b88aff-3940-4486-b865-6f2bece9f11b |
| Area=5405<br>46729eeaa148 | Joint1=5721 | Joint2=5768 | Joint3=5769 | Joint4=5722 | GUID=2b2bb5dc-a954-4395-add9-             |
| Area=5406<br>a7e0b039a1e0 | Joint1=5722 | Joint2=5769 | Joint3=5770 | Joint4=5723 | GUID=c1812279-95a1-4958-b08f-             |
| Area=5407<br>126e9ff2d659 | Joint1=5723 | Joint2=5770 | Joint3=5771 | Joint4=5724 | GUID=7aa305a4-1541-4321-bdc6-             |
| Area=5408                 | Joint1=5724 | Joint2=5771 | Joint3=5772 | Joint4=5725 | GUID=cda2fb1e-40ce-4de1-9929-f80cfb3c155c |
| Area=5409                 | Joint1=5725 | Joint2=5772 | Joint3=5773 | Joint4=5726 | GUID=4665a68c-4c1f-4db0-85fc-09d54aa5d34f |
| Area=5410                 | Joint1=5726 | Joint2=5773 | Joint3=5774 | Joint4=5727 | GUID=96b8fd66-078f-489b-a32b-2bd7cbf86c12 |
| Area=5411<br>18d6712eb6bb | Joint1=5727 | Joint2=5774 | Joint3=5775 | Joint4=5728 | GUID=dc84007-f667-446a-8a5a-              |
| Area=5412<br>83540c5d5cdb | Joint1=5728 | Joint2=5775 | Joint3=5776 | Joint4=5729 | GUID=e7f0e7bc-a932-455f-b024-             |
| Area=5413<br>461eb52d9c5b | Joint1=5729 | Joint2=5776 | Joint3=5777 | Joint4=5730 | GUID=df76910a-43da-48c5-adf0-             |
| Area=5414                 | Joint1=5730 | Joint2=5777 | Joint3=5778 | Joint4=5731 | GUID=f9640fc8-8e1b-4783-a3ea-93b979308f39 |
| Area=5415<br>8e3427485ee7 | Joint1=5731 | Joint2=5778 | Joint3=5779 | Joint4=5732 | GUID=2d6a1fcb-16c6-4e86-a86a-             |
| Area=5416<br>7b5eb93fe152 | Joint1=5732 | Joint2=5779 | Joint3=5780 | Joint4=5733 | GUID=7e567c40-fab0-4476-a7a2-             |
| Area=5417                 | Joint1=5733 | Joint2=5780 | Joint3=5781 | Joint4=5734 | GUID=5040a24e-8cfa-4bfe-9bb5-473c0d6f0f57 |
| Area=5418<br>0c815c12d8e4 | Joint1=5734 | Joint2=5781 | Joint3=5782 | Joint4=5735 | GUID=b95df86d-05db-4fd4-8136-             |
| Area=5419<br>6c61ba256b60 | Joint1=5735 | Joint2=5782 | Joint3=5783 | Joint4=5736 | GUID=89ade51d-c84a-4acb-8918-             |
| Area=5420<br>6c3d1d97f192 | Joint1=5736 | Joint2=5783 | Joint3=5784 | Joint4=5737 | GUID=58550a03-b503-4a6f-a728-             |
| Area=5421<br>860179f85379 | Joint1=5737 | Joint2=5784 | Joint3=5785 | Joint4=5738 | GUID=214756ee-c487-4752-8e5e-             |
| Area=5422                 | Joint1=5738 | Joint2=5785 | Joint3=5786 | Joint4=5739 | GUID=b137f541-b2ff-4e26-8a93-03912c837466 |
| Area=5423<br>59bea3f52c48 | Joint1=5739 | Joint2=5786 | Joint3=5787 | Joint4=5740 | GUID=b0e56652-2916-483b-b4d9-             |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=5424<br>c3eca842d0f4 | Joint1=5740 | Joint2=5787 | Joint3=5788 | Joint4=5741 | GUID=0a9b3399-15c3-4a11-92dd-             |
| Area=5425<br>53a8e3b637d4 | Joint1=5741 | Joint2=5788 | Joint3=5789 | Joint4=5742 | GUID=3cdc8e40-383b-4374-b37c-             |
| Area=5426<br>28d9a82575da | Joint1=5742 | Joint2=5789 | Joint3=5790 | Joint4=5743 | GUID=d2370e27-acfb-4df9-ae29-             |
| Area=5427                 | Joint1=5743 | Joint2=5790 | Joint3=5791 | Joint4=5744 | GUID=fccd1e90-950d-41cc-adc8-5ae2ac703b2f |
| Area=5428<br>43712e103df5 | Joint1=5744 | Joint2=5791 | Joint3=5792 | Joint4=5745 | GUID=bec6b804-b994-4a0f-9349-             |
| Area=5429                 | Joint1=5745 | Joint2=5792 | Joint3=5793 | Joint4=5746 | GUID=f308be30-4292-4fe1-a261-e9d19aaf4296 |
| Area=5430                 | Joint1=5746 | Joint2=5793 | Joint3=5794 | Joint4=5747 | GUID=aea8299c-0cf9-4e6f-b110-4261e8cc1c43 |
| Area=5431<br>bd77bc34ac93 | Joint1=5747 | Joint2=5794 | Joint3=5795 | Joint4=5748 | GUID=6df85c31-ae62-49a1-a425-             |
| Area=5432<br>5937990c129d | Joint1=5748 | Joint2=5795 | Joint3=5796 | Joint4=5749 | GUID=0b42f8ed-55c4-4620-98a7-             |
| Area=5433<br>5700048412c9 | Joint1=5749 | Joint2=5796 | Joint3=5797 | Joint4=5750 | GUID=406f2736-9068-457f-824c-             |
| Area=5434<br>6aa011c648c1 | Joint1=5750 | Joint2=5797 | Joint3=5798 | Joint4=5751 | GUID=c6776484-c794-42ed-858d-             |
| Area=5435<br>7e837077e000 | Joint1=5751 | Joint2=5798 | Joint3=5799 | Joint4=5752 | GUID=05c0d53d-3ca6-4be8-8f2f-             |
| Area=5436<br>6ce72b8078af | Joint1=5752 | Joint2=5799 | Joint3=5800 | Joint4=5753 | GUID=0977869e-d3e6-453f-9a5a-             |
| Area=5437                 | Joint1=5753 | Joint2=5800 | Joint3=5801 | Joint4=5754 | GUID=70817fa2-9da7-4983-b88c-f1115af27eb1 |
| Area=5438<br>be84335c0d11 | Joint1=5754 | Joint2=5801 | Joint3=5802 | Joint4=5755 | GUID=4a1ad5e7-4b07-4998-9f1a-             |
| Area=5439<br>80b5e55b1bfe | Joint1=5756 | Joint2=5803 | Joint3=5804 | Joint4=5757 | GUID=5a05908b-ca6a-4ce5-81a8-             |
| Area=5440<br>92c543510114 | Joint1=5757 | Joint2=5804 | Joint3=5805 | Joint4=5758 | GUID=97bef084-0097-4463-84da-             |
| Area=5441<br>39736c637442 | Joint1=5758 | Joint2=5805 | Joint3=5806 | Joint4=5759 | GUID=be740de7-b5a2-4627-9c0d-             |
| Area=5442<br>a71528c88685 | Joint1=5759 | Joint2=5806 | Joint3=5807 | Joint4=5760 | GUID=c8855755-82b5-4158-ab0d-             |
| Area=5443<br>d061bd8d621f | Joint1=5760 | Joint2=5807 | Joint3=5808 | Joint4=5761 | GUID=8e8bd3b0-a5e1-4846-8cdb-             |
| Area=5444<br>45e36253cd8d | Joint1=5761 | Joint2=5808 | Joint3=5809 | Joint4=5762 | GUID=2b288883-1f00-4b61-ae4d-             |
| Area=5445<br>7e56752951fb | Joint1=5762 | Joint2=5809 | Joint3=5810 | Joint4=5763 | GUID=9456d0b4-8328-4a03-a949-             |
| Area=5446                 | Joint1=5763 | Joint2=5810 | Joint3=5811 | Joint4=5764 | GUID=67517483-cc98-4959-b345-f6d9feb61f9b |
| Area=5447                 | Joint1=5764 | Joint2=5811 | Joint3=5812 | Joint4=5765 | GUID=b3f35702-ef9d-4767-a6fc-c6558d3e651e |
| Area=5448                 | Joint1=5765 | Joint2=5812 | Joint3=5813 | Joint4=5766 | GUID=fcb92666-2613-4fba-850d-5b83d5fc7463 |
| Area=5449<br>05717de4a022 | Joint1=5766 | Joint2=5813 | Joint3=5814 | Joint4=5767 | GUID=09774742-4e47-4bf0-be81-             |
| Area=5450<br>680cb9ec67b4 | Joint1=5767 | Joint2=5814 | Joint3=5815 | Joint4=5768 | GUID=2d727222-aa8c-4b85-8d68-             |
| Area=5451<br>b8627ed527d3 | Joint1=5768 | Joint2=5815 | Joint3=5816 | Joint4=5769 | GUID=c8b2e3fe-a5b4-417c-88b7-             |
| Area=5452<br>2e50f1b43313 | Joint1=5769 | Joint2=5816 | Joint3=5817 | Joint4=5770 | GUID=9a743b50-a4ac-4058-a927-             |
| Area=5453<br>82314a731443 | Joint1=5770 | Joint2=5817 | Joint3=5818 | Joint4=5771 | GUID=23935551-2c31-4729-9db3-             |
| Area=5454                 | Joint1=5771 | Joint2=5818 | Joint3=5819 | Joint4=5772 | GUID=f9f4245e-13be-4cf0-9861-37fa6d4e0f67 |
| Area=5455                 | Joint1=5772 | Joint2=5819 | Joint3=5820 | Joint4=5773 | GUID=f275d80a-f3d2-44db-a7f8-ae85a3fc5f3e |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=5456 Joint1=5773 Joint2=5820 Joint3=5821 Joint4=5774 GUID=62f59dff-b705-46b5-b060-5dda5f8ec955  
Area=5457 Joint1=5774 Joint2=5821 Joint3=5822 Joint4=5775 GUID=6695918a-fb7f-43fe-9e66-191689bb3cc0  
Area=5458 Joint1=5775 Joint2=5822 Joint3=5823 Joint4=5776 GUID=b0dc5933-ba2f-4066-a205-66fedc155d8d  
Area=5459 Joint1=5776 Joint2=5823 Joint3=5824 Joint4=5777 GUID=feb0940c-4979-4dfa-89a5-110b4ca5ff4a  
Area=5460 Joint1=5777 Joint2=5824 Joint3=5825 Joint4=5778 GUID=951b51bc-4146-473e-8f9f-ac4e7ca0ec44  
Area=5461 Joint1=5778 Joint2=5825 Joint3=5826 Joint4=5779 GUID=9ad50380-c380-4b35-8e2a-774c7e694692  
Area=5462 Joint1=5779 Joint2=5826 Joint3=5827 Joint4=5780 GUID=62e4e14b-a9f8-46c2-8347-047a5bf33669  
Area=5463 Joint1=5780 Joint2=5827 Joint3=5828 Joint4=5781 GUID=b9bc31e3-6369-48ae-a1d8-b0c51c65c340  
Area=5464 Joint1=5781 Joint2=5828 Joint3=5829 Joint4=5782 GUID=945f6da9-26b6-4b1c-a189-3c8dfe3e3cd1  
Area=5465 Joint1=5782 Joint2=5829 Joint3=5830 Joint4=5783 GUID=25ac0bf6-cc66-4f6d-b76a-589721f4fb64  
Area=5466 Joint1=5783 Joint2=5830 Joint3=5831 Joint4=5784 GUID=08b8f269-8406-4561-9021-885dcae6604b  
Area=5467 Joint1=5784 Joint2=5831 Joint3=5832 Joint4=5785 GUID=ffb0f5c8-3560-4956-9b37-ad09fd1fbb88  
Area=5468 Joint1=5785 Joint2=5832 Joint3=5833 Joint4=5786 GUID=958bede4-cabe-45c1-b67b-c693c23a8c46  
Area=5469 Joint1=5786 Joint2=5833 Joint3=5834 Joint4=5787 GUID=3c85e719-067d-41b8-9773-0879e3eb4da6  
Area=5470 Joint1=5787 Joint2=5834 Joint3=5835 Joint4=5788 GUID=de9c7c0e-5ada-4bb3-9ccf-00581579739e  
Area=5471 Joint1=5788 Joint2=5835 Joint3=5836 Joint4=5789 GUID=a583891f-a9bd-41fa-89b1-bd97666b25c0  
Area=5472 Joint1=5789 Joint2=5836 Joint3=5837 Joint4=5790 GUID=da44aadd-4bb1-4b2b-a768-ff38c3709960  
Area=5473 Joint1=5790 Joint2=5837 Joint3=5838 Joint4=5791 GUID=dfb4518a-7665-459b-9c1e-c6227259ddbc  
Area=5474 Joint1=5791 Joint2=5838 Joint3=5839 Joint4=5792 GUID=2dc1e5ea-4b54-4468-92e2-c5a427681c12  
Area=5475 Joint1=5792 Joint2=5839 Joint3=5840 Joint4=5793 GUID=ff70b7b0-9c43-45ff-9a19-74721875bf73  
Area=5476 Joint1=5793 Joint2=5840 Joint3=5841 Joint4=5794 GUID=abc9f6dc-aa3a-45ab-babd-9482595715c5  
Area=5477 Joint1=5794 Joint2=5841 Joint3=5842 Joint4=5795 GUID=9ac51953-b45f-4a1f-8e74-ff9560f5628c  
Area=5478 Joint1=5795 Joint2=5842 Joint3=5843 Joint4=5796 GUID=256572b7-7068-4497-a101-c006f6cb4206  
Area=5479 Joint1=5796 Joint2=5843 Joint3=5844 Joint4=5797 GUID=e996d601-151a-4bff-9ecf-72d010f3332e  
Area=5480 Joint1=5797 Joint2=5844 Joint3=5845 Joint4=5798 GUID=636b6578-0fea-43d6-a03f-40b63b54e1b1  
Area=5481 Joint1=5798 Joint2=5845 Joint3=5846 Joint4=5799 GUID=64db08f6-184b-4bc2-8a05-31b0ccad5497  
Area=5482 Joint1=5799 Joint2=5846 Joint3=5847 Joint4=5800 GUID=71a7db7e-ddd9-47d1-9d53-1c3d6774e9e1  
Area=5483 Joint1=5800 Joint2=5847 Joint3=5848 Joint4=5801 GUID=5d7ff4b6-efd3-4b13-b631-57808fa95757  
Area=5484 Joint1=5801 Joint2=5848 Joint3=5849 Joint4=5802 GUID=1e48d3c9-c949-478d-86ec-05f2ff6cd81b  
Area=5485 Joint1=5803 Joint2=5850 Joint3=5851 Joint4=5804 GUID=c4984e24-5e6d-4bf1-a025-1c365bcd60bc  
Area=5486 Joint1=5804 Joint2=5851 Joint3=5852 Joint4=5805 GUID=8173577c-9d6c-42d6-a397-1c250d0056f0  
Area=5487 Joint1=5805 Joint2=5852 Joint3=5853 Joint4=5806 GUID=27153bd9-4099-4d5c-9cbe-8e8ca2f258c0  
Area=5488 Joint1=5806 Joint2=5853 Joint3=5854 Joint4=5807 GUID=7a1a1247-b091-49c9-81c4-2c4e1e42f663



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=5489 | Joint1=5807 | Joint2=5854 | Joint3=5855 | Joint4=5808 | GUID=809d924a-0290-4a0b-9d1d-e01175458fe4 |
| Area=5490 | Joint1=5808 | Joint2=5855 | Joint3=5856 | Joint4=5809 | GUID=0f9bff4d-b992-4fb7-9786-a792c1d259bc |
| Area=5491 | Joint1=5809 | Joint2=5856 | Joint3=5857 | Joint4=5810 | GUID=0d34c565-5611-404f-b51d-a6248489727b |
| Area=5492 | Joint1=5810 | Joint2=5857 | Joint3=5858 | Joint4=5811 | GUID=1a261bda-16a8-4808-9b23-9bb69339c6ed |
| Area=5493 | Joint1=5811 | Joint2=5858 | Joint3=5859 | Joint4=5812 | GUID=9f203bfa-3383-4d6b-8cf5-f172cf32c6fd |
| Area=5494 | Joint1=5812 | Joint2=5859 | Joint3=5860 | Joint4=5813 | GUID=18c18176-9473-478a-ab87-aba5fce0a8f8 |
| Area=5495 | Joint1=5813 | Joint2=5860 | Joint3=5861 | Joint4=5814 | GUID=5585cb63-97d7-4c8b-b42c-976c75f1bf2f |
| Area=5496 | Joint1=5814 | Joint2=5861 | Joint3=5862 | Joint4=5815 | GUID=191bb53a-fe1a-4556-a238-4723db88c123 |
| Area=5497 | Joint1=5815 | Joint2=5862 | Joint3=5863 | Joint4=5816 | GUID=1fa6440b-9e4e-492e-845e-8eb231a34773 |
| Area=5498 | Joint1=5816 | Joint2=5863 | Joint3=5864 | Joint4=5817 | GUID=68aac627-a1e6-404a-aa6b-6373a2531ca8 |
| Area=5499 | Joint1=5817 | Joint2=5864 | Joint3=5865 | Joint4=5818 | GUID=77e74c31-7395-43cd-a34d-afe72c6452a3 |
| Area=5500 | Joint1=5818 | Joint2=5865 | Joint3=5866 | Joint4=5819 | GUID=7c2191cc-1bb0-4731-8ed0-148bedae4e9d |
| Area=5501 | Joint1=5819 | Joint2=5866 | Joint3=5867 | Joint4=5820 | GUID=ebf72cec-31ba-42be-89e6-a30679308899 |
| Area=5502 | Joint1=5820 | Joint2=5867 | Joint3=5868 | Joint4=5821 | GUID=fdafd29e-706f-4e8e-8a4e-722890489758 |
| Area=5503 | Joint1=5821 | Joint2=5868 | Joint3=5869 | Joint4=5822 | GUID=6c9e50c6-9218-41c7-b486-61b9a7dec0bb |
| Area=5504 | Joint1=5822 | Joint2=5869 | Joint3=5870 | Joint4=5823 | GUID=7a50d25b-e532-4fcd-9494-a250a56c6571 |
| Area=5505 | Joint1=5823 | Joint2=5870 | Joint3=5871 | Joint4=5824 | GUID=2a862061-0a7b-44af-a61e-a90242b76ecd |
| Area=5506 | Joint1=5824 | Joint2=5871 | Joint3=5872 | Joint4=5825 | GUID=197abc5b-8cd6-493b-ab5d-690229110135 |
| Area=5507 | Joint1=5825 | Joint2=5872 | Joint3=5873 | Joint4=5826 | GUID=c63418b6-7a30-4a89-aaaa-fa56f82496e8 |
| Area=5508 | Joint1=5826 | Joint2=5873 | Joint3=5874 | Joint4=5827 | GUID=9a85b3d0-d30b-4525-87c4-79d33f0f52c7 |
| Area=5509 | Joint1=5827 | Joint2=5874 | Joint3=5875 | Joint4=5828 | GUID=361cd551-6128-4506-a8de-1504f401934c |
| Area=5510 | Joint1=5828 | Joint2=5875 | Joint3=5876 | Joint4=5829 | GUID=1d227d71-97b1-47ec-b442-6f07f908837a |
| Area=5511 | Joint1=5829 | Joint2=5876 | Joint3=5877 | Joint4=5830 | GUID=bb45adb2-5670-4335-948d-23c892635932 |
| Area=5512 | Joint1=5830 | Joint2=5877 | Joint3=5878 | Joint4=5831 | GUID=db2af1f0-f40b-4e74-84ee-dbb47ef9d71a |
| Area=5513 | Joint1=5831 | Joint2=5878 | Joint3=5879 | Joint4=5832 | GUID=fc6c79ca-fd1f-4625-ae44-2046aa5b0bb3 |
| Area=5514 | Joint1=5832 | Joint2=5879 | Joint3=5880 | Joint4=5833 | GUID=1f73e73d-e8ce-425a-a3f2-9c6cc3f3bc82 |
| Area=5515 | Joint1=5833 | Joint2=5880 | Joint3=5881 | Joint4=5834 | GUID=ee31353d-aa37-44ef-a2a8-b9c4cf3e7abd |
| Area=5516 | Joint1=5834 | Joint2=5881 | Joint3=5882 | Joint4=5835 | GUID=ca3679b0-dfcb-4a5d-a0c4-348f36c37d84 |
| Area=5517 | Joint1=5835 | Joint2=5882 | Joint3=5883 | Joint4=5836 | GUID=da24c1bb-18b9-416e-b93f-bc35c0d53550 |
| Area=5518 | Joint1=5836 | Joint2=5883 | Joint3=5884 | Joint4=5837 | GUID=4dbdbcd0-5647-460c-a230-e5db1e6608e2 |
| Area=5519 | Joint1=5837 | Joint2=5884 | Joint3=5885 | Joint4=5838 | GUID=44788ad0-39f0-47bc-8f4f-356eb754918c |
| Area=5520 | Joint1=5838 | Joint2=5885 | Joint3=5886 | Joint4=5839 | GUID=df6bdf29-f952-44a2-a2a0-ece626b3cb23 |
| Area=5521 | Joint1=5839 | Joint2=5886 | Joint3=5887 | Joint4=5840 | GUID=ca0b2863-c295-478b-b9d6-32ffed87f69d |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=5522<br>5eaabf9541e6 | Joint1=5840 | Joint2=5887 | Joint3=5888 | Joint4=5841 | GUID=adfaa781-2051-456a-8d1c-             |
| Area=5523<br>74b3747d7fd  | Joint1=5841 | Joint2=5888 | Joint3=5889 | Joint4=5842 | GUID=4dea38ec-6c0f-4764-8131-             |
| Area=5524                 | Joint1=5842 | Joint2=5889 | Joint3=5890 | Joint4=5843 | GUID=e4f4ff8c-d1df-4475-9e2b-941c124e211a |
| Area=5525<br>99bf65d29662 | Joint1=5843 | Joint2=5890 | Joint3=5891 | Joint4=5844 | GUID=3d4e6967-efc1-49a9-a71c-             |
| Area=5526                 | Joint1=5844 | Joint2=5891 | Joint3=5892 | Joint4=5845 | GUID=9dfdb46b-9d7f-42e7-bfae-67338de881bb |
| Area=5527<br>55c345b0267c | Joint1=5845 | Joint2=5892 | Joint3=5893 | Joint4=5846 | GUID=a27c372f-b219-4287-a925-             |
| Area=5528<br>712986027bef | Joint1=5846 | Joint2=5893 | Joint3=5894 | Joint4=5847 | GUID=7d5c9b2e-9039-46c7-9ac2-             |
| Area=5529<br>ac786c3619d3 | Joint1=5847 | Joint2=5894 | Joint3=5895 | Joint4=5848 | GUID=9867428d-e67d-4cea-b025-             |
| Area=5530<br>dcdd8440f17b | Joint1=5848 | Joint2=5895 | Joint3=5896 | Joint4=5849 | GUID=7583d029-da7b-4843-8e94-             |
| Area=5531<br>97073575e402 | Joint1=5850 | Joint2=5897 | Joint3=5898 | Joint4=5851 | GUID=87670500-32ac-46d6-966a-             |
| Area=5532                 | Joint1=5851 | Joint2=5898 | Joint3=5899 | Joint4=5852 | GUID=0952efcd-20fc-4501-a2df-f170fbdca233 |
| Area=5533                 | Joint1=5852 | Joint2=5899 | Joint3=5900 | Joint4=5853 | GUID=023177bc-fea7-4f05-80d7-89c6ac4b70c4 |
| Area=5534<br>461448ee3909 | Joint1=5853 | Joint2=5900 | Joint3=5901 | Joint4=5854 | GUID=92f8b62a-0f83-4c99-88aa-             |
| Area=5535<br>9ceb0d87b81d | Joint1=5854 | Joint2=5901 | Joint3=5902 | Joint4=5855 | GUID=1df9ce8b-b0ab-44f4-a91a-             |
| Area=5536<br>9bb504501a45 | Joint1=5855 | Joint2=5902 | Joint3=5903 | Joint4=5856 | GUID=582c55da-5690-45c0-b324-             |
| Area=5537                 | Joint1=5856 | Joint2=5903 | Joint3=5904 | Joint4=5857 | GUID=71b2abff-5718-45a1-88a0-fbcbdd96fe08 |
| Area=5538                 | Joint1=5857 | Joint2=5904 | Joint3=5905 | Joint4=5858 | GUID=1fff6043-0ab8-472a-8917-b047d363adb4 |
| Area=5539                 | Joint1=5858 | Joint2=5905 | Joint3=5906 | Joint4=5859 | GUID=08990c73-87c5-4cb6-bff5-b3bac1fcb411 |
| Area=5540<br>15ac2d06c73e | Joint1=5859 | Joint2=5906 | Joint3=5907 | Joint4=5860 | GUID=6b659809-6fa8-4030-8f89-             |
| Area=5541<br>270267672c8f | Joint1=5860 | Joint2=5907 | Joint3=5908 | Joint4=5861 | GUID=0c304feb-d784-4982-b35c-             |
| Area=5542<br>877369c61587 | Joint1=5861 | Joint2=5908 | Joint3=5909 | Joint4=5862 | GUID=b7994335-7f47-4b0c-800d-             |
| Area=5543                 | Joint1=5862 | Joint2=5909 | Joint3=5910 | Joint4=5863 | GUID=f8626d50-3315-4f2c-b814-8c69a4f12d29 |
| Area=5544                 | Joint1=5863 | Joint2=5910 | Joint3=5911 | Joint4=5864 | GUID=f7679d3a-9e5f-4976-849b-5adae9ef38c0 |
| Area=5545<br>aa347b2327ab | Joint1=5864 | Joint2=5911 | Joint3=5912 | Joint4=5865 | GUID=91bd1ea1-7f7a-426f-ad08-             |
| Area=5546<br>52ac1eb15f7e | Joint1=5865 | Joint2=5912 | Joint3=5913 | Joint4=5866 | GUID=1328d1ab-9601-4dae-8e35-             |
| Area=5547<br>631066a40803 | Joint1=5866 | Joint2=5913 | Joint3=5914 | Joint4=5867 | GUID=7acb9dd1-2921-4e60-89cc-             |
| Area=5548<br>9c2112d1ac8c | Joint1=5867 | Joint2=5914 | Joint3=5915 | Joint4=5868 | GUID=3e11f635-c050-4d3b-8937-             |
| Area=5549<br>0aec6dd27e5e | Joint1=5868 | Joint2=5915 | Joint3=5916 | Joint4=5869 | GUID=7790d620-be66-4bae-8ada-             |
| Area=5550<br>a0897cf8cb18 | Joint1=5869 | Joint2=5916 | Joint3=5917 | Joint4=5870 | GUID=8accb639-5926-4ebc-b592-             |
| Area=5551<br>9a3da51795f2 | Joint1=5870 | Joint2=5917 | Joint3=5918 | Joint4=5871 | GUID=a7b3a3ab-ea13-4501-8a95-             |
| Area=5552<br>52e298648aa1 | Joint1=5871 | Joint2=5918 | Joint3=5919 | Joint4=5872 | GUID=b66c3e50-1137-4818-a2ed-             |
| Area=5553<br>72f206718ede | Joint1=5872 | Joint2=5919 | Joint3=5920 | Joint4=5873 | GUID=bb73152a-124c-4bb4-b1c8-             |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=5554 | Joint1=5873 | Joint2=5920 | Joint3=5921 | Joint4=5874 | GUID=4b92bb6b-8139-40c9-a88d-fad021f929f0 |
| Area=5555 | Joint1=5874 | Joint2=5921 | Joint3=5922 | Joint4=5875 | GUID=21a4e31c-571e-44db-81be-7e2d0ef6ec10 |
| Area=5556 | Joint1=5875 | Joint2=5922 | Joint3=5923 | Joint4=5876 | GUID=696fe5b1-4f30-4b4e-b788-dd6767a00340 |
| Area=5557 | Joint1=5876 | Joint2=5923 | Joint3=5924 | Joint4=5877 | GUID=a9a177f0-6ede-49ea-a837-773b76e583a0 |
| Area=5558 | Joint1=5877 | Joint2=5924 | Joint3=5925 | Joint4=5878 | GUID=e154d36e-a176-4973-a6d7-dcfb59a5c52d |
| Area=5559 | Joint1=5878 | Joint2=5925 | Joint3=5926 | Joint4=5879 | GUID=1989b2e6-58df-4f9c-bc78-8f5b781eb764 |
| Area=5560 | Joint1=5879 | Joint2=5926 | Joint3=5927 | Joint4=5880 | GUID=c4558a48-9fae-46bf-abf9-9ba5b25e4dc6 |
| Area=5561 | Joint1=5880 | Joint2=5927 | Joint3=5928 | Joint4=5881 | GUID=574f8e3a-7d89-4bae-8bec-3cb9c9125d00 |
| Area=5562 | Joint1=5881 | Joint2=5928 | Joint3=5929 | Joint4=5882 | GUID=cf7d6b58-c279-4a80-a1d1-a5ef36768563 |
| Area=5563 | Joint1=5882 | Joint2=5929 | Joint3=5930 | Joint4=5883 | GUID=19c4a3e0-0751-4872-9265-3a3e36593946 |
| Area=5564 | Joint1=5883 | Joint2=5930 | Joint3=5931 | Joint4=5884 | GUID=b6d2aa1d-50df-48a3-b01d-377094959627 |
| Area=5565 | Joint1=5884 | Joint2=5931 | Joint3=5932 | Joint4=5885 | GUID=123b0688-162a-46d2-8e33-7052d4017f17 |
| Area=5566 | Joint1=5885 | Joint2=5932 | Joint3=5933 | Joint4=5886 | GUID=611aede3-6c83-4ae6-a2f0-122281695a7d |
| Area=5567 | Joint1=5886 | Joint2=5933 | Joint3=5934 | Joint4=5887 | GUID=7cfc6256-215e-4ff2-9d5f-fb8c6ff35a5e |
| Area=5568 | Joint1=5887 | Joint2=5934 | Joint3=5935 | Joint4=5888 | GUID=3e6c33d3-722b-4354-902d-e035a3ba4573 |
| Area=5569 | Joint1=5888 | Joint2=5935 | Joint3=5936 | Joint4=5889 | GUID=11c1da44-779a-4019-89b4-ba49680e9b48 |
| Area=5570 | Joint1=5889 | Joint2=5936 | Joint3=5937 | Joint4=5890 | GUID=96a7106f-a76f-4a78-8fa5-5f7cd349da6b |
| Area=5571 | Joint1=5890 | Joint2=5937 | Joint3=5938 | Joint4=5891 | GUID=f465c4ef-afad-47f5-8b7f-c64da0a3abae |
| Area=5572 | Joint1=5891 | Joint2=5938 | Joint3=5939 | Joint4=5892 | GUID=b7324080-e47b-4ee5-84e1-787a40339088 |
| Area=5573 | Joint1=5892 | Joint2=5939 | Joint3=5940 | Joint4=5893 | GUID=b8a0b664-fe25-4c83-9a1d-1abe976c8932 |
| Area=5574 | Joint1=5893 | Joint2=5940 | Joint3=5941 | Joint4=5894 | GUID=40207d68-dcbc-481d-b69b-00d280e85335 |
| Area=5575 | Joint1=5894 | Joint2=5941 | Joint3=5942 | Joint4=5895 | GUID=93a39766-2178-42a1-a1b1-6488b6e0663a |
| Area=5576 | Joint1=5895 | Joint2=5942 | Joint3=5943 | Joint4=5896 | GUID=1c4d5172-ff6c-4d3c-9764-061c5fe085dc |
| Area=5577 | Joint1=5897 | Joint2=5944 | Joint3=5945 | Joint4=5898 | GUID=58e3fcc6-932b-4a88-b5d1-260126500cad |
| Area=5578 | Joint1=5898 | Joint2=5945 | Joint3=5946 | Joint4=5899 | GUID=6ab19dd1-83ed-402a-8616-01ec535f883a |
| Area=5579 | Joint1=5899 | Joint2=5946 | Joint3=5947 | Joint4=5900 | GUID=3eccdd2e-fe60-4db4-8718-b1f62f254ecc |
| Area=5580 | Joint1=5900 | Joint2=5947 | Joint3=5948 | Joint4=5901 | GUID=cb22a332-e588-4aa5-af17-d2b464a67ac4 |
| Area=5581 | Joint1=5901 | Joint2=5948 | Joint3=5949 | Joint4=5902 | GUID=9d2c9039-99c7-4055-af49-bf5467392c68 |
| Area=5582 | Joint1=5902 | Joint2=5949 | Joint3=5950 | Joint4=5903 | GUID=888d9a17-836f-4ea2-955c-63bdb9a44529 |
| Area=5583 | Joint1=5903 | Joint2=5950 | Joint3=5951 | Joint4=5904 | GUID=d7f1cc57-d0eb-4094-922c-d76c2b2207de |
| Area=5584 | Joint1=5904 | Joint2=5951 | Joint3=5952 | Joint4=5905 | GUID=d54e6fbf-1b87-4a15-b816-1d983b898df5 |
| Area=5585 | Joint1=5905 | Joint2=5952 | Joint3=5953 | Joint4=5906 | GUID=6868977f-7dd6-44e0-b4ad-f7363ee6fb2c |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=5586 | Joint1=5906 | Joint2=5953 | Joint3=5954 | Joint4=5907 | GUID=d5620935-db94-494a-9440-743817965f59 |
| Area=5587 | Joint1=5907 | Joint2=5954 | Joint3=5955 | Joint4=5908 | GUID=20a20cca-91ff-4237-abdd-80bed580c165 |
| Area=5588 | Joint1=5908 | Joint2=5955 | Joint3=5956 | Joint4=5909 | GUID=ee4c44ea-5c45-4b25-b4f6-f3768dbe6622 |
| Area=5589 | Joint1=5909 | Joint2=5956 | Joint3=5957 | Joint4=5910 | GUID=b5a146df-f042-49f1-810b-49b40b9182f9 |
| Area=5590 | Joint1=5910 | Joint2=5957 | Joint3=5958 | Joint4=5911 | GUID=8cf14080-f866-4bde-9033-c5f7453c5ccf |
| Area=5591 | Joint1=5911 | Joint2=5958 | Joint3=5959 | Joint4=5912 | GUID=9fc0f13b-90b2-4218-9789-cd59c976fedd |
| Area=5592 | Joint1=5912 | Joint2=5959 | Joint3=5960 | Joint4=5913 | GUID=6689e58f-df7c-4f95-9f43-fa9236a09623 |
| Area=5593 | Joint1=5913 | Joint2=5960 | Joint3=5961 | Joint4=5914 | GUID=4c6704cf-0fb9-4425-92a7-42b3ddd40f68 |
| Area=5594 | Joint1=5914 | Joint2=5961 | Joint3=5962 | Joint4=5915 | GUID=089a1a47-40a5-480a-94a2-9b6c1ef57fc7 |
| Area=5595 | Joint1=5915 | Joint2=5962 | Joint3=5963 | Joint4=5916 | GUID=90fb86df-4548-473e-96dc-5ff2fb0742ef |
| Area=5596 | Joint1=5916 | Joint2=5963 | Joint3=5964 | Joint4=5917 | GUID=f1c52802-001f-4bee-8c1e-75b8115580e9 |
| Area=5597 | Joint1=5917 | Joint2=5964 | Joint3=5965 | Joint4=5918 | GUID=7a6c1d73-3b18-4040-aaf0-b9a63594d160 |
| Area=5598 | Joint1=5918 | Joint2=5965 | Joint3=5966 | Joint4=5919 | GUID=491299fd-7bdc-4905-85b9-b779f905bbcb |
| Area=5599 | Joint1=5919 | Joint2=5966 | Joint3=5967 | Joint4=5920 | GUID=d967b247-c9fd-471d-b185-88f0bf0c1655 |
| Area=5600 | Joint1=5920 | Joint2=5967 | Joint3=5968 | Joint4=5921 | GUID=8713a0f0-64b7-4b80-9f44-272eb0d01fb4 |
| Area=5601 | Joint1=5921 | Joint2=5968 | Joint3=5969 | Joint4=5922 | GUID=601d02bc-f248-4406-8d89-2229adeedf13 |
| Area=5602 | Joint1=5922 | Joint2=5969 | Joint3=5970 | Joint4=5923 | GUID=c0d4e902-bea4-45de-8beb-f576b4783bc3 |
| Area=5603 | Joint1=5923 | Joint2=5970 | Joint3=5971 | Joint4=5924 | GUID=dfa9a051-3c34-4bdb-ad94-8dde01dd7649 |
| Area=5604 | Joint1=5924 | Joint2=5971 | Joint3=5972 | Joint4=5925 | GUID=354248ff-4527-4ee1-ae76-de469e2fbccf |
| Area=5605 | Joint1=5925 | Joint2=5972 | Joint3=5973 | Joint4=5926 | GUID=ac85e309-17b5-4a73-8272-753b41e47d4d |
| Area=5606 | Joint1=5926 | Joint2=5973 | Joint3=5974 | Joint4=5927 | GUID=11c9004c-6bcf-49b7-95f2-075787a30482 |
| Area=5607 | Joint1=5927 | Joint2=5974 | Joint3=5975 | Joint4=5928 | GUID=e82e77e4-c1e8-4aa0-b467-762be26a9991 |
| Area=5608 | Joint1=5928 | Joint2=5975 | Joint3=5976 | Joint4=5929 | GUID=bf40ef89-c188-4b02-8452-e62f06513fdc |
| Area=5609 | Joint1=5929 | Joint2=5976 | Joint3=5977 | Joint4=5930 | GUID=e8fb1186-1cfe-4048-a432-8ed0b200673b |
| Area=5610 | Joint1=5930 | Joint2=5977 | Joint3=5978 | Joint4=5931 | GUID=620a42b4-d239-4a70-ba88-d4e143086694 |
| Area=5611 | Joint1=5931 | Joint2=5978 | Joint3=5979 | Joint4=5932 | GUID=e1c52d34-ec5e-4251-a1ff-0c6a39341806 |
| Area=5612 | Joint1=5932 | Joint2=5979 | Joint3=5980 | Joint4=5933 | GUID=7c13f677-019e-4500-a576-352a107b0482 |
| Area=5613 | Joint1=5933 | Joint2=5980 | Joint3=5981 | Joint4=5934 | GUID=379b92ec-e5ae-45cd-b4c7-fb46d089660a |
| Area=5614 | Joint1=5934 | Joint2=5981 | Joint3=5982 | Joint4=5935 | GUID=fa8b5df3-82b7-41e6-86c2-2b705f13f735 |
| Area=5615 | Joint1=5935 | Joint2=5982 | Joint3=5983 | Joint4=5936 | GUID=7f65dc3b-9221-4ed1-ad3d-17fc8825b619 |
| Area=5616 | Joint1=5936 | Joint2=5983 | Joint3=5984 | Joint4=5937 | GUID=3888897d-5b58-4875-83d7-3fe1ff4d9dde |
| Area=5617 | Joint1=5937 | Joint2=5984 | Joint3=5985 | Joint4=5938 | GUID=f68638b1-fe03-4f00-b2d3-2c85d6aa32b9 |
| Area=5618 | Joint1=5938 | Joint2=5985 | Joint3=5986 | Joint4=5939 | GUID=1a9ceded-a5b2-423d-a9e8-1c6c4d340701 |
| Area=5619 | Joint1=5939 | Joint2=5986 | Joint3=5987 | Joint4=5940 | GUID=fccf58b9-8c01-4516-b38f-35d8d79a6a28 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=5620<br>634db17e0344 | Joint1=5940 | Joint2=5987 | Joint3=5988 | Joint4=5941 | GUID=b6e73296-c85f-4d3f-a39d-             |
| Area=5621<br>cad30d5b5521 | Joint1=5941 | Joint2=5988 | Joint3=5989 | Joint4=5942 | GUID=e31c84ac-f2da-4c6d-b492-             |
| Area=5622<br>6470b22ff108 | Joint1=5942 | Joint2=5989 | Joint3=5990 | Joint4=5943 | GUID=44783e60-5672-41bb-8dce-             |
| Area=5623<br>0d0835bb1a92 | Joint1=5944 | Joint2=5991 | Joint3=5992 | Joint4=5945 | GUID=78efe337-dab6-4666-9273-             |
| Area=5624<br>053ce4e7cd6c | Joint1=5945 | Joint2=5992 | Joint3=5993 | Joint4=5946 | GUID=b2117db9-01f7-4866-a1f7-             |
| Area=5625<br>bd7325863ec6 | Joint1=5946 | Joint2=5993 | Joint3=5994 | Joint4=5947 | GUID=91fa7b6f-5354-411b-89a7-             |
| Area=5626<br>e120693837c3 | Joint1=5947 | Joint2=5994 | Joint3=5995 | Joint4=5948 | GUID=f25d8369-044a-4bd6-a39c-             |
| Area=5627<br>0b8c316d9c4a | Joint1=5948 | Joint2=5995 | Joint3=5996 | Joint4=5949 | GUID=6af007d6-b469-4fe2-a01c-             |
| Area=5628<br>b5e5d6a648a5 | Joint1=5949 | Joint2=5996 | Joint3=5997 | Joint4=5950 | GUID=7dcf4163-5050-4b0a-bb8f-             |
| Area=5629<br>428dd0b4badc | Joint1=5950 | Joint2=5997 | Joint3=5998 | Joint4=5951 | GUID=ed8ddf38-ee90-40f6-a819-             |
| Area=5630<br>88b59baea19f | Joint1=5951 | Joint2=5998 | Joint3=5999 | Joint4=5952 | GUID=4a5e3cbb-e77e-4c64-b722-             |
| Area=5631<br>a6d5e17bb65c | Joint1=5952 | Joint2=5999 | Joint3=6000 | Joint4=5953 | GUID=1da2ac33-65bf-4121-bb72-             |
| Area=5632<br>4e64d4e9112c | Joint1=5953 | Joint2=6000 | Joint3=6001 | Joint4=5954 | GUID=db829d7e-cedf-4fbf-ba06-6288c5744714 |
| Area=5633<br>09bf45036d34 | Joint1=5954 | Joint2=6001 | Joint3=6002 | Joint4=5955 | GUID=e2d6e37b-31b1-4cb0-bf05-             |
| Area=5634<br>14b3202064ff | Joint1=5955 | Joint2=6002 | Joint3=6003 | Joint4=5956 | GUID=98f91ea3-076e-445e-a22d-             |
| Area=5635<br>ba53326051a6 | Joint1=5956 | Joint2=6003 | Joint3=6004 | Joint4=5957 | GUID=85b3ea86-ce8a-4b6e-abda-             |
| Area=5636<br>6ae7a41ce04e | Joint1=5957 | Joint2=6004 | Joint3=6005 | Joint4=5958 | GUID=0755bb8c-0f90-4183-bc05-             |
| Area=5637<br>baca334adf71 | Joint1=5958 | Joint2=6005 | Joint3=6006 | Joint4=5959 | GUID=d92501e6-f422-44ff-af71-8dee71600411 |
| Area=5638<br>f5a2cc56a074 | Joint1=5959 | Joint2=6006 | Joint3=6007 | Joint4=5960 | GUID=c1c86403-7717-40f8-9954-             |
| Area=5639<br>1612e71ef267 | Joint1=5960 | Joint2=6007 | Joint3=6008 | Joint4=5961 | GUID=249460ee-571e-4aa1-914a-             |
| Area=5640<br>1612e71ef267 | Joint1=5961 | Joint2=6008 | Joint3=6009 | Joint4=5962 | GUID=a4190c1f-34b3-4a3d-ab73-             |
| Area=5641<br>1612e71ef267 | Joint1=5962 | Joint2=6009 | Joint3=6010 | Joint4=5963 | GUID=1ae27d67-b278-44c8-9373-             |
| Area=5642<br>Area=5643    | Joint1=5963 | Joint2=6010 | Joint3=6011 | Joint4=5964 | GUID=dd6c695e-215f-4397-a9a4-c9daff7868e1 |
| Area=5644<br>ba0a6c05b46d | Joint1=5964 | Joint2=6011 | Joint3=6012 | Joint4=5965 | GUID=e6612c55-0bb1-48fe-af5c-c9944f8e116a |
| Area=5645<br>Area=5646    | Joint1=5965 | Joint2=6012 | Joint3=6013 | Joint4=5966 | GUID=ca99301d-0cd5-4d65-8bd9-             |
| Area=5647<br>Area=5648    | Joint1=5966 | Joint2=6013 | Joint3=6014 | Joint4=5967 | GUID=2b397942-194f-4731-95f3-9fcfa3400caf |
| Area=5649<br>40bf0b47c5d1 | Joint1=5967 | Joint2=6014 | Joint3=6015 | Joint4=5968 | GUID=81419f60-4e38-4409-a023-bc4ed83cfd77 |
| Area=5650<br>78a8d6b91e64 | Joint1=5968 | Joint2=6015 | Joint3=6016 | Joint4=5969 | GUID=493dcf13-e07d-4e3f-bf19-3a1566207249 |
|                           | Joint1=5969 | Joint2=6016 | Joint3=6017 | Joint4=5970 | GUID=062749fd-002b-46fc-aabf-80eb67afefa1 |
|                           | Joint1=5970 | Joint2=6017 | Joint3=6018 | Joint4=5971 | GUID=59f68ad0-79ba-413b-b63c-             |
|                           | Joint1=5971 | Joint2=6018 | Joint3=6019 | Joint4=5972 | GUID=a64c8006-0a36-4ee7-b680-             |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=5651 | Joint1=5972 | Joint2=6019 | Joint3=6020 | Joint4=5973 | GUID=7c066261-af23-4399-b678-fb523f5b6bca |
| Area=5652 | Joint1=5973 | Joint2=6020 | Joint3=6021 | Joint4=5974 | GUID=a5dc8ebc-e520-40ae-b303-4c3de50a6f73 |
| Area=5653 | Joint1=5974 | Joint2=6021 | Joint3=6022 | Joint4=5975 | GUID=7732dbdc-69d7-4c10-8e85-30c5c94f4a9e |
| Area=5654 | Joint1=5975 | Joint2=6022 | Joint3=6023 | Joint4=5976 | GUID=d69a6907-77d9-4d13-97e4-088531265af2 |
| Area=5655 | Joint1=5976 | Joint2=6023 | Joint3=6024 | Joint4=5977 | GUID=4c3648fc-0128-45aa-a936-d8d9c3eec7c1 |
| Area=5656 | Joint1=5977 | Joint2=6024 | Joint3=6025 | Joint4=5978 | GUID=c730e5f2-1551-42f9-b55c-d7de96fb9c86 |
| Area=5657 | Joint1=5978 | Joint2=6025 | Joint3=6026 | Joint4=5979 | GUID=6144aa6c-2770-4158-a552-afd8a7d6946d |
| Area=5658 | Joint1=5979 | Joint2=6026 | Joint3=6027 | Joint4=5980 | GUID=0c79b568-f390-4a6b-a7f2-12ed802e8459 |
| Area=5659 | Joint1=5980 | Joint2=6027 | Joint3=6028 | Joint4=5981 | GUID=95f03538-7616-4ec9-8cb8-e8a4ccaf19d8 |
| Area=5660 | Joint1=5981 | Joint2=6028 | Joint3=6029 | Joint4=5982 | GUID=4f0e15ed-8262-49fb-b50d-86295dad9c83 |
| Area=5661 | Joint1=5982 | Joint2=6029 | Joint3=6030 | Joint4=5983 | GUID=243b8eda-53a0-4ffb-928c-87088e6ea55d |
| Area=5662 | Joint1=5983 | Joint2=6030 | Joint3=6031 | Joint4=5984 | GUID=863e2241-c5d7-40cb-b9ab-dd73dc8b2693 |
| Area=5663 | Joint1=5984 | Joint2=6031 | Joint3=6032 | Joint4=5985 | GUID=cd24a7b6-42cb-472a-9574-58c222a79973 |
| Area=5664 | Joint1=5985 | Joint2=6032 | Joint3=6033 | Joint4=5986 | GUID=403b97d4-a94d-426b-8339-2142d0b86052 |
| Area=5665 | Joint1=5986 | Joint2=6033 | Joint3=6034 | Joint4=5987 | GUID=21f54118-4b40-4560-9104-4e605f75487d |
| Area=5666 | Joint1=5987 | Joint2=6034 | Joint3=6035 | Joint4=5988 | GUID=8092d961-1c9e-4c03-be7c-e7773f6e2718 |
| Area=5667 | Joint1=5988 | Joint2=6035 | Joint3=6036 | Joint4=5989 | GUID=cbad5c15-6fc1-4adb-96ff-67d8f6070e31 |
| Area=5668 | Joint1=5989 | Joint2=6036 | Joint3=6037 | Joint4=5990 | GUID=0c0c1f9e-c578-49eb-b6ee-95b768f7ef52 |
| Area=5669 | Joint1=5991 | Joint2=6038 | Joint3=6039 | Joint4=5992 | GUID=e249f36c-b22a-4db3-8465-febc8543542a |
| Area=5670 | Joint1=5992 | Joint2=6039 | Joint3=6040 | Joint4=5993 | GUID=4e8c7a04-1068-4091-932f-6aeb40b2638b |
| Area=5671 | Joint1=5993 | Joint2=6040 | Joint3=6041 | Joint4=5994 | GUID=8dd1cf44-ae09-49b4-a96e-10d6148ee2c7 |
| Area=5672 | Joint1=5994 | Joint2=6041 | Joint3=6042 | Joint4=5995 | GUID=12a44fed-18b7-43aa-b530-0e71582bdb70 |
| Area=5673 | Joint1=5995 | Joint2=6042 | Joint3=6043 | Joint4=5996 | GUID=df262a90-9223-4ac4-88c1-bdac9270ff7e |
| Area=5674 | Joint1=5996 | Joint2=6043 | Joint3=6044 | Joint4=5997 | GUID=6c7a974b-dac0-4a42-a593-30e4c97ed4db |
| Area=5675 | Joint1=5997 | Joint2=6044 | Joint3=6045 | Joint4=5998 | GUID=7dd45a4d-5540-42d9-a244-3ae056aac447 |
| Area=5676 | Joint1=5998 | Joint2=6045 | Joint3=6046 | Joint4=5999 | GUID=80f33763-818d-4238-a1af-343d541e4369 |
| Area=5677 | Joint1=5999 | Joint2=6046 | Joint3=6047 | Joint4=6000 | GUID=9949b05e-f7f9-4bda-8bef-ea5c67fa885f |
| Area=5678 | Joint1=6000 | Joint2=6047 | Joint3=6048 | Joint4=6001 | GUID=1ef5fef4-5b81-461d-ae3c-a8362b711886 |
| Area=5679 | Joint1=6001 | Joint2=6048 | Joint3=6049 | Joint4=6002 | GUID=a18bbd37-ddf8-4a37-9711-7edb879fb7b2 |
| Area=5680 | Joint1=6002 | Joint2=6049 | Joint3=6050 | Joint4=6003 | GUID=1bbc9710-8e74-41df-b2ff-89d3d4c67868 |
| Area=5681 | Joint1=6003 | Joint2=6050 | Joint3=6051 | Joint4=6004 | GUID=db2d59b7-70d6-48e7-9c3c-3487d4af312e |
| Area=5682 | Joint1=6004 | Joint2=6051 | Joint3=6052 | Joint4=6005 | GUID=40412977-5022-4f5c-a415-6c13056c0b6b |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=5683 | Joint1=6005 | Joint2=6052 | Joint3=6053 | Joint4=6006 | GUID=150efc73-c210-4b8c-893a-6ddeeb55fd5  |
| Area=5684 | Joint1=6006 | Joint2=6053 | Joint3=6054 | Joint4=6007 | GUID=5c1e31df-39d7-4d76-9aad-51062c8d722e |
| Area=5685 | Joint1=6007 | Joint2=6054 | Joint3=6055 | Joint4=6008 | GUID=4e01667f-5a0b-4cc4-a7b7-1128931de62f |
| Area=5686 | Joint1=6008 | Joint2=6055 | Joint3=6056 | Joint4=6009 | GUID=699c3ee9-7dfc-4d9e-b5d0-4c450d51a02e |
| Area=5687 | Joint1=6009 | Joint2=6056 | Joint3=6057 | Joint4=6010 | GUID=d41fcbba-88ab-4c35-8c0b-4f6a5f91173e |
| Area=5688 | Joint1=6010 | Joint2=6057 | Joint3=6058 | Joint4=6011 | GUID=cd4cbf4f-db34-41bd-83a0-f7266a951de2 |
| Area=5689 | Joint1=6011 | Joint2=6058 | Joint3=6059 | Joint4=6012 | GUID=9a9dbaf0-88fd-42b0-9a49-941ceaca84b9 |
| Area=5690 | Joint1=6012 | Joint2=6059 | Joint3=6060 | Joint4=6013 | GUID=ef546213-151a-4ade-8504-93b1ef9fb327 |
| Area=5691 | Joint1=6013 | Joint2=6060 | Joint3=6061 | Joint4=6014 | GUID=4cf1b032-f109-4087-b86b-3a24e294a4f5 |
| Area=5692 | Joint1=6014 | Joint2=6061 | Joint3=6062 | Joint4=6015 | GUID=aa0f96bc-9246-4af8-9eef-51e6eb4d1240 |
| Area=5693 | Joint1=6015 | Joint2=6062 | Joint3=6063 | Joint4=6016 | GUID=342debbb-948d-4423-8689-c9cfb0a3d84a |
| Area=5694 | Joint1=6016 | Joint2=6063 | Joint3=6064 | Joint4=6017 | GUID=397221e5-f276-44fc-b0c1-dfe3c8ca5c00 |
| Area=5695 | Joint1=6017 | Joint2=6064 | Joint3=6065 | Joint4=6018 | GUID=5fa64e3e-cfce-4884-bd07-1d6a137c49d4 |
| Area=5696 | Joint1=6018 | Joint2=6065 | Joint3=6066 | Joint4=6019 | GUID=28bcb26c-9259-4243-b552-5c41ba84fd5e |
| Area=5697 | Joint1=6019 | Joint2=6066 | Joint3=6067 | Joint4=6020 | GUID=ea28d2c0-fa0e-4f92-a757-1d72f70438eb |
| Area=5698 | Joint1=6020 | Joint2=6067 | Joint3=6068 | Joint4=6021 | GUID=3de6f865-671c-47c7-aece-a1bcf519bca0 |
| Area=5699 | Joint1=6021 | Joint2=6068 | Joint3=6069 | Joint4=6022 | GUID=a025c763-1628-4bf9-9ed3-979d46c00777 |
| Area=5700 | Joint1=6022 | Joint2=6069 | Joint3=6070 | Joint4=6023 | GUID=fc0c736b-b623-4258-8911-712127b43a5f |
| Area=5701 | Joint1=6023 | Joint2=6070 | Joint3=6071 | Joint4=6024 | GUID=7e08df4d-5af9-4fa8-b328-b19ea5e0eb65 |
| Area=5702 | Joint1=6024 | Joint2=6071 | Joint3=6072 | Joint4=6025 | GUID=cf200d84-bae1-4fab-b030-502b4765eec7 |
| Area=5703 | Joint1=6025 | Joint2=6072 | Joint3=6073 | Joint4=6026 | GUID=8070a3bb-0a70-4b91-9cb2-21016e4783c9 |
| Area=5704 | Joint1=6026 | Joint2=6073 | Joint3=6074 | Joint4=6027 | GUID=20276b7a-72f1-4269-a079-b65bbc331dab |
| Area=5705 | Joint1=6027 | Joint2=6074 | Joint3=6075 | Joint4=6028 | GUID=ddc7e273-fcd9-4515-9fd1-8284a176b8c4 |
| Area=5706 | Joint1=6028 | Joint2=6075 | Joint3=6076 | Joint4=6029 | GUID=b306cdd2-82d2-44f2-a10a-e853054ac454 |
| Area=5707 | Joint1=6029 | Joint2=6076 | Joint3=6077 | Joint4=6030 | GUID=ce1e79d8-f56a-47fc-8880-9627e83ebf2e |
| Area=5708 | Joint1=6030 | Joint2=6077 | Joint3=6078 | Joint4=6031 | GUID=6931afd1-cb57-4d38-9b39-f3fec73c68a7 |
| Area=5709 | Joint1=6031 | Joint2=6078 | Joint3=6079 | Joint4=6032 | GUID=b2230f55-0360-434c-8101-372b1b250c06 |
| Area=5710 | Joint1=6032 | Joint2=6079 | Joint3=6080 | Joint4=6033 | GUID=b3926eee-8395-49f0-8cb6-7096702dce34 |
| Area=5711 | Joint1=6033 | Joint2=6080 | Joint3=6081 | Joint4=6034 | GUID=cc05fb1a-a16d-4b25-9666-c6f6d14c7609 |
| Area=5712 | Joint1=6034 | Joint2=6081 | Joint3=6082 | Joint4=6035 | GUID=070ab998-4a52-4fca-b243-b69efedf4674 |
| Area=5713 | Joint1=6035 | Joint2=6082 | Joint3=6083 | Joint4=6036 | GUID=4d00c669-0de2-4c12-b803-9be546eaf3c2 |
| Area=5714 | Joint1=6036 | Joint2=6083 | Joint3=6084 | Joint4=6037 | GUID=97e5135e-5e80-483c-8576-fcbcf79c81df |
| Area=5715 | Joint1=6038 | Joint2=6085 | Joint3=6086 | Joint4=6039 | GUID=c0b74844-8596-4610-b269-fc84a1a9bae3 |
| Area=5716 | Joint1=6039 | Joint2=6086 | Joint3=6087 | Joint4=6040 | GUID=09f29f3c-e20b-4bde-90fd-e077914257c5 |
| Area=5717 | Joint1=6040 | Joint2=6087 | Joint3=6088 | Joint4=6041 | GUID=b575d55b-fef9-49fc-9116-2b3416928aaf |
| Area=5718 | Joint1=6041 | Joint2=6088 | Joint3=6089 | Joint4=6042 | GUID=852249c2-5eb3-4ccc-b096-510fff4547cb |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=5719<br>b334e923eafe | Joint1=6042 | Joint2=6089 | Joint3=6090 | Joint4=6043 | GUID=96bc79a7-5869-4f85-a786-             |
| Area=5720<br>f39c8d17a48c | Joint1=6043 | Joint2=6090 | Joint3=6091 | Joint4=6044 | GUID=202162fe-3331-4985-ad07-             |
| Area=5721<br>cb6a45b0d01e | Joint1=6044 | Joint2=6091 | Joint3=6092 | Joint4=6045 | GUID=b2a43d4c-6634-46bf-b5a1-             |
| Area=5722                 | Joint1=6045 | Joint2=6092 | Joint3=6093 | Joint4=6046 | GUID=526c7171-5230-40d3-89df-79f3fee0f922 |
| Area=5723                 | Joint1=6046 | Joint2=6093 | Joint3=6094 | Joint4=6047 | GUID=deac0152-cd76-4cf3-8956-76f7f9f45d85 |
| Area=5724                 | Joint1=6047 | Joint2=6094 | Joint3=6095 | Joint4=6048 | GUID=8165621f-9f58-4f58-8d75-1b3a3d754794 |
| Area=5725<br>be941497e61e | Joint1=6048 | Joint2=6095 | Joint3=6096 | Joint4=6049 | GUID=2dbbe622-96aa-4713-a7ed-             |
| Area=5726<br>deea1c28c099 | Joint1=6049 | Joint2=6096 | Joint3=6097 | Joint4=6050 | GUID=1e550488-ad22-418a-b42c-             |
| Area=5727<br>7c7935d4f0b9 | Joint1=6050 | Joint2=6097 | Joint3=6098 | Joint4=6051 | GUID=51d39f2d-8dd4-4103-8bd3-             |
| Area=5728<br>cbce7a3e09fa | Joint1=6051 | Joint2=6098 | Joint3=6099 | Joint4=6052 | GUID=a969b3af-3839-4ece-8527-             |
| Area=5729<br>1d248e731341 | Joint1=6052 | Joint2=6099 | Joint3=6100 | Joint4=6053 | GUID=ed824979-2bcf-482a-b2ee-             |
| Area=5730                 | Joint1=6053 | Joint2=6100 | Joint3=6101 | Joint4=6054 | GUID=8eaf1653-1a72-4eaa-9bfc-e61b483fb638 |
| Area=5731<br>c65b39f332e1 | Joint1=6054 | Joint2=6101 | Joint3=6102 | Joint4=6055 | GUID=717c8b86-fbbe-4336-a3b3-             |
| Area=5732                 | Joint1=6055 | Joint2=6102 | Joint3=6103 | Joint4=6056 | GUID=7126ba8f-428e-4360-9d39-3fe30dc9fd3d |
| Area=5733<br>54e0b4781a01 | Joint1=6056 | Joint2=6103 | Joint3=6104 | Joint4=6057 | GUID=d90a1754-2554-4906-8701-             |
| Area=5734                 | Joint1=6057 | Joint2=6104 | Joint3=6105 | Joint4=6058 | GUID=f2766472-ab95-4dfe-bb23-e7ae1f8a02b3 |
| Area=5735<br>31ed9428f8cf | Joint1=6058 | Joint2=6105 | Joint3=6106 | Joint4=6059 | GUID=69e5b48d-ba5e-4854-9c01-             |
| Area=5736<br>1d888b8874dd | Joint1=6059 | Joint2=6106 | Joint3=6107 | Joint4=6060 | GUID=b7521727-c89f-441b-b7fe-             |
| Area=5737<br>6d6384886d4f | Joint1=6060 | Joint2=6107 | Joint3=6108 | Joint4=6061 | GUID=9aea3a5b-2ae4-472e-95b4-             |
| Area=5738                 | Joint1=6061 | Joint2=6108 | Joint3=6109 | Joint4=6062 | GUID=a5c65d81-ff42-476e-9f63-f487969d40f3 |
| Area=5739<br>7b8b9337fd8d | Joint1=6062 | Joint2=6109 | Joint3=6110 | Joint4=6063 | GUID=2f75837d-9058-455e-8e02-             |
| Area=5740<br>51fe194942e4 | Joint1=6063 | Joint2=6110 | Joint3=6111 | Joint4=6064 | GUID=2ecc97bb-428d-434a-a5c2-             |
| Area=5741<br>044b20bdfa16 | Joint1=6064 | Joint2=6111 | Joint3=6112 | Joint4=6065 | GUID=9e042bd2-7f0e-47c2-a09c-             |
| Area=5742                 | Joint1=6065 | Joint2=6112 | Joint3=6113 | Joint4=6066 | GUID=fefc95ff-5be9-4549-a240-fd0ddbdcf7a3 |
| Area=5743                 | Joint1=6066 | Joint2=6113 | Joint3=6114 | Joint4=6067 | GUID=ae7ec5a1-01e8-47f4-bf3e-b06aef6835c0 |
| Area=5744<br>4ca777bf6c1e | Joint1=6067 | Joint2=6114 | Joint3=6115 | Joint4=6068 | GUID=842668eb-be65-404d-a68e-             |
| Area=5745                 | Joint1=6068 | Joint2=6115 | Joint3=6116 | Joint4=6069 | GUID=b9f03767-8f63-4f61-a188-c89c75426ca2 |
| Area=5746                 | Joint1=6069 | Joint2=6116 | Joint3=6117 | Joint4=6070 | GUID=2d44a5a5-f0a4-4401-b08b-60e7efee36af |
| Area=5747<br>038d62484de5 | Joint1=6070 | Joint2=6117 | Joint3=6118 | Joint4=6071 | GUID=79ba1602-86bf-420b-b1f8-             |
| Area=5748<br>95748d1a8e63 | Joint1=6071 | Joint2=6118 | Joint3=6119 | Joint4=6072 | GUID=5b3a5786-357f-46ab-ba0a-             |
| Area=5749<br>bf277ec606a4 | Joint1=6072 | Joint2=6119 | Joint3=6120 | Joint4=6073 | GUID=5da00c85-31c3-455b-bef1-             |
| Area=5750<br>11ca5d7ea0a0 | Joint1=6073 | Joint2=6120 | Joint3=6121 | Joint4=6074 | GUID=1d66b343-d49c-4c8b-ad71-             |
| Area=5751<br>0bfaee5b617a | Joint1=6074 | Joint2=6121 | Joint3=6122 | Joint4=6075 | GUID=de245831-ad0a-452c-9862-             |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=5752<br>35217047309a | Joint1=6075 | Joint2=6122 | Joint3=6123 | Joint4=6076 | GUID=562c7ece-1326-42d7-bfef-             |
| Area=5753<br>ebc75ecd04dd | Joint1=6076 | Joint2=6123 | Joint3=6124 | Joint4=6077 | GUID=c1e15c34-b788-4cd8-928e-             |
| Area=5754                 | Joint1=6077 | Joint2=6124 | Joint3=6125 | Joint4=6078 | GUID=fa2f68ae-7fd2-45c1-86ad-bc14e131c140 |
| Area=5755                 | Joint1=6078 | Joint2=6125 | Joint3=6126 | Joint4=6079 | GUID=b9834bde-32bf-458a-aabf-b6d1f2f0e081 |
| Area=5756<br>46fc7d2132a0 | Joint1=6079 | Joint2=6126 | Joint3=6127 | Joint4=6080 | GUID=eba31e8a-2e80-4670-9812-             |
| Area=5757<br>c143d17ad291 | Joint1=6080 | Joint2=6127 | Joint3=6128 | Joint4=6081 | GUID=d3a04544-4080-4c4d-b18b-             |
| Area=5758<br>9ea0745487fd | Joint1=6081 | Joint2=6128 | Joint3=6129 | Joint4=6082 | GUID=9be19ce4-b22b-4e2b-8ccf-             |
| Area=5759                 | Joint1=6082 | Joint2=6129 | Joint3=6130 | Joint4=6083 | GUID=22f6caaf-9acb-4a64-ab79-deb8400966fb |
| Area=5760                 | Joint1=6083 | Joint2=6130 | Joint3=6131 | Joint4=6084 | GUID=4e61270d-b3bd-418f-9a89-7872176f651f |
| Area=5761<br>0e821953d7cf | Joint1=6085 | Joint2=6132 | Joint3=6133 | Joint4=6086 | GUID=2f81ba09-7625-4929-a30c-             |
| Area=5762<br>032477193311 | Joint1=6086 | Joint2=6133 | Joint3=6134 | Joint4=6087 | GUID=c65dce15-43de-4a7a-9ee2-             |
| Area=5763<br>139c0b0a06fa | Joint1=6087 | Joint2=6134 | Joint3=6135 | Joint4=6088 | GUID=b426d31e-9465-4013-957e-             |
| Area=5764<br>01fe2516b75a | Joint1=6088 | Joint2=6135 | Joint3=6136 | Joint4=6089 | GUID=9290d46a-6eeb-4713-b245-             |
| Area=5765<br>649b4c765331 | Joint1=6089 | Joint2=6136 | Joint3=6137 | Joint4=6090 | GUID=454f5aba-c553-480b-a589-             |
| Area=5766<br>2c70a670a511 | Joint1=6090 | Joint2=6137 | Joint3=6138 | Joint4=6091 | GUID=48d6b4d4-3f12-43d8-b479-             |
| Area=5767<br>dd41979950ac | Joint1=6091 | Joint2=6138 | Joint3=6139 | Joint4=6092 | GUID=0eed3f2f-98c9-4393-89c1-             |
| Area=5768                 | Joint1=6092 | Joint2=6139 | Joint3=6140 | Joint4=6093 | GUID=46bc345f-2d0d-43fd-82ff-d46ea004d4ee |
| Area=5769                 | Joint1=6093 | Joint2=6140 | Joint3=6141 | Joint4=6094 | GUID=84e8c33a-4f8f-44a9-a21a-34ab30f6363e |
| Area=5770<br>3e2852469339 | Joint1=6094 | Joint2=6141 | Joint3=6142 | Joint4=6095 | GUID=61982c5a-9eaa-4a71-8cb9-             |
| Area=5771<br>224419585248 | Joint1=6095 | Joint2=6142 | Joint3=6143 | Joint4=6096 | GUID=756e48ed-e4e6-469c-abce-             |
| Area=5772<br>eaa5b5fc210  | Joint1=6096 | Joint2=6143 | Joint3=6144 | Joint4=6097 | GUID=6c48737f-e4e8-4d8e-9d72-             |
| Area=5773<br>33bcc57495d5 | Joint1=6097 | Joint2=6144 | Joint3=6145 | Joint4=6098 | GUID=5ec473ed-b4c7-45b4-8fdb-             |
| Area=5774<br>52ae5a6ae573 | Joint1=6098 | Joint2=6145 | Joint3=6146 | Joint4=6099 | GUID=1e8f7bf5-b243-4122-b714-             |
| Area=5775<br>92de0927b545 | Joint1=6099 | Joint2=6146 | Joint3=6147 | Joint4=6100 | GUID=96088d89-ada5-4e5b-a324-             |
| Area=5776                 | Joint1=6100 | Joint2=6147 | Joint3=6148 | Joint4=6101 | GUID=2f5e5e4d-4fde-49c8-abc0-b0dcf580f4ed |
| Area=5777<br>2722308e8da7 | Joint1=6101 | Joint2=6148 | Joint3=6149 | Joint4=6102 | GUID=15957101-a491-450a-8291-             |
| Area=5778<br>2be9e122b775 | Joint1=6102 | Joint2=6149 | Joint3=6150 | Joint4=6103 | GUID=9322a703-c481-4be5-bcd7-             |
| Area=5779<br>a931d0d41bf9 | Joint1=6103 | Joint2=6150 | Joint3=6151 | Joint4=6104 | GUID=95fb6141-8a67-49b3-a7aa-             |
| Area=5780<br>11f9465dc936 | Joint1=6104 | Joint2=6151 | Joint3=6152 | Joint4=6105 | GUID=5e13a390-d828-4874-843a-             |
| Area=5781<br>de3eb9371fec | Joint1=6105 | Joint2=6152 | Joint3=6153 | Joint4=6106 | GUID=8b924018-4585-493c-913a-             |
| Area=5782<br>66e6d986726a | Joint1=6106 | Joint2=6153 | Joint3=6154 | Joint4=6107 | GUID=56f53d64-91cb-428e-819c-             |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=5783<br>e4a9b91b1886 | Joint1=6107 | Joint2=6154 | Joint3=6155 | Joint4=6108 | GUID=9e2c988d-9db2-42f0-9bbd-             |
| Area=5784<br>d0ca10e24b7e | Joint1=6108 | Joint2=6155 | Joint3=6156 | Joint4=6109 | GUID=0db796df-8bd1-4876-a082-             |
| Area=5785<br>32831bb30403 | Joint1=6109 | Joint2=6156 | Joint3=6157 | Joint4=6110 | GUID=6d401b1f-9a67-432a-afc0-             |
| Area=5786<br>b337466933d9 | Joint1=6110 | Joint2=6157 | Joint3=6158 | Joint4=6111 | GUID=389f7fa0-3788-4de2-ade6-             |
| Area=5787<br>e290ce451d8d | Joint1=6111 | Joint2=6158 | Joint3=6159 | Joint4=6112 | GUID=69a95b8c-a238-485a-8761-             |
| Area=5788<br>531e6a7d7b59 | Joint1=6112 | Joint2=6159 | Joint3=6160 | Joint4=6113 | GUID=7c89802e-657f-4a1f-b3c6-             |
| Area=5789<br>62973c2e5956 | Joint1=6113 | Joint2=6160 | Joint3=6161 | Joint4=6114 | GUID=5857eedf-5e31-4e59-ae7c-             |
| Area=5790<br>23a235c43c98 | Joint1=6114 | Joint2=6161 | Joint3=6162 | Joint4=6115 | GUID=19802841-acd1-479c-855d-             |
| Area=5791                 | Joint1=6115 | Joint2=6162 | Joint3=6163 | Joint4=6116 | GUID=47e97cae-62bf-4589-a5bb-7780f3512f71 |
| Area=5792<br>644ae5a85583 | Joint1=6116 | Joint2=6163 | Joint3=6164 | Joint4=6117 | GUID=1a1628e7-5edc-498d-a39d-             |
| Area=5793                 | Joint1=6117 | Joint2=6164 | Joint3=6165 | Joint4=6118 | GUID=6c3dd4ba-8d0d-4ef7-b474-3f95ffce362d |
| Area=5794<br>a0db51730057 | Joint1=6118 | Joint2=6165 | Joint3=6166 | Joint4=6119 | GUID=7682b147-8d94-4a7f-ae0-              |
| Area=5795<br>6e96abc34ec4 | Joint1=6119 | Joint2=6166 | Joint3=6167 | Joint4=6120 | GUID=2371f0d7-53e8-452c-8902-             |
| Area=5796<br>238da6c2c405 | Joint1=6120 | Joint2=6167 | Joint3=6168 | Joint4=6121 | GUID=cd09363e-35d8-407f-ab25-             |
| Area=5797                 | Joint1=6121 | Joint2=6168 | Joint3=6169 | Joint4=6122 | GUID=2fa0566f-21d3-4cf3-8009-a0ea2f25105c |
| Area=5798<br>606a4a12188e | Joint1=6122 | Joint2=6169 | Joint3=6170 | Joint4=6123 | GUID=29ad664e-d7dc-4a0b-90e6-             |
| Area=5799<br>89ed67d7194e | Joint1=6123 | Joint2=6170 | Joint3=6171 | Joint4=6124 | GUID=b5913102-a413-4d1b-9ab9-             |
| Area=5800                 | Joint1=6124 | Joint2=6171 | Joint3=6172 | Joint4=6125 | GUID=185bd726-04f7-4229-8e94-754bf44e91df |
| Area=5801<br>6ab0274c853c | Joint1=6125 | Joint2=6172 | Joint3=6173 | Joint4=6126 | GUID=d333bff5-a2c2-4238-ae83-             |
| Area=5802                 | Joint1=6126 | Joint2=6173 | Joint3=6174 | Joint4=6127 | GUID=01b73500-6203-42ff-b54d-3523ea8af22a |
| Area=5803<br>7b3fe63e1c01 | Joint1=6127 | Joint2=6174 | Joint3=6175 | Joint4=6128 | GUID=4bfeabbb-50a4-4770-8421-             |
| Area=5804<br>236e23e74908 | Joint1=6128 | Joint2=6175 | Joint3=6176 | Joint4=6129 | GUID=ec9e3c40-12e1-4194-9c76-             |
| Area=5805<br>8266b6d9b3f0 | Joint1=6129 | Joint2=6176 | Joint3=6177 | Joint4=6130 | GUID=0c8edfe3-1ecb-44b3-9012-             |
| Area=5806<br>53f3c7e7725d | Joint1=6130 | Joint2=6177 | Joint3=6178 | Joint4=6131 | GUID=97f25008-8537-4d78-88ed-             |
| Area=5807<br>04c0628d9f29 | Joint1=6132 | Joint2=6179 | Joint3=6180 | Joint4=6133 | GUID=011263c5-d02c-4198-8af9-             |
| Area=5808<br>838b9f4af9a2 | Joint1=6133 | Joint2=6180 | Joint3=6181 | Joint4=6134 | GUID=595e5c2c-b7bb-48dc-bd98-             |
| Area=5809                 | Joint1=6134 | Joint2=6181 | Joint3=6182 | Joint4=6135 | GUID=e5c4898f-4fad-4037-9fb9-0994dc1e6002 |
| Area=5810<br>f2bed4622c7a | Joint1=6135 | Joint2=6182 | Joint3=6183 | Joint4=6136 | GUID=bdcd962a-25bb-43b0-ad01-             |
| Area=5811<br>31edbb7301ae | Joint1=6136 | Joint2=6183 | Joint3=6184 | Joint4=6137 | GUID=738a63b9-70a8-4c1c-9c39-             |
| Area=5812<br>a053a9d5a452 | Joint1=6137 | Joint2=6184 | Joint3=6185 | Joint4=6138 | GUID=b0408e95-1864-4880-8d08-             |
| Area=5813                 | Joint1=6138 | Joint2=6185 | Joint3=6186 | Joint4=6139 | GUID=24a40fc3-7cf8-48be-a94e-1f69719243ee |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=5814 Joint1=6139 Joint2=6186 Joint3=6187 Joint4=6140 GUID=3cabd9d3-f6bb-457f-93e9-3cdca6a0e75c  
Area=5815 Joint1=6140 Joint2=6187 Joint3=6188 Joint4=6141 GUID=80f7dbc4-d7a0-42bd-bf6a-eb99118f4ac  
Area=5816 Joint1=6141 Joint2=6188 Joint3=6189 Joint4=6142 GUID=69a25e2f-11cb-4689-b2df-57484c758db2  
Area=5817 Joint1=6142 Joint2=6189 Joint3=6190 Joint4=6143 GUID=8ec39114-0fde-4e0f-b544-f587dac171dd  
Area=5818 Joint1=6143 Joint2=6190 Joint3=6191 Joint4=6144 GUID=0d447837-0596-4327-b1f9-dd5d81f22b31  
Area=5819 Joint1=6144 Joint2=6191 Joint3=6192 Joint4=6145 GUID=0b643424-410c-4850-9c2f-84f7d20a92e5  
Area=5820 Joint1=6145 Joint2=6192 Joint3=6193 Joint4=6146 GUID=368d1f6d-7047-4141-bbf9-d94d28eb5580  
Area=5821 Joint1=6146 Joint2=6193 Joint3=6194 Joint4=6147 GUID=df97ba3e-5045-4a22-9af4-866beb394051  
Area=5822 Joint1=6147 Joint2=6194 Joint3=6195 Joint4=6148 GUID=107a360d-3025-4178-a7dc-d89d2e8427e7  
Area=5823 Joint1=6148 Joint2=6195 Joint3=6196 Joint4=6149 GUID=5a5e86f1-e432-41a9-be80-51265cada3ed  
Area=5824 Joint1=6149 Joint2=6196 Joint3=6197 Joint4=6150 GUID=8c0a20fc-0a29-475d-acf9-f5a650a172c8  
Area=5825 Joint1=6150 Joint2=6197 Joint3=6198 Joint4=6151 GUID=0e264a9c-e96d-4559-8afe-2b6095620833  
Area=5826 Joint1=6151 Joint2=6198 Joint3=6199 Joint4=6152 GUID=6aac0b5a-80c5-41e7-bc6d-59682d2dc615  
Area=5827 Joint1=6152 Joint2=6199 Joint3=6200 Joint4=6153 GUID=bd5c3aaf-2d0b-4d92-9bef-d62022253237  
Area=5828 Joint1=6153 Joint2=6200 Joint3=6201 Joint4=6154 GUID=adcf725-cd81-4093-92c3-44327d2d0055  
Area=5829 Joint1=6154 Joint2=6201 Joint3=6202 Joint4=6155 GUID=91df9abf-02ff-405c-bbb3-560abe9ac7a1  
Area=5830 Joint1=6155 Joint2=6202 Joint3=6203 Joint4=6156 GUID=7cdcb106-36ff-40e1-8907-ac2e7df23d06  
Area=5831 Joint1=6156 Joint2=6203 Joint3=6204 Joint4=6157 GUID=b8c4fc6d-6f04-4723-9a77-8a0db3bd31c0  
Area=5832 Joint1=6157 Joint2=6204 Joint3=6205 Joint4=6158 GUID=22683634-0676-49e9-a398-db4f3bacf770  
Area=5833 Joint1=6158 Joint2=6205 Joint3=6206 Joint4=6159 GUID=7dc14846-dc55-410e-b6c5-84c5b954e440  
Area=5834 Joint1=6159 Joint2=6206 Joint3=6207 Joint4=6160 GUID=34119d95-ca9d-4eae-88d9-be0f998f27bd  
Area=5835 Joint1=6160 Joint2=6207 Joint3=6208 Joint4=6161 GUID=45431607-5b33-41e0-8106-0e0d68ebbbb9  
Area=5836 Joint1=6161 Joint2=6208 Joint3=6209 Joint4=6162 GUID=57309fe5-1f9d-49d4-80ec-feabbbf43b4b0  
Area=5837 Joint1=6162 Joint2=6209 Joint3=6210 Joint4=6163 GUID=e39168f7-b07b-4b03-80d6-3b9d8860efbc  
Area=5838 Joint1=6163 Joint2=6210 Joint3=6211 Joint4=6164 GUID=1746dc00-b4b3-461c-b601-777ce0031240  
Area=5839 Joint1=6164 Joint2=6211 Joint3=6212 Joint4=6165 GUID=6648b07f-209b-4b54-9640-4e876e397f9c  
Area=5840 Joint1=6165 Joint2=6212 Joint3=6213 Joint4=6166 GUID=ff1e267f-c55e-4600-b7fb-5e4d2fef5307  
Area=5841 Joint1=6166 Joint2=6213 Joint3=6214 Joint4=6167 GUID=caaea2f3-361b-49ae-9e44-a650cc070fc5  
Area=5842 Joint1=6167 Joint2=6214 Joint3=6215 Joint4=6168 GUID=72c38894-e47a-4366-b18d-9358b458959d  
Area=5843 Joint1=6168 Joint2=6215 Joint3=6216 Joint4=6169 GUID=bbdcb6b1-e14e-4aaa-a20a-eea5d695cc32  
Area=5844 Joint1=6169 Joint2=6216 Joint3=6217 Joint4=6170 GUID=ea329e05-9af7-4baf-a8bf-ef0d08b7de50  
Area=5845 Joint1=6170 Joint2=6217 Joint3=6218 Joint4=6171 GUID=1f388252-8cd8-4bfa-84b5-aa4fe95e3efd  
Area=5846 Joint1=6171 Joint2=6218 Joint3=6219 Joint4=6172 GUID=379aa268-4f8d-421a-9923-45248054eed



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=5847 | Joint1=6172 | Joint2=6219 | Joint3=6220 | Joint4=6173 | GUID=424ba7d2-1982-466e-b480-6973a85ee1f2 |
| Area=5848 | Joint1=6173 | Joint2=6220 | Joint3=6221 | Joint4=6174 | GUID=728a7a80-439a-4841-9ccf-3fe9a876c4c1 |
| Area=5849 | Joint1=6174 | Joint2=6221 | Joint3=6222 | Joint4=6175 | GUID=c97230d5-3716-44fb-a83d-4eef8fc28018 |
| Area=5850 | Joint1=6175 | Joint2=6222 | Joint3=6223 | Joint4=6176 | GUID=ee964805-9a46-4be4-a079-19f49015c326 |
| Area=5851 | Joint1=6176 | Joint2=6223 | Joint3=6224 | Joint4=6177 | GUID=356b213e-e4bc-4152-86f1-cc654e24624e |
| Area=5852 | Joint1=6177 | Joint2=6224 | Joint3=6225 | Joint4=6178 | GUID=af4c011b-022e-4677-97c6-ca18ab0520dd |
| Area=5853 | Joint1=6179 | Joint2=6226 | Joint3=6227 | Joint4=6180 | GUID=3f168fec-9df1-45c4-9683-42cfc20e32df |
| Area=5854 | Joint1=6180 | Joint2=6227 | Joint3=6228 | Joint4=6181 | GUID=54f8f768-57db-4573-94b9-b55e19a04f4f |
| Area=5855 | Joint1=6181 | Joint2=6228 | Joint3=6229 | Joint4=6182 | GUID=f40e43ab-23ae-4ec7-bb6a-87ced6d3025a |
| Area=5856 | Joint1=6182 | Joint2=6229 | Joint3=6230 | Joint4=6183 | GUID=b4e390ed-6ba9-48cc-824b-1b814c3aa98f |
| Area=5857 | Joint1=6183 | Joint2=6230 | Joint3=6231 | Joint4=6184 | GUID=d89108c6-6c97-49cb-98b8-36d563b54f13 |
| Area=5858 | Joint1=6184 | Joint2=6231 | Joint3=6232 | Joint4=6185 | GUID=ce25318d-706b-4860-8078-40551efe734b |
| Area=5859 | Joint1=6185 | Joint2=6232 | Joint3=6233 | Joint4=6186 | GUID=dadfc7e2-7926-4a0c-8cf0-4a4fcdeca2c9 |
| Area=5860 | Joint1=6186 | Joint2=6233 | Joint3=6234 | Joint4=6187 | GUID=271cf339-7ad9-48d4-b7ed-30d9bca52f35 |
| Area=5861 | Joint1=6187 | Joint2=6234 | Joint3=6235 | Joint4=6188 | GUID=78941f85-ebf8-494d-9e11-8780d5a05dec |
| Area=5862 | Joint1=6188 | Joint2=6235 | Joint3=6236 | Joint4=6189 | GUID=9379d548-5a9a-4ced-9117-2d42e0935180 |
| Area=5863 | Joint1=6189 | Joint2=6236 | Joint3=6237 | Joint4=6190 | GUID=f4f773e8-3547-4d49-b72d-206a479a4a66 |
| Area=5864 | Joint1=6190 | Joint2=6237 | Joint3=6238 | Joint4=6191 | GUID=90963cb1-2259-4387-9263-c8c8e900c339 |
| Area=5865 | Joint1=6191 | Joint2=6238 | Joint3=6239 | Joint4=6192 | GUID=4067d146-9476-4995-9639-91197cb6c9c8 |
| Area=5866 | Joint1=6192 | Joint2=6239 | Joint3=6240 | Joint4=6193 | GUID=7a6b4234-4980-4a7a-ac3e-0c475b80a552 |
| Area=5867 | Joint1=6193 | Joint2=6240 | Joint3=6241 | Joint4=6194 | GUID=08aec85f-3f35-4cd2-af67-ba032edd6b8d |
| Area=5868 | Joint1=6194 | Joint2=6241 | Joint3=6242 | Joint4=6195 | GUID=94893415-429e-4c5b-9e11-d3a128005e0d |
| Area=5869 | Joint1=6195 | Joint2=6242 | Joint3=6243 | Joint4=6196 | GUID=ac13decc-01f6-41b7-ae5f-54bd92054c2c |
| Area=5870 | Joint1=6196 | Joint2=6243 | Joint3=6244 | Joint4=6197 | GUID=f6694bca-ea60-44f9-8650-bcac59dc5b71 |
| Area=5871 | Joint1=6197 | Joint2=6244 | Joint3=6245 | Joint4=6198 | GUID=1810cba1-d24c-4576-8870-7d12ecaa9cdd |
| Area=5872 | Joint1=6198 | Joint2=6245 | Joint3=6246 | Joint4=6199 | GUID=b4288a86-50e0-4097-bf50-46c1231171d4 |
| Area=5873 | Joint1=6199 | Joint2=6246 | Joint3=6247 | Joint4=6200 | GUID=0da975f7-8894-4243-8e9e-728f20ed65ae |
| Area=5874 | Joint1=6200 | Joint2=6247 | Joint3=6248 | Joint4=6201 | GUID=d1f22d01-8acc-443c-82dc-ab7ab7b352d2 |
| Area=5875 | Joint1=6201 | Joint2=6248 | Joint3=6249 | Joint4=6202 | GUID=f1a4b12c-acd5-4493-9d1e-c974409aa866 |
| Area=5876 | Joint1=6202 | Joint2=6249 | Joint3=6250 | Joint4=6203 | GUID=ba30dd91-890e-4ff5-97b3-f68529122035 |
| Area=5877 | Joint1=6203 | Joint2=6250 | Joint3=6251 | Joint4=6204 | GUID=d1257d56-243c-4f4d-a16c-dbc53d3e21a0 |
| Area=5878 | Joint1=6204 | Joint2=6251 | Joint3=6252 | Joint4=6205 | GUID=e5bf27c0-cc25-4d1b-a2e6-032616bf66d4 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                            |
|---------------------------|-------------|-------------|-------------|-------------|--------------------------------------------|
| Area=5879<br>ec4755d88012 | Joint1=6205 | Joint2=6252 | Joint3=6253 | Joint4=6206 | GUID=3b853db3-62f4-4bce-9c8c-              |
| Area=5880<br>2c28ec518f8e | Joint1=6206 | Joint2=6253 | Joint3=6254 | Joint4=6207 | GUID=8740ede2-2832-45a1-814b-              |
| Area=5881<br>eabbb9625ca1 | Joint1=6207 | Joint2=6254 | Joint3=6255 | Joint4=6208 | GUID=0d3884a5-963f-49ac-bf58-              |
| Area=5882<br>b253d8bbca4a | Joint1=6208 | Joint2=6255 | Joint3=6256 | Joint4=6209 | GUID=68930877-cfc8-40af-bb30-              |
| Area=5883<br>82e3769be4e6 | Joint1=6209 | Joint2=6256 | Joint3=6257 | Joint4=6210 | GUID=cd7e92a0-790d-46ed-96f2-              |
| Area=5884<br>28c92dca84c0 | Joint1=6210 | Joint2=6257 | Joint3=6258 | Joint4=6211 | GUID=d65a22fe-9b4a-46db-98ce-              |
| Area=5885<br>9e1f6ba8a121 | Joint1=6211 | Joint2=6258 | Joint3=6259 | Joint4=6212 | GUID=3c0bf341-d2ea-4109-acd7-              |
| Area=5886                 | Joint1=6212 | Joint2=6259 | Joint3=6260 | Joint4=6213 | GUID=942050fa-9eb9-44e6-bfa2-fb6f7d468438  |
| Area=5887                 | Joint1=6213 | Joint2=6260 | Joint3=6261 | Joint4=6214 | GUID=650a8ffc-f7a2-4051-9580-5c099f350e6e  |
| Area=5888<br>d6e8ae846ae4 | Joint1=6214 | Joint2=6261 | Joint3=6262 | Joint4=6215 | GUID=584a5a5d-b2e6-4b0d-9c28-              |
| Area=5889                 | Joint1=6215 | Joint2=6262 | Joint3=6263 | Joint4=6216 | GUID=194f1f15-7fa9-4d3b-9505-1f59e8da98d9  |
| Area=5890<br>1fd04fab29d6 | Joint1=6216 | Joint2=6263 | Joint3=6264 | Joint4=6217 | GUID=5ec85e21-8917-40a6-bb67-              |
| Area=5891                 | Joint1=6217 | Joint2=6264 | Joint3=6265 | Joint4=6218 | GUID=223ab93e-5c61-41c0-b8c0-c4eaceff2fe10 |
| Area=5892<br>a6ae598742d5 | Joint1=6218 | Joint2=6265 | Joint3=6266 | Joint4=6219 | GUID=8cf84925-85cf-48ae-8927-              |
| Area=5893<br>0f02cb6c1a1b | Joint1=6219 | Joint2=6266 | Joint3=6267 | Joint4=6220 | GUID=401a6662-0a08-4078-8deb-              |
| Area=5894<br>2276891e0c25 | Joint1=6220 | Joint2=6267 | Joint3=6268 | Joint4=6221 | GUID=380d7f66-225d-4299-8f57-              |
| Area=5895<br>59e8fc419ac  | Joint1=6221 | Joint2=6268 | Joint3=6269 | Joint4=6222 | GUID=17e7eca4-840d-4bd3-8665-              |
| Area=5896                 | Joint1=6222 | Joint2=6269 | Joint3=6270 | Joint4=6223 | GUID=e1247e8c-f584-476e-a975-189ef6914df3  |
| Area=5897                 | Joint1=6223 | Joint2=6270 | Joint3=6271 | Joint4=6224 | GUID=be72b251-5d08-4efa-99fa-44cfb1a7481d  |
| Area=5898                 | Joint1=6224 | Joint2=6271 | Joint3=6272 | Joint4=6225 | GUID=bc68b6f3-d06f-4459-8a9b-1872af0bda31  |
| Area=5899<br>83e526b77e9b | Joint1=6226 | Joint2=6273 | Joint3=6274 | Joint4=6227 | GUID=4618139e-7c4a-4bfb-afd1-              |
| Area=5900                 | Joint1=6227 | Joint2=6274 | Joint3=6275 | Joint4=6228 | GUID=bf561945-fcf5-49fc-ad99-4feb57a9ef8d  |
| Area=5901<br>a3039e8f3708 | Joint1=6228 | Joint2=6275 | Joint3=6276 | Joint4=6229 | GUID=c3e188bb-024d-4da3-84d8-              |
| Area=5902<br>b7a9374d9492 | Joint1=6229 | Joint2=6276 | Joint3=6277 | Joint4=6230 | GUID=849674ee-5993-48d0-95fb-              |
| Area=5903<br>efd0d9d60d6e | Joint1=6230 | Joint2=6277 | Joint3=6278 | Joint4=6231 | GUID=12bdc376-19e8-402a-a1f1-              |
| Area=5904<br>ea509009eb6f | Joint1=6231 | Joint2=6278 | Joint3=6279 | Joint4=6232 | GUID=8d19f578-0346-48a3-98ca-              |
| Area=5905                 | Joint1=6232 | Joint2=6279 | Joint3=6280 | Joint4=6233 | GUID=69a35842-5fe5-4ef4-a68f-6b8497c13d0a  |
| Area=5906<br>caf0d7bab469 | Joint1=6233 | Joint2=6280 | Joint3=6281 | Joint4=6234 | GUID=913c77d6-789f-403e-993d-              |
| Area=5907<br>58d10bae97c9 | Joint1=6234 | Joint2=6281 | Joint3=6282 | Joint4=6235 | GUID=0aca748e-d21a-4157-965d-              |
| Area=5908                 | Joint1=6235 | Joint2=6282 | Joint3=6283 | Joint4=6236 | GUID=2436b127-f6e7-42af-ad4d-abf64457a982  |
| Area=5909<br>49c39596b0f3 | Joint1=6236 | Joint2=6283 | Joint3=6284 | Joint4=6237 | GUID=70dc3091-e9fd-4beb-8389-              |
| Area=5910                 | Joint1=6237 | Joint2=6284 | Joint3=6285 | Joint4=6238 | GUID=fe61d6a4-81ab-4521-9f10-848e1ffe8fdd  |
| Area=5911<br>a92e95399fa8 | Joint1=6238 | Joint2=6285 | Joint3=6286 | Joint4=6239 | GUID=67beb1c6-c7e1-45eb-ab3a-              |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=5912 Joint1=6239 Joint2=6286 Joint3=6287 Joint4=6240 GUID=17ffb69e-0357-4a6f-858c-3bd4c3fb787d  
Area=5913 Joint1=6240 Joint2=6287 Joint3=6288 Joint4=6241 GUID=e6d5500e-8c66-46a3-98a4-c4eb2285478f  
Area=5914 Joint1=6241 Joint2=6288 Joint3=6289 Joint4=6242 GUID=27c2561f-c2ef-4bff-80cf-f48665f157b8  
Area=5915 Joint1=6242 Joint2=6289 Joint3=6290 Joint4=6243 GUID=b01ded5c-d018-4e7a-bad3-17968ce97375  
Area=5916 Joint1=6243 Joint2=6290 Joint3=6291 Joint4=6244 GUID=525acd70-1ec7-44e2-bec3-5a1358862b0d  
Area=5917 Joint1=6244 Joint2=6291 Joint3=6292 Joint4=6245 GUID=5b42fd6d-ba5d-476a-8f9d-18a17ddbb16d  
Area=5918 Joint1=6245 Joint2=6292 Joint3=6293 Joint4=6246 GUID=075fac19-5669-48f7-95a4-f54f2ae19b28  
Area=5919 Joint1=6246 Joint2=6293 Joint3=6294 Joint4=6247 GUID=4adca526-99da-4065-b31f-a99d7f92ea2c  
Area=5920 Joint1=6247 Joint2=6294 Joint3=6295 Joint4=6248 GUID=37695a9e-1554-4b9c-8a09-f9c357e20ee0  
Area=5921 Joint1=6248 Joint2=6295 Joint3=6296 Joint4=6249 GUID=cdef3309-ace3-4e30-9d4f-9d838fee8428  
Area=5922 Joint1=6249 Joint2=6296 Joint3=6297 Joint4=6250 GUID=8758be26-1785-4b23-ac9b-addc6d80dd08  
Area=5923 Joint1=6250 Joint2=6297 Joint3=6298 Joint4=6251 GUID=f1972ff6-312a-47ca-94ac-fa270d6574a1  
Area=5924 Joint1=6251 Joint2=6298 Joint3=6299 Joint4=6252 GUID=d2b8682c-c486-48f7-afc5-f553e136d991  
Area=5925 Joint1=6252 Joint2=6299 Joint3=6300 Joint4=6253 GUID=d9a204ad-f838-4432-8d2a-6411a26c9785  
Area=5926 Joint1=6253 Joint2=6300 Joint3=6301 Joint4=6254 GUID=b7bb3066-90f9-4b4a-af4e-99fe7aa9ccf7  
Area=5927 Joint1=6254 Joint2=6301 Joint3=6302 Joint4=6255 GUID=97c5c8d7-9ca8-41c1-85b5-702834ad7c04  
Area=5928 Joint1=6255 Joint2=6302 Joint3=6303 Joint4=6256 GUID=68508303-4e5a-4a82-b2c5-053e8ef44a2d  
Area=5929 Joint1=6256 Joint2=6303 Joint3=6304 Joint4=6257 GUID=6e9c523a-7fda-4e7e-bf55-8babad395386  
Area=5930 Joint1=6257 Joint2=6304 Joint3=6305 Joint4=6258 GUID=5bc33268-aa77-4018-bd1d-cdf38eff13ac  
Area=5931 Joint1=6258 Joint2=6305 Joint3=6306 Joint4=6259 GUID=b6b4fa50-bc0a-4f5c-a1cd-256196a79e47  
Area=5932 Joint1=6259 Joint2=6306 Joint3=6307 Joint4=6260 GUID=dbd037a4-a4be-462d-9b57-c18d2d65fbf0  
Area=5933 Joint1=6260 Joint2=6307 Joint3=6308 Joint4=6261 GUID=3fead417-9db6-4dfc-acc8-2cf72e3ad623  
Area=5934 Joint1=6261 Joint2=6308 Joint3=6309 Joint4=6262 GUID=a1eb20af-07f1-4f88-bb42-3f41f97291a9  
Area=5935 Joint1=6262 Joint2=6309 Joint3=6310 Joint4=6263 GUID=d34544d1-d3b6-4941-8da7-907a8911d57a  
Area=5936 Joint1=6263 Joint2=6310 Joint3=6311 Joint4=6264 GUID=17f2ae8e-e2d6-4fd2-98ab-241e52a409c3  
Area=5937 Joint1=6264 Joint2=6311 Joint3=6312 Joint4=6265 GUID=d5ffdade-dcfd-4ffd-b40f-e0a44955ca56  
Area=5938 Joint1=6265 Joint2=6312 Joint3=6313 Joint4=6266 GUID=78c41bf3-824d-421a-aebe-755621058dfb  
Area=5939 Joint1=6266 Joint2=6313 Joint3=6314 Joint4=6267 GUID=c7808abd-7a79-4357-aabb-157e87842533  
Area=5940 Joint1=6267 Joint2=6314 Joint3=6315 Joint4=6268 GUID=32d364af-d890-481e-adad-88f8029f489d  
Area=5941 Joint1=6268 Joint2=6315 Joint3=6316 Joint4=6269 GUID=e416a16a-4297-4485-9973-9eaa5ae30015  
Area=5942 Joint1=6269 Joint2=6316 Joint3=6317 Joint4=6270 GUID=01dc530a-042f-402f-8ea9-1e95b1097f7c  
Area=5943 Joint1=6270 Joint2=6317 Joint3=6318 Joint4=6271 GUID=38ff753f-1853-44e9-8fa8-2256b29feacd  
Area=5944 Joint1=6271 Joint2=6318 Joint3=6319 Joint4=6272 GUID=24225154-b40c-4011-b8c9-d0fcaff08321  
Area=5945 Joint1=6273 Joint2=4159 Joint3=6320 Joint4=6274 GUID=6d6f0af6-faef-46ed-a6c6-82f5c5a077aa  
Area=5946 Joint1=6274 Joint2=6320 Joint3=6321 Joint4=6275 GUID=6999161f-9094-4d47-9437-0f604c938760  
Area=5947 Joint1=6275 Joint2=6321 Joint3=6322 Joint4=6276 GUID=3d2b03cf-4893-4669-b6fa-833f45d2c1fb

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |             |             |             |             |                                           |
|---------------------------|-------------|-------------|-------------|-------------|-------------------------------------------|
| Area=5948<br>ae5d3c20a181 | Joint1=6276 | Joint2=6322 | Joint3=6323 | Joint4=6277 | GUID=3ca440d4-5c45-409a-a58a-             |
| Area=5949<br>cc29836bada8 | Joint1=6277 | Joint2=6323 | Joint3=6324 | Joint4=6278 | GUID=8bfc0683-6b4f-4b90-84b7-             |
| Area=5950<br>bd60dc0684cc | Joint1=6278 | Joint2=6324 | Joint3=6325 | Joint4=6279 | GUID=5e788a87-2dad-4fc1-951e-             |
| Area=5951<br>2e05db0bcdbb | Joint1=6279 | Joint2=6325 | Joint3=6326 | Joint4=6280 | GUID=c154042f-dc2a-4b20-ba10-             |
| Area=5952<br>b9ad5f27855e | Joint1=6280 | Joint2=6326 | Joint3=6327 | Joint4=6281 | GUID=2a878987-4766-4302-9b53-             |
| Area=5953<br>02b9df251313 | Joint1=6281 | Joint2=6327 | Joint3=6328 | Joint4=6282 | GUID=915fd60e-e50d-408b-aa77-             |
| Area=5954                 | Joint1=6282 | Joint2=6328 | Joint3=6329 | Joint4=6283 | GUID=7d6e5400-9ff5-463e-99c2-7b00a1593fd8 |
| Area=5955<br>6ab14f3375d3 | Joint1=6283 | Joint2=6329 | Joint3=6330 | Joint4=6284 | GUID=0daad864-ed2b-4508-a6ba-             |
| Area=5956<br>e32225a89c2e | Joint1=6284 | Joint2=6330 | Joint3=6331 | Joint4=6285 | GUID=a5a2c132-8996-43e0-b993-             |
| Area=5957<br>8b374bee11bb | Joint1=6285 | Joint2=6331 | Joint3=6332 | Joint4=6286 | GUID=d7d06ab9-db15-4c06-9626-             |
| Area=5958                 | Joint1=6286 | Joint2=6332 | Joint3=6333 | Joint4=6287 | GUID=f783850f-348a-4f5b-84ce-ef6d330a6010 |
| Area=5959<br>0d37fc05b13c | Joint1=6287 | Joint2=6333 | Joint3=6334 | Joint4=6288 | GUID=f416559c-1855-4787-bbab-             |
| Area=5960                 | Joint1=6288 | Joint2=6334 | Joint3=6335 | Joint4=6289 | GUID=682e6ced-1e2d-4878-8cb9-31fbc38ffde5 |
| Area=5961<br>ac019c7a4e05 | Joint1=6289 | Joint2=6335 | Joint3=6336 | Joint4=6290 | GUID=8702dfbe-7a5a-4afe-a673-             |
| Area=5962<br>9d267d7c4587 | Joint1=6290 | Joint2=6336 | Joint3=6337 | Joint4=6291 | GUID=8229b737-9568-4243-89e6-             |
| Area=5963                 | Joint1=6291 | Joint2=6337 | Joint3=6338 | Joint4=6292 | GUID=e7022f7b-5e73-4fcd-8d56-fdf2a5722427 |
| Area=5964<br>605da2df3565 | Joint1=6292 | Joint2=6338 | Joint3=6339 | Joint4=6293 | GUID=18aeeb99-c209-4513-96dd-             |
| Area=5965<br>5cd27c6d060f | Joint1=6293 | Joint2=6339 | Joint3=6340 | Joint4=6294 | GUID=9394edf2-49d3-4553-a8b1-             |
| Area=5966<br>2a521d363c9e | Joint1=6294 | Joint2=6340 | Joint3=6341 | Joint4=6295 | GUID=3f59e4b1-d199-4265-99a6-             |
| Area=5967<br>0b5d28ab2538 | Joint1=6295 | Joint2=6341 | Joint3=6342 | Joint4=6296 | GUID=71c7fa3c-53d0-4f4e-962a-             |
| Area=5968<br>42c76192fd87 | Joint1=6296 | Joint2=6342 | Joint3=6343 | Joint4=6297 | GUID=994f2085-8695-47b2-99a1-             |
| Area=5969                 | Joint1=6297 | Joint2=6343 | Joint3=6344 | Joint4=6298 | GUID=aadebbff-63f9-4d9c-bb91-1dfea93b5711 |
| Area=5970<br>87c29303490a | Joint1=6298 | Joint2=6344 | Joint3=6345 | Joint4=6299 | GUID=759f6fe9-0c96-46c6-a277-             |
| Area=5971<br>0ab96951ea26 | Joint1=6299 | Joint2=6345 | Joint3=6346 | Joint4=6300 | GUID=7dc6d37e-34ce-4455-afbb-             |
| Area=5972<br>c168701979a6 | Joint1=6300 | Joint2=6346 | Joint3=6347 | Joint4=6301 | GUID=a714ce0d-3897-4ae6-99ee-             |
| Area=5973<br>d9b404cb7731 | Joint1=6301 | Joint2=6347 | Joint3=6348 | Joint4=6302 | GUID=89566661-e6b7-4b1b-af1c-             |
| Area=5974                 | Joint1=6302 | Joint2=6348 | Joint3=6349 | Joint4=6303 | GUID=af568b36-a29c-4965-8e30-43ff12456bf7 |
| Area=5975                 | Joint1=6303 | Joint2=6349 | Joint3=6350 | Joint4=6304 | GUID=598ffa18-fd97-419c-93c5-c927c48d6673 |
| Area=5976<br>6d43a259953e | Joint1=6304 | Joint2=6350 | Joint3=6351 | Joint4=6305 | GUID=a3a82f89-f633-445c-a8bb-             |
| Area=5977                 | Joint1=6305 | Joint2=6351 | Joint3=6352 | Joint4=6306 | GUID=1b6761bc-a7f8-4b06-b9aa-2b0c95cfa8f  |
| Area=5978                 | Joint1=6306 | Joint2=6352 | Joint3=6353 | Joint4=6307 | GUID=ff6d3fb7-e28b-4d7f-81c8-e557ee5e9659 |
| Area=5979<br>a0b0b9b2e643 | Joint1=6307 | Joint2=6353 | Joint3=6354 | Joint4=6308 | GUID=f73ca8e6-410a-4770-b2fc-             |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Area=5980 Joint1=6308 Joint2=6354 Joint3=6355 Joint4=6309 GUID=da93ab7d-00e5-4133-8386-a81010f39f11

Area=5981 Joint1=6309 Joint2=6355 Joint3=6356 Joint4=6310 GUID=3ab06d76-39c8-4719-96bc-bb7175645c85

Area=5982 Joint1=6310 Joint2=6356 Joint3=6357 Joint4=6311 GUID=ea447778-5bb4-439f-b702-2d0ba202ff70

Area=5983 Joint1=6311 Joint2=6357 Joint3=6358 Joint4=6312 GUID=8e995fef-5c0c-40ec-92e6-68e4b4f31de5

Area=5984 Joint1=6312 Joint2=6358 Joint3=6359 Joint4=6313 GUID=da43cf38-ded3-43af-a740-cabeb9f638b5

Area=5985 Joint1=6313 Joint2=6359 Joint3=6360 Joint4=6314 GUID=a8c3d3b9-11f9-4287-ac50-7fdf4281ffb8

Area=5986 Joint1=6314 Joint2=6360 Joint3=6361 Joint4=6315 GUID=553e6fab-eee1-40fa-9ac4-5444b5350501

Area=5987 Joint1=6315 Joint2=6361 Joint3=6362 Joint4=6316 GUID=e1eb1bce-b008-4829-a6a0-8d0544be0290

Area=5988 Joint1=6316 Joint2=6362 Joint3=6363 Joint4=6317 GUID=f3865153-1fc9-4a72-b04b-a6b47119a8b4

Area=5989 Joint1=6317 Joint2=6363 Joint3=6364 Joint4=6318 GUID=fc79becc-003f-4fd8-974b-5e1a0f605a51

Area=5990 Joint1=6318 Joint2=6364 Joint3=4157 Joint4=6319 GUID=86676c20-7806-4ae0-80d9-ce543d4b93c8

TABLE: "CONNECTIVITY - FRAME"

Frame=1 JointI=5 JointJ=13 IsCurved=No GUID=d989b63d-6d7f-400e-b7e8-999cf80a2828

Frame=2 JointI=13 JointJ=1 IsCurved=No GUID=56dc138a-4b0d-4f09-bfde-257d89b11222

Frame=3 JointI=12 JointJ=2 IsCurved=No GUID=fbc50f73-a76c-4645-aad1-e330fd0fdfa8

Frame=5 JointI=10 JointJ=7 IsCurved=No GUID=70fd8a05-751a-4b4c-8013-9572b9a1927b

Frame=6 JointI=9 JointJ=6 IsCurved=No GUID=a65aec22-ffd0-43c2-ae5b-6f21a9d1906c

Frame=7 JointI=8 JointJ=5 IsCurved=No GUID=89847f19-072e-482b-b027-a6f8d7642b1e

Frame=8 JointI=11 JointJ=12 IsCurved=No GUID=cfe7bce7-e4f6-472c-b438-eb1fa6825a01

Frame=9 JointI=12 JointJ=13 IsCurved=No GUID=9b9e2c3d-e9ec-4acc-9898-daaea7aa385a

Frame=10 JointI=7 JointJ=11 IsCurved=No GUID=c0ea0016-fd8a-408d-9af6-c627581126be

Frame=11 JointI=11 JointJ=3 IsCurved=No GUID=596a3a6c-a502-44f0-b433-963c7febfb4

Frame=12 JointI=6 JointJ=12 IsCurved=No GUID=0f4adf20-6b35-4661-9e17-f934526bffe

Frame=15 JointI=2037 JointJ=2038 IsCurved=No GUID=831bfab3-ac6c-4dc0-b63a-bf03de94a03f

Frame=16 JointI=2038 JointJ=2039 IsCurved=No GUID=3362f989-2f07-4d71-b8e2-53e4e0588662

Frame=17 JointI=2039 JointJ=2040 IsCurved=No GUID=142bb4e2-e16a-493a-97c1-e3035139c5e5

Frame=18 JointI=2040 JointJ=2041 IsCurved=No GUID=531340b3-61de-4dad-a747-5dc6c9d11472

Frame=19 JointI=2041 JointJ=2042 IsCurved=No GUID=923d513c-f7ae-40aa-abe8-62031be12f9f

Frame=20 JointI=2042 JointJ=2043 IsCurved=No GUID=07d1ce25-1db9-46cd-90cb-895c998abe8d

Frame=21 JointI=2043 JointJ=2044 IsCurved=No GUID=98813f2a-b539-4986-971c-caaa59d241ec

Frame=22 JointI=2044 JointJ=2045 IsCurved=No GUID=8b555422-4ae3-4a68-a8f4-3cb08862dd28

Frame=23 JointI=2045 JointJ=2046 IsCurved=No GUID=3f881a56-7153-4ee8-8493-5fd2a878a39c

Frame=24 JointI=2046 JointJ=2047 IsCurved=No GUID=703ab667-1e71-4547-aa50-150f4e56f717

Frame=25 JointI=2047 JointJ=2048 IsCurved=No GUID=b459283d-be3d-4f1c-b529-7a0d8010f4ce

Frame=26 JointI=2048 JointJ=367 IsCurved=No GUID=ec0e2bf8-ab59-482d-b3dd-2a02317efcc1

Frame=27 JointI=2049 JointJ=2050 IsCurved=No GUID=71f16c53-846f-4b06-8de0-6688f3ee0b44

Frame=28 JointI=2050 JointJ=2051 IsCurved=No GUID=164e6f02-d254-4dec-9669-3ce2c982d1bb

Frame=29 JointI=2051 JointJ=2052 IsCurved=No GUID=49e0aeb2-8b77-47ec-8d35-5523f0bd12e2d

Frame=30 JointI=2052 JointJ=2053 IsCurved=No GUID=553656b4-34e0-41af-9c5e-047ca8afca4b

Frame=31 JointI=2053 JointJ=2054 IsCurved=No GUID=e8e2e2fe-b6f9-43c1-9dc3-667814a76522

Frame=32 JointI=2054 JointJ=2055 IsCurved=No GUID=3aa75897-86d8-42b3-9390-e4bdf7b377f6

Frame=33 JointI=2055 JointJ=2056 IsCurved=No GUID=5d9af9af-9b9b-43cd-b4a6-8c9e3bdfc96

Frame=34 JointI=2056 JointJ=2057 IsCurved=No GUID=096dc2ff-e01b-432b-bed8-8d1e1a381ed8

Frame=35 JointI=2057 JointJ=2058 IsCurved=No GUID=58d5567d-26bb-415c-8a5d-863fb1d58ad0

Frame=36 JointI=2058 JointJ=2059 IsCurved=No GUID=22d6090d-dd5e-4e30-a368-df5aa025efd8

Frame=37 JointI=2059 JointJ=2060 IsCurved=No GUID=1af59e4a-1006-49ba-b94d-49214a3f7f91

Frame=38 JointI=2060 JointJ=1716 IsCurved=No GUID=01c89eaa-261e-4c8e-ad20-d7bf04045c93

Frame=39 JointI=2061 JointJ=2062 IsCurved=No GUID=20ed218d-fec8-41e5-a5ae-d0f9c9966e7f



|          |             |             |             |                                           |
|----------|-------------|-------------|-------------|-------------------------------------------|
| Frame=40 | JointI=2062 | JointJ=2063 | IsCurved=No | GUID=4c3c2ea2-e430-43c7-aa0a-328ae373ab5c |
| Frame=41 | JointI=2063 | JointJ=2064 | IsCurved=No | GUID=921638f4-5897-4857-ae6b-9f46ea8124ea |
| Frame=42 | JointI=2064 | JointJ=2065 | IsCurved=No | GUID=8ac0d7b7-c72e-4dca-9f61-f074331cf03a |
| Frame=43 | JointI=2065 | JointJ=2066 | IsCurved=No | GUID=2a68cf07-8018-4c81-aa40-bfc79afb2985 |
| Frame=44 | JointI=2066 | JointJ=2067 | IsCurved=No | GUID=810c2789-adca-4429-9778-782c74949e2a |
| Frame=45 | JointI=2067 | JointJ=2068 | IsCurved=No | GUID=aaa4fe92-eed0-48f2-801d-cc483ec8045e |
| Frame=46 | JointI=2068 | JointJ=2069 | IsCurved=No | GUID=5cb12b18-3f5e-47da-8068-60bddac2f14f |
| Frame=47 | JointI=2069 | JointJ=2070 | IsCurved=No | GUID=670d2c6a-c4d1-46ba-a806-22469cd88ba2 |
| Frame=48 | JointI=2070 | JointJ=2071 | IsCurved=No | GUID=99f60777-0ceb-4604-b019-a11c84fe9931 |
| Frame=49 | JointI=2071 | JointJ=2072 | IsCurved=No | GUID=321dd07a-560f-4ba0-b8ef-a5a744f95d1c |
| Frame=50 | JointI=2072 | JointJ=337  | IsCurved=No | GUID=ac5bc2ba-e6bf-4a78-98b7-39c15bac9811 |
| Frame=51 | JointI=2073 | JointJ=2074 | IsCurved=No | GUID=ae9956b6-5832-490f-84eb-5f6f88ba400b |
| Frame=52 | JointI=2074 | JointJ=2075 | IsCurved=No | GUID=09e269c8-a687-4619-990d-24b733b10bbb |
| Frame=53 | JointI=2075 | JointJ=2076 | IsCurved=No | GUID=be7c92f6-64b8-4e81-98ab-fe0095e823fc |
| Frame=54 | JointI=2076 | JointJ=2077 | IsCurved=No | GUID=409f9b29-0608-4a4a-8877-d7ccc67775a7 |
| Frame=55 | JointI=2077 | JointJ=2078 | IsCurved=No | GUID=498262e1-320d-4067-b583-a11c84fe9931 |
| Frame=56 | JointI=2078 | JointJ=2079 | IsCurved=No | GUID=63d44729-8519-4cfb-8987-d2c0203dfc21 |
| Frame=57 | JointI=2079 | JointJ=2080 | IsCurved=No | GUID=b9fa16f0-1d59-4b94-8783-b08750a3744f |
| Frame=58 | JointI=2080 | JointJ=2081 | IsCurved=No | GUID=d1d50067-806e-4c8f-afb2-ca2eff60fb53 |
| Frame=59 | JointI=2081 | JointJ=2082 | IsCurved=No | GUID=4e1c4c6f-df6e-47be-8ce3-de284ddd2ee  |
| Frame=60 | JointI=2082 | JointJ=2083 | IsCurved=No | GUID=e78849a0-fec4-45d9-b4af-495078e7c245 |
| Frame=61 | JointI=2083 | JointJ=2084 | IsCurved=No | GUID=84c8977a-94e6-47d3-a990-3050145764e3 |
| Frame=62 | JointI=2084 | JointJ=1686 | IsCurved=No | GUID=59ddb815-3775-4383-a080-88709dd69499 |
| Frame=63 | JointI=4109 | JointJ=4110 | IsCurved=No | GUID=c3afc313-138b-454d-afdb-5434e6a3407d |
| Frame=64 | JointI=4110 | JointJ=4111 | IsCurved=No | GUID=0b1081a2-a2bc-4a27-8032-c12fb951d44f |
| Frame=65 | JointI=4111 | JointJ=4112 | IsCurved=No | GUID=5014737e-16a6-496c-85b3-98106f11d232 |
| Frame=66 | JointI=4112 | JointJ=4113 | IsCurved=No | GUID=fcd5aa9d-56a2-4ba2-83c5-52b6821eb897 |
| Frame=67 | JointI=4113 | JointJ=4114 | IsCurved=No | GUID=4a0e7597-af01-45a6-937a-9e7947d195e0 |
| Frame=68 | JointI=4114 | JointJ=4115 | IsCurved=No | GUID=38c366be-687c-4f6e-991c-c304375acbc6 |
| Frame=69 | JointI=4115 | JointJ=4116 | IsCurved=No | GUID=f944ab1d-3515-44e6-8c48-e2ebabd95419 |
| Frame=70 | JointI=4116 | JointJ=4117 | IsCurved=No | GUID=b54f1c38-f84b-4a14-ba21-0a0ac4fa5fe2 |
| Frame=71 | JointI=4117 | JointJ=4118 | IsCurved=No | GUID=90c2e7d5-c69e-4b40-88dd-bd4bf28b5893 |
| Frame=72 | JointI=4118 | JointJ=4119 | IsCurved=No | GUID=7b9850c9-45f0-4e06-82a4-08a1f47d0399 |
| Frame=73 | JointI=4119 | JointJ=4120 | IsCurved=No | GUID=91390251-1780-4292-87b7-e7ab3065ddd5 |
| Frame=74 | JointI=4120 | JointJ=2439 | IsCurved=No | GUID=b708bd5b-0cb1-49a3-9b6d-08de5053e623 |
| Frame=75 | JointI=4121 | JointJ=4122 | IsCurved=No | GUID=0c72ee4c-79d4-41e5-9a12-3bd0be7d37a9 |
| Frame=76 | JointI=4122 | JointJ=4123 | IsCurved=No | GUID=4349bac6-b60d-4b36-9ca8-4756a27dcf6f |
| Frame=77 | JointI=4123 | JointJ=4124 | IsCurved=No | GUID=50aebccd-90a8-4e14-96e5-d9f09d3db410 |
| Frame=78 | JointI=4124 | JointJ=4125 | IsCurved=No | GUID=1d913710-34b6-47df-801e-761dd22607a4 |
| Frame=79 | JointI=4125 | JointJ=4126 | IsCurved=No | GUID=8f95a178-184f-4f5e-89f7-3b5ed97af1a1 |
| Frame=80 | JointI=4126 | JointJ=4127 | IsCurved=No | GUID=37a4c5ac-aec5-418c-a73b-51196da651ba |
| Frame=81 | JointI=4127 | JointJ=4128 | IsCurved=No | GUID=dd77a65e-85c9-4a2c-a0e1-1b1baf0e95ec |
| Frame=82 | JointI=4128 | JointJ=4129 | IsCurved=No | GUID=6be7aa50-d807-4884-acdb-9942237ede39 |
| Frame=83 | JointI=4129 | JointJ=4130 | IsCurved=No | GUID=1884c15f-718e-41ad-b946-23dae8905b24 |
| Frame=84 | JointI=4130 | JointJ=4131 | IsCurved=No | GUID=45bd9e68-9ad2-4c52-a07c-67a28590392a |
| Frame=85 | JointI=4131 | JointJ=4132 | IsCurved=No | GUID=f9b51cb6-4b8e-46fe-bded-7a3e386d875a |
| Frame=86 | JointI=4132 | JointJ=3788 | IsCurved=No | GUID=38d3067c-b4af-4d79-a3c7-20b00219ab4f |
| Frame=87 | JointI=4133 | JointJ=4134 | IsCurved=No | GUID=4c6f6be5-941f-404b-81ad-005d87e50d7c |
| Frame=88 | JointI=4134 | JointJ=4135 | IsCurved=No | GUID=3af09dc9-d74c-42c4-9b3e-8bd61b8ecb43 |
| Frame=89 | JointI=4135 | JointJ=4136 | IsCurved=No | GUID=bb6537cd-e524-4fe3-ae58-ab192ed8d478 |
| Frame=90 | JointI=4136 | JointJ=4137 | IsCurved=No | GUID=d2ad5bb7-274a-4fa3-a5d8-c024ef4a1781 |
| Frame=91 | JointI=4137 | JointJ=4138 | IsCurved=No | GUID=f38e0a01-bb99-4b2e-9e6f-5efc17a80ca9 |
| Frame=92 | JointI=4138 | JointJ=4139 | IsCurved=No | GUID=64652d7c-d245-4a25-9a5a-42424d8e3f9  |
| Frame=93 | JointI=4139 | JointJ=4140 | IsCurved=No | GUID=79bdab3f-f1ef-4a20-87e1-9e88046a46b7 |
| Frame=94 | JointI=4140 | JointJ=4141 | IsCurved=No | GUID=afcac65d-9f9b-4e70-96f7-7e54ae322a19 |

|           |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------------------------------------|
| Frame=95  | JointI=4141 | JointJ=4142 | IsCurved=No | GUID=9d1be9fd-a83b-4e21-a7c1-248d9d91df52 |
| Frame=96  | JointI=4142 | JointJ=4143 | IsCurved=No | GUID=53bb4ff5-6323-49f8-9428-3294ee868d1c |
| Frame=97  | JointI=4143 | JointJ=4144 | IsCurved=No | GUID=922bcbe0-5da3-425a-acc9-54532f3733c8 |
| Frame=98  | JointI=4144 | JointJ=2409 | IsCurved=No | GUID=38fb4470-a053-474d-9015-d9009ab6d319 |
| Frame=99  | JointI=4145 | JointJ=4146 | IsCurved=No | GUID=71c35187-fa6f-4dfa-937d-1208a97f2ea4 |
| Frame=100 | JointI=4146 | JointJ=4147 | IsCurved=No | GUID=0e661967-eb12-415f-9685-913cebc7e27e |
| Frame=101 | JointI=4147 | JointJ=4148 | IsCurved=No | GUID=48e6f317-310f-4a60-bd83-a54e5347253e |
| Frame=102 | JointI=4148 | JointJ=4149 | IsCurved=No | GUID=b2edb33b-774a-4bc6-b6dd-8b2f6597a5fe |
| Frame=103 | JointI=4149 | JointJ=4150 | IsCurved=No | GUID=2ecb167c-8601-46fa-8b44-80238136cca9 |
| Frame=104 | JointI=4150 | JointJ=4151 | IsCurved=No | GUID=86ba6e60-f2d2-43ce-9e16-f86bf1468656 |
| Frame=105 | JointI=4151 | JointJ=4152 | IsCurved=No | GUID=f9f53f22-26f8-40da-8a3b-f023d0a63b32 |
| Frame=106 | JointI=4152 | JointJ=4153 | IsCurved=No | GUID=421c7fa9-ee00-4609-8ffb-292483496bd4 |
| Frame=107 | JointI=4153 | JointJ=4154 | IsCurved=No | GUID=59287a6a-27db-47eb-976d-3e06056f981c |
| Frame=108 | JointI=4154 | JointJ=4155 | IsCurved=No | GUID=ded18b54-0203-407e-bbf3-1f6809f67964 |
| Frame=109 | JointI=4155 | JointJ=4156 | IsCurved=No | GUID=2d8159c1-0c6c-4657-9973-a1a7fdffaad5 |
| Frame=110 | JointI=4156 | JointJ=3758 | IsCurved=No | GUID=d8d0c505-b683-45a0-8ce7-3e2e089a28bc |
| Frame=112 | JointI=6365 | JointJ=6366 | IsCurved=No | GUID=774a43d4-caab-4a9f-ac1a-40e5d7dedbfb |
| Frame=113 | JointI=6366 | JointJ=6367 | IsCurved=No | GUID=a525ed0b-201a-4ae9-96a7-dac47774cfe8 |
| Frame=114 | JointI=6367 | JointJ=6368 | IsCurved=No | GUID=8632ca42-c35c-479e-9d32-3cea4c1a68ec |
| Frame=115 | JointI=6368 | JointJ=6369 | IsCurved=No | GUID=b1537571-f0f1-4af9-a4f1-e375e4600246 |
| Frame=116 | JointI=6369 | JointJ=6370 | IsCurved=No | GUID=27e894af-b414-4f76-9809-3cb32c41e84f |
| Frame=117 | JointI=6370 | JointJ=6371 | IsCurved=No | GUID=25a93df5-fe18-4756-a41b-5c520e122fff |
| Frame=118 | JointI=6371 | JointJ=6372 | IsCurved=No | GUID=18c9333f-9462-4e5f-a154-ff1382bb10c5 |
| Frame=119 | JointI=6372 | JointJ=6373 | IsCurved=No | GUID=7141b3d8-de26-4eb3-ad6a-7e06b1eb7cd8 |
| Frame=120 | JointI=6373 | JointJ=6374 | IsCurved=No | GUID=f10fd983-299f-453e-b7be-462526c0fac4 |
| Frame=121 | JointI=6374 | JointJ=6375 | IsCurved=No | GUID=4263296c-d6ba-47f9-9da3-3b1453604909 |
| Frame=122 | JointI=6375 | JointJ=6376 | IsCurved=No | GUID=6bfe91ad-4899-459e-912d-f54373af1dde |
| Frame=123 | JointI=6376 | JointJ=6377 | IsCurved=No | GUID=6c9593ce-a18b-4118-8975-50cb3a7c2754 |
| Frame=124 | JointI=6377 | JointJ=4573 | IsCurved=No | GUID=7c4532fc-5300-495b-abd3-8aa20a25e72c |
| Frame=125 | JointI=6378 | JointJ=6379 | IsCurved=No | GUID=62ecd2ed-5cfb-43a2-bceb-149b13dc2310 |
| Frame=126 | JointI=6379 | JointJ=6380 | IsCurved=No | GUID=5acb6aa6-b246-4d1f-ae75-fb6714908bf2 |
| Frame=127 | JointI=6380 | JointJ=6381 | IsCurved=No | GUID=d83630bf-88da-4a90-b1a3-04fcbe8eff2f |
| Frame=128 | JointI=6381 | JointJ=6382 | IsCurved=No | GUID=12adb796-b288-43fd-b70e-b1efb8419305 |
| Frame=129 | JointI=6382 | JointJ=6383 | IsCurved=No | GUID=d101b00f-cf82-45af-bd85-e16b7730a78a |
| Frame=130 | JointI=6383 | JointJ=6384 | IsCurved=No | GUID=a0985003-24e3-4ec0-91a7-4ff6d22a68ec |
| Frame=131 | JointI=6384 | JointJ=6385 | IsCurved=No | GUID=968a616c-1a7e-4225-b9f0-5921a7b8702f |
| Frame=132 | JointI=6385 | JointJ=6386 | IsCurved=No | GUID=2958e526-33d7-48f7-9961-0098f8a74168 |
| Frame=133 | JointI=6386 | JointJ=6387 | IsCurved=No | GUID=e18e0ab1-ac29-4cd2-939d-e67131ae3048 |
| Frame=134 | JointI=6387 | JointJ=6388 | IsCurved=No | GUID=6b539ae1-1013-4c69-a16d-558990d023df |
| Frame=135 | JointI=6388 | JointJ=6389 | IsCurved=No | GUID=46ff05fd-672a-4f96-a143-cc9edd553181 |
| Frame=136 | JointI=6389 | JointJ=6390 | IsCurved=No | GUID=e2017027-8e53-42b5-9527-ff52c727e6fa |
| Frame=137 | JointI=6390 | JointJ=5982 | IsCurved=No | GUID=8c25f900-f569-41a6-abfb-7ec7869d03f7 |
| Frame=138 | JointI=6391 | JointJ=6392 | IsCurved=No | GUID=2ae0849c-07c6-456d-8d1b-83e6333cc9b4 |
| Frame=139 | JointI=6392 | JointJ=6393 | IsCurved=No | GUID=766517e9-dd2f-4837-9776-ee0940c8f864 |
| Frame=140 | JointI=6393 | JointJ=6394 | IsCurved=No | GUID=3cd137fd-31c1-45f3-b114-b41f5387d3e3 |
| Frame=141 | JointI=6394 | JointJ=6395 | IsCurved=No | GUID=22b90532-8b6d-45ec-a596-1fb5f879a8e0 |
| Frame=142 | JointI=6395 | JointJ=6396 | IsCurved=No | GUID=97d46266-ef84-4da0-97eb-625315da8c2a |
| Frame=143 | JointI=6396 | JointJ=6397 | IsCurved=No | GUID=5eca1877-5b9a-4940-8b82-6d57510d3d7c |
| Frame=144 | JointI=6397 | JointJ=6398 | IsCurved=No | GUID=d59e2a6f-97a4-4b10-8055-bf79777bc508 |
| Frame=145 | JointI=6398 | JointJ=6399 | IsCurved=No | GUID=75fe9cab-f72e-48b8-a9b4-8a48673f00dd |
| Frame=146 | JointI=6399 | JointJ=6400 | IsCurved=No | GUID=f7ca4514-f966-49c0-8571-d5b249532c58 |
| Frame=147 | JointI=6400 | JointJ=6401 | IsCurved=No | GUID=64917a47-716d-40ac-92a4-25152748407d |
| Frame=148 | JointI=6401 | JointJ=6402 | IsCurved=No | GUID=c15c250a-d4e5-4d4b-a68a-cfa64bfa5833 |
| Frame=149 | JointI=6402 | JointJ=6403 | IsCurved=No | GUID=af8e4bb4-8648-4336-817e-1f189a31b87e |
| Frame=150 | JointI=6403 | JointJ=4543 | IsCurved=No | GUID=1978491b-7590-43aa-a5f7-bc95f961d0ac |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |             |             |             |                                           |
|-----------|-------------|-------------|-------------|-------------------------------------------|
| Frame=151 | JointI=6404 | JointJ=6405 | IsCurved=No | GUID=227bb9ee-4c0b-4f94-a509-ff7023683fd8 |
| Frame=152 | JointI=6405 | JointJ=6406 | IsCurved=No | GUID=ebd75cf9-4756-44b9-be4d-fcbae854a731 |
| Frame=153 | JointI=6406 | JointJ=6407 | IsCurved=No | GUID=1d2c0051-aa7f-4853-a593-635056adb91e |
| Frame=154 | JointI=6407 | JointJ=6408 | IsCurved=No | GUID=74d054a8-9bdf-4c97-b5d4-14a6ef1c66ae |
| Frame=155 | JointI=6408 | JointJ=6409 | IsCurved=No | GUID=c71e57df-747c-47a4-8061-f22335516a14 |
| Frame=156 | JointI=6409 | JointJ=6410 | IsCurved=No | GUID=20e9b4de-ec47-4428-bc01-4999bffc4397 |
| Frame=157 | JointI=6410 | JointJ=6411 | IsCurved=No | GUID=ab6472b0-850e-475c-8409-4a124f990990 |
| Frame=158 | JointI=6411 | JointJ=6412 | IsCurved=No | GUID=5b3f257f-d460-4351-9c98-219387a27a52 |
| Frame=159 | JointI=6412 | JointJ=6413 | IsCurved=No | GUID=1fccbe8e-03f7-4f54-9cdc-da113695ab90 |
| Frame=160 | JointI=6413 | JointJ=6414 | IsCurved=No | GUID=b1381b5e-1dda-40ad-a162-da3396fc39   |
| Frame=161 | JointI=6414 | JointJ=6415 | IsCurved=No | GUID=290436dd-a636-456c-8890-37466cd82425 |
| Frame=162 | JointI=6415 | JointJ=6416 | IsCurved=No | GUID=bc07279d-15fd-4d73-b678-53905865cf40 |
| Frame=163 | JointI=6416 | JointJ=5952 | IsCurved=No | GUID=96fb6200-915e-44f2-b697-17954563ac4d |
| Frame=164 | JointI=6417 | JointJ=6418 | IsCurved=No | GUID=eda2c147-761b-46ed-899f-eed33ad9d18e |
| Frame=165 | JointI=6418 | JointJ=6419 | IsCurved=No | GUID=04fdbbc1-d646-4a2f-8413-a38c5f53f23a |
| Frame=166 | JointI=6419 | JointJ=6420 | IsCurved=No | GUID=535a190e-336e-4b8d-868d-32165cd3dbe5 |
| Frame=167 | JointI=6420 | JointJ=6421 | IsCurved=No | GUID=4e78ee5d-a5eb-46b7-bcea-aedbf8db2e9d |
| Frame=168 | JointI=6421 | JointJ=6422 | IsCurved=No | GUID=43ea9583-25ce-4fe4-8dd1-9205d252577f |
| Frame=169 | JointI=6422 | JointJ=6423 | IsCurved=No | GUID=1bf5c4da-482a-4da7-9bbe-02fd9b7cb0e1 |
| Frame=170 | JointI=6423 | JointJ=6424 | IsCurved=No | GUID=3364c5b9-8ead-4e43-9d33-07f7d4cb7d94 |
| Frame=171 | JointI=6424 | JointJ=6425 | IsCurved=No | GUID=b46c858c-3201-491d-80dd-f4460290d4d4 |
| Frame=172 | JointI=6425 | JointJ=6426 | IsCurved=No | GUID=f523d10f-70d9-49a7-9793-e80b6ede69c4 |
| Frame=173 | JointI=6426 | JointJ=6427 | IsCurved=No | GUID=153e8c21-cfd8-4e57-9601-5fc52ca4a973 |
| Frame=174 | JointI=6427 | JointJ=6428 | IsCurved=No | GUID=95045d46-9f4f-4dc9-812b-734783fd162b |
| Frame=175 | JointI=6428 | JointJ=6429 | IsCurved=No | GUID=5c3385f5-f78b-43ef-835e-c202294682f5 |
| Frame=176 | JointI=6429 | JointJ=9    | IsCurved=No | GUID=9af011e3-6300-40b6-a71c-056b52f43073 |

TABLE: "COORDINATE SYSTEMS"

Name=GLOBAL Type=Cartesian X=0 Y=0 Z=0 AboutZ=0 AboutY=0 AboutX=0

TABLE: "DATABASE DOCUMENTATION"

TABLE: "DATABASE FORMAT TYPES"

UnitsCurr=Yes OverrideE=No

TABLE: "FRAME AUTO MESH ASSIGNMENTS"

|          |              |              |             |               |             |              |
|----------|--------------|--------------|-------------|---------------|-------------|--------------|
| Frame=1  | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=2  | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=3  | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=5  | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=6  | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=7  | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=8  | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=9  | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=10 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=11 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=12 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=15 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=16 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=17 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=18 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=19 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=20 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=21 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=22 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |









|           |              |              |             |               |             |              |
|-----------|--------------|--------------|-------------|---------------|-------------|--------------|
| Frame=134 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=135 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=136 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=137 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=138 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=139 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=140 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=141 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=142 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=143 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=144 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=145 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=146 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=147 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=148 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=149 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=150 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=151 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=152 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=153 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=154 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=155 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=156 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=157 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=158 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=159 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=160 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=161 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=162 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=163 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=164 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=165 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=166 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=167 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=168 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=169 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=170 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=171 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=172 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=173 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=174 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=175 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |
| Frame=176 | AutoMesh=Yes | AtJoints=Yes | AtFrames=No | NumSegments=0 | MaxLength=0 | MaxDegrees=0 |

TABLE: "FRAME DESIGN PROCEDURES"

|          |                            |
|----------|----------------------------|
| Frame=1  | DesignProc="From Material" |
| Frame=2  | DesignProc="From Material" |
| Frame=3  | DesignProc="From Material" |
| Frame=5  | DesignProc="From Material" |
| Frame=6  | DesignProc="From Material" |
| Frame=7  | DesignProc="From Material" |
| Frame=8  | DesignProc="From Material" |
| Frame=9  | DesignProc="From Material" |
| Frame=10 | DesignProc="From Material" |
| Frame=11 | DesignProc="From Material" |

Frame=12 DesignProc="From Material"  
Frame=15 DesignProc="From Material"  
Frame=16 DesignProc="From Material"  
Frame=17 DesignProc="From Material"  
Frame=18 DesignProc="From Material"  
Frame=19 DesignProc="From Material"  
Frame=20 DesignProc="From Material"  
Frame=21 DesignProc="From Material"  
Frame=22 DesignProc="From Material"  
Frame=23 DesignProc="From Material"  
Frame=24 DesignProc="From Material"  
Frame=25 DesignProc="From Material"  
Frame=26 DesignProc="From Material"  
Frame=27 DesignProc="From Material"  
Frame=28 DesignProc="From Material"  
Frame=29 DesignProc="From Material"  
Frame=30 DesignProc="From Material"  
Frame=31 DesignProc="From Material"  
Frame=32 DesignProc="From Material"  
Frame=33 DesignProc="From Material"  
Frame=34 DesignProc="From Material"  
Frame=35 DesignProc="From Material"  
Frame=36 DesignProc="From Material"  
Frame=37 DesignProc="From Material"  
Frame=38 DesignProc="From Material"  
Frame=39 DesignProc="From Material"  
Frame=40 DesignProc="From Material"  
Frame=41 DesignProc="From Material"  
Frame=42 DesignProc="From Material"  
Frame=43 DesignProc="From Material"  
Frame=44 DesignProc="From Material"  
Frame=45 DesignProc="From Material"  
Frame=46 DesignProc="From Material"  
Frame=47 DesignProc="From Material"  
Frame=48 DesignProc="From Material"  
Frame=49 DesignProc="From Material"  
Frame=50 DesignProc="From Material"  
Frame=51 DesignProc="From Material"  
Frame=52 DesignProc="From Material"  
Frame=53 DesignProc="From Material"  
Frame=54 DesignProc="From Material"  
Frame=55 DesignProc="From Material"  
Frame=56 DesignProc="From Material"  
Frame=57 DesignProc="From Material"  
Frame=58 DesignProc="From Material"  
Frame=59 DesignProc="From Material"  
Frame=60 DesignProc="From Material"  
Frame=61 DesignProc="From Material"  
Frame=62 DesignProc="From Material"  
Frame=63 DesignProc="From Material"  
Frame=64 DesignProc="From Material"  
Frame=65 DesignProc="From Material"  
Frame=66 DesignProc="From Material"  
Frame=67 DesignProc="From Material"  
Frame=68 DesignProc="From Material"



ALCALDÍA MAYOR  
DE BOGOTÁ D.C.  
MOVILIDAD  
Instituto de Desarrollo Urbano

Frame=69 DesignProc="From Material"  
Frame=70 DesignProc="From Material"  
Frame=71 DesignProc="From Material"  
Frame=72 DesignProc="From Material"  
Frame=73 DesignProc="From Material"  
Frame=74 DesignProc="From Material"  
Frame=75 DesignProc="From Material"  
Frame=76 DesignProc="From Material"  
Frame=77 DesignProc="From Material"  
Frame=78 DesignProc="From Material"  
Frame=79 DesignProc="From Material"  
Frame=80 DesignProc="From Material"  
Frame=81 DesignProc="From Material"  
Frame=82 DesignProc="From Material"  
Frame=83 DesignProc="From Material"  
Frame=84 DesignProc="From Material"  
Frame=85 DesignProc="From Material"  
Frame=86 DesignProc="From Material"  
Frame=87 DesignProc="From Material"  
Frame=88 DesignProc="From Material"  
Frame=89 DesignProc="From Material"  
Frame=90 DesignProc="From Material"  
Frame=91 DesignProc="From Material"  
Frame=92 DesignProc="From Material"  
Frame=93 DesignProc="From Material"  
Frame=94 DesignProc="From Material"  
Frame=95 DesignProc="From Material"  
Frame=96 DesignProc="From Material"  
Frame=97 DesignProc="From Material"  
Frame=98 DesignProc="From Material"  
Frame=99 DesignProc="From Material"  
Frame=100 DesignProc="From Material"  
Frame=101 DesignProc="From Material"  
Frame=102 DesignProc="From Material"  
Frame=103 DesignProc="From Material"  
Frame=104 DesignProc="From Material"  
Frame=105 DesignProc="From Material"  
Frame=106 DesignProc="From Material"  
Frame=107 DesignProc="From Material"  
Frame=108 DesignProc="From Material"  
Frame=109 DesignProc="From Material"  
Frame=110 DesignProc="From Material"  
Frame=112 DesignProc="From Material"  
Frame=113 DesignProc="From Material"  
Frame=114 DesignProc="From Material"  
Frame=115 DesignProc="From Material"  
Frame=116 DesignProc="From Material"  
Frame=117 DesignProc="From Material"  
Frame=118 DesignProc="From Material"  
Frame=119 DesignProc="From Material"  
Frame=120 DesignProc="From Material"  
Frame=121 DesignProc="From Material"  
Frame=122 DesignProc="From Material"  
Frame=123 DesignProc="From Material"  
Frame=124 DesignProc="From Material"



ALCALDÍA MAYOR  
DE BOGOTÁ D.C.  
MOVILIDAD  
Instituto de Desarrollo Urbano

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Frame=125 DesignProc="From Material"  
 Frame=126 DesignProc="From Material"  
 Frame=127 DesignProc="From Material"  
 Frame=128 DesignProc="From Material"  
 Frame=129 DesignProc="From Material"  
 Frame=130 DesignProc="From Material"  
 Frame=131 DesignProc="From Material"  
 Frame=132 DesignProc="From Material"  
 Frame=133 DesignProc="From Material"  
 Frame=134 DesignProc="From Material"  
 Frame=135 DesignProc="From Material"  
 Frame=136 DesignProc="From Material"  
 Frame=137 DesignProc="From Material"  
 Frame=138 DesignProc="From Material"  
 Frame=139 DesignProc="From Material"  
 Frame=140 DesignProc="From Material"  
 Frame=141 DesignProc="From Material"  
 Frame=142 DesignProc="From Material"  
 Frame=143 DesignProc="From Material"  
 Frame=144 DesignProc="From Material"  
 Frame=145 DesignProc="From Material"  
 Frame=146 DesignProc="From Material"  
 Frame=147 DesignProc="From Material"  
 Frame=148 DesignProc="From Material"  
 Frame=149 DesignProc="From Material"  
 Frame=150 DesignProc="From Material"  
 Frame=151 DesignProc="From Material"  
 Frame=152 DesignProc="From Material"  
 Frame=153 DesignProc="From Material"  
 Frame=154 DesignProc="From Material"  
 Frame=155 DesignProc="From Material"  
 Frame=156 DesignProc="From Material"  
 Frame=157 DesignProc="From Material"  
 Frame=158 DesignProc="From Material"  
 Frame=159 DesignProc="From Material"  
 Frame=160 DesignProc="From Material"  
 Frame=161 DesignProc="From Material"  
 Frame=162 DesignProc="From Material"  
 Frame=163 DesignProc="From Material"  
 Frame=164 DesignProc="From Material"  
 Frame=165 DesignProc="From Material"  
 Frame=166 DesignProc="From Material"  
 Frame=167 DesignProc="From Material"  
 Frame=168 DesignProc="From Material"  
 Frame=169 DesignProc="From Material"  
 Frame=170 DesignProc="From Material"  
 Frame=171 DesignProc="From Material"  
 Frame=172 DesignProc="From Material"  
 Frame=173 DesignProc="From Material"  
 Frame=174 DesignProc="From Material"  
 Frame=175 DesignProc="From Material"  
 Frame=176 DesignProc="From Material"



TABLE: "FRAME LOAD TRANSFER OPTIONS"

Frame=1 Transfer=Yes

Frame=2 Transfer=Yes  
Frame=3 Transfer=Yes  
Frame=5 Transfer=Yes  
Frame=6 Transfer=Yes  
Frame=7 Transfer=Yes  
Frame=8 Transfer=Yes  
Frame=9 Transfer=Yes  
Frame=10 Transfer=Yes  
Frame=11 Transfer=Yes  
Frame=12 Transfer=Yes  
Frame=15 Transfer=Yes  
Frame=16 Transfer=Yes  
Frame=17 Transfer=Yes  
Frame=18 Transfer=Yes  
Frame=19 Transfer=Yes  
Frame=20 Transfer=Yes  
Frame=21 Transfer=Yes  
Frame=22 Transfer=Yes  
Frame=23 Transfer=Yes  
Frame=24 Transfer=Yes  
Frame=25 Transfer=Yes  
Frame=26 Transfer=Yes  
Frame=27 Transfer=Yes  
Frame=28 Transfer=Yes  
Frame=29 Transfer=Yes  
Frame=30 Transfer=Yes  
Frame=31 Transfer=Yes  
Frame=32 Transfer=Yes  
Frame=33 Transfer=Yes  
Frame=34 Transfer=Yes  
Frame=35 Transfer=Yes  
Frame=36 Transfer=Yes  
Frame=37 Transfer=Yes  
Frame=38 Transfer=Yes  
Frame=39 Transfer=Yes  
Frame=40 Transfer=Yes  
Frame=41 Transfer=Yes  
Frame=42 Transfer=Yes  
Frame=43 Transfer=Yes  
Frame=44 Transfer=Yes  
Frame=45 Transfer=Yes  
Frame=46 Transfer=Yes  
Frame=47 Transfer=Yes  
Frame=48 Transfer=Yes  
Frame=49 Transfer=Yes  
Frame=50 Transfer=Yes  
Frame=51 Transfer=Yes  
Frame=52 Transfer=Yes  
Frame=53 Transfer=Yes  
Frame=54 Transfer=Yes  
Frame=55 Transfer=Yes  
Frame=56 Transfer=Yes  
Frame=57 Transfer=Yes  
Frame=58 Transfer=Yes  
Frame=59 Transfer=Yes





|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Frame=60 Transfer=Yes  
 Frame=61 Transfer=Yes  
 Frame=62 Transfer=Yes  
 Frame=63 Transfer=Yes  
 Frame=64 Transfer=Yes  
 Frame=65 Transfer=Yes  
 Frame=66 Transfer=Yes  
 Frame=67 Transfer=Yes  
 Frame=68 Transfer=Yes  
 Frame=69 Transfer=Yes  
 Frame=70 Transfer=Yes  
 Frame=71 Transfer=Yes  
 Frame=72 Transfer=Yes  
 Frame=73 Transfer=Yes  
 Frame=74 Transfer=Yes  
 Frame=75 Transfer=Yes  
 Frame=76 Transfer=Yes  
 Frame=77 Transfer=Yes  
 Frame=78 Transfer=Yes  
 Frame=79 Transfer=Yes  
 Frame=80 Transfer=Yes  
 Frame=81 Transfer=Yes  
 Frame=82 Transfer=Yes  
 Frame=83 Transfer=Yes  
 Frame=84 Transfer=Yes  
 Frame=85 Transfer=Yes  
 Frame=86 Transfer=Yes  
 Frame=87 Transfer=Yes  
 Frame=88 Transfer=Yes  
 Frame=89 Transfer=Yes  
 Frame=90 Transfer=Yes  
 Frame=91 Transfer=Yes  
 Frame=92 Transfer=Yes  
 Frame=93 Transfer=Yes  
 Frame=94 Transfer=Yes  
 Frame=95 Transfer=Yes  
 Frame=96 Transfer=Yes  
 Frame=97 Transfer=Yes  
 Frame=98 Transfer=Yes  
 Frame=99 Transfer=Yes  
 Frame=100 Transfer=Yes  
 Frame=101 Transfer=Yes  
 Frame=102 Transfer=Yes  
 Frame=103 Transfer=Yes  
 Frame=104 Transfer=Yes  
 Frame=105 Transfer=Yes  
 Frame=106 Transfer=Yes  
 Frame=107 Transfer=Yes  
 Frame=108 Transfer=Yes  
 Frame=109 Transfer=Yes  
 Frame=110 Transfer=Yes  
 Frame=112 Transfer=Yes  
 Frame=113 Transfer=Yes  
 Frame=114 Transfer=Yes  
 Frame=115 Transfer=Yes



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Frame=116 Transfer=Yes  
 Frame=117 Transfer=Yes  
 Frame=118 Transfer=Yes  
 Frame=119 Transfer=Yes  
 Frame=120 Transfer=Yes  
 Frame=121 Transfer=Yes  
 Frame=122 Transfer=Yes  
 Frame=123 Transfer=Yes  
 Frame=124 Transfer=Yes  
 Frame=125 Transfer=Yes  
 Frame=126 Transfer=Yes  
 Frame=127 Transfer=Yes  
 Frame=128 Transfer=Yes  
 Frame=129 Transfer=Yes  
 Frame=130 Transfer=Yes  
 Frame=131 Transfer=Yes  
 Frame=132 Transfer=Yes  
 Frame=133 Transfer=Yes  
 Frame=134 Transfer=Yes  
 Frame=135 Transfer=Yes  
 Frame=136 Transfer=Yes  
 Frame=137 Transfer=Yes  
 Frame=138 Transfer=Yes  
 Frame=139 Transfer=Yes  
 Frame=140 Transfer=Yes  
 Frame=141 Transfer=Yes  
 Frame=142 Transfer=Yes  
 Frame=143 Transfer=Yes  
 Frame=144 Transfer=Yes  
 Frame=145 Transfer=Yes  
 Frame=146 Transfer=Yes  
 Frame=147 Transfer=Yes  
 Frame=148 Transfer=Yes  
 Frame=149 Transfer=Yes  
 Frame=150 Transfer=Yes  
 Frame=151 Transfer=Yes  
 Frame=152 Transfer=Yes  
 Frame=153 Transfer=Yes  
 Frame=154 Transfer=Yes  
 Frame=155 Transfer=Yes  
 Frame=156 Transfer=Yes  
 Frame=157 Transfer=Yes  
 Frame=158 Transfer=Yes  
 Frame=159 Transfer=Yes  
 Frame=160 Transfer=Yes  
 Frame=161 Transfer=Yes  
 Frame=162 Transfer=Yes  
 Frame=163 Transfer=Yes  
 Frame=164 Transfer=Yes  
 Frame=165 Transfer=Yes  
 Frame=166 Transfer=Yes  
 Frame=167 Transfer=Yes  
 Frame=168 Transfer=Yes  
 Frame=169 Transfer=Yes  
 Frame=170 Transfer=Yes



Frame=171 Transfer=Yes  
Frame=172 Transfer=Yes  
Frame=173 Transfer=Yes  
Frame=174 Transfer=Yes  
Frame=175 Transfer=Yes  
Frame=176 Transfer=Yes

TABLE: "FRAME OUTPUT STATION ASSIGNMENTS"

|          |                        |                |                 |                 |
|----------|------------------------|----------------|-----------------|-----------------|
| Frame=1  | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=2  | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=3  | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=5  | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=6  | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=7  | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=8  | StationType=MaxStaSpcg | MaxStaSpcg=0.5 | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=9  | StationType=MaxStaSpcg | MaxStaSpcg=0.5 | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=10 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=11 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=12 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=15 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=16 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=17 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=18 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=19 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=20 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=21 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=22 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=23 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=24 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=25 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=26 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=27 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=28 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=29 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=30 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=31 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=32 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=33 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=34 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=35 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=36 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=37 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=38 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=39 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=40 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=41 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=42 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=43 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=44 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=45 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=46 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=47 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=48 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=49 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=50 | StationType=MinNumSta  | MinNumSta=3    | AddAtElmInt=Yes | AddAtPtLoad=Yes |





385



|           |                       |             |                 |                 |
|-----------|-----------------------|-------------|-----------------|-----------------|
| Frame=162 | StationType=MinNumSta | MinNumSta=3 | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=163 | StationType=MinNumSta | MinNumSta=3 | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=164 | StationType=MinNumSta | MinNumSta=3 | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=165 | StationType=MinNumSta | MinNumSta=3 | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=166 | StationType=MinNumSta | MinNumSta=3 | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=167 | StationType=MinNumSta | MinNumSta=3 | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=168 | StationType=MinNumSta | MinNumSta=3 | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=169 | StationType=MinNumSta | MinNumSta=3 | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=170 | StationType=MinNumSta | MinNumSta=3 | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=171 | StationType=MinNumSta | MinNumSta=3 | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=172 | StationType=MinNumSta | MinNumSta=3 | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=173 | StationType=MinNumSta | MinNumSta=3 | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=174 | StationType=MinNumSta | MinNumSta=3 | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=175 | StationType=MinNumSta | MinNumSta=3 | AddAtElmInt=Yes | AddAtPtLoad=Yes |
| Frame=176 | StationType=MinNumSta | MinNumSta=3 | AddAtElmInt=Yes | AddAtPtLoad=Yes |

TABLE: "FRAME SECTION ASSIGNMENTS"

|          |                 |                |                 |
|----------|-----------------|----------------|-----------------|
| Frame=1  | AutoSelect=N.A. | AnalSect=M1    | MatProp=Default |
| Frame=2  | AutoSelect=N.A. | AnalSect=M1    | MatProp=Default |
| Frame=3  | AutoSelect=N.A. | AnalSect=M2    | MatProp=Default |
| Frame=5  | AutoSelect=N.A. | AnalSect=M3    | MatProp=Default |
| Frame=6  | AutoSelect=N.A. | AnalSect=M2    | MatProp=Default |
| Frame=7  | AutoSelect=N.A. | AnalSect=M1    | MatProp=Default |
| Frame=8  | AutoSelect=N.A. | AnalSect=TRABE | MatProp=Default |
| Frame=9  | AutoSelect=N.A. | AnalSect=TRABE | MatProp=Default |
| Frame=10 | AutoSelect=N.A. | AnalSect=M3    | MatProp=Default |
| Frame=11 | AutoSelect=N.A. | AnalSect=M3    | MatProp=Default |
| Frame=12 | AutoSelect=N.A. | AnalSect=M2    | MatProp=Default |
| Frame=15 | AutoSelect=N.A. | AnalSect=P80   | MatProp=Default |
| Frame=16 | AutoSelect=N.A. | AnalSect=P80   | MatProp=Default |
| Frame=17 | AutoSelect=N.A. | AnalSect=P80   | MatProp=Default |
| Frame=18 | AutoSelect=N.A. | AnalSect=P80   | MatProp=Default |
| Frame=19 | AutoSelect=N.A. | AnalSect=P80   | MatProp=Default |
| Frame=20 | AutoSelect=N.A. | AnalSect=P80   | MatProp=Default |
| Frame=21 | AutoSelect=N.A. | AnalSect=P80   | MatProp=Default |
| Frame=22 | AutoSelect=N.A. | AnalSect=P80   | MatProp=Default |
| Frame=23 | AutoSelect=N.A. | AnalSect=P80   | MatProp=Default |
| Frame=24 | AutoSelect=N.A. | AnalSect=P80   | MatProp=Default |
| Frame=25 | AutoSelect=N.A. | AnalSect=P80   | MatProp=Default |
| Frame=26 | AutoSelect=N.A. | AnalSect=P80   | MatProp=Default |
| Frame=27 | AutoSelect=N.A. | AnalSect=P80   | MatProp=Default |
| Frame=28 | AutoSelect=N.A. | AnalSect=P80   | MatProp=Default |
| Frame=29 | AutoSelect=N.A. | AnalSect=P80   | MatProp=Default |
| Frame=30 | AutoSelect=N.A. | AnalSect=P80   | MatProp=Default |
| Frame=31 | AutoSelect=N.A. | AnalSect=P80   | MatProp=Default |
| Frame=32 | AutoSelect=N.A. | AnalSect=P80   | MatProp=Default |
| Frame=33 | AutoSelect=N.A. | AnalSect=P80   | MatProp=Default |
| Frame=34 | AutoSelect=N.A. | AnalSect=P80   | MatProp=Default |
| Frame=35 | AutoSelect=N.A. | AnalSect=P80   | MatProp=Default |
| Frame=36 | AutoSelect=N.A. | AnalSect=P80   | MatProp=Default |
| Frame=37 | AutoSelect=N.A. | AnalSect=P80   | MatProp=Default |
| Frame=38 | AutoSelect=N.A. | AnalSect=P80   | MatProp=Default |
| Frame=39 | AutoSelect=N.A. | AnalSect=P80   | MatProp=Default |
| Frame=40 | AutoSelect=N.A. | AnalSect=P80   | MatProp=Default |
| Frame=41 | AutoSelect=N.A. | AnalSect=P80   | MatProp=Default |

|          |                 |              |                 |
|----------|-----------------|--------------|-----------------|
| Frame=42 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=43 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=44 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=45 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=46 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=47 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=48 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=49 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=50 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=51 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=52 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=53 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=54 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=55 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=56 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=57 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=58 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=59 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=60 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=61 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=62 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=63 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=64 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=65 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=66 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=67 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=68 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=69 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=70 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=71 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=72 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=73 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=74 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=75 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=76 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=77 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=78 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=79 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=80 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=81 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=82 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=83 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=84 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=85 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=86 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=87 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=88 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=89 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=90 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=91 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=92 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=93 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=94 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=95 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |
| Frame=96 | AutoSelect=N.A. | AnalSect=P80 | MatProp=Default |

Frame=97 AutoSelect=N.A. AnalSect=P80 MatProp=Default  
Frame=98 AutoSelect=N.A. AnalSect=P80 MatProp=Default  
Frame=99 AutoSelect=N.A. AnalSect=P80 MatProp=Default  
Frame=100 AutoSelect=N.A. AnalSect=P80 MatProp=Default  
Frame=101 AutoSelect=N.A. AnalSect=P80 MatProp=Default  
Frame=102 AutoSelect=N.A. AnalSect=P80 MatProp=Default  
Frame=103 AutoSelect=N.A. AnalSect=P80 MatProp=Default  
Frame=104 AutoSelect=N.A. AnalSect=P80 MatProp=Default  
Frame=105 AutoSelect=N.A. AnalSect=P80 MatProp=Default  
Frame=106 AutoSelect=N.A. AnalSect=P80 MatProp=Default  
Frame=107 AutoSelect=N.A. AnalSect=P80 MatProp=Default  
Frame=108 AutoSelect=N.A. AnalSect=P80 MatProp=Default  
Frame=109 AutoSelect=N.A. AnalSect=P80 MatProp=Default  
Frame=110 AutoSelect=N.A. AnalSect=P80 MatProp=Default  
Frame=112 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=113 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=114 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=115 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=116 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=117 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=118 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=119 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=120 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=121 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=122 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=123 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=124 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=125 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=126 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=127 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=128 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=129 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=130 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=131 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=132 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=133 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=134 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=135 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=136 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=137 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=138 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=139 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=140 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=141 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=142 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=143 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=144 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=145 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=146 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=147 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=148 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=149 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=150 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=151 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=152 AutoSelect=N.A. AnalSect=P100 MatProp=Default

Frame=153 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=154 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=155 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=156 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=157 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=158 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=159 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=160 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=161 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=162 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=163 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=164 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=165 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=166 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=167 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=168 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=169 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=170 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=171 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=172 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=173 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=174 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=175 AutoSelect=N.A. AnalSect=P100 MatProp=Default  
Frame=176 AutoSelect=N.A. AnalSect=P100 MatProp=Default

TABLE: "FRAME SECTION PROPERTIES 01 - GENERAL"

SectionName=M1 Material="f<sub>c</sub>=300kg/cm<sup>2</sup>" Shape=Rectangular t<sub>3</sub>=0.7 t<sub>2</sub>=1.2 Area=0.84  
TorsConst=0.087265516288098 I<sub>33</sub>=0.0343 I<sub>22</sub>=0.1008 I<sub>23</sub>=0 AS<sub>2</sub>=0.7 AS<sub>3</sub>=0.7 S<sub>33</sub>=0.098 S<sub>22</sub>=0.168  
Z<sub>33</sub>=0.147 Z<sub>22</sub>=0.252 \_  
R<sub>33</sub>=0.202072594216369 R<sub>22</sub>=0.346410161513775 Color=Yellow FromFile=No AMod=1 A2Mod=1  
A3Mod=1 JMod=1 I2Mod=1 I3Mod=1 MMod=1 WMod=1 Notes="Added 20/08/2021 02:45:32 p. m."  
SectionName=M2 Material="f<sub>c</sub>=300kg/cm<sup>2</sup>" Shape=Rectangular t<sub>3</sub>=1.6 t<sub>2</sub>=1.2 Area=1.92  
TorsConst=0.49762575 I<sub>33</sub>=0.4096 I<sub>22</sub>=0.2304 I<sub>23</sub>=0 AS<sub>2</sub>=1.6 AS<sub>3</sub>=1.6 S<sub>33</sub>=0.512 S<sub>22</sub>=0.384 Z<sub>33</sub>=0.768  
Z<sub>22</sub>=0.576 \_  
R<sub>33</sub>=0.461880215351701 R<sub>22</sub>=0.346410161513775 Color=16744448 FromFile=No AMod=1 A2Mod=1  
A3Mod=1 JMod=1 I2Mod=1 I3Mod=1 MMod=1 WMod=1 Notes="Added 20/08/2021 02:45:42 p. m."  
SectionName=M3 Material="f<sub>c</sub>=300kg/cm<sup>2</sup>" Shape=Rectangular t<sub>3</sub>=0.7 t<sub>2</sub>=1.6 Area=1.12  
TorsConst=0.132666270127614 I<sub>33</sub>=0.0457333333333333 I<sub>22</sub>=0.2389333333333333 I<sub>23</sub>=0  
AS<sub>2</sub>=0.9333333333333333 AS<sub>3</sub>=0.9333333333333333 \_  
S<sub>33</sub>=0.1306666666666667 S<sub>22</sub>=0.2986666666666667 Z<sub>33</sub>=0.196 Z<sub>22</sub>=0.448 R<sub>33</sub>=0.202072594216369  
R<sub>22</sub>=0.461880215351701 Color=8421631 FromFile=No AMod=1 A2Mod=1 A3Mod=1 JMod=1 I2Mod=1  
I3Mod=1 MMod=1 WMod=1 Notes="Added 20/08/2021 02:45:46 p. m."  
SectionName="MASTIL A2" Material="f<sub>c</sub>=300kg/cm<sup>2</sup>" Shape="SD Section" Area=2.00685386511966  
TorsConst=0.522528629658512 I<sub>33</sub>=0.42812882455886 I<sub>22</sub>=0.240822463814359 I<sub>23</sub>=0 AS<sub>2</sub>=1.67238649527428  
AS<sub>3</sub>=1.67238649527428 \_  
S<sub>33</sub>=0.535161030698575 S<sub>22</sub>=0.401370773023931 Z<sub>33</sub>=0.719943297166594 Z<sub>22</sub>=0.539957472874945  
R<sub>33</sub>=0.461880215351701 R<sub>22</sub>=0.346410161513775 Color=Cyan FromFile=No AMod=1 A2Mod=1 A3Mod=1  
JMod=1 I2Mod=1 I3Mod=1 \_  
MMod=1 WMod=1 Notes="Added 03/12/2021 01:37:35 p. m."  
SectionName=P100 Material="f<sub>c</sub>=300kg/cm<sup>2</sup>" Shape=Circle t<sub>3</sub>=1 Area=0.785398163397448  
TorsConst=0.098174770424681 I<sub>33</sub>=0.0490873852123405 I<sub>22</sub>=0.0490873852123405 I<sub>23</sub>=0  
AS<sub>2</sub>=0.706858347057703 AS<sub>3</sub>=0.706858347057703 \_  
S<sub>33</sub>=0.098174770424681 S<sub>22</sub>=0.098174770424681 Z<sub>33</sub>=0.1666666666666667 Z<sub>22</sub>=0.1666666666666667  
R<sub>33</sub>=0.25 R<sub>22</sub>=0.25 Color=8453888 FromFile=No AMod=1 A2Mod=1 A3Mod=1 JMod=1 I2Mod=1 I3Mod=1  
MMod=1 WMod=1 Notes="Added 16/12/2021 03:13:38 p. m."



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

SectionName=P80 Material="f'c=300kg/cm2" Shape=Circle t3=0.8 Area=0.502654824574367  
TorsConst=0.0402123859659494 I33=0.0201061929829747 I22=0.0201061929829747 I23=0  
AS2=0.45238934211693 AS3=0.45238934211693 \_

S33=0.0502654824574367 S22=0.0502654824574367 Z33=0.08533333333333334  
Z22=0.08533333333333334 R33=0.2 R22=0.2 Color=Red FromFile=No AMod=1 A2Mod=1 A3Mod=1 JMod=1  
I2Mod=1 I3Mod=1 MMod=1 WMod=1 Notes="Added 16/12/2021 03:09:04 p. m."

SectionName=TRABE Material="f'c=300kg/cm2" Shape=Rectangular t3=1.5 t2=1 Area=1.5  
TorsConst=0.293456790123457 I33=0.28125 I22=0.125 I23=0 AS2=1.25 AS3=1.25 S33=0.375 S22=0.25  
Z33=0.5625 Z22=0.375 \_

R33=0.433012701892219 R22=0.288675134594813 Color=16744703 FromFile=No AMod=1 A2Mod=1  
A3Mod=1 JMod=1 I2Mod=1 I3Mod=1 MMod=1 WMod=1 Notes="Added 25/08/2021 12:02:34 p. m."

#### TABLE: "FRAME SECTION PROPERTIES 02 - CONCRETE COLUMN"

SectionName=M1 RebarMatL=A615Gr60 RebarMatC=A615Gr60 ReinfConfig=Rectangular LatReinf=Ties  
Cover=0.05 NumBars3Dir=10 NumBars2Dir=10 BarSizeL=#8 BarSizeC=#4 SpacingC=0.15 NumCBars2=6  
NumCBars3=6 ReinfType=Design

SectionName=M2 RebarMatL=A615Gr60 RebarMatC=A615Gr60 ReinfConfig=Rectangular LatReinf=Ties  
Cover=0.05 NumBars3Dir=10 NumBars2Dir=10 BarSizeL=#8 BarSizeC=#4 SpacingC=0.15 NumCBars2=6  
NumCBars3=6 ReinfType=Design

SectionName=M3 RebarMatL=A615Gr60 RebarMatC=A615Gr60 ReinfConfig=Rectangular LatReinf=Ties  
Cover=0.05 NumBars3Dir=10 NumBars2Dir=10 BarSizeL=#8 BarSizeC=#4 SpacingC=0.15 NumCBars2=6  
NumCBars3=6 ReinfType=Design

SectionName=P100 RebarMatL=A615Gr60 RebarMatC=A615Gr60 ReinfConfig=Circular LatReinf=Ties  
Cover=0.05 NumBarsCirc=20 BarSizeL=25M BarSizeC=15M SpacingC=0.15 ReinfType=Design

SectionName=P80 RebarMatL=A615Gr60 RebarMatC=A615Gr60 ReinfConfig=Circular LatReinf=Ties  
Cover=0.05 NumBarsCirc=14 BarSizeL=25M BarSizeC=15M SpacingC=0.15 ReinfType=Design

#### TABLE: "FRAME SECTION PROPERTIES 03 - CONCRETE BEAM"

SectionName=TRABE RebarMatL=A615Gr60 RebarMatC=A615Gr60 TopCover=0.05 BotCover=0.05  
TopLeftArea=1E-07 TopRightArea=1E-07 BotLeftArea=1E-07 BotRightArea=1E-07

#### TABLE: "FRAME SECTION PROPERTIES 13 - TIME DEPENDENT"

SectionName=M1 TypeSize=Auto AutoSFSize=1

SectionName=M2 TypeSize=Auto AutoSFSize=1

SectionName=M3 TypeSize=Auto AutoSFSize=1

SectionName="MASTIL A2" TypeSize=Auto AutoSFSize=1

SectionName=P100 TypeSize=Auto AutoSFSize=1

SectionName=P80 TypeSize=Auto AutoSFSize=1

SectionName=TRABE TypeSize=Auto AutoSFSize=1

#### TABLE: "FUNCTION - PLOT FUNCTIONS"

PlotFunc="Input Energy" Type=Energy Component=Input Mode=All

#### TABLE: "FUNCTION - POWER SPECTRAL DENSITY - USER"

Name=UNIFPSD Frequency=0 Value=1

Name=UNIFPSD Frequency=1 Value=1

#### TABLE: "FUNCTION - RESPONSE SPECTRUM - USER"

Name=UNIFRS Period=0 Accel=1 FuncDamp=0.05

Name=UNIFRS Period=1 Accel=1

#### TABLE: "FUNCTION - STEADY STATE - USER"

Name=UNIFSS Frequency=0 Value=1

Name=UNIFSS Frequency=1 Value=1



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

TABLE: "FUNCTION - TIME HISTORY - USER"

Name=RAMPTH Time=0 Value=0  
Name=RAMPTH Time=1 Value=1  
Name=RAMPTH Time=4 Value=1  
Name=UNIFTH Time=0 Value=1  
Name=UNIFTH Time=1 Value=1

TABLE: "GRID LINES"

CoordSys=GLOBAL AxisDir=X GridID=A XXYZCoord=0 LineType=Primary LineColor=Gray4 Visible=Yes  
BubbleLoc=End AllVisible=Yes BubbleSize=0.5  
CoordSys=GLOBAL AxisDir=X GridID=B XXYZCoord=14.8 LineType=Primary LineColor=Gray4 Visible=Yes  
BubbleLoc=End  
CoordSys=GLOBAL AxisDir=X GridID=C XXYZCoord=22.75 LineType=Primary LineColor=Gray4 Visible=Yes  
BubbleLoc=End  
CoordSys=GLOBAL AxisDir=Y XXYZCoord=0 LineType=Primary LineColor=Gray4 Visible=Yes  
BubbleLoc=End  
CoordSys=GLOBAL AxisDir=Z GridID=Z0 XXYZCoord=-1 LineType=Primary LineColor=Gray4 Visible=Yes  
BubbleLoc=End  
CoordSys=GLOBAL AxisDir=Z GridID=Z1 XXYZCoord=0 LineType=Primary LineColor=Gray4 Visible=Yes  
BubbleLoc=End  
CoordSys=GLOBAL AxisDir=Z GridID=Z2 XXYZCoord=8.7 LineType=Primary LineColor=Gray4 Visible=Yes  
BubbleLoc=End  
CoordSys=GLOBAL AxisDir=Z GridID=Z3 XXYZCoord=12 LineType=Primary LineColor=Gray4 Visible=Yes  
BubbleLoc=End

TABLE: "GROUPS 1 - DEFINITIONS"

GroupName=All Selection=Yes SectionCut=Yes Steel=Yes Concrete=Yes Aluminum=Yes ColdFormed=Yes  
Stage=Yes Bridge=Yes AutoSeismic=No AutoWind=No SelDesSteel=No SelDesAlum=No SelDesCold=No  
MassWeight=Yes Color=Red

TABLE: "JOINT COORDINATES"

Joint=1 CoordSys=GLOBAL CoordType=Cartesian XorR=22.75 Y=0 Z=7 SpecialJt=No  
Joint=2 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=0 Z=10.2 SpecialJt=No  
Joint=3 CoordSys=GLOBAL CoordType=Cartesian XorR=0 Y=0 Z=7 SpecialJt=No  
Joint=4 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=2.2 Z=-1 SpecialJt=Yes GUID=b0786d76-034e-4f55-ae40-3e1883d40390  
Joint=5 CoordSys=GLOBAL CoordType=Cartesian XorR=22.75 Y=0 Z=0 SpecialJt=No  
Joint=6 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=0 Z=0 SpecialJt=No  
Joint=7 CoordSys=GLOBAL CoordType=Cartesian XorR=0 Y=0 Z=0 SpecialJt=No  
Joint=8 CoordSys=GLOBAL CoordType=Cartesian XorR=22.75 Y=0 Z=-1 SpecialJt=No  
Joint=9 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=0 Z=-1 SpecialJt=No  
Joint=10 CoordSys=GLOBAL CoordType=Cartesian XorR=0 Y=0 Z=-1 SpecialJt=No  
Joint=11 CoordSys=GLOBAL CoordType=Cartesian XorR=0 Y=0 Z=5 SpecialJt=No  
Joint=12 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=0 Z=5 SpecialJt=No  
Joint=13 CoordSys=GLOBAL CoordType=Cartesian XorR=22.75 Y=0 Z=5 SpecialJt=No  
Joint=14 CoordSys=GLOBAL CoordType=Cartesian XorR=-2.2 Y=2.2 Z=-1 SpecialJt=Yes GUID=4ca7a019-cf02-40e4-87ce-cdefe4b8d06b  
Joint=15 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=-2.2 Z=-1 SpecialJt=Yes GUID=be649e0e-1f04-45a0-b783-da1c8cf072f4  
Joint=16 CoordSys=GLOBAL CoordType=Cartesian XorR=-2.2 Y=-2.2 Z=-1 SpecialJt=Yes GUID=3eb241d5-1232-4b3b-9603-8c128900276a  
Joint=17 CoordSys=GLOBAL CoordType=Cartesian XorR=-2.1 Y=-2.2 Z=-1 SpecialJt=No GUID=8769ffb2-be84-483a-9ef1-b9652729e104  
Joint=18 CoordSys=GLOBAL CoordType=Cartesian XorR=-2.1 Y=-2.1 Z=-1 SpecialJt=No GUID=d6d328af-052a-4284-b2cb-e4f097a14cc8

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                                         |                                                                       |
|---------------------------------------------------------|-----------------------------------------------------------------------|
| Joint=19 CoordSys=GLOBAL<br>527c-4f10-8984-cd5e2b0134fa | CoordType=Cartesian XorR=-2.2 Y=-2.1 Z=-1 SpecialJt=No GUID=80c88123- |
| Joint=20 CoordSys=GLOBAL<br>829f-424a-ba95-41f936df5c3d | CoordType=Cartesian XorR=-2.1 Y=-2 Z=-1 SpecialJt=No GUID=69bc7620-   |
| Joint=21 CoordSys=GLOBAL<br>2b82-4a3d-828b-1a09e77380b5 | CoordType=Cartesian XorR=-2.2 Y=-2 Z=-1 SpecialJt=No GUID=93db9e17-   |
| Joint=22 CoordSys=GLOBAL<br>75ec-4564-9ec2-10031dda075a | CoordType=Cartesian XorR=-2.1 Y=-1.9 Z=-1 SpecialJt=No GUID=28e2bcc6- |
| Joint=23 CoordSys=GLOBAL<br>0e73-4e1c-943a-c7c599547435 | CoordType=Cartesian XorR=-2.2 Y=-1.9 Z=-1 SpecialJt=No GUID=127688cb- |
| Joint=24 CoordSys=GLOBAL<br>2812-419b-9369-d72fd1ceeebb | CoordType=Cartesian XorR=-2.1 Y=-1.8 Z=-1 SpecialJt=No GUID=91d42b21- |
| Joint=25 CoordSys=GLOBAL<br>4cb5-4ce7-809c-fe84eebb7706 | CoordType=Cartesian XorR=-2.2 Y=-1.8 Z=-1 SpecialJt=No GUID=179a0b7b- |
| Joint=26 CoordSys=GLOBAL<br>e111-447b-a520-5cf3eb87e829 | CoordType=Cartesian XorR=-2.1 Y=-1.7 Z=-1 SpecialJt=No GUID=b75b8cb2- |
| Joint=27 CoordSys=GLOBAL<br>0e36-49fc-8ee5-bc560c7b22f8 | CoordType=Cartesian XorR=-2.2 Y=-1.7 Z=-1 SpecialJt=No GUID=b3718430- |
| Joint=28 CoordSys=GLOBAL<br>92bf-4eb1-a2b6-760a10aac8aa | CoordType=Cartesian XorR=-2.1 Y=-1.6 Z=-1 SpecialJt=No GUID=6e1cec10- |
| Joint=29 CoordSys=GLOBAL<br>41be-4d25-b14c-d1676a22a208 | CoordType=Cartesian XorR=-2.2 Y=-1.6 Z=-1 SpecialJt=No GUID=888a98c8- |
| Joint=30 CoordSys=GLOBAL<br>d3ac-4fc2-9e3c-90f362f83589 | CoordType=Cartesian XorR=-2.1 Y=-1.5 Z=-1 SpecialJt=No GUID=62c7b9f6- |
| Joint=31 CoordSys=GLOBAL<br>7ba6-4762-bf4a-484b2749f42f | CoordType=Cartesian XorR=-2.2 Y=-1.5 Z=-1 SpecialJt=No GUID=5b9034fa- |
| Joint=32 CoordSys=GLOBAL<br>ac04-4242-bb7c-51cc4eb5e086 | CoordType=Cartesian XorR=-2.1 Y=-1.4 Z=-1 SpecialJt=No GUID=a71ad56f- |
| Joint=33 CoordSys=GLOBAL<br>f2da-4fa2-872d-6fbca401236c | CoordType=Cartesian XorR=-2.2 Y=-1.4 Z=-1 SpecialJt=No GUID=4348b510- |
| Joint=34 CoordSys=GLOBAL<br>1ba3-4441-9135-d4be8bc9e9ae | CoordType=Cartesian XorR=-2.1 Y=-1.3 Z=-1 SpecialJt=No GUID=4dea08dc- |
| Joint=35 CoordSys=GLOBAL<br>5b9f-490c-9c2b-597369a8176d | CoordType=Cartesian XorR=-2.2 Y=-1.3 Z=-1 SpecialJt=No GUID=562163fb- |
| Joint=36 CoordSys=GLOBAL<br>47d4-407e-9a19-804a15ba5be4 | CoordType=Cartesian XorR=-2.1 Y=-1.2 Z=-1 SpecialJt=No GUID=56c4f743- |
| Joint=37 CoordSys=GLOBAL<br>bc44-423b-8190-6b0f6d9def78 | CoordType=Cartesian XorR=-2.2 Y=-1.2 Z=-1 SpecialJt=No GUID=155f2a54- |
| Joint=38 CoordSys=GLOBAL<br>5779-47f3-a364-ae4f62631f4b | CoordType=Cartesian XorR=-2.1 Y=-1.1 Z=-1 SpecialJt=No GUID=43c47778- |
| Joint=39 CoordSys=GLOBAL<br>365a-49f0-acf0-659f1e95e577 | CoordType=Cartesian XorR=-2.2 Y=-1.1 Z=-1 SpecialJt=No GUID=6f446b7d- |
| Joint=40 CoordSys=GLOBAL<br>ceb7-4ee3-9fb7-f6b9ad753fda | CoordType=Cartesian XorR=-2.1 Y=-1 Z=-1 SpecialJt=No GUID=37f9b3aa-   |
| Joint=41 CoordSys=GLOBAL<br>9961-47b9-9361-785ba40bad60 | CoordType=Cartesian XorR=-2.2 Y=-1 Z=-1 SpecialJt=No GUID=185a4d43-   |
| Joint=42 CoordSys=GLOBAL<br>cdc6-4877-a855-1a64e6f8ed9f | CoordType=Cartesian XorR=-2.1 Y=-0.9 Z=-1 SpecialJt=No GUID=1a636c5e- |
| Joint=43 CoordSys=GLOBAL<br>acc8-4872-a414-f29a17b8f1c9 | CoordType=Cartesian XorR=-2.2 Y=-0.9 Z=-1 SpecialJt=No GUID=5a04d195- |
| Joint=44 CoordSys=GLOBAL<br>7ed9-42a8-b6fb-ad56f0e4741f | CoordType=Cartesian XorR=-2.1 Y=-0.8 Z=-1 SpecialJt=No GUID=570ed5a3- |
| Joint=45 CoordSys=GLOBAL<br>53fd-4230-9829-1f9a98c744e1 | CoordType=Cartesian XorR=-2.2 Y=-0.8 Z=-1 SpecialJt=No GUID=a98ae052- |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                                                       |                     |           |                       |      |              |                |
|-----------------------------------------------------------------------|---------------------|-----------|-----------------------|------|--------------|----------------|
| Joint=46 CoordSys=GLOBAL<br>280b-4235-8499-a124d45597f9               | CoordType=Cartesian | XorR=-2.1 | Y=-0.7                | Z=-1 | SpecialJt=No | GUID=dcc65480- |
| Joint=47 CoordSys=GLOBAL<br>b778-4037-b59b-c41d82b4eab1               | CoordType=Cartesian | XorR=-2.2 | Y=-0.7                | Z=-1 | SpecialJt=No | GUID=88e8a143- |
| Joint=48 CoordSys=GLOBAL<br>4e66-42a6-9063-adb61e011351               | CoordType=Cartesian | XorR=-2.1 | Y=-0.6                | Z=-1 | SpecialJt=No | GUID=fad3a75e- |
| Joint=49 CoordSys=GLOBAL<br>98d9-4c21-92fc-fada2b5067ce               | CoordType=Cartesian | XorR=-2.2 | Y=-0.6                | Z=-1 | SpecialJt=No | GUID=2f1dce2b- |
| Joint=50 CoordSys=GLOBAL<br>55a3-4177-9467-5368725f479a               | CoordType=Cartesian | XorR=-2.1 | Y=-0.5                | Z=-1 | SpecialJt=No | GUID=1f99e53f- |
| Joint=51 CoordSys=GLOBAL<br>4ab1-4d5c-9fbf-bfebb953cd9c               | CoordType=Cartesian | XorR=-2.2 | Y=-0.5                | Z=-1 | SpecialJt=No | GUID=bd5fe8a2- |
| Joint=52 CoordSys=GLOBAL<br>b279-4157-8cb2-ddd04b985e7d               | CoordType=Cartesian | XorR=-2.1 | Y=-0.4                | Z=-1 | SpecialJt=No | GUID=de119e54- |
| Joint=53 CoordSys=GLOBAL<br>c550-4fa3-82a2-f57785a14eff               | CoordType=Cartesian | XorR=-2.2 | Y=-0.4                | Z=-1 | SpecialJt=No | GUID=e23233e2- |
| Joint=54 CoordSys=GLOBAL<br>0c5a-4496-ba3e-1a513f9baf53               | CoordType=Cartesian | XorR=-2.1 | Y=-0.3                | Z=-1 | SpecialJt=No | GUID=39d236a2- |
| Joint=55 CoordSys=GLOBAL<br>830a-4ce6-a552-5a8be6834e59               | CoordType=Cartesian | XorR=-2.2 | Y=-0.3                | Z=-1 | SpecialJt=No | GUID=669276bb- |
| Joint=56 CoordSys=GLOBAL<br>d483-4f08-9c53-db193f2a0524               | CoordType=Cartesian | XorR=-2.1 | Y=-0.2                | Z=-1 | SpecialJt=No | GUID=9f48f529- |
| Joint=57 CoordSys=GLOBAL<br>04c1-491b-8645-02fc140c8b53               | CoordType=Cartesian | XorR=-2.2 | Y=-0.2                | Z=-1 | SpecialJt=No | GUID=1d23ccbb- |
| Joint=58 CoordSys=GLOBAL<br>GUID=4fa02ddd-8cb8-47f0-bb16-813adf4b02c4 | CoordType=Cartesian | XorR=-2.1 | Y=-0.0999999999999999 | Z=-1 | SpecialJt=No |                |
| Joint=59 CoordSys=GLOBAL<br>2672-40ad-9380-2a512c1deaa6               | CoordType=Cartesian | XorR=-2.2 | Y=-0.1                | Z=-1 | SpecialJt=No | GUID=eec82689- |
| Joint=60 CoordSys=GLOBAL<br>ce0b-458a-af6c-aeac83293e25               | CoordType=Cartesian | XorR=-2.1 | Y=0                   | Z=-1 | SpecialJt=No | GUID=ab56850e- |
| Joint=61 CoordSys=GLOBAL<br>026f-4126-9993-999072c7db40               | CoordType=Cartesian | XorR=-2.2 | Y=0                   | Z=-1 | SpecialJt=No | GUID=edb8ccaa- |
| Joint=62 CoordSys=GLOBAL<br>GUID=2b58bebd-113b-4c8f-9c7f-a175cf9d4249 | CoordType=Cartesian | XorR=-2.1 | Y=0.0999999999999999  | Z=-1 | SpecialJt=No |                |
| Joint=63 CoordSys=GLOBAL<br>a8a4-4dc6-81c4-9ef41c267f17               | CoordType=Cartesian | XorR=-2.2 | Y=0.1                 | Z=-1 | SpecialJt=No | GUID=69697e49- |
| Joint=64 CoordSys=GLOBAL<br>127e-43da-8a2a-3f2d6ad46eb3               | CoordType=Cartesian | XorR=-2.1 | Y=0.2                 | Z=-1 | SpecialJt=No | GUID=3c5e062d- |
| Joint=65 CoordSys=GLOBAL<br>164b-4f6e-99db-bca550074ecd               | CoordType=Cartesian | XorR=-2.2 | Y=0.2                 | Z=-1 | SpecialJt=No | GUID=002dfb19- |
| Joint=66 CoordSys=GLOBAL<br>511e-40fe-8fe7-568a08a6c7cd               | CoordType=Cartesian | XorR=-2.1 | Y=0.3                 | Z=-1 | SpecialJt=No | GUID=8e27e0b0- |
| Joint=67 CoordSys=GLOBAL<br>b2f4-4dc5-b2ef-366e49004a4b               | CoordType=Cartesian | XorR=-2.2 | Y=0.3                 | Z=-1 | SpecialJt=No | GUID=15f53e76- |
| Joint=68 CoordSys=GLOBAL<br>c5ce-42d7-971e-3d50465c3fd7               | CoordType=Cartesian | XorR=-2.1 | Y=0.4                 | Z=-1 | SpecialJt=No | GUID=15edc6d4- |
| Joint=69 CoordSys=GLOBAL<br>2df9-4188-8b27-4978560f6be2               | CoordType=Cartesian | XorR=-2.2 | Y=0.4                 | Z=-1 | SpecialJt=No | GUID=81dc4015- |
| Joint=70 CoordSys=GLOBAL<br>03d7-4f6c-bdd2-dec3e9963ab4               | CoordType=Cartesian | XorR=-2.1 | Y=0.5                 | Z=-1 | SpecialJt=No | GUID=5fe551b2- |
| Joint=71 CoordSys=GLOBAL<br>c2ab-465e-ab75-10e31db187ee               | CoordType=Cartesian | XorR=-2.2 | Y=0.5                 | Z=-1 | SpecialJt=No | GUID=890e16d8- |
| Joint=72 CoordSys=GLOBAL<br>3502-4f04-9d37-27f17df8746f               | CoordType=Cartesian | XorR=-2.1 | Y=0.6                 | Z=-1 | SpecialJt=No | GUID=7ee3a8d0- |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                                         |                     |           |       |      |              |                |
|---------------------------------------------------------|---------------------|-----------|-------|------|--------------|----------------|
| Joint=73 CoordSys=GLOBAL<br>e92c-493e-bdb2-d2027e8fceed | CoordType=Cartesian | XorR=-2.2 | Y=0.6 | Z=-1 | SpecialJt=No | GUID=0646b2f5- |
| Joint=74 CoordSys=GLOBAL<br>2f9d-488e-a456-af83968c73a2 | CoordType=Cartesian | XorR=-2.1 | Y=0.7 | Z=-1 | SpecialJt=No | GUID=645799c4- |
| Joint=75 CoordSys=GLOBAL<br>2b03-4698-b32f-d5450e93a45b | CoordType=Cartesian | XorR=-2.2 | Y=0.7 | Z=-1 | SpecialJt=No | GUID=80ffea1-  |
| Joint=76 CoordSys=GLOBAL<br>d129-4c3c-892a-3d0a88c9f42c | CoordType=Cartesian | XorR=-2.1 | Y=0.8 | Z=-1 | SpecialJt=No | GUID=1c00f171- |
| Joint=77 CoordSys=GLOBAL<br>1b49-4186-b0a6-da739cfecfcc | CoordType=Cartesian | XorR=-2.2 | Y=0.8 | Z=-1 | SpecialJt=No | GUID=84e1942a- |
| Joint=78 CoordSys=GLOBAL<br>8383-4c06-a0b5-f7cf461045cd | CoordType=Cartesian | XorR=-2.1 | Y=0.9 | Z=-1 | SpecialJt=No | GUID=9abade9c- |
| Joint=79 CoordSys=GLOBAL<br>d42a-410b-b632-5250955d475a | CoordType=Cartesian | XorR=-2.2 | Y=0.9 | Z=-1 | SpecialJt=No | GUID=1ac41aaf- |
| Joint=80 CoordSys=GLOBAL<br>1c7e-468f-b243-aa296f7e46e1 | CoordType=Cartesian | XorR=-2.1 | Y=1   | Z=-1 | SpecialJt=No | GUID=c4756732- |
| Joint=81 CoordSys=GLOBAL<br>11c6-49dc-8c6b-3ab399f297da | CoordType=Cartesian | XorR=-2.2 | Y=1   | Z=-1 | SpecialJt=No | GUID=976afb1f- |
| Joint=82 CoordSys=GLOBAL<br>83e5-44ac-bfd7-57ee956872e2 | CoordType=Cartesian | XorR=-2.1 | Y=1.1 | Z=-1 | SpecialJt=No | GUID=7676944d- |
| Joint=83 CoordSys=GLOBAL<br>612e-4f19-a8f0-69be1ad15ddd | CoordType=Cartesian | XorR=-2.2 | Y=1.1 | Z=-1 | SpecialJt=No | GUID=67930901- |
| Joint=84 CoordSys=GLOBAL<br>9c2b-420d-9fd7-a620a179b5e1 | CoordType=Cartesian | XorR=-2.1 | Y=1.2 | Z=-1 | SpecialJt=No | GUID=b42c7408- |
| Joint=85 CoordSys=GLOBAL<br>2864-4985-af2d-04c054ad889f | CoordType=Cartesian | XorR=-2.2 | Y=1.2 | Z=-1 | SpecialJt=No | GUID=aff67368- |
| Joint=86 CoordSys=GLOBAL<br>6165-4363-ab09-c99b436da4a5 | CoordType=Cartesian | XorR=-2.1 | Y=1.3 | Z=-1 | SpecialJt=No | GUID=67c215b3- |
| Joint=87 CoordSys=GLOBAL<br>6e72-427c-8695-6e87b0a119c6 | CoordType=Cartesian | XorR=-2.2 | Y=1.3 | Z=-1 | SpecialJt=No | GUID=469a85b9- |
| Joint=88 CoordSys=GLOBAL<br>15d9-49ec-93bb-3753f7101440 | CoordType=Cartesian | XorR=-2.1 | Y=1.4 | Z=-1 | SpecialJt=No | GUID=3e69f99e- |
| Joint=89 CoordSys=GLOBAL<br>e5b6-4cf3-8ac9-4ad78c72e88a | CoordType=Cartesian | XorR=-2.2 | Y=1.4 | Z=-1 | SpecialJt=No | GUID=5ce8ace0- |
| Joint=90 CoordSys=GLOBAL<br>912a-4a0d-90b1-482794686b14 | CoordType=Cartesian | XorR=-2.1 | Y=1.5 | Z=-1 | SpecialJt=No | GUID=928968f1- |
| Joint=91 CoordSys=GLOBAL<br>f20c-4a07-b8b2-16932bd5a9e4 | CoordType=Cartesian | XorR=-2.2 | Y=1.5 | Z=-1 | SpecialJt=No | GUID=80d8932e- |
| Joint=92 CoordSys=GLOBAL<br>5e37-45e1-aaba-81aa10d797d4 | CoordType=Cartesian | XorR=-2.1 | Y=1.6 | Z=-1 | SpecialJt=No | GUID=3d67ea0d- |
| Joint=93 CoordSys=GLOBAL<br>545b-4e04-8376-c78681077316 | CoordType=Cartesian | XorR=-2.2 | Y=1.6 | Z=-1 | SpecialJt=No | GUID=f726435d- |
| Joint=94 CoordSys=GLOBAL<br>f3bc-4737-949c-3aa481326d72 | CoordType=Cartesian | XorR=-2.1 | Y=1.7 | Z=-1 | SpecialJt=No | GUID=48ab3aac- |
| Joint=95 CoordSys=GLOBAL<br>b2e6-4e9d-9bb8-73e780c7d712 | CoordType=Cartesian | XorR=-2.2 | Y=1.7 | Z=-1 | SpecialJt=No | GUID=57e03251- |
| Joint=96 CoordSys=GLOBAL<br>0712-4a99-ac93-e754ea54b4f2 | CoordType=Cartesian | XorR=-2.1 | Y=1.8 | Z=-1 | SpecialJt=No | GUID=372c0777- |
| Joint=97 CoordSys=GLOBAL<br>385f-4456-9845-5a5bb46fc4f1 | CoordType=Cartesian | XorR=-2.2 | Y=1.8 | Z=-1 | SpecialJt=No | GUID=8ae7259e- |
| Joint=98 CoordSys=GLOBAL<br>0aba-48ef-bc16-cccc03f01e63 | CoordType=Cartesian | XorR=-2.1 | Y=1.9 | Z=-1 | SpecialJt=No | GUID=c33e1a9c- |
| Joint=99 CoordSys=GLOBAL<br>f7cb-4f07-87c7-b91757fa8668 | CoordType=Cartesian | XorR=-2.2 | Y=1.9 | Z=-1 | SpecialJt=No | GUID=33a9b33f- |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|           |                 |                     |           |                         |      |              |                                           |
|-----------|-----------------|---------------------|-----------|-------------------------|------|--------------|-------------------------------------------|
| Joint=100 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=-2.1 | Y=2                     | Z=-1 | SpecialJt=No | GUID=2f33311f-1d73-4e1c-8b4c-82a7a5ea3cf4 |
| Joint=101 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=-2.2 | Y=2                     | Z=-1 | SpecialJt=No | GUID=21c120f5-ec54-419d-9579-e69ca04d5fc1 |
| Joint=102 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=-2.1 | Y=2.1                   | Z=-1 | SpecialJt=No | GUID=ce8a0122-3ac6-4870-9143-565914a62f5f |
| Joint=103 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=-2.2 | Y=2.1                   | Z=-1 | SpecialJt=No | GUID=276af6c7-35b3-4f25-b1ae-bbd3690d2f19 |
| Joint=104 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=-2.1 | Y=2.2                   | Z=-1 | SpecialJt=No | GUID=48f81c74-33d5-41de-bf68-b03cbe1b78f1 |
| Joint=105 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=-2   | Y=-2.2                  | Z=-1 | SpecialJt=No | GUID=5c730a1a-0945-4f71-86a9-d8825c4a3468 |
| Joint=106 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=-2   | Y=-2.1                  | Z=-1 | SpecialJt=No | GUID=9aa49255-df4f-44b6-a37b-876de32641da |
| Joint=107 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=-2   | Y=-2                    | Z=-1 | SpecialJt=No | GUID=6f815865-0f47-4fac-b2f6-e6796be183ad |
| Joint=108 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=-2   | Y=-1.9                  | Z=-1 | SpecialJt=No | GUID=10ee9d81-b0f8-4509-997e-1df551f4edaa |
| Joint=109 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=-2   | Y=-1.8                  | Z=-1 | SpecialJt=No | GUID=39c5c022-800e-476f-ab97-ec26dbc6c1ab |
| Joint=110 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=-2   | Y=-1.7                  | Z=-1 | SpecialJt=No | GUID=48619fed-f373-482f-b6bd-c724689239fb |
| Joint=111 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=-2   | Y=-1.6                  | Z=-1 | SpecialJt=No | GUID=ef637a5a-4734-4a9f-adad-e95aea5a69ae |
| Joint=112 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=-2   | Y=-1.5                  | Z=-1 | SpecialJt=No | GUID=3a3a1589-63f9-4d95-86fd-2cb13b0248cf |
| Joint=113 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=-2   | Y=-1.4                  | Z=-1 | SpecialJt=No | GUID=f30ee3d5-6842-44df-9d68-59c829d538ba |
| Joint=114 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=-2   | Y=-1.3                  | Z=-1 | SpecialJt=No | GUID=4a9f3e9e-a442-4580-9c35-48dbfaa56c36 |
| Joint=115 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=-2   | Y=-1.2                  | Z=-1 | SpecialJt=No | GUID=5bd69cd2-39c6-419c-a2ed-844319f775a7 |
| Joint=116 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=-2   | Y=-1.1                  | Z=-1 | SpecialJt=No | GUID=612e8d1c-df9c-4166-8192-ba038729b5b3 |
| Joint=117 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=-2   | Y=-1                    | Z=-1 | SpecialJt=No | GUID=0eb497f5-5e64-451d-9d99-7c0373211a3d |
| Joint=118 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=-2   | Y=-0.9                  | Z=-1 | SpecialJt=No | GUID=e95a4a74-c6be-4dd9-b622-49f447cdd16  |
| Joint=119 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=-2   | Y=-0.8                  | Z=-1 | SpecialJt=No | GUID=0289191f-da92-4775-a0fd-d3015986c51e |
| Joint=120 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=-2   | Y=-0.7                  | Z=-1 | SpecialJt=No | GUID=c1a0459b-4eaf-4fa4-979f-b0d5b0822110 |
| Joint=121 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=-2   | Y=-0.6                  | Z=-1 | SpecialJt=No | GUID=b664d8c0-bd0e-44e4-8d81-2b70d4d6d841 |
| Joint=122 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=-2   | Y=-0.5                  | Z=-1 | SpecialJt=No | GUID=13d80296-c795-47d5-b901-cbc808054834 |
| Joint=123 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=-2   | Y=-0.4                  | Z=-1 | SpecialJt=No | GUID=68bee8a4-83e4-4671-8015-7a015e3df1b1 |
| Joint=124 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=-2   | Y=-0.3                  | Z=-1 | SpecialJt=No | GUID=d45b89aa-b3ca-413a-9bd0-98247ba58238 |
| Joint=125 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=-2   | Y=-0.2                  | Z=-1 | SpecialJt=No | GUID=7dfc5b3f-15c5-45c4-9a9d-199ad58554cf |
| Joint=126 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=-2   | Y=-0.099999999999999996 | Z=-1 | SpecialJt=No | GUID=f24f5bbb-0ec7-402f-b98a-e37b524eb2fa |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=127 CoordSys=GLOBAL CoordType=Cartesian XorR=-2 Y=0 Z=-1 SpecialJt=No GUID=ca14d939-c175-4481-9216-e51d0475a64e

Joint=128 CoordSys=GLOBAL CoordType=Cartesian XorR=-2 Y=0.099999999999999996 Z=-1 SpecialJt=No GUID=cf5fd01c-b3e7-4591-ae77-e7e4460ad0cd

Joint=129 CoordSys=GLOBAL CoordType=Cartesian XorR=-2 Y=0.2 Z=-1 SpecialJt=No GUID=cec04014-1fc4-48fe-8b4d-d52abdb172d8

Joint=130 CoordSys=GLOBAL CoordType=Cartesian XorR=-2 Y=0.3 Z=-1 SpecialJt=No GUID=689248ee-233c-4d8e-8423-da0a73300a59

Joint=131 CoordSys=GLOBAL CoordType=Cartesian XorR=-2 Y=0.4 Z=-1 SpecialJt=No GUID=4130c6d1-aaf9-40dc-9a08-7863a385a11f

Joint=132 CoordSys=GLOBAL CoordType=Cartesian XorR=-2 Y=0.5 Z=-1 SpecialJt=No GUID=2d02e712-6113-456a-a006-cd3db17186dd

Joint=133 CoordSys=GLOBAL CoordType=Cartesian XorR=-2 Y=0.6 Z=-1 SpecialJt=No GUID=3b8e4c62-a554-4882-8cb5-d6446ad221c4

Joint=134 CoordSys=GLOBAL CoordType=Cartesian XorR=-2 Y=0.7 Z=-1 SpecialJt=No GUID=99b5f098-3aab-4b62-8cd8-ff61f6ea9416

Joint=135 CoordSys=GLOBAL CoordType=Cartesian XorR=-2 Y=0.8 Z=-1 SpecialJt=No GUID=1b46ba2b-5501-4fd2-bec3-c1375ec5ee1f

Joint=136 CoordSys=GLOBAL CoordType=Cartesian XorR=-2 Y=0.9 Z=-1 SpecialJt=No GUID=8bfaa7c0-baf5-4bb1-a95a-734cd0673244

Joint=137 CoordSys=GLOBAL CoordType=Cartesian XorR=-2 Y=1 Z=-1 SpecialJt=No GUID=d65c5d5e-6231-485f-a63e-997ef97d0fc5

Joint=138 CoordSys=GLOBAL CoordType=Cartesian XorR=-2 Y=1.1 Z=-1 SpecialJt=No GUID=ab6ff683-a19a-4311-868b-98168eadf28f

Joint=139 CoordSys=GLOBAL CoordType=Cartesian XorR=-2 Y=1.2 Z=-1 SpecialJt=No GUID=d5bf43b5-dcac-4027-b82e-dd0cca4e9bb9

Joint=140 CoordSys=GLOBAL CoordType=Cartesian XorR=-2 Y=1.3 Z=-1 SpecialJt=No GUID=b5042248-2bf0-4979-8e1e-18156c876cc4

Joint=141 CoordSys=GLOBAL CoordType=Cartesian XorR=-2 Y=1.4 Z=-1 SpecialJt=No GUID=4bbc6b4d-fbab-44d6-8250-cd224d51c214

Joint=142 CoordSys=GLOBAL CoordType=Cartesian XorR=-2 Y=1.5 Z=-1 SpecialJt=No GUID=5331df55-6af3-4e14-863d-976a4ae117c7

Joint=143 CoordSys=GLOBAL CoordType=Cartesian XorR=-2 Y=1.6 Z=-1 SpecialJt=No GUID=a0c35a5d-dc25-47e1-95ec-d1a345369056

Joint=144 CoordSys=GLOBAL CoordType=Cartesian XorR=-2 Y=1.7 Z=-1 SpecialJt=No GUID=7e33ea65-4287-4819-b4e9-5ba979c38267

Joint=145 CoordSys=GLOBAL CoordType=Cartesian XorR=-2 Y=1.8 Z=-1 SpecialJt=No GUID=446587e0-b186-4091-a1c4-89b890138f51

Joint=146 CoordSys=GLOBAL CoordType=Cartesian XorR=-2 Y=1.9 Z=-1 SpecialJt=No GUID=3d9487cd-8119-412a-8000-cec5ca03e2e1

Joint=147 CoordSys=GLOBAL CoordType=Cartesian XorR=-2 Y=2 Z=-1 SpecialJt=No GUID=5fa06385-3a52-4eeb-ade2-2f2360347e8c

Joint=148 CoordSys=GLOBAL CoordType=Cartesian XorR=-2 Y=2.1 Z=-1 SpecialJt=No GUID=5de94257-88a4-4a10-ac9f-d3dd0e19deec

Joint=149 CoordSys=GLOBAL CoordType=Cartesian XorR=-2 Y=2.2 Z=-1 SpecialJt=No GUID=8016339d-d73b-43af-8a61-28289bc6a68b

Joint=150 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=-2.2 Z=-1 SpecialJt=No GUID=853dc2a2-d5ac-4227-ab17-45c0c49b5078

Joint=151 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=-2.1 Z=-1 SpecialJt=No GUID=46b37d80-0347-4467-a3d0-138b1c8925e3

Joint=152 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=-2 Z=-1 SpecialJt=No GUID=191b6ef2-a208-4c1b-951b-4a91f915f6ba

Joint=153 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=-1.9 Z=-1 SpecialJt=No GUID=e7c7f1a1-341a-40c0-8fa5-8dbe205f8e2e

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=154 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=-1.8 Z=-1 SpecialJt=No GUID=9567a794-1a7e-4145-9fdd-40754ef56572

Joint=155 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=-1.7 Z=-1 SpecialJt=No GUID=b9597ee8-c2f7-4cc5-af28-95dc938a4e91

Joint=156 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=-1.6 Z=-1 SpecialJt=No GUID=4afcf4fa-85ae-4294-972f-6b969a379cd2

Joint=157 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=-1.5 Z=-1 SpecialJt=No GUID=d7e59801-27c6-4bd6-898b-492f043b4417

Joint=158 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=-1.4 Z=-1 SpecialJt=No GUID=a033457c-dc20-4e93-a44e-a2b9b6ed3d82

Joint=159 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=-1.3 Z=-1 SpecialJt=No GUID=9e9f7e06-a915-42cd-8a17-e05fc1d5d3e3

Joint=160 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=-1.2 Z=-1 SpecialJt=No GUID=8b80de10-3750-40e2-89ac-0fc184feff3c

Joint=161 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=-1.1 Z=-1 SpecialJt=No GUID=eaf0a862-4b34-4c2d-bfae-0b0d156ae889

Joint=162 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=-1 Z=-1 SpecialJt=No GUID=491a844f-51be-4b20-b45b-8e989ec45a12

Joint=163 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=-0.9 Z=-1 SpecialJt=No GUID=c9fd8b05-09e8-46bf-a43f-d38f49995b24

Joint=164 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=-0.8 Z=-1 SpecialJt=No GUID=64977bba-772d-4d40-af32-4349410ae57b

Joint=165 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=-0.7 Z=-1 SpecialJt=No GUID=f77df931-a7ba-4421-8c1e-5629ddc429d5

Joint=166 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=-0.6 Z=-1 SpecialJt=No GUID=29f95c56-f79e-45d5-a264-26155cbf7608

Joint=167 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=-0.5 Z=-1 SpecialJt=No GUID=76e8c803-2c92-454a-a9a3-6e9f1c55e4fb

Joint=168 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=-0.4 Z=-1 SpecialJt=No GUID=bca244c0-b60a-499e-8d4b-c5f229545d97

Joint=169 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=-0.3 Z=-1 SpecialJt=No GUID=0221cd4f-6b2b-4da4-80ee-4da0650ebe52

Joint=170 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=-0.2 Z=-1 SpecialJt=No GUID=72052eca-ac6b-4428-851a-453a46e4b133

Joint=171 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=-0.1 Z=-1 SpecialJt=No GUID=c6255f2c-b535-4c8f-b37c-d6b417f0eeac

Joint=172 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=0 Z=-1 SpecialJt=No GUID=9b101f39-8b02-4b6c-b872-17b08a7e7775

Joint=173 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=0.09999999999999999999 Z=-1 SpecialJt=No GUID=79180aeb-354c-4f0d-8b07-f1ef98ee2bf0

Joint=174 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=0.2 Z=-1 SpecialJt=No GUID=7d30f221-6f03-466c-bc08-0148ff1a8ae7

Joint=175 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=0.3 Z=-1 SpecialJt=No GUID=65ba9939-e65b-4911-b3da-693ebfd3a757

Joint=176 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=0.4 Z=-1 SpecialJt=No GUID=8975c3ee-9498-4881-96ce-327e25571533

Joint=177 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=0.5 Z=-1 SpecialJt=No GUID=fb6d70d3-6396-40e8-87d0-3d7f997a9ab1

Joint=178 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=0.6 Z=-1 SpecialJt=No GUID=b6ad1134-f990-4b13-b71e-0f5b028dc206

Joint=179 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=0.7 Z=-1 SpecialJt=No GUID=4a7e1271-b967-41da-b692-e0f970f83357

Joint=180 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=0.8 Z=-1 SpecialJt=No GUID=c20d24d2-a54f-4d19-bb39-589be6fe9909

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=181 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=0.9 Z=-1 SpecialJt=No GUID=5019df54-f198-4c15-8232-9df8321ddc44  
 Joint=182 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=1 Z=-1 SpecialJt=No GUID=3f8ab3a7-97bc-4b00-ab08-934f9691662b  
 Joint=183 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=1.1 Z=-1 SpecialJt=No GUID=c31cfc06-d1af-4847-bdf8-af142caba067  
 Joint=184 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=1.2 Z=-1 SpecialJt=No GUID=5a20894c-482c-4394-aa3b-21216c177dc9  
 Joint=185 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=1.3 Z=-1 SpecialJt=No GUID=6369d037-3a76-4ea7-8328-379191eec399  
 Joint=186 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=1.4 Z=-1 SpecialJt=No GUID=98c7fc3b-5259-4549-b4ea-553e65d60db5  
 Joint=187 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=1.5 Z=-1 SpecialJt=No GUID=cbee4e2b-61ae-4b8e-b276-6e69644a659d  
 Joint=188 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=1.6 Z=-1 SpecialJt=No GUID=6962b695-2aca-4ee8-87e7-9dfe4b067d1e  
 Joint=189 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=1.7 Z=-1 SpecialJt=No GUID=132a1ef6-3d26-47e5-b6ed-aeddecad990b  
 Joint=190 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=1.8 Z=-1 SpecialJt=No GUID=ad151a4d-9d39-419f-9f8b-4e1a86728510  
 Joint=191 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=1.9 Z=-1 SpecialJt=No GUID=30639b1d-41c1-459c-bd9e-1762c76b04df  
 Joint=192 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=2 Z=-1 SpecialJt=No GUID=c8fb3998-d33d-4c64-890f-2e3f64713680  
 Joint=193 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=2.1 Z=-1 SpecialJt=No GUID=352153c7-a14a-4cb7-acfc-254150457713  
 Joint=194 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.9 Y=2.2 Z=-1 SpecialJt=No GUID=940d4fd0-752a-4e19-96dd-16a444a048a5  
 Joint=195 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=-2.2 Z=-1 SpecialJt=No GUID=4921338f-5a26-4729-a556-1d1b6729c48f  
 Joint=196 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=-2.1 Z=-1 SpecialJt=No GUID=daf10b75-0897-4434-8ab9-a29b28a1052d  
 Joint=197 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=-2 Z=-1 SpecialJt=No GUID=3d7718b5-717c-4314-9a77-8dacbc66bb95  
 Joint=198 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=-1.9 Z=-1 SpecialJt=No GUID=32d58021-8f41-4b21-852e-52d4909aba4a  
 Joint=199 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=-1.8 Z=-1 SpecialJt=No GUID=3d6737e5-f878-4f79-b061-a48fb57d912a  
 Joint=200 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=-1.7 Z=-1 SpecialJt=No GUID=493f37e7-e914-44dc-bba6-46116a7fca23  
 Joint=201 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=-1.6 Z=-1 SpecialJt=No GUID=65bce3d0-d9e8-4643-9656-4735d992aba7  
 Joint=202 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=-1.5 Z=-1 SpecialJt=No GUID=9291e59e-b019-4bbd-a066-5995d87d75fa  
 Joint=203 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=-1.4 Z=-1 SpecialJt=No GUID=1adb3e28-7fd9-4a2c-9463-c83c32d2225d  
 Joint=204 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=-1.3 Z=-1 SpecialJt=No GUID=c98b47f3-cc15-4957-8565-2e77caa84925  
 Joint=205 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=-1.2 Z=-1 SpecialJt=No GUID=91190d4f-b3f7-4662-a698-e4ad1b60bcef  
 Joint=206 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=-1.1 Z=-1 SpecialJt=No GUID=3de50d23-2ef1-4452-b5c8-389dc6ec5880  
 Joint=207 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=-1 Z=-1 SpecialJt=No GUID=86dacc92-308b-4e1b-ab0d-d262b63f913a

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=208 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=-0.9 Z=-1 SpecialJt=No GUID=b26c402c-e843-49ea-a303-f9bef74b035f

Joint=209 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=-0.8 Z=-1 SpecialJt=No GUID=83f284b4-1e85-4302-a34d-c8d794a6e66a

Joint=210 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=-0.7 Z=-1 SpecialJt=No GUID=6c7b7e00-cbe0-42ff-a2b7-116fbbb504ee

Joint=211 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=-0.6 Z=-1 SpecialJt=No GUID=be8b7f89-c617-4dbc-868c-4a5542e9eaac

Joint=212 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=-0.5 Z=-1 SpecialJt=No GUID=0e22ea8d-c7f4-445e-a0dc-91ee06f17541

Joint=213 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=-0.4 Z=-1 SpecialJt=No GUID=a51834a6-1fbb-4aee-ac39-634168c825a2

Joint=214 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=-0.3 Z=-1 SpecialJt=No GUID=63eee0fa-3f88-472c-93d8-6a6ac9f00796

Joint=215 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=-0.2 Z=-1 SpecialJt=No GUID=932c6de4-b981-444c-bdce-f3f96235b543

Joint=216 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=-0.099999999999999999 Z=-1 SpecialJt=No GUID=5cdf40f4-f6cf-44b4-9bc9-0efedcdb432e

Joint=217 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=0 Z=-1 SpecialJt=No GUID=eac43902-9526-49e7-9f5a-9d971645c2f2

Joint=218 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=0.099999999999999999 Z=-1 SpecialJt=No GUID=4bc186ee-200c-408d-838b-f03bc3d3a6cd

Joint=219 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=0.2 Z=-1 SpecialJt=No GUID=ca59f270-d2dc-414f-8330-a8c1f66072ee

Joint=220 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=0.3 Z=-1 SpecialJt=No GUID=9959fa49-8a75-4008-8efe-654634a6de45

Joint=221 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=0.4 Z=-1 SpecialJt=No GUID=dcd4600b-c255-40a2-9edb-596a803d2ece

Joint=222 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=0.5 Z=-1 SpecialJt=No GUID=ff503554-004c-430a-ae51-f3f6a995ce0f

Joint=223 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=0.6 Z=-1 SpecialJt=No GUID=7a08fc73-559e-42b2-b3d8-856f8175bb29

Joint=224 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=0.7 Z=-1 SpecialJt=No GUID=74022aae-4c45-463b-b49b-fa7bb31e763d

Joint=225 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=0.8 Z=-1 SpecialJt=No GUID=ddf45bcb-d499-483b-ab78-1974f156cb4e

Joint=226 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=0.9 Z=-1 SpecialJt=No GUID=2e86f735-7600-4345-94f7-624cf35544c2

Joint=227 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=1 Z=-1 SpecialJt=No GUID=527cdfb9-7df3-405e-88ae-59656dbad067

Joint=228 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=1.1 Z=-1 SpecialJt=No GUID=34132acd-c93f-495b-9548-6c3753229861

Joint=229 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=1.2 Z=-1 SpecialJt=No GUID=37294e3c-6812-4e9f-bef8-b27f39c4ce16

Joint=230 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=1.3 Z=-1 SpecialJt=No GUID=db5edcf0-11de-4aab-9924-bd138b66edb1

Joint=231 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=1.4 Z=-1 SpecialJt=No GUID=af8fae61-294a-45de-af8b-85dbc3599051

Joint=232 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=1.5 Z=-1 SpecialJt=No GUID=ebc3d7a6-f3cd-4303-8a26-5435a6dc17c1

Joint=233 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=1.6 Z=-1 SpecialJt=No GUID=4d1c37b6-29e7-4dfe-a0cf-22d5023b4682

Joint=234 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=1.7 Z=-1 SpecialJt=No GUID=d0f8ac46-744b-4603-88c2-cfec0c3e25ac



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=235 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=1.8 Z=-1 SpecialJt=No GUID=696707a2-af81-435a-ba2d-09e1d9a015bf

Joint=236 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=1.9 Z=-1 SpecialJt=No GUID=44eec8db-3beb-4dc3-970a-4f19a7963b6d

Joint=237 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=2 Z=-1 SpecialJt=No GUID=67b49cd4-7d2a-44f0-bd20-1cce45f3c8cf

Joint=238 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=2.1 Z=-1 SpecialJt=No GUID=224968d6-c391-413e-b705-d8ceba3631cf

Joint=239 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.8 Y=2.2 Z=-1 SpecialJt=No GUID=3581d573-4a77-4939-a068-2b75e378d292

Joint=240 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=-2.2 Z=-1 SpecialJt=No GUID=ddfff86f-6917-4a2f-a492-02494a4fcb7f

Joint=241 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=-2.1 Z=-1 SpecialJt=No GUID=cc7100c6-451f-4560-93d2-9dcb359a417d

Joint=242 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=-2 Z=-1 SpecialJt=No GUID=9c2bf34a-15c7-4dc1-9b59-048b60ac993b

Joint=243 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=-1.9 Z=-1 SpecialJt=No GUID=7336885c-177c-472d-925d-d73c5ebd7112

Joint=244 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=-1.8 Z=-1 SpecialJt=No GUID=96841d06-b926-4a83-b907-a95488883703

Joint=245 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=-1.7 Z=-1 SpecialJt=No GUID=5714f614-8587-4742-af08-eed66708872b

Joint=246 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=-1.6 Z=-1 SpecialJt=No GUID=6746365d-bc28-4c47-aced-666090d0474f

Joint=247 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=-1.5 Z=-1 SpecialJt=No GUID=c2271cda-208c-4102-8571-912af68758bf

Joint=248 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=-1.4 Z=-1 SpecialJt=No GUID=76dfe49b-b04a-4d9f-8a43-d78c3696547c

Joint=249 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=-1.3 Z=-1 SpecialJt=No GUID=45197b2f-db93-452c-a46a-e1963a6d3d2c

Joint=250 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=-1.2 Z=-1 SpecialJt=No GUID=4c3f9c71-de40-4083-bff7-a0c661544230

Joint=251 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=-1.1 Z=-1 SpecialJt=No GUID=d9008022-7735-42ef-92bb-a7668fc7ee41

Joint=252 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=-1 Z=-1 SpecialJt=No GUID=1cccf1cb-7b31-426c-ab2f-5d861c729fa2

Joint=253 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=-0.9 Z=-1 SpecialJt=No GUID=bff14a38-5664-4281-8480-69073774297d

Joint=254 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=-0.8 Z=-1 SpecialJt=No GUID=c6f6d505-3e12-4da7-9eb3-8800c895cdde

Joint=255 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=-0.7 Z=-1 SpecialJt=No GUID=5f907b19-bd85-4cc5-a776-319307769e68

Joint=256 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=-0.6 Z=-1 SpecialJt=No GUID=a8baccf6-5bd9-40c9-8ec0-bab4d7f1ead9

Joint=257 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=-0.5 Z=-1 SpecialJt=No GUID=7dcf5624-36b5-4014-a5d9-bdf3eae2fd3c

Joint=258 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=-0.4 Z=-1 SpecialJt=No GUID=e6f627bd-cdbe-46a9-ae40-9f9b532fa185

Joint=259 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=-0.3 Z=-1 SpecialJt=No GUID=fcff6ad5-2648-4d56-b360-c0fb37f6dc2c

Joint=260 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=-0.2 Z=-1 SpecialJt=No GUID=e001ddc9-448e-47ff-993e-087f9ae07a46

Joint=261 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=-0.09999999999999999 Z=-1 SpecialJt=No GUID=809add94-c37b-4f9c-a11a-25ea21de5e53



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=262 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=0 Z=-1 SpecialJt=No GUID=917f1ad5-0e60-4bd7-b2e9-15d1fad3124

Joint=263 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=0.099999999999999999 Z=-1 SpecialJt=No GUID=15f49707-f61c-44ee-9224-3d40e72a23a1

Joint=264 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=0.2 Z=-1 SpecialJt=No GUID=e7c7f6a4-53ec-4bba-b34c-0ed1f25c8ded

Joint=265 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=0.3 Z=-1 SpecialJt=No GUID=364e224b-dda8-4069-ac8a-8514cba74bb6

Joint=266 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=0.4 Z=-1 SpecialJt=No GUID=901d2d9b-418e-41c3-b517-645ca6001e71

Joint=267 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=0.5 Z=-1 SpecialJt=No GUID=69b43df8-b929-4a5f-98ce-4fc5e0a19f35

Joint=268 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=0.6 Z=-1 SpecialJt=No GUID=7d4fa1f6-0bbb-4b75-8714-0aae5b2cd6d8

Joint=269 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=0.7 Z=-1 SpecialJt=No GUID=fbfbae0b-7016-4128-9c0a-dde675185d0d

Joint=270 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=0.8 Z=-1 SpecialJt=No GUID=33f5aad6-31cf-4b50-aad1-1f917a1c55f1

Joint=271 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=0.9 Z=-1 SpecialJt=No GUID=fce2fcd7-3843-45e1-a55f-c5671347c72d

Joint=272 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=1 Z=-1 SpecialJt=No GUID=4b43fb57-8b91-4f55-aff2-7bbc70dbfa66

Joint=273 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=1.1 Z=-1 SpecialJt=No GUID=b08def3d-9223-4dd4-9e5a-cf05938c48cd

Joint=274 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=1.2 Z=-1 SpecialJt=No GUID=73aa3fdd-1a5a-4021-bddb-ad0b0c911b31

Joint=275 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=1.3 Z=-1 SpecialJt=No GUID=c1426354-e38e-4963-b4e0-f9dac00b3004

Joint=276 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=1.4 Z=-1 SpecialJt=No GUID=93bb4ca9-e430-4e14-875e-da64a5ed527d

Joint=277 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=1.5 Z=-1 SpecialJt=No GUID=6e857db7-2227-4d90-8ce1-b6753ac927c4

Joint=278 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=1.6 Z=-1 SpecialJt=No GUID=0e9ba883-1472-412d-b9bf-beb5f505c41f

Joint=279 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=1.7 Z=-1 SpecialJt=No GUID=de4c7007-9de2-4c19-943d-fa51058e951a

Joint=280 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=1.8 Z=-1 SpecialJt=No GUID=f59db3b2-3ec0-4c96-9614-cafb4a906487

Joint=281 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=1.9 Z=-1 SpecialJt=No GUID=ca3e2c52-1627-4a2c-9659-593467cb81c5

Joint=282 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=2 Z=-1 SpecialJt=No GUID=4ea30c9f-ce2f-492b-89af-f73393f2e075

Joint=283 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=2.1 Z=-1 SpecialJt=No GUID=6ee9728b-4a59-432e-acf3-dd8a2190d9b4

Joint=284 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.7 Y=2.2 Z=-1 SpecialJt=No GUID=4d1a22dc-f03e-4bfe-bc66-de36e23b45f0

Joint=285 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=-2.2 Z=-1 SpecialJt=No GUID=071af400-2094-4ffe-80fe-6ba84e0b9be4

Joint=286 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=-2.1 Z=-1 SpecialJt=No GUID=f140da3e-0e18-417c-ab6c-03c1b5ecd187

Joint=287 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=-2 Z=-1 SpecialJt=No GUID=f6d83699-a2e5-48f4-af4a-4bcd7f06f57

Joint=288 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=-1.9 Z=-1 SpecialJt=No GUID=c152ba89-dbd1-4281-9046-a4cf0c01b719

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=289 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=-1.8 Z=-1 SpecialJt=No GUID=57f554dd-d1a1-4c2e-86da-1a978482c167

Joint=290 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=-1.7 Z=-1 SpecialJt=No GUID=04b831f5-3cac-41d5-b420-1530568ccadb

Joint=291 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=-1.6 Z=-1 SpecialJt=No GUID=5550474d-1553-4bea-837f-2040bc1870cb

Joint=292 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=-1.5 Z=-1 SpecialJt=No GUID=aefabcc1-88d8-40b9-a047-0308a0d73a58

Joint=293 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=-1.4 Z=-1 SpecialJt=No GUID=708b301d-57c0-4c15-b7e4-1bb5d9cbf29b

Joint=294 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=-1.3 Z=-1 SpecialJt=No GUID=9f4f527c-4ddd-4443-ae91-d04e1adafa0f

Joint=295 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=-1.2 Z=-1 SpecialJt=No GUID=e5d22473-cd6a-4ff9-8fa5-856842db02c5

Joint=296 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=-1.1 Z=-1 SpecialJt=No GUID=4016a3bf-2919-4ef6-8fe7-dd7b4a258039

Joint=297 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=-1 Z=-1 SpecialJt=No GUID=0366611d-5d2d-459d-a56a-34a323582aeb

Joint=298 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=-0.9 Z=-1 SpecialJt=No GUID=ff1bc115-5b87-44e0-bcb5-fd29b1337488

Joint=299 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=-0.8 Z=-1 SpecialJt=No GUID=de59e922-d5d0-4765-a576-484c3525d689

Joint=300 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=-0.7 Z=-1 SpecialJt=No GUID=78bb1b3c-641c-4635-ab0f-c5873fe88854

Joint=301 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=-0.6 Z=-1 SpecialJt=No GUID=c443f47b-c11b-4835-b4da-10ecffb1a262

Joint=302 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=-0.5 Z=-1 SpecialJt=No GUID=965707c4-f802-4101-8a66-6dd5a40c3937

Joint=303 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=-0.4 Z=-1 SpecialJt=No GUID=c326f606-d31a-4d9f-9cce-d112dfb27970

Joint=304 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=-0.3 Z=-1 SpecialJt=No GUID=26ee3e15-63b4-4eb4-a5f7-b304114b8c8b

Joint=305 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=-0.2 Z=-1 SpecialJt=No GUID=da3ed35f-aa43-48b3-8dc2-bd46a97d699a

Joint=306 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=-0.09999999999999999 Z=-1 SpecialJt=No GUID=64d932e3-42dc-4455-bf33-51da4f5e863b

Joint=307 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=0 Z=-1 SpecialJt=No GUID=9773d97e-92f1-48bb-ab53-cffd6bdf72ef

Joint=308 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=0.09999999999999998 Z=-1 SpecialJt=No GUID=d315b96b-1ffd-4861-b011-5be7dee8c55a

Joint=309 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=0.2 Z=-1 SpecialJt=No GUID=697f798a-cc59-4a63-8c32-f28d0dfb5f16

Joint=310 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=0.3 Z=-1 SpecialJt=No GUID=30609252-09a5-40db-a6f4-e676b56b3a6f

Joint=311 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=0.4 Z=-1 SpecialJt=No GUID=1e5080e7-66d6-4b8f-a502-21ecc843c1d9

Joint=312 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=0.5 Z=-1 SpecialJt=No GUID=43a4e3df-6a3a-4cbc-bee7-46072c59888c

Joint=313 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=0.6 Z=-1 SpecialJt=No GUID=44f95c29-58a8-4295-8cce-7f2049e44ffa

Joint=314 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=0.7 Z=-1 SpecialJt=No GUID=000baf6a-b9b4-4363-bd8e-ccf79e96bc99

Joint=315 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=0.8 Z=-1 SpecialJt=No GUID=73ccfedf-0411-43a7-8542-ed6dff1da0ea

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=316 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=0.9 Z=-1 SpecialJt=No GUID=2dc5a987-5a50-4f4a-973b-c94a307cadf3

Joint=317 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=1 Z=-1 SpecialJt=No GUID=c242ed8b-3592-4330-a027-5a291ec8097d

Joint=318 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=1.1 Z=-1 SpecialJt=No GUID=1645f79d-ec60-4d27-b8b6-0bf835d2be6a

Joint=319 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=1.2 Z=-1 SpecialJt=No GUID=2e2ef228-b86d-41f2-b9a2-d097beb12940

Joint=320 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=1.3 Z=-1 SpecialJt=No GUID=1b73035c-4778-463f-9a2f-249ba5ebf9fd

Joint=321 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=1.4 Z=-1 SpecialJt=No GUID=b9a00568-10c6-4de1-856c-f2c7ce9f89c4

Joint=322 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=1.5 Z=-1 SpecialJt=No GUID=5567b5ff-7ddb-4d21-84de-2ce51201cf05

Joint=323 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=1.6 Z=-1 SpecialJt=No GUID=7a1ad703-41d1-4c2f-9e87-68d8dcca06b6

Joint=324 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=1.7 Z=-1 SpecialJt=No GUID=d3245416-d04d-414f-b710-c972432e27f8

Joint=325 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=1.8 Z=-1 SpecialJt=No GUID=8a1793a4-c624-4d2b-b1a1-77737436f110

Joint=326 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=1.9 Z=-1 SpecialJt=No GUID=c49b7d7f-b40d-4b6c-99ed-1b3ceae3d216

Joint=327 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=2 Z=-1 SpecialJt=No GUID=e38686b8-3f70-459b-bf80-603bf1d4aa89

Joint=328 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=2.1 Z=-1 SpecialJt=No GUID=4d83a2f4-19ad-47c4-a3ea-3b5021c88853

Joint=329 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.6 Y=2.2 Z=-1 SpecialJt=No GUID=2407e681-8a18-40dd-b479-56d696a5d678

Joint=330 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-2.2 Z=-1 SpecialJt=No GUID=b48ef8c1-0376-4fe3-ac6a-ea5c9d44a52e

Joint=331 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-2.1 Z=-1 SpecialJt=No GUID=cc7b961b-bc19-4b86-b96f-a6544de5051e

Joint=332 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-2 Z=-1 SpecialJt=No GUID=ef3a6f76-7456-461f-969e-62e082b135c7

Joint=333 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-1.9 Z=-1 SpecialJt=No GUID=799ff76d-94a5-425f-9aa6-415f51c69d42

Joint=334 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-1.8 Z=-1 SpecialJt=No GUID=b8b268ab-ae8f-4a22-bb97-c496ce8387ed

Joint=335 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-1.7 Z=-1 SpecialJt=No GUID=95eb5ef8-e1c6-4bed-b15b-55dcc366ee4b

Joint=336 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-1.6 Z=-1 SpecialJt=No GUID=06d30ca4-72ec-4fb1-a110-e8073aeafc41

Joint=337 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-1.5 Z=-1 SpecialJt=No GUID=3188d476-00a3-4d75-8a3e-3f85061aeb5b

Joint=338 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-1.4 Z=-1 SpecialJt=No GUID=4ba42244-b7b6-4b68-9d42-a127dc99462b

Joint=339 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-1.3 Z=-1 SpecialJt=No GUID=e565e0af-65e4-43a3-9505-3a6b7131c34f

Joint=340 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-1.2 Z=-1 SpecialJt=No GUID=4f8a97c0-a524-4713-8672-1eed491a7541

Joint=341 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-1.1 Z=-1 SpecialJt=No GUID=0c8162b5-52b0-4143-a6de-684cebda0fc

Joint=342 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-1 Z=-1 SpecialJt=No GUID=4f45f273-617d-46f1-9389-4b7d3d4c323e

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=343 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-0.9 Z=-1 SpecialJt=No GUID=7343e8f1-3003-4bd6-ac62-1ecd3c8ac390

Joint=344 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-0.8 Z=-1 SpecialJt=No GUID=04f9a7f4-c45e-4bad-ba38-e1b9ea89d994

Joint=345 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-0.7 Z=-1 SpecialJt=No GUID=7386a1b4-2ce2-4efc-a8e9-d749df87b4b8

Joint=346 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-0.6 Z=-1 SpecialJt=No GUID=e125603f-b10e-4714-a12c-f9102ee45b69

Joint=347 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-0.5 Z=-1 SpecialJt=No GUID=153a198e-4c98-4051-9e0f-aff038cda116

Joint=348 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-0.4 Z=-1 SpecialJt=No GUID=f6801f53-e62d-4a20-b1ad-5056d549b169

Joint=349 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-0.3 Z=-1 SpecialJt=No GUID=3dbd8dea-e18a-42d7-973b-4102c0e55d5d

Joint=350 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-0.2 Z=-1 SpecialJt=No GUID=19476f3f-0b67-4740-9a89-9cb74a8fbbf1

Joint=351 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-0.1 Z=-1 SpecialJt=No GUID=835dfcde-3649-4725-a18a-1b2520c94b7e

Joint=352 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=1.11022302462516E-16 Z=-1 SpecialJt=No GUID=11b4c77f-a5ad-4603-823f-b2b17f0463c7

Joint=353 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=0.099999999999999999 Z=-1 SpecialJt=No GUID=ce754144-e1c2-40ad-86c2-77f6abd04049

Joint=354 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=0.2 Z=-1 SpecialJt=No GUID=b42eb9f6-abfa-466e-be96-51c557184eac

Joint=355 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=0.3 Z=-1 SpecialJt=No GUID=0463339a-5ac6-4d31-9859-a8fdbbadfc4d

Joint=356 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=0.4 Z=-1 SpecialJt=No GUID=221c4220-f90a-47d1-b67f-0b5331c473c3

Joint=357 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=0.5 Z=-1 SpecialJt=No GUID=8e92308f-6b8d-47ea-9b80-2ac2ebdd2435

Joint=358 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=0.6 Z=-1 SpecialJt=No GUID=c273cc3e-73fc-464c-82b5-6db539af2d7a

Joint=359 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=0.7 Z=-1 SpecialJt=No GUID=4358e25a-b585-4785-98fe-b88138d8ee54

Joint=360 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=0.8 Z=-1 SpecialJt=No GUID=cc3e4df4-0e98-48b4-b225-d36c89c992ca

Joint=361 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=0.9 Z=-1 SpecialJt=No GUID=5c3930ce-b99c-400a-beb6-5848cef52a16

Joint=362 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=1 Z=-1 SpecialJt=No GUID=0e0f00ab-fea7-4d81-ab89-0bacba70e903

Joint=363 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=1.1 Z=-1 SpecialJt=No GUID=db266479-d6b3-44e7-8528-395448314991

Joint=364 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=1.2 Z=-1 SpecialJt=No GUID=e2a452be-f674-41ea-8226-5584a6ba6e3d

Joint=365 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=1.3 Z=-1 SpecialJt=No GUID=0a4a1339-d018-45be-aad8-f5aded445dc7

Joint=366 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=1.4 Z=-1 SpecialJt=No GUID=7d09c9c8-4385-49a6-9591-d4de95bd0db5

Joint=367 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=1.5 Z=-1 SpecialJt=No GUID=f255eeda-7166-4fbc-b288-ae530e0cbfc3

Joint=368 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=1.6 Z=-1 SpecialJt=No GUID=455de401-7a1a-4941-b750-64e0e28a28d9

Joint=369 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=1.7 Z=-1 SpecialJt=No GUID=201b6d13-4688-4df6-ab28-f02bf0bec6d8



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=370 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=1.8 Z=-1 SpecialJt=No GUID=b3099f3b-473c-4071-a7eb-7acfbea7ad31

Joint=371 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=1.9 Z=-1 SpecialJt=No GUID=af2ae3b9-3ef8-4355-a3f6-ee5bcb6c232b

Joint=372 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=2 Z=-1 SpecialJt=No GUID=acee4367-bbbd-40fd-8797-d9c15b1dabaa

Joint=373 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=2.1 Z=-1 SpecialJt=No GUID=e9f6e321-6fde-4a70-a350-43630e4dff39

Joint=374 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=2.2 Z=-1 SpecialJt=No GUID=99825135-d2bd-4854-8aa5-14a360575359

Joint=375 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=-2.2 Z=-1 SpecialJt=No GUID=e5f32d67-1448-41a9-8843-7d3d43e541d6

Joint=376 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=-2.1 Z=-1 SpecialJt=No GUID=56c77b33-9d4e-44f9-b88e-d8600d0865f2

Joint=377 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=-2 Z=-1 SpecialJt=No GUID=4049ccab-b83a-4cab-8cbc-eb262a58d999

Joint=378 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=-1.9 Z=-1 SpecialJt=No GUID=36bd24b8-ed91-4b79-ac54-e9f9fe45760b

Joint=379 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=-1.8 Z=-1 SpecialJt=No GUID=48e420b5-ed19-43fb-b851-cc92d34685cf

Joint=380 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=-1.7 Z=-1 SpecialJt=No GUID=413d935b-bbb2-499c-903b-de961c742dd5

Joint=381 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=-1.6 Z=-1 SpecialJt=No GUID=4648de2e-c748-426b-beb6-4a4f1a319cb2

Joint=382 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=-1.5 Z=-1 SpecialJt=No GUID=c692a2e9-32b0-457b-87c0-dd4c4180e4be

Joint=383 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=-1.4 Z=-1 SpecialJt=No GUID=f5d2250a-90a3-4b7f-ba16-b0e2bfe4d054

Joint=384 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=-1.3 Z=-1 SpecialJt=No GUID=12834596-5ed9-44f1-be06-63f1e1e4d232

Joint=385 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=-1.2 Z=-1 SpecialJt=No GUID=b1838a5a-06b2-4b46-8184-0340fd68792c

Joint=386 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=-1.1 Z=-1 SpecialJt=No GUID=e1cd8c19-6abf-4f98-9e7d-d0cb53f2e541

Joint=387 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=-1 Z=-1 SpecialJt=No GUID=2acdd8a3-865e-4707-9a64-00cd3d6075ee

Joint=388 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=-0.9 Z=-1 SpecialJt=No GUID=a453ecf9-710d-4e0b-a268-5a03d2ba1966

Joint=389 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=-0.8 Z=-1 SpecialJt=No GUID=bb1d80e0-e2a6-430b-869a-23f21836c387

Joint=390 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=-0.7 Z=-1 SpecialJt=No GUID=0d65bf32-72ec-4638-80ac-0ef1ed7806e2

Joint=391 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=-0.6 Z=-1 SpecialJt=No GUID=71ed817f-3d3f-4dac-ba22-fc6ef4bd383f

Joint=392 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=-0.5 Z=-1 SpecialJt=No GUID=75436a50-a97a-4cf1-8008-48cb877e9199

Joint=393 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=-0.4 Z=-1 SpecialJt=No GUID=615ceb70-968b-423b-83c7-c71546d09837

Joint=394 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=-0.3 Z=-1 SpecialJt=No GUID=e1542c57-dfe9-4d2f-b08d-5cef4ee1f74b

Joint=395 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=-0.2 Z=-1 SpecialJt=No GUID=195e8b8d-8a4c-4b73-b5da-471e8937a03e

Joint=396 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=-0.0999999999999999 Z=-1 SpecialJt=No GUID=78250149-6006-42c6-8fce-145d202a9a2f



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=397 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=-1.11022302462516E-16 Z=-1  
SpecialJt=No GUID=6232b513-f276-4643-bc9b-0f7d851b599c

Joint=398 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=0.1 Z=-1 SpecialJt=No GUID=3ecf5072-  
f51c-4b7e-b5c7-0a0aca298993

Joint=399 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=0.2 Z=-1 SpecialJt=No GUID=24b33c91-  
a069-4ee9-a84e-eeda7b3dc61d

Joint=400 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=0.3 Z=-1 SpecialJt=No GUID=4366b93c-  
82b1-4e7f-9398-8c9872999185

Joint=401 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=0.4 Z=-1 SpecialJt=No GUID=df2e60a4-  
774f-4670-b00c-dbf1583922c4

Joint=402 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=0.5 Z=-1 SpecialJt=No GUID=02d57ef1-  
6d6d-4503-83ab-baedac24591f

Joint=403 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=0.6 Z=-1 SpecialJt=No GUID=620871c0-  
8681-4774-b7b0-f127fc55d853

Joint=404 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=0.7 Z=-1 SpecialJt=No GUID=cac38e70-  
b88d-4900-a701-0a344e75e6d1

Joint=405 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=0.8 Z=-1 SpecialJt=No GUID=cb3e8fa0-  
3a3b-49c3-b8aa-f1c17938df5b

Joint=406 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=0.9 Z=-1 SpecialJt=No GUID=0a43bd28-  
a2f0-4933-8613-499e501c3c1b

Joint=407 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=1 Z=-1 SpecialJt=No GUID=ef9682e9-  
c40a-4a97-8379-ad12425a3cf2

Joint=408 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=1.1 Z=-1 SpecialJt=No GUID=af6c6ba4-  
dbcd-42ae-8547-7940a9085e43

Joint=409 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=1.2 Z=-1 SpecialJt=No GUID=da15a84d-  
b2d9-4a02-a44d-7d52809f1e0d

Joint=410 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=1.3 Z=-1 SpecialJt=No GUID=b1f2a500-  
4cda-4797-a054-4a7175905c36

Joint=411 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=1.4 Z=-1 SpecialJt=No GUID=c382d51e-  
05c1-48a5-9c42-65115b49248e

Joint=412 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=1.5 Z=-1 SpecialJt=No GUID=f43a98fe-  
44c5-4a5d-aba2-d2075967292a

Joint=413 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=1.6 Z=-1 SpecialJt=No GUID=7c34902a-  
3144-4e11-bacd-a3e89df932b2

Joint=414 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=1.7 Z=-1 SpecialJt=No GUID=ab746fee-  
a05d-4e03-b148-10a7650eaf25

Joint=415 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=1.8 Z=-1 SpecialJt=No GUID=bbc2fb64-  
f758-4679-9445-17d924684df5

Joint=416 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=1.9 Z=-1 SpecialJt=No GUID=57ef09ad-  
f697-4ca8-a972-c6f1a65b81c5

Joint=417 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=2 Z=-1 SpecialJt=No GUID=1e63ee8e-  
e66a-4de1-ae2d-620b726febb1

Joint=418 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=2.1 Z=-1 SpecialJt=No GUID=3f258acb-  
4194-44ec-bf3d-577f8abe7aa8

Joint=419 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.4 Y=2.2 Z=-1 SpecialJt=No GUID=c2c7a06b-  
4d13-4397-b52c-8e86a35a7b79

Joint=420 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=-2.2 Z=-1 SpecialJt=No GUID=7a789e1c-  
1c28-4070-8808-9a4675650f8e

Joint=421 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=-2.1 Z=-1 SpecialJt=No GUID=7ef59140-  
0982-42df-980c-a435759b615a

Joint=422 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=-2 Z=-1 SpecialJt=No GUID=64ba8402-  
3e41-4104-9915-e184ecd17313

Joint=423 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=-1.9 Z=-1 SpecialJt=No GUID=57f350f7-  
0ec1-40f5-bc1b-400fd170c624

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=424 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=-1.8 Z=-1 SpecialJt=No GUID=32652cb3-faba-46b2-8a07-310e8b41f04d

Joint=425 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=-1.7 Z=-1 SpecialJt=No GUID=95e8dc56-101a-4fb0-a3d1-796ea1d44aa9

Joint=426 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=-1.6 Z=-1 SpecialJt=No GUID=f33f0665-dd71-45c7-acb4-33f0bf1ce8ce

Joint=427 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=-1.5 Z=-1 SpecialJt=No GUID=d9e565e3-b730-4127-876c-13899d7c1d2b

Joint=428 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=-1.4 Z=-1 SpecialJt=No GUID=06d1dd2a-6f3f-4de2-a577-da73de4b6f39

Joint=429 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=-1.3 Z=-1 SpecialJt=No GUID=7a8efaf8-9adb-45c3-96ca-bd0cc6e63d79

Joint=430 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=-1.2 Z=-1 SpecialJt=No GUID=8fb551ca-bed2-49c4-bb0a-9b215690e08b

Joint=431 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=-1.1 Z=-1 SpecialJt=No GUID=e0b880e2-b4d9-4e25-bf90-ddba8ead64ca

Joint=432 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=-1 Z=-1 SpecialJt=No GUID=c48950b2-cbbf-41fe-b4fb-30e634bbb866

Joint=433 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=-0.9 Z=-1 SpecialJt=No GUID=89c07f13-d4a8-4498-a067-a913f80d1ded

Joint=434 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=-0.8 Z=-1 SpecialJt=No GUID=514b7d3d-4234-4577-9497-ab340314361a

Joint=435 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=-0.7 Z=-1 SpecialJt=No GUID=8ef1b52f-e275-49a3-838b-c354864162fc

Joint=436 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=-0.6 Z=-1 SpecialJt=No GUID=21e36c98-358c-42a6-ade3-75e6c4f4017a

Joint=437 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=-0.5 Z=-1 SpecialJt=No GUID=669e5e9f-ef8b-466c-986b-bac9226c8ae2

Joint=438 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=-0.4 Z=-1 SpecialJt=No GUID=7a0c0ff7-c9a3-4f14-b605-61277431d86a

Joint=439 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=-0.3 Z=-1 SpecialJt=No GUID=c49f8af2-3e4a-48ce-b9b9-38ce3d35d983

Joint=440 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=-0.2 Z=-1 SpecialJt=No GUID=0f46fd14-5eba-4430-8397-437a7ebd1ff2

Joint=441 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=-0.1 Z=-1 SpecialJt=No GUID=4fbf0574-f1f5-4c73-98d5-8b431c6b0f51

Joint=442 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=0 Z=-1 SpecialJt=No GUID=cbccd29f-3289-4537-ba03-e45a877ab0d7

Joint=443 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=0.1 Z=-1 SpecialJt=No GUID=c59ae766-e133-42a9-b3be-a15e769d590f

Joint=444 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=0.2 Z=-1 SpecialJt=No GUID=22aee100-aa26-4d92-b79c-eaf752645373

Joint=445 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=0.3 Z=-1 SpecialJt=No GUID=4719a024-9b20-4c6b-8cf0-aa60a5ca76cb

Joint=446 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=0.4 Z=-1 SpecialJt=No GUID=34a94e8f-5972-44d5-b24e-614eaf76880c

Joint=447 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=0.5 Z=-1 SpecialJt=No GUID=bdef03dc-cb47-4f0a-b8b6-d17df563eca3

Joint=448 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=0.6 Z=-1 SpecialJt=No GUID=40f8a81e-abab-438f-adb7-07c062e1b641

Joint=449 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=0.7 Z=-1 SpecialJt=No GUID=2cfb51ae-0cf0-48cb-bfd8-9131a4fa638a

Joint=450 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=0.8 Z=-1 SpecialJt=No GUID=ce5978a4-0f6b-492a-ab18-4e4c61ff27b0

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=451 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=0.9 Z=-1 SpecialJt=No GUID=c6d1fbde-25db-4152-b293-e8cb572fc125

Joint=452 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=1 Z=-1 SpecialJt=No GUID=acb290e9-6cca-45cb-b6e9-e19bc521181a

Joint=453 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=1.1 Z=-1 SpecialJt=No GUID=ac9a6c66-e231-4735-8dec-a123c3d77777

Joint=454 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=1.2 Z=-1 SpecialJt=No GUID=e0c55e8d-3ad8-491a-a38f-e4c3c8e3cf49

Joint=455 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=1.3 Z=-1 SpecialJt=No GUID=4595b193-0816-4f28-80e8-e745ccc4c975

Joint=456 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=1.4 Z=-1 SpecialJt=No GUID=9534433d-667b-42f6-ba96-4a28d19da0e6

Joint=457 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=1.5 Z=-1 SpecialJt=No GUID=b59ea5ea-ebdb-4e3e-b86f-ba9446cd7781

Joint=458 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=1.6 Z=-1 SpecialJt=No GUID=7d2a76fb-9b8b-4f81-b4cb-77b452abdd15

Joint=459 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=1.7 Z=-1 SpecialJt=No GUID=3a463511-b391-43e5-a685-acbf9cdaaea1

Joint=460 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=1.8 Z=-1 SpecialJt=No GUID=4fc3aa7d-ee16-4ebf-8230-6ea5c85854f2

Joint=461 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=1.9 Z=-1 SpecialJt=No GUID=f912e5c2-accd-4f58-8fc1-ea70ca9941ce

Joint=462 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=2 Z=-1 SpecialJt=No GUID=92963502-14fc-4564-8f1c-2bf77c2c9648

Joint=463 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=2.1 Z=-1 SpecialJt=No GUID=8234289e-2565-4c60-8c51-24d86a88b2ce

Joint=464 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.3 Y=2.2 Z=-1 SpecialJt=No GUID=28c52db3-1731-425e-921a-78ec954420c8

Joint=465 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=-2.2 Z=-1 SpecialJt=No GUID=9869ddb2-7532-4928-bad1-aa8fe706e5b1

Joint=466 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=-2.1 Z=-1 SpecialJt=No GUID=2a40122c-10fd-4802-9aa5-1b509f11dbcf

Joint=467 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=-2 Z=-1 SpecialJt=No GUID=2d5219a3-c9d5-4247-8170-5d10015c0149

Joint=468 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=-1.9 Z=-1 SpecialJt=No GUID=d407510b-d798-4b3c-997d-2397239ee3b4

Joint=469 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=-1.8 Z=-1 SpecialJt=No GUID=ed6b5bcd-887d-4192-bdea-7970de19faf0

Joint=470 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=-1.7 Z=-1 SpecialJt=No GUID=2d389c8d-741a-4871-8f95-2609197ca02d

Joint=471 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=-1.6 Z=-1 SpecialJt=No GUID=aa8a75a8-51fa-433a-85b6-79db86c5b5f8

Joint=472 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=-1.5 Z=-1 SpecialJt=No GUID=fdd014e7-1131-4178-b5bc-9d44a2468b06

Joint=473 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=-1.4 Z=-1 SpecialJt=No GUID=58d091d5-685e-4a67-87e0-4db0b51de446

Joint=474 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=-1.3 Z=-1 SpecialJt=No GUID=c43477e2-9b12-42f2-8f1a-309ed8c9aab6

Joint=475 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=-1.2 Z=-1 SpecialJt=No GUID=bee9b48a-2c73-4818-baf4-cc6ecf8601cc

Joint=476 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=-1.1 Z=-1 SpecialJt=No GUID=e56d8c8c-1fa6-45c1-ab57-042abe08b1f1

Joint=477 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=-1 Z=-1 SpecialJt=No GUID=b373e706-8af5-47d6-b4d5-c3112bf2f478

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=478 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=-0.9 Z=-1 SpecialJt=No GUID=0db94720-a779-42c8-8717-2677a5563573

Joint=479 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=-0.8 Z=-1 SpecialJt=No GUID=fe1db773-e96c-4e74-82f7-594c041ec3f6

Joint=480 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=-0.7 Z=-1 SpecialJt=No GUID=fbe8f5a5-f6be-4c4e-95ef-1225a03ab9ba

Joint=481 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=-0.6 Z=-1 SpecialJt=No GUID=49464192-e6a6-45bc-b30f-0df7e6f13d57

Joint=482 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=-0.5 Z=-1 SpecialJt=No GUID=e5cd4946-f822-442f-9290-c714461fd64f

Joint=483 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=-0.4 Z=-1 SpecialJt=No GUID=4348e0a0-9ec6-463f-a7a4-cef5d9901c70

Joint=484 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=-0.3 Z=-1 SpecialJt=No GUID=37a52a54-fa92-465a-a2e8-05e413f95433

Joint=485 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=-0.2 Z=-1 SpecialJt=No GUID=5bd151f4-b7a9-434b-beed-a758236b0ee9

Joint=486 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=-0.09999999999999998 Z=-1 SpecialJt=No GUID=6b35af5d-e676-4fa5-9557-6c4f523f8b13

Joint=487 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=0 Z=-1 SpecialJt=No GUID=0418bdd7-01e6-4254-9192-dc625ffe5f40

Joint=488 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=0.09999999999999998 Z=-1 SpecialJt=No GUID=53e8e1f8-a955-4a27-9cf3-7b5d32944b7d

Joint=489 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=0.2 Z=-1 SpecialJt=No GUID=40dd3e21-0ee6-4d38-8342-281755657bf3

Joint=490 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=0.3 Z=-1 SpecialJt=No GUID=af05ae99-e1fd-47f7-af8a-08f1e75548e2

Joint=491 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=0.4 Z=-1 SpecialJt=No GUID=ae8e5088-9ca2-420f-bbf7-33da1ac16c18

Joint=492 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=0.5 Z=-1 SpecialJt=No GUID=31516d61-3b3e-4265-baa7-d3e6dbda55d4

Joint=493 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=0.6 Z=-1 SpecialJt=No GUID=275b0a07-914d-40df-886c-902517cc0eee

Joint=494 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=0.7 Z=-1 SpecialJt=No GUID=b76136c0-ebdd-4f48-86a7-536e6ea79db3

Joint=495 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=0.8 Z=-1 SpecialJt=No GUID=0e8391b5-e232-47ff-a84c-a0b754498975

Joint=496 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=0.9 Z=-1 SpecialJt=No GUID=e4228b35-08e6-4f2c-9141-b22cc6c0109e

Joint=497 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=1 Z=-1 SpecialJt=No GUID=13a44279-1c84-4540-bd5f-5c6278e67f21

Joint=498 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=1.1 Z=-1 SpecialJt=No GUID=ec2f1491-c692-47a3-be4e-fe43d84640a8

Joint=499 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=1.2 Z=-1 SpecialJt=No GUID=599f5ce4-d75d-42a9-83fd-34c1a10527f3

Joint=500 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=1.3 Z=-1 SpecialJt=No GUID=a3d5fd8c-08ab-449f-9046-3ac27632eae4

Joint=501 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=1.4 Z=-1 SpecialJt=No GUID=57395c01-fd5b-43bf-a58b-aae8f52ed4d9

Joint=502 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=1.5 Z=-1 SpecialJt=No GUID=3399b364-6294-49af-8d7d-818f74abee72

Joint=503 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=1.6 Z=-1 SpecialJt=No GUID=7fe641bf-d6d4-4852-9658-9ea4c7bf53cc

Joint=504 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=1.7 Z=-1 SpecialJt=No GUID=4b6dee3c-faed-41e0-876c-4e252faeb23c



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=505 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=1.8 Z=-1 SpecialJt=No GUID=407f41b9-7988-45c4-ac87-f544f72b4feb

Joint=506 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=1.9 Z=-1 SpecialJt=No GUID=51b4d127-de41-4925-af56-e79671136373

Joint=507 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=2 Z=-1 SpecialJt=No GUID=9d2aba0f-5e7e-49ea-92d0-a26c6013aa9b

Joint=508 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=2.1 Z=-1 SpecialJt=No GUID=ea2bf441-c23f-42b5-98a6-1474ccbcf752

Joint=509 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.2 Y=2.2 Z=-1 SpecialJt=No GUID=a9d589b6-64e9-49d4-9a94-ac40d4a15301

Joint=510 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.1 Y=-2.2 Z=-1 SpecialJt=No GUID=e1b9e571-a36b-46c9-aa85-9cd0df3b4f0b

Joint=511 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.1 Y=-2.1 Z=-1 SpecialJt=No GUID=805d5f04-b63a-4c5d-9c94-942a5f2e663e

Joint=512 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.1 Y=-2 Z=-1 SpecialJt=No GUID=aa998ed9-e7e6-4f8b-a614-65ef332aeaed

Joint=513 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.1 Y=-1.9 Z=-1 SpecialJt=No GUID=b74de554-85b8-4fd6-b6db-70392092c0cc

Joint=514 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.1 Y=-1.8 Z=-1 SpecialJt=No GUID=385a8d9a-bedd-4fce-9b64-6ff9a0116cbb

Joint=515 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.1 Y=-1.7 Z=-1 SpecialJt=No GUID=c014f237-2cc2-4a69-9785-f79bc9cda714

Joint=516 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.1 Y=-1.6 Z=-1 SpecialJt=No GUID=2f2a73e7-e578-4f45-8fc0-01c5b379474b

Joint=517 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.1 Y=-1.5 Z=-1 SpecialJt=No GUID=2b6708ec-0af0-41ff-8af6-2d32676ba055

Joint=518 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.1 Y=-1.4 Z=-1 SpecialJt=No GUID=ba8bf885-f60d-4f41-a8f4-138217d38f4c

Joint=519 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.1 Y=-1.3 Z=-1 SpecialJt=No GUID=2d9b6287-840f-4782-ac05-6313cbd8db7

Joint=520 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.1 Y=-1.2 Z=-1 SpecialJt=No GUID=bf39aded-c09f-4a8d-9310-5a83dcbab694e

Joint=521 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.1 Y=-1.1 Z=-1 SpecialJt=No GUID=2851f503-00c3-488a-b7f2-5d9517ac1e65

Joint=522 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.1 Y=-1 Z=-1 SpecialJt=No GUID=857c8624-93df-4bd4-b5fc-fad5f7a40354

Joint=523 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.1 Y=-0.9 Z=-1 SpecialJt=No GUID=adb224f4-0072-4525-815e-b1d868ac01c9

Joint=524 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.1 Y=-0.8 Z=-1 SpecialJt=No GUID=2e40a664-c3fd-46a0-9bc7-ecd9d3534916

Joint=525 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.1 Y=-0.7 Z=-1 SpecialJt=No GUID=f7209462-4824-4e09-92ab-9aa9050c02db

Joint=526 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.1 Y=-0.6 Z=-1 SpecialJt=No GUID=8fcde8b1-c0df-4c0f-8073-bfe8e56b9863

Joint=527 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.1 Y=-0.5 Z=-1 SpecialJt=No GUID=a9b2f60e-f930-4a1f-8de6-b0352b35d43b

Joint=528 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.1 Y=-0.4 Z=-1 SpecialJt=No GUID=d91c358d-ce6b-4ba2-9dbe-2726f0bbe1c8

Joint=529 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.1 Y=-0.3 Z=-1 SpecialJt=No GUID=1ed5af22-ca0c-4e25-a1b5-46be228bebd4

Joint=530 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.1 Y=-0.2 Z=-1 SpecialJt=No GUID=42700abf-e924-4d23-bf18-2921a0460109

Joint=531 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.1 Y=-0.1 Z=-1 SpecialJt=No GUID=7d6ced8e-856f-4254-bed8-4e8bf3b87689



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |                     |           |        |      |              |                                           |
|---------------------------|---------------------|-----------|--------|------|--------------|-------------------------------------------|
| Joint=532 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1.1 | Y=0    | Z=-1 | SpecialJt=No | GUID=86f3851a-16ee-48e3-b6e8-a624bf078a47 |
| Joint=533 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1.1 | Y=0.1  | Z=-1 | SpecialJt=No | GUID=59ea087f-5a93-4ff6-a30b-f449fc7da32a |
| Joint=534 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1.1 | Y=0.2  | Z=-1 | SpecialJt=No | GUID=a36eb270-ad27-41c8-9457-31f810bde4b  |
| Joint=535 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1.1 | Y=0.3  | Z=-1 | SpecialJt=No | GUID=d2ac0c0c-eae1-4200-b467-f834840137e0 |
| Joint=536 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1.1 | Y=0.4  | Z=-1 | SpecialJt=No | GUID=3df65437-8c9d-40a5-8168-67ff98301371 |
| Joint=537 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1.1 | Y=0.5  | Z=-1 | SpecialJt=No | GUID=dfda16e2-7f0e-412d-b8e0-1b9a691cc5c1 |
| Joint=538 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1.1 | Y=0.6  | Z=-1 | SpecialJt=No | GUID=d50343fe-6710-427d-a543-ecdd0526368a |
| Joint=539 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1.1 | Y=0.7  | Z=-1 | SpecialJt=No | GUID=23605ba8-1e9f-4433-9d84-ea8847149528 |
| Joint=540 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1.1 | Y=0.8  | Z=-1 | SpecialJt=No | GUID=a3afb463-a291-4b11-bb5d-88136b7117bb |
| Joint=541 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1.1 | Y=0.9  | Z=-1 | SpecialJt=No | GUID=1b1e6784-5225-4347-9898-7f09836b450b |
| Joint=542 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1.1 | Y=1    | Z=-1 | SpecialJt=No | GUID=a4a3a8f7-b333-4dfd-9682-9d8b98fb49d4 |
| Joint=543 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1.1 | Y=1.1  | Z=-1 | SpecialJt=No | GUID=52018f46-6ee8-4f83-8003-bb2bbe452161 |
| Joint=544 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1.1 | Y=1.2  | Z=-1 | SpecialJt=No | GUID=5830e0ef-fe9d-4726-99cf-e8d600271b08 |
| Joint=545 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1.1 | Y=1.3  | Z=-1 | SpecialJt=No | GUID=c3aae029-5753-41a9-8fc1-8474fdf48625 |
| Joint=546 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1.1 | Y=1.4  | Z=-1 | SpecialJt=No | GUID=17c57c10-7409-448e-a542-52a07da45725 |
| Joint=547 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1.1 | Y=1.5  | Z=-1 | SpecialJt=No | GUID=198f9630-27bb-4488-bb37-d537c23ea0e4 |
| Joint=548 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1.1 | Y=1.6  | Z=-1 | SpecialJt=No | GUID=33311c45-209e-4df5-95ac-aa529aa60fe3 |
| Joint=549 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1.1 | Y=1.7  | Z=-1 | SpecialJt=No | GUID=a4d0574c-ec8f-40aa-aa87-3ca07b9a6bd2 |
| Joint=550 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1.1 | Y=1.8  | Z=-1 | SpecialJt=No | GUID=7a8477e9-d25a-4032-8dcd-e38234a36303 |
| Joint=551 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1.1 | Y=1.9  | Z=-1 | SpecialJt=No | GUID=a1ece31d-74d0-4000-bd17-45ddcab245b1 |
| Joint=552 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1.1 | Y=2    | Z=-1 | SpecialJt=No | GUID=9f0a4309-d75a-4029-99e7-6b0f1936b93c |
| Joint=553 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1.1 | Y=2.1  | Z=-1 | SpecialJt=No | GUID=f7dbc46b-0539-450f-bbdf-ffc94f9544f9 |
| Joint=554 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1.1 | Y=2.2  | Z=-1 | SpecialJt=No | GUID=d4204523-110b-47fd-81bb-c7489f74a0a8 |
| Joint=555 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1   | Y=-2.2 | Z=-1 | SpecialJt=No | GUID=21251c0f-62a7-4d56-b858-18185167aae9 |
| Joint=556 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1   | Y=-2.1 | Z=-1 | SpecialJt=No | GUID=5e761aa8-0b74-4336-9f45-dc590b91c09b |
| Joint=557 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1   | Y=-2   | Z=-1 | SpecialJt=No | GUID=4abbff67-843c-45c7-a591-370e429f084b |
| Joint=558 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1   | Y=-1.9 | Z=-1 | SpecialJt=No | GUID=43dcc124-cb6f-4a27-b39f-e06a01218c25 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                                                                                                           |  |
|---------------------------------------------------------------------------------------------------------------------------|--|
| Joint=559 CoordSys=GLOBAL CoordType=Cartesian XorR=-1 Y=-1.8 Z=-1 SpecialJt=No GUID=fd3d8644-df9f-4f94-a72c-2b2b82fb3550  |  |
| Joint=560 CoordSys=GLOBAL CoordType=Cartesian XorR=-1 Y=-1.7 Z=-1 SpecialJt=No GUID=d3eba615-4afd-43eb-988a-8ced932f2b10  |  |
| Joint=561 CoordSys=GLOBAL CoordType=Cartesian XorR=-1 Y=-1.6 Z=-1 SpecialJt=No GUID=d346bc45-ad50-4f4f-bf57-c7d7be76b791  |  |
| Joint=562 CoordSys=GLOBAL CoordType=Cartesian XorR=-1 Y=-1.5 Z=-1 SpecialJt=No GUID=91b45aca-38a2-43f3-a04a-05791e21187d  |  |
| Joint=563 CoordSys=GLOBAL CoordType=Cartesian XorR=-1 Y=-1.4 Z=-1 SpecialJt=No GUID=85030757-6b94-4af6-bcb6-693a19406022  |  |
| Joint=564 CoordSys=GLOBAL CoordType=Cartesian XorR=-1 Y=-1.3 Z=-1 SpecialJt=No GUID=fe4236e7-13a6-4e44-85e6-6f5507fbdabaa |  |
| Joint=565 CoordSys=GLOBAL CoordType=Cartesian XorR=-1 Y=-1.2 Z=-1 SpecialJt=No GUID=f8242f0a-7eae-4dd1-a682-4eec21960f07  |  |
| Joint=566 CoordSys=GLOBAL CoordType=Cartesian XorR=-1 Y=-1.1 Z=-1 SpecialJt=No GUID=70e9dfd7-ad21-4cf3-86fa-77f3360cb3cb  |  |
| Joint=567 CoordSys=GLOBAL CoordType=Cartesian XorR=-1 Y=-1 Z=-1 SpecialJt=No GUID=4042ebe6-7fe1-4d3a-a814-9a6a3b075a1d    |  |
| Joint=568 CoordSys=GLOBAL CoordType=Cartesian XorR=-1 Y=-0.9 Z=-1 SpecialJt=No GUID=db066ee5-31c0-4fd2-a990-5f9c2c97dd78  |  |
| Joint=569 CoordSys=GLOBAL CoordType=Cartesian XorR=-1 Y=-0.8 Z=-1 SpecialJt=No GUID=4777198e-d8f7-4b10-a8e9-ba7ed003d333  |  |
| Joint=570 CoordSys=GLOBAL CoordType=Cartesian XorR=-1 Y=-0.7 Z=-1 SpecialJt=No GUID=c5ed6314-39f0-4540-bc49-6e4e1a5463e1  |  |
| Joint=571 CoordSys=GLOBAL CoordType=Cartesian XorR=-1 Y=-0.6 Z=-1 SpecialJt=No GUID=d632839e-2adb-47f8-9b73-6f35916bf155  |  |
| Joint=572 CoordSys=GLOBAL CoordType=Cartesian XorR=-1 Y=-0.5 Z=-1 SpecialJt=No GUID=7f2b6454-4dc5-44ff-af3e-63e0a3a5f176  |  |
| Joint=573 CoordSys=GLOBAL CoordType=Cartesian XorR=-1 Y=-0.4 Z=-1 SpecialJt=No GUID=517494d9-53e0-4184-b901-dcc482d46d79  |  |
| Joint=574 CoordSys=GLOBAL CoordType=Cartesian XorR=-1 Y=-0.3 Z=-1 SpecialJt=No GUID=09145e0b-bf0d-46af-b5a3-376f97c8a2e9  |  |
| Joint=575 CoordSys=GLOBAL CoordType=Cartesian XorR=-1 Y=-0.2 Z=-1 SpecialJt=No GUID=7f7822a5-93b1-4661-a13a-4dd3d32cc14a  |  |
| Joint=576 CoordSys=GLOBAL CoordType=Cartesian XorR=-1 Y=-0.1 Z=-1 SpecialJt=No GUID=e1d3ca73-d719-444b-8c73-9e3aa2639a9b  |  |
| Joint=577 CoordSys=GLOBAL CoordType=Cartesian XorR=-1 Y=0 Z=-1 SpecialJt=No GUID=e8a9163b-eb57-45bf-9380-4519b52295d4     |  |
| Joint=578 CoordSys=GLOBAL CoordType=Cartesian XorR=-1 Y=0.1 Z=-1 SpecialJt=No GUID=aea77f2e-c6c0-485e-b4e9-f309f0d3cd2c   |  |
| Joint=579 CoordSys=GLOBAL CoordType=Cartesian XorR=-1 Y=0.2 Z=-1 SpecialJt=No GUID=2b319d85-eb43-4170-b382-72f3eb0441b9   |  |
| Joint=580 CoordSys=GLOBAL CoordType=Cartesian XorR=-1 Y=0.3 Z=-1 SpecialJt=No GUID=b1a436ad-8b42-4a65-9749-a43419bf1bd    |  |
| Joint=581 CoordSys=GLOBAL CoordType=Cartesian XorR=-1 Y=0.4 Z=-1 SpecialJt=No GUID=47c7e574-6571-47c0-84d6-4f63a1197767   |  |
| Joint=582 CoordSys=GLOBAL CoordType=Cartesian XorR=-1 Y=0.5 Z=-1 SpecialJt=No GUID=696d6306-40ba-421d-8df6-9a131b75821d   |  |
| Joint=583 CoordSys=GLOBAL CoordType=Cartesian XorR=-1 Y=0.6 Z=-1 SpecialJt=No GUID=3ece01b8-397c-4722-ab93-d9e79fac210d   |  |
| Joint=584 CoordSys=GLOBAL CoordType=Cartesian XorR=-1 Y=0.7 Z=-1 SpecialJt=No GUID=35dd45e7-6877-40c6-bffb-866ea566fdbb   |  |
| Joint=585 CoordSys=GLOBAL CoordType=Cartesian XorR=-1 Y=0.8 Z=-1 SpecialJt=No GUID=3cf6f8dc-2af7-44d3-b6a7-a6641bc0557d   |  |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                           |                     |           |        |      |              |                                           |
|---------------------------|---------------------|-----------|--------|------|--------------|-------------------------------------------|
| Joint=586 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1   | Y=0.9  | Z=-1 | SpecialJt=No | GUID=d5f19982-75cb-469c-8752-63a5645d749f |
| Joint=587 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1   | Y=1    | Z=-1 | SpecialJt=No | GUID=7a565349-7218-484a-8b2d-0d2cb503eb9b |
| Joint=588 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1   | Y=1.1  | Z=-1 | SpecialJt=No | GUID=72f8bcb3-8083-4701-976d-5afd572395f5 |
| Joint=589 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1   | Y=1.2  | Z=-1 | SpecialJt=No | GUID=c6b47d5b-02f3-427b-b5f0-bf67e3ffb3e0 |
| Joint=590 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1   | Y=1.3  | Z=-1 | SpecialJt=No | GUID=2a486395-8dc9-499c-9d54-a677d215fdb8 |
| Joint=591 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1   | Y=1.4  | Z=-1 | SpecialJt=No | GUID=6c8fc880-63fe-4a78-b864-06a2b58ad390 |
| Joint=592 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1   | Y=1.5  | Z=-1 | SpecialJt=No | GUID=6addcccb-74cd-4905-a1ec-705b3f4d358e |
| Joint=593 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1   | Y=1.6  | Z=-1 | SpecialJt=No | GUID=63ed00f8-5204-4037-8187-210593caae78 |
| Joint=594 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1   | Y=1.7  | Z=-1 | SpecialJt=No | GUID=50f9ce10-0ddf-4d96-8e75-dcb9bffdcc3d |
| Joint=595 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1   | Y=1.8  | Z=-1 | SpecialJt=No | GUID=4c75cbfc-2c70-42c0-b4e5-065e7c8d7511 |
| Joint=596 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1   | Y=1.9  | Z=-1 | SpecialJt=No | GUID=2d88cb17-10d0-47ba-aae8-87b7da69eddc |
| Joint=597 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1   | Y=2    | Z=-1 | SpecialJt=No | GUID=a0cf17ca-cf11-4a5c-8c1b-026ee6e9e1a9 |
| Joint=598 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1   | Y=2.1  | Z=-1 | SpecialJt=No | GUID=cd7f4398-675d-4eee-993a-054bb1243eb3 |
| Joint=599 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-1   | Y=2.2  | Z=-1 | SpecialJt=No | GUID=d7039a9f-603f-4165-9a26-53ab4c236cfb |
| Joint=600 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-0.9 | Y=-2.2 | Z=-1 | SpecialJt=No | GUID=3f504f29-485a-452e-a03a-2118cb3da397 |
| Joint=601 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-0.9 | Y=-2.1 | Z=-1 | SpecialJt=No | GUID=985f4f3e-95d5-43d7-8e53-943a162a0196 |
| Joint=602 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-0.9 | Y=-2   | Z=-1 | SpecialJt=No | GUID=22534d03-1b55-486b-b43c-aaaaceaff932 |
| Joint=603 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-0.9 | Y=-1.9 | Z=-1 | SpecialJt=No | GUID=9fce96f7-bc28-4629-b64c-79a3c8fb9eed |
| Joint=604 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-0.9 | Y=-1.8 | Z=-1 | SpecialJt=No | GUID=5328bb95-2837-408b-815b-e086427214b5 |
| Joint=605 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-0.9 | Y=-1.7 | Z=-1 | SpecialJt=No | GUID=0e177824-51eb-43aa-ad7e-994e59e7be2e |
| Joint=606 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-0.9 | Y=-1.6 | Z=-1 | SpecialJt=No | GUID=68600847-2e77-4ce3-9ce6-497b8c94e3c9 |
| Joint=607 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-0.9 | Y=-1.5 | Z=-1 | SpecialJt=No | GUID=3f477bb1-a87f-46b4-9916-395d949d57d5 |
| Joint=608 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-0.9 | Y=-1.4 | Z=-1 | SpecialJt=No | GUID=4779cbdd-e4a8-4736-8f5b-db9a4bca25ac |
| Joint=609 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-0.9 | Y=-1.3 | Z=-1 | SpecialJt=No | GUID=afb927df-445f-4837-b242-6e37d9457e01 |
| Joint=610 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-0.9 | Y=-1.2 | Z=-1 | SpecialJt=No | GUID=724382a8-13e3-44fe-a03b-7c90c48521e0 |
| Joint=611 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-0.9 | Y=-1.1 | Z=-1 | SpecialJt=No | GUID=ae5ae1ef-e873-4418-b3be-c3a3e6e37600 |
| Joint=612 CoordSys=GLOBAL | CoordType=Cartesian | XorR=-0.9 | Y=-1   | Z=-1 | SpecialJt=No | GUID=737ace37-d377-481a-a96d-25ea5271530a |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=613 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=-0.9 Z=-1 SpecialJt=No GUID=b18a4d1d-0fb1-4993-9d48-d72ace396d50

Joint=614 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=-0.8 Z=-1 SpecialJt=No GUID=c47a9686-8bd5-41cf-9e42-120525db30a1

Joint=615 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=-0.7 Z=-1 SpecialJt=No GUID=c667f74b-a1bb-48c4-a614-31c51dd9851b

Joint=616 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=-0.6 Z=-1 SpecialJt=No GUID=37328992-5163-4c1f-9ae0-0715f119ef83

Joint=617 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=-0.5 Z=-1 SpecialJt=No GUID=d9304dc7-188d-460d-a869-5390d82e609a

Joint=618 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=-0.4 Z=-1 SpecialJt=No GUID=3ab254e6-8e8a-48f5-b806-c7d0fb90a0e1

Joint=619 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=-0.3 Z=-1 SpecialJt=No GUID=03ea04ad-d3c3-49f3-beb6-67c67915c605

Joint=620 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=-0.2 Z=-1 SpecialJt=No GUID=49a7443a-5011-42eb-8feb-d69fa2b36a5c

Joint=621 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=-0.09999999999999999 Z=-1 SpecialJt=No GUID=f5a3e448-3dc1-4ac4-930e-bac7abb69412

Joint=622 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=1.11022302462516E-16 Z=-1 SpecialJt=No GUID=99c554cf-4e7a-460f-accf-7163c9722e47

Joint=623 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=0.09999999999999999 Z=-1 SpecialJt=No GUID=1c87e4e0-e6ac-4172-ae3e-63074a35120b

Joint=624 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=0.2 Z=-1 SpecialJt=No GUID=937ffe8-8efe-4723-a0d0-7ae9352cc3e1

Joint=625 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=0.3 Z=-1 SpecialJt=No GUID=434c4ef4-85cd-4fa4-8634-dea2a22a154f

Joint=626 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=0.4 Z=-1 SpecialJt=No GUID=ee7883b7-fa05-46a5-b69e-f098a31724e4

Joint=627 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=0.5 Z=-1 SpecialJt=No GUID=2337b792-8a98-4b43-a1ba-6246a7b42d35

Joint=628 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=0.6 Z=-1 SpecialJt=No GUID=4c4bb532-1b79-4669-a1a8-f8a9afa6a428

Joint=629 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=0.7 Z=-1 SpecialJt=No GUID=4a907a61-059d-4c94-b9e4-e0a68f7e6de9

Joint=630 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=0.8 Z=-1 SpecialJt=No GUID=ff3f4c2c-b634-494f-82f7-9e3981083630

Joint=631 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=0.9 Z=-1 SpecialJt=No GUID=e01f4459-a401-433b-89ff-7d0c7dcd2946

Joint=632 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=1 Z=-1 SpecialJt=No GUID=10363344-526d-499f-9cb7-1ed01e16676d

Joint=633 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=1.1 Z=-1 SpecialJt=No GUID=c51e060a-c61a-426f-a686-b25db92c2860

Joint=634 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=1.2 Z=-1 SpecialJt=No GUID=8d16bbfb-dd84-4fbf-86cc-dd490f39dd00

Joint=635 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=1.3 Z=-1 SpecialJt=No GUID=a6c51a48-d013-4eea-b9b2-5317ed69ac6b

Joint=636 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=1.4 Z=-1 SpecialJt=No GUID=29e81f75-0c95-4c47-81fc-db46e2e87b02

Joint=637 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=1.5 Z=-1 SpecialJt=No GUID=3d7306a5-03bd-450b-b580-65119781aa91

Joint=638 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=1.6 Z=-1 SpecialJt=No GUID=c34cfc4c-4f10-4f42-bf5f-b5fa72c440fd

Joint=639 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=1.7 Z=-1 SpecialJt=No GUID=357e25cf-75da-40e6-b1f8-1cc689bbc592



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=640 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=1.8 Z=-1 SpecialJt=No GUID=5bb02da7-b35c-4e5c-9925-773571f6d0b4

Joint=641 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=1.9 Z=-1 SpecialJt=No GUID=5c770246-ea16-40bc-8ac2-a98afc80df7a

Joint=642 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=2 Z=-1 SpecialJt=No GUID=831df69c-316d-4535-9397-7616451f8a74

Joint=643 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=2.1 Z=-1 SpecialJt=No GUID=ce3ac8ec-ad41-49cd-ba86-c740284451e7

Joint=644 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.9 Y=2.2 Z=-1 SpecialJt=No GUID=d12d3948-85b8-4386-90ce-278bcfe7c907

Joint=645 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=-2.2 Z=-1 SpecialJt=No GUID=ff498a5e-f256-4597-a382-4f7dac883820

Joint=646 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=-2.1 Z=-1 SpecialJt=No GUID=c16226ea-c2b3-4fe3-a1b7-e1f153136fed

Joint=647 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=-2 Z=-1 SpecialJt=No GUID=4935e534-d1c3-4a16-b710-50edd2c93639

Joint=648 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=-1.9 Z=-1 SpecialJt=No GUID=21f4b137-624c-45c9-89d4-67b869e67b68

Joint=649 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=-1.8 Z=-1 SpecialJt=No GUID=5285f169-5dbd-4118-9437-f56004d0b08a

Joint=650 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=-1.7 Z=-1 SpecialJt=No GUID=16a4ac14-a12d-48df-b684-897f541ec703

Joint=651 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=-1.6 Z=-1 SpecialJt=No GUID=0bb26522-9be9-4455-9c26-6c60620658a3

Joint=652 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=-1.5 Z=-1 SpecialJt=No GUID=76740524-44e6-4a43-ad36-14500054a346

Joint=653 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=-1.4 Z=-1 SpecialJt=No GUID=91cc24ab-80d5-4b3f-9897-c9e4de626a5b

Joint=654 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=-1.3 Z=-1 SpecialJt=No GUID=1b79182b-ee82-4803-a22e-78456da43820

Joint=655 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=-1.2 Z=-1 SpecialJt=No GUID=2174176c-af90-4bc8-81ae-da7c20ecd5c9

Joint=656 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=-1.1 Z=-1 SpecialJt=No GUID=726a258e-41a7-4fa8-a733-0f599bb2b0f7

Joint=657 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=-1 Z=-1 SpecialJt=No GUID=9f21ef08-a494-4e43-ba2e-791a237bc024

Joint=658 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=-0.9 Z=-1 SpecialJt=No GUID=b782aa2c-4f6b-4ad9-956c-603dff150087

Joint=659 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=-0.8 Z=-1 SpecialJt=No GUID=8948c2b0-ca95-4d2e-ba01-3f162e5916dd

Joint=660 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=-0.7 Z=-1 SpecialJt=No GUID=902b15dc-21de-43ff-b599-e8f3d19c4f0f

Joint=661 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=-0.6 Z=-1 SpecialJt=No GUID=4ea8de88-c9f1-471d-b5d2-e3a05bd28e54

Joint=662 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=-0.5 Z=-1 SpecialJt=No GUID=4e028477-ed49-4af8-a41c-ae683d54f62c

Joint=663 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=-0.4 Z=-1 SpecialJt=No GUID=d126eec1-6d68-4145-9a8c-8a8d4e6ef6c7

Joint=664 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=-0.3 Z=-1 SpecialJt=No GUID=279d4cbe-adf7-4d9e-aef7-0c33e3711ef7

Joint=665 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=-0.2 Z=-1 SpecialJt=No GUID=298977dd-b367-4f6f-82bb-b8bc274b66d7

Joint=666 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=-0.1 Z=-1 SpecialJt=No GUID=c1290c40-3f71-41d1-b39f-910c3dac0eee

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=667 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=1.11022302462516E-16 Z=-1 SpecialJt=No GUID=f555b099-315c-4432-bc6b-10ea0c5ab7c3

Joint=668 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=0.099999999999999999 Z=-1 SpecialJt=No GUID=7a2ff4c8-809e-4695-b3fe-b7410e0f0985

Joint=669 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=0.2 Z=-1 SpecialJt=No GUID=95911848-ebb4-47d3-bbc7-3dcb6d656a4c

Joint=670 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=0.3 Z=-1 SpecialJt=No GUID=32aad980-9851-46c5-867c-f606a8e0b3d0

Joint=671 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=0.4 Z=-1 SpecialJt=No GUID=79ebda58-b9b3-4aee-b7d1-aaa5ba2ad147

Joint=672 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=0.5 Z=-1 SpecialJt=No GUID=2df18457-6300-4781-a33b-7774a95da381

Joint=673 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=0.6 Z=-1 SpecialJt=No GUID=ba28f9fa-2d2b-409e-b061-60ada23edba2

Joint=674 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=0.7 Z=-1 SpecialJt=No GUID=1fc9923c-9911-4134-8e62-4986d82d71c3

Joint=675 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=0.8 Z=-1 SpecialJt=No GUID=89b9786f-df94-4c7c-b548-a5b3708c2afa

Joint=676 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=0.9 Z=-1 SpecialJt=No GUID=ea3a2847-8a70-4fb6-8399-60ba6fa820ee

Joint=677 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=1 Z=-1 SpecialJt=No GUID=cd7b3148-f668-4ded-bd74-7d6c982b855a

Joint=678 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=1.1 Z=-1 SpecialJt=No GUID=639fa85f-7371-4fb1-97c0-37de9833f3d3

Joint=679 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=1.2 Z=-1 SpecialJt=No GUID=e323f465-3610-48b1-b34d-ef0e2b1e9570

Joint=680 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=1.3 Z=-1 SpecialJt=No GUID=be110031-7ad7-4421-a18b-018b3b5560f8

Joint=681 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=1.4 Z=-1 SpecialJt=No GUID=7fc54a7f-401e-4b97-9d65-9ae7ad70e7ff

Joint=682 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=1.5 Z=-1 SpecialJt=No GUID=981c9ffe-c8f6-4eb6-9eb1-507174352448

Joint=683 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=1.6 Z=-1 SpecialJt=No GUID=e640c02d-a01f-4422-9e6a-069581c60b95

Joint=684 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=1.7 Z=-1 SpecialJt=No GUID=1e4d64b8-6f0b-493d-b2a1-1f1158805691

Joint=685 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=1.8 Z=-1 SpecialJt=No GUID=a3f053b2-15f0-48dc-abe9-4706ffeac161

Joint=686 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=1.9 Z=-1 SpecialJt=No GUID=c5d01e1f-d045-473d-a17e-2a372a7c0117

Joint=687 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=2 Z=-1 SpecialJt=No GUID=e6f61f1b-32dc-4f56-8613-adf57a51e7a1

Joint=688 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=2.1 Z=-1 SpecialJt=No GUID=40bce48b-759b-4f54-a6cb-1aa756bf1763

Joint=689 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.8 Y=2.2 Z=-1 SpecialJt=No GUID=897ee884-d335-4992-855f-8f0cf83ca454

Joint=690 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=-2.2 Z=-1 SpecialJt=No GUID=b10f46ac-b036-4003-8f8c-064726e962e9

Joint=691 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=-2.1 Z=-1 SpecialJt=No GUID=a3ced7b4-6523-447e-8195-63e17473f90b

Joint=692 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=-2 Z=-1 SpecialJt=No GUID=33148fdb-c2d3-4da3-ac65-1b8646b2411f

Joint=693 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=-1.9 Z=-1 SpecialJt=No GUID=32fd5979-315a-4e8e-80f3-d8a08dcf366a

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=694 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=-1.8 Z=-1 SpecialJt=No GUID=7c7b0e35-  
cea4-461b-8b87-b2e2ed72451a

Joint=695 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=-1.7 Z=-1 SpecialJt=No GUID=4aefb0e8-  
140d-4a97-a6c2-5e955be1862c

Joint=696 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=-1.6 Z=-1 SpecialJt=No GUID=162d7dae-  
0dcc-4352-b6c1-4a1b18646a6c

Joint=697 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=-1.5 Z=-1 SpecialJt=No GUID=f7f369f2-  
4779-46a9-825e-df3aec5a17d8

Joint=698 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=-1.4 Z=-1 SpecialJt=No GUID=8522d2f7-  
cc71-4a90-b0af-10d81f095cbc

Joint=699 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=-1.3 Z=-1 SpecialJt=No GUID=789ba35d-  
536f-4ed3-af20-0f0528067a9b

Joint=700 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=-1.2 Z=-1 SpecialJt=No GUID=1cc86642-  
9f83-4e14-bd27-2876e2532e49

Joint=701 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=-1.1 Z=-1 SpecialJt=No GUID=6c0b655a-  
3cc3-4f03-ad57-766a00b1d226

Joint=702 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=-1 Z=-1 SpecialJt=No GUID=db3dd5d8-  
a547-49e5-b946-a33909a4dab7

Joint=703 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=-0.9 Z=-1 SpecialJt=No GUID=7213c084-  
938e-4ae8-b7bb-e4755bea8772

Joint=704 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=-0.8 Z=-1 SpecialJt=No GUID=5df56a2a-  
7b7e-479c-b9a6-73f00499962e

Joint=705 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=-0.7 Z=-1 SpecialJt=No GUID=a12b5980-  
0692-4b6c-bb81-b8134c21bf6a

Joint=706 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=-0.6 Z=-1 SpecialJt=No GUID=303a7887-  
2e12-4cd8-84a7-1934418ad905

Joint=707 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=-0.5 Z=-1 SpecialJt=No GUID=bf4d03e0-  
9112-4302-b5e6-bad54538c6a5

Joint=708 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=-0.4 Z=-1 SpecialJt=No GUID=9624763b-  
315a-4d50-ba6a-140b46451caa

Joint=709 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=-0.3 Z=-1 SpecialJt=No GUID=2af3b7f1-  
c9ff-4619-8d61-676473c9c513

Joint=710 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=-0.2 Z=-1 SpecialJt=No GUID=da6f2078-  
b7c8-4625-99af-45e04923b6a2

Joint=711 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=-0.1 Z=-1 SpecialJt=No GUID=b839b604-  
f6b7-4ebe-ba77-a856a6825e69

Joint=712 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=1.11022302462516E-16 Z=-1  
SpecialJt=No GUID=ddbb6d18-a714-4f42-93ad-2f9bb43a3985

Joint=713 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=0.0999999999999999 Z=-1 SpecialJt=No  
GUID=7ee1af30-eeec-4c72-a5f6-0609750fb8d9

Joint=714 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=0.2 Z=-1 SpecialJt=No GUID=1072b47c-  
05bd-42b7-ac6d-bd5589341a7d

Joint=715 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=0.3 Z=-1 SpecialJt=No GUID=39aef823-  
2c7c-4acc-8f71-7ffbb43fddfa

Joint=716 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=0.4 Z=-1 SpecialJt=No GUID=b3248f11-  
f51f-4679-8771-32942827c4a3

Joint=717 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=0.5 Z=-1 SpecialJt=No GUID=0000303d-  
b83d-42ce-b572-5f81cd43a3eb

Joint=718 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=0.6 Z=-1 SpecialJt=No GUID=a56a8b0c-  
b0b9-4112-a751-0fa074be0b32

Joint=719 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=0.7 Z=-1 SpecialJt=No GUID=67b8eee6-  
ad14-47eb-aa0d-0f60dd0f5efa

Joint=720 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=0.8 Z=-1 SpecialJt=No GUID=5b1d94dd-  
6747-40a0-8397-5cc0c7ec4a92

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=721 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=0.9 Z=-1 SpecialJt=No GUID=f3b57d17-a81b-4539-96f2-64562ea45be8

Joint=722 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=1 Z=-1 SpecialJt=No GUID=a0105821-2e3c-4dd9-8cc3-02f77c689f20

Joint=723 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=1.1 Z=-1 SpecialJt=No GUID=5567a50a-0443-43cb-bcc1-f6949611cfd

Joint=724 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=1.2 Z=-1 SpecialJt=No GUID=82663f66-e59e-45a1-b27e-b0d238230f93

Joint=725 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=1.3 Z=-1 SpecialJt=No GUID=a52584d1-af19-461c-ab17-c54d99464d1b

Joint=726 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=1.4 Z=-1 SpecialJt=No GUID=a13d93d7-8975-43d7-b975-d6ff19876670

Joint=727 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=1.5 Z=-1 SpecialJt=No GUID=2e622447-c223-400c-bd84-a86d87efc967

Joint=728 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=1.6 Z=-1 SpecialJt=No GUID=9a830e59-9233-4408-9c23-3d53b3e1d1f6

Joint=729 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=1.7 Z=-1 SpecialJt=No GUID=88495f7a-3c73-4945-969c-353b6fd54744

Joint=730 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=1.8 Z=-1 SpecialJt=No GUID=a57a4a40-5902-4f89-a4cf-ef91cc56f6

Joint=731 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=1.9 Z=-1 SpecialJt=No GUID=7d1b2199-c671-4a89-b486-64cf02cf8104

Joint=732 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=2 Z=-1 SpecialJt=No GUID=6cdc6c46-33d2-430d-8d81-8438f47e18c3

Joint=733 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=2.1 Z=-1 SpecialJt=No GUID=a07f5dc3-49e5-4752-9ca0-18cf1c76af04

Joint=734 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.7 Y=2.2 Z=-1 SpecialJt=No GUID=2dd6c50d-18bc-4a94-b80d-a3971d5eaed6

Joint=735 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=-2.2 Z=-1 SpecialJt=No GUID=a7f8dcec-3558-4855-8bad-5e2f10490f22

Joint=736 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=-2.1 Z=-1 SpecialJt=No GUID=c4d875df-c733-4c1d-aaa8-51a59412d262

Joint=737 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=-2 Z=-1 SpecialJt=No GUID=9dd0a40f-52b6-4406-85f6-64ff589d7852

Joint=738 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=-1.9 Z=-1 SpecialJt=No GUID=295d2b48-0b0c-4622-8b75-ee7c8f57413d

Joint=739 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=-1.8 Z=-1 SpecialJt=No GUID=c3924193-92e8-4465-8308-25f73d75a1f6

Joint=740 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=-1.7 Z=-1 SpecialJt=No GUID=42abd047-5616-4d10-a438-7fe6a6a80d35

Joint=741 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=-1.6 Z=-1 SpecialJt=No GUID=17f69d2d-b460-4a60-9638-fd6fdea57f0f

Joint=742 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=-1.5 Z=-1 SpecialJt=No GUID=8a794d0d-1457-4d69-9c0e-7b8129606a5c

Joint=743 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=-1.4 Z=-1 SpecialJt=No GUID=49095029-b8b8-400b-8ddb-c0b9cf26b5db

Joint=744 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=-1.3 Z=-1 SpecialJt=No GUID=5b67c238-519c-4ca1-874e-14c1c47dc918

Joint=745 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=-1.2 Z=-1 SpecialJt=No GUID=e9785da8-d6e7-4f4e-89f4-192b926430a7

Joint=746 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=-1.1 Z=-1 SpecialJt=No GUID=3b66591f-31c5-4e2a-ae86-1c7acfe2643e

Joint=747 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=-1 Z=-1 SpecialJt=No GUID=7889a07a-eb2a-4894-b537-1a72186dea3c



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=748 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=-0.9 Z=-1 SpecialJt=No GUID=17c2cac9-433f-4358-a12b-e3bd0f18fe72

Joint=749 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=-0.8 Z=-1 SpecialJt=No GUID=2490e750-9d94-4cd8-a775-74184cb8ac22

Joint=750 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=-0.7 Z=-1 SpecialJt=No GUID=9b2482f3-6198-47f2-9e59-86e2a775f6cb

Joint=751 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=-0.6 Z=-1 SpecialJt=No GUID=aa34d6e0-4f45-41a5-8470-482ac6f4ec58

Joint=752 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=-0.5 Z=-1 SpecialJt=No GUID=ba765ddd-c9d6-4308-8a74-6eb2ec5bed89

Joint=753 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=-0.4 Z=-1 SpecialJt=No GUID=54129c41-86ca-426a-9dae-debcd0eb405a

Joint=754 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=-0.3 Z=-1 SpecialJt=No GUID=45d06f5f-44e8-4cd7-b4e2-af4a55c8d7c7

Joint=755 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=-0.2 Z=-1 SpecialJt=No GUID=10cc238b-e5c5-4282-8b67-4438558151bc

Joint=756 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=-0.1 Z=-1 SpecialJt=No GUID=2a51636b-4be3-4fd4-bb65-1a94e9130e1c

Joint=757 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=0 Z=-1 SpecialJt=No GUID=3f572552-ee0e-41bc-8fd1-066d16e1e23a

Joint=758 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=0.1 Z=-1 SpecialJt=No GUID=8eca206d-e782-486d-aa05-909fee921c45

Joint=759 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=0.2 Z=-1 SpecialJt=No GUID=fc3918c0-6f4a-48c0-8996-3981dc049abc

Joint=760 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=0.3 Z=-1 SpecialJt=No GUID=a94845af-64ce-4104-a35c-0e62e62e181a

Joint=761 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=0.4 Z=-1 SpecialJt=No GUID=8920635a-caec-4ae5-972b-b5b73f086d38

Joint=762 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=0.5 Z=-1 SpecialJt=No GUID=a5574e5c-a8b1-4ecd-a38f-6e0592dce5a6

Joint=763 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=0.6 Z=-1 SpecialJt=No GUID=9cf3282f-2fc2-4d57-8a0b-662450df402b

Joint=764 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=0.7 Z=-1 SpecialJt=No GUID=7976b8fc-39d6-43bc-a4f0-ef33a9bf0673

Joint=765 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=0.8 Z=-1 SpecialJt=No GUID=4cdcfe3c-ff90-4018-9d46-1f76d85ac8cd

Joint=766 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=0.9 Z=-1 SpecialJt=No GUID=8dafb7e2-c484-4ebe-b404-88a66d52a76f

Joint=767 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=1 Z=-1 SpecialJt=No GUID=a19e52a0-ca99-4487-8d8c-736c7a2c9370

Joint=768 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=1.1 Z=-1 SpecialJt=No GUID=7753a507-b6c6-43fb-9429-1cbbee3feedc

Joint=769 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=1.2 Z=-1 SpecialJt=No GUID=92a73b84-308a-4a19-9f5f-b13ecbb6970b

Joint=770 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=1.3 Z=-1 SpecialJt=No GUID=29be1b49-2e5f-42f0-919b-f576b13d0351

Joint=771 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=1.4 Z=-1 SpecialJt=No GUID=596a762d-dad5-439b-90e4-7796c771989a

Joint=772 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=1.5 Z=-1 SpecialJt=No GUID=021603e3-403d-490e-918c-5f25dc743404

Joint=773 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=1.6 Z=-1 SpecialJt=No GUID=fbbc977a-0920-41fe-93d6-fde2e8e5bb11

Joint=774 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=1.7 Z=-1 SpecialJt=No GUID=e0d20ef1-d98c-4070-97f3-ed2f7ed9006b

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=775 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=1.8 Z=-1 SpecialJt=No GUID=11ec519d-730a-4fab-9452-110a45d012d2

Joint=776 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=1.9 Z=-1 SpecialJt=No GUID=0bb6947b-4bc5-4a0a-9380-ed00d76beaf

Joint=777 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=2 Z=-1 SpecialJt=No GUID=0fed977d-5466-42e9-87e9-2bd0ff598ea4

Joint=778 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=2.1 Z=-1 SpecialJt=No GUID=5ee8fe38-6aa0-4681-b4ee-f9201cdc1304

Joint=779 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.6 Y=2.2 Z=-1 SpecialJt=No GUID=e7098513-f1ec-47cf-a6a7-4daf77adcd83

Joint=780 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=-2.2 Z=-1 SpecialJt=No GUID=9f7206c5-a9b8-4c04-943e-c5d7d713e199

Joint=781 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=-2.1 Z=-1 SpecialJt=No GUID=01907f54-59df-4f02-8ed5-e76c71a7f1c2

Joint=782 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=-2 Z=-1 SpecialJt=No GUID=885f3acd-b023-4fc0-b83d-d91e79c67931

Joint=783 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=-1.9 Z=-1 SpecialJt=No GUID=af3a8410-6b30-41cf-b713-21a2282f733a

Joint=784 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=-1.8 Z=-1 SpecialJt=No GUID=ab8ab313-3d8c-4ed5-bdce-bf3f57a7d9a4

Joint=785 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=-1.7 Z=-1 SpecialJt=No GUID=187ca793-16c7-4f1f-a7e4-58b3b325c3c5

Joint=786 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=-1.6 Z=-1 SpecialJt=No GUID=61cc01ce-0571-41e6-9944-637509e560dc

Joint=787 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=-1.5 Z=-1 SpecialJt=No GUID=dfa3a95f-8e57-4397-a654-f0b37b54573b

Joint=788 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=-1.4 Z=-1 SpecialJt=No GUID=5001e688-ba8f-4900-9f2c-5e44e33bc850

Joint=789 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=-1.3 Z=-1 SpecialJt=No GUID=600bd4ee-373d-4b5d-b8f1-8366b3aca36c

Joint=790 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=-1.2 Z=-1 SpecialJt=No GUID=3f6b1cef-e886-47c3-b2da-a4380021327a

Joint=791 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=-1.1 Z=-1 SpecialJt=No GUID=fa8f122d-e801-4316-8666-18f7b2d6e85f

Joint=792 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=-1 Z=-1 SpecialJt=No GUID=49c87eab-9a37-4a2c-93ef-d9e33aed6e21

Joint=793 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=-0.9 Z=-1 SpecialJt=No GUID=fca89bb4-bd0c-4377-977d-ca92ec5cc249

Joint=794 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=-0.8 Z=-1 SpecialJt=No GUID=8e5a25ad-35ee-4fdb-b7cc-475d66e47af2

Joint=795 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=-0.7 Z=-1 SpecialJt=No GUID=66a2a156-08be-4dc9-a032-6dafd771ceef

Joint=796 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=-0.6 Z=-1 SpecialJt=No GUID=6691d620-6215-44bd-82d1-5d1594768456

Joint=797 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=-0.5 Z=-1 SpecialJt=No GUID=fb58ecdb-bcd1-483c-8eef-ff1bbd54bfe2

Joint=798 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=-0.4 Z=-1 SpecialJt=No GUID=32b176f8-5bf6-4329-a72b-65ede7742267

Joint=799 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=-0.3 Z=-1 SpecialJt=No GUID=cafaad90-c6d0-411c-83aa-e4fe774bef78

Joint=800 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=-0.2 Z=-1 SpecialJt=No GUID=86e36710-cda6-4a4d-8f9c-0c2ac94a4666

Joint=801 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=-0.09999999999999999 Z=-1 SpecialJt=No GUID=94e3135d-8cb9-47f2-87e9-4697cc57a34e

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=802 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=0 Z=-1 SpecialJt=No GUID=77afa7c8-0fe8-493a-976d-2c3f469b1d42

Joint=803 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=0.0999999999999998 Z=-1 SpecialJt=No GUID=a1a65c17-1e9a-4e1b-b704-28690a5f4b70

Joint=804 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=0.2 Z=-1 SpecialJt=No GUID=0f39647a-6bee-4d5b-9c0e-82f228851e3c

Joint=805 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=0.3 Z=-1 SpecialJt=No GUID=732e4f7f-84a3-4c83-ac12-6fd4d44afecb

Joint=806 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=0.4 Z=-1 SpecialJt=No GUID=7472500b-9ad3-46c1-b395-eb974359de28

Joint=807 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=0.5 Z=-1 SpecialJt=No GUID=d9558695-1551-4147-8518-6ddf460c46fd

Joint=808 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=0.6 Z=-1 SpecialJt=No GUID=b0816243-bed9-4ae9-800f-bf03267117fa

Joint=809 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=0.7 Z=-1 SpecialJt=No GUID=87d0522b-0db7-46c8-95fe-af6e2c775b98

Joint=810 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=0.8 Z=-1 SpecialJt=No GUID=28db7d48-9807-4b9e-a080-78c708b3467a

Joint=811 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=0.9 Z=-1 SpecialJt=No GUID=daccba8a-2a28-42fa-8be7-0845b4d4acc5

Joint=812 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=1 Z=-1 SpecialJt=No GUID=e3c34b22-b230-42eb-937a-b6f027934809

Joint=813 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=1.1 Z=-1 SpecialJt=No GUID=5d3355a0-5b76-45f4-a899-037da9f982df

Joint=814 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=1.2 Z=-1 SpecialJt=No GUID=1150371c-c91f-4cc1-b3a3-c8fe01d458e1

Joint=815 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=1.3 Z=-1 SpecialJt=No GUID=8972ba85-f8dc-47be-b0e5-d58c3920e8d9

Joint=816 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=1.4 Z=-1 SpecialJt=No GUID=9eabf668-4990-41ae-b1f3-02427620a47c

Joint=817 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=1.5 Z=-1 SpecialJt=No GUID=968ec30e-7bbc-4979-babf-06e74da61597

Joint=818 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=1.6 Z=-1 SpecialJt=No GUID=a4a838ef-e324-4c8e-ae10-b8fba410ba33

Joint=819 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=1.7 Z=-1 SpecialJt=No GUID=3790cc12-3a71-491d-8554-37be1f18e614

Joint=820 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=1.8 Z=-1 SpecialJt=No GUID=3c089910-fc87-4457-9c00-e6cdf7f5d1fe

Joint=821 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=1.9 Z=-1 SpecialJt=No GUID=09070c06-cf1e-45c9-874c-c9a622830a45

Joint=822 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=2 Z=-1 SpecialJt=No GUID=7b2e5df9-6ec0-49d6-a0e7-541621c9b45b

Joint=823 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=2.1 Z=-1 SpecialJt=No GUID=be620022-fc40-4dee-a039-9256b8f454dc

Joint=824 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.5 Y=2.2 Z=-1 SpecialJt=No GUID=ba1ccb5a-087c-47ae-8638-72f20e2c4e30

Joint=825 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.4 Y=-2.2 Z=-1 SpecialJt=No GUID=c0da4f8e-9037-49ff-a650-1392d574be0e

Joint=826 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.4 Y=-2.1 Z=-1 SpecialJt=No GUID=d0403c75-fa9d-424e-bffb-f887a7472d68

Joint=827 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.4 Y=-2 Z=-1 SpecialJt=No GUID=ef8e98e2-22a2-433f-a715-8cb2d3d1e0c8

Joint=828 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.4 Y=-1.9 Z=-1 SpecialJt=No GUID=3cc636e4-f6f6-4143-8d8d-2dae447c0de4

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=829 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.4 Y=-1.8 Z=-1 SpecialJt=No GUID=31161a61-760f-4371-b0d0-b91fb592f4b8

Joint=830 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.4 Y=-1.7 Z=-1 SpecialJt=No GUID=b7f21537-90e4-4fb1-bce5-3deb37a00c82

Joint=831 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.4 Y=-1.6 Z=-1 SpecialJt=No GUID=8e63f3d3-7f5a-40c7-9164-46f9271b2034

Joint=832 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.4 Y=-1.5 Z=-1 SpecialJt=No GUID=b67797c2-d810-4521-ac5b-8c8acc6bbd63

Joint=833 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.4 Y=-1.4 Z=-1 SpecialJt=No GUID=30ee9a7b-bb11-4d5e-b51f-c388546da0fb

Joint=834 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.4 Y=-1.3 Z=-1 SpecialJt=No GUID=2d683370-2c8a-493f-a60f-954acc114705

Joint=835 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.4 Y=-1.2 Z=-1 SpecialJt=No GUID=33486b6d-351a-4647-8b4c-62e50d338611

Joint=836 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.4 Y=-1.1 Z=-1 SpecialJt=No GUID=44b62af3-1702-4989-830b-fe3440af5064

Joint=837 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.4 Y=-1 Z=-1 SpecialJt=No GUID=45f42c47-3d67-4829-ad1d-5d634ef8ecfd

Joint=838 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.4 Y=-0.9 Z=-1 SpecialJt=No GUID=e8ec483f-89f3-4bd2-b3d1-2116ed1c768a

Joint=839 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.4 Y=-0.8 Z=-1 SpecialJt=No GUID=da572c30-50d5-48af-9758-9dabd6d8b6c6

Joint=840 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.4 Y=-0.7 Z=-1 SpecialJt=No GUID=3e97fc20-a8f4-4027-be04-2076d9864d01

Joint=841 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.4 Y=-0.6 Z=-1 SpecialJt=No GUID=7dacd3bf-243e-471f-9881-fef6dbd70062

Joint=842 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.4 Y=-0.5 Z=-1 SpecialJt=No GUID=31f91ce9-d1d4-4d93-81d6-8015c450e8cc

Joint=843 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.4 Y=-0.4 Z=-1 SpecialJt=No GUID=0a7b12a1-31c0-4c7a-b8ee-c564b0e86b39

Joint=844 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.4 Y=-0.3 Z=-1 SpecialJt=No GUID=4fb5a75b-e2b1-4760-8ea3-85cde4ec35b7

Joint=845 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.4 Y=-0.2 Z=-1 SpecialJt=No GUID=4d753be9-2ea5-43b0-b2a4-be9a6c6d0d21

Joint=846 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.4 Y=-0.0999999999999999 Z=-1 SpecialJt=No GUID=b3b0d305-719c-4a86-8266-277481340a16

Joint=847 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.4 Y=-1.11022302462516E-16 Z=-1 SpecialJt=No GUID=00c9af6f-3b7a-453e-b29a-a18f8e250de4

Joint=848 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.4 Y=0.0999999999999999 Z=-1 SpecialJt=No GUID=8ea5d231-d3cd-4eaf-9724-cf7fa04c0c29

Joint=849 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.4 Y=0.2 Z=-1 SpecialJt=No GUID=1fea8600-68e8-461a-87af-8084705575b7

Joint=850 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.4 Y=0.3 Z=-1 SpecialJt=No GUID=2a2c0f63-e933-471b-afe3-8cd7a1fa4086

Joint=851 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.4 Y=0.4 Z=-1 SpecialJt=No GUID=4c248413-13e9-4a15-ad4a-508c56ed7d72

Joint=852 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.4 Y=0.5 Z=-1 SpecialJt=No GUID=01e5d51e-d828-44bf-b511-1a3917edf5c7

Joint=853 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.4 Y=0.6 Z=-1 SpecialJt=No GUID=22bf97ef-23d1-4aff-b6fa-11229eca22d2

Joint=854 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.4 Y=0.7 Z=-1 SpecialJt=No GUID=ef59c91c-8a07-4c37-a243-dc31edd47d72

Joint=855 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.4 Y=0.8 Z=-1 SpecialJt=No GUID=0e326ac2-7a39-4b92-a14d-acc727280e8c



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                                          |                                                                       |
|----------------------------------------------------------|-----------------------------------------------------------------------|
| Joint=856 CoordSys=GLOBAL<br>0684-4058-bf1e-e37214078e7e | CoordType=Cartesian XorR=-0.4 Y=0.9 Z=-1 SpecialJt=No GUID=95d10f01-  |
| Joint=857 CoordSys=GLOBAL<br>c271-43ad-960e-27e8d2cb2bb4 | CoordType=Cartesian XorR=-0.4 Y=1 Z=-1 SpecialJt=No GUID=3bb67fb4-    |
| Joint=858 CoordSys=GLOBAL<br>a830-43d5-9795-e33a58775e0f | CoordType=Cartesian XorR=-0.4 Y=1.1 Z=-1 SpecialJt=No GUID=ace888e8-  |
| Joint=859 CoordSys=GLOBAL<br>f764-4189-ba6d-5697a9867da7 | CoordType=Cartesian XorR=-0.4 Y=1.2 Z=-1 SpecialJt=No GUID=422d5883-  |
| Joint=860 CoordSys=GLOBAL<br>a28a-4c87-b99a-855eeb521f6e | CoordType=Cartesian XorR=-0.4 Y=1.3 Z=-1 SpecialJt=No GUID=655d4054-  |
| Joint=861 CoordSys=GLOBAL<br>28db-49a3-95e1-ae2ac47961a9 | CoordType=Cartesian XorR=-0.4 Y=1.4 Z=-1 SpecialJt=No GUID=affca2b9-  |
| Joint=862 CoordSys=GLOBAL<br>231c-4802-91e3-3bb457952514 | CoordType=Cartesian XorR=-0.4 Y=1.5 Z=-1 SpecialJt=No GUID=e86b1802-  |
| Joint=863 CoordSys=GLOBAL<br>a397-421b-8401-c1b2d9f06990 | CoordType=Cartesian XorR=-0.4 Y=1.6 Z=-1 SpecialJt=No GUID=960a0f2d-  |
| Joint=864 CoordSys=GLOBAL<br>6d3d-4290-8b83-b64bb9d0479a | CoordType=Cartesian XorR=-0.4 Y=1.7 Z=-1 SpecialJt=No GUID=d9ecb51d-  |
| Joint=865 CoordSys=GLOBAL<br>08f5-44e0-b3c4-5fc33e8d1a6b | CoordType=Cartesian XorR=-0.4 Y=1.8 Z=-1 SpecialJt=No GUID=1e8f58a8-  |
| Joint=866 CoordSys=GLOBAL<br>0add-48c7-abde-6c9a084504c3 | CoordType=Cartesian XorR=-0.4 Y=1.9 Z=-1 SpecialJt=No GUID=aa6a77d5-  |
| Joint=867 CoordSys=GLOBAL<br>9ca5-4299-ae47-5162b6d0cde8 | CoordType=Cartesian XorR=-0.4 Y=2 Z=-1 SpecialJt=No GUID=d639712b-    |
| Joint=868 CoordSys=GLOBAL<br>255a-423b-b8d0-493544a8ff34 | CoordType=Cartesian XorR=-0.4 Y=2.1 Z=-1 SpecialJt=No GUID=08935a39-  |
| Joint=869 CoordSys=GLOBAL<br>0a4e-4dc5-920f-5e55afa921b0 | CoordType=Cartesian XorR=-0.4 Y=2.2 Z=-1 SpecialJt=No GUID=a4ccb388-  |
| Joint=870 CoordSys=GLOBAL<br>be09-4564-bc95-8b83f3566220 | CoordType=Cartesian XorR=-0.3 Y=-2.2 Z=-1 SpecialJt=No GUID=7caf889b- |
| Joint=871 CoordSys=GLOBAL<br>af60-490d-87fa-2f9601c9d6d2 | CoordType=Cartesian XorR=-0.3 Y=-2.1 Z=-1 SpecialJt=No GUID=eafdf917- |
| Joint=872 CoordSys=GLOBAL<br>979a-4945-9eef-7c00484aae5c | CoordType=Cartesian XorR=-0.3 Y=-2 Z=-1 SpecialJt=No GUID=b864257a-   |
| Joint=873 CoordSys=GLOBAL<br>fca1-43cf-8934-9d47a1d51c16 | CoordType=Cartesian XorR=-0.3 Y=-1.9 Z=-1 SpecialJt=No GUID=e9b7b9cb- |
| Joint=874 CoordSys=GLOBAL<br>b3a7-4be6-ba22-3110c1116cf8 | CoordType=Cartesian XorR=-0.3 Y=-1.8 Z=-1 SpecialJt=No GUID=fdd6de5b- |
| Joint=875 CoordSys=GLOBAL<br>ea69-481d-8e6d-732bae87d217 | CoordType=Cartesian XorR=-0.3 Y=-1.7 Z=-1 SpecialJt=No GUID=a09febbf- |
| Joint=876 CoordSys=GLOBAL<br>dc07-4fa8-9355-6b3f7e17912d | CoordType=Cartesian XorR=-0.3 Y=-1.6 Z=-1 SpecialJt=No GUID=5e6c2864- |
| Joint=877 CoordSys=GLOBAL<br>5760-4927-a8a2-be1c935eec26 | CoordType=Cartesian XorR=-0.3 Y=-1.5 Z=-1 SpecialJt=No GUID=e3f2d147- |
| Joint=878 CoordSys=GLOBAL<br>1682-4475-8f6a-2d123fcd76e8 | CoordType=Cartesian XorR=-0.3 Y=-1.4 Z=-1 SpecialJt=No GUID=7a39a14f- |
| Joint=879 CoordSys=GLOBAL<br>f2ec-4bbd-8112-ddf3293bce50 | CoordType=Cartesian XorR=-0.3 Y=-1.3 Z=-1 SpecialJt=No GUID=1a256583- |
| Joint=880 CoordSys=GLOBAL<br>d63b-45dc-a7d7-e57bbb3b3285 | CoordType=Cartesian XorR=-0.3 Y=-1.2 Z=-1 SpecialJt=No GUID=dd520a6a- |
| Joint=881 CoordSys=GLOBAL<br>eae0-44b2-85a7-bae68c4533bb | CoordType=Cartesian XorR=-0.3 Y=-1.1 Z=-1 SpecialJt=No GUID=dea7f809- |
| Joint=882 CoordSys=GLOBAL<br>8172-4629-bbfd-9db7200e1b74 | CoordType=Cartesian XorR=-0.3 Y=-1 Z=-1 SpecialJt=No GUID=f1468632-   |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=883 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=-0.9 Z=-1 SpecialJt=No GUID=6582654b-9161-483f-9c6b-aa09a7273e6a

Joint=884 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=-0.8 Z=-1 SpecialJt=No GUID=6ef35e01-edbd-47f5-b60e-70c76772466a

Joint=885 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=-0.7 Z=-1 SpecialJt=No GUID=bd8cdd36-4067-4673-9590-fefd3978a062

Joint=886 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=-0.6 Z=-1 SpecialJt=No GUID=95966e2e-107b-404e-829e-79ddee0f6168

Joint=887 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=-0.5 Z=-1 SpecialJt=No GUID=7ba7b836-ab6d-4b61-8076-d70cd6df4823

Joint=888 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=-0.4 Z=-1 SpecialJt=No GUID=c1e490ff-8f6b-423b-81d7-ec0b36325fe6

Joint=889 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=-0.3 Z=-1 SpecialJt=No GUID=1d40998d-2ee1-4ed7-bd1d-56ddc11003a6

Joint=890 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=-0.2 Z=-1 SpecialJt=No GUID=4e776098-719f-4ffc-84aa-20d0e03c1251

Joint=891 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=-0.09999999999999999 Z=-1 SpecialJt=No GUID=83878c91-3c4c-41e7-9c97-998196e01c23

Joint=892 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=0 Z=-1 SpecialJt=No GUID=7e9ffe50-f995-41d8-80d5-ceb090bf50b3

Joint=893 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=0.1 Z=-1 SpecialJt=No GUID=a87c27fb-ccee-4dd8-b6a3-1645fcd787cf

Joint=894 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=0.2 Z=-1 SpecialJt=No GUID=84307177-21f2-4d7f-a199-64b3d905b476

Joint=895 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=0.3 Z=-1 SpecialJt=No GUID=26cd6cdf-2225-404c-a2ae-57bfd1c17d58

Joint=896 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=0.4 Z=-1 SpecialJt=No GUID=38e7a2e7-da29-4a98-ac3b-c5676e366364

Joint=897 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=0.5 Z=-1 SpecialJt=No GUID=8d49d346-2214-4807-8a21-f5e60a08e974

Joint=898 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=0.6 Z=-1 SpecialJt=No GUID=929bce46-da94-4244-a5d8-19f6e1aaf3c5

Joint=899 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=0.7 Z=-1 SpecialJt=No GUID=cdca50b9-1124-473a-be78-424f953247bb

Joint=900 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=0.8 Z=-1 SpecialJt=No GUID=6082d6bd-576e-4320-af45-b0814287ee06

Joint=901 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=0.9 Z=-1 SpecialJt=No GUID=ca108d09-3c36-4932-b11f-1d071a17c499

Joint=902 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=1 Z=-1 SpecialJt=No GUID=21751363-739f-408b-8ffa-90f283bb5779

Joint=903 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=1.1 Z=-1 SpecialJt=No GUID=4241ce29-b75c-4183-b3c5-c8f4e61603d8

Joint=904 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=1.2 Z=-1 SpecialJt=No GUID=93e97372-5921-45ea-a731-96e7d79d8d43

Joint=905 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=1.3 Z=-1 SpecialJt=No GUID=5e41a4e4-c08d-4f2c-b423-0fdad54f1dd8

Joint=906 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=1.4 Z=-1 SpecialJt=No GUID=2cf4ebc9-5d46-4e4f-8ec6-7c8060310d1b

Joint=907 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=1.5 Z=-1 SpecialJt=No GUID=94c6a002-d236-40cf-a202-ce9ee0daa243

Joint=908 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=1.6 Z=-1 SpecialJt=No GUID=6c569f11-ab5a-4b6a-96c2-7751cc35ae34

Joint=909 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=1.7 Z=-1 SpecialJt=No GUID=befa8f9d-f42e-4cf7-b2c3-63a0bc06ddcb

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=910 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=1.8 Z=-1 SpecialJt=No GUID=d0cb1d01-7544-4396-9deb-7cb0c3a78446

Joint=911 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=1.9 Z=-1 SpecialJt=No GUID=820f62dd-63be-4ce2-9950-da9c2280b041

Joint=912 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=2 Z=-1 SpecialJt=No GUID=dc86f38c-8e7c-4862-81c8-d654af75180d

Joint=913 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=2.1 Z=-1 SpecialJt=No GUID=d5c005c1-e1b8-49b5-a53d-7701795fb2d5

Joint=914 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.3 Y=2.2 Z=-1 SpecialJt=No GUID=ea6afef3-1d3f-4274-bb50-434d28eddee7

Joint=915 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=-2.2 Z=-1 SpecialJt=No GUID=77cce7de-fbe0-4220-9b2e-eed45215ebfc

Joint=916 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=-2.1 Z=-1 SpecialJt=No GUID=12e91a44-ebae-4b28-b55c-40088bcdc922

Joint=917 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=-2 Z=-1 SpecialJt=No GUID=bb472f5c-30be-49b4-846d-faaed14ea687

Joint=918 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=-1.9 Z=-1 SpecialJt=No GUID=3f1554da-566d-430c-87df-d19fff32e6a9

Joint=919 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=-1.8 Z=-1 SpecialJt=No GUID=277cc083-609d-45af-9d94-2131add6c855

Joint=920 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=-1.7 Z=-1 SpecialJt=No GUID=b7d14041-da44-4ce9-ad79-87e113a1d484

Joint=921 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=-1.6 Z=-1 SpecialJt=No GUID=f320669e-0d03-440c-bd77-1e5153be991f

Joint=922 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=-1.5 Z=-1 SpecialJt=No GUID=dc10cb3b-bdda-41a7-9d6f-cb7a2112697e

Joint=923 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=-1.4 Z=-1 SpecialJt=No GUID=728b71e0-391e-4b66-9e7e-d62c138f9740

Joint=924 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=-1.3 Z=-1 SpecialJt=No GUID=25f040b1-6f39-4586-a187-b33a0cc88c80

Joint=925 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=-1.2 Z=-1 SpecialJt=No GUID=57cf6af0-ab47-4217-8185-3e4ad11659a1

Joint=926 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=-1.1 Z=-1 SpecialJt=No GUID=6b0b613f-f3d8-43f1-9f82-9ca8ab68ae96

Joint=927 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=-1 Z=-1 SpecialJt=No GUID=28fb3b1e-a20c-4e3b-a1ae-1b16b76c221f

Joint=928 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=-0.9 Z=-1 SpecialJt=No GUID=3327c798-31ed-47fe-a8e1-6dc738e2fcd1

Joint=929 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=-0.8 Z=-1 SpecialJt=No GUID=8f3ab750-89dc-49e9-8436-21bdc06db111

Joint=930 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=-0.7 Z=-1 SpecialJt=No GUID=8f30e045-20f7-4227-a56a-9432b0f35b7d

Joint=931 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=-0.6 Z=-1 SpecialJt=No GUID=8ff62191-f87d-478b-98c4-1bb7152d6fd4

Joint=932 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=-0.5 Z=-1 SpecialJt=No GUID=bc2c2f97-2ac7-4ed4-92d4-1c72aa204174

Joint=933 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=-0.4 Z=-1 SpecialJt=No GUID=d82700f2-3824-40cd-81d6-e38d28a9d81b

Joint=934 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=-0.3 Z=-1 SpecialJt=No GUID=533864f5-8f8a-4965-a69c-089c02db5d18

Joint=935 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=-0.2 Z=-1 SpecialJt=No GUID=4ffc2723-b6a6-4ffb-962d-b801f14546c5

Joint=936 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=-0.09999999999999999 Z=-1 SpecialJt=No GUID=876a4ebe-e245-4dbe-828b-aaf66c7207b3

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=937 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=-1.11022302462516E-16 Z=-1 SpecialJt=No GUID=7c075314-5e3e-4577-8295-1880fd966d44

Joint=938 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=0.1 Z=-1 SpecialJt=No GUID=981a78b4-1510-438a-af12-52f67d2e0ad3

Joint=939 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=0.2 Z=-1 SpecialJt=No GUID=b47dd0a1-9cd4-4b48-8e6f-14f84d0aa17a

Joint=940 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=0.3 Z=-1 SpecialJt=No GUID=423f1f88-be6d-4fb4-8181-f4a4ad4f6b54

Joint=941 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=0.4 Z=-1 SpecialJt=No GUID=c4c816bb-6eda-462c-87f1-37b305253c2f

Joint=942 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=0.5 Z=-1 SpecialJt=No GUID=92ac8616-4d5a-4cd2-8669-879bfbae54dc

Joint=943 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=0.6 Z=-1 SpecialJt=No GUID=a6aaa65d-d98e-4161-b0e0-26d9dd6d2a34

Joint=944 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=0.7 Z=-1 SpecialJt=No GUID=f723d955-6d99-4b0e-aeb9-89dd01b19cbd

Joint=945 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=0.8 Z=-1 SpecialJt=No GUID=6fe42f1e-0c7d-4fcb-b6cb-45f11427fc70

Joint=946 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=0.9 Z=-1 SpecialJt=No GUID=972fcc48-be75-4574-ab2f-b00c390d487

Joint=947 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=1 Z=-1 SpecialJt=No GUID=54203514-91e2-4af9-94e8-68f0d23955de

Joint=948 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=1.1 Z=-1 SpecialJt=No GUID=6ac529f9-f177-4184-9999-6e182daa95b4

Joint=949 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=1.2 Z=-1 SpecialJt=No GUID=404df627-62f4-47c8-a0be-a9d6210c5abe

Joint=950 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=1.3 Z=-1 SpecialJt=No GUID=c4b00057-c2ea-4000-8e87-fc1b2a1bebfcc

Joint=951 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=1.4 Z=-1 SpecialJt=No GUID=548a3f5e-9256-4f3c-b4c2-e25342ba39d4

Joint=952 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=1.5 Z=-1 SpecialJt=No GUID=fcec909e-786a-4bee-8f0b-385066c44f8d

Joint=953 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=1.6 Z=-1 SpecialJt=No GUID=ece6a8a2-7d4f-4025-8a3b-c9c31bfd0962

Joint=954 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=1.7 Z=-1 SpecialJt=No GUID=d7386cbc-1cc4-4126-96b4-5ae212d5d521

Joint=955 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=1.8 Z=-1 SpecialJt=No GUID=79532aed-8864-4d3f-8304-f8a0be46b0de

Joint=956 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=1.9 Z=-1 SpecialJt=No GUID=a6828c2a-4e06-4335-82fd-a012e14c7425

Joint=957 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=2 Z=-1 SpecialJt=No GUID=969e8090-2f87-4018-8be4-2e008f4ad021

Joint=958 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=2.1 Z=-1 SpecialJt=No GUID=e0c5d08d-159f-4e20-a6f5-5b747d4b5cb9

Joint=959 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.2 Y=2.2 Z=-1 SpecialJt=No GUID=4cc0b237-dc9f-4968-a788-d8edc85ffd44

Joint=960 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.1 Y=-2.2 Z=-1 SpecialJt=No GUID=dcf8731d-209e-4851-9fa6-0f71f970bea0

Joint=961 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.09999999999999999 Y=-2.1 Z=-1 SpecialJt=No GUID=e109315c-b8a3-45d9-a021-24b371cf331e

Joint=962 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.09999999999999998 Y=-2 Z=-1 SpecialJt=No GUID=4649141d-257e-4970-9a33-9a76fd6a8e63

Joint=963 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.1 Y=-1.9 Z=-1 SpecialJt=No GUID=34757170-519c-451c-a95b-f9880c803505



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=964 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.099999999999999999 Y=-1.8 Z=-1 SpecialJt=No  
GUID=a1aeab75-3478-4cb7-b55e-0de90dce197e

Joint=965 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.099999999999999999 Y=-1.7 Z=-1 SpecialJt=No  
GUID=d6351f9f-2c9d-4f6e-9b3d-19966da6b604

Joint=966 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.099999999999999998 Y=-1.6 Z=-1 SpecialJt=No  
GUID=5e804085-063f-4493-a706-d64dd57e5bef

Joint=967 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.099999999999999999 Y=-1.5 Z=-1 SpecialJt=No  
GUID=61910acc-929a-44cd-8e99-760c907e5f58

Joint=968 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.1 Y=-1.4 Z=-1 SpecialJt=No GUID=25c73d48-  
7530-4325-9a9d-68e7883794fe

Joint=969 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.1 Y=-1.3 Z=-1 SpecialJt=No GUID=96b6ae1a-  
13d7-4110-9660-9dc5ef1e2396

Joint=970 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.099999999999999999 Y=-1.2 Z=-1 SpecialJt=No  
GUID=d1349e3a-6ed3-46dd-8dc3-5d8406ea57da

Joint=971 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.1 Y=-1.1 Z=-1 SpecialJt=No GUID=941d5e36-  
a4e7-4dc9-98ad-e8141a7aaee9

Joint=972 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.1 Y=-1 Z=-1 SpecialJt=No GUID=c7dac1a3-  
cf57-489c-baf2-ab7e4d59c101

Joint=973 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.099999999999999998 Y=-0.9 Z=-1 SpecialJt=No  
GUID=b1a89aca-cedc-483e-9cd1-804feea70262

Joint=974 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.1 Y=-0.8 Z=-1 SpecialJt=No GUID=b841f705-  
8e0d-460e-9630-7a43d02f43b8

Joint=975 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.099999999999999999 Y=-0.7 Z=-1 SpecialJt=No  
GUID=054a2a27-bb58-401b-8a71-9c2b581d8477

Joint=976 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.1 Y=-0.6 Z=-1 SpecialJt=No GUID=d666f9ad-  
866b-474c-9f49-4bca25b17658

Joint=977 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.099999999999999999 Y=-0.5 Z=-1 SpecialJt=No  
GUID=bb68ef0f-e7c1-4399-a575-9454ec48a127

Joint=978 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.099999999999999999 Y=-0.4 Z=-1 SpecialJt=No  
GUID=d3ccab28-fbf8-4122-9a26-e8926dd46ca2

Joint=979 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.1 Y=-0.3 Z=-1 SpecialJt=No GUID=12e8ec65-  
d7ea-4f7c-a577-c1ccf1e5cf7b

Joint=980 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.1 Y=-0.2 Z=-1 SpecialJt=No GUID=0ee03f5b-  
07ed-4d99-ad67-2f0d9424166d

Joint=981 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.099999999999999999 Y=-0.099999999999999999  
Z=-1 SpecialJt=No GUID=711fc8fc-2da2-443b-a543-4b26491b480b

Joint=982 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.1 Y=0 Z=-1 SpecialJt=No GUID=240f4874-  
51f2-4502-b8bb-6874dca5ddcd

Joint=983 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.099999999999999999 Y=0.099999999999999999  
Z=-1 SpecialJt=No GUID=ac16cfd9-72c6-4f45-af06-e8638e498117

Joint=984 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.1 Y=0.2 Z=-1 SpecialJt=No GUID=adc0f97c-  
262c-4d38-8ce9-2a0ca13a7692

Joint=985 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.1 Y=0.3 Z=-1 SpecialJt=No GUID=1a057542-  
da7b-46e0-81f8-92d27f023c29

Joint=986 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.099999999999999999 Y=0.4 Z=-1 SpecialJt=No  
GUID=a2c947b5-75ef-4752-98ac-3868a422d406

Joint=987 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.099999999999999999 Y=0.5 Z=-1 SpecialJt=No  
GUID=f45407fd-5690-4647-8f8f-7d34aea487e4

Joint=988 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.1 Y=0.6 Z=-1 SpecialJt=No GUID=b9e4c2ef-  
e31b-408e-9f1d-d7fc927e941f

Joint=989 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.099999999999999999 Y=0.7 Z=-1 SpecialJt=No  
GUID=effeb144-e0aa-4a85-98d0-ccd2fed317d4

Joint=990 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.1 Y=0.8 Z=-1 SpecialJt=No GUID=1a2c8e5b-  
5256-4415-b1fd-c29cfed9705e

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=991 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.099999999999999999 Y=0.9 Z=-1 SpecialJt=No  
GUID=5b739e87-f0e3-41b0-96d0-86f8a3032668

Joint=992 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.1 Y=1 Z=-1 SpecialJt=No GUID=4c72c574-  
2b4a-4e90-9dc8-6580706ac9e1

Joint=993 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.1 Y=1.1 Z=-1 SpecialJt=No GUID=33c3cc49-  
a3bf-4f58-a07f-0c4ab18a9ef4

Joint=994 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.099999999999999999 Y=1.2 Z=-1 SpecialJt=No  
GUID=aeabd1a1-83cd-4f62-b5ac-ab63dc5535cb

Joint=995 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.1 Y=1.3 Z=-1 SpecialJt=No GUID=e7dd671c-  
1510-473c-8589-0992cf345752

Joint=996 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.1 Y=1.4 Z=-1 SpecialJt=No GUID=b05acb53-  
cf86-42c7-bde5-afd8dcc6e5e0

Joint=997 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.1 Y=1.5 Z=-1 SpecialJt=No GUID=ff7c52a5-  
eba8-40ac-9340-f6ba0eae8615

Joint=998 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.099999999999999999 Y=1.6 Z=-1 SpecialJt=No  
GUID=d4af9779-2b4e-489a-8eea-3a5679ac7873

Joint=999 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.099999999999999999 Y=1.7 Z=-1 SpecialJt=No  
GUID=21c2c401-a9e4-4a93-9f9f-a2f4cca7381a

Joint=1000 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.099999999999999999 Y=1.8 Z=-1 SpecialJt=No  
GUID=fcc060cc-b9ff-4af1-81f5-b56086a8a6d8

Joint=1001 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.099999999999999999 Y=1.9 Z=-1 SpecialJt=No  
GUID=60a8480d-ca62-41f9-8849-fa6767f2a7c0

Joint=1002 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.099999999999999998 Y=2 Z=-1 SpecialJt=No  
GUID=90a5029a-e8b3-4c1d-9d4a-0c01b4249767

Joint=1003 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.099999999999999999 Y=2.1 Z=-1 SpecialJt=No  
GUID=a23ec6e9-5cd5-4dfc-96db-f70053bbc444

Joint=1004 CoordSys=GLOBAL CoordType=Cartesian XorR=-0.1 Y=2.2 Z=-1 SpecialJt=No GUID=f9cc4766-  
bfd6-4fbc-a4a0-48061dd0e742

Joint=1005 CoordSys=GLOBAL CoordType=Cartesian XorR=0 Y=-2.2 Z=-1 SpecialJt=No GUID=5f8f7352-  
8ca1-44da-b4ec-b4f37a57f09c

Joint=1006 CoordSys=GLOBAL CoordType=Cartesian XorR=0 Y=-2.1 Z=-1 SpecialJt=No GUID=a5706911-  
403e-47e3-85f4-977a2d1e285b

Joint=1007 CoordSys=GLOBAL CoordType=Cartesian XorR=0 Y=-2 Z=-1 SpecialJt=No GUID=a88b1c59-  
10c4-40d2-8da2-bfc87d1621db

Joint=1008 CoordSys=GLOBAL CoordType=Cartesian XorR=0 Y=-1.9 Z=-1 SpecialJt=No GUID=ba7266b0-  
8c7b-415e-a252-c546e42b777e

Joint=1009 CoordSys=GLOBAL CoordType=Cartesian XorR=0 Y=-1.8 Z=-1 SpecialJt=No GUID=02856728-  
cf55-454e-b985-1b6e4422d8c6

Joint=1010 CoordSys=GLOBAL CoordType=Cartesian XorR=0 Y=-1.7 Z=-1 SpecialJt=No GUID=eef80335-  
e169-40da-a352-d0f91cd4f75d

Joint=1011 CoordSys=GLOBAL CoordType=Cartesian XorR=0 Y=-1.6 Z=-1 SpecialJt=No GUID=4ba99c73-  
3860-4643-ab02-839f980f0e9a

Joint=1012 CoordSys=GLOBAL CoordType=Cartesian XorR=0 Y=-1.5 Z=-1 SpecialJt=No GUID=81577506-  
dbdd-400f-bce2-7447f23b55a3

Joint=1013 CoordSys=GLOBAL CoordType=Cartesian XorR=0 Y=-1.4 Z=-1 SpecialJt=No GUID=07577bdc-  
ed17-4d72-83c2-a8118ad677b9

Joint=1014 CoordSys=GLOBAL CoordType=Cartesian XorR=0 Y=-1.3 Z=-1 SpecialJt=No GUID=53d4a355-  
1d76-48e1-a4cc-f0c0e5563634

Joint=1015 CoordSys=GLOBAL CoordType=Cartesian XorR=0 Y=-1.2 Z=-1 SpecialJt=No GUID=1ba24150-  
6952-4109-bc1d-f3f17f4d4a01

Joint=1016 CoordSys=GLOBAL CoordType=Cartesian XorR=0 Y=-1.1 Z=-1 SpecialJt=No GUID=f9d6fb83-  
42e5-45f0-ac21-f58eb580858c

Joint=1017 CoordSys=GLOBAL CoordType=Cartesian XorR=0 Y=-1 Z=-1 SpecialJt=No GUID=943f6e73-  
aa8f-48b5-9621-b5060d637c3e

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|            |                 |                     |        |        |      |              |                                           |
|------------|-----------------|---------------------|--------|--------|------|--------------|-------------------------------------------|
| Joint=1018 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=0 | Y=-0.9 | Z=-1 | SpecialJt=No | GUID=50649a02-48d1-4316-8c55-318fb7a98943 |
| Joint=1019 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=0 | Y=-0.8 | Z=-1 | SpecialJt=No | GUID=49ade720-aa28-41f3-8be6-f5d731dcea5c |
| Joint=1020 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=0 | Y=-0.7 | Z=-1 | SpecialJt=No | GUID=488c3ec9-d59f-45ca-bcb8-3293dcfc4ba4 |
| Joint=1021 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=0 | Y=-0.6 | Z=-1 | SpecialJt=No | GUID=d7fb00fb-c05b-4662-a12e-3fbf31254f44 |
| Joint=1022 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=0 | Y=-0.5 | Z=-1 | SpecialJt=No | GUID=1fc24978-7ddd-4bff-a771-2eea3649e59a |
| Joint=1023 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=0 | Y=-0.4 | Z=-1 | SpecialJt=No | GUID=a399b108-45a8-4989-b3a6-67a20ce7e967 |
| Joint=1024 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=0 | Y=-0.3 | Z=-1 | SpecialJt=No | GUID=92b5f43c-64c1-4196-8c6c-7ae44bb4fddc |
| Joint=1025 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=0 | Y=-0.2 | Z=-1 | SpecialJt=No | GUID=51f1fdcd-2647-4c14-b4a5-b124aaa8fe40 |
| Joint=1026 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=0 | Y=-0.1 | Z=-1 | SpecialJt=No | GUID=47644403-09ad-4572-9f90-a318b96f9d3c |
| Joint=1027 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=0 | Y=0.1  | Z=-1 | SpecialJt=No | GUID=b31debd0-a7c2-493d-a8b4-037fe8c3dc7f |
| Joint=1028 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=0 | Y=0.2  | Z=-1 | SpecialJt=No | GUID=04fc98b8-c7e7-4ae1-b489-bdf775bfb52e |
| Joint=1029 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=0 | Y=0.3  | Z=-1 | SpecialJt=No | GUID=f39a02e1-fe34-4dcd-9361-fcc58b11a0f6 |
| Joint=1030 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=0 | Y=0.4  | Z=-1 | SpecialJt=No | GUID=dba21b2b-bdff-4a73-91af-6ea7f3259049 |
| Joint=1031 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=0 | Y=0.5  | Z=-1 | SpecialJt=No | GUID=b3644738-101b-4ccf-a132-cdad5c35c426 |
| Joint=1032 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=0 | Y=0.6  | Z=-1 | SpecialJt=No | GUID=d8f887e5-19cd-4e06-bc46-ce722ae4adea |
| Joint=1033 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=0 | Y=0.7  | Z=-1 | SpecialJt=No | GUID=f65b389c-b464-46e8-9b2d-20bf863d5e47 |
| Joint=1034 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=0 | Y=0.8  | Z=-1 | SpecialJt=No | GUID=773befdd-87a6-432a-a7d8-ee4d1c3c783f |
| Joint=1035 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=0 | Y=0.9  | Z=-1 | SpecialJt=No | GUID=4ded28eb-e8d7-460d-9869-33b3318224e7 |
| Joint=1036 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=0 | Y=1    | Z=-1 | SpecialJt=No | GUID=5afe94ea-44a9-4b82-8528-70a62333e537 |
| Joint=1037 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=0 | Y=1.1  | Z=-1 | SpecialJt=No | GUID=5de49d6d-3a5b-469d-8425-6e221555f00c |
| Joint=1038 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=0 | Y=1.2  | Z=-1 | SpecialJt=No | GUID=71e32169-9796-430f-ac1e-a9902a6f496d |
| Joint=1039 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=0 | Y=1.3  | Z=-1 | SpecialJt=No | GUID=19c5c434-806f-49e6-88f9-2420847acf23 |
| Joint=1040 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=0 | Y=1.4  | Z=-1 | SpecialJt=No | GUID=a1a4a00f-92b0-4eef-a5b8-415437e2d69a |
| Joint=1041 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=0 | Y=1.5  | Z=-1 | SpecialJt=No | GUID=71c9e79f-37b7-442f-9823-6c9504477091 |
| Joint=1042 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=0 | Y=1.6  | Z=-1 | SpecialJt=No | GUID=5565ec75-16c9-483c-bcd8-a338c376a176 |
| Joint=1043 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=0 | Y=1.7  | Z=-1 | SpecialJt=No | GUID=74b6a23c-a6ef-4b04-a47d-08f4eebad0c6 |
| Joint=1044 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=0 | Y=1.8  | Z=-1 | SpecialJt=No | GUID=228835e4-a8c9-4a58-b3c0-3b7b06585d4a |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1045 CoordSys=GLOBAL CoordType=Cartesian XorR=0 Y=1.9 Z=-1 SpecialJt=No GUID=ca9406e0-60b8-4d9d-a7b5-2ee3f3e6f874

Joint=1046 CoordSys=GLOBAL CoordType=Cartesian XorR=0 Y=2 Z=-1 SpecialJt=No GUID=413f8268-2008-410a-ad5b-e89fb03f239c

Joint=1047 CoordSys=GLOBAL CoordType=Cartesian XorR=0 Y=2.1 Z=-1 SpecialJt=No GUID=4ff68d5e-ea34-4407-81d7-25d3d6cfa740

Joint=1048 CoordSys=GLOBAL CoordType=Cartesian XorR=0 Y=2.2 Z=-1 SpecialJt=No GUID=b40985cd-7460-4893-838b-c649a90c315d

Joint=1049 CoordSys=GLOBAL CoordType=Cartesian XorR=0.1 Y=-2.2 Z=-1 SpecialJt=No GUID=28256437-0248-41cc-a653-7da85b285be3

Joint=1050 CoordSys=GLOBAL CoordType=Cartesian XorR=0.099999999999999999 Y=-2.1 Z=-1 SpecialJt=No GUID=fcb93cba-b4a5-472c-8992-966ba4acb185

Joint=1051 CoordSys=GLOBAL CoordType=Cartesian XorR=0.099999999999999998 Y=-2 Z=-1 SpecialJt=No GUID=21a04451-0fe2-4df4-ad68-1c46f6a3490a

Joint=1052 CoordSys=GLOBAL CoordType=Cartesian XorR=0.1 Y=-1.9 Z=-1 SpecialJt=No GUID=98ca764f-48c5-421c-9821-18828fd09623

Joint=1053 CoordSys=GLOBAL CoordType=Cartesian XorR=0.099999999999999999 Y=-1.8 Z=-1 SpecialJt=No GUID=4c81df62-d484-4729-8a05-84b04321759d

Joint=1054 CoordSys=GLOBAL CoordType=Cartesian XorR=0.099999999999999999 Y=-1.7 Z=-1 SpecialJt=No GUID=cd5044ab-e0be-494a-9375-f20459cc5bfe

Joint=1055 CoordSys=GLOBAL CoordType=Cartesian XorR=0.099999999999999998 Y=-1.6 Z=-1 SpecialJt=No GUID=e32c8edc-4d1e-44bd-b43e-2db9e9afc51a

Joint=1056 CoordSys=GLOBAL CoordType=Cartesian XorR=0.099999999999999999 Y=-1.5 Z=-1 SpecialJt=No GUID=54e08d5c-850d-4d41-9d83-ba2b6fb60791

Joint=1057 CoordSys=GLOBAL CoordType=Cartesian XorR=0.1 Y=-1.4 Z=-1 SpecialJt=No GUID=080c48f1-8efa-40c6-9702-48955e5641f3

Joint=1058 CoordSys=GLOBAL CoordType=Cartesian XorR=0.1 Y=-1.3 Z=-1 SpecialJt=No GUID=0001e504-0966-423c-8662-b6c6dad08247

Joint=1059 CoordSys=GLOBAL CoordType=Cartesian XorR=0.099999999999999999 Y=-1.2 Z=-1 SpecialJt=No GUID=fc7d1162-1d31-496c-800f-7216b202ae40

Joint=1060 CoordSys=GLOBAL CoordType=Cartesian XorR=0.1 Y=-1.1 Z=-1 SpecialJt=No GUID=60b43981-d4dc-474e-98be-5b89c49d62a3

Joint=1061 CoordSys=GLOBAL CoordType=Cartesian XorR=0.1 Y=-1 Z=-1 SpecialJt=No GUID=171b85b3-6058-461f-b719-1aa03195f4b0

Joint=1062 CoordSys=GLOBAL CoordType=Cartesian XorR=0.099999999999999998 Y=-0.9 Z=-1 SpecialJt=No GUID=5f3538ec-c67f-47d7-b252-d30279b40747

Joint=1063 CoordSys=GLOBAL CoordType=Cartesian XorR=0.1 Y=-0.8 Z=-1 SpecialJt=No GUID=623d5b0b-4106-437f-99d9-0fc1451e9388

Joint=1064 CoordSys=GLOBAL CoordType=Cartesian XorR=0.099999999999999999 Y=-0.7 Z=-1 SpecialJt=No GUID=c33aac86-171d-4744-ad9e-7bcf199e03e1

Joint=1065 CoordSys=GLOBAL CoordType=Cartesian XorR=0.1 Y=-0.6 Z=-1 SpecialJt=No GUID=f02ae447-cfdd-4ca4-8ef1-47b4f4c9e9e3

Joint=1066 CoordSys=GLOBAL CoordType=Cartesian XorR=0.099999999999999999 Y=-0.5 Z=-1 SpecialJt=No GUID=ae7c87f8-b25c-4f77-b1fc-83ed1b5e6f67

Joint=1067 CoordSys=GLOBAL CoordType=Cartesian XorR=0.099999999999999999 Y=-0.4 Z=-1 SpecialJt=No GUID=91708dbc-a72c-4dc7-bcc6-80fda33541dd

Joint=1068 CoordSys=GLOBAL CoordType=Cartesian XorR=0.1 Y=-0.3 Z=-1 SpecialJt=No GUID=c6b9745d-df1b-45f1-b37a-4cbfa91a71a6

Joint=1069 CoordSys=GLOBAL CoordType=Cartesian XorR=0.1 Y=-0.2 Z=-1 SpecialJt=No GUID=74956ad8-9cef-4637-9d17-921d73b36685

Joint=1070 CoordSys=GLOBAL CoordType=Cartesian XorR=0.099999999999999999 Y=-0.099999999999999999 Z=-1 SpecialJt=No GUID=00ebe1eb-10d9-4444-bdb1-cecdf3ba05d4

Joint=1071 CoordSys=GLOBAL CoordType=Cartesian XorR=0.1 Y=0 Z=-1 SpecialJt=No GUID=22517151-8cfe-4db1-ba7d-4db7ec6c3475



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1072 CoordSys=GLOBAL CoordType=Cartesian XorR=0.099999999999999999 Y=0.099999999999999999 Z=-1 SpecialJt=No GUID=46eb9dd6-37b9-45ba-bf2d-858ec81ec4e2

Joint=1073 CoordSys=GLOBAL CoordType=Cartesian XorR=0.1 Y=0.2 Z=-1 SpecialJt=No GUID=9024db22-af7a-4415-a39a-2956c0d7ab73

Joint=1074 CoordSys=GLOBAL CoordType=Cartesian XorR=0.1 Y=0.3 Z=-1 SpecialJt=No GUID=cc9ecb8a-2734-4b69-9ee7-7a70558194ce

Joint=1075 CoordSys=GLOBAL CoordType=Cartesian XorR=0.099999999999999999 Y=0.4 Z=-1 SpecialJt=No GUID=5a40fa88-9cd0-494f-8999-e699fd6b5e50

Joint=1076 CoordSys=GLOBAL CoordType=Cartesian XorR=0.099999999999999999 Y=0.5 Z=-1 SpecialJt=No GUID=6c975305-e224-42c1-96d9-af8835e8dabe

Joint=1077 CoordSys=GLOBAL CoordType=Cartesian XorR=0.1 Y=0.6 Z=-1 SpecialJt=No GUID=61715763-7147-4e30-ba02-09a25c3b78cf

Joint=1078 CoordSys=GLOBAL CoordType=Cartesian XorR=0.099999999999999999 Y=0.7 Z=-1 SpecialJt=No GUID=9e52af66-9c6a-4f73-85cf-168e20d76fd9

Joint=1079 CoordSys=GLOBAL CoordType=Cartesian XorR=0.1 Y=0.8 Z=-1 SpecialJt=No GUID=463863f8-eaa8-4c45-b4f9-7f58de5b98e2

Joint=1080 CoordSys=GLOBAL CoordType=Cartesian XorR=0.099999999999999999 Y=0.9 Z=-1 SpecialJt=No GUID=41721d34-e254-47d1-acbf-8bc63248dbf8

Joint=1081 CoordSys=GLOBAL CoordType=Cartesian XorR=0.1 Y=1 Z=-1 SpecialJt=No GUID=73e3659a-1f7d-43d3-acad-4c7b68351527

Joint=1082 CoordSys=GLOBAL CoordType=Cartesian XorR=0.1 Y=1.1 Z=-1 SpecialJt=No GUID=e3eaca5d-8cb3-4c73-beb6-26bd911ed807

Joint=1083 CoordSys=GLOBAL CoordType=Cartesian XorR=0.099999999999999999 Y=1.2 Z=-1 SpecialJt=No GUID=51c365f2-856e-4659-9ee0-7929e8c9e277

Joint=1084 CoordSys=GLOBAL CoordType=Cartesian XorR=0.1 Y=1.3 Z=-1 SpecialJt=No GUID=485aadf5-b5d0-49e3-8223-f6512e6c0dac

Joint=1085 CoordSys=GLOBAL CoordType=Cartesian XorR=0.1 Y=1.4 Z=-1 SpecialJt=No GUID=0c1bfc5b-f70d-455d-8577-0f06efec9075

Joint=1086 CoordSys=GLOBAL CoordType=Cartesian XorR=0.1 Y=1.5 Z=-1 SpecialJt=No GUID=61d024f8-af76-47ec-8c04-17c062b17dea

Joint=1087 CoordSys=GLOBAL CoordType=Cartesian XorR=0.099999999999999999 Y=1.6 Z=-1 SpecialJt=No GUID=178df281-3561-4efc-a34c-1b8f1ce430ab

Joint=1088 CoordSys=GLOBAL CoordType=Cartesian XorR=0.1 Y=1.7 Z=-1 SpecialJt=No GUID=bf9e928b-f98c-4126-a85b-b10bbe114004

Joint=1089 CoordSys=GLOBAL CoordType=Cartesian XorR=0.099999999999999999 Y=1.8 Z=-1 SpecialJt=No GUID=2bd53340-5d78-4182-9341-ec323957618e

Joint=1090 CoordSys=GLOBAL CoordType=Cartesian XorR=0.099999999999999999 Y=1.9 Z=-1 SpecialJt=No GUID=fb59d7c3-2176-45f2-aec2-92e808163956

Joint=1091 CoordSys=GLOBAL CoordType=Cartesian XorR=0.099999999999999999 Y=2 Z=-1 SpecialJt=No GUID=0fbd6b0d-cca6-40ff-a148-f21dbac04516

Joint=1092 CoordSys=GLOBAL CoordType=Cartesian XorR=0.099999999999999999 Y=2.1 Z=-1 SpecialJt=No GUID=3eb9b945-765e-4c8b-96f2-b159723c51b7

Joint=1093 CoordSys=GLOBAL CoordType=Cartesian XorR=0.1 Y=2.2 Z=-1 SpecialJt=No GUID=55d67b7c-b19d-47ec-b3d5-1ef01e7867d3

Joint=1094 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=-2.2 Z=-1 SpecialJt=No GUID=db1352f1-6c95-412b-a6cb-cf1121b6dc83

Joint=1095 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=-2.1 Z=-1 SpecialJt=No GUID=b1f73a57-3a41-4bb7-8bfb-cfd697b119bd

Joint=1096 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=-2 Z=-1 SpecialJt=No GUID=5916a5ab-c9d4-427d-8be7-0a649236c68e

Joint=1097 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=-1.9 Z=-1 SpecialJt=No GUID=f3400c78-f606-4cbc-98cc-3447f638e066

Joint=1098 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=-1.8 Z=-1 SpecialJt=No GUID=01805c29-ca3e-40f3-94c0-77b0dfd838f1

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1099 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=-1.7 Z=-1 SpecialJt=No GUID=23143710-9b7f-40e2-b243-66fb1ec12dfb

Joint=1100 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=-1.6 Z=-1 SpecialJt=No GUID=1e7747bf-ec8c-46a3-92f9-f099a30774c0

Joint=1101 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=-1.5 Z=-1 SpecialJt=No GUID=1b744edd-8328-4a72-8e47-aa81e6f5ac04

Joint=1102 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=-1.4 Z=-1 SpecialJt=No GUID=abfb94b5-c3ae-4fc7-a87b-a3810fdc043e

Joint=1103 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=-1.3 Z=-1 SpecialJt=No GUID=1cc0bf98-c5fb-4506-990f-3d9d95d8a0fd

Joint=1104 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=-1.2 Z=-1 SpecialJt=No GUID=a83e8287-259e-47af-b81c-9057d93f43c4

Joint=1105 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=-1.1 Z=-1 SpecialJt=No GUID=8c035764-c01f-4358-b079-3c556f327b7f

Joint=1106 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=-1 Z=-1 SpecialJt=No GUID=a67f94fc-9561-4ef9-b76e-913d5de93bdb

Joint=1107 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=-0.9 Z=-1 SpecialJt=No GUID=599484b5-3be6-4234-a47f-896bf4a96c30

Joint=1108 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=-0.8 Z=-1 SpecialJt=No GUID=e9d5ced4-02f0-4487-8e3e-7a7452033e1e

Joint=1109 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=-0.7 Z=-1 SpecialJt=No GUID=59601c14-dc7d-4eea-ba4d-a36c6b1f1f77

Joint=1110 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=-0.6 Z=-1 SpecialJt=No GUID=de7538e3-0bac-414c-bed5-dcef1379cb71

Joint=1111 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=-0.5 Z=-1 SpecialJt=No GUID=4a991038-18d7-4151-8f25-ddcaf5feea48

Joint=1112 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=-0.4 Z=-1 SpecialJt=No GUID=9f6dd732-f864-42ad-9035-9a9f9b9c53f0

Joint=1113 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=-0.3 Z=-1 SpecialJt=No GUID=f0ad029e-8bd5-44ab-8c07-c171d76565ec

Joint=1114 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=-0.2 Z=-1 SpecialJt=No GUID=5bb023ba-1ebb-4295-8fe2-8e8492e00210

Joint=1115 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=-0.1 Z=-1 SpecialJt=No GUID=8503c215-a2e5-46b8-820e-e366456679d

Joint=1116 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=0 Z=-1 SpecialJt=No GUID=59f25dc3-c2e9-4140-8bce-6bbc0e9ca5eb

Joint=1117 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=0.1 Z=-1 SpecialJt=No GUID=1e69f7f3-53dd-4a59-ae83-c0df7f39e82e

Joint=1118 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=0.2 Z=-1 SpecialJt=No GUID=0f88c12a-e09c-48b5-beff-5a8fe6f81fdb

Joint=1119 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=0.3 Z=-1 SpecialJt=No GUID=fac797eb-a45d-43c9-abe2-b02b38ab1498

Joint=1120 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=0.4 Z=-1 SpecialJt=No GUID=e78daaca-0eee-4e8a-9f7d-840b52544059

Joint=1121 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=0.5 Z=-1 SpecialJt=No GUID=5d1eb6fa-37c2-4c5a-a02e-6389900b0373

Joint=1122 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=0.6 Z=-1 SpecialJt=No GUID=30ca1d62-2c6c-446c-b2d6-d77e1b63011f

Joint=1123 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=0.7 Z=-1 SpecialJt=No GUID=7e890d1d-bee8-4a00-9736-116b7936fa76

Joint=1124 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=0.8 Z=-1 SpecialJt=No GUID=7a8a3c89-e240-4b82-976c-6802c1f6d7db

Joint=1125 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=0.9 Z=-1 SpecialJt=No GUID=a7bac811-0350-4781-ad2f-c6fd51a2c20a

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1126 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=1 Z=-1 SpecialJt=No GUID=2f57c5ba-cfab-4349-9789-cb7b22f5c1ad

Joint=1127 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=1.1 Z=-1 SpecialJt=No GUID=c6ddd12c-ee84-423d-ba49-fd07b099cb3e

Joint=1128 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=1.2 Z=-1 SpecialJt=No GUID=7c1b46a6-eba1-4917-a463-d3fff41e5898

Joint=1129 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=1.3 Z=-1 SpecialJt=No GUID=f02f06a8-f106-448f-af69-6703f2caa525

Joint=1130 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=1.4 Z=-1 SpecialJt=No GUID=74ed460d-be73-4455-a4de-6819f7ca0c56

Joint=1131 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=1.5 Z=-1 SpecialJt=No GUID=d9e9374b-ed8f-4a5e-ae44-2603e9dc84fb

Joint=1132 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=1.6 Z=-1 SpecialJt=No GUID=19147c87-0379-4a3d-9dd6-a266f2c51028

Joint=1133 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=1.7 Z=-1 SpecialJt=No GUID=0bfc0182-cede-42e6-bfde-e359152bf360

Joint=1134 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=1.8 Z=-1 SpecialJt=No GUID=771f0ec9-851b-43de-bbad-1b8a7a626f0a

Joint=1135 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=1.9 Z=-1 SpecialJt=No GUID=bbc143f1-c68e-4591-9658-8f5311915be5

Joint=1136 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=2 Z=-1 SpecialJt=No GUID=94524c45-3c69-48d4-b5c4-4bcfb648b724

Joint=1137 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=2.1 Z=-1 SpecialJt=No GUID=b3db592d-4638-416e-bca4-37e7887a333e

Joint=1138 CoordSys=GLOBAL CoordType=Cartesian XorR=0.2 Y=2.2 Z=-1 SpecialJt=No GUID=fed8e402-c03c-4272-a4d9-0ee5baf13653

Joint=1139 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=-2.2 Z=-1 SpecialJt=No GUID=15e1f88a-ceec-4204-8fc9-1933f1966da8

Joint=1140 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=-2.1 Z=-1 SpecialJt=No GUID=bea0a2e8-010f-4aa3-a155-22cc8ba09821

Joint=1141 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=-2 Z=-1 SpecialJt=No GUID=2e178e38-5955-4fd0-82fd-a718f32b1984

Joint=1142 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=-1.9 Z=-1 SpecialJt=No GUID=ab338e5d-d79b-480f-88dd-0e3eaaff564c

Joint=1143 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=-1.8 Z=-1 SpecialJt=No GUID=08a0a8fa-9d7a-439b-bd0c-e687114b76f1

Joint=1144 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=-1.7 Z=-1 SpecialJt=No GUID=ea0955cf-0a43-48da-aaf7-3f403393b292

Joint=1145 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=-1.6 Z=-1 SpecialJt=No GUID=af8a7761-f960-47fc-9c12-654ccd1cfc3b

Joint=1146 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=-1.5 Z=-1 SpecialJt=No GUID=9c34c577-93b0-4e8a-876e-7989f56e56b4

Joint=1147 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=-1.4 Z=-1 SpecialJt=No GUID=c11e30f9-e334-4014-91b1-7575cc7115eb

Joint=1148 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=-1.3 Z=-1 SpecialJt=No GUID=320076bf-2faf-49a7-b4f6-2ebef08113af

Joint=1149 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=-1.2 Z=-1 SpecialJt=No GUID=c88497af-e00f-410d-9c50-f03f8b161b3f

Joint=1150 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=-1.1 Z=-1 SpecialJt=No GUID=6ae0ee91-f0a5-4018-ae1a-45ca844a09cc

Joint=1151 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=-1 Z=-1 SpecialJt=No GUID=556870f7-173c-4bb6-bce6-a99a67308be1

Joint=1152 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=-0.9 Z=-1 SpecialJt=No GUID=5674b787-5ae9-42d3-b773-dfc1de51ddd0

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1153 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=-0.8 Z=-1 SpecialJt=No GUID=6b72bc75-cc1e-4f08-b607-f7f8341845be

Joint=1154 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=-0.7 Z=-1 SpecialJt=No GUID=aeef6697-e946-418f-bd9d-24f75456dc4b

Joint=1155 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=-0.6 Z=-1 SpecialJt=No GUID=551c3326-5d54-4ae6-ae68-fcf7475d55f1

Joint=1156 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=-0.5 Z=-1 SpecialJt=No GUID=67166ae5-ac20-41fa-8060-a470da1551f1

Joint=1157 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=-0.4 Z=-1 SpecialJt=No GUID=f8eee4e1-2bcc-4804-8d9a-47181c314660

Joint=1158 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=-0.3 Z=-1 SpecialJt=No GUID=10421412-c53c-4d85-975a-a3d3bab98782

Joint=1159 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=-0.2 Z=-1 SpecialJt=No GUID=28c1a972-ea4e-42d8-b170-5d3d18ad5b24

Joint=1160 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=-0.1 Z=-1 SpecialJt=No GUID=37d9ac70-2caa-4c46-a79d-bcbbbd342828

Joint=1161 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=0 Z=-1 SpecialJt=No GUID=c918c9cb-61f2-41bd-a3f0-4c55365908b0

Joint=1162 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=0.1 Z=-1 SpecialJt=No GUID=a196eed6-68a3-4239-896a-edel884099e8

Joint=1163 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=0.2 Z=-1 SpecialJt=No GUID=18a7be12-1eeb-4da4-88b1-6271d5d84ac1

Joint=1164 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=0.3 Z=-1 SpecialJt=No GUID=9e4191de-c741-4686-a390-7aa89ff3885a

Joint=1165 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=0.4 Z=-1 SpecialJt=No GUID=b9e9cf4e-5d36-400f-a9fd-9b04ec716309

Joint=1166 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=0.5 Z=-1 SpecialJt=No GUID=90180605-efda-409d-8acd-d3f878703a7e

Joint=1167 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=0.6 Z=-1 SpecialJt=No GUID=ee957d1b-dacd-4c03-800f-3ce29752f3bc

Joint=1168 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=0.7 Z=-1 SpecialJt=No GUID=4b477e38-3b3d-423b-8884-f29aa4ea212e

Joint=1169 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=0.8 Z=-1 SpecialJt=No GUID=9fa769e1-6738-42a1-9ff5-f60dec0b08d6

Joint=1170 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=0.9 Z=-1 SpecialJt=No GUID=13d36d51-1390-4923-9a12-d32361f82134

Joint=1171 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=1 Z=-1 SpecialJt=No GUID=941868ad-a8ea-4fdd-a2ad-63ceb8a4fd3e

Joint=1172 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=1.1 Z=-1 SpecialJt=No GUID=dc6c1422-9fe5-4157-8952-62b31ec9ac32

Joint=1173 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=1.2 Z=-1 SpecialJt=No GUID=bbf93baf-98e1-4ece-8b56-ab8591352d1e

Joint=1174 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=1.3 Z=-1 SpecialJt=No GUID=eb6f8ab6-e0c9-4020-b968-76f3ad7f01f2

Joint=1175 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=1.4 Z=-1 SpecialJt=No GUID=90779f77-e0d1-4e15-a5c5-e8d75fc92f01

Joint=1176 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=1.5 Z=-1 SpecialJt=No GUID=514c3397-3480-44a0-b978-dc2e840af833

Joint=1177 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=1.6 Z=-1 SpecialJt=No GUID=b36adb52-4b8a-4dc0-8608-e2c4afda85cb

Joint=1178 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=1.7 Z=-1 SpecialJt=No GUID=ee6dc11a-79cd-4e1f-9157-d00df4d4e6c6

Joint=1179 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=1.8 Z=-1 SpecialJt=No GUID=68f322f0-601d-4980-bfcd-32f9d4cfd744



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1180 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=1.9 Z=-1 SpecialJt=No GUID=21a11b97-0d84-4942-a55f-4b8c49167b9f

Joint=1181 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=2 Z=-1 SpecialJt=No GUID=ddf6ba07-c1d3-4316-9af5-5133d7bd9f9b

Joint=1182 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=2.1 Z=-1 SpecialJt=No GUID=57519fcb-f851-4596-91ed-584aeab14a36

Joint=1183 CoordSys=GLOBAL CoordType=Cartesian XorR=0.3 Y=2.2 Z=-1 SpecialJt=No GUID=21c069e3-1211-4b4c-80a9-4e2127c7c665

Joint=1184 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=-2.2 Z=-1 SpecialJt=No GUID=53f06ed7-076a-41e9-a24d-4425f91251b1

Joint=1185 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=-2.1 Z=-1 SpecialJt=No GUID=81980663-107d-4a74-ba18-39500fce609d

Joint=1186 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=-2 Z=-1 SpecialJt=No GUID=f51d42a8-28d4-4322-a1dc-1703f4631937

Joint=1187 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=-1.9 Z=-1 SpecialJt=No GUID=283de064-44ff-464d-94f5-6dc5455c22b1

Joint=1188 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=-1.8 Z=-1 SpecialJt=No GUID=c06ceec0-1fb5-48e8-b19a-c18901524375

Joint=1189 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=-1.7 Z=-1 SpecialJt=No GUID=1f3ddafe-5aaf-4415-905a-1821cacdf431

Joint=1190 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=-1.6 Z=-1 SpecialJt=No GUID=8f85e378-ae1e-4bd6-a233-87477cee0342

Joint=1191 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=-1.5 Z=-1 SpecialJt=No GUID=daeed570-e610-4b5c-98ae-5764071c8642

Joint=1192 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=-1.4 Z=-1 SpecialJt=No GUID=04821de5-466f-443f-a603-7e2b3b2a5d04

Joint=1193 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=-1.3 Z=-1 SpecialJt=No GUID=90369c07-b452-48d8-8451-742626f7f600

Joint=1194 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=-1.2 Z=-1 SpecialJt=No GUID=e8c94d12-b4fc-4704-a2e1-779cbfa08dd1

Joint=1195 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=-1.1 Z=-1 SpecialJt=No GUID=2bda3560-4727-4bec-bece-8b1586fca172

Joint=1196 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=-1 Z=-1 SpecialJt=No GUID=991313b1-d136-4483-af36-98782091bfaa

Joint=1197 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=-0.9 Z=-1 SpecialJt=No GUID=20b45ac4-7995-4834-a72c-49cc0245fb5b

Joint=1198 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=-0.8 Z=-1 SpecialJt=No GUID=0791c003-899b-4826-a199-81d4bc20c737

Joint=1199 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=-0.7 Z=-1 SpecialJt=No GUID=ce058621-5b23-4973-8080-c75c8e11a0f1

Joint=1200 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=-0.6 Z=-1 SpecialJt=No GUID=6e1099af-9fbf-427a-b4b5-16a40888f78d

Joint=1201 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=-0.5 Z=-1 SpecialJt=No GUID=48365334-9b5b-4cf5-9888-05c53ce07f90

Joint=1202 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=-0.4 Z=-1 SpecialJt=No GUID=447a31f5-a44c-46f2-96a0-dc5a21a4748e

Joint=1203 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=-0.3 Z=-1 SpecialJt=No GUID=9a2cb176-ea17-4bc3-91b2-613cb8110336

Joint=1204 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=-0.2 Z=-1 SpecialJt=No GUID=081e162b-d423-459a-a314-791138cfebe

Joint=1205 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=-0.09999999999999999 Z=-1 SpecialJt=No GUID=2b39cd56-324b-402b-9828-c34f79d92baa

Joint=1206 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=5.55111512312578E-17 Z=-1 SpecialJt=No GUID=fe4ebd12-15e8-4941-8c35-84d87a7b8287

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1207 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=0.0999999999999998 Z=-1 SpecialJt=No  
GUID=c02c384f-0b26-4e80-9d78-c0bf81c5c8f4

Joint=1208 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=0.2 Z=-1 SpecialJt=No GUID=4ec4f3a2-  
842b-4c01-b90e-8957e7a5a3a7

Joint=1209 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=0.3 Z=-1 SpecialJt=No GUID=c605f476-  
1585-43bb-bbbe-2dbb3abee69c

Joint=1210 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=0.4 Z=-1 SpecialJt=No GUID=003a85c8-  
83f8-4f8d-b387-b4fe8bf6217a

Joint=1211 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=0.5 Z=-1 SpecialJt=No GUID=089cb59a-  
a31e-411e-989f-49c9001170dd

Joint=1212 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=0.6 Z=-1 SpecialJt=No GUID=5ac843b5-  
60ca-45a0-82ce-e417f77d6375

Joint=1213 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=0.7 Z=-1 SpecialJt=No GUID=292f0009-  
0028-4451-8a9a-735b1e64f305

Joint=1214 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=0.8 Z=-1 SpecialJt=No GUID=95323055-  
0031-4e2f-a5f6-cd953586f49d

Joint=1215 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=0.9 Z=-1 SpecialJt=No GUID=1550550f-  
30a0-43d4-a928-4cf007345de3

Joint=1216 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=1 Z=-1 SpecialJt=No GUID=89e6edc0-  
e92a-4822-9515-ba4331f43b7f

Joint=1217 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=1.1 Z=-1 SpecialJt=No GUID=4996cb17-  
b52f-40bf-8c70-ae6a96df51ec

Joint=1218 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=1.2 Z=-1 SpecialJt=No GUID=a89dc3f1-  
f819-46e3-8723-0c74cecd3cf6

Joint=1219 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=1.3 Z=-1 SpecialJt=No GUID=c011c805-  
eddc-44cb-b230-fdbe1a6d69d4

Joint=1220 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=1.4 Z=-1 SpecialJt=No GUID=0143f857-  
9f1c-4046-b6c1-15cc6affa613

Joint=1221 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=1.5 Z=-1 SpecialJt=No GUID=017347ea-  
d4f5-4249-bc0e-4616439569d5

Joint=1222 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=1.6 Z=-1 SpecialJt=No GUID=7d94c27d-  
6a81-48a2-8687-5c3cbc8aa47d

Joint=1223 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=1.7 Z=-1 SpecialJt=No GUID=7c03c974-  
6213-4d38-b0a1-bcce08862b85

Joint=1224 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=1.8 Z=-1 SpecialJt=No GUID=4727df08-  
4972-4508-a8b8-6e9e82182dc1

Joint=1225 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=1.9 Z=-1 SpecialJt=No GUID=46178193-  
895c-4124-9fe8-98f365d39329

Joint=1226 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=2 Z=-1 SpecialJt=No GUID=10103100-  
b3da-40b1-ae27-98ec3b6e2db2

Joint=1227 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=2.1 Z=-1 SpecialJt=No GUID=167746ed-  
8518-4c15-9eea-5338c7bb8a62

Joint=1228 CoordSys=GLOBAL CoordType=Cartesian XorR=0.4 Y=2.2 Z=-1 SpecialJt=No GUID=e61ffe30-  
e33f-4bd7-aa75-6da41f615e7b

Joint=1229 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=-2.2 Z=-1 SpecialJt=No GUID=8b3b1777-  
e3f8-4d73-9881-dd19d8b76513

Joint=1230 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=-2.1 Z=-1 SpecialJt=No GUID=535db666-  
8880-4f43-bc25-21b3ee9bd614

Joint=1231 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=-2 Z=-1 SpecialJt=No GUID=a559b852-  
7b5c-4d53-87b7-ab95d7ae1bce

Joint=1232 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=-1.9 Z=-1 SpecialJt=No GUID=69afa3d9-  
a25f-4802-96cc-e496817f750d

Joint=1233 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=-1.8 Z=-1 SpecialJt=No GUID=e4794f90-  
2567-45a2-94d6-245a3d529c60

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1234 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=-1.7 Z=-1 SpecialJt=No GUID=0fb114cc-9b0f-4947-9356-8384963cfee4  
 Joint=1235 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=-1.6 Z=-1 SpecialJt=No GUID=45c1d1f7-088e-458b-a1a4-ed5f3685a455  
 Joint=1236 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=-1.5 Z=-1 SpecialJt=No GUID=1f0d84f0-3871-4eae-b846-498ff5801170  
 Joint=1237 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=-1.4 Z=-1 SpecialJt=No GUID=09b6346a-092a-4367-b770-c406f8d17462  
 Joint=1238 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=-1.3 Z=-1 SpecialJt=No GUID=71391ee7-667c-4b15-9029-206cd7276ad8  
 Joint=1239 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=-1.2 Z=-1 SpecialJt=No GUID=50de204d-ef7c-41ad-b0a1-a74e7bb89463  
 Joint=1240 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=-1.1 Z=-1 SpecialJt=No GUID=a08aedc4-b89b-4063-86cc-0c3e14959197  
 Joint=1241 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=-1 Z=-1 SpecialJt=No GUID=bc280789-c108-4baf-a680-1d0cc0e1a7d5  
 Joint=1242 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=-0.9 Z=-1 SpecialJt=No GUID=340578a0-9997-4233-b1dd-afae21068b6c  
 Joint=1243 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=-0.8 Z=-1 SpecialJt=No GUID=3958b9ef-a37f-4b54-abbd-28c780bec777  
 Joint=1244 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=-0.7 Z=-1 SpecialJt=No GUID=7aa10d50-0832-4ca6-8c38-e941370a0b17  
 Joint=1245 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=-0.6 Z=-1 SpecialJt=No GUID=4b5ec049-9079-490c-840b-7eccefe6e1ec  
 Joint=1246 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=-0.5 Z=-1 SpecialJt=No GUID=55887685-912f-4d7d-a1b8-d993c96ccc2c  
 Joint=1247 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=-0.4 Z=-1 SpecialJt=No GUID=89bb79a0-2f0c-4d4b-9da1-7f33cac2ea3a  
 Joint=1248 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=-0.3 Z=-1 SpecialJt=No GUID=30b0bcd7-f123-4b4d-b3e6-d1b530201c49  
 Joint=1249 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=-0.2 Z=-1 SpecialJt=No GUID=694e5c8a-3ecb-4b30-bd90-427e85eadbbf  
 Joint=1250 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=-0.09999999999999998 Z=-1 SpecialJt=No GUID=e268bea9-193c-45da-960b-2e3d879b4fdb  
 Joint=1251 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=0 Z=-1 SpecialJt=No GUID=9a174b26-3ef4-4331-ad31-f80b793cf804  
 Joint=1252 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=0.09999999999999998 Z=-1 SpecialJt=No GUID=2be83453-f999-4acb-ac3f-9e119524c530  
 Joint=1253 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=0.2 Z=-1 SpecialJt=No GUID=cd4c2db5-cb4d-42e5-9a10-2ced74ad2a96  
 Joint=1254 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=0.3 Z=-1 SpecialJt=No GUID=95a89e0e-c665-46a3-8c4d-fc104db586bb  
 Joint=1255 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=0.4 Z=-1 SpecialJt=No GUID=9671642f-0e2f-4c12-8843-15263a34cadd  
 Joint=1256 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=0.5 Z=-1 SpecialJt=No GUID=1d2fcd5e-48cb-4b9c-95c2-83fbffa5471f  
 Joint=1257 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=0.6 Z=-1 SpecialJt=No GUID=62a7cd94-1732-41c1-ad2b-db72ace288c6  
 Joint=1258 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=0.7 Z=-1 SpecialJt=No GUID=365163f9-b324-4fd8-800b-32cf76a39a75  
 Joint=1259 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=0.8 Z=-1 SpecialJt=No GUID=d182cce0-36f7-4ef2-94c3-9e52ea5fbc7  
 Joint=1260 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=0.9 Z=-1 SpecialJt=No GUID=736f2933-e8d3-4957-9686-c5d941a26d97

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1261 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=1 Z=-1 SpecialJt=No GUID=063564d6-ee6d-4beb-b582-01c3bf31a890

Joint=1262 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=1.1 Z=-1 SpecialJt=No GUID=d3fa0f4e-9bb4-4357-9591-614445b70abd

Joint=1263 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=1.2 Z=-1 SpecialJt=No GUID=e49ebe2b-fc47-4e84-9f19-b42bf17a3012

Joint=1264 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=1.3 Z=-1 SpecialJt=No GUID=5e9d1a7f-162f-4133-b3d9-dff2ca6bd433

Joint=1265 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=1.4 Z=-1 SpecialJt=No GUID=599237b4-2d9f-4275-95b2-38180be6aabc

Joint=1266 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=1.5 Z=-1 SpecialJt=No GUID=d6697e92-8ba9-401a-bc11-9b0847f0501e

Joint=1267 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=1.6 Z=-1 SpecialJt=No GUID=3ecbb797-2388-40b3-9d18-58ed0fe175f5

Joint=1268 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=1.7 Z=-1 SpecialJt=No GUID=9c67d8c3-e5b7-4cb8-a958-cf5406124a97

Joint=1269 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=1.8 Z=-1 SpecialJt=No GUID=c692dd44-6164-44df-a561-888060e81231

Joint=1270 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=1.9 Z=-1 SpecialJt=No GUID=1351c167-17dc-41e8-83b1-f0ba60803a69

Joint=1271 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=2 Z=-1 SpecialJt=No GUID=643b7612-c742-405f-929f-171debd0cddb

Joint=1272 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=2.1 Z=-1 SpecialJt=No GUID=da7203f3-b155-4723-a711-2d9b69e31b64

Joint=1273 CoordSys=GLOBAL CoordType=Cartesian XorR=0.5 Y=2.2 Z=-1 SpecialJt=No GUID=02645a23-ddce-4f7b-92b3-36beb03e413d

Joint=1274 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=-2.2 Z=-1 SpecialJt=No GUID=aa50628f-7b23-4757-a6d1-f38df4b42ad0

Joint=1275 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=-2.1 Z=-1 SpecialJt=No GUID=ee22f9e6-15cc-4c55-af69-614859227003

Joint=1276 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=-2 Z=-1 SpecialJt=No GUID=6e414246-5efc-4972-8cc3-5f8c6214ebe5

Joint=1277 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=-1.9 Z=-1 SpecialJt=No GUID=fd6ecdbc-10e1-4788-bfa2-d6769abbe9b2

Joint=1278 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=-1.8 Z=-1 SpecialJt=No GUID=84943948-9ad6-46f7-8cb0-b7917f611618

Joint=1279 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=-1.7 Z=-1 SpecialJt=No GUID=15759834-16ae-4db9-b9d3-b911f610d43d

Joint=1280 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=-1.6 Z=-1 SpecialJt=No GUID=bceb21b6-3ca1-466d-a7b0-e5a2f32f7755

Joint=1281 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=-1.5 Z=-1 SpecialJt=No GUID=0c7fb77b-5468-4f07-988c-f00d7067badb

Joint=1282 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=-1.4 Z=-1 SpecialJt=No GUID=96370484-ff95-4844-b937-457d50f62957

Joint=1283 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=-1.3 Z=-1 SpecialJt=No GUID=fb868444-3cec-4229-b73b-a6a3b2827709

Joint=1284 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=-1.2 Z=-1 SpecialJt=No GUID=1ab0748a-67e7-41a8-a465-6a92ba269781

Joint=1285 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=-1.1 Z=-1 SpecialJt=No GUID=08066776-5d9c-44dd-98b8-68c021edc449

Joint=1286 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=-1 Z=-1 SpecialJt=No GUID=134f1642-e5cf-4614-896f-c9931c191e39

Joint=1287 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=-0.9 Z=-1 SpecialJt=No GUID=8fbcc868-99e5-4785-b2fd-40f015047275



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1288 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=-0.8 Z=-1 SpecialJt=No GUID=548506e4-38e9-4d7a-b264-baef395a0d2c

Joint=1289 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=-0.7 Z=-1 SpecialJt=No GUID=0d5a97aa-3c62-4c5f-8df0-484630e8bf16

Joint=1290 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=-0.6 Z=-1 SpecialJt=No GUID=ac49862e-ff1e-434d-b33a-1c8d3999cf4d

Joint=1291 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=-0.5 Z=-1 SpecialJt=No GUID=a7ef5ff3-8bda-4ba7-9053-57501b995a70

Joint=1292 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=-0.4 Z=-1 SpecialJt=No GUID=7ff95e1d-53ac-4b53-9fe0-b49d1db3fdd9

Joint=1293 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=-0.3 Z=-1 SpecialJt=No GUID=440c9d68-7bad-4e53-93e1-9ab54e263663

Joint=1294 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=-0.2 Z=-1 SpecialJt=No GUID=6b63a9be-c845-4b5e-b42f-7128cacaf39b

Joint=1295 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=-0.1 Z=-1 SpecialJt=No GUID=92e9b076-555f-46e5-b06b-0536ec133f12

Joint=1296 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=0 Z=-1 SpecialJt=No GUID=87f104ea-8027-454e-b42a-f4230bfa4050

Joint=1297 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=0.1 Z=-1 SpecialJt=No GUID=4cd5feb0-e9f8-45e3-9ba4-91b8dc490cc7

Joint=1298 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=0.2 Z=-1 SpecialJt=No GUID=e56e3ac4-c8d4-420b-b4fe-466aac8289ac

Joint=1299 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=0.3 Z=-1 SpecialJt=No GUID=a4992fdc-9f74-4933-a3b2-6ce1caa2ed90

Joint=1300 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=0.4 Z=-1 SpecialJt=No GUID=0b92454b-85ed-4b19-80ff-300e5a6570f3

Joint=1301 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=0.5 Z=-1 SpecialJt=No GUID=4e491370-0399-4f31-a286-5c4ec85625d5

Joint=1302 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=0.6 Z=-1 SpecialJt=No GUID=73aaa782-88dd-4d8c-a062-88c9b5463ef8

Joint=1303 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=0.7 Z=-1 SpecialJt=No GUID=773d3d41-b4b9-4db2-9fb2-10eb91eae62

Joint=1304 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=0.8 Z=-1 SpecialJt=No GUID=0536fa1a-c36d-4cee-8d69-ee9062860ae5

Joint=1305 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=0.9 Z=-1 SpecialJt=No GUID=c2ba2620-f7b0-4c5d-8c48-63ccf12f9fbe

Joint=1306 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=1 Z=-1 SpecialJt=No GUID=1195aece-95d3-4bd1-aded-b6ba7ebc8c97

Joint=1307 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=1.1 Z=-1 SpecialJt=No GUID=1e47bf33-4bef-4e21-9461-7ecc8e1c05e9

Joint=1308 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=1.2 Z=-1 SpecialJt=No GUID=7d698da7-ccdb-4a04-8e70-fb9f99911c6e

Joint=1309 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=1.3 Z=-1 SpecialJt=No GUID=76a222ff-b583-4f3c-b329-b67060704acb

Joint=1310 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=1.4 Z=-1 SpecialJt=No GUID=8a2bf41f-1559-478a-8802-6b1413d39b22

Joint=1311 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=1.5 Z=-1 SpecialJt=No GUID=aba01aa8-9e6c-41c6-b774-60e308adce44

Joint=1312 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=1.6 Z=-1 SpecialJt=No GUID=d28a38d0-49c0-4a40-af74-0504128538c5

Joint=1313 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=1.7 Z=-1 SpecialJt=No GUID=67773474-c690-4bb0-ae16-f5ba0171da0a

Joint=1314 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=1.8 Z=-1 SpecialJt=No GUID=2c9c966d-ffa9-4c22-9d2f-c23fa4caa9e3

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1315 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=1.9 Z=-1 SpecialJt=No GUID=e6267c2d-3db3-457b-8df0-342a88138c91

Joint=1316 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=2 Z=-1 SpecialJt=No GUID=25f61087-dbcf-414b-b236-5bf5ede86e56

Joint=1317 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=2.1 Z=-1 SpecialJt=No GUID=d068e4a9-95a8-4246-9a10-ccd92e7278ad

Joint=1318 CoordSys=GLOBAL CoordType=Cartesian XorR=0.6 Y=2.2 Z=-1 SpecialJt=No GUID=f2885bb3-cbba-49fd-8042-505c38fe568f

Joint=1319 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=-2.2 Z=-1 SpecialJt=No GUID=78aca91c-0fc0-40e9-a078-3cc9a5bdff35

Joint=1320 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=-2.1 Z=-1 SpecialJt=No GUID=3d8c3f62-1e0a-4762-9c36-72a97af3375f

Joint=1321 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=-2 Z=-1 SpecialJt=No GUID=b2eb85b4-bd0d-41ec-bc6f-ba585548c77a

Joint=1322 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=-1.9 Z=-1 SpecialJt=No GUID=145bbe46-f123-4dc0-b7d5-f807ea6e340d

Joint=1323 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=-1.8 Z=-1 SpecialJt=No GUID=9cfa6dfa-5ce8-4802-9a88-445062939103

Joint=1324 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=-1.7 Z=-1 SpecialJt=No GUID=df5a9e75-9ae1-43fd-8840-9bcf4d729c1a

Joint=1325 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=-1.6 Z=-1 SpecialJt=No GUID=797f2b2b-2543-403e-a747-77f58e92d928

Joint=1326 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=-1.5 Z=-1 SpecialJt=No GUID=d2651168-4a3c-41b4-a3bd-e8fac383c580

Joint=1327 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=-1.4 Z=-1 SpecialJt=No GUID=56c85550-e29e-4bcb-a89f-0a6d3db95818

Joint=1328 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=-1.3 Z=-1 SpecialJt=No GUID=86beb5f3-fe0f-4aaa-afcc-01ab6b863aa2

Joint=1329 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=-1.2 Z=-1 SpecialJt=No GUID=9d692bc0-9517-4608-970c-94aa7d189a7c

Joint=1330 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=-1.1 Z=-1 SpecialJt=No GUID=2648ac94-4705-49d9-a984-865909f58be9

Joint=1331 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=-1 Z=-1 SpecialJt=No GUID=1786972f-36ef-42d6-b08c-9bc858502847

Joint=1332 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=-0.9 Z=-1 SpecialJt=No GUID=ebe86232-f314-4037-8c38-2b0085c4e82d

Joint=1333 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=-0.8 Z=-1 SpecialJt=No GUID=e52e5072-f2b9-44ac-bdda-d498d96bd289

Joint=1334 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=-0.7 Z=-1 SpecialJt=No GUID=d4057b35-f8d0-4713-ae35-1a8794a1863a

Joint=1335 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=-0.6 Z=-1 SpecialJt=No GUID=ff632709-3d9e-47f8-9577-24e5a7ba129d

Joint=1336 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=-0.5 Z=-1 SpecialJt=No GUID=be7479f8-c7e1-419f-a55d-14d75df03fea

Joint=1337 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=-0.4 Z=-1 SpecialJt=No GUID=a7f7e3bf-fd8f-4f92-ad39-cf606a6d1b9c

Joint=1338 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=-0.3 Z=-1 SpecialJt=No GUID=66333235-4fb8-4900-89d1-29e96c67ec4f

Joint=1339 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=-0.2 Z=-1 SpecialJt=No GUID=a15d0eb7-2433-443b-8ad8-1d1c7b9060cf

Joint=1340 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=-0.09999999999999999 Z=-1 SpecialJt=No GUID=96f55c05-a50b-4b6c-9426-dd7f1342920b

Joint=1341 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=-5.55111512312578E-17 Z=-1 SpecialJt=No GUID=8f77067c-1616-402f-bb4f-871f79020a7d

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1342 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=0.0999999999999998 Z=-1 SpecialJt=No  
GUID=b32c3df0-f754-48ce-a4c3-22b1bdde1149

Joint=1343 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=0.2 Z=-1 SpecialJt=No GUID=27f83c1f-  
9205-4b12-874e-59bcff7a6053

Joint=1344 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=0.3 Z=-1 SpecialJt=No GUID=7b074b20-  
2758-45e1-9ea3-26e4b0ae9647

Joint=1345 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=0.4 Z=-1 SpecialJt=No GUID=b82ef8af-  
dcb6-4188-8de2-1dec32a11b28

Joint=1346 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=0.5 Z=-1 SpecialJt=No GUID=9291d5d6-  
25b5-4a72-858f-63805381c156

Joint=1347 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=0.6 Z=-1 SpecialJt=No GUID=a9c5a287-  
4e74-4a11-b1f5-3192a6e68413

Joint=1348 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=0.7 Z=-1 SpecialJt=No GUID=888d7e89-  
cec1-4656-9163-a02cccd075a6

Joint=1349 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=0.8 Z=-1 SpecialJt=No GUID=28c11bd1-  
93dc-4404-b668-5bc767d272f5

Joint=1350 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=0.9 Z=-1 SpecialJt=No GUID=7ab0087e-  
d05f-46d9-bdea-1e7d4df6425e

Joint=1351 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=1 Z=-1 SpecialJt=No GUID=7f07401f-  
08f9-4017-ad31-d39f522fc6fa

Joint=1352 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=1.1 Z=-1 SpecialJt=No GUID=a2164280-  
8c26-40e3-a487-a014f3543956

Joint=1353 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=1.2 Z=-1 SpecialJt=No GUID=c9aff9fe-  
f532-4001-8dab-4180bba4f692

Joint=1354 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=1.3 Z=-1 SpecialJt=No GUID=367ca406-  
5495-4994-847d-023acef1556e

Joint=1355 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=1.4 Z=-1 SpecialJt=No GUID=6b1971de-  
6746-4e66-b86a-b6796143568a

Joint=1356 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=1.5 Z=-1 SpecialJt=No GUID=6878e199-  
b7c6-4667-963c-e5592901e9cd

Joint=1357 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=1.6 Z=-1 SpecialJt=No GUID=b7f12c7c-  
b7f7-4e82-afb7-0ec792cd5592

Joint=1358 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=1.7 Z=-1 SpecialJt=No GUID=8023f977-  
725f-410d-8750-a0a99c805e51

Joint=1359 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=1.8 Z=-1 SpecialJt=No GUID=b0476d6b-  
ffad-4740-aa7a-3f291ea36fd5

Joint=1360 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=1.9 Z=-1 SpecialJt=No GUID=618b60b9-  
7a2f-4538-a4ac-b84baf56f4e7

Joint=1361 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=2 Z=-1 SpecialJt=No GUID=12abdc38-  
e743-41ce-9117-2e8db8d10f7f

Joint=1362 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=2.1 Z=-1 SpecialJt=No GUID=7fff3d5b-  
b07d-4f83-81c6-4c2db98ce57a

Joint=1363 CoordSys=GLOBAL CoordType=Cartesian XorR=0.7 Y=2.2 Z=-1 SpecialJt=No GUID=7811efd9-  
a33f-4b25-ad62-4d981dcc6f2b

Joint=1364 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=-2.2 Z=-1 SpecialJt=No GUID=8b88e7d5-  
94eb-44a7-99b2-3c335e265e37

Joint=1365 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=-2.1 Z=-1 SpecialJt=No GUID=6895d137-  
718f-4de6-aac1-dfcf31201223

Joint=1366 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=-2 Z=-1 SpecialJt=No GUID=05d542ca-  
f5de-4a2f-a0d7-29f385b96f7b

Joint=1367 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=-1.9 Z=-1 SpecialJt=No GUID=af1f4232-  
ad54-4c82-92fe-18c05e41c3ec

Joint=1368 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=-1.8 Z=-1 SpecialJt=No GUID=e1c62111-  
364a-4712-84c8-647efa296101

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1369 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=-1.7 Z=-1 SpecialJt=No GUID=f3be6ba2-3cbf-4cc2-9324-32c77c08cd06

Joint=1370 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=-1.6 Z=-1 SpecialJt=No GUID=d3af24c2-a848-4aac-ae72-485cd9e7871f

Joint=1371 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=-1.5 Z=-1 SpecialJt=No GUID=0a90a8d2-1d6d-4375-8ead-0f71481b60a6

Joint=1372 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=-1.4 Z=-1 SpecialJt=No GUID=67008bb1-995b-4a5e-977f-1bbdd6c8d6db

Joint=1373 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=-1.3 Z=-1 SpecialJt=No GUID=85958013-67a7-4da2-aaa3-4c3b1c959123

Joint=1374 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=-1.2 Z=-1 SpecialJt=No GUID=15e589b6-6723-4d5d-af16-80c8bc83c73c

Joint=1375 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=-1.1 Z=-1 SpecialJt=No GUID=0bdb7d42-1de4-4e59-9fcf-5bd010865e1b

Joint=1376 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=-1 Z=-1 SpecialJt=No GUID=b15cbcc6-9868-4b51-a1e9-967a6900231d

Joint=1377 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=-0.9 Z=-1 SpecialJt=No GUID=79f6b687-4744-4bfe-8f40-8dc967b8640a

Joint=1378 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=-0.8 Z=-1 SpecialJt=No GUID=3cc0ebd3-2cf9-478b-9327-fbd331a8ed16

Joint=1379 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=-0.7 Z=-1 SpecialJt=No GUID=2db8ed3c-3da7-48d3-84ba-1a2db9af7212

Joint=1380 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=-0.6 Z=-1 SpecialJt=No GUID=ffd0c68e-c324-4367-ac0b-0b17f4b3be9d

Joint=1381 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=-0.5 Z=-1 SpecialJt=No GUID=ba891321-772c-4e98-87db-24d0842915af

Joint=1382 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=-0.4 Z=-1 SpecialJt=No GUID=8e59356f-1483-491c-8c0a-78aefcfce451

Joint=1383 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=-0.3 Z=-1 SpecialJt=No GUID=30adf17b-e90e-4893-b007-5884bbc2bc79

Joint=1384 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=-0.2 Z=-1 SpecialJt=No GUID=c763e559-621f-48d5-b639-29d907f92c6e

Joint=1385 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=-0.1 Z=-1 SpecialJt=No GUID=76f52113-d587-43be-9c9a-aaf3120de3b3

Joint=1386 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=0 Z=-1 SpecialJt=No GUID=8bf54b72-9177-421d-a0a9-25e7704b09a5

Joint=1387 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=0.1 Z=-1 SpecialJt=No GUID=3567ba85-de15-4b5a-b86b-ecf7a02d14d7

Joint=1388 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=0.2 Z=-1 SpecialJt=No GUID=585edb73-da57-485b-9b32-57dd8bf485db

Joint=1389 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=0.3 Z=-1 SpecialJt=No GUID=bf758318-3149-4844-a2df-eef9a96b43ce

Joint=1390 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=0.4 Z=-1 SpecialJt=No GUID=8c563d78-dd22-4997-b05c-e79a2867f6ef

Joint=1391 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=0.5 Z=-1 SpecialJt=No GUID=95398b37-209e-4686-94e9-dae8f84a017e

Joint=1392 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=0.6 Z=-1 SpecialJt=No GUID=c452b3e4-2b08-4183-99f4-b8156a4fc1e3

Joint=1393 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=0.7 Z=-1 SpecialJt=No GUID=515f7fb9-1ff8-4d1b-94a6-ce508417d74b

Joint=1394 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=0.8 Z=-1 SpecialJt=No GUID=4274e173-7eab-41e8-9985-63b74c1eebbc

Joint=1395 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=0.9 Z=-1 SpecialJt=No GUID=1a7d3484-80aa-41a2-9d13-2246bc93d2f5



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1396 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=1 Z=-1 SpecialJt=No GUID=08db1672-2f0b-492e-baba-402642166464

Joint=1397 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=1.1 Z=-1 SpecialJt=No GUID=8848689e-63ec-4702-87ef-f5e60b60f1a3

Joint=1398 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=1.2 Z=-1 SpecialJt=No GUID=e4b9cefe-c461-47d0-9859-b127be52e801

Joint=1399 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=1.3 Z=-1 SpecialJt=No GUID=499d33ac-a36d-4a32-8db7-12196cddf63f

Joint=1400 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=1.4 Z=-1 SpecialJt=No GUID=5311d8f1-e4ed-4e16-a791-ba39f8ebdd79

Joint=1401 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=1.5 Z=-1 SpecialJt=No GUID=c3234a75-144a-4555-83f3-48248b71f37b

Joint=1402 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=1.6 Z=-1 SpecialJt=No GUID=6818a232-62c6-4551-b596-d25e3b50b7b6

Joint=1403 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=1.7 Z=-1 SpecialJt=No GUID=5970c621-fda3-4f7e-a254-2d312470abe7

Joint=1404 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=1.8 Z=-1 SpecialJt=No GUID=81d3c0a3-8984-4478-86d4-d553d473a33d

Joint=1405 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=1.9 Z=-1 SpecialJt=No GUID=8fdb2754-6fc4-4f4a-9e96-3ea4b2c0cdb1

Joint=1406 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=2 Z=-1 SpecialJt=No GUID=1b131d91-0d55-47f0-adc9-41a015276d6f

Joint=1407 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=2.1 Z=-1 SpecialJt=No GUID=f4d8d2c2-1d72-419e-8817-fdd4aa1044ea

Joint=1408 CoordSys=GLOBAL CoordType=Cartesian XorR=0.8 Y=2.2 Z=-1 SpecialJt=No GUID=8baa07ae-3647-40a5-af7e-11958f4264b9

Joint=1409 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=-2.2 Z=-1 SpecialJt=No GUID=380112a4-c7b7-4eb3-848e-2588b87a250c

Joint=1410 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=-2.1 Z=-1 SpecialJt=No GUID=90484226-f48b-4edd-964d-fce2b2fe3412

Joint=1411 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=-2 Z=-1 SpecialJt=No GUID=018f8ba9-9b91-415c-9bc0-052b7e86f47f

Joint=1412 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=-1.9 Z=-1 SpecialJt=No GUID=32b3daf3-fd82-45a7-9b64-cd7e29223501

Joint=1413 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=-1.8 Z=-1 SpecialJt=No GUID=60ac8bb0-33c2-421b-b74f-b783894c4564

Joint=1414 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=-1.7 Z=-1 SpecialJt=No GUID=acd663a1-19fd-4563-89ab-25d823467cf1

Joint=1415 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=-1.6 Z=-1 SpecialJt=No GUID=f3e13f86-a504-4413-aa46-437bcd6419ed

Joint=1416 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=-1.5 Z=-1 SpecialJt=No GUID=eddbc3c0-31f9-49db-9eec-5576813f74d3

Joint=1417 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=-1.4 Z=-1 SpecialJt=No GUID=ee9a1ce9-3014-4c2d-8d59-92cd9915d4cf

Joint=1418 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=-1.3 Z=-1 SpecialJt=No GUID=f66e7741-887d-4bad-a394-498d6b29c37f

Joint=1419 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=-1.2 Z=-1 SpecialJt=No GUID=032b4468-8995-4a43-b625-18c4dc333e08

Joint=1420 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=-1.1 Z=-1 SpecialJt=No GUID=093b86b4-3985-439e-8953-690bf521929b

Joint=1421 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=-1 Z=-1 SpecialJt=No GUID=6ff66bf2-9da6-4648-8d08-66ea10c32584

Joint=1422 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=-0.9 Z=-1 SpecialJt=No GUID=67d04492-7414-4358-89fd-a3391443fae7

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1423 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=-0.8 Z=-1 SpecialJt=No GUID=31c55eff-3676-41b7-ba3a-63c4ca9f46c8  
 Joint=1424 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=-0.7 Z=-1 SpecialJt=No GUID=1107f63c-53cc-4d00-8628-50d961feddb8  
 Joint=1425 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=-0.6 Z=-1 SpecialJt=No GUID=00cc690e-9d73-447c-9af8-cb83e00aa04d  
 Joint=1426 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=-0.5 Z=-1 SpecialJt=No GUID=525dc7d5-2550-4a36-b644-235265802878  
 Joint=1427 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=-0.4 Z=-1 SpecialJt=No GUID=fd2c7cd6-63d0-4e5a-829d-c094402176f5  
 Joint=1428 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=-0.3 Z=-1 SpecialJt=No GUID=43a946e2-9e2d-4a2d-961d-3be2cbede55f  
 Joint=1429 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=-0.2 Z=-1 SpecialJt=No GUID=a6a96ec8-273a-4d0c-b3b0-9fe0495ef748  
 Joint=1430 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=-0.0999999999999997 Z=-1 SpecialJt=No GUID=36cb0cdb-e238-43b2-8cd9-ec9e4aa0ed8e  
 Joint=1431 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=0 Z=-1 SpecialJt=No GUID=8ef0fd53-00b5-453b-a4e1-4b617e9c807b  
 Joint=1432 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=0.0999999999999998 Z=-1 SpecialJt=No GUID=fe640de9-bc7c-48e2-abd3-12df1c9ba26c  
 Joint=1433 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=0.2 Z=-1 SpecialJt=No GUID=d020343f-a67f-4466-a301-44d14146565d  
 Joint=1434 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=0.3 Z=-1 SpecialJt=No GUID=6bec1c31-ee44-48d9-be0d-128cea8306e  
 Joint=1435 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=0.4 Z=-1 SpecialJt=No GUID=b1d3e901-fa2b-417f-8739-e411d7984dda  
 Joint=1436 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=0.5 Z=-1 SpecialJt=No GUID=1916603b-1a84-40ae-a152-82ee6cc5bf79  
 Joint=1437 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=0.6 Z=-1 SpecialJt=No GUID=9d252c6d-6984-42b4-9653-2e7649fc647a  
 Joint=1438 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=0.7 Z=-1 SpecialJt=No GUID=b7d0ea8a-f0a9-44ab-9016-e8fed2c247f9  
 Joint=1439 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=0.8 Z=-1 SpecialJt=No GUID=b154fe1e-7b2c-4ea0-9220-31efb072caf8  
 Joint=1440 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=0.9 Z=-1 SpecialJt=No GUID=59024651-3bef-4606-93bb-431ab788af8f  
 Joint=1441 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=1 Z=-1 SpecialJt=No GUID=8e070c59-9bb2-4f2f-84c8-e6b5fe852546  
 Joint=1442 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=1.1 Z=-1 SpecialJt=No GUID=59e0e15b-5efd-45ec-8987-d1af9c34821a  
 Joint=1443 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=1.2 Z=-1 SpecialJt=No GUID=525a9c98-6f68-4f18-a14e-3e58c26df481  
 Joint=1444 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=1.3 Z=-1 SpecialJt=No GUID=05f13086-636e-4f35-828b-0109b1b20edb  
 Joint=1445 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=1.4 Z=-1 SpecialJt=No GUID=d5584db4-ec03-4b99-b300-65c252357e50  
 Joint=1446 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=1.5 Z=-1 SpecialJt=No GUID=e64dd4d2-4652-4bce-a95b-4bb23c5d57aa  
 Joint=1447 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=1.6 Z=-1 SpecialJt=No GUID=edf3bcc8-6b9f-4795-8390-191c7b3dc593  
 Joint=1448 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=1.7 Z=-1 SpecialJt=No GUID=20c6ff0a-a70f-4df0-951e-d99d05c081ef  
 Joint=1449 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=1.8 Z=-1 SpecialJt=No GUID=0aff6575-6ce9-4c82-b0d1-f305452aeaa0

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1450 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=1.9 Z=-1 SpecialJt=No GUID=1edef2e1-a528-4f97-a30b-86914829c574

Joint=1451 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=2 Z=-1 SpecialJt=No GUID=f7f83e17-b53c-426a-94a8-56b8a54fda14

Joint=1452 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=2.1 Z=-1 SpecialJt=No GUID=2dbba30a-ce2a-4c51-b0f6-a85d1cac1359

Joint=1453 CoordSys=GLOBAL CoordType=Cartesian XorR=0.9 Y=2.2 Z=-1 SpecialJt=No GUID=2fe01d3b-aa41-4723-ba0b-0362348de360

Joint=1454 CoordSys=GLOBAL CoordType=Cartesian XorR=1 Y=-2.2 Z=-1 SpecialJt=No GUID=40bee44b-5458-4e49-aa3a-93984aaef8eb

Joint=1455 CoordSys=GLOBAL CoordType=Cartesian XorR=1 Y=-2.1 Z=-1 SpecialJt=No GUID=92475fec-23ca-4020-b3db-0d44a4f35d4e

Joint=1456 CoordSys=GLOBAL CoordType=Cartesian XorR=1 Y=-2 Z=-1 SpecialJt=No GUID=f28efd01-217f-40e6-a6cc-50cecaff8d61

Joint=1457 CoordSys=GLOBAL CoordType=Cartesian XorR=1 Y=-1.9 Z=-1 SpecialJt=No GUID=3d5fb956-3caa-40e9-b868-303ce5949645

Joint=1458 CoordSys=GLOBAL CoordType=Cartesian XorR=1 Y=-1.8 Z=-1 SpecialJt=No GUID=b8a3c5a4-3445-430b-9013-91c903145558

Joint=1459 CoordSys=GLOBAL CoordType=Cartesian XorR=1 Y=-1.7 Z=-1 SpecialJt=No GUID=f5c39bcc-fc69-4f85-8582-144b0528a995

Joint=1460 CoordSys=GLOBAL CoordType=Cartesian XorR=1 Y=-1.6 Z=-1 SpecialJt=No GUID=a924dbb3-d022-4107-aacf-1fbbe37617a5

Joint=1461 CoordSys=GLOBAL CoordType=Cartesian XorR=1 Y=-1.5 Z=-1 SpecialJt=No GUID=693c5832-87ab-4040-8fb3-ce2b60b5f44b

Joint=1462 CoordSys=GLOBAL CoordType=Cartesian XorR=1 Y=-1.4 Z=-1 SpecialJt=No GUID=d6fdf9fa-b861-47ab-88a4-ccdf58c9accc

Joint=1463 CoordSys=GLOBAL CoordType=Cartesian XorR=1 Y=-1.3 Z=-1 SpecialJt=No GUID=15cf4e08-4390-417c-b718-331ab6e28ad5

Joint=1464 CoordSys=GLOBAL CoordType=Cartesian XorR=1 Y=-1.2 Z=-1 SpecialJt=No GUID=0e5ca09f-d328-42c4-ac1e-1d831b2e96f5

Joint=1465 CoordSys=GLOBAL CoordType=Cartesian XorR=1 Y=-1.1 Z=-1 SpecialJt=No GUID=99ac01ea-393d-4fba-8a1f-29cc6f04a2f1

Joint=1466 CoordSys=GLOBAL CoordType=Cartesian XorR=1 Y=-1 Z=-1 SpecialJt=No GUID=a768ad6f-7360-44e5-a62b-55c90fc362f8

Joint=1467 CoordSys=GLOBAL CoordType=Cartesian XorR=1 Y=-0.9 Z=-1 SpecialJt=No GUID=00a7ff78-da14-42ca-b5ab-74f56d1d052b

Joint=1468 CoordSys=GLOBAL CoordType=Cartesian XorR=1 Y=-0.8 Z=-1 SpecialJt=No GUID=e2f53d1c-b695-473f-9808-c80369c97dcb

Joint=1469 CoordSys=GLOBAL CoordType=Cartesian XorR=1 Y=-0.7 Z=-1 SpecialJt=No GUID=6358519b-28cc-470d-bff1-ece7984f50ed

Joint=1470 CoordSys=GLOBAL CoordType=Cartesian XorR=1 Y=-0.6 Z=-1 SpecialJt=No GUID=7948081b-f7ef-4b02-acc9-05cbddf052d2

Joint=1471 CoordSys=GLOBAL CoordType=Cartesian XorR=1 Y=-0.5 Z=-1 SpecialJt=No GUID=b162b4c7-200c-4eda-bd77-0a8d6b1330dd

Joint=1472 CoordSys=GLOBAL CoordType=Cartesian XorR=1 Y=-0.4 Z=-1 SpecialJt=No GUID=b0a3cab9-8d60-4e2f-9f89-38c59705b282

Joint=1473 CoordSys=GLOBAL CoordType=Cartesian XorR=1 Y=-0.3 Z=-1 SpecialJt=No GUID=ca29944c-45bd-43c5-9389-6123d75e3230

Joint=1474 CoordSys=GLOBAL CoordType=Cartesian XorR=1 Y=-0.2 Z=-1 SpecialJt=No GUID=90a8b12b-ec7f-45c0-b89c-917eb4290ad6

Joint=1475 CoordSys=GLOBAL CoordType=Cartesian XorR=1 Y=-0.1 Z=-1 SpecialJt=No GUID=b7edb089-5b8e-48ee-ae38-b11cd11adb91

Joint=1476 CoordSys=GLOBAL CoordType=Cartesian XorR=1 Y=-5.55111512312578E-17 Z=-1 SpecialJt=No GUID=fbee9d7b-c916-4dcc-a1b1-cf44dd96274d

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                            |                     |          |        |      |              |                                           |
|----------------------------|---------------------|----------|--------|------|--------------|-------------------------------------------|
| Joint=1477 CoordSys=GLOBAL | CoordType=Cartesian | XorR=1   | Y=0.1  | Z=-1 | SpecialJt=No | GUID=97b0cd6f-b9ff-4e6b-9853-7443aef766a6 |
| Joint=1478 CoordSys=GLOBAL | CoordType=Cartesian | XorR=1   | Y=0.2  | Z=-1 | SpecialJt=No | GUID=3597fbfc-38aa-44a0-afc8-52f8519c5b40 |
| Joint=1479 CoordSys=GLOBAL | CoordType=Cartesian | XorR=1   | Y=0.3  | Z=-1 | SpecialJt=No | GUID=5070d297-e927-48d6-b840-30a356a5f069 |
| Joint=1480 CoordSys=GLOBAL | CoordType=Cartesian | XorR=1   | Y=0.4  | Z=-1 | SpecialJt=No | GUID=2b2acf91-0b55-47ec-8442-23a27c53fa13 |
| Joint=1481 CoordSys=GLOBAL | CoordType=Cartesian | XorR=1   | Y=0.5  | Z=-1 | SpecialJt=No | GUID=73808ab4-2a2f-4754-a00c-8f769566bb48 |
| Joint=1482 CoordSys=GLOBAL | CoordType=Cartesian | XorR=1   | Y=0.6  | Z=-1 | SpecialJt=No | GUID=c3410168-d5a7-4435-b4da-41ab36603102 |
| Joint=1483 CoordSys=GLOBAL | CoordType=Cartesian | XorR=1   | Y=0.7  | Z=-1 | SpecialJt=No | GUID=3a82c4f6-6af3-41f9-a08b-809f5f65d92b |
| Joint=1484 CoordSys=GLOBAL | CoordType=Cartesian | XorR=1   | Y=0.8  | Z=-1 | SpecialJt=No | GUID=478a5e54-b851-4573-8955-118ce6693012 |
| Joint=1485 CoordSys=GLOBAL | CoordType=Cartesian | XorR=1   | Y=0.9  | Z=-1 | SpecialJt=No | GUID=4a3b637e-bc34-4ede-bdf1-f850458a57ba |
| Joint=1486 CoordSys=GLOBAL | CoordType=Cartesian | XorR=1   | Y=1    | Z=-1 | SpecialJt=No | GUID=5cc525d8-41a2-43ba-bbcb-d5cc86226ccb |
| Joint=1487 CoordSys=GLOBAL | CoordType=Cartesian | XorR=1   | Y=1.1  | Z=-1 | SpecialJt=No | GUID=4160d887-3489-4627-b48f-eabdad3ca77f |
| Joint=1488 CoordSys=GLOBAL | CoordType=Cartesian | XorR=1   | Y=1.2  | Z=-1 | SpecialJt=No | GUID=88d8a7f6-0397-453d-9394-50e8e3ae696a |
| Joint=1489 CoordSys=GLOBAL | CoordType=Cartesian | XorR=1   | Y=1.3  | Z=-1 | SpecialJt=No | GUID=32888120-79db-4a23-ae19-11bcfd296dcb |
| Joint=1490 CoordSys=GLOBAL | CoordType=Cartesian | XorR=1   | Y=1.4  | Z=-1 | SpecialJt=No | GUID=9fdf918e-807f-43ec-818d-68c16cc8e088 |
| Joint=1491 CoordSys=GLOBAL | CoordType=Cartesian | XorR=1   | Y=1.5  | Z=-1 | SpecialJt=No | GUID=3f30d4a0-1ab0-493b-a6b2-45d6a9528cec |
| Joint=1492 CoordSys=GLOBAL | CoordType=Cartesian | XorR=1   | Y=1.6  | Z=-1 | SpecialJt=No | GUID=b4a18233-eb3a-4d78-83d4-13f8ffe6fda1 |
| Joint=1493 CoordSys=GLOBAL | CoordType=Cartesian | XorR=1   | Y=1.7  | Z=-1 | SpecialJt=No | GUID=38388048-9d51-467d-a856-1c56f80d25b7 |
| Joint=1494 CoordSys=GLOBAL | CoordType=Cartesian | XorR=1   | Y=1.8  | Z=-1 | SpecialJt=No | GUID=5cc3d394-295c-47e9-af12-aca882fc3a59 |
| Joint=1495 CoordSys=GLOBAL | CoordType=Cartesian | XorR=1   | Y=1.9  | Z=-1 | SpecialJt=No | GUID=d02f83f3-bb37-4b10-af62-04bc69fea553 |
| Joint=1496 CoordSys=GLOBAL | CoordType=Cartesian | XorR=1   | Y=2    | Z=-1 | SpecialJt=No | GUID=7749c8e2-09da-4d85-8cc4-9a15dbd193c7 |
| Joint=1497 CoordSys=GLOBAL | CoordType=Cartesian | XorR=1   | Y=2.1  | Z=-1 | SpecialJt=No | GUID=876757a8-890e-44d9-aa3b-9c3d84796340 |
| Joint=1498 CoordSys=GLOBAL | CoordType=Cartesian | XorR=1   | Y=2.2  | Z=-1 | SpecialJt=No | GUID=b5cfcf12-ba0e-4fe0-a22d-cdd1534fd659 |
| Joint=1499 CoordSys=GLOBAL | CoordType=Cartesian | XorR=1.1 | Y=-2.2 | Z=-1 | SpecialJt=No | GUID=5eb20b33-44b6-4298-9462-334ea924d9fc |
| Joint=1500 CoordSys=GLOBAL | CoordType=Cartesian | XorR=1.1 | Y=-2.1 | Z=-1 | SpecialJt=No | GUID=2bcd92af-9f88-45ac-89e5-497fa8774b2c |
| Joint=1501 CoordSys=GLOBAL | CoordType=Cartesian | XorR=1.1 | Y=-2   | Z=-1 | SpecialJt=No | GUID=03bdeeac-afa3-4c42-9bfd-afb30013208a |
| Joint=1502 CoordSys=GLOBAL | CoordType=Cartesian | XorR=1.1 | Y=-1.9 | Z=-1 | SpecialJt=No | GUID=70fff1a0-a7c0-4793-8b0d-3075017482ca |
| Joint=1503 CoordSys=GLOBAL | CoordType=Cartesian | XorR=1.1 | Y=-1.8 | Z=-1 | SpecialJt=No | GUID=b4a026dd-af79-41a5-bf15-89c9f7c18e22 |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1504 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=-1.7 Z=-1 SpecialJt=No GUID=2ff6451e-1aad-4e53-b6e8-62caf35adddc  
 Joint=1505 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=-1.6 Z=-1 SpecialJt=No GUID=e1374849-35ab-42b1-a59b-417cb87fa38f  
 Joint=1506 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=-1.5 Z=-1 SpecialJt=No GUID=3a9b8dad-b05e-4d99-a1b4-f9652589ca98  
 Joint=1507 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=-1.4 Z=-1 SpecialJt=No GUID=b73c3ea1-a323-46fe-927d-e764b1915d96  
 Joint=1508 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=-1.3 Z=-1 SpecialJt=No GUID=1d5c7c6e-7b62-4efc-bc91-1012e4d1bb41  
 Joint=1509 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=-1.2 Z=-1 SpecialJt=No GUID=12fe7fb2-aceb-48c3-a754-167e71d7bbe3  
 Joint=1510 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=-1.1 Z=-1 SpecialJt=No GUID=6e73ec32-acf6-4926-ab2f-db34aef5a2f2  
 Joint=1511 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=-1 Z=-1 SpecialJt=No GUID=3a2059ef-be39-43eb-b14f-0cfa06a6d307  
 Joint=1512 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=-0.9 Z=-1 SpecialJt=No GUID=6b043e30-e703-4228-aef1-76317ad62573  
 Joint=1513 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=-0.8 Z=-1 SpecialJt=No GUID=76e63194-73bb-481f-92b6-a0079848a96c  
 Joint=1514 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=-0.7 Z=-1 SpecialJt=No GUID=d061b3d2-c45d-43f6-a234-8f3117be5ede  
 Joint=1515 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=-0.6 Z=-1 SpecialJt=No GUID=2fdff2a2-a03c-46d5-83ea-9bac4e29d6f4  
 Joint=1516 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=-0.5 Z=-1 SpecialJt=No GUID=07138297-c55c-4f99-b96b-1fa5afc901a9  
 Joint=1517 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=-0.4 Z=-1 SpecialJt=No GUID=e1f94b09-085b-443b-a419-9c52fb71cacb  
 Joint=1518 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=-0.3 Z=-1 SpecialJt=No GUID=2382bbf0-e4af-485f-8677-02bb2533cdd6  
 Joint=1519 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=-0.2 Z=-1 SpecialJt=No GUID=3034a825-6279-4dd1-871a-e90cf0f5bbd9  
 Joint=1520 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=-0.1 Z=-1 SpecialJt=No GUID=5b6976a2-cf90-4082-9a36-64d2376439e3  
 Joint=1521 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=0 Z=-1 SpecialJt=No GUID=33bce1f7-54c6-4c8a-9432-6e935ddd259e  
 Joint=1522 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=0.1 Z=-1 SpecialJt=No GUID=1f2b789c-ecf1-4cea-87c2-3c0edb5f80a7  
 Joint=1523 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=0.2 Z=-1 SpecialJt=No GUID=45058a55-7b84-40cf-ab3b-d586916a4658  
 Joint=1524 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=0.3 Z=-1 SpecialJt=No GUID=68736f6c-70ab-4a18-b25e-afd4d04e14fd  
 Joint=1525 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=0.4 Z=-1 SpecialJt=No GUID=e42c8cce-d2a6-4e79-a386-9419824773fb  
 Joint=1526 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=0.5 Z=-1 SpecialJt=No GUID=ec45353a-570f-40b5-90fa-818ed7524367  
 Joint=1527 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=0.6 Z=-1 SpecialJt=No GUID=176a242d-97b6-47aa-90d3-540575577bb9  
 Joint=1528 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=0.7 Z=-1 SpecialJt=No GUID=249f0f84-8eb6-400e-8a2e-694f79e91939  
 Joint=1529 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=0.8 Z=-1 SpecialJt=No GUID=fa3800f7-f637-4567-9118-1eed729cf995  
 Joint=1530 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=0.9 Z=-1 SpecialJt=No GUID=429a97a8-17dc-489d-b305-3d97b114553b

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1531 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=1 Z=-1 SpecialJt=No GUID=e3ecf9b0-4ee2-45ac-94d7-2119cef18e1e  
 Joint=1532 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=1.1 Z=-1 SpecialJt=No GUID=a0f736cf-4720-43c5-a187-3fe4c6d6f717  
 Joint=1533 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=1.2 Z=-1 SpecialJt=No GUID=530c1194-d17d-4a99-af12-9dfd86a8302b  
 Joint=1534 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=1.3 Z=-1 SpecialJt=No GUID=e99cfad2-041f-4ec5-92fe-450e1bfe636f  
 Joint=1535 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=1.4 Z=-1 SpecialJt=No GUID=c92d5715-a032-4724-821f-4fb826f568f6  
 Joint=1536 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=1.5 Z=-1 SpecialJt=No GUID=39b0394c-0b84-4435-b901-36a58014cce2  
 Joint=1537 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=1.6 Z=-1 SpecialJt=No GUID=235ec0c6-e78a-44ce-9aca-6b148850eaa8  
 Joint=1538 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=1.7 Z=-1 SpecialJt=No GUID=a7cacdd0-3059-416a-b72e-059827df4de9  
 Joint=1539 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=1.8 Z=-1 SpecialJt=No GUID=fc0fd08c-fe6c-41bc-8462-bceca1231b8f  
 Joint=1540 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=1.9 Z=-1 SpecialJt=No GUID=d918f673-0493-4769-b544-d76936f104fe  
 Joint=1541 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=2 Z=-1 SpecialJt=No GUID=ce74dfcd-64e5-43cb-9da0-c0ac5382f1f2  
 Joint=1542 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=2.1 Z=-1 SpecialJt=No GUID=dbabfd2e-d7f9-414b-b0a4-8c21123edcaf  
 Joint=1543 CoordSys=GLOBAL CoordType=Cartesian XorR=1.1 Y=2.2 Z=-1 SpecialJt=No GUID=6eb204a2-2803-4fb9-81d7-64d3354bc830  
 Joint=1544 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=-2.2 Z=-1 SpecialJt=No GUID=a74df4e4-a3ee-4478-bdb8-a23d79fcdabc  
 Joint=1545 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=-2.1 Z=-1 SpecialJt=No GUID=ba484020-ced1-4757-b419-328635f3dffe  
 Joint=1546 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=-2 Z=-1 SpecialJt=No GUID=992c4aee-5f82-4009-891e-9e139f6cc656  
 Joint=1547 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=-1.9 Z=-1 SpecialJt=No GUID=70fcde21-d2a2-4a56-94be-d21e97585f74  
 Joint=1548 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=-1.8 Z=-1 SpecialJt=No GUID=a58315e0-7b42-4458-852f-19a384e91b4e  
 Joint=1549 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=-1.7 Z=-1 SpecialJt=No GUID=bde6c358-def5-43ac-91d9-52b80eb4477c  
 Joint=1550 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=-1.6 Z=-1 SpecialJt=No GUID=52c2a07a-a6ef-43df-8a83-f102ccf3944d  
 Joint=1551 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=-1.5 Z=-1 SpecialJt=No GUID=2db207c2-1759-4f85-8a52-a637f655ae03  
 Joint=1552 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=-1.4 Z=-1 SpecialJt=No GUID=5e07c5bb-a34b-4a4c-bd9a-ce6fc251e72e  
 Joint=1553 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=-1.3 Z=-1 SpecialJt=No GUID=4a959fa8-b76b-4df3-9631-e68e2d2bdfe8  
 Joint=1554 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=-1.2 Z=-1 SpecialJt=No GUID=93c92356-7218-4667-a877-5368877c226c  
 Joint=1555 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=-1.1 Z=-1 SpecialJt=No GUID=d5198497-f60c-468e-8af5-339a26f17d8b  
 Joint=1556 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=-1 Z=-1 SpecialJt=No GUID=76e0bec9-14c6-4b90-8219-0f6a0a49399e  
 Joint=1557 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=-0.9 Z=-1 SpecialJt=No GUID=dfa03af1-d9c0-412b-abd7-26b5f51585df

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1558 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=-0.8 Z=-1 SpecialJt=No GUID=ffc180bf-804d-4336-912f-b968e09ba8f3

Joint=1559 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=-0.7 Z=-1 SpecialJt=No GUID=d789e7f6-b144-4433-a1c1-63b2b54e4962

Joint=1560 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=-0.6 Z=-1 SpecialJt=No GUID=234bea7d-aaec-4589-b6bb-84a131a35a4e

Joint=1561 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=-0.5 Z=-1 SpecialJt=No GUID=47aa7450-87a8-4940-8e8b-d3793e2922b9

Joint=1562 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=-0.4 Z=-1 SpecialJt=No GUID=0f46db20-37cd-44b2-9fcf-13c958682b7d

Joint=1563 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=-0.3 Z=-1 SpecialJt=No GUID=ccd57108-a2eb-4828-ae63-0ffb56c67f5a

Joint=1564 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=-0.2 Z=-1 SpecialJt=No GUID=75c961d9-06df-4ae2-ad58-1529daf793a6

Joint=1565 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=-0.1 Z=-1 SpecialJt=No GUID=365e3a85-24d7-450d-bca2-bb13c0ece4e9

Joint=1566 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=5.55111512312578E-17 Z=-1 SpecialJt=No GUID=4e20b9c0-a6ac-45a7-8331-d8166de0cfd5

Joint=1567 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=0.0999999999999998 Z=-1 SpecialJt=No GUID=553fab0a-8381-46ac-b5c9-188edc803b9b

Joint=1568 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=0.2 Z=-1 SpecialJt=No GUID=754232b1-13bd-4206-b1d0-cb24fafbf853

Joint=1569 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=0.3 Z=-1 SpecialJt=No GUID=48d14d6f-38e1-4279-b234-05d5665fa832

Joint=1570 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=0.4 Z=-1 SpecialJt=No GUID=f776b55b-ccfb-448e-b9ef-5cf3befcb254

Joint=1571 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=0.5 Z=-1 SpecialJt=No GUID=ebe4625d-8831-4721-bd81-b4d3476f54a7

Joint=1572 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=0.6 Z=-1 SpecialJt=No GUID=ef7bb8f8-aff7-48c6-9edd-2fca6cf0c1af

Joint=1573 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=0.7 Z=-1 SpecialJt=No GUID=7c5f639c-c406-45aa-899a-119a8e4df14a

Joint=1574 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=0.8 Z=-1 SpecialJt=No GUID=c000a998-52ba-4470-a400-36d18bfc3b1

Joint=1575 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=0.9 Z=-1 SpecialJt=No GUID=0d04e02f-9bcb-4840-99f7-0865edaecf50

Joint=1576 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=1 Z=-1 SpecialJt=No GUID=9e7e54aa-91fa-43b8-adbb-d508910e2340

Joint=1577 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=1.1 Z=-1 SpecialJt=No GUID=180dd704-0cf8-4eb6-a432-1de165a42d0c

Joint=1578 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=1.2 Z=-1 SpecialJt=No GUID=5e8891fa-a2e3-4ac8-b906-39898984d701

Joint=1579 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=1.3 Z=-1 SpecialJt=No GUID=e0ad1641-5dbc-4ee1-a971-d27970ead57d

Joint=1580 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=1.4 Z=-1 SpecialJt=No GUID=c001aa61-b331-4ffe-afbd-aa05576e93a7

Joint=1581 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=1.5 Z=-1 SpecialJt=No GUID=ed004575-05d8-44b2-a736-8070e3991d21

Joint=1582 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=1.6 Z=-1 SpecialJt=No GUID=7ed77d8f-61bf-44dd-b510-a9f876338b5

Joint=1583 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=1.7 Z=-1 SpecialJt=No GUID=177996c5-359a-42e9-add0-46c7fc279078

Joint=1584 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=1.8 Z=-1 SpecialJt=No GUID=61dbf529-6cda-4760-b411-4323be2a57bd

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1585 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=1.9 Z=-1 SpecialJt=No GUID=a3f7bf90-c8cc-4639-9880-5eeeb0c52896

Joint=1586 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=2 Z=-1 SpecialJt=No GUID=2a9534c2-19a8-4ddf-ac16-2e5aa2a2ce8a

Joint=1587 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=2.1 Z=-1 SpecialJt=No GUID=58b36c02-8476-4e24-a51f-dd6e29fb269e

Joint=1588 CoordSys=GLOBAL CoordType=Cartesian XorR=1.2 Y=2.2 Z=-1 SpecialJt=No GUID=a630f3e5-234b-46ad-b1ba-92d49afdcacd

Joint=1589 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=-2.2 Z=-1 SpecialJt=No GUID=a7e3b237-0842-489c-a21e-054a77b4beed

Joint=1590 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=-2.1 Z=-1 SpecialJt=No GUID=2531416e-2c35-4c3e-bcfa-466d3053b0b5

Joint=1591 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=-2 Z=-1 SpecialJt=No GUID=ec7ac4e5-50ef-46d0-ade4-9521886627f6

Joint=1592 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=-1.9 Z=-1 SpecialJt=No GUID=795eee58-41c1-44e3-b747-addd57acc55b

Joint=1593 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=-1.8 Z=-1 SpecialJt=No GUID=1955eac5-ab66-4e01-96cd-f478307bd113

Joint=1594 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=-1.7 Z=-1 SpecialJt=No GUID=6a516218-c39c-4c17-a51d-7fe6448a7edd

Joint=1595 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=-1.6 Z=-1 SpecialJt=No GUID=df006a96-7b2b-41d7-ba72-3d58ed923349

Joint=1596 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=-1.5 Z=-1 SpecialJt=No GUID=75966dcd-bbbe-4621-b104-ed8c06a8e92f

Joint=1597 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=-1.4 Z=-1 SpecialJt=No GUID=a2cdf576-a188-43e5-bac2-c6e1f49237dc

Joint=1598 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=-1.3 Z=-1 SpecialJt=No GUID=f6a0d0c7-f5d9-4d9a-bfbf-2b78b6bae8ad

Joint=1599 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=-1.2 Z=-1 SpecialJt=No GUID=1cfbfc8e-3035-4093-8c4a-44c43dd99b61

Joint=1600 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=-1.1 Z=-1 SpecialJt=No GUID=83c066e1-0dd0-4650-90f4-46bb1ebdc0e8

Joint=1601 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=-1 Z=-1 SpecialJt=No GUID=e2a9288c-693a-4989-b51a-0468f6f97b96

Joint=1602 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=-0.9 Z=-1 SpecialJt=No GUID=69cca7c6-2d88-45fd-b243-384b5cfc051e

Joint=1603 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=-0.8 Z=-1 SpecialJt=No GUID=a9bf1dca-7cdf-48d9-9018-f5edf2046ce9

Joint=1604 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=-0.7 Z=-1 SpecialJt=No GUID=65ff2998-8460-47ce-807a-f6933e81b9f2

Joint=1605 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=-0.6 Z=-1 SpecialJt=No GUID=bd53a180-56c7-44ad-b7f8-d029941dd052

Joint=1606 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=-0.5 Z=-1 SpecialJt=No GUID=4709a8ca-dcb7-4a05-aa58-a860380631fb

Joint=1607 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=-0.4 Z=-1 SpecialJt=No GUID=9e802839-f4b1-413a-b618-4148277f4352

Joint=1608 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=-0.3 Z=-1 SpecialJt=No GUID=3cf6779d-9662-4f4d-a109-4f6da97146b8

Joint=1609 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=-0.2 Z=-1 SpecialJt=No GUID=19f04aa1-2816-4709-ae30-fad3f2991cdb

Joint=1610 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=-0.1 Z=-1 SpecialJt=No GUID=d4f476c7-6e43-4794-82c6-a9cf0a43a3e3

Joint=1611 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=-2.77555756156289E-17 Z=-1 SpecialJt=No GUID=93d16b11-4406-4a7c-8609-6f8e38cb9949



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1612 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=0.1 Z=-1 SpecialJt=No GUID=8f2345e9-9e02-4818-aaca-364c99fc5814

Joint=1613 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=0.2 Z=-1 SpecialJt=No GUID=4612180f-3139-4541-a4ee-124e52444c00

Joint=1614 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=0.3 Z=-1 SpecialJt=No GUID=b98ce6cc-2d4f-42ee-90a7-59daf22e4e8d

Joint=1615 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=0.4 Z=-1 SpecialJt=No GUID=a32e4d3c-b0e0-4e93-906e-7e10f5822ba9

Joint=1616 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=0.5 Z=-1 SpecialJt=No GUID=a75eea07-04e3-4525-92d2-7af22e31ee0e

Joint=1617 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=0.6 Z=-1 SpecialJt=No GUID=9c2e86c7-567c-4ddd-ac3a-5c3866279bcb

Joint=1618 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=0.7 Z=-1 SpecialJt=No GUID=f5ceab43-ce23-4492-a2db-4a9d39504dad

Joint=1619 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=0.8 Z=-1 SpecialJt=No GUID=e6479f31-4e40-4845-abb8-52be2354b11b

Joint=1620 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=0.9 Z=-1 SpecialJt=No GUID=591dba10-0d09-4dbd-b275-6c97a581dd11

Joint=1621 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=1 Z=-1 SpecialJt=No GUID=9c8fd8c6-8516-456c-8db6-fa12dc1b0d32

Joint=1622 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=1.1 Z=-1 SpecialJt=No GUID=503de185-2e59-413c-b28d-b102c18fbf40

Joint=1623 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=1.2 Z=-1 SpecialJt=No GUID=3a597bcf-2fa8-45e7-91bd-99365ad55588

Joint=1624 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=1.3 Z=-1 SpecialJt=No GUID=b01e9914-99f9-4f33-ac3e-ef2c095412cf

Joint=1625 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=1.4 Z=-1 SpecialJt=No GUID=a8b5de2f-7307-446b-b416-152bf4abd538

Joint=1626 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=1.5 Z=-1 SpecialJt=No GUID=58ca5dc1-bd85-4969-b7b7-14971b752f57

Joint=1627 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=1.6 Z=-1 SpecialJt=No GUID=ccf8ef06-fd8e-44a5-8604-babf56373594

Joint=1628 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=1.7 Z=-1 SpecialJt=No GUID=e3031e31-3484-417a-9fb2-0f2ae7df3a16

Joint=1629 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=1.8 Z=-1 SpecialJt=No GUID=32ee2c3e-e120-46f9-86d1-26582a61e0e9

Joint=1630 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=1.9 Z=-1 SpecialJt=No GUID=4c8ba81e-cf55-455f-a3ee-fe200c40c940

Joint=1631 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=2 Z=-1 SpecialJt=No GUID=8da4ba25-d8ab-407d-9752-261df8b7385f

Joint=1632 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=2.1 Z=-1 SpecialJt=No GUID=a7fd0e2b-5733-45c3-8b65-db802ed76ea1

Joint=1633 CoordSys=GLOBAL CoordType=Cartesian XorR=1.3 Y=2.2 Z=-1 SpecialJt=No GUID=3b7162e6-8732-4ae4-8cb5-7ce18a0a0dc2

Joint=1634 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=-2.2 Z=-1 SpecialJt=No GUID=10a804fd-e0e8-4776-a533-f4365c445502

Joint=1635 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=-2.1 Z=-1 SpecialJt=No GUID=4ac5f797-1b57-4c56-a2d9-ab34548d94aa

Joint=1636 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=-2 Z=-1 SpecialJt=No GUID=dd28a7e5-66c6-4701-8467-e5bb64d5b7ee

Joint=1637 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=-1.9 Z=-1 SpecialJt=No GUID=3a4fed32-c24f-4dbc-beb6-bdc3a86b2d2d

Joint=1638 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=-1.8 Z=-1 SpecialJt=No GUID=3e8ad375-08d8-44c8-817f-92606c179caa

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1639 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=-1.7 Z=-1 SpecialJt=No GUID=dceb977f-ce18-44fa-87b5-074bc17bc7fc

Joint=1640 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=-1.6 Z=-1 SpecialJt=No GUID=63c50561-351f-4758-b3de-719f7ba6426a

Joint=1641 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=-1.5 Z=-1 SpecialJt=No GUID=94302d83-a6aa-469a-8b71-c905e6fa6a93

Joint=1642 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=-1.4 Z=-1 SpecialJt=No GUID=553a16d7-6dcc-45f2-a057-fb285218adbf

Joint=1643 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=-1.3 Z=-1 SpecialJt=No GUID=e01edac0-fb9f-4acc-a4bb-839affe05e62

Joint=1644 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=-1.2 Z=-1 SpecialJt=No GUID=81360e34-6ca8-4da0-ae4f-4d4a074f82d6

Joint=1645 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=-1.1 Z=-1 SpecialJt=No GUID=06e0b7b4-ea1d-46f1-9ac1-26fda74aeb7b

Joint=1646 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=-1 Z=-1 SpecialJt=No GUID=3c0bea70-08f6-4b58-982a-aa6e1881529a

Joint=1647 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=-0.9 Z=-1 SpecialJt=No GUID=41c973ad-55b1-4b25-ab1d-943efac2c80c

Joint=1648 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=-0.8 Z=-1 SpecialJt=No GUID=1c08adad-4f58-48c1-8773-b7480fa8001d

Joint=1649 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=-0.7 Z=-1 SpecialJt=No GUID=d4748514-599f-4884-abf9-1dc9c01c7940

Joint=1650 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=-0.6 Z=-1 SpecialJt=No GUID=05714584-a108-4398-9943-004e83f6bf8f

Joint=1651 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=-0.5 Z=-1 SpecialJt=No GUID=c95829af-c4cc-4644-a6e7-f453df59a3da

Joint=1652 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=-0.4 Z=-1 SpecialJt=No GUID=563e5269-a5e3-4b34-9f0e-4ee778fc840d

Joint=1653 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=-0.3 Z=-1 SpecialJt=No GUID=d5ed8d2f-b532-4314-bd56-c591374b3839

Joint=1654 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=-0.2 Z=-1 SpecialJt=No GUID=8574a06d-2034-4e3b-a893-0baf247e50c8

Joint=1655 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=-0.1 Z=-1 SpecialJt=No GUID=4551d78d-b84d-4c3e-8433-e1dfa068b8ad

Joint=1656 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=0 Z=-1 SpecialJt=No GUID=ecd50e4f-162c-493a-957a-bba54aa5a2a8

Joint=1657 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=0.1 Z=-1 SpecialJt=No GUID=a77e3474-b504-4a45-acab-403acc04bb7c

Joint=1658 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=0.2 Z=-1 SpecialJt=No GUID=ab36a52d-2982-44ab-afdd-826f50317d2c

Joint=1659 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=0.3 Z=-1 SpecialJt=No GUID=5e4a4c6e-56c3-4b6d-9376-f67afe2c6060

Joint=1660 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=0.4 Z=-1 SpecialJt=No GUID=3712fdad-c657-4344-ad7e-22f160e68e91

Joint=1661 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=0.5 Z=-1 SpecialJt=No GUID=18ab1732-a2e2-4adb-9fc2-533a8fd0d489

Joint=1662 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=0.6 Z=-1 SpecialJt=No GUID=1639220e-62a3-4215-b757-e39b5eeacdc8

Joint=1663 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=0.7 Z=-1 SpecialJt=No GUID=e8917093-cadb-4556-86a1-9994f71b1695

Joint=1664 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=0.8 Z=-1 SpecialJt=No GUID=e56e24f2-9c32-4d28-848f-c509de40ee05

Joint=1665 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=0.9 Z=-1 SpecialJt=No GUID=6eed6408-63c1-42bb-a75a-425cac88f612

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1666 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=1 Z=-1 SpecialJt=No GUID=87c9712c-e8ba-4b9f-a7f3-fa9236e2d6b6

Joint=1667 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=1.1 Z=-1 SpecialJt=No GUID=370bc54f-6d80-4efc-b9e9-2739dc339810

Joint=1668 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=1.2 Z=-1 SpecialJt=No GUID=0acb1afd-acbb-41b7-a282-29397aa3941a

Joint=1669 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=1.3 Z=-1 SpecialJt=No GUID=392423f5-99f3-459f-9b7f-12dbb6f9dbcf

Joint=1670 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=1.4 Z=-1 SpecialJt=No GUID=68627267-0889-44e5-891c-234e866abc15

Joint=1671 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=1.5 Z=-1 SpecialJt=No GUID=0a5c253c-f8cb-4b38-92d3-6714a39ded8f

Joint=1672 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=1.6 Z=-1 SpecialJt=No GUID=7a0a8ec0-359e-4ab7-83f8-ce6aa5b3686e

Joint=1673 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=1.7 Z=-1 SpecialJt=No GUID=f480e8ca-d405-4de3-96ad-5f76d31c4898

Joint=1674 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=1.8 Z=-1 SpecialJt=No GUID=c16b2c1a-9967-49c8-96a9-90bf01e44c95

Joint=1675 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=1.9 Z=-1 SpecialJt=No GUID=8c4fd0cb-00b0-4d72-89e3-6bc318851467

Joint=1676 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=2 Z=-1 SpecialJt=No GUID=5e056b7c-7bad-41f5-8705-bca360f47db9

Joint=1677 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=2.1 Z=-1 SpecialJt=No GUID=98549aee-0b32-4583-bd81-329abec8129c

Joint=1678 CoordSys=GLOBAL CoordType=Cartesian XorR=1.4 Y=2.2 Z=-1 SpecialJt=No GUID=b84af4e2-a73e-49ce-8dad-4b9aa0c8d6ce

Joint=1679 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-2.2 Z=-1 SpecialJt=No GUID=6845bdbc-aea9-4d6e-9018-0c64a5d4e384

Joint=1680 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-2.1 Z=-1 SpecialJt=No GUID=8424a4b5-7e79-4b95-9941-209021fc9469

Joint=1681 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-2 Z=-1 SpecialJt=No GUID=a349e6ed-d25e-4f1c-be96-b2c67578e62f

Joint=1682 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-1.9 Z=-1 SpecialJt=No GUID=0ef13edd-7987-4147-b4ef-7aa39eebeae7

Joint=1683 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-1.8 Z=-1 SpecialJt=No GUID=97b300dc-8911-4628-9165-303de3c52c28

Joint=1684 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-1.7 Z=-1 SpecialJt=No GUID=48e65c3b-68eb-42c1-bdc9-cee3b38c31a9

Joint=1685 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-1.6 Z=-1 SpecialJt=No GUID=8d37a809-3b6c-4f90-9081-e3284460278f

Joint=1686 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-1.5 Z=-1 SpecialJt=No GUID=4fd64c63-e7ed-4003-a6c9-445488081478

Joint=1687 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-1.4 Z=-1 SpecialJt=No GUID=baaf995b-20e2-4e0f-909c-f15f26423ac7

Joint=1688 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-1.3 Z=-1 SpecialJt=No GUID=0ba2ad76-0550-45a6-9bd2-0c9dbcaab58f

Joint=1689 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-1.2 Z=-1 SpecialJt=No GUID=1845ffbe-d6d4-426d-8e22-eb61a67d7cee

Joint=1690 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-1.1 Z=-1 SpecialJt=No GUID=db8fdd0c-bbf9-4849-a945-04c6f412465a

Joint=1691 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-1 Z=-1 SpecialJt=No GUID=72715c8d-dc14-4202-bfe1-037f83a890ba

Joint=1692 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-0.9 Z=-1 SpecialJt=No GUID=8900cecd-bfda-4ac2-82f8-b75bdd9aa99d

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1693 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-0.8 Z=-1 SpecialJt=No GUID=01f4d4a8-63b1-4c2e-af0b-1393054c61de

Joint=1694 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-0.7 Z=-1 SpecialJt=No GUID=0167651f-5e6d-4b64-b3a0-944e9bdc081

Joint=1695 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-0.6 Z=-1 SpecialJt=No GUID=a2e3e0b4-6623-45d8-839f-fc37206f3b16

Joint=1696 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-0.5 Z=-1 SpecialJt=No GUID=ecd85d0f-12e7-48f0-806b-1c82a7e87673

Joint=1697 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-0.4 Z=-1 SpecialJt=No GUID=e93ee6fe-88f9-4ad2-8cbd-3e376099aed1

Joint=1698 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-0.3 Z=-1 SpecialJt=No GUID=9b1f9f8e-6f1b-4829-b4cd-0ed8d387f43d

Joint=1699 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-0.2 Z=-1 SpecialJt=No GUID=1c5e910d-fdf6-4119-8396-7b63eb13d8f9

Joint=1700 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-0.1 Z=-1 SpecialJt=No GUID=25cb278b-9ec3-42fd-a2b1-cf9734bdc5ec

Joint=1701 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=5.55111512312578E-17 Z=-1 SpecialJt=No GUID=6478bd5b-dea9-4c6f-aac1-b4b1643be145

Joint=1702 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=0.0999999999999998 Z=-1 SpecialJt=No GUID=70dc1ee1-e52a-4b53-a540-abf1e7a40545

Joint=1703 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=0.2 Z=-1 SpecialJt=No GUID=2ba597bf-f434-45d0-98ae-fc4374a52a30

Joint=1704 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=0.3 Z=-1 SpecialJt=No GUID=b498090e-503a-4c28-9b22-3d36ddaaf041

Joint=1705 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=0.4 Z=-1 SpecialJt=No GUID=1cdb8109-7d36-44a9-81c8-08abf1939f8d

Joint=1706 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=0.5 Z=-1 SpecialJt=No GUID=c66a45a0-2dd7-4d56-9d54-e5f7e14dc0d5

Joint=1707 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=0.6 Z=-1 SpecialJt=No GUID=fdbed53c-cbd3-4230-ae5e-2226a7ca7a2c

Joint=1708 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=0.7 Z=-1 SpecialJt=No GUID=e6b1234b-d4e2-4712-96b9-aa60f8a83c47

Joint=1709 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=0.8 Z=-1 SpecialJt=No GUID=16544a9e-9f95-439a-a61b-a930a6ab9aba

Joint=1710 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=0.9 Z=-1 SpecialJt=No GUID=1545f619-a4c1-44e8-8cf3-e59b5f8e63ba

Joint=1711 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=1 Z=-1 SpecialJt=No GUID=a158a32c-3d15-4b3d-94e7-9142f1cc8664

Joint=1712 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=1.1 Z=-1 SpecialJt=No GUID=1ff4a9fc-0574-4b48-9b82-6870a3826aea

Joint=1713 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=1.2 Z=-1 SpecialJt=No GUID=014e05d8-4136-4119-95ef-9ecd423e61a0

Joint=1714 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=1.3 Z=-1 SpecialJt=No GUID=37b9a746-150e-48ae-839a-4fc2542d26d4

Joint=1715 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=1.4 Z=-1 SpecialJt=No GUID=b67ce5ee-8d0e-495d-9432-56b993c61ec3

Joint=1716 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=1.5 Z=-1 SpecialJt=No GUID=94f486fe-ae20-401a-ae12-d7555b2f960e

Joint=1717 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=1.6 Z=-1 SpecialJt=No GUID=96d89f70-d9d1-4cb7-8484-5564976cc773

Joint=1718 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=1.7 Z=-1 SpecialJt=No GUID=8568bff7-804b-4afb-84e8-dcf2ef10bdbd

Joint=1719 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=1.8 Z=-1 SpecialJt=No GUID=d17e20b7-c265-494a-a941-8b823af8f5da



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1720 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=1.9 Z=-1 SpecialJt=No GUID=d41113b0-a78e-4afe-8c50-c67ab5fb11f3

Joint=1721 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=2 Z=-1 SpecialJt=No GUID=336f31da-07b3-4b92-926e-69810f8ca10d

Joint=1722 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=2.1 Z=-1 SpecialJt=No GUID=d5fff732-7edb-4f84-8d36-4a5c43a556d0

Joint=1723 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=2.2 Z=-1 SpecialJt=No GUID=a6c82d74-d008-4556-9ee4-a94c4a86e5ea

Joint=1724 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=-2.2 Z=-1 SpecialJt=No GUID=3d7a8907-8c6d-4400-8957-ce372e6167a3

Joint=1725 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=-2.1 Z=-1 SpecialJt=No GUID=0c8c2513-8526-4659-b491-73d3997e6207

Joint=1726 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=-2 Z=-1 SpecialJt=No GUID=cf36be34-97ac-4f94-a60b-90124d518d2f

Joint=1727 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=-1.9 Z=-1 SpecialJt=No GUID=d70fddde-b09f-4017-b3bc-d2572b8360e9

Joint=1728 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=-1.8 Z=-1 SpecialJt=No GUID=a96e5917-b0dc-4120-934a-b483c9f9ac5d

Joint=1729 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=-1.7 Z=-1 SpecialJt=No GUID=7cd51bbf-8e37-498a-8d33-fac9f1f7f374

Joint=1730 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=-1.6 Z=-1 SpecialJt=No GUID=0d2776ad-ab39-4aae-a257-b62e0954864b

Joint=1731 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=-1.5 Z=-1 SpecialJt=No GUID=d9e80382-5710-481b-a856-308accfeb0d2

Joint=1732 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=-1.4 Z=-1 SpecialJt=No GUID=4408ba1a-c2ca-40eb-826d-54ed3fec1f9c

Joint=1733 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=-1.3 Z=-1 SpecialJt=No GUID=801e008e-f6b2-49c1-865e-fd2c2fa8b5d7

Joint=1734 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=-1.2 Z=-1 SpecialJt=No GUID=40f1f5f9-6ac1-43db-8ea0-88e28e2bb02f

Joint=1735 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=-1.1 Z=-1 SpecialJt=No GUID=38d83db7-e714-464c-a756-5d678cbdc2a8

Joint=1736 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=-1 Z=-1 SpecialJt=No GUID=aed40ba8-fd2e-42b3-bb2f-9fe91933fd4

Joint=1737 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=-0.9 Z=-1 SpecialJt=No GUID=104e0df2-7528-43c9-8280-ee2118c97015

Joint=1738 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=-0.8 Z=-1 SpecialJt=No GUID=f4ab28f2-a790-4b90-a7cd-6552eb36b331

Joint=1739 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=-0.7 Z=-1 SpecialJt=No GUID=18b2e428-1047-4933-a07b-e047f4e92000

Joint=1740 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=-0.6 Z=-1 SpecialJt=No GUID=d9dd074a-e7e6-4a63-863c-e8c46b52d77f

Joint=1741 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=-0.5 Z=-1 SpecialJt=No GUID=b7c163c5-f13f-4479-b0a3-e407bffa0902

Joint=1742 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=-0.4 Z=-1 SpecialJt=No GUID=85a7c713-4f09-4048-aa29-b9d4e80892ed

Joint=1743 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=-0.3 Z=-1 SpecialJt=No GUID=70ba54cd-ddba-4719-8d07-b0b241dbac7c

Joint=1744 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=-0.2 Z=-1 SpecialJt=No GUID=3b4c0c42-bd26-4aec-b99f-cc52011cb3a4

Joint=1745 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=-0.09999999999999999 Z=-1 SpecialJt=No GUID=bfa118fc-4c33-4828-8601-94d539062c7d

Joint=1746 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=-2.77555756156289E-17 Z=-1 SpecialJt=No GUID=3f8998f8-5eaa-4e8d-b36b-e73e49834714

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1747 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=0.0999999999999997 Z=-1 SpecialJt=No  
GUID=387b4624-b795-493a-a935-89d1290fb3a1

Joint=1748 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=0.2 Z=-1 SpecialJt=No GUID=2ac78ff6-  
26c0-47c8-b749-6bbcfce58fb

Joint=1749 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=0.3 Z=-1 SpecialJt=No GUID=1b3c74b3-  
6244-49ad-859c-c335dd5c8d0b

Joint=1750 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=0.4 Z=-1 SpecialJt=No GUID=e48d4038-  
3a1b-4d5c-a473-fd13fab639b1

Joint=1751 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=0.5 Z=-1 SpecialJt=No GUID=f531009f-  
4d49-480a-985c-7fcd0338c0aa

Joint=1752 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=0.6 Z=-1 SpecialJt=No GUID=066a6bd9-  
1964-4620-9542-863beaeab13a

Joint=1753 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=0.7 Z=-1 SpecialJt=No GUID=ccbe9f64-  
38fc-4b4a-bf67-d465a5f45538

Joint=1754 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=0.8 Z=-1 SpecialJt=No GUID=8c1818ff-  
e8ed-4257-86c7-785c38becf49

Joint=1755 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=0.9 Z=-1 SpecialJt=No GUID=041b20fa-  
5214-4fba-8079-5b5bbe1862c7

Joint=1756 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=1 Z=-1 SpecialJt=No GUID=05ebd965-  
35cc-41c7-ba70-96d749ad447d

Joint=1757 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=1.1 Z=-1 SpecialJt=No GUID=5fac389d-  
ad13-40a2-8414-954dc9f66137

Joint=1758 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=1.2 Z=-1 SpecialJt=No GUID=0244c08a-  
6f86-41a4-accf-399bdfbce2cd

Joint=1759 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=1.3 Z=-1 SpecialJt=No GUID=30f89212-  
aa0f-4dab-b24d-4acd1a15a549

Joint=1760 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=1.4 Z=-1 SpecialJt=No GUID=ff334e99-  
d717-4683-8be4-5ded305a899f

Joint=1761 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=1.5 Z=-1 SpecialJt=No GUID=8340d64d-  
ab50-429e-b627-78d7e2a6fdd7

Joint=1762 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=1.6 Z=-1 SpecialJt=No GUID=1519fa62-  
7646-4d4c-a7ef-c9548e14c2ce

Joint=1763 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=1.7 Z=-1 SpecialJt=No GUID=914836ee-  
4769-433f-a4dc-29d5dbe9033b

Joint=1764 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=1.8 Z=-1 SpecialJt=No GUID=2f774c64-  
a679-4f49-8c86-33972696521a

Joint=1765 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=1.9 Z=-1 SpecialJt=No GUID=8a87e51a-  
354a-4419-aaf6-553f34d0b62e

Joint=1766 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=2 Z=-1 SpecialJt=No GUID=1dc6f16b-  
3c9a-428f-bf5b-69f127e29800

Joint=1767 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=2.1 Z=-1 SpecialJt=No GUID=d0f0af82-  
f9a4-4b72-893e-bcfd8f2175c

Joint=1768 CoordSys=GLOBAL CoordType=Cartesian XorR=1.6 Y=2.2 Z=-1 SpecialJt=No GUID=7920b062-  
b252-4837-a27b-777f438aec9a

Joint=1769 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=-2.2 Z=-1 SpecialJt=No GUID=4a3b71bb-  
ce58-4e93-aca8-9bd1c9d9cb3a

Joint=1770 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=-2.1 Z=-1 SpecialJt=No GUID=e9a24ff8-  
7fc9-4fb2-b37e-855e9c2cf8ca

Joint=1771 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=-2 Z=-1 SpecialJt=No GUID=ae3c429f-  
d73e-4fc8-8dec-165f27512142

Joint=1772 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=-1.9 Z=-1 SpecialJt=No GUID=c7555c0f-  
7dce-4b5c-807a-0838197e217f

Joint=1773 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=-1.8 Z=-1 SpecialJt=No GUID=c5993d76-  
c76d-49be-b655-49c91595cfb3

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1774 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=-1.7 Z=-1 SpecialJt=No GUID=6cb8703d-05f8-4412-9b5c-7c12bf82549c

Joint=1775 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=-1.6 Z=-1 SpecialJt=No GUID=e2ce359d-59b3-4b5d-b793-df4ef739a5f4

Joint=1776 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=-1.5 Z=-1 SpecialJt=No GUID=54503c6a-55d1-451f-89c9-1790d0d5f89a

Joint=1777 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=-1.4 Z=-1 SpecialJt=No GUID=8583c5aa-c700-405a-b279-65c619d66fa4

Joint=1778 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=-1.3 Z=-1 SpecialJt=No GUID=bf795c15-da41-4fef-a175-4dae0c084cd3

Joint=1779 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=-1.2 Z=-1 SpecialJt=No GUID=1c0695a1-69f5-4513-9850-ac4cb8c60212

Joint=1780 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=-1.1 Z=-1 SpecialJt=No GUID=b7dd85f7-cf8a-4690-a78d-5dc2e7147779

Joint=1781 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=-1 Z=-1 SpecialJt=No GUID=272b1627-e36f-407a-b714-d69753287585

Joint=1782 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=-0.9 Z=-1 SpecialJt=No GUID=08546818-da58-45c8-8e0d-4b4fb798b667

Joint=1783 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=-0.8 Z=-1 SpecialJt=No GUID=1c1924d2-78b1-44a8-a34f-28ff46259d96

Joint=1784 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=-0.7 Z=-1 SpecialJt=No GUID=5b02c952-d36f-4c5a-8013-5fddb8d6b608

Joint=1785 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=-0.6 Z=-1 SpecialJt=No GUID=46b870d6-0c5e-4092-9c8f-5088fe78570f

Joint=1786 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=-0.5 Z=-1 SpecialJt=No GUID=08552ea6-73ec-4c29-8204-51cbcedccd43

Joint=1787 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=-0.4 Z=-1 SpecialJt=No GUID=85727034-77a2-4241-a8f3-db669e123792

Joint=1788 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=-0.3 Z=-1 SpecialJt=No GUID=bdbb9e31-f31b-4038-833e-293889a612a3

Joint=1789 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=-0.2 Z=-1 SpecialJt=No GUID=35a0c827-f31f-4896-b626-f9052927a70d

Joint=1790 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=-0.09999999999999998 Z=-1 SpecialJt=No GUID=23bcae15-5bed-44a7-a6a1-e566c0012b80

Joint=1791 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=2.77555756156289E-17 Z=-1 SpecialJt=No GUID=95caa09e-ff89-4f70-8a88-d9436632ce94

Joint=1792 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=0.1 Z=-1 SpecialJt=No GUID=e330a2cf-2877-41c9-8512-6691e2ca757c

Joint=1793 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=0.2 Z=-1 SpecialJt=No GUID=8231b5bb-d213-4117-a6ae-02c190b3184a

Joint=1794 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=0.3 Z=-1 SpecialJt=No GUID=7f70213b-b83a-4c02-9af1-58f7e600460b

Joint=1795 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=0.4 Z=-1 SpecialJt=No GUID=190ffa75-9fa3-46cc-b512-e7b7b3a3653e

Joint=1796 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=0.5 Z=-1 SpecialJt=No GUID=333ab716-01f2-4f55-b9bf-00895820bfd6

Joint=1797 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=0.6 Z=-1 SpecialJt=No GUID=dc039fe7-ac3d-48fc-8b52-9b62ea66babd

Joint=1798 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=0.7 Z=-1 SpecialJt=No GUID=5f2ae40a-7853-4230-909e-679e9102e6aa

Joint=1799 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=0.8 Z=-1 SpecialJt=No GUID=76866c20-6bdf-4c27-b2b5-6e0fd24b6640

Joint=1800 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=0.9 Z=-1 SpecialJt=No GUID=8ee92585-97a3-41fc-bed3-08d72eb0fefe

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1801 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=1 Z=-1 SpecialJt=No GUID=eaf714fa-336f-48b9-a258-b450dd747781  
 Joint=1802 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=1.1 Z=-1 SpecialJt=No GUID=4f29e43f-407c-4e96-a723-e27a0ed288c5  
 Joint=1803 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=1.2 Z=-1 SpecialJt=No GUID=381aecc8-2c94-4ae1-b3ca-d2093d059383  
 Joint=1804 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=1.3 Z=-1 SpecialJt=No GUID=4254e289-3862-4882-9461-c4805ab2e3e2  
 Joint=1805 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=1.4 Z=-1 SpecialJt=No GUID=6ef35380-a569-4159-4add-fd4192bd4504  
 Joint=1806 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=1.5 Z=-1 SpecialJt=No GUID=c8a0a3b6-5100-47e4-ba22-cedf1dc83de4  
 Joint=1807 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=1.6 Z=-1 SpecialJt=No GUID=0799d2be-3a5f-45ae-b3ff-18b018236393  
 Joint=1808 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=1.7 Z=-1 SpecialJt=No GUID=c7ec1bd9-226e-4cdf-976d-e63148e5e25d  
 Joint=1809 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=1.8 Z=-1 SpecialJt=No GUID=8401023b-ce9e-4593-83c0-4a523abbc3c3  
 Joint=1810 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=1.9 Z=-1 SpecialJt=No GUID=9fc457f0-aa32-4e6b-9d01-3d832962308d  
 Joint=1811 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=2 Z=-1 SpecialJt=No GUID=0c50c564-a62c-4835-a02b-9f9e926c427e  
 Joint=1812 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=2.1 Z=-1 SpecialJt=No GUID=cce44e6d-f152-46d3-a414-262f4f596ea3  
 Joint=1813 CoordSys=GLOBAL CoordType=Cartesian XorR=1.7 Y=2.2 Z=-1 SpecialJt=No GUID=35030832-084a-4858-91a5-8639f3d43293  
 Joint=1814 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=-2.2 Z=-1 SpecialJt=No GUID=8052d813-75fe-467b-bb77-d7f5c8f3589b  
 Joint=1815 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=-2.1 Z=-1 SpecialJt=No GUID=031fddc3-f74e-48b9-8b54-281dc99b0490  
 Joint=1816 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=-2 Z=-1 SpecialJt=No GUID=667103b2-7048-4ed9-bfb2-ce1129f9225d  
 Joint=1817 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=-1.9 Z=-1 SpecialJt=No GUID=fa0de19e-188d-4cd8-a7c0-2f25a79f128f  
 Joint=1818 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=-1.8 Z=-1 SpecialJt=No GUID=bd192aee-cb1f-47dc-94d1-b9763b6c8449  
 Joint=1819 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=-1.7 Z=-1 SpecialJt=No GUID=3137d7fb-30c2-4b57-aa88-935935346b9d  
 Joint=1820 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=-1.6 Z=-1 SpecialJt=No GUID=5fb1c790-3736-4f68-bedc-9e437529ebf5  
 Joint=1821 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=-1.5 Z=-1 SpecialJt=No GUID=72faba71-8bcc-44ef-8912-926325a5a83a  
 Joint=1822 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=-1.4 Z=-1 SpecialJt=No GUID=36063cb7-3cae-47fa-a544-dc37a0325d54  
 Joint=1823 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=-1.3 Z=-1 SpecialJt=No GUID=4baad6fb-2606-47e7-8949-8fc1c4abb98a  
 Joint=1824 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=-1.2 Z=-1 SpecialJt=No GUID=b697ef08-e590-40a8-82e9-bdc7852f266  
 Joint=1825 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=-1.1 Z=-1 SpecialJt=No GUID=e035e454-68e0-4958-9bd3-711e44b6fa13  
 Joint=1826 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=-1 Z=-1 SpecialJt=No GUID=91d9ce92-718d-423e-a65a-5139abb1c3d4  
 Joint=1827 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=-0.9 Z=-1 SpecialJt=No GUID=7a0e3e78-fbb3-44de-850f-ad300d511d1e



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1828 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=-0.8 Z=-1 SpecialJt=No GUID=0de0e605-a27a-49b9-9f24-7eb817daad8f

Joint=1829 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=-0.7 Z=-1 SpecialJt=No GUID=99af67b6-fbc3-4999-afc0-3ca468006559

Joint=1830 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=-0.6 Z=-1 SpecialJt=No GUID=adb2e01d-3b30-4709-a542-a852077b0f9c

Joint=1831 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=-0.5 Z=-1 SpecialJt=No GUID=379a1e7c-1a20-4e7f-91db-4cf83adcf3da

Joint=1832 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=-0.4 Z=-1 SpecialJt=No GUID=14084f25-5213-4183-b090-c525751d67ba

Joint=1833 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=-0.3 Z=-1 SpecialJt=No GUID=cc4cf976-6e44-4ddc-af57-1f400dae5748

Joint=1834 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=-0.2 Z=-1 SpecialJt=No GUID=0901d58b-6e2e-4cd7-a5ba-e92d112375a3

Joint=1835 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=-0.09999999999999998 Z=-1 SpecialJt=No GUID=b9db4390-ebab-4044-8530-d57f6cd89118

Joint=1836 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=-4.16333634234434E-17 Z=-1 SpecialJt=No GUID=19eb513d-15f8-49a5-84f2-dc336b2f22e5

Joint=1837 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=0.1 Z=-1 SpecialJt=No GUID=cedb5d58-0273-43f3-baa9-34e99324660d

Joint=1838 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=0.2 Z=-1 SpecialJt=No GUID=25bc4468-f38e-4bb5-8e0a-f8732582435e

Joint=1839 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=0.3 Z=-1 SpecialJt=No GUID=83a7bef2-2180-464e-97c9-a779a1b7b24b

Joint=1840 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=0.4 Z=-1 SpecialJt=No GUID=c7706fa6-2e15-4606-a343-7117c8711660

Joint=1841 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=0.5 Z=-1 SpecialJt=No GUID=8aead022-0913-436d-942c-4d1483746e6d

Joint=1842 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=0.6 Z=-1 SpecialJt=No GUID=a4d49cd0-4208-4795-ba5b-6fec2684cbd6

Joint=1843 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=0.7 Z=-1 SpecialJt=No GUID=9cee0c18-209a-4657-9ead-06f77e080eb3

Joint=1844 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=0.8 Z=-1 SpecialJt=No GUID=0911aaa6-d45c-42c5-8fdf-1b0be9a37d29

Joint=1845 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=0.9 Z=-1 SpecialJt=No GUID=e392a020-e6ba-4c5e-89d4-154620e262da

Joint=1846 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=1 Z=-1 SpecialJt=No GUID=b4e58221-a229-406d-86ce-36616f428599

Joint=1847 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=1.1 Z=-1 SpecialJt=No GUID=50aa0038-57b7-43a2-9225-00a2d567581b

Joint=1848 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=1.2 Z=-1 SpecialJt=No GUID=eb498d09-8ac9-4065-9b31-e6534f0a54e0

Joint=1849 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=1.3 Z=-1 SpecialJt=No GUID=8ba3f226-c11d-4219-8e39-65e9fb76e0bf

Joint=1850 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=1.4 Z=-1 SpecialJt=No GUID=94ffd4bf-9443-47a0-9d63-ff81977aee2e

Joint=1851 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=1.5 Z=-1 SpecialJt=No GUID=017cf37d-a3c7-4145-b94e-ae0051907f69

Joint=1852 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=1.6 Z=-1 SpecialJt=No GUID=4220d935-317e-4878-991f-95c3ed3cd6f9

Joint=1853 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=1.7 Z=-1 SpecialJt=No GUID=9c3ca53d-c639-49e3-b1de-57fbf2b3701e

Joint=1854 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=1.8 Z=-1 SpecialJt=No GUID=fc235944-2955-47f4-a769-33924cdb49c4

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1855 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=1.9 Z=-1 SpecialJt=No GUID=87113f62-f6c0-462d-8a51-1bd87624f818

Joint=1856 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=2 Z=-1 SpecialJt=No GUID=7f2c78eb-ca9e-4e62-8329-66a3c73d6a74

Joint=1857 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=2.1 Z=-1 SpecialJt=No GUID=eb2d4452-755f-4832-a69f-eda028354be0

Joint=1858 CoordSys=GLOBAL CoordType=Cartesian XorR=1.8 Y=2.2 Z=-1 SpecialJt=No GUID=14d79ca5-bae4-4f45-8121-2000ccc645e5

Joint=1859 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=-2.2 Z=-1 SpecialJt=No GUID=fc29b107-d314-49b9-8b6e-80fefeadd1beb

Joint=1860 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=-2.1 Z=-1 SpecialJt=No GUID=7bfe5656-871f-4a33-aa5f-9760a400547c

Joint=1861 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=-2 Z=-1 SpecialJt=No GUID=ccc53842-6717-44c1-82a0-265c06be86ed

Joint=1862 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=-1.9 Z=-1 SpecialJt=No GUID=a6a3a9a7-0e26-48d0-a6c0-4abc43655608

Joint=1863 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=-1.8 Z=-1 SpecialJt=No GUID=6ceba155-5568-46d9-ae35-f1f9c5f4bda

Joint=1864 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=-1.7 Z=-1 SpecialJt=No GUID=a768b05f-9216-469f-b220-d6f33a580901

Joint=1865 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=-1.6 Z=-1 SpecialJt=No GUID=4317c675-2dbe-4a13-91f8-1c2befa11fed

Joint=1866 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=-1.5 Z=-1 SpecialJt=No GUID=730c1495-d73d-4eef-a924-9447968eb984

Joint=1867 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=-1.4 Z=-1 SpecialJt=No GUID=c35426b3-362a-49d7-aab9-573c9f1fec9d

Joint=1868 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=-1.3 Z=-1 SpecialJt=No GUID=285231be-90a7-4fb7-8429-599fb9127cdc

Joint=1869 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=-1.2 Z=-1 SpecialJt=No GUID=a67b1439-cf5f-4a50-a3cd-7a5c9af155c2

Joint=1870 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=-1.1 Z=-1 SpecialJt=No GUID=333a036a-c1e9-4786-bc1d-e3c97acd8aaa

Joint=1871 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=-1 Z=-1 SpecialJt=No GUID=d0faa3f3-09af-46aa-ab02-f02b5b43e504

Joint=1872 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=-0.9 Z=-1 SpecialJt=No GUID=bc45c31-4c6c-464d-add6-a370cfa0d724

Joint=1873 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=-0.8 Z=-1 SpecialJt=No GUID=bfb3235-73a7-4610-a45b-2dbe530ed75b

Joint=1874 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=-0.7 Z=-1 SpecialJt=No GUID=fd71c191-d197-4677-8f20-13b0ee700666

Joint=1875 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=-0.6 Z=-1 SpecialJt=No GUID=0dd246e8-5609-41e5-80df-6f8838082b90

Joint=1876 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=-0.5 Z=-1 SpecialJt=No GUID=d6afee86-e1fd-4c95-b879-6ac5963ca9a2

Joint=1877 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=-0.4 Z=-1 SpecialJt=No GUID=6bdea740-bbc1-4a29-8ff6-79357ac6af1f

Joint=1878 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=-0.3 Z=-1 SpecialJt=No GUID=7d8643c6-3006-47cf-83f8-f49a55614db0

Joint=1879 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=-0.2 Z=-1 SpecialJt=No GUID=6a28d408-aed0-4d35-b6df-5149bc19e5f0

Joint=1880 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=-0.09999999999999999 Z=-1 SpecialJt=No GUID=c1164f03-2c6a-4728-8fcc-2b04b16d676b

Joint=1881 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=1.11022302462516E-16 Z=-1 SpecialJt=No GUID=67db0d2f-e8de-499a-b7a3-d43137c280aa

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1882 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=0.0999999999999997 Z=-1 SpecialJt=No  
GUID=30fff1bc-a8a6-42e0-82b3-2639f6ea990a

Joint=1883 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=0.2 Z=-1 SpecialJt=No GUID=b468d6b8-  
1312-4820-bf2c-af46ab6c72f5

Joint=1884 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=0.3 Z=-1 SpecialJt=No GUID=c644e2e7-  
db3d-4bd9-b370-027e923b72fb

Joint=1885 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=0.4 Z=-1 SpecialJt=No GUID=a45f62e4-  
42e2-408b-b3e4-fa869c3f8d26

Joint=1886 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=0.5 Z=-1 SpecialJt=No GUID=e49043fe-  
89f1-4f98-8277-2b290a9b2398

Joint=1887 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=0.6 Z=-1 SpecialJt=No GUID=4c59440e-  
171b-4a34-bbbe-859f23fa00f6

Joint=1888 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=0.7 Z=-1 SpecialJt=No GUID=5dde40f6-  
3ccb-4e54-81c6-ff7e48606851

Joint=1889 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=0.8 Z=-1 SpecialJt=No GUID=e057528a-  
e539-4c04-9d78-67b93151a770

Joint=1890 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=0.9 Z=-1 SpecialJt=No GUID=a20598d9-  
eb42-41ed-bf6b-b1c48425fda5

Joint=1891 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=1 Z=-1 SpecialJt=No GUID=e2fc2301-  
77f1-441d-ab5d-6336c61d6da3

Joint=1892 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=1.1 Z=-1 SpecialJt=No GUID=c4397d8f-  
a521-459c-88a9-85e4fc35cddb

Joint=1893 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=1.2 Z=-1 SpecialJt=No GUID=6af2fb6d-  
8e44-48df-a51a-b96727133478

Joint=1894 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=1.3 Z=-1 SpecialJt=No GUID=7663a5d7-  
99b9-4e11-9332-59d23dc2836b

Joint=1895 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=1.4 Z=-1 SpecialJt=No GUID=9a8a6932-  
8e3a-4d1b-8f48-4ec85ba1671d

Joint=1896 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=1.5 Z=-1 SpecialJt=No GUID=c0a62982-  
6ad0-474f-9831-342c9d2a9f4b

Joint=1897 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=1.6 Z=-1 SpecialJt=No GUID=72494f85-  
789c-4d3b-b2d6-5611077b3ef9

Joint=1898 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=1.7 Z=-1 SpecialJt=No GUID=556e7ca9-  
3fc7-4d7f-b52d-5133d1eb5b71

Joint=1899 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=1.8 Z=-1 SpecialJt=No GUID=61ab1190-  
fac8-48b9-ac62-b959612e823f

Joint=1900 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=1.9 Z=-1 SpecialJt=No GUID=e7b78acf-  
cf67-452b-9f11-6b1960e9b370

Joint=1901 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=2 Z=-1 SpecialJt=No GUID=4a1a1f36-  
ea19-4b12-b13a-c3ade321e81f

Joint=1902 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=2.1 Z=-1 SpecialJt=No GUID=3395491a-  
111a-45ed-bd4f-1064ee7d1aec

Joint=1903 CoordSys=GLOBAL CoordType=Cartesian XorR=1.9 Y=2.2 Z=-1 SpecialJt=No GUID=021c9b80-  
e9fb-4e18-9623-36bc1658755c

Joint=1904 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=-2.2 Z=-1 SpecialJt=No GUID=4b97d7ed-  
020c-4800-add7-bed7f48856e7

Joint=1905 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=-2.1 Z=-1 SpecialJt=No GUID=27c616ce-  
5297-4fe3-8af1-e415eeda6198

Joint=1906 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=-2 Z=-1 SpecialJt=No GUID=721735d4-  
9a76-4f84-a210-f0e334ee062f

Joint=1907 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=-1.9 Z=-1 SpecialJt=No GUID=b87900a4-  
2332-4514-9644-2811cdf4bb44

Joint=1908 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=-1.8 Z=-1 SpecialJt=No GUID=3b4474f3-  
253d-43f2-a461-012b97070364

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1909 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=-1.7 Z=-1 SpecialJt=No GUID=e71e9ad9-1064-4c4d-bf5b-923c497a3055

Joint=1910 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=-1.6 Z=-1 SpecialJt=No GUID=f9ed8355-73b5-4f95-a0fb-16dc192c2a76

Joint=1911 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=-1.5 Z=-1 SpecialJt=No GUID=86b11cba-f79e-43b8-8864-1e1fb791ff6c

Joint=1912 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=-1.4 Z=-1 SpecialJt=No GUID=a6253c46-ee8c-4775-8552-c42b7c28d6cd

Joint=1913 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=-1.3 Z=-1 SpecialJt=No GUID=cc1413f4-4cdb-4259-acba-d5774f3ecb09

Joint=1914 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=-1.2 Z=-1 SpecialJt=No GUID=2f3250bf-b831-49d8-ac26-0f9c11d6f983

Joint=1915 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=-1.1 Z=-1 SpecialJt=No GUID=46acf698-98bc-452b-aabc-fa38e3d6a73f

Joint=1916 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=-1 Z=-1 SpecialJt=No GUID=7216bd6e-c866-42c2-b93a-54a392199747

Joint=1917 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=-0.9 Z=-1 SpecialJt=No GUID=a45ef3b3-3a16-47e9-b088-3ca051ea4f03

Joint=1918 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=-0.8 Z=-1 SpecialJt=No GUID=14c4d7f0-754c-41b5-ad21-4f002355eae8

Joint=1919 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=-0.7 Z=-1 SpecialJt=No GUID=d22a6fdc-2d9e-4a4a-bc0d-7e22867959c9

Joint=1920 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=-0.6 Z=-1 SpecialJt=No GUID=2bc718a5-0957-4608-99c3-0e15030d018d

Joint=1921 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=-0.5 Z=-1 SpecialJt=No GUID=bd879b11-6a8c-4532-acaa-c816227594d4

Joint=1922 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=-0.4 Z=-1 SpecialJt=No GUID=928e1cc4-db11-4d98-8843-af30608d0b70

Joint=1923 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=-0.3 Z=-1 SpecialJt=No GUID=932e4bf2-42ba-4af8-8624-684088d01dfe

Joint=1924 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=-0.2 Z=-1 SpecialJt=No GUID=0c771b49-7eac-468b-970a-afc860e7186f

Joint=1925 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=-0.09999999999999998 Z=-1 SpecialJt=No GUID=3eac324c-f3ed-4304-a98b-c3e7a31983da

Joint=1926 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=-8.32667268468867E-17 Z=-1 SpecialJt=No GUID=c39f1357-637e-4bc5-acfb-71bbba49316b

Joint=1927 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=0.09999999999999998 Z=-1 SpecialJt=No GUID=32430867-e4ea-4772-892f-25bf4cf80c9a

Joint=1928 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=0.2 Z=-1 SpecialJt=No GUID=ebcdad5c-bcf8-4268-b49e-ea1c5095b401

Joint=1929 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=0.3 Z=-1 SpecialJt=No GUID=c4049ac3-cdeb-4bcf-8408-8999c9ea40b8

Joint=1930 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=0.4 Z=-1 SpecialJt=No GUID=7b5c96e2-25d2-4048-bbb5-c53d2858917a

Joint=1931 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=0.5 Z=-1 SpecialJt=No GUID=c9cd0d91-c868-49e2-ad16-46c0f294cbdf

Joint=1932 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=0.6 Z=-1 SpecialJt=No GUID=7ef944a1-6f33-4518-8187-176c38718cc0

Joint=1933 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=0.7 Z=-1 SpecialJt=No GUID=7acf30e0-e94d-4675-944d-73b2cd116213

Joint=1934 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=0.8 Z=-1 SpecialJt=No GUID=25582af9-b84a-471e-bef4-a7ecb34b8648

Joint=1935 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=0.9 Z=-1 SpecialJt=No GUID=6988db4f-a053-402e-8bbb-731e2166a871



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1936 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=1 Z=-1 SpecialJt=No GUID=7eae0638-a702-416e-a200-42b1ddbc89bf

Joint=1937 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=1.1 Z=-1 SpecialJt=No GUID=6c48cf0f-2335-48b3-9000-d92951ff2d53

Joint=1938 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=1.2 Z=-1 SpecialJt=No GUID=c45d5d83-6522-4edf-bcf9-78f79c02e8e2

Joint=1939 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=1.3 Z=-1 SpecialJt=No GUID=97f3f8cd-25c6-49ee-988f-6ccf0cc32898

Joint=1940 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=1.4 Z=-1 SpecialJt=No GUID=f8a4b61b-915f-4a40-90c9-0a187f9cda3d

Joint=1941 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=1.5 Z=-1 SpecialJt=No GUID=cfd79e7c-86de-4970-8a0e-9efb4cb2d4a0

Joint=1942 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=1.6 Z=-1 SpecialJt=No GUID=5b3f3fa0-c7ce-4dbe-b8ff-c398cd8f5ea4

Joint=1943 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=1.7 Z=-1 SpecialJt=No GUID=798c69fa-50f2-4048-a003-a4c29c98b29c

Joint=1944 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=1.8 Z=-1 SpecialJt=No GUID=0ce91b73-62d0-4423-a119-7239d45ea67a

Joint=1945 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=1.9 Z=-1 SpecialJt=No GUID=98c0a5f6-bde7-4b0a-ab21-be5061026818

Joint=1946 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=2 Z=-1 SpecialJt=No GUID=06c1b638-d816-4fd7-ad4f-aac54615e9cf

Joint=1947 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=2.1 Z=-1 SpecialJt=No GUID=9de882a2-932a-4ff7-b906-4eb920f5ea90

Joint=1948 CoordSys=GLOBAL CoordType=Cartesian XorR=2 Y=2.2 Z=-1 SpecialJt=No GUID=e35f142c-4dab-49b4-9941-f3184e8e324f

Joint=1949 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=-2.2 Z=-1 SpecialJt=No GUID=291f28ef-1b63-40a7-b40f-81ee3ca7adad

Joint=1950 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=-2.1 Z=-1 SpecialJt=No GUID=2fb93830-c823-45ad-853e-65efb2945eaf

Joint=1951 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=-2 Z=-1 SpecialJt=No GUID=9b4e8ec4-ad88-4409-98ca-db702605c81d

Joint=1952 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=-1.9 Z=-1 SpecialJt=No GUID=91353521-7dd9-4d1d-8a63-3de5bfca468f

Joint=1953 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=-1.8 Z=-1 SpecialJt=No GUID=fc20402d-0e62-4c7f-af90-c47a263c1760

Joint=1954 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=-1.7 Z=-1 SpecialJt=No GUID=1f9e3511-11e3-46bb-af9a-4f2f284ae8b2

Joint=1955 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=-1.6 Z=-1 SpecialJt=No GUID=be4160c0-c3eb-4717-81db-43068c48a587

Joint=1956 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=-1.5 Z=-1 SpecialJt=No GUID=efea5190-98b6-40c7-8028-8e8662977623

Joint=1957 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=-1.4 Z=-1 SpecialJt=No GUID=01da9f4e-4d47-4983-b125-552ccb8d6ad2

Joint=1958 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=-1.3 Z=-1 SpecialJt=No GUID=82f18676-4c06-4345-ae71-ae994861f291

Joint=1959 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=-1.2 Z=-1 SpecialJt=No GUID=3cb267fa-2da0-456b-bab4-5183fbd16bd8

Joint=1960 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=-1.1 Z=-1 SpecialJt=No GUID=72874b78-be11-431b-a1e6-9982f09ff48b

Joint=1961 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=-1 Z=-1 SpecialJt=No GUID=05ea8ff1-d005-4369-8c16-858866784bb2

Joint=1962 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=-0.9 Z=-1 SpecialJt=No GUID=a9c2c1c6-8682-4d7c-a9dc-93fb477d883d

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1963 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=-0.8 Z=-1 SpecialJt=No GUID=d0a04bba-772c-4174-9392-b7cc387c65f1  
 Joint=1964 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=-0.7 Z=-1 SpecialJt=No GUID=ba650bcd-5a51-4bce-b317-ae7046d5bacc  
 Joint=1965 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=-0.6 Z=-1 SpecialJt=No GUID=3b290d30-2276-47e9-a8f2-110c7121ced8  
 Joint=1966 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=-0.5 Z=-1 SpecialJt=No GUID=9aca3041-fd89-434b-a0fd-06f641b9f91a  
 Joint=1967 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=-0.4 Z=-1 SpecialJt=No GUID=c2d0f1da-0860-4bbd-a4b4-0a732603f8ae  
 Joint=1968 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=-0.3 Z=-1 SpecialJt=No GUID=d85645c8-e81a-4177-bf40-5c096e7dff5a  
 Joint=1969 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=-0.2 Z=-1 SpecialJt=No GUID=b328263d-be08-4dda-8339-a2166bfc687d  
 Joint=1970 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=-0.0999999999999999 Z=-1 SpecialJt=No GUID=6a6aaf84-a2a8-434d-a458-666cb15b8ac3  
 Joint=1971 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=6.93889390390723E-17 Z=-1 SpecialJt=No GUID=495cf84c-dd90-4d55-b641-5ed71a6cefd9  
 Joint=1972 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=0.0999999999999999 Z=-1 SpecialJt=No GUID=820e7f7d-6e73-4dc6-9453-b6f60ff4c041  
 Joint=1973 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=0.2 Z=-1 SpecialJt=No GUID=712b4a63-005f-4dfa-b28c-1d0d6e6dddc1  
 Joint=1974 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=0.3 Z=-1 SpecialJt=No GUID=85895894-bb58-481f-b6e3-8c566f49cda2  
 Joint=1975 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=0.4 Z=-1 SpecialJt=No GUID=1ccb5d7a-0f63-4cab-a47b-5c043795f648  
 Joint=1976 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=0.5 Z=-1 SpecialJt=No GUID=65de21e9-334b-496d-bcd6-e9dd700cebab  
 Joint=1977 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=0.6 Z=-1 SpecialJt=No GUID=dc819dd4-ba74-4461-b4d9-bebd7a34db67  
 Joint=1978 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=0.7 Z=-1 SpecialJt=No GUID=e2c07a04-f4af-4772-aa1d-ec0c080258ac  
 Joint=1979 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=0.8 Z=-1 SpecialJt=No GUID=46b0e956-1d6e-4596-8db3-48c95d1613d6  
 Joint=1980 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=0.9 Z=-1 SpecialJt=No GUID=f73b5b32-6666-456b-92b2-010d660fd2ba  
 Joint=1981 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=1 Z=-1 SpecialJt=No GUID=f10be32b-b749-4305-a3f9-d51462f89550  
 Joint=1982 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=1.1 Z=-1 SpecialJt=No GUID=8b1c817d-276d-413e-bf87-a05def384830  
 Joint=1983 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=1.2 Z=-1 SpecialJt=No GUID=639a7782-e57d-4d4d-adf4-ddd15a862de3  
 Joint=1984 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=1.3 Z=-1 SpecialJt=No GUID=2814971e-3939-4caa-8910-1f4f6f462e7d  
 Joint=1985 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=1.4 Z=-1 SpecialJt=No GUID=31708d7a-3ad6-4b25-b059-9960531dad78  
 Joint=1986 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=1.5 Z=-1 SpecialJt=No GUID=57dd65f7-1638-4b55-a8f2-573cbb0a09377  
 Joint=1987 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=1.6 Z=-1 SpecialJt=No GUID=ee3e99a8-992e-4a3f-8e40-3fc57852faa8  
 Joint=1988 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=1.7 Z=-1 SpecialJt=No GUID=efe2320c-6d98-4e3d-8da5-39bb59205e90  
 Joint=1989 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=1.8 Z=-1 SpecialJt=No GUID=c78dbb57-a852-4c6e-a494-fa85a8395111

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=1990 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=1.9 Z=-1 SpecialJt=No GUID=afe19fe1-4f91-47f4-8926-16de107c0597

Joint=1991 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=2 Z=-1 SpecialJt=No GUID=72e9d94b-c3f2-4507-9a81-cee9993e2871

Joint=1992 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=2.1 Z=-1 SpecialJt=No GUID=a8a0f8df-53d2-4536-8525-071969c32d80

Joint=1993 CoordSys=GLOBAL CoordType=Cartesian XorR=2.1 Y=2.2 Z=-1 SpecialJt=No GUID=6fcea11c-0f77-4f64-bdcb-5a98d35c2c4b

Joint=1994 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=-2.1 Z=-1 SpecialJt=No GUID=f0cc75f3-91eb-48e2-a83a-3f04b80ee00b

Joint=1995 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=-2 Z=-1 SpecialJt=No GUID=7df24348-80c3-4f63-adc1-80fcd0eab91

Joint=1996 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=-1.9 Z=-1 SpecialJt=No GUID=f541e6dc-47d1-4976-aeec-59d49c62fc6a

Joint=1997 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=-1.8 Z=-1 SpecialJt=No GUID=aed2e85-1144-477e-b221-c0e235466845

Joint=1998 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=-1.7 Z=-1 SpecialJt=No GUID=e3428142-c301-4dde-ac11-e3651d197bba

Joint=1999 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=-1.6 Z=-1 SpecialJt=No GUID=ec8c6004-9ddf-4856-90fb-e0d9cf940ce3

Joint=2000 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=-1.5 Z=-1 SpecialJt=No GUID=48cce570-3b1d-4395-a25a-32a0bb757b02

Joint=2001 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=-1.4 Z=-1 SpecialJt=No GUID=a9c15044-3fe2-47ce-b363-4018805db495

Joint=2002 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=-1.3 Z=-1 SpecialJt=No GUID=da1b6a0b-6cbe-4231-8e56-0e83b4686c4e

Joint=2003 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=-1.2 Z=-1 SpecialJt=No GUID=dd98c1ed-11a0-49ef-90b6-97a369f21970

Joint=2004 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=-1.1 Z=-1 SpecialJt=No GUID=f0d1cc3f-344f-41dc-a84a-6cf74356194a

Joint=2005 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=-1 Z=-1 SpecialJt=No GUID=e25fb32e-b296-4b8d-882c-428c843e7742

Joint=2006 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=-0.9 Z=-1 SpecialJt=No GUID=189825f2-5568-4b83-beda-a702739c2dd3

Joint=2007 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=-0.8 Z=-1 SpecialJt=No GUID=ffc46695-792c-45f2-a9c5-dbb53057cbc7

Joint=2008 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=-0.7 Z=-1 SpecialJt=No GUID=b34cb028-f612-49c3-9a7a-2401a15c8266

Joint=2009 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=-0.6 Z=-1 SpecialJt=No GUID=32813c93-7617-4660-a199-80b2ec3cfede

Joint=2010 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=-0.5 Z=-1 SpecialJt=No GUID=947dc23a-3efd-4d20-87f4-2d0a80e63447

Joint=2011 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=-0.4 Z=-1 SpecialJt=No GUID=a7258de9-ccf7-4704-8c1d-5aec7f41e6db

Joint=2012 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=-0.3 Z=-1 SpecialJt=No GUID=7f59a12b-4b18-480e-a256-a2a0a73b67e9

Joint=2013 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=-0.2 Z=-1 SpecialJt=No GUID=464ec570-53f6-41e7-817b-f67b981d8beb

Joint=2014 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=-0.1 Z=-1 SpecialJt=No GUID=318d6abf-1a00-4bb8-90b6-e69c330b9cc1

Joint=2015 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=0 Z=-1 SpecialJt=No GUID=1675cb9a-e413-4b25-8086-addf54b995a1

Joint=2016 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=0.1 Z=-1 SpecialJt=No GUID=70fd3670-eb84-4e02-8384-5e408715a9b9

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=2017 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=0.2 Z=-1 SpecialJt=No GUID=13ff2b1c-dfa5-4ec1-aea0-5aaf2309d465

Joint=2018 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=0.3 Z=-1 SpecialJt=No GUID=1c17e67b-0c9f-494f-bf8e-e602900d47e5

Joint=2019 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=0.4 Z=-1 SpecialJt=No GUID=bc264394-2752-4e66-aab2-fde403a390f7

Joint=2020 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=0.5 Z=-1 SpecialJt=No GUID=aa9ce0e5-1997-49bf-90df-af05df14ba1e

Joint=2021 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=0.6 Z=-1 SpecialJt=No GUID=a7ebe3f1-6a72-45ac-90a0-08a0cb6ae3b2

Joint=2022 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=0.7 Z=-1 SpecialJt=No GUID=6fd324fc-22cc-4df9-8c57-c9bab2237054

Joint=2023 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=0.8 Z=-1 SpecialJt=No GUID=4a1917b6-3c2a-4b2a-9221-4bc04daea2ce

Joint=2024 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=0.9 Z=-1 SpecialJt=No GUID=e140d661-93fd-49e3-809c-16edac018ed3

Joint=2025 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=1 Z=-1 SpecialJt=No GUID=70b2b78b-af17-4d22-9f4c-63258101c16f

Joint=2026 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=1.1 Z=-1 SpecialJt=No GUID=fa1f74a2-b7d5-48bc-b98f-899ac8a886b9

Joint=2027 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=1.2 Z=-1 SpecialJt=No GUID=e1295bf4-74e5-4cee-b5f4-0fd863eaecfd

Joint=2028 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=1.3 Z=-1 SpecialJt=No GUID=607b5ef2-323d-4229-b0f4-6cb12ad41d04

Joint=2029 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=1.4 Z=-1 SpecialJt=No GUID=eff06489-49b0-488f-80f9-6e0bfa8a9354

Joint=2030 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=1.5 Z=-1 SpecialJt=No GUID=2deb88aa-45ff-4a96-bd27-f1ea35609872

Joint=2031 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=1.6 Z=-1 SpecialJt=No GUID=5b520cc2-ca62-4306-9d28-73bb12cb09f3

Joint=2032 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=1.7 Z=-1 SpecialJt=No GUID=6bc19310-69ee-4c7d-92f4-438d1295ae8b

Joint=2033 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=1.8 Z=-1 SpecialJt=No GUID=a83ab2c6-3b05-4637-918b-45fd0a7711b2

Joint=2034 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=1.9 Z=-1 SpecialJt=No GUID=d98b06c1-7702-43e7-9159-f14458cb468e

Joint=2035 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=2 Z=-1 SpecialJt=No GUID=acf5709a-bcc7-43d4-a488-3452c6d140c9

Joint=2036 CoordSys=GLOBAL CoordType=Cartesian XorR=2.2 Y=2.1 Z=-1 SpecialJt=No GUID=011f5bec-1fe2-4aaa-9e25-9c2622656adf

Joint=2037 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=1.5 Z=-13 SpecialJt=Yes GUID=1b9c5e8f-f628-4692-b760-36c5dba006b3

Joint=2038 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=1.5 Z=-12 SpecialJt=No GUID=0f3a3711-2923-4683-a5c5-f7365a5d9242

Joint=2039 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=1.5 Z=-11 SpecialJt=No GUID=740f2e82-f967-4202-881e-ad3925adcc9e

Joint=2040 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=1.5 Z=-10 SpecialJt=No GUID=376a6cbd-c4fc-4722-ad32-441850306569

Joint=2041 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=1.5 Z=-9 SpecialJt=No GUID=7aed0634-b9f2-4b47-846d-7f76846235d1

Joint=2042 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=1.5 Z=-8 SpecialJt=No GUID=d328b05a-3de7-4fdf-b64b-4b376593039b

Joint=2043 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=1.5 Z=-7 SpecialJt=No GUID=719bbcba-60c7-43c3-a815-ddf6fd1904be



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=2044 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=1.5 Z=-6 SpecialJt=No GUID=66df3669-01c3-45db-83f7-7b298ed8f8e3

Joint=2045 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=1.5 Z=-5 SpecialJt=No GUID=8507809f-e72b-4eda-9bd9-c13ef5ab63c3

Joint=2046 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=1.5 Z=-4 SpecialJt=No GUID=6732a890-7624-4a6d-985e-333fdbabbe91

Joint=2047 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=1.5 Z=-3 SpecialJt=No GUID=3d2ef682-c533-42a4-bbb7-6fe4f5916f24

Joint=2048 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=1.5 Z=-2 SpecialJt=No GUID=bd25f0cc-4e3d-4f49-9bb9-b5fd44a8b7cf

Joint=2049 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=1.5 Z=-13 SpecialJt=Yes GUID=6e03a77f-ead6-449d-9b50-01672323c285

Joint=2050 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=1.5 Z=-12 SpecialJt=No GUID=5a1ed102-3897-4f55-a13b-e06d11c4c907

Joint=2051 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=1.5 Z=-11 SpecialJt=No GUID=9d9cf7b8-0f6e-4839-96e4-f67ee74925dd

Joint=2052 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=1.5 Z=-10 SpecialJt=No GUID=4861139c-6ef6-4847-930b-28b81cc29a00

Joint=2053 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=1.5 Z=-9 SpecialJt=No GUID=1ac173c0-8b40-4b87-b3c0-5e1197394eb1

Joint=2054 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=1.5 Z=-8 SpecialJt=No GUID=02166b9f-63c0-4829-8d9a-903b4e03fdd

Joint=2055 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=1.5 Z=-7 SpecialJt=No GUID=10301e9b-a2e9-42aa-8d46-fa78f5fc1021

Joint=2056 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=1.5 Z=-6 SpecialJt=No GUID=76a75caf-09fe-458e-a3ab-1c0369e1791d

Joint=2057 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=1.5 Z=-5 SpecialJt=No GUID=4c51b21a-49d6-4150-8481-c121f40dd0ee

Joint=2058 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=1.5 Z=-4 SpecialJt=No GUID=237cbf95-6d84-4c86-8b5f-30990c7fdbcb

Joint=2059 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=1.5 Z=-3 SpecialJt=No GUID=4b365d1c-a3e6-49e7-aad5-644312ba0280

Joint=2060 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=1.5 Z=-2 SpecialJt=No GUID=ae493634-45be-4d5e-aeda-99011a81f574

Joint=2061 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-1.5 Z=-13 SpecialJt=Yes GUID=496aa857-c8a8-46bd-9bae-c2fa667224af

Joint=2062 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-1.5 Z=-12 SpecialJt=No GUID=2d32634f-c771-48ba-92a7-b678b035591b

Joint=2063 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-1.5 Z=-11 SpecialJt=No GUID=e70fd52b-ff58-4a60-bf69-daa9a034de00

Joint=2064 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-1.5 Z=-10 SpecialJt=No GUID=89114972-667f-4241-9fbd-b06060985333

Joint=2065 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-1.5 Z=-9 SpecialJt=No GUID=fcfc44bd-f245-4431-a5b5-2d998a0e4ac0

Joint=2066 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-1.5 Z=-8 SpecialJt=No GUID=f82f9e8e-3399-4b50-a3ef-9c7f27e966e1

Joint=2067 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-1.5 Z=-7 SpecialJt=No GUID=2256bfa3-37bf-47a2-95d3-e624a39ec81e

Joint=2068 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-1.5 Z=-6 SpecialJt=No GUID=fc6e8138-14fd-4fb3-9507-67e3eba6a5cb

Joint=2069 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-1.5 Z=-5 SpecialJt=No GUID=7d90a1ae-1b58-437f-a7a3-5026d4226df8

Joint=2070 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-1.5 Z=-4 SpecialJt=No GUID=55522315-c049-4d43-90dd-9de115f6c87c

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=2071 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-1.5 Z=-3 SpecialJt=No  
GUID=2b39b49c-1dab-41eb-b5b3-5099b910c863

Joint=2072 CoordSys=GLOBAL CoordType=Cartesian XorR=-1.5 Y=-1.5 Z=-2 SpecialJt=No GUID=f81ae3e2-  
d96f-4d86-90de-431f114358bf

Joint=2073 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-1.5 Z=-13 SpecialJt=Yes  
GUID=ac2cd4c1-49f3-4bdd-9009-3fbcc69138cc

Joint=2074 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-1.5 Z=-12 SpecialJt=No  
GUID=3b9cc618-b057-4fe8-a379-32ed9e2d9af0

Joint=2075 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-1.5 Z=-11 SpecialJt=No  
GUID=6f320de5-e469-472e-b089-559e30cf11e8

Joint=2076 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-1.5 Z=-10 SpecialJt=No  
GUID=020230b4-1ec6-4259-92e9-10a47610c264

Joint=2077 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-1.5 Z=-9 SpecialJt=No GUID=c21fdc68-  
0519-4d25-b80b-8bf1a2843d29

Joint=2078 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-1.5 Z=-8 SpecialJt=No GUID=561e4761-  
8ae2-428b-af22-cfc8c6250943

Joint=2079 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-1.5 Z=-7 SpecialJt=No GUID=f1abc5c7-  
7b56-49c3-b835-210c7e58f655

Joint=2080 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-1.5 Z=-6 SpecialJt=No GUID=5e475425-  
eeee-4c7f-9e32-18a620bd9bd0

Joint=2081 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-1.5 Z=-5 SpecialJt=No GUID=2a13d0e5-  
21e5-48c5-8d90-5ae8f569271c

Joint=2082 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-1.5 Z=-4 SpecialJt=No GUID=49e70cfa-  
15fd-46c1-a8f5-b34ca9d5acd

Joint=2083 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-1.5 Z=-3 SpecialJt=No GUID=39e0464c-  
a968-4fce-a86e-cda67b925d27

Joint=2084 CoordSys=GLOBAL CoordType=Cartesian XorR=1.5 Y=-1.5 Z=-2 SpecialJt=No GUID=31ea52af-  
f3da-4166-a6ff-99df7e3b7662

Joint=2085 CoordSys=GLOBAL CoordType=Cartesian XorR=24.95 Y=2.2 Z=-1 SpecialJt=Yes  
GUID=3d38af4d-e875-4ca6-98eb-0f630d59e230

Joint=2086 CoordSys=GLOBAL CoordType=Cartesian XorR=20.55 Y=2.2 Z=-1 SpecialJt=Yes  
GUID=e7baa61a-035d-401e-be1d-784eca726087

Joint=2087 CoordSys=GLOBAL CoordType=Cartesian XorR=24.95 Y=-2.2 Z=-1 SpecialJt=Yes  
GUID=d33b07f2-d014-47fa-9d9b-76c5d5595dcd

Joint=2088 CoordSys=GLOBAL CoordType=Cartesian XorR=20.55 Y=-2.2 Z=-1 SpecialJt=Yes  
GUID=dda1fe14-edb2-4cbe-80d5-df687f52a2c1

Joint=2089 CoordSys=GLOBAL CoordType=Cartesian XorR=20.65 Y=-2.2 Z=-1 SpecialJt=No  
GUID=79cc75f7-9e4a-4dc5-8bee-9a8d62b417ad

Joint=2090 CoordSys=GLOBAL CoordType=Cartesian XorR=20.65 Y=-2.1 Z=-1 SpecialJt=No  
GUID=50cd8000-fbeb-4eee-bd72-283782672475

Joint=2091 CoordSys=GLOBAL CoordType=Cartesian XorR=20.55 Y=-2.1 Z=-1 SpecialJt=No  
GUID=1da6f7a9-ac07-461d-a194-038094036437

Joint=2092 CoordSys=GLOBAL CoordType=Cartesian XorR=20.65 Y=-2 Z=-1 SpecialJt=No GUID=0c9c1bca-  
dd1c-4fc5-9a26-1e328ad01b25

Joint=2093 CoordSys=GLOBAL CoordType=Cartesian XorR=20.55 Y=-2 Z=-1 SpecialJt=No GUID=1aef5949-  
ead0-4392-9ad0-7f6a791eac1a

Joint=2094 CoordSys=GLOBAL CoordType=Cartesian XorR=20.65 Y=-1.9 Z=-1 SpecialJt=No  
GUID=04bd3ce9-7256-4fde-b50c-9b199d1e087b

Joint=2095 CoordSys=GLOBAL CoordType=Cartesian XorR=20.55 Y=-1.9 Z=-1 SpecialJt=No  
GUID=5d5493ae-60e1-4478-8bea-02c26c146724

Joint=2096 CoordSys=GLOBAL CoordType=Cartesian XorR=20.65 Y=-1.8 Z=-1 SpecialJt=No  
GUID=4b6290b0-7122-49d0-8370-dcbc9555114f

Joint=2097 CoordSys=GLOBAL CoordType=Cartesian XorR=20.55 Y=-1.8 Z=-1 SpecialJt=No  
GUID=bb01b5f0-223c-4b7d-8cd7-2ea19c082886

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                           |                 |                     |            |        |      |              |                                           |
|-------------------------------------------|-----------------|---------------------|------------|--------|------|--------------|-------------------------------------------|
| Joint=2098                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=20.65 | Y=-1.7 | Z=-1 | SpecialJt=No |                                           |
| GUID=3be37b93-ba98-4944-82d0-f9d4af932d47 |                 |                     |            |        |      |              |                                           |
| Joint=2099                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=20.55 | Y=-1.7 | Z=-1 | SpecialJt=No |                                           |
| GUID=bcf70665-0689-4126-ba05-f9fabb227bae |                 |                     |            |        |      |              |                                           |
| Joint=2100                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=20.65 | Y=-1.6 | Z=-1 | SpecialJt=No |                                           |
| GUID=300e87ef-1636-4f6c-8836-632202ef2951 |                 |                     |            |        |      |              |                                           |
| Joint=2101                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=20.55 | Y=-1.6 | Z=-1 | SpecialJt=No |                                           |
| GUID=03e01c2a-71b4-4768-9cf5-bc5f827c7d8d |                 |                     |            |        |      |              |                                           |
| Joint=2102                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=20.65 | Y=-1.5 | Z=-1 | SpecialJt=No |                                           |
| GUID=9d5d85df-9999-4bd7-bfef-626765602b05 |                 |                     |            |        |      |              |                                           |
| Joint=2103                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=20.55 | Y=-1.5 | Z=-1 | SpecialJt=No |                                           |
| GUID=229c30ab-9aa4-4a2d-9e99-5a9b60a9ae0f |                 |                     |            |        |      |              |                                           |
| Joint=2104                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=20.65 | Y=-1.4 | Z=-1 | SpecialJt=No |                                           |
| GUID=f9b6fa5a-19d6-4489-9ea2-0e59c74aeab7 |                 |                     |            |        |      |              |                                           |
| Joint=2105                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=20.55 | Y=-1.4 | Z=-1 | SpecialJt=No |                                           |
| GUID=086bb28a-6d1c-4007-9e89-76f5aeb7b766 |                 |                     |            |        |      |              |                                           |
| Joint=2106                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=20.65 | Y=-1.3 | Z=-1 | SpecialJt=No |                                           |
| GUID=191ac980-7681-408b-b6ab-c292f4341f60 |                 |                     |            |        |      |              |                                           |
| Joint=2107                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=20.55 | Y=-1.3 | Z=-1 | SpecialJt=No |                                           |
| GUID=db53b02d-1403-4d61-8176-a7910f9aac45 |                 |                     |            |        |      |              |                                           |
| Joint=2108                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=20.65 | Y=-1.2 | Z=-1 | SpecialJt=No |                                           |
| GUID=aea63650-e646-4cff-a1f6-d5a6e1d5b728 |                 |                     |            |        |      |              |                                           |
| Joint=2109                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=20.55 | Y=-1.2 | Z=-1 | SpecialJt=No |                                           |
| GUID=ca28a3b4-ae90-4601-a8e9-e00ba140012c |                 |                     |            |        |      |              |                                           |
| Joint=2110                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=20.65 | Y=-1.1 | Z=-1 | SpecialJt=No |                                           |
| GUID=6e7921a3-857b-4699-bc80-ebe9a49e921d |                 |                     |            |        |      |              |                                           |
| Joint=2111                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=20.55 | Y=-1.1 | Z=-1 | SpecialJt=No |                                           |
| GUID=4ee9f95d-a883-444f-9a9f-96b019f96d17 |                 |                     |            |        |      |              |                                           |
| Joint=2112                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=20.65 | Y=-1   | Z=-1 | SpecialJt=No | GUID=f3d6100c-1268-4ea8-a8bf-85a7211d7f97 |
| Joint=2113                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=20.55 | Y=-1   | Z=-1 | SpecialJt=No | GUID=a9d9b7c5-c127-4075-8546-baa8d28b0783 |
| Joint=2114                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=20.65 | Y=-0.9 | Z=-1 | SpecialJt=No | GUID=00f5a8c3-d0bf-48a4-8336-b8a6ee26ed5a |
| Joint=2115                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=20.55 | Y=-0.9 | Z=-1 | SpecialJt=No | GUID=11e0f101-c1ff-481b-b076-070e7734253e |
| Joint=2116                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=20.65 | Y=-0.8 | Z=-1 | SpecialJt=No | GUID=353caaf7-83cb-4f72-a285-4421385ab122 |
| Joint=2117                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=20.55 | Y=-0.8 | Z=-1 | SpecialJt=No | GUID=e2d05b1e-bdba-489e-87be-16a09538cf7d |
| Joint=2118                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=20.65 | Y=-0.7 | Z=-1 | SpecialJt=No | GUID=efde555c-8e34-411f-b276-b574171cd5ad |
| Joint=2119                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=20.55 | Y=-0.7 | Z=-1 | SpecialJt=No | GUID=066c219b-0dbf-4848-b98b-ef6129343532 |
| Joint=2120                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=20.65 | Y=-0.6 | Z=-1 | SpecialJt=No | GUID=dd696b39-a70b-4e48-ad96-3053b5da868d |
| Joint=2121                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=20.55 | Y=-0.6 | Z=-1 | SpecialJt=No | GUID=7b87d206-9d9f-431a-9555-5c0f283d1b4d |
| Joint=2122                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=20.65 | Y=-0.5 | Z=-1 | SpecialJt=No | GUID=07d29c4b-a97c-4804-958b-93f83861dc92 |
| Joint=2123                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=20.55 | Y=-0.5 | Z=-1 | SpecialJt=No | GUID=1a099107-ed66-47e8-8ccb-e31e3b9146cf |
| Joint=2124                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=20.65 | Y=-0.4 | Z=-1 | SpecialJt=No | GUID=b83fc291-a7be-40b7-8e66-9915a4012fd9 |





|                                           |                                           |                     |            |                        |      |              |
|-------------------------------------------|-------------------------------------------|---------------------|------------|------------------------|------|--------------|
| Joint=2125                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.55 | Y=-0.4                 | Z=-1 | SpecialJt=No |
| GUID=fcc00021-1541-45d6-a916-afcec5c35b3a |                                           |                     |            |                        |      |              |
| Joint=2126                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.65 | Y=-0.3                 | Z=-1 | SpecialJt=No |
| GUID=7041fb84-e63c-4fb8-b090-7da73bc3c7b2 |                                           |                     |            |                        |      |              |
| Joint=2127                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.55 | Y=-0.3                 | Z=-1 | SpecialJt=No |
| GUID=9e8bf62d-ad7d-418c-985f-a54b0f3c3537 |                                           |                     |            |                        |      |              |
| Joint=2128                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.65 | Y=-0.2                 | Z=-1 | SpecialJt=No |
| GUID=d2e13bc8-e52b-4edc-b1e4-26e4f2a62075 |                                           |                     |            |                        |      |              |
| Joint=2129                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.55 | Y=-0.2                 | Z=-1 | SpecialJt=No |
| GUID=129cf54a-04b0-4d90-a3ec-4c9cb6127345 |                                           |                     |            |                        |      |              |
| Joint=2130                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.65 | Y=-0.09999999999999999 | Z=-1 |              |
| SpecialJt=No                              | GUID=0d7697ac-98c0-42cf-956f-4046e9e26e54 |                     |            |                        |      |              |
| Joint=2131                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.55 | Y=-0.1                 | Z=-1 | SpecialJt=No |
| GUID=f4745b81-db32-4e6e-be32-ed4c9c99664b |                                           |                     |            |                        |      |              |
| Joint=2132                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.65 | Y=0                    | Z=-1 | SpecialJt=No |
| GUID=18ecc3b3-6e0e-42a8-b442-6c130c22b753 |                                           |                     |            |                        |      |              |
| Joint=2133                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.55 | Y=0                    | Z=-1 | SpecialJt=No |
| GUID=438769f1-ea17-4fe9-a20b-3b16d7971a52 |                                           |                     |            |                        |      |              |
| Joint=2134                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.65 | Y=0.09999999999999999  | Z=-1 |              |
| SpecialJt=No                              | GUID=6f778395-6125-442a-85a7-8d098bcf6339 |                     |            |                        |      |              |
| Joint=2135                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.55 | Y=0.1                  | Z=-1 | SpecialJt=No |
| GUID=03834c3d-7f37-4a91-8480-52a4f6ba4e1d |                                           |                     |            |                        |      |              |
| Joint=2136                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.65 | Y=0.2                  | Z=-1 | SpecialJt=No |
| GUID=5fd82dab-6ce4-4c1d-b552-b159f1f4ceb3 |                                           |                     |            |                        |      |              |
| Joint=2137                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.55 | Y=0.2                  | Z=-1 | SpecialJt=No |
| GUID=3f4b3f82-7c68-4411-9015-df863e86ebac |                                           |                     |            |                        |      |              |
| Joint=2138                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.65 | Y=0.3                  | Z=-1 | SpecialJt=No |
| GUID=0d133396-f410-45aa-b9f1-74cfe2cab875 |                                           |                     |            |                        |      |              |
| Joint=2139                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.55 | Y=0.3                  | Z=-1 | SpecialJt=No |
| GUID=5d16514b-e922-4d9d-88ec-6684e9a521c5 |                                           |                     |            |                        |      |              |
| Joint=2140                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.65 | Y=0.4                  | Z=-1 | SpecialJt=No |
| GUID=f20c4a43-62ca-4d99-b864-7eee160e02cb |                                           |                     |            |                        |      |              |
| Joint=2141                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.55 | Y=0.4                  | Z=-1 | SpecialJt=No |
| GUID=c7f62c28-58fe-4d72-a359-2bc412898487 |                                           |                     |            |                        |      |              |
| Joint=2142                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.65 | Y=0.5                  | Z=-1 | SpecialJt=No |
| GUID=75aa7ae3-f3b7-4bc7-ad4e-4a99f00dec76 |                                           |                     |            |                        |      |              |
| Joint=2143                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.55 | Y=0.5                  | Z=-1 | SpecialJt=No |
| GUID=63be34a1-d11c-445b-bab0-e4de657edd87 |                                           |                     |            |                        |      |              |
| Joint=2144                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.65 | Y=0.6                  | Z=-1 | SpecialJt=No |
| GUID=b3daadc0-f901-4d2f-a3da-0e98eda3ff4d |                                           |                     |            |                        |      |              |
| Joint=2145                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.55 | Y=0.6                  | Z=-1 | SpecialJt=No |
| GUID=ecb5b007-e9f3-4336-a30e-17a17aa0e91d |                                           |                     |            |                        |      |              |
| Joint=2146                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.65 | Y=0.7                  | Z=-1 | SpecialJt=No |
| GUID=73a0a406-74dc-41c8-a896-b696071c8ef1 |                                           |                     |            |                        |      |              |
| Joint=2147                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.55 | Y=0.7                  | Z=-1 | SpecialJt=No |
| GUID=db1af26c-5eeb-4201-8b09-55a5c65534db |                                           |                     |            |                        |      |              |
| Joint=2148                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.65 | Y=0.8                  | Z=-1 | SpecialJt=No |
| GUID=a093f2e2-8d72-48fc-bdac-da608f23b028 |                                           |                     |            |                        |      |              |
| Joint=2149                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.55 | Y=0.8                  | Z=-1 | SpecialJt=No |
| GUID=16dc2ba0-171d-4a84-a2f7-f95881b6dd31 |                                           |                     |            |                        |      |              |
| Joint=2150                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.65 | Y=0.9                  | Z=-1 | SpecialJt=No |
| GUID=a7a36343-348e-4c88-a4b8-9ffd0a60554a |                                           |                     |            |                        |      |              |
| Joint=2151                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.55 | Y=0.9                  | Z=-1 | SpecialJt=No |
| GUID=394831b4-01e7-4406-934c-1b8c15f0bc6d |                                           |                     |            |                        |      |              |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=2152 CoordSys=GLOBAL CoordType=Cartesian XorR=20.65 Y=1 Z=-1 SpecialJt=No GUID=75204ee7-2339-4048-a3ce-4bc6c32b730e

Joint=2153 CoordSys=GLOBAL CoordType=Cartesian XorR=20.55 Y=1 Z=-1 SpecialJt=No GUID=39e35b91-fc51-4c6c-833b-951c42376e4d

Joint=2154 CoordSys=GLOBAL CoordType=Cartesian XorR=20.65 Y=1.1 Z=-1 SpecialJt=No GUID=6c94baee-bdba-4ea0-8490-e327c1b56b4c

Joint=2155 CoordSys=GLOBAL CoordType=Cartesian XorR=20.55 Y=1.1 Z=-1 SpecialJt=No GUID=26a66fc5-f7ac-496c-90be-1cd8a0447667

Joint=2156 CoordSys=GLOBAL CoordType=Cartesian XorR=20.65 Y=1.2 Z=-1 SpecialJt=No GUID=929bb7ec-f844-43fa-afc3-a9df28f8b16a

Joint=2157 CoordSys=GLOBAL CoordType=Cartesian XorR=20.55 Y=1.2 Z=-1 SpecialJt=No GUID=f59ce8ae-00c4-49cf-8d91-f214a01645ca

Joint=2158 CoordSys=GLOBAL CoordType=Cartesian XorR=20.65 Y=1.3 Z=-1 SpecialJt=No GUID=ff6905f5-620e-4e53-acdd-715e6e78ec4a

Joint=2159 CoordSys=GLOBAL CoordType=Cartesian XorR=20.55 Y=1.3 Z=-1 SpecialJt=No GUID=e8da29ea-01c0-41fc-9bea-458521be6e2a

Joint=2160 CoordSys=GLOBAL CoordType=Cartesian XorR=20.65 Y=1.4 Z=-1 SpecialJt=No GUID=97e86599-0e79-4e2a-8191-cfb6069b8973

Joint=2161 CoordSys=GLOBAL CoordType=Cartesian XorR=20.55 Y=1.4 Z=-1 SpecialJt=No GUID=f2d6397c-be0c-4039-9168-172ff860ddcb

Joint=2162 CoordSys=GLOBAL CoordType=Cartesian XorR=20.65 Y=1.5 Z=-1 SpecialJt=No GUID=1190117c-4e1b-48a7-ad9f-ce2e9e4db5db

Joint=2163 CoordSys=GLOBAL CoordType=Cartesian XorR=20.55 Y=1.5 Z=-1 SpecialJt=No GUID=b6c92db1-1eb8-4428-92f0-242139258334

Joint=2164 CoordSys=GLOBAL CoordType=Cartesian XorR=20.65 Y=1.6 Z=-1 SpecialJt=No GUID=57f419b6-c263-4960-85bb-4b745e9ff9ce

Joint=2165 CoordSys=GLOBAL CoordType=Cartesian XorR=20.55 Y=1.6 Z=-1 SpecialJt=No GUID=6b9f1f2a-68b1-45f8-bc9b-e32fc033f6e3

Joint=2166 CoordSys=GLOBAL CoordType=Cartesian XorR=20.65 Y=1.7 Z=-1 SpecialJt=No GUID=80510405-b1f8-448b-b3e1-d5945bec5352

Joint=2167 CoordSys=GLOBAL CoordType=Cartesian XorR=20.55 Y=1.7 Z=-1 SpecialJt=No GUID=6d744e6d-b159-495c-8952-c5abcf9cab5e

Joint=2168 CoordSys=GLOBAL CoordType=Cartesian XorR=20.65 Y=1.8 Z=-1 SpecialJt=No GUID=119edbf4-4bfc-4338-805a-9e7bc6f3fd91

Joint=2169 CoordSys=GLOBAL CoordType=Cartesian XorR=20.55 Y=1.8 Z=-1 SpecialJt=No GUID=028edfed-2998-49df-97ed-e7bde13f063a

Joint=2170 CoordSys=GLOBAL CoordType=Cartesian XorR=20.65 Y=1.9 Z=-1 SpecialJt=No GUID=4c5e89ce-45cb-487e-8538-77a52da59aba

Joint=2171 CoordSys=GLOBAL CoordType=Cartesian XorR=20.55 Y=1.9 Z=-1 SpecialJt=No GUID=e680448f-bc1e-49a5-afcc-3790bf1ebbf7

Joint=2172 CoordSys=GLOBAL CoordType=Cartesian XorR=20.65 Y=2 Z=-1 SpecialJt=No GUID=65a657cc-e26e-4b89-a8d1-2fc54ca56165

Joint=2173 CoordSys=GLOBAL CoordType=Cartesian XorR=20.55 Y=2 Z=-1 SpecialJt=No GUID=cd9a44ba-c85f-4d89-b8a4-096f72847ad1

Joint=2174 CoordSys=GLOBAL CoordType=Cartesian XorR=20.65 Y=2.1 Z=-1 SpecialJt=No GUID=3a93fc12-3fa4-4d10-9725-7103c1d4588a

Joint=2175 CoordSys=GLOBAL CoordType=Cartesian XorR=20.55 Y=2.1 Z=-1 SpecialJt=No GUID=5fcbbaa2-bcb0-40b3-a9d8-820fe2aadd49

Joint=2176 CoordSys=GLOBAL CoordType=Cartesian XorR=20.65 Y=2.2 Z=-1 SpecialJt=No GUID=f70a3a5f-ec85-4899-9177-f0bf311ac051

Joint=2177 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=-2.2 Z=-1 SpecialJt=No GUID=435838db-7e2e-48f7-a1e2-31ae38b1fc86

Joint=2178 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=-2.1 Z=-1 SpecialJt=No GUID=8ebbd259-0771-4fcb-a5ad-082a48bc5ded

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=2179 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=-2 Z=-1 SpecialJt=No GUID=9aac8b08-3b4e-4a3d-804d-30675478015e

Joint=2180 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=-1.9 Z=-1 SpecialJt=No GUID=cf392a9f-3bf7-4484-98ce-0da248dea610

Joint=2181 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=-1.8 Z=-1 SpecialJt=No GUID=713fd639-d976-468c-a922-c6b2a81f299e

Joint=2182 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=-1.7 Z=-1 SpecialJt=No GUID=d300273c-7c09-462d-b587-e680e40bb6b6

Joint=2183 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=-1.6 Z=-1 SpecialJt=No GUID=067010ae-c4a7-4d9f-a296-59087738c2a8

Joint=2184 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=-1.5 Z=-1 SpecialJt=No GUID=6a437b45-d7f6-4f9b-960c-7649aaa40109

Joint=2185 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=-1.4 Z=-1 SpecialJt=No GUID=5d763164-796c-4676-bb50-0237900e635e

Joint=2186 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=-1.3 Z=-1 SpecialJt=No GUID=58ea738d-b950-4fde-9c42-1027c9fdf431

Joint=2187 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=-1.2 Z=-1 SpecialJt=No GUID=32a29816-409a-4922-9b34-a7bde1a0d745

Joint=2188 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=-1.1 Z=-1 SpecialJt=No GUID=3a467d55-ffff-4aba-baef-2ded6cc4fa21

Joint=2189 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=-1 Z=-1 SpecialJt=No GUID=339bb270-ba77-4389-88f9-973135bc8e88

Joint=2190 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=-0.9 Z=-1 SpecialJt=No GUID=7bf7846f-2324-4e1a-a017-3a23ffbcc0eb

Joint=2191 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=-0.8 Z=-1 SpecialJt=No GUID=bcae8f41-3eff-4edc-8c36-b241830e2c9b

Joint=2192 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=-0.7 Z=-1 SpecialJt=No GUID=be31a542-4b15-42c8-9d50-2af3a47bafd3

Joint=2193 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=-0.6 Z=-1 SpecialJt=No GUID=04629857-62b2-49a1-9ccb-5573568d1479

Joint=2194 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=-0.5 Z=-1 SpecialJt=No GUID=c291405a-d063-4968-be42-14059227548c

Joint=2195 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=-0.4 Z=-1 SpecialJt=No GUID=a42a2c25-543b-4156-b9b3-dbeb3781a49b

Joint=2196 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=-0.3 Z=-1 SpecialJt=No GUID=e2d2e4eb-f907-4d51-b42d-5e13df48ea5f

Joint=2197 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=-0.2 Z=-1 SpecialJt=No GUID=ea8027c2-750e-43b3-8288-6ec0539b3c90

Joint=2198 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=-0.09999999999999996 Z=-1 SpecialJt=No GUID=9f6cb732-40a0-4b3b-a4d3-7133e06d5141

Joint=2199 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=0 Z=-1 SpecialJt=No GUID=b9ef4248-5ddd-49ba-92ff-43a2e1509e20

Joint=2200 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=0.09999999999999996 Z=-1 SpecialJt=No GUID=3dc44f2d-314a-4098-a88c-611764cb99b4

Joint=2201 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=0.2 Z=-1 SpecialJt=No GUID=2b0220cd-e179-40d4-8754-33700e9dbec

Joint=2202 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=0.3 Z=-1 SpecialJt=No GUID=dc359830-021f-4dc7-9b7d-8d27df67497f

Joint=2203 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=0.4 Z=-1 SpecialJt=No GUID=4611ed67-f0d9-4e27-ad6b-fba3fed60b27

Joint=2204 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=0.5 Z=-1 SpecialJt=No GUID=5461bcce-53fe-44b9-ac14-e57b2eb7a66d

Joint=2205 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=0.6 Z=-1 SpecialJt=No GUID=e2dfad0e-e917-46f0-977d-e66b8b74b0ad

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=2206 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=0.7 Z=-1 SpecialJt=No  
GUID=12fdee33-0314-4cf3-a200-c533f85281f1

Joint=2207 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=0.8 Z=-1 SpecialJt=No GUID=f331f42b-3c05-4537-b68f-5ca187590041

Joint=2208 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=0.9 Z=-1 SpecialJt=No  
GUID=6575266e-2307-4587-a0af-0fc49015165b

Joint=2209 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=1 Z=-1 SpecialJt=No GUID=407a0cfe-06da-4859-8977-24d3a152caad

Joint=2210 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=1.1 Z=-1 SpecialJt=No GUID=cf0f34bb-7346-42c6-83a4-c902690e4381

Joint=2211 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=1.2 Z=-1 SpecialJt=No  
GUID=318cdb51-58fd-4120-b6e9-e03e659e317d

Joint=2212 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=1.3 Z=-1 SpecialJt=No  
GUID=a4bddc4b-e4ef-47e9-81e4-8ace22c12fcf

Joint=2213 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=1.4 Z=-1 SpecialJt=No  
GUID=15352c04-30c3-4362-8425-93c92ef27153

Joint=2214 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=1.5 Z=-1 SpecialJt=No  
GUID=f972bc2a-c60c-4644-9bd6-043c31c02ac8

Joint=2215 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=1.6 Z=-1 SpecialJt=No  
GUID=c5458fb1-56b2-4736-8250-a24798e3d5a2

Joint=2216 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=1.7 Z=-1 SpecialJt=No  
GUID=74c17390-edf6-41e5-9f77-7574ee243d5d

Joint=2217 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=1.8 Z=-1 SpecialJt=No  
GUID=5c50c28f-aff4-4f1f-b5cd-480654474540

Joint=2218 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=1.9 Z=-1 SpecialJt=No  
GUID=c7a2e51c-7807-4656-938a-a7f240fb4259

Joint=2219 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=2 Z=-1 SpecialJt=No GUID=8cc17d06-e2fa-4e32-ab4c-ca6b5a2d6707

Joint=2220 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=2.1 Z=-1 SpecialJt=No  
GUID=2f74ad1e-300c-4b79-a18a-45b61c73f020

Joint=2221 CoordSys=GLOBAL CoordType=Cartesian XorR=20.75 Y=2.2 Z=-1 SpecialJt=No  
GUID=bbca0db7-9cb9-4cc4-bcdc-ffd01c9845e5

Joint=2222 CoordSys=GLOBAL CoordType=Cartesian XorR=20.85 Y=-2.2 Z=-1 SpecialJt=No  
GUID=5d351016-7386-40d2-9db2-b01e44f8a581

Joint=2223 CoordSys=GLOBAL CoordType=Cartesian XorR=20.85 Y=-2.1 Z=-1 SpecialJt=No  
GUID=76792323-921d-416d-b7bc-3a0aa673bdaf

Joint=2224 CoordSys=GLOBAL CoordType=Cartesian XorR=20.85 Y=-2 Z=-1 SpecialJt=No GUID=b3c5acab-bac9-41b3-a6d3-701e7aa1f13e

Joint=2225 CoordSys=GLOBAL CoordType=Cartesian XorR=20.85 Y=-1.9 Z=-1 SpecialJt=No  
GUID=f6d1e647-d7e7-4351-b163-8fedbca954c4

Joint=2226 CoordSys=GLOBAL CoordType=Cartesian XorR=20.85 Y=-1.8 Z=-1 SpecialJt=No  
GUID=8009f2ca-44e0-49a9-98b5-6766c9fc4eb1

Joint=2227 CoordSys=GLOBAL CoordType=Cartesian XorR=20.85 Y=-1.7 Z=-1 SpecialJt=No  
GUID=2a1bcd96-7823-4510-b37f-5eea251a1903

Joint=2228 CoordSys=GLOBAL CoordType=Cartesian XorR=20.85 Y=-1.6 Z=-1 SpecialJt=No  
GUID=9527a82e-cc07-44b1-b5ab-bc3c7aff6934

Joint=2229 CoordSys=GLOBAL CoordType=Cartesian XorR=20.85 Y=-1.5 Z=-1 SpecialJt=No  
GUID=957d577e-152f-4c7c-acfa-0bfae81d5f5d

Joint=2230 CoordSys=GLOBAL CoordType=Cartesian XorR=20.85 Y=-1.4 Z=-1 SpecialJt=No  
GUID=67e89001-cc63-4f92-914b-2b835df70350

Joint=2231 CoordSys=GLOBAL CoordType=Cartesian XorR=20.85 Y=-1.3 Z=-1 SpecialJt=No  
GUID=e3068e8f-a879-429c-b81e-2078720315bb

Joint=2232 CoordSys=GLOBAL CoordType=Cartesian XorR=20.85 Y=-1.2 Z=-1 SpecialJt=No  
GUID=83ac2cb9-f774-4ba0-a08c-2d43bbe57894





|                                            |                                           |                     |            |                        |      |              |
|--------------------------------------------|-------------------------------------------|---------------------|------------|------------------------|------|--------------|
| Joint=2233                                 | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.85 | Y=-1.1                 | Z=-1 | SpecialJt=No |
| GUID=6026118f-221f-4110-9601-e8a3871af3af  |                                           |                     |            |                        |      |              |
| Joint=2234                                 | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.85 | Y=-1                   | Z=-1 | SpecialJt=No |
| GUID=bae5a384-7e96-4ae4-8a45-5e88d7937b07  |                                           |                     |            |                        |      |              |
| Joint=2235                                 | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.85 | Y=-0.9                 | Z=-1 | SpecialJt=No |
| GUID=b4b79c5d-89b0-4ea7-8842-18a61e910521  |                                           |                     |            |                        |      |              |
| Joint=2236                                 | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.85 | Y=-0.8                 | Z=-1 | SpecialJt=No |
| GUID=0296921f-316c-42bc-beb2-2df02300f363  |                                           |                     |            |                        |      |              |
| Joint=2237                                 | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.85 | Y=-0.7                 | Z=-1 | SpecialJt=No |
| GUID=79af026a-06f7-4951-af7a-edc1ded8fa09  |                                           |                     |            |                        |      |              |
| Joint=2238                                 | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.85 | Y=-0.6                 | Z=-1 | SpecialJt=No |
| GUID=8f35da78-c2fa-4bb5-bc3f-38e008b2fae2  |                                           |                     |            |                        |      |              |
| Joint=2239                                 | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.85 | Y=-0.5                 | Z=-1 | SpecialJt=No |
| GUID=3ce6dfa2-75ce-4ed7-979e-41e76001cdfd  |                                           |                     |            |                        |      |              |
| Joint=2240                                 | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.85 | Y=-0.4                 | Z=-1 | SpecialJt=No |
| GUID=84b66fd0-c6cd-464e-b8b0-4dc7a3687e3b  |                                           |                     |            |                        |      |              |
| Joint=2241                                 | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.85 | Y=-0.3                 | Z=-1 | SpecialJt=No |
| GUID=1ed69b23-7878-4f59-9fb7-772d26472058  |                                           |                     |            |                        |      |              |
| Joint=2242                                 | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.85 | Y=-0.2                 | Z=-1 | SpecialJt=No |
| GUID=149c1aa1-b006-45b3-8616-cc83ecad23eb  |                                           |                     |            |                        |      |              |
| Joint=2243                                 | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.85 | Y=-0.1                 | Z=-1 | SpecialJt=No |
| GUID=4932f969-0caf-48cc-91f3-14cac970ed1b  |                                           |                     |            |                        |      |              |
| Joint=2244                                 | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.85 | Y=0                    | Z=-1 | SpecialJt=No |
| GUID=f525-45cd-82a3-b543b68f95d2           |                                           |                     |            |                        |      |              |
| Joint=2245                                 | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.85 | Y=0.099999999999999999 | Z=-1 |              |
| SpecialJt=No                               | GUID=d43c193f-fc9a-4ad8-bc94-83a7484beca6 |                     |            |                        |      |              |
| Joint=2246                                 | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.85 | Y=0.2                  | Z=-1 | SpecialJt=No |
| GUID=7230d5e1-e05c-4a9f-ad61-02e62e42560b  |                                           |                     |            |                        |      |              |
| Joint=2247                                 | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.85 | Y=0.3                  | Z=-1 | SpecialJt=No |
| GUID=c4a377f7-db53-49ee-9ddb-5ca3f9118ab7  |                                           |                     |            |                        |      |              |
| Joint=2248                                 | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.85 | Y=0.4                  | Z=-1 | SpecialJt=No |
| GUID=5ab72754-4f17-4a8b-9fd1-4d2b40122ce1  |                                           |                     |            |                        |      |              |
| Joint=2249                                 | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.85 | Y=0.5                  | Z=-1 | SpecialJt=No |
| GUID=ca3c533b-05cc-49f1-b480-936f3feb1ebb  |                                           |                     |            |                        |      |              |
| Joint=2250                                 | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.85 | Y=0.6                  | Z=-1 | SpecialJt=No |
| GUID=b8ce6970-6976-4204-9e55-90b19c8b2bc7  |                                           |                     |            |                        |      |              |
| Joint=2251                                 | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.85 | Y=0.7                  | Z=-1 | SpecialJt=No |
| GUID=69d8aa50-90f6-4929-b6f7-371f6d7bde24  |                                           |                     |            |                        |      |              |
| Joint=2252                                 | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.85 | Y=0.8                  | Z=-1 | SpecialJt=No |
| GUID=e89dfb03-5fda-49fc-9537-20870a8732fc  |                                           |                     |            |                        |      |              |
| Joint=2253                                 | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.85 | Y=0.9                  | Z=-1 | SpecialJt=No |
| GUID=98eb44cf-b646-47a4-ba4f-fdc66ba14e35  |                                           |                     |            |                        |      |              |
| Joint=2254                                 | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.85 | Y=1                    | Z=-1 | SpecialJt=No |
| GUID=2958-4e38-8162-5770598364c7           |                                           |                     |            |                        |      |              |
| Joint=2255                                 | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.85 | Y=1.1                  | Z=-1 | SpecialJt=No |
| GUID=7a127510-3c26-4ecc-a206-02433b7505d6  |                                           |                     |            |                        |      |              |
| Joint=2256                                 | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.85 | Y=1.2                  | Z=-1 | SpecialJt=No |
| GUID=c10cbdc4-3254-47cd-9664-8cc685a0ab03  |                                           |                     |            |                        |      |              |
| Joint=2257                                 | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.85 | Y=1.3                  | Z=-1 | SpecialJt=No |
| GUID=15c3fb9a-8ac4-4ca8-93d9-0cbbc53abbbb4 |                                           |                     |            |                        |      |              |
| Joint=2258                                 | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.85 | Y=1.4                  | Z=-1 | SpecialJt=No |
| GUID=0ced23da-584f-4c51-93f1-cd20c38348a5  |                                           |                     |            |                        |      |              |
| Joint=2259                                 | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=20.85 | Y=1.5                  | Z=-1 | SpecialJt=No |
| GUID=2646c4d5-fa95-4407-83e6-ff704bd91c37  |                                           |                     |            |                        |      |              |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=2260 CoordSys=GLOBAL CoordType=Cartesian XorR=20.85 Y=1.6 Z=-1 SpecialJt=No  
GUID=448a7e62-63e7-4203-ab81-a47ef55a1fd2

Joint=2261 CoordSys=GLOBAL CoordType=Cartesian XorR=20.85 Y=1.7 Z=-1 SpecialJt=No  
GUID=7677c0dc-d03c-4539-ba92-3905b408c59e

Joint=2262 CoordSys=GLOBAL CoordType=Cartesian XorR=20.85 Y=1.8 Z=-1 SpecialJt=No GUID=f04424ff-b9b6-4857-832a-67fd1c78eb2a

Joint=2263 CoordSys=GLOBAL CoordType=Cartesian XorR=20.85 Y=1.9 Z=-1 SpecialJt=No  
GUID=e2d36b06-38da-437f-9a09-232d3904bbd3

Joint=2264 CoordSys=GLOBAL CoordType=Cartesian XorR=20.85 Y=2 Z=-1 SpecialJt=No GUID=a42b061b-56cd-4db1-9c4e-313867a7315a

Joint=2265 CoordSys=GLOBAL CoordType=Cartesian XorR=20.85 Y=2.1 Z=-1 SpecialJt=No  
GUID=bc5880fb-a731-4566-8891-7a45b728a303

Joint=2266 CoordSys=GLOBAL CoordType=Cartesian XorR=20.85 Y=2.2 Z=-1 SpecialJt=No  
GUID=2b2417de-0a5d-40b1-a041-2145759e3bda

Joint=2267 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=-2.2 Z=-1 SpecialJt=No  
GUID=b8e44341-e66a-4673-afba-781df056958c

Joint=2268 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=-2.1 Z=-1 SpecialJt=No  
GUID=522dd349-3af9-4f23-ba06-2cbd230bdb54

Joint=2269 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=-2 Z=-1 SpecialJt=No GUID=845db81c-722a-49f5-b284-6644900ee90c

Joint=2270 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=-1.9 Z=-1 SpecialJt=No  
GUID=de46453c-1b5d-4fdc-92c5-03b809344e87

Joint=2271 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=-1.8 Z=-1 SpecialJt=No  
GUID=bd5a4ee4-8adf-4268-9196-a621046b6eab

Joint=2272 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=-1.7 Z=-1 SpecialJt=No  
GUID=ad506465-9f13-4194-80dd-522243d2dbd1

Joint=2273 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=-1.6 Z=-1 SpecialJt=No  
GUID=cac63807-e003-4ae1-9d11-3a26c94cf5a3

Joint=2274 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=-1.5 Z=-1 SpecialJt=No  
GUID=1f4ca960-5ab1-482f-be97-a9693f79ae46

Joint=2275 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=-1.4 Z=-1 SpecialJt=No  
GUID=d7c333cf-9038-4086-9bea-b869f8387270

Joint=2276 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=-1.3 Z=-1 SpecialJt=No  
GUID=c7d04d95-96d5-4e97-9bfa-c02308c0b6a5

Joint=2277 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=-1.2 Z=-1 SpecialJt=No  
GUID=d6aec903-4de3-4dfc-be6e-0a298e1b2df5

Joint=2278 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=-1.1 Z=-1 SpecialJt=No  
GUID=f0d54a5e-89ce-43fe-ad19-488f2b2ec6ea

Joint=2279 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=-1 Z=-1 SpecialJt=No GUID=b2cc00f2-1f34-4fa1-8ccb-9b3b1b34a9a2

Joint=2280 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=-0.9 Z=-1 SpecialJt=No  
GUID=d1670f95-336f-48f8-a610-53576d410f23

Joint=2281 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=-0.8 Z=-1 SpecialJt=No  
GUID=ae403279-4dc3-4664-aca9-cc8065e40723

Joint=2282 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=-0.7 Z=-1 SpecialJt=No  
GUID=b6fe5fcb-cac7-4dff-a921-73260b34d3fd

Joint=2283 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=-0.6 Z=-1 SpecialJt=No  
GUID=017ca6e3-d7c1-4f70-aba7-e2d2181033bc

Joint=2284 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=-0.5 Z=-1 SpecialJt=No  
GUID=262c783e-ee1d-4c42-990a-cac970e99bb7

Joint=2285 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=-0.4 Z=-1 SpecialJt=No  
GUID=0d63a235-c61a-4b9b-bd7f-1cd6fd6918d6

Joint=2286 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=-0.3 Z=-1 SpecialJt=No  
GUID=b9d716b1-09b2-422f-97fd-be5ec405e5e5

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=2287 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=-0.2 Z=-1 SpecialJt=No  
GUID=593bccf1-4746-46be-a119-6d8426e49729

Joint=2288 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=-0.09999999999999999 Z=-1  
SpecialJt=No GUID=a48a3cef-e207-4bce-b8ea-8143dde6b81

Joint=2289 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=0 Z=-1 SpecialJt=No GUID=c1c0f1b4-  
7f23-454f-80a0-ac55d8d9877d

Joint=2290 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=0.09999999999999999 Z=-1  
SpecialJt=No GUID=5dd158ac-c975-4889-9fbf-14f9b8057fc8

Joint=2291 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=0.2 Z=-1 SpecialJt=No GUID=1fb60fa3-  
ae52-4176-af85-9b8b70c64f56

Joint=2292 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=0.3 Z=-1 SpecialJt=No  
GUID=256bd65a-94ba-4448-8b62-76038996a2f0

Joint=2293 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=0.4 Z=-1 SpecialJt=No  
GUID=53ea681c-c5ad-4f0b-ac98-921bcf59dcfb

Joint=2294 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=0.5 Z=-1 SpecialJt=No  
GUID=e51d2ba4-a6b9-4616-8305-0986d6a5f843

Joint=2295 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=0.6 Z=-1 SpecialJt=No  
GUID=19d5370c-5bf0-4c9c-9fdd-70fab62bbfb8

Joint=2296 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=0.7 Z=-1 SpecialJt=No  
GUID=01a67935-ff52-49ae-a791-29180e6e299b

Joint=2297 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=0.8 Z=-1 SpecialJt=No  
GUID=b6745b20-33c4-402c-8acd-40379d903d69

Joint=2298 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=0.9 Z=-1 SpecialJt=No  
GUID=a499549a-b59b-470d-ad5a-052e058e67d2

Joint=2299 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=1 Z=-1 SpecialJt=No GUID=c1548492-  
8be3-4ddb-9d2c-87f82b31f1bb

Joint=2300 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=1.1 Z=-1 SpecialJt=No  
GUID=a3bd3884-61b3-4668-92d2-897803780e26

Joint=2301 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=1.2 Z=-1 SpecialJt=No  
GUID=6649581d-5027-481a-8b3f-c35743888677

Joint=2302 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=1.3 Z=-1 SpecialJt=No  
GUID=37991e66-dc0c-4ceb-b281-f1d0be6661a0

Joint=2303 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=1.4 Z=-1 SpecialJt=No  
GUID=eea93f78-0e6f-4860-aa92-ba74a4156ce3

Joint=2304 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=1.5 Z=-1 SpecialJt=No  
GUID=47a06e59-f348-477e-ad6e-a8e12870c94b

Joint=2305 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=1.6 Z=-1 SpecialJt=No  
GUID=0b6b6ba4-a6f2-4260-849d-aaecf840a981

Joint=2306 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=1.7 Z=-1 SpecialJt=No  
GUID=bf2adb42-8b6e-4ee3-b0f1-27874a09b6de

Joint=2307 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=1.8 Z=-1 SpecialJt=No  
GUID=4036c5ea-7be5-4f63-8894-c4e3d56363ed

Joint=2308 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=1.9 Z=-1 SpecialJt=No  
GUID=c3770627-6545-4fee-b5ce-32231956b757

Joint=2309 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=2 Z=-1 SpecialJt=No GUID=0b14433f-  
dffa-470c-b635-7d3084ac9ecb

Joint=2310 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=2.1 Z=-1 SpecialJt=No  
GUID=702d879e-3fe0-47e0-8a09-e9b0c29072be

Joint=2311 CoordSys=GLOBAL CoordType=Cartesian XorR=20.95 Y=2.2 Z=-1 SpecialJt=No  
GUID=c65531a4-de9e-4ee8-b38b-07b4f0d1577d

Joint=2312 CoordSys=GLOBAL CoordType=Cartesian XorR=21.05 Y=-2.2 Z=-1 SpecialJt=No  
GUID=e2aca05f-53f7-4ecf-b308-43c9dd666572

Joint=2313 CoordSys=GLOBAL CoordType=Cartesian XorR=21.05 Y=-2.1 Z=-1 SpecialJt=No  
GUID=01def8c4-56ec-453d-a45d-acc5ccf1275



|            |                 |                     |            |                        |      |              |                                            |
|------------|-----------------|---------------------|------------|------------------------|------|--------------|--------------------------------------------|
| Joint=2314 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=-2                   | Z=-1 | SpecialJt=No | GUID=bf88c15d-3856-434c-beeb-c996501004e8  |
| Joint=2315 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=-1.9                 | Z=-1 | SpecialJt=No | GUID=c9009c1c-a433-45d3-8926-3dd3e5bf5223  |
| Joint=2316 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=-1.8                 | Z=-1 | SpecialJt=No | GUID=0ebb3433-b4f6-4254-a10f-8fec340df8a5  |
| Joint=2317 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=-1.7                 | Z=-1 | SpecialJt=No | GUID=2de27d48-919f-4689-9976-5668e8002a3e  |
| Joint=2318 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=-1.6                 | Z=-1 | SpecialJt=No | GUID=99076242-affbc-4875-85ba-c4c515f6af09 |
| Joint=2319 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=-1.5                 | Z=-1 | SpecialJt=No | GUID=f9751529-1532-498d-8513-e496e86e63f1  |
| Joint=2320 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=-1.4                 | Z=-1 | SpecialJt=No | GUID=22327f3b-0951-4283-8ee6-7e034c37cc69  |
| Joint=2321 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=-1.3                 | Z=-1 | SpecialJt=No | GUID=17f54e24-b186-4a72-b154-71a9975d11b2  |
| Joint=2322 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=-1.2                 | Z=-1 | SpecialJt=No | GUID=3664d76f-3e7b-4603-ae4d-98ff9dca30cf  |
| Joint=2323 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=-1.1                 | Z=-1 | SpecialJt=No | GUID=a422f0ae-ac47-4677-849d-3239bfc3abd4  |
| Joint=2324 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=-1                   | Z=-1 | SpecialJt=No | GUID=deeda7c6-985f-4478-bf7a-c81129349e0f  |
| Joint=2325 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=-0.9                 | Z=-1 | SpecialJt=No | GUID=5c12237f-a4b6-434f-93c4-e395afa4960f  |
| Joint=2326 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=-0.8                 | Z=-1 | SpecialJt=No | GUID=75f53a7a-edd0-4706-93a4-606125455cf9  |
| Joint=2327 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=-0.7                 | Z=-1 | SpecialJt=No | GUID=bc1649c3-1a51-497f-964d-07794c54a2da  |
| Joint=2328 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=-0.6                 | Z=-1 | SpecialJt=No | GUID=3fd53d67-cc2d-4519-a18e-8fa9cb62742c  |
| Joint=2329 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=-0.5                 | Z=-1 | SpecialJt=No | GUID=a148d01e-3778-4c84-8366-a2ad5627bd8f  |
| Joint=2330 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=-0.4                 | Z=-1 | SpecialJt=No | GUID=4a7015f2-eb8d-4366-bd2a-c782fa34d25e  |
| Joint=2331 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=-0.3                 | Z=-1 | SpecialJt=No | GUID=b698f857-207b-4b59-a518-c6e2f439c015  |
| Joint=2332 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=-0.2                 | Z=-1 | SpecialJt=No | GUID=bb9857e9-ce90-4f64-991e-1dad8640558e  |
| Joint=2333 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=-0.09999999999999998 | Z=-1 | SpecialJt=No | GUID=3ee8f299-4d49-43d0-8592-9b65a4e57b02  |
| Joint=2334 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=0                    | Z=-1 | SpecialJt=No | GUID=74e0f4fc-11c7-4532-ab2e-0a1270bfdd24  |
| Joint=2335 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=0.09999999999999999  | Z=-1 | SpecialJt=No | GUID=2acaa592-ae90-4c46-8c31-05c0742424e7  |
| Joint=2336 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=0.2                  | Z=-1 | SpecialJt=No | GUID=fd48b878-b599-4b97-918d-1966262c5509  |
| Joint=2337 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=0.3                  | Z=-1 | SpecialJt=No | GUID=abba9d0b-a792-4399-945e-014f96a2d35b  |
| Joint=2338 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=0.4                  | Z=-1 | SpecialJt=No | GUID=49e33840-0337-458c-a56f-ccb689b0250d  |
| Joint=2339 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=0.5                  | Z=-1 | SpecialJt=No | GUID=1ab07c79-4023-4724-841b-3e469369859d  |
| Joint=2340 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=0.6                  | Z=-1 | SpecialJt=No | GUID=315bbbcf-ac9e-4361-9e2d-ff9027d36869  |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|            |                 |                     |            |        |      |              |                                           |
|------------|-----------------|---------------------|------------|--------|------|--------------|-------------------------------------------|
| Joint=2341 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=0.7  | Z=-1 | SpecialJt=No | GUID=5a3aa99e-a796-4e2d-8ec2-3d664edf092c |
| Joint=2342 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=0.8  | Z=-1 | SpecialJt=No | GUID=05b13cf5-061e-4fdf-bddb-1fe6d26d71d4 |
| Joint=2343 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=0.9  | Z=-1 | SpecialJt=No | GUID=a13d1fdd-e210-4737-908f-55266f3e015d |
| Joint=2344 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=1    | Z=-1 | SpecialJt=No | GUID=a7d1a9ca-c6f7-43ca-9c76-87d71c887737 |
| Joint=2345 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=1.1  | Z=-1 | SpecialJt=No | GUID=22cc71fb-4685-4e64-b453-1351eac536b7 |
| Joint=2346 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=1.2  | Z=-1 | SpecialJt=No | GUID=e807af05-fdd0-4ed3-9e02-dab43ba22291 |
| Joint=2347 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=1.3  | Z=-1 | SpecialJt=No | GUID=ce54be8a-ff67-4463-bd5f-54c001cb2201 |
| Joint=2348 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=1.4  | Z=-1 | SpecialJt=No | GUID=3a5a5d21-352a-47ca-9c44-8f14763c78cf |
| Joint=2349 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=1.5  | Z=-1 | SpecialJt=No | GUID=49cd3a96-7439-4462-8b6a-dc94e9b384e1 |
| Joint=2350 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=1.6  | Z=-1 | SpecialJt=No | GUID=16c6ceea-ac84-4364-a4b3-2e73abdc52ec |
| Joint=2351 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=1.7  | Z=-1 | SpecialJt=No | GUID=f91eaeda-9870-4d22-a473-8d1cdad23da9 |
| Joint=2352 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=1.8  | Z=-1 | SpecialJt=No | GUID=11bcc4ff-2441-4201-bde2-7a51f6242be6 |
| Joint=2353 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=1.9  | Z=-1 | SpecialJt=No | GUID=93d65784-652f-46c5-b8d9-285501113883 |
| Joint=2354 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=2    | Z=-1 | SpecialJt=No | GUID=f71ff95e-23df-4411-a2f5-955f439f38d6 |
| Joint=2355 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=2.1  | Z=-1 | SpecialJt=No | GUID=ee276bff-7272-43f3-97a1-c99557ef31e4 |
| Joint=2356 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.05 | Y=2.2  | Z=-1 | SpecialJt=No | GUID=a8c1d68e-625e-422b-b651-1ee07a273b7b |
| Joint=2357 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.15 | Y=-2.2 | Z=-1 | SpecialJt=No | GUID=cd3bd03b-4a3b-484f-83a6-e7ba728a3012 |
| Joint=2358 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.15 | Y=-2.1 | Z=-1 | SpecialJt=No | GUID=636777d9-55e9-412a-9119-5b143a452606 |
| Joint=2359 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.15 | Y=-2   | Z=-1 | SpecialJt=No | GUID=62b2ea92-f091-4df3-b471-fa2ee02e36bc |
| Joint=2360 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.15 | Y=-1.9 | Z=-1 | SpecialJt=No | GUID=ac844284-0901-4171-b1cf-fdf890e11b7d |
| Joint=2361 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.15 | Y=-1.8 | Z=-1 | SpecialJt=No | GUID=6058a34d-085f-424c-b577-02e6900bd6fe |
| Joint=2362 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.15 | Y=-1.7 | Z=-1 | SpecialJt=No | GUID=c364eb71-1a50-4e12-8e48-518a70222451 |
| Joint=2363 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.15 | Y=-1.6 | Z=-1 | SpecialJt=No | GUID=17e9b886-1e02-4769-a024-fdf286d976b9 |
| Joint=2364 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.15 | Y=-1.5 | Z=-1 | SpecialJt=No | GUID=3174d9e5-0ef1-45b0-b0e0-0a220718c53d |
| Joint=2365 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.15 | Y=-1.4 | Z=-1 | SpecialJt=No | GUID=76401a38-2ce4-4aee-a86e-0fea308f4804 |
| Joint=2366 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.15 | Y=-1.3 | Z=-1 | SpecialJt=No | GUID=9c525809-ca7f-4720-b75b-9a6ffcd38ea  |
| Joint=2367 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.15 | Y=-1.2 | Z=-1 | SpecialJt=No | GUID=9646d8d9-9519-411b-bea4-548a90d16970 |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=2368 CoordSys=GLOBAL CoordType=Cartesian XorR=21.15 Y=-1.1 Z=-1 SpecialJt=No  
GUID=bef04a07-490b-4647-9870-d84844a09e66

Joint=2369 CoordSys=GLOBAL CoordType=Cartesian XorR=21.15 Y=-1 Z=-1 SpecialJt=No GUID=328ccf9f-  
298d-45d7-ae05-39cccd43c238

Joint=2370 CoordSys=GLOBAL CoordType=Cartesian XorR=21.15 Y=-0.9 Z=-1 SpecialJt=No  
GUID=d1afa3bd-3510-476a-bc47-f8c7727f3a11

Joint=2371 CoordSys=GLOBAL CoordType=Cartesian XorR=21.15 Y=-0.8 Z=-1 SpecialJt=No  
GUID=09acf4c0-b92e-4649-9d5b-dac193b3bb49

Joint=2372 CoordSys=GLOBAL CoordType=Cartesian XorR=21.15 Y=-0.7 Z=-1 SpecialJt=No  
GUID=4696afb4-5623-47e6-83e6-eccd3b524527

Joint=2373 CoordSys=GLOBAL CoordType=Cartesian XorR=21.15 Y=-0.6 Z=-1 SpecialJt=No  
GUID=bd5c2692-d6ab-4e71-856f-ba27d5d9830c

Joint=2374 CoordSys=GLOBAL CoordType=Cartesian XorR=21.15 Y=-0.5 Z=-1 SpecialJt=No  
GUID=960ec1a8-0f62-47cc-a4a1-ca97257427e9

Joint=2375 CoordSys=GLOBAL CoordType=Cartesian XorR=21.15 Y=-0.4 Z=-1 SpecialJt=No  
GUID=a4721e3c-a0a3-4d02-840c-061d2e269703

Joint=2376 CoordSys=GLOBAL CoordType=Cartesian XorR=21.15 Y=-0.3 Z=-1 SpecialJt=No  
GUID=4e252ea3-3055-4997-8728-c8f6251022a9

Joint=2377 CoordSys=GLOBAL CoordType=Cartesian XorR=21.15 Y=-0.2 Z=-1 SpecialJt=No  
GUID=0bafb6de-0f27-433c-80ec-c1015afa88e1

Joint=2378 CoordSys=GLOBAL CoordType=Cartesian XorR=21.15 Y=-0.099999999999999999 Z=-1  
SpecialJt=No GUID=99c257c3-52c4-40bb-9084-982cbaa630be

Joint=2379 CoordSys=GLOBAL CoordType=Cartesian XorR=21.15 Y=0 Z=-1 SpecialJt=No GUID=46a068aa-  
8757-4fa4-b41e-18cde47bf393

Joint=2380 CoordSys=GLOBAL CoordType=Cartesian XorR=21.15 Y=0.09999999999999998 Z=-1  
SpecialJt=No GUID=f4f5fb6f-0ceb-4b4f-8c42-9bb232d22f50

Joint=2381 CoordSys=GLOBAL CoordType=Cartesian XorR=21.15 Y=0.2 Z=-1 SpecialJt=No GUID=953f8f92-  
ffd8-4740-812c-576080d76dd4

Joint=2382 CoordSys=GLOBAL CoordType=Cartesian XorR=21.15 Y=0.3 Z=-1 SpecialJt=No  
GUID=8bd83d78-7751-4d66-95d3-c7f443dd20a6

Joint=2383 CoordSys=GLOBAL CoordType=Cartesian XorR=21.15 Y=0.4 Z=-1 SpecialJt=No  
GUID=666711e1-9c8e-4c2a-a1b9-45cd6f003cd1

Joint=2384 CoordSys=GLOBAL CoordType=Cartesian XorR=21.15 Y=0.5 Z=-1 SpecialJt=No  
GUID=4f8a39c8-daf3-4b3c-bbae-01274a1f6b05

Joint=2385 CoordSys=GLOBAL CoordType=Cartesian XorR=21.15 Y=0.6 Z=-1 SpecialJt=No  
GUID=6eb3b57b-f7dd-461f-a59a-d2d7fe3542c8

Joint=2386 CoordSys=GLOBAL CoordType=Cartesian XorR=21.15 Y=0.7 Z=-1 SpecialJt=No  
GUID=0d0e0235-d0f3-4d00-88a8-9dd1ba1e2ccd

Joint=2387 CoordSys=GLOBAL CoordType=Cartesian XorR=21.15 Y=0.8 Z=-1 SpecialJt=No  
GUID=65af1919-aef3-49cd-a994-c0a691344563

Joint=2388 CoordSys=GLOBAL CoordType=Cartesian XorR=21.15 Y=0.9 Z=-1 SpecialJt=No  
GUID=ade44dc7-1fde-446e-9db8-4cce178254ee

Joint=2389 CoordSys=GLOBAL CoordType=Cartesian XorR=21.15 Y=1 Z=-1 SpecialJt=No GUID=4aff9017-  
0320-4e45-8324-04dbddf4480a

Joint=2390 CoordSys=GLOBAL CoordType=Cartesian XorR=21.15 Y=1.1 Z=-1 SpecialJt=No  
GUID=f560baba-b75f-4281-aba5-09678f23af81

Joint=2391 CoordSys=GLOBAL CoordType=Cartesian XorR=21.15 Y=1.2 Z=-1 SpecialJt=No  
GUID=d8c529ce-f7ed-4290-ab65-4a497073485e

Joint=2392 CoordSys=GLOBAL CoordType=Cartesian XorR=21.15 Y=1.3 Z=-1 SpecialJt=No  
GUID=d7825e6c-09ee-4e6f-a71e-2fcec4f88212

Joint=2393 CoordSys=GLOBAL CoordType=Cartesian XorR=21.15 Y=1.4 Z=-1 SpecialJt=No  
GUID=1b3e46e9-7551-4463-b700-25a5facffa80

Joint=2394 CoordSys=GLOBAL CoordType=Cartesian XorR=21.15 Y=1.5 Z=-1 SpecialJt=No  
GUID=a17a1bd3-d747-4257-8906-80c7f5abeeca

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                           |                 |                     |            |        |      |              |
|-------------------------------------------|-----------------|---------------------|------------|--------|------|--------------|
| Joint=2395                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.15 | Y=1.6  | Z=-1 | SpecialJt=No |
| GUID=c1ab661d-14f3-452e-8bd3-9b74ccd7e142 |                 |                     |            |        |      |              |
| Joint=2396                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.15 | Y=1.7  | Z=-1 | SpecialJt=No |
| GUID=8f20b408-5ae0-4771-9600-de67a2aeb582 |                 |                     |            |        |      |              |
| Joint=2397                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.15 | Y=1.8  | Z=-1 | SpecialJt=No |
| GUID=788b39f8-7fa5-428e-b698-bd2b119ea315 |                 |                     |            |        |      |              |
| Joint=2398                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.15 | Y=1.9  | Z=-1 | SpecialJt=No |
| GUID=43f7586a-329f-442b-aeeb-f4fea372f0c5 |                 |                     |            |        |      |              |
| Joint=2399                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.15 | Y=2    | Z=-1 | SpecialJt=No |
| GUID=f08a0481-f674-4f96-a91b-2c4ff1f1220e |                 |                     |            |        |      |              |
| Joint=2400                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.15 | Y=2.1  | Z=-1 | SpecialJt=No |
| GUID=1b3c1051-5f27-42ef-a105-0924eb161b9a |                 |                     |            |        |      |              |
| Joint=2401                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.15 | Y=2.2  | Z=-1 | SpecialJt=No |
| GUID=77358daf-a24e-41c5-95c1-6ddd9d99f144 |                 |                     |            |        |      |              |
| Joint=2402                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-2.2 | Z=-1 | SpecialJt=No |
| GUID=50ea4879-1256-4637-8e47-648f34983ae3 |                 |                     |            |        |      |              |
| Joint=2403                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-2.1 | Z=-1 | SpecialJt=No |
| GUID=9cad4093-a93d-480f-b4f2-4d084ebb24e5 |                 |                     |            |        |      |              |
| Joint=2404                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-2   | Z=-1 | SpecialJt=No |
| GUID=4886fac3-b511-4c01-820d-5e96f80f7e3d |                 |                     |            |        |      |              |
| Joint=2405                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-1.9 | Z=-1 | SpecialJt=No |
| GUID=2131d220-331a-4e06-b5e9-218e529278bc |                 |                     |            |        |      |              |
| Joint=2406                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-1.8 | Z=-1 | SpecialJt=No |
| GUID=6ad32f28-58d4-4db2-88d2-3d10184cb682 |                 |                     |            |        |      |              |
| Joint=2407                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-1.7 | Z=-1 | SpecialJt=No |
| GUID=83ed0b97-3962-4379-bf4c-1df7dfa80e20 |                 |                     |            |        |      |              |
| Joint=2408                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-1.6 | Z=-1 | SpecialJt=No |
| GUID=5143935e-9c79-4d5a-8e3e-201398b0cd5d |                 |                     |            |        |      |              |
| Joint=2409                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-1.5 | Z=-1 | SpecialJt=No |
| GUID=9118b7f4-d17b-44bd-bd03-ff92e4d07810 |                 |                     |            |        |      |              |
| Joint=2410                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-1.4 | Z=-1 | SpecialJt=No |
| GUID=4edb1d54-97f1-42df-8ea5-62aaa3def2c4 |                 |                     |            |        |      |              |
| Joint=2411                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-1.3 | Z=-1 | SpecialJt=No |
| GUID=4e5d2e67-83ed-4331-aebc-0a72a0018134 |                 |                     |            |        |      |              |
| Joint=2412                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-1.2 | Z=-1 | SpecialJt=No |
| GUID=30b16873-17a2-4a08-877d-1a7ee584077a |                 |                     |            |        |      |              |
| Joint=2413                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-1.1 | Z=-1 | SpecialJt=No |
| GUID=c1b3cb32-77c1-4edf-a0fa-01259a13505f |                 |                     |            |        |      |              |
| Joint=2414                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-1   | Z=-1 | SpecialJt=No |
| GUID=35efd269-d750-40da-980f-d5cdfa6ee10f |                 |                     |            |        |      |              |
| Joint=2415                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-0.9 | Z=-1 | SpecialJt=No |
| GUID=f84be6d9-bd9e-41cd-8ba7-5108f48c67b7 |                 |                     |            |        |      |              |
| Joint=2416                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-0.8 | Z=-1 | SpecialJt=No |
| GUID=9d2d3353-8fe2-4da1-929c-11adc5c1cd0e |                 |                     |            |        |      |              |
| Joint=2417                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-0.7 | Z=-1 | SpecialJt=No |
| GUID=49b5809c-993d-4b01-b58b-b02324fdcaf9 |                 |                     |            |        |      |              |
| Joint=2418                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-0.6 | Z=-1 | SpecialJt=No |
| GUID=b885c078-538e-4266-9d4d-ee97b9e0d879 |                 |                     |            |        |      |              |
| Joint=2419                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-0.5 | Z=-1 | SpecialJt=No |
| GUID=ff44d956-7f08-4dd9-aebf-b301e97c59e3 |                 |                     |            |        |      |              |
| Joint=2420                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-0.4 | Z=-1 | SpecialJt=No |
| GUID=954ffdb6-14c9-469b-8758-5fb1b5cdd73  |                 |                     |            |        |      |              |
| Joint=2421                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-0.3 | Z=-1 | SpecialJt=No |
| GUID=d267b9c2-3b0a-4f22-8110-051c596ec230 |                 |                     |            |        |      |              |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|            |                 |                     |            |                        |      |              |                                           |
|------------|-----------------|---------------------|------------|------------------------|------|--------------|-------------------------------------------|
| Joint=2422 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-0.2                 | Z=-1 | SpecialJt=No | GUID=f2e6791b-2be1-43fe-8881-f2ff9daddf4b |
| Joint=2423 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-0.1                 | Z=-1 | SpecialJt=No | GUID=81f72be8-2973-4ae3-8467-ba7cf4843677 |
| Joint=2424 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=1.11022302462516E-16 | Z=-1 | SpecialJt=No | GUID=f8f5bdb4-6b59-490e-bf2f-0b909cec52db |
| Joint=2425 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=0.0999999999999999   | Z=-1 | SpecialJt=No | GUID=0194c955-905d-47d2-a0db-994831bfbf48 |
| Joint=2426 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=0.2                  | Z=-1 | SpecialJt=No | GUID=6245d2e0-d3ec-4405-bd92-8b6e63235734 |
| Joint=2427 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=0.3                  | Z=-1 | SpecialJt=No | GUID=cf663b82-0b37-4c4c-929a-93137663ebc5 |
| Joint=2428 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=0.4                  | Z=-1 | SpecialJt=No | GUID=d6bc76f1-9d77-421d-8bfc-81ea58c00412 |
| Joint=2429 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=0.5                  | Z=-1 | SpecialJt=No | GUID=4705e02c-2c02-4bb6-8572-ee4b460316a4 |
| Joint=2430 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=0.6                  | Z=-1 | SpecialJt=No | GUID=d35d9cf6-8bd4-4060-a0ec-e1463462b011 |
| Joint=2431 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=0.7                  | Z=-1 | SpecialJt=No | GUID=2c76231b-f48d-44c3-bc94-af393a8d872b |
| Joint=2432 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=0.8                  | Z=-1 | SpecialJt=No | GUID=3fcbf199-535e-4a34-9718-dc5876f95db5 |
| Joint=2433 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=0.9                  | Z=-1 | SpecialJt=No | GUID=4b2bdaa3-b31c-471e-812c-879151a18c08 |
| Joint=2434 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=1                    | Z=-1 | SpecialJt=No | GUID=fc720735-132a-4a51-a50c-5c75696cf920 |
| Joint=2435 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=1.1                  | Z=-1 | SpecialJt=No | GUID=345e7d06-9752-4827-af7a-93a379d59a90 |
| Joint=2436 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=1.2                  | Z=-1 | SpecialJt=No | GUID=51812a8a-03af-4884-a256-483607589ff4 |
| Joint=2437 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=1.3                  | Z=-1 | SpecialJt=No | GUID=7b06a01c-df8d-4f68-9092-5eb66caeedf1 |
| Joint=2438 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=1.4                  | Z=-1 | SpecialJt=No | GUID=f97d8cb5-303f-495f-8ccf-ccfa045db15f |
| Joint=2439 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=1.5                  | Z=-1 | SpecialJt=No | GUID=169afc0b-9ac0-4e68-b231-381f1bd791b9 |
| Joint=2440 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=1.6                  | Z=-1 | SpecialJt=No | GUID=7a68d6d3-d8fb-4b92-85e5-ca170c7ff43d |
| Joint=2441 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=1.7                  | Z=-1 | SpecialJt=No | GUID=70418d11-c522-4a60-a9e5-268bfb804346 |
| Joint=2442 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=1.8                  | Z=-1 | SpecialJt=No | GUID=96e27057-8f69-4666-91ee-68f2b6a9e7f0 |
| Joint=2443 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=1.9                  | Z=-1 | SpecialJt=No | GUID=fdbcbf0c-e60b-41f8-b8ed-8fd40e1a7aa8 |
| Joint=2444 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=2                    | Z=-1 | SpecialJt=No | GUID=73e8f9be-ad9e-412a-87ae-73d657289198 |
| Joint=2445 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=2.1                  | Z=-1 | SpecialJt=No | GUID=bd104b0f-977e-4195-a4a7-305baa0333b4 |
| Joint=2446 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=2.2                  | Z=-1 | SpecialJt=No | GUID=8587095b-f0b9-490f-bcf4-c7a979e3e0b5 |
| Joint=2447 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.35 | Y=-2.2                 | Z=-1 | SpecialJt=No | GUID=342531cf-716a-463e-9554-daab0c3f229b |
| Joint=2448 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.35 | Y=-2.1                 | Z=-1 | SpecialJt=No | GUID=e4f2fa03-76d2-4cb7-b85a-f97750e97c44 |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=2449 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=-2 Z=-1 SpecialJt=No GUID=7c07354c-3ff8-4f25-a6a7-058503f8346c

Joint=2450 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=-1.9 Z=-1 SpecialJt=No GUID=4aa06636-537f-4797-a69d-4fa12df0e224

Joint=2451 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=-1.8 Z=-1 SpecialJt=No GUID=48049d1e-0e04-4412-b3a5-d4d99c648df6

Joint=2452 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=-1.7 Z=-1 SpecialJt=No GUID=1f01b878-5952-4b10-9015-d8158c886a4d

Joint=2453 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=-1.6 Z=-1 SpecialJt=No GUID=e5f6c9cd-1b34-4ea3-96a2-220445cacde9

Joint=2454 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=-1.5 Z=-1 SpecialJt=No GUID=83f19c19-d6b3-4b1f-98de-abaae3f5fa60

Joint=2455 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=-1.4 Z=-1 SpecialJt=No GUID=0263c2f3-6f11-4076-af45-54ffd32c2f87

Joint=2456 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=-1.3 Z=-1 SpecialJt=No GUID=eb29caff-7c35-41c1-a818-7661ad113662

Joint=2457 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=-1.2 Z=-1 SpecialJt=No GUID=60e82dd1-91b4-4990-a525-e673d5e30c51

Joint=2458 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=-1.1 Z=-1 SpecialJt=No GUID=8dfe3c95-2c13-49fd-be47-ecb03c733ddc

Joint=2459 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=-1 Z=-1 SpecialJt=No GUID=65b2f32e-c0ff-43ab-bdf3-19439b73d422

Joint=2460 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=-0.9 Z=-1 SpecialJt=No GUID=8d34f9fc-1bc0-4165-8b8b-538622f61a85

Joint=2461 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=-0.8 Z=-1 SpecialJt=No GUID=ae2f616d-7556-4f88-9895-bcd20d4a261b

Joint=2462 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=-0.7 Z=-1 SpecialJt=No GUID=00a4d059-0cc8-4b98-9f0d-1df930229f50

Joint=2463 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=-0.6 Z=-1 SpecialJt=No GUID=121e94a6-ee06-43af-96ee-1719fcf22cc1

Joint=2464 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=-0.5 Z=-1 SpecialJt=No GUID=b54f4a95-79f0-461f-8d6f-6cf1618593c4

Joint=2465 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=-0.4 Z=-1 SpecialJt=No GUID=cd341e27-5dbc-4fa1-a227-47adf6774a5f

Joint=2466 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=-0.3 Z=-1 SpecialJt=No GUID=4927aeab-81d3-475e-84fb-e8f3c4b85474

Joint=2467 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=-0.2 Z=-1 SpecialJt=No GUID=ead4d6fe-c3cf-49af-a9da-07c8077d2c06

Joint=2468 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=-0.09999999999999999 Z=-1 SpecialJt=No GUID=c85e8c63-3285-45c9-81e7-960a9b592103

Joint=2469 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=-1.11022302462516E-16 Z=-1 SpecialJt=No GUID=aa53c687-a4ad-415c-a239-c236d31f306e

Joint=2470 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=0.1 Z=-1 SpecialJt=No GUID=08163edd-20b5-4f0b-af18-f71d62bc8373

Joint=2471 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=0.2 Z=-1 SpecialJt=No GUID=daa9f486-36c3-4182-982f-cfcc37f54c19

Joint=2472 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=0.3 Z=-1 SpecialJt=No GUID=87cf9658-17ee-408c-a0ef-d11d8e46180d

Joint=2473 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=0.4 Z=-1 SpecialJt=No GUID=7d593deb-cdff-4295-9a9a-2d84113226e8

Joint=2474 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=0.5 Z=-1 SpecialJt=No GUID=810d8aa9-e95e-4d4b-aa5d-dfc936ad0f92

Joint=2475 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=0.6 Z=-1 SpecialJt=No GUID=8be35fc2-9169-4bdd-8a96-e7b493897612



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=2476 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=0.7 Z=-1 SpecialJt=No  
GUID=7c8f90de-1dd9-4a56-a237-862b22836aa3

Joint=2477 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=0.8 Z=-1 SpecialJt=No  
GUID=20ae1c3e-f4ac-4f72-846d-1d84bd2c89d8

Joint=2478 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=0.9 Z=-1 SpecialJt=No  
GUID=1e7a5bd3-73c8-4594-879b-359a5a05d640

Joint=2479 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=1 Z=-1 SpecialJt=No GUID=ecdd4dc5-  
cf70-4c09-92bf-23786abf460e

Joint=2480 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=1.1 Z=-1 SpecialJt=No GUID=f879827f-  
28ea-4e60-9daa-9c13579a44d1

Joint=2481 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=1.2 Z=-1 SpecialJt=No  
GUID=8765c950-08ae-4ed1-8169-dc9868db264e

Joint=2482 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=1.3 Z=-1 SpecialJt=No  
GUID=4dfd057d-b3b2-48fb-9eef-2554e6e6f76c

Joint=2483 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=1.4 Z=-1 SpecialJt=No  
GUID=71012827-01ab-49ed-9370-41cba9607f78

Joint=2484 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=1.5 Z=-1 SpecialJt=No  
GUID=ac0fb1b8-521e-4b3d-bad3-ad2ea63e40d5

Joint=2485 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=1.6 Z=-1 SpecialJt=No  
GUID=14c92ed1-c20c-4d75-b3ad-827dc67661a8

Joint=2486 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=1.7 Z=-1 SpecialJt=No GUID=c01f84af-  
e1da-41b3-a18e-3a7fba0210e5

Joint=2487 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=1.8 Z=-1 SpecialJt=No  
GUID=4b3d0243-6d07-4359-80e5-d14d793845ad

Joint=2488 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=1.9 Z=-1 SpecialJt=No  
GUID=ed24dc03-6c67-4ff3-943a-0f5f78fa7f39

Joint=2489 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=2 Z=-1 SpecialJt=No GUID=294d2bd5-  
a8d7-43b3-a693-d629948f3ea3

Joint=2490 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=2.1 Z=-1 SpecialJt=No  
GUID=de05f0c6-8aef-4386-9d72-1358f4f14da0

Joint=2491 CoordSys=GLOBAL CoordType=Cartesian XorR=21.35 Y=2.2 Z=-1 SpecialJt=No GUID=f57f4fdf-  
2d30-4b42-837b-b3ca7e4adcb7

Joint=2492 CoordSys=GLOBAL CoordType=Cartesian XorR=21.45 Y=-2.2 Z=-1 SpecialJt=No  
GUID=92b91147-ff4a-4880-8735-fa2951bfcde8

Joint=2493 CoordSys=GLOBAL CoordType=Cartesian XorR=21.45 Y=-2.1 Z=-1 SpecialJt=No  
GUID=c816004f-c302-4734-87f7-5d1f22ee6c4f

Joint=2494 CoordSys=GLOBAL CoordType=Cartesian XorR=21.45 Y=-2 Z=-1 SpecialJt=No GUID=2b5f2f26-  
122b-4f37-b95c-238e817d72eb

Joint=2495 CoordSys=GLOBAL CoordType=Cartesian XorR=21.45 Y=-1.9 Z=-1 SpecialJt=No  
GUID=6717805a-596a-4d9c-8da0-1a0d66e2cadd

Joint=2496 CoordSys=GLOBAL CoordType=Cartesian XorR=21.45 Y=-1.8 Z=-1 SpecialJt=No  
GUID=4bd85879-b569-4ebb-9f23-1b9c25899f67

Joint=2497 CoordSys=GLOBAL CoordType=Cartesian XorR=21.45 Y=-1.7 Z=-1 SpecialJt=No  
GUID=40e0f535-ceaa-4f6c-a9ac-b0f864d68f51

Joint=2498 CoordSys=GLOBAL CoordType=Cartesian XorR=21.45 Y=-1.6 Z=-1 SpecialJt=No  
GUID=a62b3a18-e38f-4f80-ac6a-8cd24f87d6e3

Joint=2499 CoordSys=GLOBAL CoordType=Cartesian XorR=21.45 Y=-1.5 Z=-1 SpecialJt=No  
GUID=f81122e2-b99b-4b48-a9be-9e0c2b80c903

Joint=2500 CoordSys=GLOBAL CoordType=Cartesian XorR=21.45 Y=-1.4 Z=-1 SpecialJt=No  
GUID=677418df-3cf3-4db6-89f1-b637e58ce99b

Joint=2501 CoordSys=GLOBAL CoordType=Cartesian XorR=21.45 Y=-1.3 Z=-1 SpecialJt=No  
GUID=78f9925e-3458-4aac-8b45-26169c80e995

Joint=2502 CoordSys=GLOBAL CoordType=Cartesian XorR=21.45 Y=-1.2 Z=-1 SpecialJt=No  
GUID=3f93b37f-073f-41ac-a211-447beab70a2b

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|            |                 |                     |            |        |      |              |                                           |
|------------|-----------------|---------------------|------------|--------|------|--------------|-------------------------------------------|
| Joint=2503 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=-1.1 | Z=-1 | SpecialJt=No | GUID=ad604a5b-1807-42c2-9558-d80ed1f9ca75 |
| Joint=2504 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=-1   | Z=-1 | SpecialJt=No | GUID=e39affdf-7aee-453a-80e7-795227a41f12 |
| Joint=2505 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=-0.9 | Z=-1 | SpecialJt=No | GUID=cf4b465e-db99-420e-8676-83ed416f3a36 |
| Joint=2506 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=-0.8 | Z=-1 | SpecialJt=No | GUID=fad1ef05-7858-4a83-8d0d-ad1c25e40f5a |
| Joint=2507 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=-0.7 | Z=-1 | SpecialJt=No | GUID=e1b0eee4-a819-43d2-9a8e-9dfa9c6322fe |
| Joint=2508 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=-0.6 | Z=-1 | SpecialJt=No | GUID=0c31b89d-74db-4686-9de8-a0e8b9a2235f |
| Joint=2509 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=-0.5 | Z=-1 | SpecialJt=No | GUID=e9894ffc-499f-4171-bdb0-1f6c0b75c5b6 |
| Joint=2510 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=-0.4 | Z=-1 | SpecialJt=No | GUID=15e864df-614e-4196-bb3f-97a3cff49140 |
| Joint=2511 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=-0.3 | Z=-1 | SpecialJt=No | GUID=4a5711a0-8601-4eec-a526-263b306be4fd |
| Joint=2512 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=-0.2 | Z=-1 | SpecialJt=No | GUID=9f3b6cd6-ddb8-4b89-9a2d-7cfeb0e600b9 |
| Joint=2513 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=-0.1 | Z=-1 | SpecialJt=No | GUID=70316fbd-7720-4ca8-b6e3-2198f79b9eb9 |
| Joint=2514 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=0    | Z=-1 | SpecialJt=No | GUID=e8be16de-b97c-4c35-ba4c-3146d6ab8cfb |
| Joint=2515 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=0.1  | Z=-1 | SpecialJt=No | GUID=9cec59c2-aec3-4923-9736-dbd05ef75f   |
| Joint=2516 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=0.2  | Z=-1 | SpecialJt=No | GUID=00a9d43b-240d-4e45-a188-ae7f56c8ed94 |
| Joint=2517 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=0.3  | Z=-1 | SpecialJt=No | GUID=fbd9a959-825b-47f3-becc-f86e43d9dd08 |
| Joint=2518 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=0.4  | Z=-1 | SpecialJt=No | GUID=a6288d47-8ab6-4a1c-8b3e-2b55aec3cb0  |
| Joint=2519 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=0.5  | Z=-1 | SpecialJt=No | GUID=ea49064f-9628-4c8e-8fea-01a7803c406a |
| Joint=2520 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=0.6  | Z=-1 | SpecialJt=No | GUID=0ef7152b-845a-4886-8bff-9c9428295e76 |
| Joint=2521 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=0.7  | Z=-1 | SpecialJt=No | GUID=06c1c2a6-8e07-47ba-8061-c3a12de9b20c |
| Joint=2522 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=0.8  | Z=-1 | SpecialJt=No | GUID=1a796cd2-95eb-4011-be78-c35e3c4e2b89 |
| Joint=2523 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=0.9  | Z=-1 | SpecialJt=No | GUID=d1463db2-0cb8-4b19-b19a-c9d8b167cef8 |
| Joint=2524 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=1    | Z=-1 | SpecialJt=No | GUID=e9e0ea2a-d2d6-4bb3-90a4-31d54ff2ae94 |
| Joint=2525 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=1.1  | Z=-1 | SpecialJt=No | GUID=ad772bac-38de-4fc0-a35b-bb0b871d0f97 |
| Joint=2526 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=1.2  | Z=-1 | SpecialJt=No | GUID=19b56336-27e3-46f1-b31e-f065e5e8ce97 |
| Joint=2527 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=1.3  | Z=-1 | SpecialJt=No | GUID=13ddd693-5933-49de-927d-19dd063f7973 |
| Joint=2528 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=1.4  | Z=-1 | SpecialJt=No | GUID=e181faa6-5213-49d2-bc09-8d3f70b2c7a5 |
| Joint=2529 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=1.5  | Z=-1 | SpecialJt=No | GUID=031e6fe1-677c-42f8-8096-6b790f0732d5 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|            |                 |                     |            |        |      |              |                                           |
|------------|-----------------|---------------------|------------|--------|------|--------------|-------------------------------------------|
| Joint=2530 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=1.6  | Z=-1 | SpecialJt=No | GUID=687d91fa-6314-476b-ad3a-e03ee1f71996 |
| Joint=2531 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=1.7  | Z=-1 | SpecialJt=No | GUID=b53841ea-c44b-492f-b2a3-b8715e7a65e6 |
| Joint=2532 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=1.8  | Z=-1 | SpecialJt=No | GUID=3e7bc0db-bd34-4587-bb2e-b377f6ede1ea |
| Joint=2533 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=1.9  | Z=-1 | SpecialJt=No | GUID=71ef816a-3acb-4628-a2a4-fb765695c923 |
| Joint=2534 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=2    | Z=-1 | SpecialJt=No | GUID=9f912f11-a7a1-4bf3-96da-7e1468c603c8 |
| Joint=2535 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=2.1  | Z=-1 | SpecialJt=No | GUID=06232b38-466e-4988-935f-0e010cebbe97 |
| Joint=2536 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.45 | Y=2.2  | Z=-1 | SpecialJt=No | GUID=c5bf7262-9243-4bc6-b740-9b6df2a9cc91 |
| Joint=2537 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.55 | Y=-2.2 | Z=-1 | SpecialJt=No | GUID=e993ee9c-65f7-42f0-b071-c3b145536111 |
| Joint=2538 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.55 | Y=-2.1 | Z=-1 | SpecialJt=No | GUID=d8156146-3840-4fa7-9462-fb27171563c7 |
| Joint=2539 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.55 | Y=-2   | Z=-1 | SpecialJt=No | GUID=f81b65c0-2a8e-4c44-8997-bbcdc9d28ce6 |
| Joint=2540 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.55 | Y=-1.9 | Z=-1 | SpecialJt=No | GUID=a4ae244a-b0b5-4f6d-9547-02a36d3b8adf |
| Joint=2541 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.55 | Y=-1.8 | Z=-1 | SpecialJt=No | GUID=63c4b520-101e-4014-b7f2-e8d1ae9abe80 |
| Joint=2542 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.55 | Y=-1.7 | Z=-1 | SpecialJt=No | GUID=f2164580-3317-487e-94af-08cd39cea9c6 |
| Joint=2543 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.55 | Y=-1.6 | Z=-1 | SpecialJt=No | GUID=93e3a2a2-4b66-443d-91e1-0ab6fdd7cf88 |
| Joint=2544 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.55 | Y=-1.5 | Z=-1 | SpecialJt=No | GUID=946dabb3-50b9-4cef-aacc-51a895709243 |
| Joint=2545 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.55 | Y=-1.4 | Z=-1 | SpecialJt=No | GUID=d0789de8-a4f6-46e6-b7c8-b4a5f8a49805 |
| Joint=2546 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.55 | Y=-1.3 | Z=-1 | SpecialJt=No | GUID=11170c75-3178-477e-9589-baca745c0f85 |
| Joint=2547 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.55 | Y=-1.2 | Z=-1 | SpecialJt=No | GUID=8dc2f5e3-e5fa-4c14-b9ef-ea8536c92bc2 |
| Joint=2548 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.55 | Y=-1.1 | Z=-1 | SpecialJt=No | GUID=ef4b2bf4-df40-40dc-9e3f-1f27ddf3c343 |
| Joint=2549 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.55 | Y=-1   | Z=-1 | SpecialJt=No | GUID=62981ffa-9470-4258-8f1e-ea80f385cb43 |
| Joint=2550 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.55 | Y=-0.9 | Z=-1 | SpecialJt=No | GUID=d2a7bdb1-ae98-4b5a-b893-e3ad2c3673fa |
| Joint=2551 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.55 | Y=-0.8 | Z=-1 | SpecialJt=No | GUID=f5b503ab-609e-406a-be95-00e35b84627c |
| Joint=2552 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.55 | Y=-0.7 | Z=-1 | SpecialJt=No | GUID=3f87ca47-2d07-46cd-ba24-ba11b5a4a89c |
| Joint=2553 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.55 | Y=-0.6 | Z=-1 | SpecialJt=No | GUID=df65b2b6-5fc8-4155-baa2-0520b230f6c2 |
| Joint=2554 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.55 | Y=-0.5 | Z=-1 | SpecialJt=No | GUID=dc319d4f-297a-4fbc-af1b-69bd49ddbff1 |
| Joint=2555 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.55 | Y=-0.4 | Z=-1 | SpecialJt=No | GUID=16f0210d-4d0e-40ca-92f3-0e77cb5ebdd7 |
| Joint=2556 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.55 | Y=-0.3 | Z=-1 | SpecialJt=No | GUID=cc836f6c-9a6e-4afa-b1bf-04e2ed65ff70 |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=2557 CoordSys=GLOBAL CoordType=Cartesian XorR=21.55 Y=-0.2 Z=-1 SpecialJt=No  
GUID=566ea895-82dd-45be-b93b-006f1288c9fb

Joint=2558 CoordSys=GLOBAL CoordType=Cartesian XorR=21.55 Y=-0.09999999999999998 Z=-1  
SpecialJt=No GUID=f9ec1c9f-d2fb-4482-b239-b7d8e9a781f6

Joint=2559 CoordSys=GLOBAL CoordType=Cartesian XorR=21.55 Y=0 Z=-1 SpecialJt=No GUID=0c365f17-  
cd17-4c77-bc64-bf80d0ac30de

Joint=2560 CoordSys=GLOBAL CoordType=Cartesian XorR=21.55 Y=0.09999999999999998 Z=-1  
SpecialJt=No GUID=18563eac-6622-4bd9-b47d-0111b2d7f710

Joint=2561 CoordSys=GLOBAL CoordType=Cartesian XorR=21.55 Y=0.2 Z=-1 SpecialJt=No  
GUID=34b54261-aad0-4c37-ac23-b94007e4e8e9

Joint=2562 CoordSys=GLOBAL CoordType=Cartesian XorR=21.55 Y=0.3 Z=-1 SpecialJt=No GUID=10f78f2b-  
a886-4b1f-bf27-0c8a3841b433

Joint=2563 CoordSys=GLOBAL CoordType=Cartesian XorR=21.55 Y=0.4 Z=-1 SpecialJt=No GUID=8fb13f2a-  
1d84-44ab-8e38-663f12302010

Joint=2564 CoordSys=GLOBAL CoordType=Cartesian XorR=21.55 Y=0.5 Z=-1 SpecialJt=No  
GUID=0300707e-1438-4eaa-ad51-6b26304aac55

Joint=2565 CoordSys=GLOBAL CoordType=Cartesian XorR=21.55 Y=0.6 Z=-1 SpecialJt=No  
GUID=0432d1db-e993-40ba-8508-b97b2b48b758

Joint=2566 CoordSys=GLOBAL CoordType=Cartesian XorR=21.55 Y=0.7 Z=-1 SpecialJt=No  
GUID=c3c7053a-73f3-490e-828f-8231e0430ca3

Joint=2567 CoordSys=GLOBAL CoordType=Cartesian XorR=21.55 Y=0.8 Z=-1 SpecialJt=No  
GUID=5a18ed14-36a9-4fb0-a59d-fc96055fe4bd

Joint=2568 CoordSys=GLOBAL CoordType=Cartesian XorR=21.55 Y=0.9 Z=-1 SpecialJt=No  
GUID=0322735a-7231-4201-8e9f-51e473f9a863

Joint=2569 CoordSys=GLOBAL CoordType=Cartesian XorR=21.55 Y=1 Z=-1 SpecialJt=No GUID=475f1eca-  
c513-45eb-a166-638ce939118f

Joint=2570 CoordSys=GLOBAL CoordType=Cartesian XorR=21.55 Y=1.1 Z=-1 SpecialJt=No  
GUID=c3062d76-fa15-4fe9-9b5d-5e7b13586da6

Joint=2571 CoordSys=GLOBAL CoordType=Cartesian XorR=21.55 Y=1.2 Z=-1 SpecialJt=No  
GUID=8c9e0076-9f8f-4ec2-bb5e-f97234af4669

Joint=2572 CoordSys=GLOBAL CoordType=Cartesian XorR=21.55 Y=1.3 Z=-1 SpecialJt=No  
GUID=619cf8dd-4954-45b7-bca4-54e6d3d23c40

Joint=2573 CoordSys=GLOBAL CoordType=Cartesian XorR=21.55 Y=1.4 Z=-1 SpecialJt=No  
GUID=1a8e2c28-535f-4d15-b467-aeae6667eaa8

Joint=2574 CoordSys=GLOBAL CoordType=Cartesian XorR=21.55 Y=1.5 Z=-1 SpecialJt=No  
GUID=e97012c4-5ec2-438e-906d-de71ff9216b6

Joint=2575 CoordSys=GLOBAL CoordType=Cartesian XorR=21.55 Y=1.6 Z=-1 SpecialJt=No  
GUID=e97ea5c2-4fa2-433f-853d-e82a91921163

Joint=2576 CoordSys=GLOBAL CoordType=Cartesian XorR=21.55 Y=1.7 Z=-1 SpecialJt=No  
GUID=a0101e1a-287f-4fb8-8af0-1d5ce795f2dd

Joint=2577 CoordSys=GLOBAL CoordType=Cartesian XorR=21.55 Y=1.8 Z=-1 SpecialJt=No  
GUID=f4d4d3c4-d88d-4945-bb51-c1e680a75a72

Joint=2578 CoordSys=GLOBAL CoordType=Cartesian XorR=21.55 Y=1.9 Z=-1 SpecialJt=No  
GUID=6a8ad9c9-41f2-4167-b0a3-dabdafff21de

Joint=2579 CoordSys=GLOBAL CoordType=Cartesian XorR=21.55 Y=2 Z=-1 SpecialJt=No GUID=be466ab2-  
fe2c-4733-8786-4d977a615580

Joint=2580 CoordSys=GLOBAL CoordType=Cartesian XorR=21.55 Y=2.1 Z=-1 SpecialJt=No  
GUID=af1bbdae-ef86-4e73-8ce6-3b109bf64a46

Joint=2581 CoordSys=GLOBAL CoordType=Cartesian XorR=21.55 Y=2.2 Z=-1 SpecialJt=No  
GUID=3e1a4b31-d549-4736-b14d-e8daec61d44b

Joint=2582 CoordSys=GLOBAL CoordType=Cartesian XorR=21.65 Y=-2.2 Z=-1 SpecialJt=No  
GUID=9b333274-2348-4e7a-80f9-d70f5fad99de

Joint=2583 CoordSys=GLOBAL CoordType=Cartesian XorR=21.65 Y=-2.1 Z=-1 SpecialJt=No  
GUID=5a6f71da-23f5-4ed7-9de1-35105cfc19fb



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=2584 CoordSys=GLOBAL CoordType=Cartesian XorR=21.65 Y=-2 Z=-1 SpecialJt=No GUID=bbf5dfb5-692b-42d6-a3b7-b68f5978e7dc

Joint=2585 CoordSys=GLOBAL CoordType=Cartesian XorR=21.65 Y=-1.9 Z=-1 SpecialJt=No GUID=97a360b3-ac32-4adf-a0f8-28a667419c9e

Joint=2586 CoordSys=GLOBAL CoordType=Cartesian XorR=21.65 Y=-1.8 Z=-1 SpecialJt=No GUID=0bda3e83-569c-4a94-a709-5cfeaeaa0a33

Joint=2587 CoordSys=GLOBAL CoordType=Cartesian XorR=21.65 Y=-1.7 Z=-1 SpecialJt=No GUID=af38c1fc-c560-4dde-bdf0-25f6f1359950

Joint=2588 CoordSys=GLOBAL CoordType=Cartesian XorR=21.65 Y=-1.6 Z=-1 SpecialJt=No GUID=b88115ee-9686-4769-9ac9-2b2b0b925f6f

Joint=2589 CoordSys=GLOBAL CoordType=Cartesian XorR=21.65 Y=-1.5 Z=-1 SpecialJt=No GUID=e3677f8c-4d02-491b-b205-9a78cd9b3c2b

Joint=2590 CoordSys=GLOBAL CoordType=Cartesian XorR=21.65 Y=-1.4 Z=-1 SpecialJt=No GUID=452c54aa-cb18-41bb-bc1d-8a3204f03ba2

Joint=2591 CoordSys=GLOBAL CoordType=Cartesian XorR=21.65 Y=-1.3 Z=-1 SpecialJt=No GUID=0cf8cc9c-cfde-4d2a-ad29-a5e07cd3021f

Joint=2592 CoordSys=GLOBAL CoordType=Cartesian XorR=21.65 Y=-1.2 Z=-1 SpecialJt=No GUID=8de661d5-8821-4112-9451-91933f296eba

Joint=2593 CoordSys=GLOBAL CoordType=Cartesian XorR=21.65 Y=-1.1 Z=-1 SpecialJt=No GUID=c75834e1-97b9-46b9-a4a3-11c11dc61f84

Joint=2594 CoordSys=GLOBAL CoordType=Cartesian XorR=21.65 Y=-1 Z=-1 SpecialJt=No GUID=c2e52519-f53f-4721-880b-61988bae3c63

Joint=2595 CoordSys=GLOBAL CoordType=Cartesian XorR=21.65 Y=-0.9 Z=-1 SpecialJt=No GUID=3b4d9906-ee73-48d5-ab22-94f9eb9dd434

Joint=2596 CoordSys=GLOBAL CoordType=Cartesian XorR=21.65 Y=-0.8 Z=-1 SpecialJt=No GUID=786001e9-4423-4e45-998c-dd20b25e2cd4

Joint=2597 CoordSys=GLOBAL CoordType=Cartesian XorR=21.65 Y=-0.7 Z=-1 SpecialJt=No GUID=9eff6507-645f-4c9a-a804-42907c57e06c

Joint=2598 CoordSys=GLOBAL CoordType=Cartesian XorR=21.65 Y=-0.6 Z=-1 SpecialJt=No GUID=b4101c0f-5d3c-41c2-bf76-0cf70c519764

Joint=2599 CoordSys=GLOBAL CoordType=Cartesian XorR=21.65 Y=-0.5 Z=-1 SpecialJt=No GUID=18636d11-5c2a-4d29-acec-669993cada3b

Joint=2600 CoordSys=GLOBAL CoordType=Cartesian XorR=21.65 Y=-0.4 Z=-1 SpecialJt=No GUID=6f1251da-de37-4a76-a471-3c795f76ea16

Joint=2601 CoordSys=GLOBAL CoordType=Cartesian XorR=21.65 Y=-0.3 Z=-1 SpecialJt=No GUID=1afefcd4-218e-47f5-bcd0-a0c707617309

Joint=2602 CoordSys=GLOBAL CoordType=Cartesian XorR=21.65 Y=-0.2 Z=-1 SpecialJt=No GUID=dcc1ae81-5978-4bfe-ae0c-fa9c86861ca1

Joint=2603 CoordSys=GLOBAL CoordType=Cartesian XorR=21.65 Y=-0.1 Z=-1 SpecialJt=No GUID=4f39f9ca-d149-4ea4-82b4-d57e8db2f308

Joint=2604 CoordSys=GLOBAL CoordType=Cartesian XorR=21.65 Y=0 Z=-1 SpecialJt=No GUID=e5509275-4e74-462f-b9b8-09715d9599c3

Joint=2605 CoordSys=GLOBAL CoordType=Cartesian XorR=21.65 Y=0.1 Z=-1 SpecialJt=No GUID=24c0d9b1-e64e-47ff-95a8-a952795b1ec0

Joint=2606 CoordSys=GLOBAL CoordType=Cartesian XorR=21.65 Y=0.2 Z=-1 SpecialJt=No GUID=2b8452b7-ba5d-4f06-a5b4-ccb15bed131

Joint=2607 CoordSys=GLOBAL CoordType=Cartesian XorR=21.65 Y=0.3 Z=-1 SpecialJt=No GUID=41b39a0b-320a-423c-b57a-1c9b1d191b76

Joint=2608 CoordSys=GLOBAL CoordType=Cartesian XorR=21.65 Y=0.4 Z=-1 SpecialJt=No GUID=15ccc3a1-c476-462c-9249-e48dffd438b

Joint=2609 CoordSys=GLOBAL CoordType=Cartesian XorR=21.65 Y=0.5 Z=-1 SpecialJt=No GUID=d6bac0d0-226f-47e8-bedf-2dc53294ad25

Joint=2610 CoordSys=GLOBAL CoordType=Cartesian XorR=21.65 Y=0.6 Z=-1 SpecialJt=No GUID=8886969e-8522-4508-a549-d7059b0fd9d0

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                           |                 |                     |            |        |      |              |
|-------------------------------------------|-----------------|---------------------|------------|--------|------|--------------|
| Joint=2611                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.65 | Y=0.7  | Z=-1 | SpecialJt=No |
| GUID=332ad4bd-e4a5-4327-bcf8-30029340b229 |                 |                     |            |        |      |              |
| Joint=2612                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.65 | Y=0.8  | Z=-1 | SpecialJt=No |
| GUID=5a1f1711-8a52-4ea2-b436-aa056d0dfd3a |                 |                     |            |        |      |              |
| Joint=2613                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.65 | Y=0.9  | Z=-1 | SpecialJt=No |
| GUID=b22eb1d4-40de-4e1c-866e-2860f9582bbd |                 |                     |            |        |      |              |
| Joint=2614                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.65 | Y=1    | Z=-1 | SpecialJt=No |
| GUID=64b449a1-dc77-486f-87a0-909ad63695b1 |                 |                     |            |        |      |              |
| Joint=2615                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.65 | Y=1.1  | Z=-1 | SpecialJt=No |
| GUID=62a88ff4-2dd3-4ea0-9876-69237acd150d |                 |                     |            |        |      |              |
| Joint=2616                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.65 | Y=1.2  | Z=-1 | SpecialJt=No |
| GUID=be5d4317-0884-4fbe-b408-3682cf5663f6 |                 |                     |            |        |      |              |
| Joint=2617                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.65 | Y=1.3  | Z=-1 | SpecialJt=No |
| GUID=f0a79754-a26c-40af-8f36-dfb85ecac65a |                 |                     |            |        |      |              |
| Joint=2618                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.65 | Y=1.4  | Z=-1 | SpecialJt=No |
| GUID=2a8c4803-8648-4616-bdc6-91ddcfea1dab |                 |                     |            |        |      |              |
| Joint=2619                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.65 | Y=1.5  | Z=-1 | SpecialJt=No |
| GUID=d5dfd4b3-50f4-4b22-ba1d-d401ffa2a4a7 |                 |                     |            |        |      |              |
| Joint=2620                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.65 | Y=1.6  | Z=-1 | SpecialJt=No |
| GUID=a51cbd54-16ee-404c-8e8e-00beb7e42517 |                 |                     |            |        |      |              |
| Joint=2621                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.65 | Y=1.7  | Z=-1 | SpecialJt=No |
| GUID=05619c70-24b3-459f-9021-73d984db7c68 |                 |                     |            |        |      |              |
| Joint=2622                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.65 | Y=1.8  | Z=-1 | SpecialJt=No |
| GUID=990e4102-54dd-43f0-a36d-61e0d82c368a |                 |                     |            |        |      |              |
| Joint=2623                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.65 | Y=1.9  | Z=-1 | SpecialJt=No |
| GUID=0f00c4d6-5a3e-4c3b-9eea-ace4051625ea |                 |                     |            |        |      |              |
| Joint=2624                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.65 | Y=2    | Z=-1 | SpecialJt=No |
| GUID=617eacfa-9639-4a0e-8947-173da8a89fab |                 |                     |            |        |      |              |
| Joint=2625                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.65 | Y=2.1  | Z=-1 | SpecialJt=No |
| GUID=827bdb60-4c4c-4f31-9a4e-12da3d0f344a |                 |                     |            |        |      |              |
| Joint=2626                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.65 | Y=2.2  | Z=-1 | SpecialJt=No |
| GUID=bd7ca7bf-fd9b-4528-8f61-d2aec4717bd  |                 |                     |            |        |      |              |
| Joint=2627                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=-2.2 | Z=-1 | SpecialJt=No |
| GUID=d7f4fb2a-7729-4efb-b584-e9492c5b8b73 |                 |                     |            |        |      |              |
| Joint=2628                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=-2.1 | Z=-1 | SpecialJt=No |
| GUID=9b9b1a3b-f97e-4f87-97e6-6448c64fd82d |                 |                     |            |        |      |              |
| Joint=2629                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=-2   | Z=-1 | SpecialJt=No |
| GUID=47c7d524-ca2a-4544-adf0-74ffaeed7cfb |                 |                     |            |        |      |              |
| Joint=2630                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=-1.9 | Z=-1 | SpecialJt=No |
| GUID=54439e0f-3d20-4972-b563-6f8929722ed6 |                 |                     |            |        |      |              |
| Joint=2631                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=-1.8 | Z=-1 | SpecialJt=No |
| GUID=922c0492-143b-4b0b-be7d-b010326a83d7 |                 |                     |            |        |      |              |
| Joint=2632                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=-1.7 | Z=-1 | SpecialJt=No |
| GUID=9327fda1-be4e-43f9-8e2b-eb6b15adb21a |                 |                     |            |        |      |              |
| Joint=2633                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=-1.6 | Z=-1 | SpecialJt=No |
| GUID=f41401e6-cd9a-4ed0-9324-5a3f8ec2cefd |                 |                     |            |        |      |              |
| Joint=2634                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=-1.5 | Z=-1 | SpecialJt=No |
| GUID=adc34255-0f47-409d-8b35-32045dc280ce |                 |                     |            |        |      |              |
| Joint=2635                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=-1.4 | Z=-1 | SpecialJt=No |
| GUID=5bcc944f-cf1c-4e33-90a1-1d61399eb3fc |                 |                     |            |        |      |              |
| Joint=2636                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=-1.3 | Z=-1 | SpecialJt=No |
| GUID=0de3b21c-fd4f-4cee-8417-04f182196094 |                 |                     |            |        |      |              |
| Joint=2637                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=-1.2 | Z=-1 | SpecialJt=No |
| GUID=b691f7dd-453f-4b4d-b9f4-dc84272544b2 |                 |                     |            |        |      |              |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                            |                 |                     |            |        |      |              |                                           |
|--------------------------------------------|-----------------|---------------------|------------|--------|------|--------------|-------------------------------------------|
| Joint=2638                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=-1.1 | Z=-1 | SpecialJt=No |                                           |
| GUID=0785c8f7-ef9d-424a-a43f-9a6eb99eb16a  |                 |                     |            |        |      |              |                                           |
| Joint=2639                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=-1   | Z=-1 | SpecialJt=No |                                           |
| GUID=983da646-1595-4a68-bab8-6b354e47512c  |                 |                     |            |        |      |              |                                           |
| Joint=2640                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=-0.9 | Z=-1 | SpecialJt=No |                                           |
| GUID=ad195f17-35e5-464c-9086-480ea93badbe  |                 |                     |            |        |      |              |                                           |
| Joint=2641                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=-0.8 | Z=-1 | SpecialJt=No |                                           |
| GUID=b2dc7f49-084e-432c-8902-ae0fc3cc9418  |                 |                     |            |        |      |              |                                           |
| Joint=2642                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=-0.7 | Z=-1 | SpecialJt=No |                                           |
| GUID=0accb998-7890-4b11-99e2-affcdd42a4e5  |                 |                     |            |        |      |              |                                           |
| Joint=2643                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=-0.6 | Z=-1 | SpecialJt=No |                                           |
| GUID=32e06b34-5b26-44e8-a8bb-a02516c6bca4  |                 |                     |            |        |      |              |                                           |
| Joint=2644                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=-0.5 | Z=-1 | SpecialJt=No |                                           |
| GUID=2bd49f6b-cca9-48c6-9f0e-3774604e0e0b  |                 |                     |            |        |      |              |                                           |
| Joint=2645                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=-0.4 | Z=-1 | SpecialJt=No |                                           |
| GUID=8cd98a32-2f96-4944-a511-18396b6feb03  |                 |                     |            |        |      |              |                                           |
| Joint=2646                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=-0.3 | Z=-1 | SpecialJt=No |                                           |
| GUID=e5eee461-ab64-4edd-8a4b-e564399ed804  |                 |                     |            |        |      |              |                                           |
| Joint=2647                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=-0.2 | Z=-1 | SpecialJt=No |                                           |
| GUID=50790fb7-5ecc-4ed0-9802-9182ce40acdc  |                 |                     |            |        |      |              |                                           |
| Joint=2648                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=-0.1 | Z=-1 | SpecialJt=No |                                           |
| GUID=f4a380a8-7dd9-4c5c-924c-32eb87459baf  |                 |                     |            |        |      |              |                                           |
| Joint=2649                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=0    | Z=-1 | SpecialJt=No | GUID=f68b3c22-025a-45bf-8262-6c3cce07b4b0 |
| Joint=2650                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=0.1  | Z=-1 | SpecialJt=No |                                           |
| GUID=cdbdb2464-e698-4bd3-8910-96fe0be28e28 |                 |                     |            |        |      |              |                                           |
| Joint=2651                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=0.2  | Z=-1 | SpecialJt=No |                                           |
| GUID=b08187e6-2fc0-413a-bf31-273237fd321e  |                 |                     |            |        |      |              |                                           |
| Joint=2652                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=0.3  | Z=-1 | SpecialJt=No |                                           |
| GUID=56972aca-5fd4-4ad6-9450-f0316e29b5e9  |                 |                     |            |        |      |              |                                           |
| Joint=2653                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=0.4  | Z=-1 | SpecialJt=No |                                           |
| GUID=c987ace2-491a-43f0-a75a-26546034493f  |                 |                     |            |        |      |              |                                           |
| Joint=2654                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=0.5  | Z=-1 | SpecialJt=No |                                           |
| GUID=e7729f81-50f9-489e-adcb-e458a3477665  |                 |                     |            |        |      |              |                                           |
| Joint=2655                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=0.6  | Z=-1 | SpecialJt=No |                                           |
| GUID=d58914ed-7feb-4120-a3c5-f54c5e63dc68  |                 |                     |            |        |      |              |                                           |
| Joint=2656                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=0.7  | Z=-1 | SpecialJt=No | GUID=df4e7f61-ec05-4c6f-890d-0c416a6dad32 |
| Joint=2657                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=0.8  | Z=-1 | SpecialJt=No |                                           |
| GUID=4e52548b-bd7c-4078-ae84-fa21e76d2298  |                 |                     |            |        |      |              |                                           |
| Joint=2658                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=0.9  | Z=-1 | SpecialJt=No |                                           |
| GUID=bcc20e6c-03a1-4658-838f-53b2266bfd5f  |                 |                     |            |        |      |              |                                           |
| Joint=2659                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=1    | Z=-1 | SpecialJt=No | GUID=3f2148b1-bb83-4cde-af02-a8d5da4c7b1a |
| Joint=2660                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=1.1  | Z=-1 | SpecialJt=No |                                           |
| GUID=b8344713-7b3f-4582-a408-225ee2ce9bdd  |                 |                     |            |        |      |              |                                           |
| Joint=2661                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=1.2  | Z=-1 | SpecialJt=No |                                           |
| GUID=c91f8236-71e9-4382-8440-f712da224662  |                 |                     |            |        |      |              |                                           |
| Joint=2662                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=1.3  | Z=-1 | SpecialJt=No |                                           |
| GUID=7f73d142-496a-4766-8edb-e8dc3bb36297  |                 |                     |            |        |      |              |                                           |
| Joint=2663                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=1.4  | Z=-1 | SpecialJt=No |                                           |
| GUID=eb5f073e-fcf3-4931-9433-ddd226cf638b  |                 |                     |            |        |      |              |                                           |
| Joint=2664                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.75 | Y=1.5  | Z=-1 | SpecialJt=No |                                           |
| GUID=347fc721-fa43-4f8e-93cd-cf7b4215731e  |                 |                     |            |        |      |              |                                           |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=2665 CoordSys=GLOBAL CoordType=Cartesian XorR=21.75 Y=1.6 Z=-1 SpecialJt=No  
GUID=e8c0e2aa-502f-4922-88e8-68c782ce3ec8

Joint=2666 CoordSys=GLOBAL CoordType=Cartesian XorR=21.75 Y=1.7 Z=-1 SpecialJt=No  
GUID=33329e42-69a9-4bce-a9b4-eb2ff6a40681

Joint=2667 CoordSys=GLOBAL CoordType=Cartesian XorR=21.75 Y=1.8 Z=-1 SpecialJt=No GUID=f72af7ce-9415-482f-bc30-6f2328b24388

Joint=2668 CoordSys=GLOBAL CoordType=Cartesian XorR=21.75 Y=1.9 Z=-1 SpecialJt=No  
GUID=450dd94e-284c-4a26-945e-8709292fd3e7

Joint=2669 CoordSys=GLOBAL CoordType=Cartesian XorR=21.75 Y=2 Z=-1 SpecialJt=No GUID=a4ab7041-cc1c-48e9-b55c-0e7d9597726f

Joint=2670 CoordSys=GLOBAL CoordType=Cartesian XorR=21.75 Y=2.1 Z=-1 SpecialJt=No  
GUID=276e55b3-cf55-4928-be84-f980316b0196

Joint=2671 CoordSys=GLOBAL CoordType=Cartesian XorR=21.75 Y=2.2 Z=-1 SpecialJt=No  
GUID=9520dac3-91ac-4d36-91fa-50577cc3f45c

Joint=2672 CoordSys=GLOBAL CoordType=Cartesian XorR=21.85 Y=-2.2 Z=-1 SpecialJt=No  
GUID=05a225c1-e6b8-4407-b644-bf3b9e9cf334

Joint=2673 CoordSys=GLOBAL CoordType=Cartesian XorR=21.85 Y=-2.1 Z=-1 SpecialJt=No  
GUID=2893449b-7e57-4718-b6a8-864cdc223e04

Joint=2674 CoordSys=GLOBAL CoordType=Cartesian XorR=21.85 Y=-2 Z=-1 SpecialJt=No GUID=891f4808-b6cc-4ea4-b97b-5c6dc5ca2067

Joint=2675 CoordSys=GLOBAL CoordType=Cartesian XorR=21.85 Y=-1.9 Z=-1 SpecialJt=No  
GUID=50a78a29-7260-4588-990e-914c2032ea18

Joint=2676 CoordSys=GLOBAL CoordType=Cartesian XorR=21.85 Y=-1.8 Z=-1 SpecialJt=No  
GUID=2706e1f2-5f95-45f4-a8fa-86074170c7b9

Joint=2677 CoordSys=GLOBAL CoordType=Cartesian XorR=21.85 Y=-1.7 Z=-1 SpecialJt=No  
GUID=ccb5cade-ea95-4659-8d0d-060f2c4dd1cd

Joint=2678 CoordSys=GLOBAL CoordType=Cartesian XorR=21.85 Y=-1.6 Z=-1 SpecialJt=No  
GUID=e10a0d19-9cf7-4281-a796-9c1c847610f0

Joint=2679 CoordSys=GLOBAL CoordType=Cartesian XorR=21.85 Y=-1.5 Z=-1 SpecialJt=No  
GUID=4ebc55cf-bbb8-4c95-b06f-ab083b9186ba

Joint=2680 CoordSys=GLOBAL CoordType=Cartesian XorR=21.85 Y=-1.4 Z=-1 SpecialJt=No  
GUID=7c129e0d-8b50-4c3c-8075-7176e1d4a755

Joint=2681 CoordSys=GLOBAL CoordType=Cartesian XorR=21.85 Y=-1.3 Z=-1 SpecialJt=No  
GUID=5e514361-c09b-4c3f-a639-2f78732a8588

Joint=2682 CoordSys=GLOBAL CoordType=Cartesian XorR=21.85 Y=-1.2 Z=-1 SpecialJt=No  
GUID=aabcfbdc-7c6c-4c08-a1f2-680db1097a39

Joint=2683 CoordSys=GLOBAL CoordType=Cartesian XorR=21.85 Y=-1.1 Z=-1 SpecialJt=No  
GUID=8f14eef8-6300-42ef-970a-ced746319724

Joint=2684 CoordSys=GLOBAL CoordType=Cartesian XorR=21.85 Y=-1 Z=-1 SpecialJt=No  
GUID=472666a3-5495-4bc9-9a91-d471ae494799

Joint=2685 CoordSys=GLOBAL CoordType=Cartesian XorR=21.85 Y=-0.9 Z=-1 SpecialJt=No  
GUID=4f1fec09-3224-466f-8a05-6c81bdab7246

Joint=2686 CoordSys=GLOBAL CoordType=Cartesian XorR=21.85 Y=-0.8 Z=-1 SpecialJt=No  
GUID=4f478c47-c98a-4b5e-be04-f6ea63b44379

Joint=2687 CoordSys=GLOBAL CoordType=Cartesian XorR=21.85 Y=-0.7 Z=-1 SpecialJt=No  
GUID=fb14e0fe-702f-481a-81b0-0758b4a06b77

Joint=2688 CoordSys=GLOBAL CoordType=Cartesian XorR=21.85 Y=-0.6 Z=-1 SpecialJt=No  
GUID=02c4c759-1377-458b-aaf7-f64889345465

Joint=2689 CoordSys=GLOBAL CoordType=Cartesian XorR=21.85 Y=-0.5 Z=-1 SpecialJt=No  
GUID=e721c218-af78-469c-a78b-3248e5c5ba2c

Joint=2690 CoordSys=GLOBAL CoordType=Cartesian XorR=21.85 Y=-0.4 Z=-1 SpecialJt=No  
GUID=337a721f-6a70-4095-abac-2566c4d4a726

Joint=2691 CoordSys=GLOBAL CoordType=Cartesian XorR=21.85 Y=-0.3 Z=-1 SpecialJt=No  
GUID=f4a8a5a6-8afc-462a-a02a-9e713f978766



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                           |                                           |                     |            |                        |      |              |
|-------------------------------------------|-------------------------------------------|---------------------|------------|------------------------|------|--------------|
| Joint=2692                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=21.85 | Y=-0.2                 | Z=-1 | SpecialJt=No |
| GUID=8c6875ec-1f54-4168-ac0a-bdde63979a31 |                                           |                     |            |                        |      |              |
| Joint=2693                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=21.85 | Y=-0.09999999999999999 | Z=-1 |              |
| SpecialJt=No                              | GUID=a9fd0bcd-0b54-4ebf-9c72-3b99fe3893c2 |                     |            |                        |      |              |
| Joint=2694                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=21.85 | Y=1.11022302462516E-16 | Z=-1 |              |
| SpecialJt=No                              | GUID=5bda702a-2fd0-4d35-8777-b870f8b9799f |                     |            |                        |      |              |
| Joint=2695                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=21.85 | Y=0.09999999999999999  | Z=-1 |              |
| SpecialJt=No                              | GUID=0ddc4497-e0be-4f33-97ab-7f728b6dff06 |                     |            |                        |      |              |
| Joint=2696                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=21.85 | Y=0.2                  | Z=-1 | SpecialJt=No |
| GUID=45d7ddc4-9adb-44db-8ff5-d2c05a255baa |                                           |                     |            |                        |      |              |
| Joint=2697                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=21.85 | Y=0.3                  | Z=-1 | SpecialJt=No |
| GUID=56a6651a-9ffa-45b0-be3e-c44c404cf735 |                                           |                     |            |                        |      |              |
| Joint=2698                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=21.85 | Y=0.4                  | Z=-1 | SpecialJt=No |
| GUID=531-4876-b207-8086d9d5a697           |                                           |                     |            |                        |      |              |
| Joint=2699                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=21.85 | Y=0.5                  | Z=-1 | SpecialJt=No |
| GUID=baa0ada9-0c17-478a-8f1f-833f5dce93c8 |                                           |                     |            |                        |      |              |
| Joint=2700                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=21.85 | Y=0.6                  | Z=-1 | SpecialJt=No |
| GUID=d281a091-5a6c-43a3-9003-d1a05e61752d |                                           |                     |            |                        |      |              |
| Joint=2701                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=21.85 | Y=0.7                  | Z=-1 | SpecialJt=No |
| GUID=a4ecf87e-1727-4d74-87d3-d06d891d364d |                                           |                     |            |                        |      |              |
| Joint=2702                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=21.85 | Y=0.8                  | Z=-1 | SpecialJt=No |
| GUID=7d0820e4-e80a-470c-badf-90cd63c56c60 |                                           |                     |            |                        |      |              |
| Joint=2703                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=21.85 | Y=0.9                  | Z=-1 | SpecialJt=No |
| GUID=1ae47e55-0303-40cc-9c2b-fabfca67b508 |                                           |                     |            |                        |      |              |
| Joint=2704                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=21.85 | Y=1                    | Z=-1 | SpecialJt=No |
| GUID=d1ce4916-d5f0-4179-98a9-1ee82cfabb04 |                                           |                     |            |                        |      |              |
| Joint=2705                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=21.85 | Y=1.1                  | Z=-1 | SpecialJt=No |
| GUID=904e73de-5250-4a9d-bb51-0c6e9308ada8 |                                           |                     |            |                        |      |              |
| Joint=2706                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=21.85 | Y=1.2                  | Z=-1 | SpecialJt=No |
| GUID=4ea4609c-919e-4283-a5e1-5bb5383f23ff |                                           |                     |            |                        |      |              |
| Joint=2707                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=21.85 | Y=1.3                  | Z=-1 | SpecialJt=No |
| GUID=5a317228-1ab6-4f32-8855-b82ed018c2db |                                           |                     |            |                        |      |              |
| Joint=2708                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=21.85 | Y=1.4                  | Z=-1 | SpecialJt=No |
| GUID=49f86706-67cd-4a54-9e08-1e5b7a128b38 |                                           |                     |            |                        |      |              |
| Joint=2709                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=21.85 | Y=1.5                  | Z=-1 | SpecialJt=No |
| GUID=e0a72dc5-cbe7-43c4-bbd6-fa27b435d495 |                                           |                     |            |                        |      |              |
| Joint=2710                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=21.85 | Y=1.6                  | Z=-1 | SpecialJt=No |
| GUID=3a833cb8-e0b2-4ecb-8c03-a83ce77cfae5 |                                           |                     |            |                        |      |              |
| Joint=2711                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=21.85 | Y=1.7                  | Z=-1 | SpecialJt=No |
| GUID=e6c0dfa6-c77a-4e9c-bd3e-d4e128b3402a |                                           |                     |            |                        |      |              |
| Joint=2712                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=21.85 | Y=1.8                  | Z=-1 | SpecialJt=No |
| GUID=8361c9cd-9552-4ed9-8e71-cbccacc06f94 |                                           |                     |            |                        |      |              |
| Joint=2713                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=21.85 | Y=1.9                  | Z=-1 | SpecialJt=No |
| GUID=811663be-9859-4394-b203-74e0a2fb828c |                                           |                     |            |                        |      |              |
| Joint=2714                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=21.85 | Y=2                    | Z=-1 | SpecialJt=No |
| GUID=f81a7756-a1a4-4fc0-bca4-1349b86e23f0 |                                           |                     |            |                        |      |              |
| Joint=2715                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=21.85 | Y=2.1                  | Z=-1 | SpecialJt=No |
| GUID=f5836c17-9268-4d91-a8b3-d11d9fcd2835 |                                           |                     |            |                        |      |              |
| Joint=2716                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=21.85 | Y=2.2                  | Z=-1 | SpecialJt=No |
| GUID=5153e736-3fbb-4ab4-ab31-cadc1dfcca5a |                                           |                     |            |                        |      |              |
| Joint=2717                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=21.95 | Y=-2.2                 | Z=-1 | SpecialJt=No |
| GUID=5f08618e-295d-43e2-9276-ce24d7c15fca |                                           |                     |            |                        |      |              |
| Joint=2718                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=21.95 | Y=-2.1                 | Z=-1 | SpecialJt=No |
| GUID=55f65923-2f8b-4759-a576-55d2d072d97e |                                           |                     |            |                        |      |              |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=2719 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=-2 Z=-1 SpecialJt=No GUID=f87091d1-eb6a-47d7-8568-bf115c8d4f4b

Joint=2720 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=-1.9 Z=-1 SpecialJt=No GUID=f150338d-5282-4761-b4a1-ec924253b5f4

Joint=2721 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=-1.8 Z=-1 SpecialJt=No GUID=3a4da817-9638-4c92-b7e5-3fc8b96e5da6

Joint=2722 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=-1.7 Z=-1 SpecialJt=No GUID=466280a5-4abc-499f-a7f5-4d0b27436288

Joint=2723 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=-1.6 Z=-1 SpecialJt=No GUID=ef29c373-687c-42da-b935-05772a64ead7

Joint=2724 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=-1.5 Z=-1 SpecialJt=No GUID=ee51cabd-5d69-4e59-b39d-be068d3e7016

Joint=2725 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=-1.4 Z=-1 SpecialJt=No GUID=ee26d679-e720-435b-921e-ed23d1e2ca19

Joint=2726 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=-1.3 Z=-1 SpecialJt=No GUID=5f7408ce-0556-49f7-ad3f-7f26840ab2e7

Joint=2727 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=-1.2 Z=-1 SpecialJt=No GUID=b08be9be-15e0-4dc2-be60-b051867511b3

Joint=2728 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=-1.1 Z=-1 SpecialJt=No GUID=72906bfb-e88c-4837-a162-1678627e05b9

Joint=2729 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=-1 Z=-1 SpecialJt=No GUID=8a827cd7-8a7d-4656-8c4c-9a75df1a01ae

Joint=2730 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=-0.9 Z=-1 SpecialJt=No GUID=5e6562b9-30a5-4cbe-a95f-7e7ce4b32caa

Joint=2731 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=-0.8 Z=-1 SpecialJt=No GUID=14098a36-fe9c-4832-bc81-c51d6357bda9

Joint=2732 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=-0.7 Z=-1 SpecialJt=No GUID=39f010fc-f926-40e0-b21a-2504822dc17e

Joint=2733 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=-0.6 Z=-1 SpecialJt=No GUID=a1b72f70-de59-4393-98b1-7129e25b81cb

Joint=2734 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=-0.5 Z=-1 SpecialJt=No GUID=0a1544cd-ea24-477c-be44-4708d644271c

Joint=2735 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=-0.4 Z=-1 SpecialJt=No GUID=e3ef0fc9-ede1-433e-b510-030dc29796ca

Joint=2736 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=-0.3 Z=-1 SpecialJt=No GUID=6198a6e1-21dd-4719-9cc9-6a6451099b28

Joint=2737 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=-0.2 Z=-1 SpecialJt=No GUID=d3d1af5b-4a38-4e0d-bb9d-185271d754a0

Joint=2738 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=-0.1 Z=-1 SpecialJt=No GUID=1f3ba74a-69bd-429a-88c6-585f2466a92b

Joint=2739 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=1.11022302462516E-16 Z=-1 SpecialJt=No GUID=bbca7e5a-488d-4788-b711-dbe44cbd881a

Joint=2740 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=0.09999999999999999 Z=-1 SpecialJt=No GUID=b5420467-c8bc-4a3a-9da8-c4fa0bc6700d

Joint=2741 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=0.2 Z=-1 SpecialJt=No GUID=d3aad3ce-70c0-438b-af8f-8e7337442965

Joint=2742 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=0.3 Z=-1 SpecialJt=No GUID=8db24261-6872-4e39-af86-909cdcf79c6

Joint=2743 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=0.4 Z=-1 SpecialJt=No GUID=e0235451-4180-4b76-9768-5a303f48d1be

Joint=2744 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=0.5 Z=-1 SpecialJt=No GUID=ab84c26e-f2ce-4451-9831-0245006d2a25

Joint=2745 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=0.6 Z=-1 SpecialJt=No GUID=7303c3a6-7da1-465b-ac74-67f9373a9f68

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=2746 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=0.7 Z=-1 SpecialJt=No  
GUID=2a2f047c-3ca5-4388-8f8a-fca4d1edd8c7

Joint=2747 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=0.8 Z=-1 SpecialJt=No  
GUID=d99bc6fd-f765-4ec6-8886-6b356876fa17

Joint=2748 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=0.9 Z=-1 SpecialJt=No  
GUID=89f620c3-210d-47d8-8e2b-34e978b03f89

Joint=2749 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=1 Z=-1 SpecialJt=No GUID=ad7bc353-a5ee-409c-bba6-7d700e4fc756

Joint=2750 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=1.1 Z=-1 SpecialJt=No  
GUID=d50749dc-1547-46b7-b807-537d964f9e16

Joint=2751 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=1.2 Z=-1 SpecialJt=No  
GUID=644aec38-0ac6-4ebe-a692-f21ddb33431

Joint=2752 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=1.3 Z=-1 SpecialJt=No GUID=fc0def1b-e8b7-4883-837d-c6ef75c28f53

Joint=2753 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=1.4 Z=-1 SpecialJt=No  
GUID=d4e61945-1914-494c-9a5e-ab1567ee424b

Joint=2754 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=1.5 Z=-1 SpecialJt=No GUID=9c632f5f-e733-4565-9208-e6005b4d4836

Joint=2755 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=1.6 Z=-1 SpecialJt=No  
GUID=4c973974-2856-418f-a2a7-8ed443d969e1

Joint=2756 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=1.7 Z=-1 SpecialJt=No  
GUID=cc28d394-216c-4983-8b2a-80b34044d014

Joint=2757 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=1.8 Z=-1 SpecialJt=No  
GUID=2c7502a0-1690-4f1b-8166-c5bb181a52de

Joint=2758 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=1.9 Z=-1 SpecialJt=No  
GUID=0ae89f71-0581-4038-b6fc-8e3d9665ed20

Joint=2759 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=2 Z=-1 SpecialJt=No GUID=6748fd2d-edb0-41da-8c71-b6bbc5d7bbff

Joint=2760 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=2.1 Z=-1 SpecialJt=No  
GUID=d6063852-44bb-4419-ad63-6ef9337dbf0b

Joint=2761 CoordSys=GLOBAL CoordType=Cartesian XorR=21.95 Y=2.2 Z=-1 SpecialJt=No  
GUID=cb22cd9d-1620-43ab-b8be-f22e41f44660

Joint=2762 CoordSys=GLOBAL CoordType=Cartesian XorR=22.05 Y=-2.2 Z=-1 SpecialJt=No  
GUID=03acc814-b840-41ec-aa5d-0bc632a1dbd1

Joint=2763 CoordSys=GLOBAL CoordType=Cartesian XorR=22.05 Y=-2.1 Z=-1 SpecialJt=No  
GUID=670eb093-617b-4103-8364-38c39b9e6aba

Joint=2764 CoordSys=GLOBAL CoordType=Cartesian XorR=22.05 Y=-2 Z=-1 SpecialJt=No GUID=833910ff-9bf3-4a43-a705-91e56c611eb8

Joint=2765 CoordSys=GLOBAL CoordType=Cartesian XorR=22.05 Y=-1.9 Z=-1 SpecialJt=No  
GUID=4bf384e7-5a90-4420-8be0-beac90b58101

Joint=2766 CoordSys=GLOBAL CoordType=Cartesian XorR=22.05 Y=-1.8 Z=-1 SpecialJt=No  
GUID=f828dd95-799e-43f9-8fe0-4d20622198f8

Joint=2767 CoordSys=GLOBAL CoordType=Cartesian XorR=22.05 Y=-1.7 Z=-1 SpecialJt=No  
GUID=25434476-c92b-4132-870a-fdb4235c0485

Joint=2768 CoordSys=GLOBAL CoordType=Cartesian XorR=22.05 Y=-1.6 Z=-1 SpecialJt=No  
GUID=41137582-bc42-4bcb-801b-cc73bbf24a58

Joint=2769 CoordSys=GLOBAL CoordType=Cartesian XorR=22.05 Y=-1.5 Z=-1 SpecialJt=No  
GUID=2d5843b2-9eb1-44ab-a0f4-a7f00f6fa3b3

Joint=2770 CoordSys=GLOBAL CoordType=Cartesian XorR=22.05 Y=-1.4 Z=-1 SpecialJt=No  
GUID=72017f61-012b-481f-82e2-1af26911409e

Joint=2771 CoordSys=GLOBAL CoordType=Cartesian XorR=22.05 Y=-1.3 Z=-1 SpecialJt=No  
GUID=c2f42888-832b-4552-a31d-bb7d1b5c94a5

Joint=2772 CoordSys=GLOBAL CoordType=Cartesian XorR=22.05 Y=-1.2 Z=-1 SpecialJt=No  
GUID=41c615bb-c298-4381-b009-a02216b25db1



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                           |                 |                     |            |                        |      |              |
|-------------------------------------------|-----------------|---------------------|------------|------------------------|------|--------------|
| Joint=2773                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=-1.1                 | Z=-1 | SpecialJt=No |
| GUID=05ee662c-9da6-425f-8282-814fc59d96cd |                 |                     |            |                        |      |              |
| Joint=2774                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=-1                   | Z=-1 | SpecialJt=No |
| GUID=1951d09e-b4b9-4a39-9816-ec5eba630907 |                 |                     |            |                        |      |              |
| Joint=2775                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=-0.9                 | Z=-1 | SpecialJt=No |
| GUID=f36b8cc1-0c18-4e7b-95d4-d66ec77adcef |                 |                     |            |                        |      |              |
| Joint=2776                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=-0.8                 | Z=-1 | SpecialJt=No |
| GUID=fbf8ed8a-1977-4c84-9cd4-339703a01d7a |                 |                     |            |                        |      |              |
| Joint=2777                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=-0.7                 | Z=-1 | SpecialJt=No |
| GUID=a5bf26f9-8015-46bd-a2ed-7e72e73bc2c1 |                 |                     |            |                        |      |              |
| Joint=2778                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=-0.6                 | Z=-1 | SpecialJt=No |
| GUID=8018b098-a29b-41ad-ba63-83bd9e582cf5 |                 |                     |            |                        |      |              |
| Joint=2779                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=-0.5                 | Z=-1 | SpecialJt=No |
| GUID=e67d36a9-1f85-44fd-ba80-77b36f49cc6c |                 |                     |            |                        |      |              |
| Joint=2780                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=-0.4                 | Z=-1 | SpecialJt=No |
| GUID=5e6e8f37-0f0b-4ea8-b9f0-c2942c70d499 |                 |                     |            |                        |      |              |
| Joint=2781                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=-0.3                 | Z=-1 | SpecialJt=No |
| GUID=2a55eaa3-935a-4a13-8dfe-a1f2e25d1a2b |                 |                     |            |                        |      |              |
| Joint=2782                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=-0.2                 | Z=-1 | SpecialJt=No |
| GUID=f1446007-42af-4a84-bba8-6ade1381459a |                 |                     |            |                        |      |              |
| Joint=2783                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=-0.1                 | Z=-1 | SpecialJt=No |
| GUID=3d2f6433-c7ae-4424-bcd1-ba946b29825b |                 |                     |            |                        |      |              |
| Joint=2784                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=1.11022302462516E-16 | Z=-1 | SpecialJt=No |
| GUID=3680644f-325e-4a5a-846c-550de0c4d013 |                 |                     |            |                        |      |              |
| Joint=2785                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=0.09999999999999999  | Z=-1 | SpecialJt=No |
| GUID=e92e7107-a730-4d2b-9f6c-3ce20c287926 |                 |                     |            |                        |      |              |
| Joint=2786                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=0.2                  | Z=-1 | SpecialJt=No |
| GUID=4c8e1882-ab25-4787-a3d7-30044e7816c9 |                 |                     |            |                        |      |              |
| Joint=2787                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=0.3                  | Z=-1 | SpecialJt=No |
| GUID=2f37ce39-ccaa-43b7-b0d8-42ad2f601df9 |                 |                     |            |                        |      |              |
| Joint=2788                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=0.4                  | Z=-1 | SpecialJt=No |
| GUID=ba2cf29d-d986-4e2b-b3ad-a7c5c244706a |                 |                     |            |                        |      |              |
| Joint=2789                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=0.5                  | Z=-1 | SpecialJt=No |
| GUID=a4f5ac51-7775-4d7d-b526-f71a34ef85fd |                 |                     |            |                        |      |              |
| Joint=2790                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=0.6                  | Z=-1 | SpecialJt=No |
| GUID=1ba05d89-24b5-4cb0-9f21-a6e29704597f |                 |                     |            |                        |      |              |
| Joint=2791                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=0.7                  | Z=-1 | SpecialJt=No |
| GUID=4c3720f0-c9b4-4893-9def-3ef86ceaf780 |                 |                     |            |                        |      |              |
| Joint=2792                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=0.8                  | Z=-1 | SpecialJt=No |
| GUID=585f26cd-3121-4a16-b561-3797f03eae6f |                 |                     |            |                        |      |              |
| Joint=2793                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=0.9                  | Z=-1 | SpecialJt=No |
| GUID=7b304ebc-1d83-47e7-b3da-2035825f405f |                 |                     |            |                        |      |              |
| Joint=2794                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=1                    | Z=-1 | SpecialJt=No |
| GUID=d9c01452-ecea-4636-b7ce-555e7469dc01 |                 |                     |            |                        |      |              |
| Joint=2795                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=1.1                  | Z=-1 | SpecialJt=No |
| GUID=f0e38f74-23bf-4f63-a9ae-7b898893574d |                 |                     |            |                        |      |              |
| Joint=2796                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=1.2                  | Z=-1 | SpecialJt=No |
| GUID=170873d7-97da-4b60-87d0-bbd46e238690 |                 |                     |            |                        |      |              |
| Joint=2797                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=1.3                  | Z=-1 | SpecialJt=No |
| GUID=70a4d853-094c-4f58-a284-1a74c0d82af6 |                 |                     |            |                        |      |              |
| Joint=2798                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=1.4                  | Z=-1 | SpecialJt=No |
| GUID=2ede52db-b690-41e2-acce-a85683e11c60 |                 |                     |            |                        |      |              |
| Joint=2799                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=1.5                  | Z=-1 | SpecialJt=No |
| GUID=88ab9d92-3bfb-41f7-9fd8-86eba551e1d2 |                 |                     |            |                        |      |              |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                           |                 |                     |            |        |      |              |
|-------------------------------------------|-----------------|---------------------|------------|--------|------|--------------|
| Joint=2800                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=1.6  | Z=-1 | SpecialJt=No |
| GUID=55740311-9c97-4378-bbf2-60ea07cf1a42 |                 |                     |            |        |      |              |
| Joint=2801                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=1.7  | Z=-1 | SpecialJt=No |
| GUID=a716fc8d-2277-4a5a-b780-b6aa6b317d9a |                 |                     |            |        |      |              |
| Joint=2802                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=1.8  | Z=-1 | SpecialJt=No |
| GUID=be9a08be-e461-4bfa-92ba-4092950a5ccc |                 |                     |            |        |      |              |
| Joint=2803                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=1.9  | Z=-1 | SpecialJt=No |
| GUID=e257734d-2705-4ad7-ba1c-52885a438d32 |                 |                     |            |        |      |              |
| Joint=2804                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=2    | Z=-1 | SpecialJt=No |
| GUID=990ec5e5-ffd7-4e10-94ff-fdb02631c302 |                 |                     |            |        |      |              |
| Joint=2805                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=2.1  | Z=-1 | SpecialJt=No |
| GUID=3c521c64-b14a-48ce-982c-0a5819677ada |                 |                     |            |        |      |              |
| Joint=2806                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.05 | Y=2.2  | Z=-1 | SpecialJt=No |
| GUID=cf8cc1e0-937e-46b7-baa4-f7d6489b56d5 |                 |                     |            |        |      |              |
| Joint=2807                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.15 | Y=-2.2 | Z=-1 | SpecialJt=No |
| GUID=0d9832c5-6eee-480e-b801-49aee7d03977 |                 |                     |            |        |      |              |
| Joint=2808                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.15 | Y=-2.1 | Z=-1 | SpecialJt=No |
| GUID=0c822637-2377-484f-859e-75c795a72db6 |                 |                     |            |        |      |              |
| Joint=2809                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.15 | Y=-2   | Z=-1 | SpecialJt=No |
| GUID=74052d13-d206-4cb5-a67f-9796e4074f31 |                 |                     |            |        |      |              |
| Joint=2810                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.15 | Y=-1.9 | Z=-1 | SpecialJt=No |
| GUID=2ae2b06a-001b-4eef-89be-d1a503122ac5 |                 |                     |            |        |      |              |
| Joint=2811                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.15 | Y=-1.8 | Z=-1 | SpecialJt=No |
| GUID=d2601367-7651-4b1a-ae89-90eecedad924 |                 |                     |            |        |      |              |
| Joint=2812                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.15 | Y=-1.7 | Z=-1 | SpecialJt=No |
| GUID=7ef09812-ff38-4d43-9f28-ee92d88f19a4 |                 |                     |            |        |      |              |
| Joint=2813                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.15 | Y=-1.6 | Z=-1 | SpecialJt=No |
| GUID=86f05d63-dec5-4188-8971-f961a8800e65 |                 |                     |            |        |      |              |
| Joint=2814                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.15 | Y=-1.5 | Z=-1 | SpecialJt=No |
| GUID=f7e36499-83fa-40d3-af2b-82b66465df6c |                 |                     |            |        |      |              |
| Joint=2815                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.15 | Y=-1.4 | Z=-1 | SpecialJt=No |
| GUID=0c68e0cf-eb36-423a-b79c-659f44738401 |                 |                     |            |        |      |              |
| Joint=2816                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.15 | Y=-1.3 | Z=-1 | SpecialJt=No |
| GUID=9946a005-aea4-4d0a-9155-84592ebba2b6 |                 |                     |            |        |      |              |
| Joint=2817                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.15 | Y=-1.2 | Z=-1 | SpecialJt=No |
| GUID=ba684c11-6954-4fed-b243-d932e9a9a32  |                 |                     |            |        |      |              |
| Joint=2818                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.15 | Y=-1.1 | Z=-1 | SpecialJt=No |
| GUID=8245ab4d-368f-4827-812f-dde471d00066 |                 |                     |            |        |      |              |
| Joint=2819                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.15 | Y=-1   | Z=-1 | SpecialJt=No |
| GUID=92e8c3b8-1258-4fb3-a202-4c02eb6597c0 |                 |                     |            |        |      |              |
| Joint=2820                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.15 | Y=-0.9 | Z=-1 | SpecialJt=No |
| GUID=ad300ec2-c384-4931-87bc-c9d4ed8a02c6 |                 |                     |            |        |      |              |
| Joint=2821                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.15 | Y=-0.8 | Z=-1 | SpecialJt=No |
| GUID=cbf1678a-91d4-4118-8f7e-c10692ef84b3 |                 |                     |            |        |      |              |
| Joint=2822                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.15 | Y=-0.7 | Z=-1 | SpecialJt=No |
| GUID=274cfddb-e14a-4603-9010-8b45d136f166 |                 |                     |            |        |      |              |
| Joint=2823                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.15 | Y=-0.6 | Z=-1 | SpecialJt=No |
| GUID=d5694370-2f3b-458e-8309-378ed82e4b2d |                 |                     |            |        |      |              |
| Joint=2824                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.15 | Y=-0.5 | Z=-1 | SpecialJt=No |
| GUID=0a18dbb3-69b6-476b-8e86-df348b07c385 |                 |                     |            |        |      |              |
| Joint=2825                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.15 | Y=-0.4 | Z=-1 | SpecialJt=No |
| GUID=babecb3f-98df-4335-94c5-7405c58f4289 |                 |                     |            |        |      |              |
| Joint=2826                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.15 | Y=-0.3 | Z=-1 | SpecialJt=No |
| GUID=471b3816-f8d7-4cd6-b26d-350d307ebe74 |                 |                     |            |        |      |              |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=2827 CoordSys=GLOBAL CoordType=Cartesian XorR=22.15 Y=-0.2 Z=-1 SpecialJt=No  
GUID=12c371a5-ca87-40af-8f51-5c45ff3dec95

Joint=2828 CoordSys=GLOBAL CoordType=Cartesian XorR=22.15 Y=-0.1 Z=-1 SpecialJt=No  
GUID=b23b7c79-2d8a-4a6f-881f-7e721b5f0c21

Joint=2829 CoordSys=GLOBAL CoordType=Cartesian XorR=22.15 Y=0 Z=-1 SpecialJt=No GUID=a89bfda7-4efe-4847-b97c-4b395dd96b50

Joint=2830 CoordSys=GLOBAL CoordType=Cartesian XorR=22.15 Y=0.1 Z=-1 SpecialJt=No  
GUID=71adfa0b-9158-47ba-92df-e38760b5c2b2

Joint=2831 CoordSys=GLOBAL CoordType=Cartesian XorR=22.15 Y=0.2 Z=-1 SpecialJt=No  
GUID=e04b9462-466c-4464-9282-dbf3eed0f40a

Joint=2832 CoordSys=GLOBAL CoordType=Cartesian XorR=22.15 Y=0.3 Z=-1 SpecialJt=No  
GUID=6bace1a3-df0b-442f-9d43-87e7b2ad824d

Joint=2833 CoordSys=GLOBAL CoordType=Cartesian XorR=22.15 Y=0.4 Z=-1 SpecialJt=No  
GUID=bfb59d4-c0bb-4620-97a0-5bbd8d10aa52

Joint=2834 CoordSys=GLOBAL CoordType=Cartesian XorR=22.15 Y=0.5 Z=-1 SpecialJt=No  
GUID=aa5a54fb-8683-405c-b645-5b52e1a50b53

Joint=2835 CoordSys=GLOBAL CoordType=Cartesian XorR=22.15 Y=0.6 Z=-1 SpecialJt=No  
GUID=dd036b78-fec5-455d-808a-19aff6a484e4

Joint=2836 CoordSys=GLOBAL CoordType=Cartesian XorR=22.15 Y=0.7 Z=-1 SpecialJt=No  
GUID=865608c8-aed4-4675-8908-a65680260302

Joint=2837 CoordSys=GLOBAL CoordType=Cartesian XorR=22.15 Y=0.8 Z=-1 SpecialJt=No  
GUID=01d76cdf-b181-4730-a608-2dc2609dbae5

Joint=2838 CoordSys=GLOBAL CoordType=Cartesian XorR=22.15 Y=0.9 Z=-1 SpecialJt=No  
GUID=71871d1f-447a-43a9-9d77-4ca7f14fce2e

Joint=2839 CoordSys=GLOBAL CoordType=Cartesian XorR=22.15 Y=1 Z=-1 SpecialJt=No GUID=dc103c17-6ba9-44df-a912-781bf08149ca

Joint=2840 CoordSys=GLOBAL CoordType=Cartesian XorR=22.15 Y=1.1 Z=-1 SpecialJt=No  
GUID=56d0050e-ad1f-473a-9b69-62a0dc0fd91b

Joint=2841 CoordSys=GLOBAL CoordType=Cartesian XorR=22.15 Y=1.2 Z=-1 SpecialJt=No  
GUID=a2858e58-c2dc-49f4-a141-47eabd9fe9fc

Joint=2842 CoordSys=GLOBAL CoordType=Cartesian XorR=22.15 Y=1.3 Z=-1 SpecialJt=No  
GUID=27cd9ecf-9a62-453d-b7a2-43ed4ffb98e8

Joint=2843 CoordSys=GLOBAL CoordType=Cartesian XorR=22.15 Y=1.4 Z=-1 SpecialJt=No  
GUID=0126a0f5-7b36-4c67-9eb4-8141b49989c9

Joint=2844 CoordSys=GLOBAL CoordType=Cartesian XorR=22.15 Y=1.5 Z=-1 SpecialJt=No  
GUID=aea5d4f4-b3cb-47bc-a859-f94fae4d4de0

Joint=2845 CoordSys=GLOBAL CoordType=Cartesian XorR=22.15 Y=1.6 Z=-1 SpecialJt=No  
GUID=eef302a3-c803-48a9-b6b3-24a5abfeb42f

Joint=2846 CoordSys=GLOBAL CoordType=Cartesian XorR=22.15 Y=1.7 Z=-1 SpecialJt=No  
GUID=ba6c0922-f000-475d-a0cd-173b48e9c2b0

Joint=2847 CoordSys=GLOBAL CoordType=Cartesian XorR=22.15 Y=1.8 Z=-1 SpecialJt=No  
GUID=eeae51b6-2572-4e54-96c6-d7156afe0a8

Joint=2848 CoordSys=GLOBAL CoordType=Cartesian XorR=22.15 Y=1.9 Z=-1 SpecialJt=No  
GUID=18be2dba-ac28-41e8-b2d9-5bfe9a18bac1

Joint=2849 CoordSys=GLOBAL CoordType=Cartesian XorR=22.15 Y=2 Z=-1 SpecialJt=No GUID=79e8f924-e7bd-4c46-999b-a9f024bcd16c

Joint=2850 CoordSys=GLOBAL CoordType=Cartesian XorR=22.15 Y=2.1 Z=-1 SpecialJt=No  
GUID=696e89e8-57ec-4d33-8b68-ba238ed4d2f7

Joint=2851 CoordSys=GLOBAL CoordType=Cartesian XorR=22.15 Y=2.2 Z=-1 SpecialJt=No  
GUID=14d56457-6af8-4093-8556-71110cdd9222

Joint=2852 CoordSys=GLOBAL CoordType=Cartesian XorR=22.25 Y=-2.2 Z=-1 SpecialJt=No  
GUID=3c8ee55e-4ac2-4e94-a243-5020ab2b7fa4

Joint=2853 CoordSys=GLOBAL CoordType=Cartesian XorR=22.25 Y=-2.1 Z=-1 SpecialJt=No  
GUID=3794ac00-70e1-4731-971e-b8ab504ecdcd

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=2854 CoordSys=GLOBAL CoordType=Cartesian XorR=22.25 Y=-2 Z=-1 SpecialJt=No GUID=cc3359b2-3107-445e-a5c4-a255f0be5352

Joint=2855 CoordSys=GLOBAL CoordType=Cartesian XorR=22.25 Y=-1.9 Z=-1 SpecialJt=No GUID=372094a4-46b1-49ab-8397-fa0c89b06f7d

Joint=2856 CoordSys=GLOBAL CoordType=Cartesian XorR=22.25 Y=-1.8 Z=-1 SpecialJt=No GUID=f825f8f1-7ebf-4b50-8f79-417b3a8df93a

Joint=2857 CoordSys=GLOBAL CoordType=Cartesian XorR=22.25 Y=-1.7 Z=-1 SpecialJt=No GUID=1b7f84d9-19ed-479e-8e0f-d60901df0a69

Joint=2858 CoordSys=GLOBAL CoordType=Cartesian XorR=22.25 Y=-1.6 Z=-1 SpecialJt=No GUID=5222e817-8766-4147-a5f5-2a95bcf598d9

Joint=2859 CoordSys=GLOBAL CoordType=Cartesian XorR=22.25 Y=-1.5 Z=-1 SpecialJt=No GUID=13d53fb6-120e-4754-8489-9643282843a3

Joint=2860 CoordSys=GLOBAL CoordType=Cartesian XorR=22.25 Y=-1.4 Z=-1 SpecialJt=No GUID=59398e84-5ed2-4631-85b4-4587e4bb942e

Joint=2861 CoordSys=GLOBAL CoordType=Cartesian XorR=22.25 Y=-1.3 Z=-1 SpecialJt=No GUID=d4f6c128-1ec2-47d0-84ac-41dc006ed6b9

Joint=2862 CoordSys=GLOBAL CoordType=Cartesian XorR=22.25 Y=-1.2 Z=-1 SpecialJt=No GUID=d3bea012-3cec-4039-82a8-74b45ecef892

Joint=2863 CoordSys=GLOBAL CoordType=Cartesian XorR=22.25 Y=-1.1 Z=-1 SpecialJt=No GUID=7e82cec1-c83e-4b89-855f-34ac1242ccd8

Joint=2864 CoordSys=GLOBAL CoordType=Cartesian XorR=22.25 Y=-1 Z=-1 SpecialJt=No GUID=90e086d4-0370-4667-bb0d-0a0230eed3a4

Joint=2865 CoordSys=GLOBAL CoordType=Cartesian XorR=22.25 Y=-0.9 Z=-1 SpecialJt=No GUID=239a4641-c0de-459d-935f-49f923056632

Joint=2866 CoordSys=GLOBAL CoordType=Cartesian XorR=22.25 Y=-0.8 Z=-1 SpecialJt=No GUID=a2d7a700-e955-4ea1-9448-e836b52fe8e9

Joint=2867 CoordSys=GLOBAL CoordType=Cartesian XorR=22.25 Y=-0.7 Z=-1 SpecialJt=No GUID=9c9307d0-3bce-4ab1-a8ea-1bb9c1af8cb7

Joint=2868 CoordSys=GLOBAL CoordType=Cartesian XorR=22.25 Y=-0.6 Z=-1 SpecialJt=No GUID=9170742a-a654-4368-ab22-9fe675a3ebe2

Joint=2869 CoordSys=GLOBAL CoordType=Cartesian XorR=22.25 Y=-0.5 Z=-1 SpecialJt=No GUID=181437c9-63f6-4ff2-abce-66c4ab53277e

Joint=2870 CoordSys=GLOBAL CoordType=Cartesian XorR=22.25 Y=-0.4 Z=-1 SpecialJt=No GUID=1cad59b5-d0fc-4a47-9336-38bd15465245

Joint=2871 CoordSys=GLOBAL CoordType=Cartesian XorR=22.25 Y=-0.3 Z=-1 SpecialJt=No GUID=862a76c3-6079-40e2-bba6-fe0f87ade799

Joint=2872 CoordSys=GLOBAL CoordType=Cartesian XorR=22.25 Y=-0.2 Z=-1 SpecialJt=No GUID=04069905-f080-4d46-be9a-8b86b5fb1969

Joint=2873 CoordSys=GLOBAL CoordType=Cartesian XorR=22.25 Y=-0.09999999999999998 Z=-1 SpecialJt=No GUID=0df03cb0-a44f-49bf-b991-99db7537d5ae

Joint=2874 CoordSys=GLOBAL CoordType=Cartesian XorR=22.25 Y=0 Z=-1 SpecialJt=No GUID=6019e445-29ca-4d02-8adc-4693775e71c2

Joint=2875 CoordSys=GLOBAL CoordType=Cartesian XorR=22.25 Y=0.09999999999999998 Z=-1 SpecialJt=No GUID=7f98b5de-4843-48e6-afd2-a3bc820663e5

Joint=2876 CoordSys=GLOBAL CoordType=Cartesian XorR=22.25 Y=0.2 Z=-1 SpecialJt=No GUID=2a608134-34ab-49ab-9eeb-7ff310bdc438

Joint=2877 CoordSys=GLOBAL CoordType=Cartesian XorR=22.25 Y=0.3 Z=-1 SpecialJt=No GUID=4ef638b4-7250-45d5-bb12-2702166ec89e

Joint=2878 CoordSys=GLOBAL CoordType=Cartesian XorR=22.25 Y=0.4 Z=-1 SpecialJt=No GUID=fd710f83-b829-4f91-ab04-5fec91362975

Joint=2879 CoordSys=GLOBAL CoordType=Cartesian XorR=22.25 Y=0.5 Z=-1 SpecialJt=No GUID=8f447e99-1c6d-415c-b136-fc7252bae229

Joint=2880 CoordSys=GLOBAL CoordType=Cartesian XorR=22.25 Y=0.6 Z=-1 SpecialJt=No GUID=4a83b961-f6dc-47e8-85ca-7d5bfd14ff8b



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|            |                 |                     |            |        |      |              |                                           |
|------------|-----------------|---------------------|------------|--------|------|--------------|-------------------------------------------|
| Joint=2881 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.25 | Y=0.7  | Z=-1 | SpecialJt=No | GUID=c663263d-d702-4ba7-9895-cf26b2860b9c |
| Joint=2882 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.25 | Y=0.8  | Z=-1 | SpecialJt=No | GUID=b9502533-c4fe-4fcc-8c7b-2d76cfc68af6 |
| Joint=2883 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.25 | Y=0.9  | Z=-1 | SpecialJt=No | GUID=b12867df-6b53-4b8f-b0f5-496882da00a5 |
| Joint=2884 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.25 | Y=1    | Z=-1 | SpecialJt=No | GUID=87f6e0c4-3ed0-4d29-a2d6-fd0f7c1d78c4 |
| Joint=2885 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.25 | Y=1.1  | Z=-1 | SpecialJt=No | GUID=b9df1a64-4ff5-41bf-96f2-2fbfc6cf03bb |
| Joint=2886 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.25 | Y=1.2  | Z=-1 | SpecialJt=No | GUID=446de241-030f-4f7a-a654-112103356897 |
| Joint=2887 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.25 | Y=1.3  | Z=-1 | SpecialJt=No | GUID=463e8ca5-abb2-4f67-a42a-96f408138733 |
| Joint=2888 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.25 | Y=1.4  | Z=-1 | SpecialJt=No | GUID=293261f8-1962-4d3a-b8e9-d4a65bba4a73 |
| Joint=2889 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.25 | Y=1.5  | Z=-1 | SpecialJt=No | GUID=81e6696a-9953-43e5-b7e8-bdc6e00e632d |
| Joint=2890 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.25 | Y=1.6  | Z=-1 | SpecialJt=No | GUID=89b73bc2-1c8a-4384-98b9-7a57e3fd2c22 |
| Joint=2891 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.25 | Y=1.7  | Z=-1 | SpecialJt=No | GUID=261b97fb-a84d-418c-b19e-b05fc0c26d6d |
| Joint=2892 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.25 | Y=1.8  | Z=-1 | SpecialJt=No | GUID=51749a74-8096-4bbb-a26e-07abfcaf59d4 |
| Joint=2893 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.25 | Y=1.9  | Z=-1 | SpecialJt=No | GUID=8139fe9d-4fda-41c4-9f2e-cf65c5b30739 |
| Joint=2894 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.25 | Y=2    | Z=-1 | SpecialJt=No | GUID=a1ead4b7-f679-446a-b880-786b71d8acd6 |
| Joint=2895 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.25 | Y=2.1  | Z=-1 | SpecialJt=No | GUID=6d53072f-c63-4587-89cf-4e73364c6ea6  |
| Joint=2896 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.25 | Y=2.2  | Z=-1 | SpecialJt=No | GUID=8d4be008-bfb5-4fa7-bd6c-d78863d025e9 |
| Joint=2897 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.35 | Y=-2.2 | Z=-1 | SpecialJt=No | GUID=b1ce8e02-7a96-4fe9-b3a7-ef317dbc15e2 |
| Joint=2898 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.35 | Y=-2.1 | Z=-1 | SpecialJt=No | GUID=d81c4453-6f03-42c6-8d59-4a11e13feb52 |
| Joint=2899 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.35 | Y=-2   | Z=-1 | SpecialJt=No | GUID=82766ff5-4222-4837-93c5-2a3ed7e747f4 |
| Joint=2900 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.35 | Y=-1.9 | Z=-1 | SpecialJt=No | GUID=fa964934-16f0-4eb4-8cd7-75a1f321f1ee |
| Joint=2901 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.35 | Y=-1.8 | Z=-1 | SpecialJt=No | GUID=b1394058-6093-416f-809d-41c993cc2a73 |
| Joint=2902 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.35 | Y=-1.7 | Z=-1 | SpecialJt=No | GUID=6ed8113b-630a-4e16-ad58-5f9c9af997dc |
| Joint=2903 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.35 | Y=-1.6 | Z=-1 | SpecialJt=No | GUID=6a6f737b-e628-4f7d-9504-52113b78ca68 |
| Joint=2904 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.35 | Y=-1.5 | Z=-1 | SpecialJt=No | GUID=fa8b8efd-249b-4bdf-a17f-e85779c0c113 |
| Joint=2905 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.35 | Y=-1.4 | Z=-1 | SpecialJt=No | GUID=70709364-3078-4ff2-8777-2ac52ea94920 |
| Joint=2906 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.35 | Y=-1.3 | Z=-1 | SpecialJt=No | GUID=92c74e64-775c-4cda-a3a9-a9dd627b4579 |
| Joint=2907 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.35 | Y=-1.2 | Z=-1 | SpecialJt=No | GUID=af81fb26-75e8-4bb5-8eb2-97039bd126cf |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=2908 CoordSys=GLOBAL CoordType=Cartesian XorR=22.35 Y=-1.1 Z=-1 SpecialJt=No  
GUID=28d78477-287e-4dea-b178-32fbf42d493f

Joint=2909 CoordSys=GLOBAL CoordType=Cartesian XorR=22.35 Y=-1 Z=-1 SpecialJt=No GUID=33659c8c-  
c357-4d25-a355-db2273e2e4ce

Joint=2910 CoordSys=GLOBAL CoordType=Cartesian XorR=22.35 Y=-0.9 Z=-1 SpecialJt=No  
GUID=fe625007-3c71-4688-a2a9-ff10791ca834

Joint=2911 CoordSys=GLOBAL CoordType=Cartesian XorR=22.35 Y=-0.8 Z=-1 SpecialJt=No  
GUID=43c6d6c5-4aae-48bc-8f04-78aca18b78d6

Joint=2912 CoordSys=GLOBAL CoordType=Cartesian XorR=22.35 Y=-0.7 Z=-1 SpecialJt=No  
GUID=0b9f5350-64f1-4b49-ae0d-f93e18f8e4a0

Joint=2913 CoordSys=GLOBAL CoordType=Cartesian XorR=22.35 Y=-0.6 Z=-1 SpecialJt=No  
GUID=53acd712-3785-4472-82ea-758c943a8528

Joint=2914 CoordSys=GLOBAL CoordType=Cartesian XorR=22.35 Y=-0.5 Z=-1 SpecialJt=No  
GUID=d99a1179-d64e-48f9-b275-76a258f547ab

Joint=2915 CoordSys=GLOBAL CoordType=Cartesian XorR=22.35 Y=-0.4 Z=-1 SpecialJt=No  
GUID=60f5f5db-add1-4daf-bfda-4d7e7d0a8a06

Joint=2916 CoordSys=GLOBAL CoordType=Cartesian XorR=22.35 Y=-0.3 Z=-1 SpecialJt=No  
GUID=00829287-4a8c-44b7-9ece-f11ea901bb52

Joint=2917 CoordSys=GLOBAL CoordType=Cartesian XorR=22.35 Y=-0.2 Z=-1 SpecialJt=No  
GUID=5fb4fb09-8879-4fe2-986c-b07159a92ef6

Joint=2918 CoordSys=GLOBAL CoordType=Cartesian XorR=22.35 Y=-0.09999999999999998 Z=-1  
SpecialJt=No GUID=c8d455ae-9011-412b-b9c3-71b080d1dedd

Joint=2919 CoordSys=GLOBAL CoordType=Cartesian XorR=22.35 Y=-1.11022302462516E-16 Z=-1  
SpecialJt=No GUID=d9196a6b-d747-4964-a2b2-eca2f959dbc9

Joint=2920 CoordSys=GLOBAL CoordType=Cartesian XorR=22.35 Y=0.09999999999999999 Z=-1  
SpecialJt=No GUID=b57550c9-16e4-4e85-8b8d-96def13356a9

Joint=2921 CoordSys=GLOBAL CoordType=Cartesian XorR=22.35 Y=0.2 Z=-1 SpecialJt=No  
GUID=89df62cb-0c6d-4dae-b69e-d7541484d23d

Joint=2922 CoordSys=GLOBAL CoordType=Cartesian XorR=22.35 Y=0.3 Z=-1 SpecialJt=No  
GUID=ecd62d03-e9ee-4869-9cf1-3598f5d70ebd

Joint=2923 CoordSys=GLOBAL CoordType=Cartesian XorR=22.35 Y=0.4 Z=-1 SpecialJt=No  
GUID=ef686658-265d-49a6-a421-bf2df164c7bd

Joint=2924 CoordSys=GLOBAL CoordType=Cartesian XorR=22.35 Y=0.5 Z=-1 SpecialJt=No  
GUID=66115768-71f2-4cb8-a63c-666ccee2ed8b

Joint=2925 CoordSys=GLOBAL CoordType=Cartesian XorR=22.35 Y=0.6 Z=-1 SpecialJt=No  
GUID=daaafbd8-2e64-4502-ac33-15b83465e0ab

Joint=2926 CoordSys=GLOBAL CoordType=Cartesian XorR=22.35 Y=0.7 Z=-1 SpecialJt=No  
GUID=25e4bed3-7205-4d91-9576-4313bce500ad

Joint=2927 CoordSys=GLOBAL CoordType=Cartesian XorR=22.35 Y=0.8 Z=-1 SpecialJt=No  
GUID=7f383d2b-23e4-4f8a-b71d-c03c7ba08c83

Joint=2928 CoordSys=GLOBAL CoordType=Cartesian XorR=22.35 Y=0.9 Z=-1 SpecialJt=No  
GUID=01100b50-a4e4-4cec-b224-e11f17e5eaa

Joint=2929 CoordSys=GLOBAL CoordType=Cartesian XorR=22.35 Y=1 Z=-1 SpecialJt=No GUID=64b3d467-  
0d03-4599-b80d-5aefe4fe7caf

Joint=2930 CoordSys=GLOBAL CoordType=Cartesian XorR=22.35 Y=1.1 Z=-1 SpecialJt=No  
GUID=a03c7c5a-36fe-489b-a5e9-ee1fa205c3ca

Joint=2931 CoordSys=GLOBAL CoordType=Cartesian XorR=22.35 Y=1.2 Z=-1 SpecialJt=No  
GUID=b0d56599-5eb3-4b15-9d90-cd58918c4cba

Joint=2932 CoordSys=GLOBAL CoordType=Cartesian XorR=22.35 Y=1.3 Z=-1 SpecialJt=No  
GUID=e82bfebd-31da-40e6-93bf-4dabdae797d6

Joint=2933 CoordSys=GLOBAL CoordType=Cartesian XorR=22.35 Y=1.4 Z=-1 SpecialJt=No  
GUID=54416119-9c04-4960-b178-662892604124

Joint=2934 CoordSys=GLOBAL CoordType=Cartesian XorR=22.35 Y=1.5 Z=-1 SpecialJt=No GUID=836f610f-  
a51c-482d-a0a2-d1678465458a

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                           |                 |                     |            |        |      |              |
|-------------------------------------------|-----------------|---------------------|------------|--------|------|--------------|
| Joint=2935                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.35 | Y=1.6  | Z=-1 | SpecialJt=No |
| GUID=5c5da3f3-4e9a-4422-b622-7c1dd13170e9 |                 |                     |            |        |      |              |
| Joint=2936                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.35 | Y=1.7  | Z=-1 | SpecialJt=No |
| GUID=fa3283d6-5d6b-4ff8-9224-2c8bde1315c6 |                 |                     |            |        |      |              |
| Joint=2937                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.35 | Y=1.8  | Z=-1 | SpecialJt=No |
| GUID=643ed2a3-9772-4c9f-a142-8878fc812e54 |                 |                     |            |        |      |              |
| Joint=2938                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.35 | Y=1.9  | Z=-1 | SpecialJt=No |
| GUID=d3c0bd67-c04e-4ced-a79e-8051b2a41c34 |                 |                     |            |        |      |              |
| Joint=2939                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.35 | Y=2    | Z=-1 | SpecialJt=No |
| GUID=1ab9e059-c85c-4ebd-a7f6-9b9fc464aca5 |                 |                     |            |        |      |              |
| Joint=2940                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.35 | Y=2.1  | Z=-1 | SpecialJt=No |
| GUID=316d68fe-bc17-450c-b082-5c6272d20f53 |                 |                     |            |        |      |              |
| Joint=2941                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.35 | Y=2.2  | Z=-1 | SpecialJt=No |
| GUID=2a8d8b5b-d4ed-4fe4-a820-3f24cfd63e70 |                 |                     |            |        |      |              |
| Joint=2942                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.45 | Y=-2.2 | Z=-1 | SpecialJt=No |
| GUID=3b2d7115-57df-4097-b24e-5dedb23e0076 |                 |                     |            |        |      |              |
| Joint=2943                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.45 | Y=-2.1 | Z=-1 | SpecialJt=No |
| GUID=25d7f3f5-d1f5-4489-b19c-9a1f56b5ae3f |                 |                     |            |        |      |              |
| Joint=2944                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.45 | Y=-2   | Z=-1 | SpecialJt=No |
| GUID=bb2a248f-9f14-4c06-8bd8-0f478d34974e |                 |                     |            |        |      |              |
| Joint=2945                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.45 | Y=-1.9 | Z=-1 | SpecialJt=No |
| GUID=0b1ac6f1-6c79-4ae1-986f-957f3c34aad3 |                 |                     |            |        |      |              |
| Joint=2946                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.45 | Y=-1.8 | Z=-1 | SpecialJt=No |
| GUID=67ebc8d5-98c9-438e-9419-19849b87288c |                 |                     |            |        |      |              |
| Joint=2947                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.45 | Y=-1.7 | Z=-1 | SpecialJt=No |
| GUID=5ec21119-6f43-43b6-b45d-974c3d84730f |                 |                     |            |        |      |              |
| Joint=2948                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.45 | Y=-1.6 | Z=-1 | SpecialJt=No |
| GUID=7eca2259-7a39-4372-b712-38326600d546 |                 |                     |            |        |      |              |
| Joint=2949                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.45 | Y=-1.5 | Z=-1 | SpecialJt=No |
| GUID=482ba1ae-c9ef-4511-adb0-97459edbb835 |                 |                     |            |        |      |              |
| Joint=2950                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.45 | Y=-1.4 | Z=-1 | SpecialJt=No |
| GUID=b07b84d8-d5f1-4349-90c1-47fcca45a56  |                 |                     |            |        |      |              |
| Joint=2951                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.45 | Y=-1.3 | Z=-1 | SpecialJt=No |
| GUID=2b241526-c650-4fec-b982-fed53b7597a3 |                 |                     |            |        |      |              |
| Joint=2952                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.45 | Y=-1.2 | Z=-1 | SpecialJt=No |
| GUID=315da5f9-8886-4ff4-b1c8-d584bfc7a2b9 |                 |                     |            |        |      |              |
| Joint=2953                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.45 | Y=-1.1 | Z=-1 | SpecialJt=No |
| GUID=5f9290a1-f94b-425a-bb35-2502e0aa9ca6 |                 |                     |            |        |      |              |
| Joint=2954                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.45 | Y=-1   | Z=-1 | SpecialJt=No |
| GUID=28951a86-8d39-49f4-b87b-a7eabada468c |                 |                     |            |        |      |              |
| Joint=2955                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.45 | Y=-0.9 | Z=-1 | SpecialJt=No |
| GUID=a976d8b0-5746-406c-99be-73017a82fba3 |                 |                     |            |        |      |              |
| Joint=2956                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.45 | Y=-0.8 | Z=-1 | SpecialJt=No |
| GUID=44ffb1bc-6e52-404e-b066-8d71342ad1f6 |                 |                     |            |        |      |              |
| Joint=2957                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.45 | Y=-0.7 | Z=-1 | SpecialJt=No |
| GUID=f51e8bef-a6b3-431c-b001-ddb48b31539d |                 |                     |            |        |      |              |
| Joint=2958                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.45 | Y=-0.6 | Z=-1 | SpecialJt=No |
| GUID=e7089440-f8e0-478e-a186-2027faef218b |                 |                     |            |        |      |              |
| Joint=2959                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.45 | Y=-0.5 | Z=-1 | SpecialJt=No |
| GUID=bf8798a2-8359-41a3-8303-3e0cd1194c57 |                 |                     |            |        |      |              |
| Joint=2960                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.45 | Y=-0.4 | Z=-1 | SpecialJt=No |
| GUID=1ed531e6-5aa4-4988-aafa-d9a7fe7e4825 |                 |                     |            |        |      |              |
| Joint=2961                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.45 | Y=-0.3 | Z=-1 | SpecialJt=No |
| GUID=4bc763fe-1cec-4492-a7b0-caf7abe536cd |                 |                     |            |        |      |              |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=2962 CoordSys=GLOBAL CoordType=Cartesian XorR=22.45 Y=-0.2 Z=-1 SpecialJt=No  
GUID=b12b9292-9d69-466e-8bab-4c5e339c6abf

Joint=2963 CoordSys=GLOBAL CoordType=Cartesian XorR=22.45 Y=-0.09999999999999999 Z=-1  
SpecialJt=No GUID=4a98a447-5e26-4488-8385-c6718480ce56

Joint=2964 CoordSys=GLOBAL CoordType=Cartesian XorR=22.45 Y=0 Z=-1 SpecialJt=No GUID=00c12dee-  
49e1-4315-af57-c2c77d708b49

Joint=2965 CoordSys=GLOBAL CoordType=Cartesian XorR=22.45 Y=0.1 Z=-1 SpecialJt=No  
GUID=f51a74e5-2aea-43a6-ae00-a19542f20d41

Joint=2966 CoordSys=GLOBAL CoordType=Cartesian XorR=22.45 Y=0.2 Z=-1 SpecialJt=No  
GUID=e810a9d5-a51d-471d-ac91-024c21cdd782

Joint=2967 CoordSys=GLOBAL CoordType=Cartesian XorR=22.45 Y=0.3 Z=-1 SpecialJt=No  
GUID=ca2d526f-bb74-445e-8fb7-48281b7307af

Joint=2968 CoordSys=GLOBAL CoordType=Cartesian XorR=22.45 Y=0.4 Z=-1 SpecialJt=No  
GUID=644b13b0-ef41-48e2-80d6-1b9a31f5737d

Joint=2969 CoordSys=GLOBAL CoordType=Cartesian XorR=22.45 Y=0.5 Z=-1 SpecialJt=No  
GUID=7a7e592b-16fc-4af4-9ce0-8528ff5d3cce

Joint=2970 CoordSys=GLOBAL CoordType=Cartesian XorR=22.45 Y=0.6 Z=-1 SpecialJt=No  
GUID=c06f47d3-b399-4331-9654-cd4f0e95222a

Joint=2971 CoordSys=GLOBAL CoordType=Cartesian XorR=22.45 Y=0.7 Z=-1 SpecialJt=No  
GUID=1cb74c63-f06a-4210-bdb7-325e335a1977

Joint=2972 CoordSys=GLOBAL CoordType=Cartesian XorR=22.45 Y=0.8 Z=-1 SpecialJt=No  
GUID=86913a92-a380-4d5b-b86d-cb38071816e9

Joint=2973 CoordSys=GLOBAL CoordType=Cartesian XorR=22.45 Y=0.9 Z=-1 SpecialJt=No  
GUID=811593e8-14e2-423c-98f5-e55e07c081fa

Joint=2974 CoordSys=GLOBAL CoordType=Cartesian XorR=22.45 Y=1 Z=-1 SpecialJt=No GUID=9b5b7b05-  
d496-4c86-985d-69b32a1093f8

Joint=2975 CoordSys=GLOBAL CoordType=Cartesian XorR=22.45 Y=1.1 Z=-1 SpecialJt=No  
GUID=4e3d9d17-2b00-46e5-a858-d76e0c65b4dd

Joint=2976 CoordSys=GLOBAL CoordType=Cartesian XorR=22.45 Y=1.2 Z=-1 SpecialJt=No  
GUID=0c7e53c7-9b02-4144-a817-00ae71e0f7c1

Joint=2977 CoordSys=GLOBAL CoordType=Cartesian XorR=22.45 Y=1.3 Z=-1 SpecialJt=No  
GUID=05d213ca-b4fa-4de3-bd06-d310ca6a62f2

Joint=2978 CoordSys=GLOBAL CoordType=Cartesian XorR=22.45 Y=1.4 Z=-1 SpecialJt=No  
GUID=68070cda-912c-41d9-ac1a-f8f87884dfde

Joint=2979 CoordSys=GLOBAL CoordType=Cartesian XorR=22.45 Y=1.5 Z=-1 SpecialJt=No  
GUID=3a18cd0f-173b-43d1-8d59-8f1523c94c3e

Joint=2980 CoordSys=GLOBAL CoordType=Cartesian XorR=22.45 Y=1.6 Z=-1 SpecialJt=No  
GUID=a8358544-513c-4e9d-8d0f-f83575f7e40a

Joint=2981 CoordSys=GLOBAL CoordType=Cartesian XorR=22.45 Y=1.7 Z=-1 SpecialJt=No  
GUID=c62af4d6-c225-4601-95c3-512b6ff5c882

Joint=2982 CoordSys=GLOBAL CoordType=Cartesian XorR=22.45 Y=1.8 Z=-1 SpecialJt=No  
GUID=b6e4e536-94f4-4f9e-8f49-c452b403e167

Joint=2983 CoordSys=GLOBAL CoordType=Cartesian XorR=22.45 Y=1.9 Z=-1 SpecialJt=No  
GUID=1ced46cc-c47e-4414-9546-726f145e45ac

Joint=2984 CoordSys=GLOBAL CoordType=Cartesian XorR=22.45 Y=2 Z=-1 SpecialJt=No GUID=b16c8d2a-  
4a80-4ac2-a487-7d3e8e50ca06

Joint=2985 CoordSys=GLOBAL CoordType=Cartesian XorR=22.45 Y=2.1 Z=-1 SpecialJt=No  
GUID=2ee0f510-d424-41ad-96c0-e353f56655d1

Joint=2986 CoordSys=GLOBAL CoordType=Cartesian XorR=22.45 Y=2.2 Z=-1 SpecialJt=No GUID=1a7b7bf-  
7bec-4d02-9257-75e9ab3bc82b

Joint=2987 CoordSys=GLOBAL CoordType=Cartesian XorR=22.55 Y=-2.2 Z=-1 SpecialJt=No  
GUID=4a1f9bcc-a847-4a37-a4ab-0ef3fa393937

Joint=2988 CoordSys=GLOBAL CoordType=Cartesian XorR=22.55 Y=-2.1 Z=-1 SpecialJt=No  
GUID=ec548146-a965-4f79-a429-dfb53e3bcd39



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                           |                 |                     |            |                         |      |              |
|-------------------------------------------|-----------------|---------------------|------------|-------------------------|------|--------------|
| Joint=2989                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.55 | Y=-2                    | Z=-1 | SpecialJt=No |
| GUID=19d9a5a4-59b5-4596-b44b-0f5867443434 |                 |                     |            |                         |      |              |
| Joint=2990                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.55 | Y=-1.9                  | Z=-1 | SpecialJt=No |
| GUID=3ec07c8f-8ddf-483c-aed9-da3198755025 |                 |                     |            |                         |      |              |
| Joint=2991                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.55 | Y=-1.8                  | Z=-1 | SpecialJt=No |
| GUID=c3cb8f6f-a6b1-4525-912f-8dc04c14e67e |                 |                     |            |                         |      |              |
| Joint=2992                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.55 | Y=-1.7                  | Z=-1 | SpecialJt=No |
| GUID=1432fd9a-a211-483e-a083-866fe34e2a0c |                 |                     |            |                         |      |              |
| Joint=2993                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.55 | Y=-1.6                  | Z=-1 | SpecialJt=No |
| GUID=21697367-94f3-4cbc-9154-086d0aab8234 |                 |                     |            |                         |      |              |
| Joint=2994                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.55 | Y=-1.5                  | Z=-1 | SpecialJt=No |
| GUID=af3170e0-1d06-4bc0-ae80-9f3226ea80f2 |                 |                     |            |                         |      |              |
| Joint=2995                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.55 | Y=-1.4                  | Z=-1 | SpecialJt=No |
| GUID=3bbce718-eaef-4f05-935e-9e5f83677f1b |                 |                     |            |                         |      |              |
| Joint=2996                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.55 | Y=-1.3                  | Z=-1 | SpecialJt=No |
| GUID=6a5b6db6-56b1-4191-b76a-39906daffb0c |                 |                     |            |                         |      |              |
| Joint=2997                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.55 | Y=-1.2                  | Z=-1 | SpecialJt=No |
| GUID=2967b633-45f3-4ad9-92c9-644ae874a888 |                 |                     |            |                         |      |              |
| Joint=2998                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.55 | Y=-1.1                  | Z=-1 | SpecialJt=No |
| GUID=64b83d17-c64c-4f6f-ac67-18860e711e71 |                 |                     |            |                         |      |              |
| Joint=2999                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.55 | Y=-1                    | Z=-1 | SpecialJt=No |
| GUID=f3921ec9-291a-4c43-88c7-18b6d7054d68 |                 |                     |            |                         |      |              |
| Joint=3000                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.55 | Y=-0.9                  | Z=-1 | SpecialJt=No |
| GUID=b6672116-536f-4fc7-92d5-fd813dc3b3be |                 |                     |            |                         |      |              |
| Joint=3001                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.55 | Y=-0.8                  | Z=-1 | SpecialJt=No |
| GUID=f3381ee2-d1cd-40b3-92f8-4f47088ef881 |                 |                     |            |                         |      |              |
| Joint=3002                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.55 | Y=-0.7                  | Z=-1 | SpecialJt=No |
| GUID=b8efeba6-427c-4994-b1c9-108e8bdc5de5 |                 |                     |            |                         |      |              |
| Joint=3003                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.55 | Y=-0.6                  | Z=-1 | SpecialJt=No |
| GUID=aac94e36-9ebb-4650-8c78-16d07110154d |                 |                     |            |                         |      |              |
| Joint=3004                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.55 | Y=-0.5                  | Z=-1 | SpecialJt=No |
| GUID=ab42d0b8-d2f8-412c-9b36-07bc73f863d4 |                 |                     |            |                         |      |              |
| Joint=3005                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.55 | Y=-0.4                  | Z=-1 | SpecialJt=No |
| GUID=4330ae2f-4f98-4d0c-9c25-5f289cf8ee7a |                 |                     |            |                         |      |              |
| Joint=3006                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.55 | Y=-0.3                  | Z=-1 | SpecialJt=No |
| GUID=8ed68012-ba65-4e9e-8010-18c5329c8d80 |                 |                     |            |                         |      |              |
| Joint=3007                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.55 | Y=-0.2                  | Z=-1 | SpecialJt=No |
| GUID=ed0f18cf-2239-4a37-baa9-f2b4dfd64604 |                 |                     |            |                         |      |              |
| Joint=3008                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.55 | Y=-0.09999999999999999  | Z=-1 | SpecialJt=No |
| GUID=b5806bc8-a32a-4cc8-adc0-cd8813dabf36 |                 |                     |            |                         |      |              |
| Joint=3009                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.55 | Y=-1.11022302462516E-16 | Z=-1 | SpecialJt=No |
| GUID=ba6654b4-b71e-405e-803e-4ad361885ccd |                 |                     |            |                         |      |              |
| Joint=3010                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.55 | Y=0.1                   | Z=-1 | SpecialJt=No |
| GUID=91e7187e-2717-4bc1-be45-6cc8a181900d |                 |                     |            |                         |      |              |
| Joint=3011                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.55 | Y=0.2                   | Z=-1 | SpecialJt=No |
| GUID=3a95cba6-091b-4425-b043-c9f5b20b3dcf |                 |                     |            |                         |      |              |
| Joint=3012                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.55 | Y=0.3                   | Z=-1 | SpecialJt=No |
| GUID=849ce80f-32db-48ad-85e7-ca09dbe2c075 |                 |                     |            |                         |      |              |
| Joint=3013                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.55 | Y=0.4                   | Z=-1 | SpecialJt=No |
| GUID=f5dcb992-832b-4621-a0a2-a32be318ea21 |                 |                     |            |                         |      |              |
| Joint=3014                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.55 | Y=0.5                   | Z=-1 | SpecialJt=No |
| GUID=fc0bc08d-ca38-45fc-89c4-793243592bf7 |                 |                     |            |                         |      |              |
| Joint=3015                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.55 | Y=0.6                   | Z=-1 | SpecialJt=No |
| GUID=666b0611-d693-4011-9a25-3edfcf46f01b |                 |                     |            |                         |      |              |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=3016 CoordSys=GLOBAL CoordType=Cartesian XorR=22.55 Y=0.7 Z=-1 SpecialJt=No  
GUID=9f977622-845a-4ac8-b000-80429ce91588

Joint=3017 CoordSys=GLOBAL CoordType=Cartesian XorR=22.55 Y=0.8 Z=-1 SpecialJt=No  
GUID=2eea56e2-39ac-4edb-a41b-a871ded325de

Joint=3018 CoordSys=GLOBAL CoordType=Cartesian XorR=22.55 Y=0.9 Z=-1 SpecialJt=No  
GUID=3bba9547-f1da-4836-bb95-ffe4261e9f7c

Joint=3019 CoordSys=GLOBAL CoordType=Cartesian XorR=22.55 Y=1 Z=-1 SpecialJt=No GUID=e57ba4db-f95a-4656-8e17-a41e529f59f6

Joint=3020 CoordSys=GLOBAL CoordType=Cartesian XorR=22.55 Y=1.1 Z=-1 SpecialJt=No  
GUID=e96c8ad6-c214-415a-8056-7baddb6c7f87

Joint=3021 CoordSys=GLOBAL CoordType=Cartesian XorR=22.55 Y=1.2 Z=-1 SpecialJt=No  
GUID=6b8724e8-7d95-43a9-9a3d-cf0381cb1787

Joint=3022 CoordSys=GLOBAL CoordType=Cartesian XorR=22.55 Y=1.3 Z=-1 SpecialJt=No  
GUID=5b43d6b0-331e-4c2a-8be8-9346c1d5ca30

Joint=3023 CoordSys=GLOBAL CoordType=Cartesian XorR=22.55 Y=1.4 Z=-1 SpecialJt=No GUID=6aa9ef7f-49bc-484b-9355-da834bd5df70

Joint=3024 CoordSys=GLOBAL CoordType=Cartesian XorR=22.55 Y=1.5 Z=-1 SpecialJt=No  
GUID=02945fa3-28a3-4d5f-8e8a-ace24820c30c

Joint=3025 CoordSys=GLOBAL CoordType=Cartesian XorR=22.55 Y=1.6 Z=-1 SpecialJt=No  
GUID=f2e7e30a-8457-4d50-92fc-885978c149f2

Joint=3026 CoordSys=GLOBAL CoordType=Cartesian XorR=22.55 Y=1.7 Z=-1 SpecialJt=No  
GUID=d47ed49f-b16c-4a58-aac9-7ad9dd7b114a

Joint=3027 CoordSys=GLOBAL CoordType=Cartesian XorR=22.55 Y=1.8 Z=-1 SpecialJt=No  
GUID=0615a5ef-4a2a-4a62-bec4-b36ba04ff147

Joint=3028 CoordSys=GLOBAL CoordType=Cartesian XorR=22.55 Y=1.9 Z=-1 SpecialJt=No  
GUID=bc4dbf43-8ba4-4e3c-abc4-094f3d8aef09

Joint=3029 CoordSys=GLOBAL CoordType=Cartesian XorR=22.55 Y=2 Z=-1 SpecialJt=No GUID=b533d06b-c815-46eb-9316-d66c8325166b

Joint=3030 CoordSys=GLOBAL CoordType=Cartesian XorR=22.55 Y=2.1 Z=-1 SpecialJt=No  
GUID=8b915b76-8df5-4a85-984f-92e45c890ab9

Joint=3031 CoordSys=GLOBAL CoordType=Cartesian XorR=22.55 Y=2.2 Z=-1 SpecialJt=No  
GUID=3022f797-4211-487b-a2b0-00aee2b9939c

Joint=3032 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=-2.2 Z=-1 SpecialJt=No  
GUID=4d19fa1f-db60-4b0d-bc07-216d6f31a9b5

Joint=3033 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=-2.1 Z=-1 SpecialJt=No  
GUID=f7b47ef3-e88c-483c-acc4-011f5de0fbc3

Joint=3034 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=-2 Z=-1 SpecialJt=No  
GUID=4ee7728d-e6cf-4df4-8f9d-3b5a4a3b07c9

Joint=3035 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=-1.9 Z=-1 SpecialJt=No  
GUID=adcf816d-53e0-48ba-9fdd-581293344a6a

Joint=3036 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=-1.8 Z=-1 SpecialJt=No  
GUID=83d6ae6e-1ad8-4ea5-8106-69b1163e4bbf

Joint=3037 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=-1.7 Z=-1 SpecialJt=No  
GUID=7b4e9520-d77f-4f2d-b682-d90225c77888

Joint=3038 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=-1.6 Z=-1 SpecialJt=No  
GUID=10fcfd22-90df-47bd-a883-05092d3ae4ce

Joint=3039 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=-1.5 Z=-1 SpecialJt=No  
GUID=3dd84f6b-3f51-41fd-8ec6-75742fcc1341

Joint=3040 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=-1.4 Z=-1 SpecialJt=No  
GUID=87dff480-fb4e-4600-aca2-a5fff3b116aa

Joint=3041 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=-1.3 Z=-1 SpecialJt=No  
GUID=9f7414eb-110f-48ab-b6b4-3b9ac63947d3

Joint=3042 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=-1.2 Z=-1 SpecialJt=No  
GUID=73f0a68f-4247-4796-b380-e1a667ac60b0

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=3043 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=-1.1 Z=-1 SpecialJt=No  
GUID=4919330c-6480-49ca-b4f3-1c819b0f33fd

Joint=3044 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=-1 Z=-1 SpecialJt=No GUID=7e80a3cf-3bcf-47eb-a84d-bec8546eaaf9

Joint=3045 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=-0.9 Z=-1 SpecialJt=No  
GUID=77843649-86ce-43e7-850a-f051e5c2763a

Joint=3046 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=-0.8 Z=-1 SpecialJt=No  
GUID=2a2468fc-cf33-40db-8b2e-697e61f9b1a0

Joint=3047 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=-0.7 Z=-1 SpecialJt=No  
GUID=717e9159-0656-48cb-8048-0af94b320e44

Joint=3048 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=-0.6 Z=-1 SpecialJt=No  
GUID=9161b487-d794-4a83-a051-4988ba556908

Joint=3049 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=-0.5 Z=-1 SpecialJt=No  
GUID=790398fe-0d97-41a0-b50f-c26b7dd8b5fe

Joint=3050 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=-0.4 Z=-1 SpecialJt=No  
GUID=f7d00181-d918-4edf-b26c-e55b6e68e444

Joint=3051 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=-0.3 Z=-1 SpecialJt=No  
GUID=8660f51f-2ec3-45cc-b713-d66d45da1606

Joint=3052 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=-0.2 Z=-1 SpecialJt=No  
GUID=4ff894a8-e6ca-4121-b4e3-f7a153a1f74f

Joint=3053 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=-0.09999999999999999999 Z=-1  
SpecialJt=No GUID=31b19b88-bd08-4daa-b6b6-9c243b933f48

Joint=3054 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=0 Z=-1 SpecialJt=No GUID=7332cf52-2f12-4dd0-9c3d-3d5645fda25e

Joint=3055 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=0.09999999999999999999 Z=-1  
SpecialJt=No GUID=87ce1138-2fa8-430b-9c0a-0ae06fc40157

Joint=3056 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=0.2 Z=-1 SpecialJt=No  
GUID=4de89f39-dac4-49d8-aa6a-307f345377de

Joint=3057 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=0.3 Z=-1 SpecialJt=No  
GUID=2c1a0d96-aa68-4387-a78f-ae63aed1b35b

Joint=3058 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=0.4 Z=-1 SpecialJt=No  
GUID=5d280cfd-2def-485b-b7bf-c09a7f4b6946

Joint=3059 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=0.5 Z=-1 SpecialJt=No  
GUID=8551bd33-cf82-4380-b78d-509b8d1e5421

Joint=3060 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=0.6 Z=-1 SpecialJt=No  
GUID=685e0305-a67e-4e5c-a029-d24781a5461c

Joint=3061 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=0.7 Z=-1 SpecialJt=No  
GUID=b5bb257e-35ae-45ff-aaa2-4062586169cd

Joint=3062 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=0.8 Z=-1 SpecialJt=No  
GUID=17c061ae-0166-437f-be10-04242274ac65

Joint=3063 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=0.9 Z=-1 SpecialJt=No  
GUID=ea39f5ad-8229-4a28-85c0-e96c97aa448c

Joint=3064 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=1 Z=-1 SpecialJt=No GUID=9e24d407-9f66-480c-8678-b8ffc2983eec

Joint=3065 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=1.1 Z=-1 SpecialJt=No  
GUID=3d5c4c22-6cba-42a4-9f07-b26be721264b

Joint=3066 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=1.2 Z=-1 SpecialJt=No  
GUID=491ecfb8-0032-46a1-925f-26c7bc782e48

Joint=3067 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=1.3 Z=-1 SpecialJt=No  
GUID=8b46a63d-ac56-4af1-9010-f2efa6d09063

Joint=3068 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=1.4 Z=-1 SpecialJt=No  
GUID=a0b021b4-8d5b-4280-bbdf-c518353d6a5a

Joint=3069 CoordSys=GLOBAL CoordType=Cartesian XorR=22.65 Y=1.5 Z=-1 SpecialJt=No GUID=878ef7ff-db4f-40f3-b88b-807c8df517e9

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                           |                 |                     |            |        |      |              |
|-------------------------------------------|-----------------|---------------------|------------|--------|------|--------------|
| Joint=3070                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.65 | Y=1.6  | Z=-1 | SpecialJt=No |
| GUID=59a814eb-8ff2-44bc-93d2-bc42eee870ee |                 |                     |            |        |      |              |
| Joint=3071                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.65 | Y=1.7  | Z=-1 | SpecialJt=No |
| GUID=e458cbb5-a5e1-424c-b97c-5dd0aae71223 |                 |                     |            |        |      |              |
| Joint=3072                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.65 | Y=1.8  | Z=-1 | SpecialJt=No |
| GUID=9c7ba70f-d415-46e3-9853-e386ea5a11e4 |                 |                     |            |        |      |              |
| Joint=3073                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.65 | Y=1.9  | Z=-1 | SpecialJt=No |
| GUID=a047c93b-92fc-4f9d-9054-c34f0d4e1fc4 |                 |                     |            |        |      |              |
| Joint=3074                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.65 | Y=2    | Z=-1 | SpecialJt=No |
| GUID=cadd968a-8ebf-47e7-9ada-fb8a68a8a965 |                 |                     |            |        |      |              |
| Joint=3075                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.65 | Y=2.1  | Z=-1 | SpecialJt=No |
| GUID=b6fc0aa3-8feb-402d-b20d-7a81b4a66e83 |                 |                     |            |        |      |              |
| Joint=3076                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.65 | Y=2.2  | Z=-1 | SpecialJt=No |
| GUID=65f06c48-02d3-4f6a-adf1-e0cb8738b2fa |                 |                     |            |        |      |              |
| Joint=3077                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=-2.2 | Z=-1 | SpecialJt=No |
| GUID=878abe39-7d13-402c-83d5-72caf020fa40 |                 |                     |            |        |      |              |
| Joint=3078                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=-2.1 | Z=-1 | SpecialJt=No |
| GUID=9fd1a518-0732-40da-afe2-d775de72bde2 |                 |                     |            |        |      |              |
| Joint=3079                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=-2   | Z=-1 | SpecialJt=No |
| GUID=e4ff394c-10ca-45b7-bf10-d66a0a02b8dc |                 |                     |            |        |      |              |
| Joint=3080                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=-1.9 | Z=-1 | SpecialJt=No |
| GUID=11e2d1e0-6567-48c3-845a-4cd65466e525 |                 |                     |            |        |      |              |
| Joint=3081                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=-1.8 | Z=-1 | SpecialJt=No |
| GUID=1494b99b-0bbf-4e38-a0e6-3c18f5b2f8f3 |                 |                     |            |        |      |              |
| Joint=3082                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=-1.7 | Z=-1 | SpecialJt=No |
| GUID=6fcb66a7-4833-4e4a-862c-bb9fb37fbd9  |                 |                     |            |        |      |              |
| Joint=3083                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=-1.6 | Z=-1 | SpecialJt=No |
| GUID=6409552f-350b-4b96-aaf4-48d0e0c326e8 |                 |                     |            |        |      |              |
| Joint=3084                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=-1.5 | Z=-1 | SpecialJt=No |
| GUID=8f864b8a-ac2b-4340-8ebe-e1b73d65c58c |                 |                     |            |        |      |              |
| Joint=3085                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=-1.4 | Z=-1 | SpecialJt=No |
| GUID=78b4a91f-6adc-4ad9-a54b-1dd4ab0e5511 |                 |                     |            |        |      |              |
| Joint=3086                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=-1.3 | Z=-1 | SpecialJt=No |
| GUID=8660442f-f080-4999-91c0-6d9cbda8d868 |                 |                     |            |        |      |              |
| Joint=3087                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=-1.2 | Z=-1 | SpecialJt=No |
| GUID=d5f6991c-b37c-483a-a308-e06308c30203 |                 |                     |            |        |      |              |
| Joint=3088                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=-1.1 | Z=-1 | SpecialJt=No |
| GUID=01a4d28b-ea05-4b8a-8fad-2a9dc6c409c4 |                 |                     |            |        |      |              |
| Joint=3089                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=-1   | Z=-1 | SpecialJt=No |
| GUID=cab3e5ac-605d-4a25-8079-14c1014c920e |                 |                     |            |        |      |              |
| Joint=3090                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=-0.9 | Z=-1 | SpecialJt=No |
| GUID=d9180884-d4ef-47a0-aeef-20913d4e6d43 |                 |                     |            |        |      |              |
| Joint=3091                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=-0.8 | Z=-1 | SpecialJt=No |
| GUID=03d4921b-dfee-4754-8e0a-931fcfc02656 |                 |                     |            |        |      |              |
| Joint=3092                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=-0.7 | Z=-1 | SpecialJt=No |
| GUID=a4f980e6-fed1-4197-80f2-02330cee5a06 |                 |                     |            |        |      |              |
| Joint=3093                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=-0.6 | Z=-1 | SpecialJt=No |
| GUID=06c454d2-6d02-4d5f-9ec0-4249a70dd298 |                 |                     |            |        |      |              |
| Joint=3094                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=-0.5 | Z=-1 | SpecialJt=No |
| GUID=e1abc8f3-17bc-4a9b-a0f0-b7672286e7d5 |                 |                     |            |        |      |              |
| Joint=3095                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=-0.4 | Z=-1 | SpecialJt=No |
| GUID=9ff30dc4-aa82-423c-8548-59cf9cfc186b |                 |                     |            |        |      |              |
| Joint=3096                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=-0.3 | Z=-1 | SpecialJt=No |
| GUID=866980a0-6833-4817-8550-ef4e1a697f10 |                 |                     |            |        |      |              |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                           |                 |                     |            |        |      |              |                                           |
|-------------------------------------------|-----------------|---------------------|------------|--------|------|--------------|-------------------------------------------|
| Joint=3097                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=-0.2 | Z=-1 | SpecialJt=No |                                           |
| GUID=d4175dc0-1c79-433a-81ff-0b805b162b66 |                 |                     |            |        |      |              |                                           |
| Joint=3098                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=-0.1 | Z=-1 | SpecialJt=No |                                           |
| GUID=8c76c6e8-b343-46d1-bb7a-5900f22e0c32 |                 |                     |            |        |      |              |                                           |
| Joint=3099                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=0.1  | Z=-1 | SpecialJt=No |                                           |
| GUID=bb222df0-1172-4ed9-9ad5-4b0f4252cae0 |                 |                     |            |        |      |              |                                           |
| Joint=3100                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=0.2  | Z=-1 | SpecialJt=No |                                           |
| GUID=2e62a50e-36ef-4745-a321-912540854032 |                 |                     |            |        |      |              |                                           |
| Joint=3101                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=0.3  | Z=-1 | SpecialJt=No |                                           |
| GUID=865db5ad-dbc7-4f8f-965f-d2cac4070b35 |                 |                     |            |        |      |              |                                           |
| Joint=3102                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=0.4  | Z=-1 | SpecialJt=No |                                           |
| GUID=7054002b-dfd2-485e-9c01-1370cec74e85 |                 |                     |            |        |      |              |                                           |
| Joint=3103                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=0.5  | Z=-1 | SpecialJt=No |                                           |
| GUID=34ecb970-11c1-4466-93dd-a5fb17ef783d |                 |                     |            |        |      |              |                                           |
| Joint=3104                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=0.6  | Z=-1 | SpecialJt=No | GUID=28b8ff49-df36-4f04-959f-56301044ec19 |
| Joint=3105                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=0.7  | Z=-1 | SpecialJt=No |                                           |
| GUID=fab184d4-21a4-4803-9ada-9e4cf9113fd2 |                 |                     |            |        |      |              |                                           |
| Joint=3106                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=0.8  | Z=-1 | SpecialJt=No |                                           |
| GUID=90295e78-d63a-40b1-86ff-9c5d78e47417 |                 |                     |            |        |      |              |                                           |
| Joint=3107                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=0.9  | Z=-1 | SpecialJt=No |                                           |
| GUID=4b4352d0-e255-4458-b4e5-d206f5e6a99e |                 |                     |            |        |      |              |                                           |
| Joint=3108                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=1    | Z=-1 | SpecialJt=No | GUID=5bf7b9b9-c4cc-4fd4-a296-e4cb6f961570 |
| Joint=3109                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=1.1  | Z=-1 | SpecialJt=No |                                           |
| GUID=7995d07d-b36d-481d-a9cb-45600d2d8520 |                 |                     |            |        |      |              |                                           |
| Joint=3110                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=1.2  | Z=-1 | SpecialJt=No |                                           |
| GUID=d99e0126-410c-4e4b-bb2f-780f3bc1fdc7 |                 |                     |            |        |      |              |                                           |
| Joint=3111                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=1.3  | Z=-1 | SpecialJt=No |                                           |
| GUID=283f9257-01d4-4842-884e-6677b0ff8f7f |                 |                     |            |        |      |              |                                           |
| Joint=3112                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=1.4  | Z=-1 | SpecialJt=No |                                           |
| GUID=270fc781-bac9-4ac9-868d-32bd91151cda |                 |                     |            |        |      |              |                                           |
| Joint=3113                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=1.5  | Z=-1 | SpecialJt=No | GUID=f490cf9b-46a5-4c41-83ad-21d967f41ef0 |
| Joint=3114                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=1.6  | Z=-1 | SpecialJt=No |                                           |
| GUID=0d932d40-7f19-42ef-b6c2-43cda6096d16 |                 |                     |            |        |      |              |                                           |
| Joint=3115                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=1.7  | Z=-1 | SpecialJt=No |                                           |
| GUID=56b7332f-a50f-4894-a502-d5349164c70a |                 |                     |            |        |      |              |                                           |
| Joint=3116                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=1.8  | Z=-1 | SpecialJt=No |                                           |
| GUID=e1f8ae76-d56f-4ae0-a13b-62bfa0f4983d |                 |                     |            |        |      |              |                                           |
| Joint=3117                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=1.9  | Z=-1 | SpecialJt=No |                                           |
| GUID=2e72d8ac-89d7-4f8a-8081-34f3fff7467e |                 |                     |            |        |      |              |                                           |
| Joint=3118                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=2    | Z=-1 | SpecialJt=No | GUID=50d881fc-7daf-4316-b57c-7681451aa0d1 |
| Joint=3119                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=2.1  | Z=-1 | SpecialJt=No |                                           |
| GUID=e6299949-6c97-40ca-91c4-76e85b28438c |                 |                     |            |        |      |              |                                           |
| Joint=3120                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.75 | Y=2.2  | Z=-1 | SpecialJt=No |                                           |
| GUID=01d5f4bc-6393-4319-89b3-17be442800ce |                 |                     |            |        |      |              |                                           |
| Joint=3121                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.85 | Y=-2.2 | Z=-1 | SpecialJt=No |                                           |
| GUID=fccc29c1-274e-4de8-ace7-e77892206440 |                 |                     |            |        |      |              |                                           |
| Joint=3122                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.85 | Y=-2.1 | Z=-1 | SpecialJt=No |                                           |
| GUID=05de1798-75cc-4efb-af48-798550402f9d |                 |                     |            |        |      |              |                                           |
| Joint=3123                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.85 | Y=-2   | Z=-1 | SpecialJt=No | GUID=fbd967a9-e204-4a21-8d7e-56523bd0095f |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                           |                 |                     |            |                           |      |              |
|-------------------------------------------|-----------------|---------------------|------------|---------------------------|------|--------------|
| Joint=3124                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.85 | Y=-1.9                    | Z=-1 | SpecialJt=No |
| GUID=2021a487-c0c9-49ee-b138-7a05ca748155 |                 |                     |            |                           |      |              |
| Joint=3125                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.85 | Y=-1.8                    | Z=-1 | SpecialJt=No |
| GUID=2351dc34-c845-4a70-bb07-0c2b7b4d9571 |                 |                     |            |                           |      |              |
| Joint=3126                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.85 | Y=-1.7                    | Z=-1 | SpecialJt=No |
| GUID=7f5be0cb-f273-4190-aedc-1a8d4be04d20 |                 |                     |            |                           |      |              |
| Joint=3127                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.85 | Y=-1.6                    | Z=-1 | SpecialJt=No |
| GUID=01a68a79-4c9b-4c39-8a52-bfdadd533699 |                 |                     |            |                           |      |              |
| Joint=3128                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.85 | Y=-1.5                    | Z=-1 | SpecialJt=No |
| GUID=73063b22-a94e-49f2-b505-deb99a5f1cd3 |                 |                     |            |                           |      |              |
| Joint=3129                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.85 | Y=-1.4                    | Z=-1 | SpecialJt=No |
| GUID=77615a61-05eb-42e0-9830-f67221957663 |                 |                     |            |                           |      |              |
| Joint=3130                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.85 | Y=-1.3                    | Z=-1 | SpecialJt=No |
| GUID=3da6bb30-d8e6-4e23-8f09-a27b853e393d |                 |                     |            |                           |      |              |
| Joint=3131                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.85 | Y=-1.2                    | Z=-1 | SpecialJt=No |
| GUID=6f7a1512-49ab-4bd2-ac1d-1b1eaa7b6350 |                 |                     |            |                           |      |              |
| Joint=3132                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.85 | Y=-1.1                    | Z=-1 | SpecialJt=No |
| GUID=6bd06f28-310a-46df-a6a2-6984e8e24d67 |                 |                     |            |                           |      |              |
| Joint=3133                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.85 | Y=-1                      | Z=-1 | SpecialJt=No |
| GUID=32e2a429-5d6f-4f8f-8433-fe45fa3c2c72 |                 |                     |            |                           |      |              |
| Joint=3134                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.85 | Y=-0.9                    | Z=-1 | SpecialJt=No |
| GUID=726ab74e-5f7e-4ce8-8291-52a24fb12a03 |                 |                     |            |                           |      |              |
| Joint=3135                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.85 | Y=-0.8                    | Z=-1 | SpecialJt=No |
| GUID=dd428e2e-5a7c-46fb-8335-f1b9707a2730 |                 |                     |            |                           |      |              |
| Joint=3136                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.85 | Y=-0.7                    | Z=-1 | SpecialJt=No |
| GUID=d60cdfa-26b4-4a9b-adaa-48a23db731f4  |                 |                     |            |                           |      |              |
| Joint=3137                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.85 | Y=-0.6                    | Z=-1 | SpecialJt=No |
| GUID=5ff6dc58-593e-4516-8156-508c4f89446d |                 |                     |            |                           |      |              |
| Joint=3138                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.85 | Y=-0.5                    | Z=-1 | SpecialJt=No |
| GUID=41b9af44-3cae-4905-8ca0-432ca1d5e8dd |                 |                     |            |                           |      |              |
| Joint=3139                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.85 | Y=-0.4                    | Z=-1 | SpecialJt=No |
| GUID=b16f40be-ddea-4569-87e8-12043a83864c |                 |                     |            |                           |      |              |
| Joint=3140                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.85 | Y=-0.3                    | Z=-1 | SpecialJt=No |
| GUID=e59482b2-de15-43b7-857b-1952dbe622a8 |                 |                     |            |                           |      |              |
| Joint=3141                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.85 | Y=-0.2                    | Z=-1 | SpecialJt=No |
| GUID=c9438b62-9877-4e75-b3b1-1554296cb20b |                 |                     |            |                           |      |              |
| Joint=3142                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.85 | Y=-0.09999999999999999999 | Z=-1 | SpecialJt=No |
| GUID=2edea16e-cf9a-4b59-9dfb-91d10de58312 |                 |                     |            |                           |      |              |
| Joint=3143                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.85 | Y=0                       | Z=-1 | SpecialJt=No |
| GUID=4bb07a3e-b194-436c-bea0-aa6e10a94a92 |                 |                     |            |                           |      |              |
| Joint=3144                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.85 | Y=0.09999999999999999999  | Z=-1 | SpecialJt=No |
| GUID=edf1cd4b-d744-474d-ab5d-311ff4c5ff0f |                 |                     |            |                           |      |              |
| Joint=3145                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.85 | Y=0.2                     | Z=-1 | SpecialJt=No |
| GUID=d5944bd4-59ec-496a-97b7-628d620436cf |                 |                     |            |                           |      |              |
| Joint=3146                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.85 | Y=0.3                     | Z=-1 | SpecialJt=No |
| GUID=d8f23d2c-7473-438e-8fcd-3ca0c3a9886d |                 |                     |            |                           |      |              |
| Joint=3147                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.85 | Y=0.4                     | Z=-1 | SpecialJt=No |
| GUID=3ecc526a-e473-444b-9343-f3bf414f730f |                 |                     |            |                           |      |              |
| Joint=3148                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.85 | Y=0.5                     | Z=-1 | SpecialJt=No |
| GUID=d30e54c1-c0a3-4a10-906c-5816a0e69d87 |                 |                     |            |                           |      |              |
| Joint=3149                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.85 | Y=0.6                     | Z=-1 | SpecialJt=No |
| GUID=7964b101-f15d-466f-b0f8-dfdafbf7bcbb |                 |                     |            |                           |      |              |
| Joint=3150                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=22.85 | Y=0.7                     | Z=-1 | SpecialJt=No |
| GUID=0cf7f1d7-77d2-4404-b2b1-78ef1413acb0 |                 |                     |            |                           |      |              |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=3151 CoordSys=GLOBAL CoordType=Cartesian XorR=22.85 Y=0.8 Z=-1 SpecialJt=No  
GUID=8338bc98-be57-4d95-aba2-0df6e17cfc5e

Joint=3152 CoordSys=GLOBAL CoordType=Cartesian XorR=22.85 Y=0.9 Z=-1 SpecialJt=No  
GUID=4ce7d46a-9d37-46d5-a94d-ad6181b4fbd7

Joint=3153 CoordSys=GLOBAL CoordType=Cartesian XorR=22.85 Y=1 Z=-1 SpecialJt=No GUID=5b6126bd-178b-4198-873a-218f93cf294e

Joint=3154 CoordSys=GLOBAL CoordType=Cartesian XorR=22.85 Y=1.1 Z=-1 SpecialJt=No  
GUID=3d82e548-fa0a-48c8-a8c2-a2cc8206e977

Joint=3155 CoordSys=GLOBAL CoordType=Cartesian XorR=22.85 Y=1.2 Z=-1 SpecialJt=No  
GUID=bba35cdb-f913-4472-b0bd-74cee08d45d6

Joint=3156 CoordSys=GLOBAL CoordType=Cartesian XorR=22.85 Y=1.3 Z=-1 SpecialJt=No  
GUID=d20b1734-7884-4c26-bf09-1d6360892557

Joint=3157 CoordSys=GLOBAL CoordType=Cartesian XorR=22.85 Y=1.4 Z=-1 SpecialJt=No  
GUID=f1ac9951-025b-4cfd-adf7-38a4e6814a8b

Joint=3158 CoordSys=GLOBAL CoordType=Cartesian XorR=22.85 Y=1.5 Z=-1 SpecialJt=No  
GUID=9b618cfe-7d63-403e-9118-766a8ce0494d

Joint=3159 CoordSys=GLOBAL CoordType=Cartesian XorR=22.85 Y=1.6 Z=-1 SpecialJt=No  
GUID=dab8d392-eb8c-4a2f-a78c-2addb2f9419f

Joint=3160 CoordSys=GLOBAL CoordType=Cartesian XorR=22.85 Y=1.7 Z=-1 SpecialJt=No  
GUID=5d230535-93fd-4ea4-848e-380efd060c42

Joint=3161 CoordSys=GLOBAL CoordType=Cartesian XorR=22.85 Y=1.8 Z=-1 SpecialJt=No  
GUID=b4c4f532-4a4d-4c5c-a2d6-a7b6b9c494ed

Joint=3162 CoordSys=GLOBAL CoordType=Cartesian XorR=22.85 Y=1.9 Z=-1 SpecialJt=No  
GUID=a7fe6849-84f9-408a-9b64-66d0c607b9a2

Joint=3163 CoordSys=GLOBAL CoordType=Cartesian XorR=22.85 Y=2 Z=-1 SpecialJt=No GUID=dccc0b59-b037-48ad-a7e2-f954ad21b3fa

Joint=3164 CoordSys=GLOBAL CoordType=Cartesian XorR=22.85 Y=2.1 Z=-1 SpecialJt=No  
GUID=06960015-2850-4b89-ac1b-163f86501c0d

Joint=3165 CoordSys=GLOBAL CoordType=Cartesian XorR=22.85 Y=2.2 Z=-1 SpecialJt=No  
GUID=8eb871a8-07d8-456b-a474-70f471462a3e

Joint=3166 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=-2.2 Z=-1 SpecialJt=No  
GUID=40b771a0-f7ca-459a-a404-21565a8e4193

Joint=3167 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=-2.1 Z=-1 SpecialJt=No  
GUID=ef6a91ff-e9ea-4961-8aed-21a70dbac9b9

Joint=3168 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=-2 Z=-1 SpecialJt=No GUID=4cf445d7-9a54-466c-9259-faeb1f20fd4a

Joint=3169 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=-1.9 Z=-1 SpecialJt=No  
GUID=44ac745c-4fb6-4e58-9307-af776f97084b

Joint=3170 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=-1.8 Z=-1 SpecialJt=No  
GUID=42ca7228-1f8a-4292-88f5-a4f4b04f3fa1

Joint=3171 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=-1.7 Z=-1 SpecialJt=No  
GUID=e5c853a9-4e36-4211-9da7-c9bfec533b1b

Joint=3172 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=-1.6 Z=-1 SpecialJt=No  
GUID=4b1b7327-86ce-48aa-b6e8-2135628aea9d

Joint=3173 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=-1.5 Z=-1 SpecialJt=No  
GUID=7f69712f-6fdb-471a-8584-79434113a8a0

Joint=3174 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=-1.4 Z=-1 SpecialJt=No  
GUID=1a346c8e-7be5-4fe8-ae30-6bc849efb993

Joint=3175 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=-1.3 Z=-1 SpecialJt=No  
GUID=918abea5-2912-47f9-8602-f13efc649850

Joint=3176 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=-1.2 Z=-1 SpecialJt=No  
GUID=8296b851-2c84-4274-9b8b-ea2cc1715b6e

Joint=3177 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=-1.1 Z=-1 SpecialJt=No  
GUID=b9587b89-a91b-4da8-8af7-126c61fa654d

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=3178 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=-1 Z=-1 SpecialJt=No GUID=45d0419c-62bf-4961-95a1-e81c2ef8821b

Joint=3179 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=-0.9 Z=-1 SpecialJt=No GUID=eb219d7c-089a-4fc6-a876-8061c986fa5f

Joint=3180 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=-0.8 Z=-1 SpecialJt=No GUID=08bf8cd3-22ed-4850-94db-64be16a28777

Joint=3181 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=-0.7 Z=-1 SpecialJt=No GUID=7057f53e-4e79-43e4-8c02-a1544788c2cc

Joint=3182 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=-0.6 Z=-1 SpecialJt=No GUID=e0920275-1720-41e1-83af-a12b101926a0

Joint=3183 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=-0.5 Z=-1 SpecialJt=No GUID=eeac957a-2500-4dba-8335-fc3d707f65b7

Joint=3184 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=-0.4 Z=-1 SpecialJt=No GUID=52c1d03b-fe13-40ec-a603-8c07060aeb92

Joint=3185 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=-0.3 Z=-1 SpecialJt=No GUID=e503f616-673e-4200-b0aa-a7a0e6bc9dc3

Joint=3186 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=-0.2 Z=-1 SpecialJt=No GUID=d0524d22-9f12-41da-961f-717784d2550e

Joint=3187 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=-0.1 Z=-1 SpecialJt=No GUID=310b3539-3108-42c9-9984-a9252ec05cc7

Joint=3188 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=0 Z=-1 SpecialJt=No GUID=ca7048a4-2a90-49e5-abe5-7e6333f4cd69

Joint=3189 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=0.1 Z=-1 SpecialJt=No GUID=f88d0971-a3a8-4754-8529-6974c33b37d7

Joint=3190 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=0.2 Z=-1 SpecialJt=No GUID=f00c60a5-510e-4ad5-bc2e-656f2fdc9903

Joint=3191 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=0.3 Z=-1 SpecialJt=No GUID=6adfd4b-86d7-4118-8f94-1f06c2c1b8ff

Joint=3192 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=0.4 Z=-1 SpecialJt=No GUID=a5367b8c-e714-4a78-a917-eacdf37949b9

Joint=3193 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=0.5 Z=-1 SpecialJt=No GUID=7a68cb26-e4d9-4e11-adb4-6b84d9b29961

Joint=3194 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=0.6 Z=-1 SpecialJt=No GUID=ce2dfedd-88d1-43bd-a8bc-1f35ad85d913

Joint=3195 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=0.7 Z=-1 SpecialJt=No GUID=3a541994-bcf6-40e2-a1df-9fd452f107fb

Joint=3196 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=0.8 Z=-1 SpecialJt=No GUID=01dcd5eb-ce1f-4b17-9277-237de7f9664d

Joint=3197 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=0.9 Z=-1 SpecialJt=No GUID=df20d62f-68d8-471b-bf48-bc7ed40a8d00

Joint=3198 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=1 Z=-1 SpecialJt=No GUID=1fbb4310-b294-4d62-ae37-55a5d769b33b

Joint=3199 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=1.1 Z=-1 SpecialJt=No GUID=0302faa7-d1b6-4be7-bffd-44a310ab312c

Joint=3200 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=1.2 Z=-1 SpecialJt=No GUID=d06b43c2-0159-4820-964e-52a04806e4fd

Joint=3201 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=1.3 Z=-1 SpecialJt=No GUID=0758c174-91ff-48d7-97b2-c30669b9fca8

Joint=3202 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=1.4 Z=-1 SpecialJt=No GUID=cc257f55-cb56-4d83-ac84-767d2c789df1

Joint=3203 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=1.5 Z=-1 SpecialJt=No GUID=63c6b907-79b6-4dad-9305-d55149dc45f9

Joint=3204 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=1.6 Z=-1 SpecialJt=No GUID=322f3c86-79d3-41a5-8c09-5beab31338ef



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=3205 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=1.7 Z=-1 SpecialJt=No  
GUID=d22a35e6-6023-420a-b052-9f68c188f75d

Joint=3206 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=1.8 Z=-1 SpecialJt=No GUID=ff5e929b-d085-4bd7-8e13-948412bc0c49

Joint=3207 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=1.9 Z=-1 SpecialJt=No  
GUID=eca7a044-759e-4836-873b-230d139176ee

Joint=3208 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=2 Z=-1 SpecialJt=No GUID=bd4fd5f5-3700-43af-b338-0b15287cdbaf

Joint=3209 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=2.1 Z=-1 SpecialJt=No  
GUID=5b1ac3a8-2260-4422-b5c1-808a7943b64d

Joint=3210 CoordSys=GLOBAL CoordType=Cartesian XorR=22.95 Y=2.2 Z=-1 SpecialJt=No  
GUID=dc5e2ae9-ea6c-451c-b489-bcb3fc48fc85

Joint=3211 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=-2.2 Z=-1 SpecialJt=No  
GUID=e97cf75e-7722-4896-9d01-5eba8f83ac13

Joint=3212 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=-2.1 Z=-1 SpecialJt=No  
GUID=d273e4c0-83ea-44e8-b2dd-e9611ce6f23b

Joint=3213 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=-2 Z=-1 SpecialJt=No  
GUID=5996897a-ffbd-45b6-9624-b989b0e613bb

Joint=3214 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=-1.9 Z=-1 SpecialJt=No  
GUID=3220171c-b6ab-4de6-93f6-7e546564c731

Joint=3215 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=-1.8 Z=-1 SpecialJt=No  
GUID=78eb711c-ca69-4e59-a03d-2ed6e8ec0a3f

Joint=3216 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=-1.7 Z=-1 SpecialJt=No  
GUID=e5fcabce-3a05-4973-854c-6690af052e2e

Joint=3217 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=-1.6 Z=-1 SpecialJt=No  
GUID=c11615ac-5314-4d1d-961a-4a4321fd12ec

Joint=3218 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=-1.5 Z=-1 SpecialJt=No  
GUID=64aebcb8-5532-44c6-8bd4-a6765a7133e6

Joint=3219 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=-1.4 Z=-1 SpecialJt=No  
GUID=5fa56830-dafb-4561-8fc6-c66d58b9ddde

Joint=3220 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=-1.3 Z=-1 SpecialJt=No  
GUID=db626f7b-b63e-415f-a3d1-dd61639d7d67

Joint=3221 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=-1.2 Z=-1 SpecialJt=No  
GUID=06dffe36-09dc-4c81-8d1a-b6b9b9091b42

Joint=3222 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=-1.1 Z=-1 SpecialJt=No  
GUID=456b01f9-ee9b-4720-b356-1d60977108d4

Joint=3223 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=-1 Z=-1 SpecialJt=No  
GUID=5a3505a4-7776-4694-80c7-2cb4a943bd81

Joint=3224 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=-0.9 Z=-1 SpecialJt=No  
GUID=079aa159-9835-4b64-8e8b-72e06648938a

Joint=3225 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=-0.8 Z=-1 SpecialJt=No  
GUID=63529b9c-27bd-495f-b31a-26fd7ea51843

Joint=3226 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=-0.7 Z=-1 SpecialJt=No  
GUID=28d0eef9-cf14-487b-9237-4b89dc206936

Joint=3227 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=-0.6 Z=-1 SpecialJt=No  
GUID=41dc126f-2987-4cf7-9f7a-f4d6a7d85a44

Joint=3228 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=-0.5 Z=-1 SpecialJt=No  
GUID=27a00507-febb-4d42-b262-e1f5d2daa53e

Joint=3229 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=-0.4 Z=-1 SpecialJt=No  
GUID=b2072897-e64d-4c01-a631-399ddcfc05bc

Joint=3230 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=-0.3 Z=-1 SpecialJt=No  
GUID=4dd10399-3008-44d6-9645-3aab18549a1a

Joint=3231 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=-0.2 Z=-1 SpecialJt=No  
GUID=56cb6c3e-013e-4a66-8208-049f8c97b06f



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=3232 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=-0.1 Z=-1 SpecialJt=No  
GUID=39e13fef-5b47-4a20-829a-9211aae08757

Joint=3233 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=0 Z=-1 SpecialJt=No GUID=649bac7b-  
7ea5-4c6d-9e19-e93f0f93d33a

Joint=3234 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=0.1 Z=-1 SpecialJt=No  
GUID=19fccaaa-8fb1-416b-974b-a4e31d72ce2b

Joint=3235 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=0.2 Z=-1 SpecialJt=No  
GUID=9f87ca53-b2c2-4e3d-b33b-d75936a40a7b

Joint=3236 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=0.3 Z=-1 SpecialJt=No  
GUID=a6fbcdbe-d874-485d-931d-1ce9da2a467a

Joint=3237 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=0.4 Z=-1 SpecialJt=No  
GUID=658dfbc9-6395-4187-9946-aed6ea97f7ba

Joint=3238 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=0.5 Z=-1 SpecialJt=No  
GUID=dd438fb3-f223-4e6b-9773-97e6cf61979d

Joint=3239 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=0.6 Z=-1 SpecialJt=No  
GUID=645fec5c-ca7c-4de6-be5e-57a9cfa51e69

Joint=3240 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=0.7 Z=-1 SpecialJt=No  
GUID=2c56ed8c-9221-4dd1-a6b7-3c0465cf5c48

Joint=3241 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=0.8 Z=-1 SpecialJt=No  
GUID=653bcee2-dc6b-41cb-bd83-6fce6ba61bda

Joint=3242 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=0.9 Z=-1 SpecialJt=No  
GUID=80043fdb-98bc-4652-b27b-f26ccadf2ec3

Joint=3243 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=1 Z=-1 SpecialJt=No GUID=272f4c25-  
d2fd-4a3b-a80e-cc586217467f

Joint=3244 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=1.1 Z=-1 SpecialJt=No  
GUID=56375098-7c01-4764-b817-210b281835eb

Joint=3245 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=1.2 Z=-1 SpecialJt=No  
GUID=8c10f73d-e1c6-4a72-8ebb-f7f1b665c3e0

Joint=3246 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=1.3 Z=-1 SpecialJt=No  
GUID=75ebfa73-4dd1-4d4e-a20d-48d072de4bc0

Joint=3247 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=1.4 Z=-1 SpecialJt=No  
GUID=71aa9e3b-d319-4722-b3bf-5f4914cfdba3

Joint=3248 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=1.5 Z=-1 SpecialJt=No  
GUID=3195dac7-1e2c-4946-8c61-08f9f82bcbf9

Joint=3249 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=1.6 Z=-1 SpecialJt=No  
GUID=987a6a94-6849-4a51-8b91-05615a606c94

Joint=3250 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=1.7 Z=-1 SpecialJt=No  
GUID=22494773-7a8b-4434-8b31-c9e4278600a8

Joint=3251 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=1.8 Z=-1 SpecialJt=No  
GUID=dbb4866d-eb35-48a1-9f75-d206eb044417

Joint=3252 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=1.9 Z=-1 SpecialJt=No  
GUID=16e790cb-8aa9-4caf-ab7d-ffc72a7abd12

Joint=3253 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=2 Z=-1 SpecialJt=No GUID=369d8ed5-  
d65a-4330-a8fd-9e78b356bf0b

Joint=3254 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=2.1 Z=-1 SpecialJt=No  
GUID=4e4a5c5e-50a9-4cc7-9bf7-04c93d8d791c

Joint=3255 CoordSys=GLOBAL CoordType=Cartesian XorR=23.05 Y=2.2 Z=-1 SpecialJt=No  
GUID=89c917b6-4764-4db5-8f03-63739122fbe7

Joint=3256 CoordSys=GLOBAL CoordType=Cartesian XorR=23.15 Y=-2.2 Z=-1 SpecialJt=No  
GUID=3dcb1385-4ccb-4834-bb06-77d57c60d6c6

Joint=3257 CoordSys=GLOBAL CoordType=Cartesian XorR=23.15 Y=-2.1 Z=-1 SpecialJt=No  
GUID=f0d42e20-fb9d-4d63-8062-a20707f1aa1c

Joint=3258 CoordSys=GLOBAL CoordType=Cartesian XorR=23.15 Y=-2 Z=-1 SpecialJt=No  
GUID=6b0d57e7-0375-4b71-a685-ec157d05135d

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                           |                 |                     |            |                        |      |              |
|-------------------------------------------|-----------------|---------------------|------------|------------------------|------|--------------|
| Joint=3259                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.15 | Y=-1.9                 | Z=-1 | SpecialJt=No |
| GUID=68da160f-c541-442c-8f6f-890f3444349d |                 |                     |            |                        |      |              |
| Joint=3260                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.15 | Y=-1.8                 | Z=-1 | SpecialJt=No |
| GUID=6e7b0c72-a6bb-4365-b5a3-00e6f120938b |                 |                     |            |                        |      |              |
| Joint=3261                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.15 | Y=-1.7                 | Z=-1 | SpecialJt=No |
| GUID=d630ea5e-4c5c-4bcb-a0bc-56cf9878e06d |                 |                     |            |                        |      |              |
| Joint=3262                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.15 | Y=-1.6                 | Z=-1 | SpecialJt=No |
| GUID=b5997e79-a69f-4792-a0a1-87e88fa98aad |                 |                     |            |                        |      |              |
| Joint=3263                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.15 | Y=-1.5                 | Z=-1 | SpecialJt=No |
| GUID=9ce7f15b-215e-4973-ae32-6168277932a3 |                 |                     |            |                        |      |              |
| Joint=3264                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.15 | Y=-1.4                 | Z=-1 | SpecialJt=No |
| GUID=6b796549-10a2-4a37-89c4-4a39d924fcb2 |                 |                     |            |                        |      |              |
| Joint=3265                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.15 | Y=-1.3                 | Z=-1 | SpecialJt=No |
| GUID=86993555-4002-4da7-aca2-080db81cacb9 |                 |                     |            |                        |      |              |
| Joint=3266                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.15 | Y=-1.2                 | Z=-1 | SpecialJt=No |
| GUID=99279fc6-ec96-41b4-b682-4926ab8dc21a |                 |                     |            |                        |      |              |
| Joint=3267                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.15 | Y=-1.1                 | Z=-1 | SpecialJt=No |
| GUID=ed67dc62-08bb-45f2-ab11-6c666a0447f9 |                 |                     |            |                        |      |              |
| Joint=3268                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.15 | Y=-1                   | Z=-1 | SpecialJt=No |
| GUID=1b60937d-10da-4152-87a1-bcf2dd0a1030 |                 |                     |            |                        |      |              |
| Joint=3269                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.15 | Y=-0.9                 | Z=-1 | SpecialJt=No |
| GUID=888d592a-7e13-4a9f-9964-3c7e906b5eec |                 |                     |            |                        |      |              |
| Joint=3270                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.15 | Y=-0.8                 | Z=-1 | SpecialJt=No |
| GUID=b7dfc250-35e0-4bd2-ac00-413fab5f492f |                 |                     |            |                        |      |              |
| Joint=3271                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.15 | Y=-0.7                 | Z=-1 | SpecialJt=No |
| GUID=2d6f2358-42b1-4aa2-a211-f052f1de6966 |                 |                     |            |                        |      |              |
| Joint=3272                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.15 | Y=-0.6                 | Z=-1 | SpecialJt=No |
| GUID=0fc80862-3bfa-415f-9fc3-01208b635dd2 |                 |                     |            |                        |      |              |
| Joint=3273                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.15 | Y=-0.5                 | Z=-1 | SpecialJt=No |
| GUID=6276f4bd-e94b-48ab-b9e4-02ce82f8b109 |                 |                     |            |                        |      |              |
| Joint=3274                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.15 | Y=-0.4                 | Z=-1 | SpecialJt=No |
| GUID=78c3efc1-7f58-444e-8fe1-0054bb9d6236 |                 |                     |            |                        |      |              |
| Joint=3275                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.15 | Y=-0.3                 | Z=-1 | SpecialJt=No |
| GUID=e7189187-f788-44dd-a370-e8f1e8fda888 |                 |                     |            |                        |      |              |
| Joint=3276                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.15 | Y=-0.2                 | Z=-1 | SpecialJt=No |
| GUID=b2c7b0f1-76d2-437c-9eec-acb199ae5e51 |                 |                     |            |                        |      |              |
| Joint=3277                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.15 | Y=-0.09999999999999998 | Z=-1 | SpecialJt=No |
| GUID=307e8e69-8dc1-48e8-a4ef-27acac277793 |                 |                     |            |                        |      |              |
| Joint=3278                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.15 | Y=5.55111512312578E-17 | Z=-1 | SpecialJt=No |
| GUID=78f94dc2-cdd6-4ed0-8e71-94075fb637d4 |                 |                     |            |                        |      |              |
| Joint=3279                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.15 | Y=0.09999999999999998  | Z=-1 | SpecialJt=No |
| GUID=fd150cb8-a7d1-4933-8ab8-e02aff6cefef |                 |                     |            |                        |      |              |
| Joint=3280                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.15 | Y=0.2                  | Z=-1 | SpecialJt=No |
| GUID=8af1b4a7-313e-43f7-85ae-2263a5b21244 |                 |                     |            |                        |      |              |
| Joint=3281                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.15 | Y=0.3                  | Z=-1 | SpecialJt=No |
| GUID=6214206c-319b-4223-9267-b3e578660397 |                 |                     |            |                        |      |              |
| Joint=3282                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.15 | Y=0.4                  | Z=-1 | SpecialJt=No |
| GUID=44212f9a-17e3-4c64-bbab-957983955129 |                 |                     |            |                        |      |              |
| Joint=3283                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.15 | Y=0.5                  | Z=-1 | SpecialJt=No |
| GUID=64f32c46-21ef-42ce-8c45-0ae4da6dc309 |                 |                     |            |                        |      |              |
| Joint=3284                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.15 | Y=0.6                  | Z=-1 | SpecialJt=No |
| GUID=366623fc-a0a3-43ce-8628-f1f476767a4a |                 |                     |            |                        |      |              |
| Joint=3285                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.15 | Y=0.7                  | Z=-1 | SpecialJt=No |
| GUID=c275dbb5-35f7-4cbd-801e-67046410478a |                 |                     |            |                        |      |              |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=3286 CoordSys=GLOBAL CoordType=Cartesian XorR=23.15 Y=0.8 Z=-1 SpecialJt=No GUID=bfa63f37-4f66-4c6f-8da7-a9e2b151076d

Joint=3287 CoordSys=GLOBAL CoordType=Cartesian XorR=23.15 Y=0.9 Z=-1 SpecialJt=No GUID=140d4370-9761-4b15-9bd2-ac61d7eb4483

Joint=3288 CoordSys=GLOBAL CoordType=Cartesian XorR=23.15 Y=1 Z=-1 SpecialJt=No GUID=327284f1-7352-4a29-abf5-cf3e23f625d3

Joint=3289 CoordSys=GLOBAL CoordType=Cartesian XorR=23.15 Y=1.1 Z=-1 SpecialJt=No GUID=e051784b-399e-4390-9ca4-7e610f3b028e

Joint=3290 CoordSys=GLOBAL CoordType=Cartesian XorR=23.15 Y=1.2 Z=-1 SpecialJt=No GUID=55fea972-b1e3-4e58-95ae-1aee93dc2c31

Joint=3291 CoordSys=GLOBAL CoordType=Cartesian XorR=23.15 Y=1.3 Z=-1 SpecialJt=No GUID=461b7778-0d05-4e0b-adfa-d3da39f393d6

Joint=3292 CoordSys=GLOBAL CoordType=Cartesian XorR=23.15 Y=1.4 Z=-1 SpecialJt=No GUID=45c390fe-2f8b-4ecc-9a48-62d3b2723c64

Joint=3293 CoordSys=GLOBAL CoordType=Cartesian XorR=23.15 Y=1.5 Z=-1 SpecialJt=No GUID=b33dec4f-3c95-4bb3-b7fb-6cba49e61c73

Joint=3294 CoordSys=GLOBAL CoordType=Cartesian XorR=23.15 Y=1.6 Z=-1 SpecialJt=No GUID=5ae19aa3-df36-489c-82ed-01b89a9f7f8d

Joint=3295 CoordSys=GLOBAL CoordType=Cartesian XorR=23.15 Y=1.7 Z=-1 SpecialJt=No GUID=4226a751-1186-4735-badc-653c1d43830a

Joint=3296 CoordSys=GLOBAL CoordType=Cartesian XorR=23.15 Y=1.8 Z=-1 SpecialJt=No GUID=dadb1304-d4d8-4199-bee8-e5c17ba0b39b

Joint=3297 CoordSys=GLOBAL CoordType=Cartesian XorR=23.15 Y=1.9 Z=-1 SpecialJt=No GUID=9184f25f-d3ee-43a4-a25a-cd965227d44c

Joint=3298 CoordSys=GLOBAL CoordType=Cartesian XorR=23.15 Y=2 Z=-1 SpecialJt=No GUID=7bd4ef5d-b4a5-4370-9c1c-f7fb8637910

Joint=3299 CoordSys=GLOBAL CoordType=Cartesian XorR=23.15 Y=2.1 Z=-1 SpecialJt=No GUID=68fa82d0-2a3a-41a9-8b32-a24e9543f28a

Joint=3300 CoordSys=GLOBAL CoordType=Cartesian XorR=23.15 Y=2.2 Z=-1 SpecialJt=No GUID=3330cd15-ba3f-48aa-a425-75dfa6870b6

Joint=3301 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=-2.2 Z=-1 SpecialJt=No GUID=7b87f7af-880b-43fe-893d-a863f540e4a4

Joint=3302 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=-2.1 Z=-1 SpecialJt=No GUID=34f79eb2-8a23-465b-a396-a63d207e48af

Joint=3303 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=-2 Z=-1 SpecialJt=No GUID=05757c24-6c45-4c9a-b6a8-88932af5e2c5

Joint=3304 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=-1.9 Z=-1 SpecialJt=No GUID=989fe56a-8a18-4d48-8af1-df9d09879819

Joint=3305 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=-1.8 Z=-1 SpecialJt=No GUID=87e1c506-00be-4a93-aa39-6b28998a2fb7

Joint=3306 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=-1.7 Z=-1 SpecialJt=No GUID=a654592b-bfe1-4308-93de-bd7039ef6318

Joint=3307 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=-1.6 Z=-1 SpecialJt=No GUID=ce697353-64fe-4438-b1ad-c025e27ba014

Joint=3308 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=-1.5 Z=-1 SpecialJt=No GUID=b7bc66d7-e147-49c8-983d-a734ab5251de

Joint=3309 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=-1.4 Z=-1 SpecialJt=No GUID=e038cad9-d54e-4021-aa42-3fdd33a05467

Joint=3310 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=-1.3 Z=-1 SpecialJt=No GUID=81a6db40-a164-4098-955a-ca5a31b13b59

Joint=3311 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=-1.2 Z=-1 SpecialJt=No GUID=eb31aa29-d4bd-47bc-90bb-3f983947a1ad

Joint=3312 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=-1.1 Z=-1 SpecialJt=No GUID=65f53140-9ae4-44e1-ba6c-96f3ca32fc69



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=3313 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=-1 Z=-1 SpecialJt=No GUID=5ba0c64b-c305-4f58-95d9-5ffe78ec5d4e

Joint=3314 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=-0.9 Z=-1 SpecialJt=No GUID=85c6bf3a-df1b-4268-a133-f7636b11090e

Joint=3315 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=-0.8 Z=-1 SpecialJt=No GUID=d8ad3576-8d0f-49fb-a3ce-6d9cfd0f7d11

Joint=3316 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=-0.7 Z=-1 SpecialJt=No GUID=d21b122a-e528-4b46-a8a0-9893c8c4a606

Joint=3317 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=-0.6 Z=-1 SpecialJt=No GUID=c3e4eb39-e0e0-4ad4-93c6-ffda4af38a8e

Joint=3318 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=-0.5 Z=-1 SpecialJt=No GUID=0085d66f-5203-4386-a8cf-7433aa198fb5

Joint=3319 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=-0.4 Z=-1 SpecialJt=No GUID=bb784b2e-fa2a-48ad-b691-14a732016fdb

Joint=3320 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=-0.3 Z=-1 SpecialJt=No GUID=49675dc6-1e40-4217-970d-dbeb4d049600

Joint=3321 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=-0.2 Z=-1 SpecialJt=No GUID=0eec5950-2c28-4f69-b475-1ea9aee2d181

Joint=3322 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=-0.09999999999999998 Z=-1 SpecialJt=No GUID=a29ff192-f5b5-4aae-a467-29ef711c2b25

Joint=3323 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=0 Z=-1 SpecialJt=No GUID=7acc48d4-e731-4c05-af13-0c902d386385

Joint=3324 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=0.09999999999999998 Z=-1 SpecialJt=No GUID=b42332d4-9c36-44d4-b0b2-676395882af2

Joint=3325 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=0.2 Z=-1 SpecialJt=No GUID=82dca4d1-df0b-4a39-9543-1fecdcad1d0a7

Joint=3326 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=0.3 Z=-1 SpecialJt=No GUID=5c6fcd0a-e882-472b-b40e-29a33ad943bd

Joint=3327 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=0.4 Z=-1 SpecialJt=No GUID=437a7f1a-85a4-48e8-935a-61141e7f6c6c

Joint=3328 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=0.5 Z=-1 SpecialJt=No GUID=4e9db7f9-8a41-467b-bd56-db6493e8736f

Joint=3329 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=0.6 Z=-1 SpecialJt=No GUID=c4d49eef-cecf-45e5-9479-725e1bb9b8bf

Joint=3330 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=0.7 Z=-1 SpecialJt=No GUID=a7858f56-ca08-4728-b53e-7764dcb52a9a

Joint=3331 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=0.8 Z=-1 SpecialJt=No GUID=9e12a827-21d1-4793-abdd-85704f2c7cfa

Joint=3332 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=0.9 Z=-1 SpecialJt=No GUID=a1702639-6149-49e3-8ea0-57449372f072

Joint=3333 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=1 Z=-1 SpecialJt=No GUID=5bea470b-bfc6-4678-9b21-41a4e25d8443

Joint=3334 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=1.1 Z=-1 SpecialJt=No GUID=a5a2bfe8-bc46-4669-8de1-672c41290046

Joint=3335 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=1.2 Z=-1 SpecialJt=No GUID=81bc4c57-9eba-4bd1-8b03-7ff2496431a0

Joint=3336 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=1.3 Z=-1 SpecialJt=No GUID=6c9032e0-2b52-4401-a9c4-29eae878a6ca

Joint=3337 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=1.4 Z=-1 SpecialJt=No GUID=5f0ec40d-131a-4741-9f91-c21182b677e4

Joint=3338 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=1.5 Z=-1 SpecialJt=No GUID=b6e8253c-0b0d-436b-8fb8-5f3eccc2d33

Joint=3339 CoordSys=GLOBAL CoordType=Cartesian XorR=23.25 Y=1.6 Z=-1 SpecialJt=No GUID=479042dc-34fe-47be-8f8f-48b611538eaf



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                           |                 |                     |            |        |      |              |
|-------------------------------------------|-----------------|---------------------|------------|--------|------|--------------|
| Joint=3340                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.25 | Y=1.7  | Z=-1 | SpecialJt=No |
| GUID=7518c0ac-c544-4d4e-8b75-8e5d8364bdb5 |                 |                     |            |        |      |              |
| Joint=3341                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.25 | Y=1.8  | Z=-1 | SpecialJt=No |
| GUID=8fcd849d-8b81-4476-8bc1-de09e3881a06 |                 |                     |            |        |      |              |
| Joint=3342                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.25 | Y=1.9  | Z=-1 | SpecialJt=No |
| GUID=88f5dd47-1015-47be-a29b-1ef1622aea37 |                 |                     |            |        |      |              |
| Joint=3343                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.25 | Y=2    | Z=-1 | SpecialJt=No |
| GUID=3a55776d-2736-4222-bf19-1035fdd54106 |                 |                     |            |        |      |              |
| Joint=3344                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.25 | Y=2.1  | Z=-1 | SpecialJt=No |
| GUID=b39e6f9b-7767-4327-b461-ddb791155dc1 |                 |                     |            |        |      |              |
| Joint=3345                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.25 | Y=2.2  | Z=-1 | SpecialJt=No |
| GUID=8d828818-42d7-4e5a-973c-1a8a89b5eec7 |                 |                     |            |        |      |              |
| Joint=3346                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.35 | Y=-2.2 | Z=-1 | SpecialJt=No |
| GUID=8d7752d8-8b16-44e4-8cf1-806d7d22a720 |                 |                     |            |        |      |              |
| Joint=3347                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.35 | Y=-2.1 | Z=-1 | SpecialJt=No |
| GUID=a31966b2-d156-4af2-8a90-86677e0bb610 |                 |                     |            |        |      |              |
| Joint=3348                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.35 | Y=-2   | Z=-1 | SpecialJt=No |
| GUID=be08d303-1e2d-4ea7-8dbd-5eb2c97ced17 |                 |                     |            |        |      |              |
| Joint=3349                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.35 | Y=-1.9 | Z=-1 | SpecialJt=No |
| GUID=c42da607-760a-43e7-9aaf-e478dfa53287 |                 |                     |            |        |      |              |
| Joint=3350                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.35 | Y=-1.8 | Z=-1 | SpecialJt=No |
| GUID=930bf2d5-2b35-4426-afeb-ba297c569fba |                 |                     |            |        |      |              |
| Joint=3351                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.35 | Y=-1.7 | Z=-1 | SpecialJt=No |
| GUID=4050726a-e6f9-4885-82fd-b204c4309b71 |                 |                     |            |        |      |              |
| Joint=3352                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.35 | Y=-1.6 | Z=-1 | SpecialJt=No |
| GUID=16b6e030-3504-4e07-b5c6-447bd180d95e |                 |                     |            |        |      |              |
| Joint=3353                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.35 | Y=-1.5 | Z=-1 | SpecialJt=No |
| GUID=0d324a09-390e-4a7d-82db-2c31ca0c38d0 |                 |                     |            |        |      |              |
| Joint=3354                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.35 | Y=-1.4 | Z=-1 | SpecialJt=No |
| GUID=c45311d0-8607-4528-affa-9ed58abaaee3 |                 |                     |            |        |      |              |
| Joint=3355                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.35 | Y=-1.3 | Z=-1 | SpecialJt=No |
| GUID=5f7e2129-4e52-49fc-939d-2d3e264b8e7e |                 |                     |            |        |      |              |
| Joint=3356                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.35 | Y=-1.2 | Z=-1 | SpecialJt=No |
| GUID=64fb2ced-164c-43f3-9b24-b99641f126bf |                 |                     |            |        |      |              |
| Joint=3357                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.35 | Y=-1.1 | Z=-1 | SpecialJt=No |
| GUID=febfa8ac-c3e1-44be-82f3-48b1dd867008 |                 |                     |            |        |      |              |
| Joint=3358                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.35 | Y=-1   | Z=-1 | SpecialJt=No |
| GUID=bb0e8865-f67f-46c1-8d2a-a0d40f3110df |                 |                     |            |        |      |              |
| Joint=3359                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.35 | Y=-0.9 | Z=-1 | SpecialJt=No |
| GUID=e6aea54a-0508-4ec2-8d84-c535a4640036 |                 |                     |            |        |      |              |
| Joint=3360                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.35 | Y=-0.8 | Z=-1 | SpecialJt=No |
| GUID=5422f265-c5ff-43e9-88f2-21d052be0853 |                 |                     |            |        |      |              |
| Joint=3361                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.35 | Y=-0.7 | Z=-1 | SpecialJt=No |
| GUID=6bcf079b-8ee5-4dc0-b622-260b859cdeb9 |                 |                     |            |        |      |              |
| Joint=3362                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.35 | Y=-0.6 | Z=-1 | SpecialJt=No |
| GUID=1da38e18-f161-4205-b6bc-f543dcf2a729 |                 |                     |            |        |      |              |
| Joint=3363                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.35 | Y=-0.5 | Z=-1 | SpecialJt=No |
| GUID=5fff0177-a0df-46f4-9af7-c38639cd1e95 |                 |                     |            |        |      |              |
| Joint=3364                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.35 | Y=-0.4 | Z=-1 | SpecialJt=No |
| GUID=9cd97df6-a408-4ec4-9b1e-381e442a23ae |                 |                     |            |        |      |              |
| Joint=3365                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.35 | Y=-0.3 | Z=-1 | SpecialJt=No |
| GUID=78b0834f-bbc5-43de-a75f-998daf5edfb6 |                 |                     |            |        |      |              |
| Joint=3366                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.35 | Y=-0.2 | Z=-1 | SpecialJt=No |
| GUID=5d1b4fb6-3b27-4d81-9546-2698d59fc9e1 |                 |                     |            |        |      |              |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=3367 CoordSys=GLOBAL CoordType=Cartesian XorR=23.35 Y=-0.1 Z=-1 SpecialJt=No  
GUID=d755ea9d-aaa8-4790-a398-8ebdae2c5da3

Joint=3368 CoordSys=GLOBAL CoordType=Cartesian XorR=23.35 Y=0 Z=-1 SpecialJt=No GUID=bfcdf7e-89fc-4ad3-9d7e-f8b2bf51ba46

Joint=3369 CoordSys=GLOBAL CoordType=Cartesian XorR=23.35 Y=0.1 Z=-1 SpecialJt=No  
GUID=f38529d2-d0fe-4350-9f71-6ae5c8102353

Joint=3370 CoordSys=GLOBAL CoordType=Cartesian XorR=23.35 Y=0.2 Z=-1 SpecialJt=No  
GUID=26118557-6314-4bbc-987d-a7ef7629abdc

Joint=3371 CoordSys=GLOBAL CoordType=Cartesian XorR=23.35 Y=0.3 Z=-1 SpecialJt=No  
GUID=00b27578-e876-4034-a626-e11e84c3af9f

Joint=3372 CoordSys=GLOBAL CoordType=Cartesian XorR=23.35 Y=0.4 Z=-1 SpecialJt=No  
GUID=2189b107-5793-43f3-bf92-d200b23acd2b

Joint=3373 CoordSys=GLOBAL CoordType=Cartesian XorR=23.35 Y=0.5 Z=-1 SpecialJt=No  
GUID=d94094a4-9489-4086-9c0f-63888afcd2d5

Joint=3374 CoordSys=GLOBAL CoordType=Cartesian XorR=23.35 Y=0.6 Z=-1 SpecialJt=No  
GUID=5ddb6c6b-93eb-47d3-82d5-995c197c926b

Joint=3375 CoordSys=GLOBAL CoordType=Cartesian XorR=23.35 Y=0.7 Z=-1 SpecialJt=No  
GUID=4d97778f-7c19-418d-b6ad-17ae1d351036

Joint=3376 CoordSys=GLOBAL CoordType=Cartesian XorR=23.35 Y=0.8 Z=-1 SpecialJt=No  
GUID=02720c2f-9387-45a1-b8ed-ef963ffc9cf5

Joint=3377 CoordSys=GLOBAL CoordType=Cartesian XorR=23.35 Y=0.9 Z=-1 SpecialJt=No  
GUID=09322217-c5de-4577-81c1-31db000fb5ec

Joint=3378 CoordSys=GLOBAL CoordType=Cartesian XorR=23.35 Y=1 Z=-1 SpecialJt=No GUID=a0df3d80-e0d4-4160-9319-fcaa21ed78b2

Joint=3379 CoordSys=GLOBAL CoordType=Cartesian XorR=23.35 Y=1.1 Z=-1 SpecialJt=No  
GUID=6d4b847a-d8e1-47f4-93a4-52cc953ce017

Joint=3380 CoordSys=GLOBAL CoordType=Cartesian XorR=23.35 Y=1.2 Z=-1 SpecialJt=No  
GUID=0ed4416b-bf70-4011-9723-3cf10bb5984e

Joint=3381 CoordSys=GLOBAL CoordType=Cartesian XorR=23.35 Y=1.3 Z=-1 SpecialJt=No GUID=8fcfbf7a-ac80-45f4-9ec1-3be6237ef059

Joint=3382 CoordSys=GLOBAL CoordType=Cartesian XorR=23.35 Y=1.4 Z=-1 SpecialJt=No  
GUID=ad5d63d6-4873-41ee-a4b6-f59569f3eba6

Joint=3383 CoordSys=GLOBAL CoordType=Cartesian XorR=23.35 Y=1.5 Z=-1 SpecialJt=No  
GUID=dfc3bcb7-36b2-4335-a371-fe4e525cd561

Joint=3384 CoordSys=GLOBAL CoordType=Cartesian XorR=23.35 Y=1.6 Z=-1 SpecialJt=No  
GUID=46834466-62f5-45f1-afa7-7e9a4b3c7b16

Joint=3385 CoordSys=GLOBAL CoordType=Cartesian XorR=23.35 Y=1.7 Z=-1 SpecialJt=No  
GUID=bc58f1d4-64e1-4e7d-90a4-e846b0aa58db

Joint=3386 CoordSys=GLOBAL CoordType=Cartesian XorR=23.35 Y=1.8 Z=-1 SpecialJt=No  
GUID=cb304d2a-f8e2-4a33-b219-098299d77e3

Joint=3387 CoordSys=GLOBAL CoordType=Cartesian XorR=23.35 Y=1.9 Z=-1 SpecialJt=No  
GUID=344fde1d-2bf1-4d59-9c61-12c7fa45de0d

Joint=3388 CoordSys=GLOBAL CoordType=Cartesian XorR=23.35 Y=2 Z=-1 SpecialJt=No GUID=9e310b88-a27d-41b1-83ac-4b66ba6d939d

Joint=3389 CoordSys=GLOBAL CoordType=Cartesian XorR=23.35 Y=2.1 Z=-1 SpecialJt=No  
GUID=24df7b99-76f0-40e1-b5ef-7d8dd5182f68

Joint=3390 CoordSys=GLOBAL CoordType=Cartesian XorR=23.35 Y=2.2 Z=-1 SpecialJt=No  
GUID=9cf598c6-c723-402b-af68-cb573361abc2

Joint=3391 CoordSys=GLOBAL CoordType=Cartesian XorR=23.45 Y=-2.2 Z=-1 SpecialJt=No  
GUID=1ed88bf6-ba7d-468c-bf8a-99f42a45c3c3

Joint=3392 CoordSys=GLOBAL CoordType=Cartesian XorR=23.45 Y=-2.1 Z=-1 SpecialJt=No  
GUID=8ac2d1f5-c4f9-4b76-aada-617a6a4fbe09

Joint=3393 CoordSys=GLOBAL CoordType=Cartesian XorR=23.45 Y=-2 Z=-1 SpecialJt=No GUID=750c8838-29c8-4597-97b5-73bbc2b5ad83

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                            |                 |                     |            |                         |      |              |
|--------------------------------------------|-----------------|---------------------|------------|-------------------------|------|--------------|
| Joint=3394                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.45 | Y=-1.9                  | Z=-1 | SpecialJt=No |
| GUID=5bf49e62-f931-423a-a999-03abb9c13ed3  |                 |                     |            |                         |      |              |
| Joint=3395                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.45 | Y=-1.8                  | Z=-1 | SpecialJt=No |
| GUID=a68f18b4-2c25-4c63-a589-05b58d1f7e4e  |                 |                     |            |                         |      |              |
| Joint=3396                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.45 | Y=-1.7                  | Z=-1 | SpecialJt=No |
| GUID=5adb5418-32fd-47d9-9bd3-5ebe9e0678c8  |                 |                     |            |                         |      |              |
| Joint=3397                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.45 | Y=-1.6                  | Z=-1 | SpecialJt=No |
| GUID=54c61ef6-907a-4995-9722-2536e53da4df  |                 |                     |            |                         |      |              |
| Joint=3398                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.45 | Y=-1.5                  | Z=-1 | SpecialJt=No |
| GUID=2aba1a07-888b-4907-a1e8-e28810cce637  |                 |                     |            |                         |      |              |
| Joint=3399                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.45 | Y=-1.4                  | Z=-1 | SpecialJt=No |
| GUID=b16d49c0-c9c6-4bf8-9224-0e4e78510498  |                 |                     |            |                         |      |              |
| Joint=3400                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.45 | Y=-1.3                  | Z=-1 | SpecialJt=No |
| GUID=a6cfe10b-c493-494b-896b-9ac922de5907  |                 |                     |            |                         |      |              |
| Joint=3401                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.45 | Y=-1.2                  | Z=-1 | SpecialJt=No |
| GUID=202be8bb-d412-4e73-9e48-0ee13633dc7c  |                 |                     |            |                         |      |              |
| Joint=3402                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.45 | Y=-1.1                  | Z=-1 | SpecialJt=No |
| GUID=bea22101-ad54-4f19-bd31-139fc0f158f6  |                 |                     |            |                         |      |              |
| Joint=3403                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.45 | Y=-1                    | Z=-1 | SpecialJt=No |
| GUID=54b983a7-a41b-4717-8c42-b8ae1ad4b106  |                 |                     |            |                         |      |              |
| Joint=3404                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.45 | Y=-0.9                  | Z=-1 | SpecialJt=No |
| GUID=dbcfcae08-ffe1-4b23-afba-a0b0e82a8be6 |                 |                     |            |                         |      |              |
| Joint=3405                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.45 | Y=-0.8                  | Z=-1 | SpecialJt=No |
| GUID=d5b125b9-10d4-4f3e-9993-0cdd70e046bb  |                 |                     |            |                         |      |              |
| Joint=3406                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.45 | Y=-0.7                  | Z=-1 | SpecialJt=No |
| GUID=2f99a314-4604-47e4-b689-8aa59ea0b169  |                 |                     |            |                         |      |              |
| Joint=3407                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.45 | Y=-0.6                  | Z=-1 | SpecialJt=No |
| GUID=033a3f70-1903-4823-8075-88dfc0cb0d98  |                 |                     |            |                         |      |              |
| Joint=3408                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.45 | Y=-0.5                  | Z=-1 | SpecialJt=No |
| GUID=82585ada-592d-4ac1-9a0c-79dca89755fb  |                 |                     |            |                         |      |              |
| Joint=3409                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.45 | Y=-0.4                  | Z=-1 | SpecialJt=No |
| GUID=1ff9ede4-7311-4f26-b0ab-e6db53b74d83  |                 |                     |            |                         |      |              |
| Joint=3410                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.45 | Y=-0.3                  | Z=-1 | SpecialJt=No |
| GUID=928bcb78-01c8-4c3c-a246-09c3f31df2ef  |                 |                     |            |                         |      |              |
| Joint=3411                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.45 | Y=-0.2                  | Z=-1 | SpecialJt=No |
| GUID=f862ad59-acd0-4d82-8189-ead5539d21ea  |                 |                     |            |                         |      |              |
| Joint=3412                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.45 | Y=-0.09999999999999998  | Z=-1 | SpecialJt=No |
| GUID=0ecb2302-e583-4cee-8f1e-1e3e8818994f  |                 |                     |            |                         |      |              |
| Joint=3413                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.45 | Y=-5.55111512312578E-17 | Z=-1 | SpecialJt=No |
| GUID=7ee8255c-7add-4c27-bd77-6e9857bea18d  |                 |                     |            |                         |      |              |
| Joint=3414                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.45 | Y=0.09999999999999998   | Z=-1 | SpecialJt=No |
| GUID=dbf3b9a6-3c33-48b0-8a86-5004b65ae08f  |                 |                     |            |                         |      |              |
| Joint=3415                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.45 | Y=0.2                   | Z=-1 | SpecialJt=No |
| GUID=6fc0221a-bcb6-4aad-933d-aaa2bb11eb6f  |                 |                     |            |                         |      |              |
| Joint=3416                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.45 | Y=0.3                   | Z=-1 | SpecialJt=No |
| GUID=8b32258e-d44f-43b8-aefd-e20aa6c93769  |                 |                     |            |                         |      |              |
| Joint=3417                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.45 | Y=0.4                   | Z=-1 | SpecialJt=No |
| GUID=763e2c89-6226-4b0a-b84d-54b3bbe8ac77  |                 |                     |            |                         |      |              |
| Joint=3418                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.45 | Y=0.5                   | Z=-1 | SpecialJt=No |
| GUID=bfed10bf-1ced-44c4-bb3d-4f23fcfce2ba  |                 |                     |            |                         |      |              |
| Joint=3419                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.45 | Y=0.6                   | Z=-1 | SpecialJt=No |
| GUID=e881af19-8f84-4e28-80ee-6fda9d916a75  |                 |                     |            |                         |      |              |
| Joint=3420                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.45 | Y=0.7                   | Z=-1 | SpecialJt=No |
| GUID=df000aa9-108f-4b35-9b03-ae06aaf35713  |                 |                     |            |                         |      |              |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=3421 CoordSys=GLOBAL CoordType=Cartesian XorR=23.45 Y=0.8 Z=-1 SpecialJt=No  
GUID=670bf65d-7495-44aa-955e-4e7bde7edca6

Joint=3422 CoordSys=GLOBAL CoordType=Cartesian XorR=23.45 Y=0.9 Z=-1 SpecialJt=No  
GUID=dad3ba6b-0013-4a79-86f2-93ba3277cb0b

Joint=3423 CoordSys=GLOBAL CoordType=Cartesian XorR=23.45 Y=1 Z=-1 SpecialJt=No GUID=6848be96-  
fffa-4665-8c6a-867ea43a3990

Joint=3424 CoordSys=GLOBAL CoordType=Cartesian XorR=23.45 Y=1.1 Z=-1 SpecialJt=No  
GUID=58322312-5a3e-4a27-8f98-788675adcde5

Joint=3425 CoordSys=GLOBAL CoordType=Cartesian XorR=23.45 Y=1.2 Z=-1 SpecialJt=No  
GUID=e09802e0-545a-4ed9-997a-4db15371e1aa

Joint=3426 CoordSys=GLOBAL CoordType=Cartesian XorR=23.45 Y=1.3 Z=-1 SpecialJt=No  
GUID=3929d396-b722-4d0d-894e-ffbaaddf782

Joint=3427 CoordSys=GLOBAL CoordType=Cartesian XorR=23.45 Y=1.4 Z=-1 SpecialJt=No  
GUID=9312df91-7015-4f27-b1bc-ffe9932ec15a

Joint=3428 CoordSys=GLOBAL CoordType=Cartesian XorR=23.45 Y=1.5 Z=-1 SpecialJt=No  
GUID=91d49ee6-52fe-415f-b9de-8d0e2eb9db3a

Joint=3429 CoordSys=GLOBAL CoordType=Cartesian XorR=23.45 Y=1.6 Z=-1 SpecialJt=No  
GUID=635cf6d1-3dd7-4b23-9d9a-f40576d2b0a2

Joint=3430 CoordSys=GLOBAL CoordType=Cartesian XorR=23.45 Y=1.7 Z=-1 SpecialJt=No  
GUID=5b309c87-9f47-46d0-8acd-e71bc717ec71

Joint=3431 CoordSys=GLOBAL CoordType=Cartesian XorR=23.45 Y=1.8 Z=-1 SpecialJt=No  
GUID=487b5b5d-3374-4967-813a-c18ed73e5a79

Joint=3432 CoordSys=GLOBAL CoordType=Cartesian XorR=23.45 Y=1.9 Z=-1 SpecialJt=No  
GUID=e95c85cc-99a1-4011-b7cf-e428a3f44287

Joint=3433 CoordSys=GLOBAL CoordType=Cartesian XorR=23.45 Y=2 Z=-1 SpecialJt=No GUID=68713147-  
f145-40f1-bbc8-b7a046db4293

Joint=3434 CoordSys=GLOBAL CoordType=Cartesian XorR=23.45 Y=2.1 Z=-1 SpecialJt=No  
GUID=b8496a63-4a6a-47e9-882e-a421d579daf2

Joint=3435 CoordSys=GLOBAL CoordType=Cartesian XorR=23.45 Y=2.2 Z=-1 SpecialJt=No  
GUID=826ec81f-185c-4164-b8ac-8545a8f67b01

Joint=3436 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=-2.2 Z=-1 SpecialJt=No  
GUID=6e4049d9-97ed-42c7-8291-f87ddf0263c0

Joint=3437 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=-2.1 Z=-1 SpecialJt=No  
GUID=3d9efc7e-fc43-4d3e-b990-e505f791ee1e

Joint=3438 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=-2 Z=-1 SpecialJt=No GUID=dd4e7c74-  
4ec0-4f22-b4fd-5674d372fcb6

Joint=3439 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=-1.9 Z=-1 SpecialJt=No  
GUID=f31638e5-7382-441b-b4a2-ae745aac650b

Joint=3440 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=-1.8 Z=-1 SpecialJt=No  
GUID=16050810-2960-4374-8055-62edeadea340

Joint=3441 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=-1.7 Z=-1 SpecialJt=No  
GUID=55ec023d-493a-48ad-91b4-3fbaf44f7634

Joint=3442 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=-1.6 Z=-1 SpecialJt=No  
GUID=a2e6635d-4fd0-421c-881c-abdc4a7b7e35

Joint=3443 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=-1.5 Z=-1 SpecialJt=No  
GUID=f9f41bc7-d57d-4f03-aea1-47f9ec35c368

Joint=3444 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=-1.4 Z=-1 SpecialJt=No  
GUID=4f26b50b-7e20-4576-9050-3afdc148d5f1

Joint=3445 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=-1.3 Z=-1 SpecialJt=No  
GUID=c26dda94-cfcc-4aaa-9336-83ebfcac2cfd

Joint=3446 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=-1.2 Z=-1 SpecialJt=No  
GUID=bc6c29ec-372c-4eb9-b6ac-a89982a74b7c

Joint=3447 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=-1.1 Z=-1 SpecialJt=No  
GUID=b5ecda00-1a93-4d60-9bc9-a32c92eea536



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=3448 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=-1 Z=-1 SpecialJt=No GUID=df7a7f87-55d4-47b8-ab99-70dbd0d83997

Joint=3449 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=-0.9 Z=-1 SpecialJt=No GUID=345c13b2-3d93-4566-9d61-636c2c6afc76

Joint=3450 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=-0.8 Z=-1 SpecialJt=No GUID=a6835cf9-eafa-432c-bce5-80c26b324173

Joint=3451 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=-0.7 Z=-1 SpecialJt=No GUID=fe9376ea-776a-4d28-bd41-f210bad62028

Joint=3452 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=-0.6 Z=-1 SpecialJt=No GUID=93da2ef5-b592-4ec1-9fa4-3f6a6b7241f9

Joint=3453 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=-0.5 Z=-1 SpecialJt=No GUID=96f5d370-5058-4e4d-b4b0-2adff681b0c6

Joint=3454 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=-0.4 Z=-1 SpecialJt=No GUID=982385b1-ea30-4a80-a09e-bd247ebcd9e8

Joint=3455 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=-0.3 Z=-1 SpecialJt=No GUID=1190f2ea-9aa9-40d3-8b56-da418ab469f3

Joint=3456 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=-0.2 Z=-1 SpecialJt=No GUID=09e97395-7bc9-4690-b781-d0c50e3f8d26

Joint=3457 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=-0.1 Z=-1 SpecialJt=No GUID=0f68be3e-7502-480e-a7b9-610d2874fedc

Joint=3458 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=0 Z=-1 SpecialJt=No GUID=79720d60-ea92-4471-904c-5598ec2765b1

Joint=3459 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=0.1 Z=-1 SpecialJt=No GUID=5d016750-5f4d-4d5f-a534-2cbd4ef9e686

Joint=3460 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=0.2 Z=-1 SpecialJt=No GUID=c311ce5c-7fc5-487e-825c-7e2c7dc1e704

Joint=3461 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=0.3 Z=-1 SpecialJt=No GUID=448256c1-4da9-432c-ab8a-f87b11cd590a

Joint=3462 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=0.4 Z=-1 SpecialJt=No GUID=be5305fd-9a54-4828-9c00-e157077ef689

Joint=3463 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=0.5 Z=-1 SpecialJt=No GUID=3b080d56-be9a-48a8-97b7-7b30710f429c

Joint=3464 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=0.6 Z=-1 SpecialJt=No GUID=37b88cb1-b269-4050-8154-9ceffef7c099

Joint=3465 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=0.7 Z=-1 SpecialJt=No GUID=4b0cb01c-a073-48e3-889f-351a6f619e0b

Joint=3466 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=0.8 Z=-1 SpecialJt=No GUID=56be1cc0-6895-4f6e-af7e-eff7234b785a

Joint=3467 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=0.9 Z=-1 SpecialJt=No GUID=e03fecf0-3bcf-4da6-9588-762158018f69

Joint=3468 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=1 Z=-1 SpecialJt=No GUID=d7446fb6-8e60-4a2f-8579-379ca01a44f9

Joint=3469 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=1.1 Z=-1 SpecialJt=No GUID=eab1e4d1-4693-4889-997e-c5ef63bb9dd9

Joint=3470 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=1.2 Z=-1 SpecialJt=No GUID=aa018af7-cce0-4f86-b1cf-c622bd79ec2a

Joint=3471 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=1.3 Z=-1 SpecialJt=No GUID=05a59c42-2bbc-44b7-9a3e-d1cf17b44812

Joint=3472 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=1.4 Z=-1 SpecialJt=No GUID=524347fd-31de-4859-9c08-f309c9a748ef

Joint=3473 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=1.5 Z=-1 SpecialJt=No GUID=48e381d8-7f25-47e5-bc5e-7c86df43be2f

Joint=3474 CoordSys=GLOBAL CoordType=Cartesian XorR=23.55 Y=1.6 Z=-1 SpecialJt=No GUID=41690870-371d-4463-b5af-01c5a57ebfa2

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                           |                 |                     |            |        |      |              |
|-------------------------------------------|-----------------|---------------------|------------|--------|------|--------------|
| Joint=3475                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.55 | Y=1.7  | Z=-1 | SpecialJt=No |
| GUID=8bb708c4-f1a4-43ae-9f5e-335362b0c9b8 |                 |                     |            |        |      |              |
| Joint=3476                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.55 | Y=1.8  | Z=-1 | SpecialJt=No |
| GUID=ec8f3316-5d43-445f-bd78-475152220119 |                 |                     |            |        |      |              |
| Joint=3477                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.55 | Y=1.9  | Z=-1 | SpecialJt=No |
| GUID=5d609ac9-7457-4341-aa1e-9885ca0bc5b3 |                 |                     |            |        |      |              |
| Joint=3478                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.55 | Y=2    | Z=-1 | SpecialJt=No |
| GUID=98d227e7-1f9a-428e-844b-b00412e4f239 |                 |                     |            |        |      |              |
| Joint=3479                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.55 | Y=2.1  | Z=-1 | SpecialJt=No |
| GUID=f34c18e9-59a3-47b8-a5f6-11c3df554a92 |                 |                     |            |        |      |              |
| Joint=3480                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.55 | Y=2.2  | Z=-1 | SpecialJt=No |
| GUID=780f7194-a910-4cf7-bd00-21e9653011ab |                 |                     |            |        |      |              |
| Joint=3481                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.65 | Y=-2.2 | Z=-1 | SpecialJt=No |
| GUID=13c7888e-3c99-4f8f-ae7c-9cf077fd6c1b |                 |                     |            |        |      |              |
| Joint=3482                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.65 | Y=-2.1 | Z=-1 | SpecialJt=No |
| GUID=3109fb5a-aa36-4381-8c67-8b9531ae7471 |                 |                     |            |        |      |              |
| Joint=3483                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.65 | Y=-2   | Z=-1 | SpecialJt=No |
| GUID=f07e4df0-a75a-4394-9508-84aef63c8b1d |                 |                     |            |        |      |              |
| Joint=3484                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.65 | Y=-1.9 | Z=-1 | SpecialJt=No |
| GUID=a40d97b0-e037-437a-8098-e1304094f16c |                 |                     |            |        |      |              |
| Joint=3485                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.65 | Y=-1.8 | Z=-1 | SpecialJt=No |
| GUID=57e3b9fc-4aae-4f47-a6da-497a40ec9c4b |                 |                     |            |        |      |              |
| Joint=3486                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.65 | Y=-1.7 | Z=-1 | SpecialJt=No |
| GUID=1823dfc4-86e5-4742-bcfd-3b1f48d5869e |                 |                     |            |        |      |              |
| Joint=3487                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.65 | Y=-1.6 | Z=-1 | SpecialJt=No |
| GUID=f13c16ab-f40a-419c-b403-dbfcd2421849 |                 |                     |            |        |      |              |
| Joint=3488                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.65 | Y=-1.5 | Z=-1 | SpecialJt=No |
| GUID=3a0602cb-937b-491d-b066-e2d708de1298 |                 |                     |            |        |      |              |
| Joint=3489                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.65 | Y=-1.4 | Z=-1 | SpecialJt=No |
| GUID=1732f101-5d61-4bb9-8569-b2b7e682bc8c |                 |                     |            |        |      |              |
| Joint=3490                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.65 | Y=-1.3 | Z=-1 | SpecialJt=No |
| GUID=cc56d9d9-e0b2-4598-918d-61e1996ca16d |                 |                     |            |        |      |              |
| Joint=3491                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.65 | Y=-1.2 | Z=-1 | SpecialJt=No |
| GUID=2d686633-b87f-474f-a2d5-710cf85eef82 |                 |                     |            |        |      |              |
| Joint=3492                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.65 | Y=-1.1 | Z=-1 | SpecialJt=No |
| GUID=5e54619f-921d-41da-b599-057a9c7432ac |                 |                     |            |        |      |              |
| Joint=3493                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.65 | Y=-1   | Z=-1 | SpecialJt=No |
| GUID=dcc08e9c-a397-4e70-909a-1453585d27a7 |                 |                     |            |        |      |              |
| Joint=3494                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.65 | Y=-0.9 | Z=-1 | SpecialJt=No |
| GUID=ab75c032-66ae-4d80-900f-a3f947f83710 |                 |                     |            |        |      |              |
| Joint=3495                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.65 | Y=-0.8 | Z=-1 | SpecialJt=No |
| GUID=d8a64c89-71e8-4e9d-9dfc-8df50f53a221 |                 |                     |            |        |      |              |
| Joint=3496                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.65 | Y=-0.7 | Z=-1 | SpecialJt=No |
| GUID=3eb99083-74b5-499e-9287-a10132f9dbd7 |                 |                     |            |        |      |              |
| Joint=3497                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.65 | Y=-0.6 | Z=-1 | SpecialJt=No |
| GUID=38095cc4-1df9-45c5-9308-e58cc083b06b |                 |                     |            |        |      |              |
| Joint=3498                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.65 | Y=-0.5 | Z=-1 | SpecialJt=No |
| GUID=1c65dada-6b07-4f96-a079-5320eb49f8c5 |                 |                     |            |        |      |              |
| Joint=3499                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.65 | Y=-0.4 | Z=-1 | SpecialJt=No |
| GUID=ef5c6411-b1c6-4a3f-8890-955d96457a41 |                 |                     |            |        |      |              |
| Joint=3500                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.65 | Y=-0.3 | Z=-1 | SpecialJt=No |
| GUID=757b3390-13e4-48ff-a750-a14f58891666 |                 |                     |            |        |      |              |
| Joint=3501                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.65 | Y=-0.2 | Z=-1 | SpecialJt=No |
| GUID=009e26db-5152-4e04-b0ff-7d7895b8bef1 |                 |                     |            |        |      |              |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=3502 CoordSys=GLOBAL CoordType=Cartesian XorR=23.65 Y=-0.0999999999999997 Z=-1  
SpecialJt=No GUID=e398f96c-bbc5-40a3-aa7a-73ae0925b525

Joint=3503 CoordSys=GLOBAL CoordType=Cartesian XorR=23.65 Y=0 Z=-1 SpecialJt=No GUID=968246e4-597f-46d1-9a97-e4ff86faa581

Joint=3504 CoordSys=GLOBAL CoordType=Cartesian XorR=23.65 Y=0.0999999999999998 Z=-1  
SpecialJt=No GUID=cc44d6b9-efaa-44df-8438-9ea4a1f250e2

Joint=3505 CoordSys=GLOBAL CoordType=Cartesian XorR=23.65 Y=0.2 Z=-1 SpecialJt=No  
GUID=89951ec7-0396-4f1b-ac72-9ad5a6888d8

Joint=3506 CoordSys=GLOBAL CoordType=Cartesian XorR=23.65 Y=0.3 Z=-1 SpecialJt=No  
GUID=6a851555-4617-48b7-866c-2aa0a9c6438a

Joint=3507 CoordSys=GLOBAL CoordType=Cartesian XorR=23.65 Y=0.4 Z=-1 SpecialJt=No  
GUID=aa617f78-b08f-4d30-b50d-f545a596117e

Joint=3508 CoordSys=GLOBAL CoordType=Cartesian XorR=23.65 Y=0.5 Z=-1 SpecialJt=No  
GUID=785de639-b333-4b1b-a9b5-37c7b0b30fe3

Joint=3509 CoordSys=GLOBAL CoordType=Cartesian XorR=23.65 Y=0.6 Z=-1 SpecialJt=No  
GUID=e3b4a9c2-2fad-4e67-a52e-c11700a2edb8

Joint=3510 CoordSys=GLOBAL CoordType=Cartesian XorR=23.65 Y=0.7 Z=-1 SpecialJt=No  
GUID=bd61be5e-3f64-4508-8163-44d7c13bd104

Joint=3511 CoordSys=GLOBAL CoordType=Cartesian XorR=23.65 Y=0.8 Z=-1 SpecialJt=No  
GUID=3b2b2065-daeb-4ab2-937c-807657552d5c

Joint=3512 CoordSys=GLOBAL CoordType=Cartesian XorR=23.65 Y=0.9 Z=-1 SpecialJt=No  
GUID=946e66af-4a87-419f-a520-8331ead6fcf4

Joint=3513 CoordSys=GLOBAL CoordType=Cartesian XorR=23.65 Y=1 Z=-1 SpecialJt=No GUID=9b0a4749-4ece-4ad1-8234-76e09be82f0c

Joint=3514 CoordSys=GLOBAL CoordType=Cartesian XorR=23.65 Y=1.1 Z=-1 SpecialJt=No  
GUID=e10f8d1b-aff3-4e87-b25c-31dd7010c67e

Joint=3515 CoordSys=GLOBAL CoordType=Cartesian XorR=23.65 Y=1.2 Z=-1 SpecialJt=No GUID=f6d3cf7b-1652-4b83-8f9c-cce09dcf6949

Joint=3516 CoordSys=GLOBAL CoordType=Cartesian XorR=23.65 Y=1.3 Z=-1 SpecialJt=No  
GUID=9c6e96d5-6260-4cc6-ac3d-42e61a9439dd

Joint=3517 CoordSys=GLOBAL CoordType=Cartesian XorR=23.65 Y=1.4 Z=-1 SpecialJt=No  
GUID=b9240801-7b9a-4179-a55b-83e6f5bb4639

Joint=3518 CoordSys=GLOBAL CoordType=Cartesian XorR=23.65 Y=1.5 Z=-1 SpecialJt=No  
GUID=4c6b367e-00a5-447a-9419-f63855a879fb

Joint=3519 CoordSys=GLOBAL CoordType=Cartesian XorR=23.65 Y=1.6 Z=-1 SpecialJt=No  
GUID=48e9636e-79b5-424d-8932-b4a3065e4977

Joint=3520 CoordSys=GLOBAL CoordType=Cartesian XorR=23.65 Y=1.7 Z=-1 SpecialJt=No  
GUID=a5b730f2-cc3f-4198-a8d6-795fd19ddaba

Joint=3521 CoordSys=GLOBAL CoordType=Cartesian XorR=23.65 Y=1.8 Z=-1 SpecialJt=No  
GUID=012e722c-be38-4954-a198-99d1bc3eb855

Joint=3522 CoordSys=GLOBAL CoordType=Cartesian XorR=23.65 Y=1.9 Z=-1 SpecialJt=No  
GUID=3201ca86-fff0-4965-8b3c-ccda6b56a702

Joint=3523 CoordSys=GLOBAL CoordType=Cartesian XorR=23.65 Y=2 Z=-1 SpecialJt=No GUID=3f847532-a36b-4b64-9c96-82d277d19c15

Joint=3524 CoordSys=GLOBAL CoordType=Cartesian XorR=23.65 Y=2.1 Z=-1 SpecialJt=No  
GUID=4f70d914-67c9-44b0-ab32-750f139a5c1a

Joint=3525 CoordSys=GLOBAL CoordType=Cartesian XorR=23.65 Y=2.2 Z=-1 SpecialJt=No GUID=ef58df5c-7a13-4ff3-a728-e24c4149837d

Joint=3526 CoordSys=GLOBAL CoordType=Cartesian XorR=23.75 Y=-2.2 Z=-1 SpecialJt=No  
GUID=d84dd87b-cd36-4bd3-acc3-8899e6ed0476

Joint=3527 CoordSys=GLOBAL CoordType=Cartesian XorR=23.75 Y=-2.1 Z=-1 SpecialJt=No  
GUID=2f67498c-fadc-41e6-851f-45cfffbd0f3a

Joint=3528 CoordSys=GLOBAL CoordType=Cartesian XorR=23.75 Y=-2 Z=-1 SpecialJt=No GUID=ede68fa4-a4d7-483b-a9c5-273a662942b0



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                           |                 |                     |            |                         |      |              |
|-------------------------------------------|-----------------|---------------------|------------|-------------------------|------|--------------|
| Joint=3529                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.75 | Y=-1.9                  | Z=-1 | SpecialJt=No |
| GUID=505a573b-4285-46c7-8cf0-0e8be1b35c29 |                 |                     |            |                         |      |              |
| Joint=3530                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.75 | Y=-1.8                  | Z=-1 | SpecialJt=No |
| GUID=ec45624a-f228-4034-b843-d0869545ccf9 |                 |                     |            |                         |      |              |
| Joint=3531                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.75 | Y=-1.7                  | Z=-1 | SpecialJt=No |
| GUID=03995c76-e6c8-4e94-bdd2-fbdb690601f9 |                 |                     |            |                         |      |              |
| Joint=3532                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.75 | Y=-1.6                  | Z=-1 | SpecialJt=No |
| GUID=23a257d7-4076-4706-8f01-cb3b53416680 |                 |                     |            |                         |      |              |
| Joint=3533                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.75 | Y=-1.5                  | Z=-1 | SpecialJt=No |
| GUID=c4bfd480-ebc7-4b50-8157-65b584764fda |                 |                     |            |                         |      |              |
| Joint=3534                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.75 | Y=-1.4                  | Z=-1 | SpecialJt=No |
| GUID=c29b45aa-a04e-4d53-ad38-b8ed5b051909 |                 |                     |            |                         |      |              |
| Joint=3535                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.75 | Y=-1.3                  | Z=-1 | SpecialJt=No |
| GUID=1e9526db-84eb-4c1a-8a44-1254edc42bfa |                 |                     |            |                         |      |              |
| Joint=3536                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.75 | Y=-1.2                  | Z=-1 | SpecialJt=No |
| GUID=a3cd383f-fa40-4024-9a5b-a75bb26b34b2 |                 |                     |            |                         |      |              |
| Joint=3537                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.75 | Y=-1.1                  | Z=-1 | SpecialJt=No |
| GUID=e3520710-b43f-4f30-921e-5b5fa14b24c4 |                 |                     |            |                         |      |              |
| Joint=3538                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.75 | Y=-1                    | Z=-1 | SpecialJt=No |
| GUID=1ab65599-8f2f-4c56-b155-22374c3154d4 |                 |                     |            |                         |      |              |
| Joint=3539                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.75 | Y=-0.9                  | Z=-1 | SpecialJt=No |
| GUID=bcf0be3e-95cb-4441-a16d-14ed3a958c37 |                 |                     |            |                         |      |              |
| Joint=3540                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.75 | Y=-0.8                  | Z=-1 | SpecialJt=No |
| GUID=f772456f-d473-4e1b-8d45-04f52bc62125 |                 |                     |            |                         |      |              |
| Joint=3541                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.75 | Y=-0.7                  | Z=-1 | SpecialJt=No |
| GUID=76383164-3529-4542-91fc-5509bc059d53 |                 |                     |            |                         |      |              |
| Joint=3542                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.75 | Y=-0.6                  | Z=-1 | SpecialJt=No |
| GUID=212fde72-76e2-4476-82b5-463632b784b1 |                 |                     |            |                         |      |              |
| Joint=3543                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.75 | Y=-0.5                  | Z=-1 | SpecialJt=No |
| GUID=9c1a53c0-580d-4df9-a266-ebfbae0f3bde |                 |                     |            |                         |      |              |
| Joint=3544                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.75 | Y=-0.4                  | Z=-1 | SpecialJt=No |
| GUID=78150380-d526-4a64-bfed-ddc000ed939f |                 |                     |            |                         |      |              |
| Joint=3545                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.75 | Y=-0.3                  | Z=-1 | SpecialJt=No |
| GUID=6b058f31-2a85-4830-8d75-e35fe28ffed8 |                 |                     |            |                         |      |              |
| Joint=3546                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.75 | Y=-0.2                  | Z=-1 | SpecialJt=No |
| GUID=6fe3c816-c3b5-414a-9c2d-0ded89433ff7 |                 |                     |            |                         |      |              |
| Joint=3547                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.75 | Y=-0.1                  | Z=-1 | SpecialJt=No |
| GUID=cd127769-4e48-4808-8a01-9b9fff387e09 |                 |                     |            |                         |      |              |
| Joint=3548                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.75 | Y=-5.55111512312578E-17 | Z=-1 | SpecialJt=No |
| GUID=fb1b2c2d-5bdb-4106-a6ed-de790ea2f7cf |                 |                     |            |                         |      |              |
| Joint=3549                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.75 | Y=0.1                   | Z=-1 | SpecialJt=No |
| GUID=0f283913-815a-4f47-8991-1a7759483866 |                 |                     |            |                         |      |              |
| Joint=3550                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.75 | Y=0.2                   | Z=-1 | SpecialJt=No |
| GUID=e7d950b3-5b41-4f1a-99dc-b9b74a4ca406 |                 |                     |            |                         |      |              |
| Joint=3551                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.75 | Y=0.3                   | Z=-1 | SpecialJt=No |
| GUID=a693db0b-cbf7-4870-858e-061d62fa7d05 |                 |                     |            |                         |      |              |
| Joint=3552                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.75 | Y=0.4                   | Z=-1 | SpecialJt=No |
| GUID=84ab6bdb-2204-4cdf-9c5c-b2ad1882299b |                 |                     |            |                         |      |              |
| Joint=3553                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.75 | Y=0.5                   | Z=-1 | SpecialJt=No |
| GUID=9bfcc0a6-474c-454d-a394-fe2e0a7f0899 |                 |                     |            |                         |      |              |
| Joint=3554                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.75 | Y=0.6                   | Z=-1 | SpecialJt=No |
| GUID=db4c3da3-848c-47e6-ace6-87012cfe603c |                 |                     |            |                         |      |              |
| Joint=3555                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.75 | Y=0.7                   | Z=-1 | SpecialJt=No |
| GUID=019fd859-edb3-4f2a-af3b-a6988ceaefd2 |                 |                     |            |                         |      |              |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=3556 CoordSys=GLOBAL CoordType=Cartesian XorR=23.75 Y=0.8 Z=-1 SpecialJt=No  
GUID=51a8af21-3dbd-4999-82bf-cdf3cbd18fab

Joint=3557 CoordSys=GLOBAL CoordType=Cartesian XorR=23.75 Y=0.9 Z=-1 SpecialJt=No  
GUID=e5dba524-3d59-4a86-a7a7-d77560a4a9a4

Joint=3558 CoordSys=GLOBAL CoordType=Cartesian XorR=23.75 Y=1 Z=-1 SpecialJt=No GUID=552ee62c-8585-465b-b5f3-8a22939a9b5b

Joint=3559 CoordSys=GLOBAL CoordType=Cartesian XorR=23.75 Y=1.1 Z=-1 SpecialJt=No  
GUID=0c531f8c-79c0-418d-a616-98e66ffcae60

Joint=3560 CoordSys=GLOBAL CoordType=Cartesian XorR=23.75 Y=1.2 Z=-1 SpecialJt=No GUID=ef762fff-3281-4da7-bfe9-1a17980aa2e7

Joint=3561 CoordSys=GLOBAL CoordType=Cartesian XorR=23.75 Y=1.3 Z=-1 SpecialJt=No  
GUID=d2c68f63-f255-419e-8106-546bb63f0df0

Joint=3562 CoordSys=GLOBAL CoordType=Cartesian XorR=23.75 Y=1.4 Z=-1 SpecialJt=No  
GUID=71e1cd73-4b2e-46fe-854c-bbce4a9788bd

Joint=3563 CoordSys=GLOBAL CoordType=Cartesian XorR=23.75 Y=1.5 Z=-1 SpecialJt=No  
GUID=71e4cc2f-f04b-4c05-b5a8-0f7e1e542f62

Joint=3564 CoordSys=GLOBAL CoordType=Cartesian XorR=23.75 Y=1.6 Z=-1 SpecialJt=No  
GUID=6570289b-f384-4fb2-ae49-dc19103a2f46

Joint=3565 CoordSys=GLOBAL CoordType=Cartesian XorR=23.75 Y=1.7 Z=-1 SpecialJt=No  
GUID=54c7b52d-c245-4d55-bf56-3c258a2f2b0d

Joint=3566 CoordSys=GLOBAL CoordType=Cartesian XorR=23.75 Y=1.8 Z=-1 SpecialJt=No  
GUID=ada95dcb-74a5-4e55-8759-811b2f502158

Joint=3567 CoordSys=GLOBAL CoordType=Cartesian XorR=23.75 Y=1.9 Z=-1 SpecialJt=No  
GUID=792687da-b5a2-4b76-8190-50e61b196dd5

Joint=3568 CoordSys=GLOBAL CoordType=Cartesian XorR=23.75 Y=2 Z=-1 SpecialJt=No GUID=0648f4b4-a863-4ebd-b632-89276046357c

Joint=3569 CoordSys=GLOBAL CoordType=Cartesian XorR=23.75 Y=2.1 Z=-1 SpecialJt=No  
GUID=8483ab31-67d5-4152-b8d1-d761aa49c25e

Joint=3570 CoordSys=GLOBAL CoordType=Cartesian XorR=23.75 Y=2.2 Z=-1 SpecialJt=No  
GUID=0920aa59-f1ee-497d-8cac-3607a79251d3

Joint=3571 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=-2.2 Z=-1 SpecialJt=No  
GUID=4b235d25-071c-4f64-9310-98dbef7db436

Joint=3572 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=-2.1 Z=-1 SpecialJt=No  
GUID=d4b64a74-bb1d-439a-bb37-f88dc749ab4b

Joint=3573 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=-2 Z=-1 SpecialJt=No GUID=d3a648fe-366d-4b77-843a-65255f4d6586

Joint=3574 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=-1.9 Z=-1 SpecialJt=No  
GUID=913d988a-aae0-4833-8468-d03cc6195915

Joint=3575 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=-1.8 Z=-1 SpecialJt=No  
GUID=1ea3776c-b8d0-464d-ad80-4137bf8b4b50

Joint=3576 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=-1.7 Z=-1 SpecialJt=No  
GUID=b65fa001-2da0-4b43-a7b5-5d34a565c4c6

Joint=3577 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=-1.6 Z=-1 SpecialJt=No  
GUID=36d9cf19-9612-47ae-9b39-73fc7917ced0

Joint=3578 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=-1.5 Z=-1 SpecialJt=No  
GUID=c50ce1f6-53ff-48de-a5e4-67636a6ff117

Joint=3579 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=-1.4 Z=-1 SpecialJt=No  
GUID=f8d8aa20-3b9a-4f12-b178-9f28cde0ccde

Joint=3580 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=-1.3 Z=-1 SpecialJt=No  
GUID=b71fa5ed-07ba-448c-b2d8-4bb47b5b08c7

Joint=3581 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=-1.2 Z=-1 SpecialJt=No  
GUID=8c88cc1a-5347-4a71-9339-a72dfea43556

Joint=3582 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=-1.1 Z=-1 SpecialJt=No  
GUID=e00c7f98-8cf1-4dd7-a6aa-db178a9de886

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=3583 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=-1 Z=-1 SpecialJt=No GUID=a0fe796a-11d9-4910-8842-f31a8619919b

Joint=3584 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=-0.9 Z=-1 SpecialJt=No GUID=c3f10ea7-51c2-4265-aab3-2bb1555c0ce6

Joint=3585 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=-0.8 Z=-1 SpecialJt=No GUID=390d1c1c-c125-407c-88c2-436c4cd5d835

Joint=3586 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=-0.7 Z=-1 SpecialJt=No GUID=82a71494-0138-405f-ac01-4565fa1e6e8c

Joint=3587 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=-0.6 Z=-1 SpecialJt=No GUID=0eb09d8e-4431-429f-ac33-fbe3238bf9f8

Joint=3588 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=-0.5 Z=-1 SpecialJt=No GUID=81ac7441-b13a-4bd0-8b41-1e8b2d577d9f

Joint=3589 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=-0.4 Z=-1 SpecialJt=No GUID=f30605fc-076e-4e0f-a3b3-5b0cf8393f79

Joint=3590 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=-0.3 Z=-1 SpecialJt=No GUID=e45055b5-399b-41cd-9031-c5cf9502ee8c

Joint=3591 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=-0.2 Z=-1 SpecialJt=No GUID=95fb59b1-1658-43a3-a6cd-9d19301d9632

Joint=3592 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=-0.1 Z=-1 SpecialJt=No GUID=cf890e44-8767-489c-9e9b-c3b83205c04d

Joint=3593 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=0 Z=-1 SpecialJt=No GUID=81006ec9-03b0-4001-8809-fc68d4c5192f

Joint=3594 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=0.1 Z=-1 SpecialJt=No GUID=d6f8ab14-394a-4b94-9d64-e20f0a5cbbaf

Joint=3595 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=0.2 Z=-1 SpecialJt=No GUID=642eca73-1dc5-4fdd-a7c6-328cacdb2e81

Joint=3596 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=0.3 Z=-1 SpecialJt=No GUID=e967a596-a48b-41af-b638-793a9221df50

Joint=3597 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=0.4 Z=-1 SpecialJt=No GUID=77a61808-00e7-43f6-b7d9-257111fbef79

Joint=3598 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=0.5 Z=-1 SpecialJt=No GUID=4644bd99-6797-4b09-b85a-9fa8cf0dccc3

Joint=3599 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=0.6 Z=-1 SpecialJt=No GUID=55db6aaa-006e-4e35-b25c-3045bbd73996

Joint=3600 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=0.7 Z=-1 SpecialJt=No GUID=65748954-262d-46a0-aa28-c58a1579acfa

Joint=3601 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=0.8 Z=-1 SpecialJt=No GUID=29abfd73-79a2-44f1-a68a-c329679b1cf3

Joint=3602 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=0.9 Z=-1 SpecialJt=No GUID=0c4680f4-40f9-4b3a-a99c-cce8491908b2

Joint=3603 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=1 Z=-1 SpecialJt=No GUID=00e34893-5b1a-43e7-bf1a-6015b5008219

Joint=3604 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=1.1 Z=-1 SpecialJt=No GUID=6ce2ab53-f560-47e9-9da5-ffc25b067959

Joint=3605 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=1.2 Z=-1 SpecialJt=No GUID=0a037cd3-4985-4a00-88cf-8e4ea882e57d

Joint=3606 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=1.3 Z=-1 SpecialJt=No GUID=a51bb7e1-ca1b-4bf0-9e12-64e51aed20e5

Joint=3607 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=1.4 Z=-1 SpecialJt=No GUID=3d1b5e8d-2a08-4524-953d-610a08dda827

Joint=3608 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=1.5 Z=-1 SpecialJt=No GUID=bf8299ce-a487-428c-93e7-a5a94944766f

Joint=3609 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=1.6 Z=-1 SpecialJt=No GUID=7b0d373a-0d95-42e5-9de7-e29442754b37

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=3610 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=1.7 Z=-1 SpecialJt=No  
GUID=a8f2835d-1329-49dc-80c3-a43efcbf4728

Joint=3611 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=1.8 Z=-1 SpecialJt=No  
GUID=979479cd-09a3-4e94-a952-1ef989ef2e3a

Joint=3612 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=1.9 Z=-1 SpecialJt=No GUID=fe89f011-4154-4af6-bab1-0f212607e967

Joint=3613 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=2 Z=-1 SpecialJt=No GUID=53b8f6d9-f7ea-41f8-9542-5fd676ecff88

Joint=3614 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=2.1 Z=-1 SpecialJt=No  
GUID=131f3a54-4fdf-4903-8ce2-19fa53327042

Joint=3615 CoordSys=GLOBAL CoordType=Cartesian XorR=23.85 Y=2.2 Z=-1 SpecialJt=No GUID=9f88e8f4-d75c-4538-a96d-8e9456ec1eb7

Joint=3616 CoordSys=GLOBAL CoordType=Cartesian XorR=23.95 Y=-2.2 Z=-1 SpecialJt=No  
GUID=2c3b5afe-9fde-4dee-8db4-ce6a5b350b49

Joint=3617 CoordSys=GLOBAL CoordType=Cartesian XorR=23.95 Y=-2.1 Z=-1 SpecialJt=No  
GUID=51319af3-8e2e-4094-ac52-f3ebe7716a83

Joint=3618 CoordSys=GLOBAL CoordType=Cartesian XorR=23.95 Y=-2 Z=-1 SpecialJt=No GUID=0ad3c8e7-0312-4fb0-8ef1-110474aac852

Joint=3619 CoordSys=GLOBAL CoordType=Cartesian XorR=23.95 Y=-1.9 Z=-1 SpecialJt=No  
GUID=0b1d2a51-64fa-488f-a42f-49c3e764275a

Joint=3620 CoordSys=GLOBAL CoordType=Cartesian XorR=23.95 Y=-1.8 Z=-1 SpecialJt=No  
GUID=7f361d36-5b3d-49f5-87aa-0acc136ee51a

Joint=3621 CoordSys=GLOBAL CoordType=Cartesian XorR=23.95 Y=-1.7 Z=-1 SpecialJt=No  
GUID=9e44b0ae-06ad-4283-9cd4-d0cdfb14139e

Joint=3622 CoordSys=GLOBAL CoordType=Cartesian XorR=23.95 Y=-1.6 Z=-1 SpecialJt=No  
GUID=9ee37b09-abe2-4a7c-af21-9b3c92b6a05f

Joint=3623 CoordSys=GLOBAL CoordType=Cartesian XorR=23.95 Y=-1.5 Z=-1 SpecialJt=No  
GUID=ca90af69-2805-4652-aa6f-d4b0313ab775

Joint=3624 CoordSys=GLOBAL CoordType=Cartesian XorR=23.95 Y=-1.4 Z=-1 SpecialJt=No  
GUID=0ea095a0-1fe0-4483-a90e-7275f0c889e9

Joint=3625 CoordSys=GLOBAL CoordType=Cartesian XorR=23.95 Y=-1.3 Z=-1 SpecialJt=No  
GUID=ab9d3fdf-f7cc-4f92-916e-b70152458c50

Joint=3626 CoordSys=GLOBAL CoordType=Cartesian XorR=23.95 Y=-1.2 Z=-1 SpecialJt=No  
GUID=07751915-a973-4af4-a6f6-0cf58a633344

Joint=3627 CoordSys=GLOBAL CoordType=Cartesian XorR=23.95 Y=-1.1 Z=-1 SpecialJt=No  
GUID=695a2ac8-a2d0-482f-a6a5-5e69070b35ad

Joint=3628 CoordSys=GLOBAL CoordType=Cartesian XorR=23.95 Y=-1 Z=-1 SpecialJt=No GUID=25427a2f-0530-48a4-b35d-4bf6c0acf91c

Joint=3629 CoordSys=GLOBAL CoordType=Cartesian XorR=23.95 Y=-0.9 Z=-1 SpecialJt=No  
GUID=34b9975d-7b69-4197-85fb-b68286226052

Joint=3630 CoordSys=GLOBAL CoordType=Cartesian XorR=23.95 Y=-0.8 Z=-1 SpecialJt=No  
GUID=a6f6f059-a6c8-493e-968c-452b878183b8

Joint=3631 CoordSys=GLOBAL CoordType=Cartesian XorR=23.95 Y=-0.7 Z=-1 SpecialJt=No  
GUID=0e8d545e-629b-48f0-97b9-a83704975672

Joint=3632 CoordSys=GLOBAL CoordType=Cartesian XorR=23.95 Y=-0.6 Z=-1 SpecialJt=No  
GUID=dee5a5a0-f6b5-4497-8949-acd6057d2dd5

Joint=3633 CoordSys=GLOBAL CoordType=Cartesian XorR=23.95 Y=-0.5 Z=-1 SpecialJt=No  
GUID=b87821b2-6bf0-45d3-a9cd-c2b17e931da5

Joint=3634 CoordSys=GLOBAL CoordType=Cartesian XorR=23.95 Y=-0.4 Z=-1 SpecialJt=No  
GUID=d68e4921-9b6b-468f-b156-15158729e098

Joint=3635 CoordSys=GLOBAL CoordType=Cartesian XorR=23.95 Y=-0.3 Z=-1 SpecialJt=No  
GUID=b0b1aecd-783c-43b2-acc4-77b2a401cf39

Joint=3636 CoordSys=GLOBAL CoordType=Cartesian XorR=23.95 Y=-0.2 Z=-1 SpecialJt=No  
GUID=d56fb151-1833-4b31-b042-850d71209b3f



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|            |                 |                     |            |                        |      |              |                                           |
|------------|-----------------|---------------------|------------|------------------------|------|--------------|-------------------------------------------|
| Joint=3637 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.95 | Y=-0.1                 | Z=-1 | SpecialJt=No | GUID=324e2dff-bfa7-4dbc-a878-e0c3be9b9364 |
| Joint=3638 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.95 | Y=5.55111512312578E-17 | Z=-1 | SpecialJt=No | GUID=7e485d75-f425-4266-9ba3-b178ce245355 |
| Joint=3639 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.95 | Y=0.09999999999999998  | Z=-1 | SpecialJt=No | GUID=fd743268-e69e-48ca-a784-9f634b193131 |
| Joint=3640 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.95 | Y=0.2                  | Z=-1 | SpecialJt=No | GUID=8a29828c-b5da-48f5-851d-68cd16786074 |
| Joint=3641 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.95 | Y=0.3                  | Z=-1 | SpecialJt=No | GUID=d3bf70d3-2e7d-49ca-9edb-1ae91a6a936e |
| Joint=3642 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.95 | Y=0.4                  | Z=-1 | SpecialJt=No | GUID=781e35b4-b25c-4109-91e2-5899dc2d7472 |
| Joint=3643 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.95 | Y=0.5                  | Z=-1 | SpecialJt=No | GUID=3b15e02f-2fed-4fa5-9c21-422c77965144 |
| Joint=3644 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.95 | Y=0.6                  | Z=-1 | SpecialJt=No | GUID=0cee317c-c6f6-45f2-9514-7ffdbb2ba8d3 |
| Joint=3645 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.95 | Y=0.7                  | Z=-1 | SpecialJt=No | GUID=9efc205d-1a89-4334-abd0-0c1413483a03 |
| Joint=3646 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.95 | Y=0.8                  | Z=-1 | SpecialJt=No | GUID=b39cbd6b-b290-4a5a-bff7-a09b5bb94fd9 |
| Joint=3647 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.95 | Y=0.9                  | Z=-1 | SpecialJt=No | GUID=99a5c4ab-7953-47a2-a766-d28de2905950 |
| Joint=3648 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.95 | Y=1                    | Z=-1 | SpecialJt=No | GUID=ea320e84-41af-4734-9a09-e9467730eda8 |
| Joint=3649 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.95 | Y=1.1                  | Z=-1 | SpecialJt=No | GUID=7197972d-38d9-4e59-a5a7-fe71d66d5b59 |
| Joint=3650 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.95 | Y=1.2                  | Z=-1 | SpecialJt=No | GUID=c1b35360-8fc2-4ed1-ac33-46d4f605b5c3 |
| Joint=3651 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.95 | Y=1.3                  | Z=-1 | SpecialJt=No | GUID=21e20778-9b4b-4abc-be62-9408e1d3628d |
| Joint=3652 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.95 | Y=1.4                  | Z=-1 | SpecialJt=No | GUID=b2a63c37-c475-4a95-b197-ce44caa3baf1 |
| Joint=3653 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.95 | Y=1.5                  | Z=-1 | SpecialJt=No | GUID=796d1450-d5a5-4d98-8eff-4051faa61a11 |
| Joint=3654 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.95 | Y=1.6                  | Z=-1 | SpecialJt=No | GUID=088fd40e-dd7e-4392-af6b-91627bce36a0 |
| Joint=3655 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.95 | Y=1.7                  | Z=-1 | SpecialJt=No | GUID=773b98eb-7af1-4fe9-91bb-04037fe707f0 |
| Joint=3656 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.95 | Y=1.8                  | Z=-1 | SpecialJt=No | GUID=62f2c328-ceeb-407c-adc0-3219323cac9  |
| Joint=3657 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.95 | Y=1.9                  | Z=-1 | SpecialJt=No | GUID=627f1bb8-d836-49bd-aa34-3923d9ddeb3c |
| Joint=3658 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.95 | Y=2                    | Z=-1 | SpecialJt=No | GUID=cd7a5ce9-61c5-40fd-9577-f33f8292edb7 |
| Joint=3659 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.95 | Y=2.1                  | Z=-1 | SpecialJt=No | GUID=f64c8c0f-920b-440f-9e8e-98010e57cd5b |
| Joint=3660 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=23.95 | Y=2.2                  | Z=-1 | SpecialJt=No | GUID=1483e3da-7509-411f-97e7-7c8acd6532bf |
| Joint=3661 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.05 | Y=-2.2                 | Z=-1 | SpecialJt=No | GUID=1b728256-b066-4716-97d8-6f0a42d1d144 |
| Joint=3662 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.05 | Y=-2.1                 | Z=-1 | SpecialJt=No | GUID=10999f32-faf9-4200-b9bb-fe1b22dc9bd7 |
| Joint=3663 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.05 | Y=-2                   | Z=-1 | SpecialJt=No | GUID=9f5f1e85-c5a2-492a-9063-f5c43f9d8900 |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                           |                 |                     |            |                         |      |              |
|-------------------------------------------|-----------------|---------------------|------------|-------------------------|------|--------------|
| Joint=3664                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.05 | Y=-1.9                  | Z=-1 | SpecialJt=No |
| GUID=494100fa-2eb5-4cb4-9ca5-be6f54a0d479 |                 |                     |            |                         |      |              |
| Joint=3665                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.05 | Y=-1.8                  | Z=-1 | SpecialJt=No |
| GUID=9733da79-706a-4b6a-90c0-67ab85acf074 |                 |                     |            |                         |      |              |
| Joint=3666                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.05 | Y=-1.7                  | Z=-1 | SpecialJt=No |
| GUID=52dd619e-0519-45da-a857-9b7d15c80050 |                 |                     |            |                         |      |              |
| Joint=3667                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.05 | Y=-1.6                  | Z=-1 | SpecialJt=No |
| GUID=ba228b87-74e6-4f28-a69c-09051273242d |                 |                     |            |                         |      |              |
| Joint=3668                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.05 | Y=-1.5                  | Z=-1 | SpecialJt=No |
| GUID=7e14a138-324b-4ebd-8106-d6cf03266483 |                 |                     |            |                         |      |              |
| Joint=3669                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.05 | Y=-1.4                  | Z=-1 | SpecialJt=No |
| GUID=a531f033-fcda-4ad0-8be9-8aca29228dc3 |                 |                     |            |                         |      |              |
| Joint=3670                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.05 | Y=-1.3                  | Z=-1 | SpecialJt=No |
| GUID=09fef6dd-1af9-48df-82cf-ce10eb57bc2f |                 |                     |            |                         |      |              |
| Joint=3671                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.05 | Y=-1.2                  | Z=-1 | SpecialJt=No |
| GUID=e788c4e1-d3ed-4736-9101-3715e53f7843 |                 |                     |            |                         |      |              |
| Joint=3672                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.05 | Y=-1.1                  | Z=-1 | SpecialJt=No |
| GUID=0dab777d-9edc-4148-9415-24c89259dde6 |                 |                     |            |                         |      |              |
| Joint=3673                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.05 | Y=-1                    | Z=-1 | SpecialJt=No |
| GUID=01bc7873-b67d-4205-b05d-991a4151550b |                 |                     |            |                         |      |              |
| Joint=3674                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.05 | Y=-0.9                  | Z=-1 | SpecialJt=No |
| GUID=602e29d9-057e-4c8e-9599-00d55163cd1a |                 |                     |            |                         |      |              |
| Joint=3675                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.05 | Y=-0.8                  | Z=-1 | SpecialJt=No |
| GUID=107afe13-c671-4d78-9af2-772c6f455fd7 |                 |                     |            |                         |      |              |
| Joint=3676                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.05 | Y=-0.7                  | Z=-1 | SpecialJt=No |
| GUID=df3551b6-9012-4f95-942d-cd49ee2e5837 |                 |                     |            |                         |      |              |
| Joint=3677                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.05 | Y=-0.6                  | Z=-1 | SpecialJt=No |
| GUID=afb3fcbd-67ad-40fd-bff7-93768059c10e |                 |                     |            |                         |      |              |
| Joint=3678                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.05 | Y=-0.5                  | Z=-1 | SpecialJt=No |
| GUID=6fb806fa-84b3-4382-9eb0-a0960326e236 |                 |                     |            |                         |      |              |
| Joint=3679                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.05 | Y=-0.4                  | Z=-1 | SpecialJt=No |
| GUID=91802059-a863-4255-9cda-9206021a1cb4 |                 |                     |            |                         |      |              |
| Joint=3680                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.05 | Y=-0.3                  | Z=-1 | SpecialJt=No |
| GUID=ae16a29e-a5d7-4d11-b529-c5e15fd972bf |                 |                     |            |                         |      |              |
| Joint=3681                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.05 | Y=-0.2                  | Z=-1 | SpecialJt=No |
| GUID=a1a14d02-4940-4c4f-bc92-c05324bd8a8c |                 |                     |            |                         |      |              |
| Joint=3682                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.05 | Y=-0.1                  | Z=-1 | SpecialJt=No |
| GUID=7427c171-67ca-4952-a562-81099fe42321 |                 |                     |            |                         |      |              |
| Joint=3683                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.05 | Y=-2.77555756156289E-17 | Z=-1 | SpecialJt=No |
| GUID=4feba00a-b7a0-4a0b-940c-fd13e488ca11 |                 |                     |            |                         |      |              |
| Joint=3684                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.05 | Y=0.1                   | Z=-1 | SpecialJt=No |
| GUID=bccbc054-975f-4f8d-aaa0-2b024ddd607b |                 |                     |            |                         |      |              |
| Joint=3685                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.05 | Y=0.2                   | Z=-1 | SpecialJt=No |
| GUID=cc227a87-2f45-4b78-9f84-0fd25f1b4caa |                 |                     |            |                         |      |              |
| Joint=3686                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.05 | Y=0.3                   | Z=-1 | SpecialJt=No |
| GUID=b3dbece8-c329-4fc3-aae7-9013be4413d0 |                 |                     |            |                         |      |              |
| Joint=3687                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.05 | Y=0.4                   | Z=-1 | SpecialJt=No |
| GUID=760cac84-081b-458b-b4ff-af09ffe83183 |                 |                     |            |                         |      |              |
| Joint=3688                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.05 | Y=0.5                   | Z=-1 | SpecialJt=No |
| GUID=b989627d-3ac5-4a74-a1e4-f23c0c059490 |                 |                     |            |                         |      |              |
| Joint=3689                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.05 | Y=0.6                   | Z=-1 | SpecialJt=No |
| GUID=9d1409ad-fe4f-4281-81c9-cfd1b7d5df51 |                 |                     |            |                         |      |              |
| Joint=3690                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.05 | Y=0.7                   | Z=-1 | SpecialJt=No |
| GUID=0ae08f50-422e-4a2d-a5c2-a998b8174797 |                 |                     |            |                         |      |              |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=3691 CoordSys=GLOBAL CoordType=Cartesian XorR=24.05 Y=0.8 Z=-1 SpecialJt=No  
GUID=225e5da3-c15e-4112-9302-39fd3c1e59ea

Joint=3692 CoordSys=GLOBAL CoordType=Cartesian XorR=24.05 Y=0.9 Z=-1 SpecialJt=No  
GUID=07535419-771a-4fb3-8e5f-1513fb6f5e40

Joint=3693 CoordSys=GLOBAL CoordType=Cartesian XorR=24.05 Y=1 Z=-1 SpecialJt=No GUID=5c9c3b8f-d733-4ad8-9453-e1d2518115f8

Joint=3694 CoordSys=GLOBAL CoordType=Cartesian XorR=24.05 Y=1.1 Z=-1 SpecialJt=No GUID=cf8defe6-7627-4813-9e23-058360aa53bc

Joint=3695 CoordSys=GLOBAL CoordType=Cartesian XorR=24.05 Y=1.2 Z=-1 SpecialJt=No  
GUID=0c957763-462e-47c8-b668-606e94f3c01e

Joint=3696 CoordSys=GLOBAL CoordType=Cartesian XorR=24.05 Y=1.3 Z=-1 SpecialJt=No  
GUID=c14a2982-4c7c-4729-956e-0802ac0da967

Joint=3697 CoordSys=GLOBAL CoordType=Cartesian XorR=24.05 Y=1.4 Z=-1 SpecialJt=No  
GUID=ae421180-77de-4b38-ae3b-38e9c589a92e

Joint=3698 CoordSys=GLOBAL CoordType=Cartesian XorR=24.05 Y=1.5 Z=-1 SpecialJt=No  
GUID=0629f553-6a1b-46b8-9090-f8300c19bc3f

Joint=3699 CoordSys=GLOBAL CoordType=Cartesian XorR=24.05 Y=1.6 Z=-1 SpecialJt=No  
GUID=66455ea9-13b8-4cad-b9e9-7571648817cb

Joint=3700 CoordSys=GLOBAL CoordType=Cartesian XorR=24.05 Y=1.7 Z=-1 SpecialJt=No  
GUID=4c8d0418-f208-449d-a679-a025f528a368

Joint=3701 CoordSys=GLOBAL CoordType=Cartesian XorR=24.05 Y=1.8 Z=-1 SpecialJt=No  
GUID=5c58412b-55f1-4ef1-a28b-66837db8b3f6

Joint=3702 CoordSys=GLOBAL CoordType=Cartesian XorR=24.05 Y=1.9 Z=-1 SpecialJt=No  
GUID=20ae526f-459c-4cba-82d3-fae33224ba05

Joint=3703 CoordSys=GLOBAL CoordType=Cartesian XorR=24.05 Y=2 Z=-1 SpecialJt=No GUID=63c80265-94d6-4f5e-a355-294dfc66cc65

Joint=3704 CoordSys=GLOBAL CoordType=Cartesian XorR=24.05 Y=2.1 Z=-1 SpecialJt=No  
GUID=7cfc65e9-a458-46e8-8e63-6886d32034e4

Joint=3705 CoordSys=GLOBAL CoordType=Cartesian XorR=24.05 Y=2.2 Z=-1 SpecialJt=No  
GUID=7ed1398b-cb61-4d7c-a6c8-7f841b3ddaa7

Joint=3706 CoordSys=GLOBAL CoordType=Cartesian XorR=24.15 Y=-2.2 Z=-1 SpecialJt=No  
GUID=e4d5a5ae-abac-4d63-9842-0ae764d5822b

Joint=3707 CoordSys=GLOBAL CoordType=Cartesian XorR=24.15 Y=-2.1 Z=-1 SpecialJt=No  
GUID=4f892a08-87d0-4ae3-a57f-c6e5f3c686e6

Joint=3708 CoordSys=GLOBAL CoordType=Cartesian XorR=24.15 Y=-2 Z=-1 SpecialJt=No  
GUID=e413a5d5-4be7-467b-98af-98893c915ef7

Joint=3709 CoordSys=GLOBAL CoordType=Cartesian XorR=24.15 Y=-1.9 Z=-1 SpecialJt=No  
GUID=d8734119-aa77-47c7-8fc1-890a2aa67d78

Joint=3710 CoordSys=GLOBAL CoordType=Cartesian XorR=24.15 Y=-1.8 Z=-1 SpecialJt=No  
GUID=6e8f91b6-f337-4edc-8817-953bccd8b482

Joint=3711 CoordSys=GLOBAL CoordType=Cartesian XorR=24.15 Y=-1.7 Z=-1 SpecialJt=No  
GUID=7dd908e5-c71c-498f-a8d6-809349984efc

Joint=3712 CoordSys=GLOBAL CoordType=Cartesian XorR=24.15 Y=-1.6 Z=-1 SpecialJt=No  
GUID=528f50c4-16c6-4ffc-8f73-1ba3e56b029d

Joint=3713 CoordSys=GLOBAL CoordType=Cartesian XorR=24.15 Y=-1.5 Z=-1 SpecialJt=No  
GUID=8bc2a007-51bd-4343-882d-f2de5915755d

Joint=3714 CoordSys=GLOBAL CoordType=Cartesian XorR=24.15 Y=-1.4 Z=-1 SpecialJt=No  
GUID=da04bb3b-2a1d-4605-87b8-dbbb9617674e

Joint=3715 CoordSys=GLOBAL CoordType=Cartesian XorR=24.15 Y=-1.3 Z=-1 SpecialJt=No  
GUID=43fea017-609d-4ddb-8e99-aa4862fbb86f

Joint=3716 CoordSys=GLOBAL CoordType=Cartesian XorR=24.15 Y=-1.2 Z=-1 SpecialJt=No  
GUID=1d7def2c-a690-43b8-9584-769f5344adc0

Joint=3717 CoordSys=GLOBAL CoordType=Cartesian XorR=24.15 Y=-1.1 Z=-1 SpecialJt=No  
GUID=3caa6494-1b61-49f0-9931-93b08bbb3f16

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                           |                 |                     |            |        |      |              |                                           |
|-------------------------------------------|-----------------|---------------------|------------|--------|------|--------------|-------------------------------------------|
| Joint=3718                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=-1   | Z=-1 | SpecialJt=No |                                           |
| GUID=313d066d-fe0b-4b0b-be43-a448956e5822 |                 |                     |            |        |      |              |                                           |
| Joint=3719                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=-0.9 | Z=-1 | SpecialJt=No |                                           |
| GUID=cf08e90f-5a59-4ebb-af03-b44f9f9a9368 |                 |                     |            |        |      |              |                                           |
| Joint=3720                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=-0.8 | Z=-1 | SpecialJt=No |                                           |
| GUID=e6e794e3-9457-47f4-b362-8227c4650281 |                 |                     |            |        |      |              |                                           |
| Joint=3721                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=-0.7 | Z=-1 | SpecialJt=No |                                           |
| GUID=473c362c-8d1f-4a0e-a519-4e29bdea48e8 |                 |                     |            |        |      |              |                                           |
| Joint=3722                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=-0.6 | Z=-1 | SpecialJt=No |                                           |
| GUID=d28e64c8-f575-4952-9ffe-4d68cb57cf5a |                 |                     |            |        |      |              |                                           |
| Joint=3723                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=-0.5 | Z=-1 | SpecialJt=No |                                           |
| GUID=565bcd82-24a6-48dc-92df-d46bfc0768f2 |                 |                     |            |        |      |              |                                           |
| Joint=3724                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=-0.4 | Z=-1 | SpecialJt=No |                                           |
| GUID=fba56a8f-6a69-4f58-954f-2662ca32eebb |                 |                     |            |        |      |              |                                           |
| Joint=3725                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=-0.3 | Z=-1 | SpecialJt=No |                                           |
| GUID=ce234fb9-e022-4bc3-ba93-ccf2bd2150fd |                 |                     |            |        |      |              |                                           |
| Joint=3726                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=-0.2 | Z=-1 | SpecialJt=No |                                           |
| GUID=d1bc0ef1-9e67-428c-99ea-0c2cdc3b2aff |                 |                     |            |        |      |              |                                           |
| Joint=3727                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=-0.1 | Z=-1 | SpecialJt=No |                                           |
| GUID=cfde6755-7141-4f59-83e8-f5733223e987 |                 |                     |            |        |      |              |                                           |
| Joint=3728                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=0    | Z=-1 | SpecialJt=No | GUID=26c9260c-f62e-4d22-8d9b-977b3e654f81 |
| Joint=3729                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=0.1  | Z=-1 | SpecialJt=No |                                           |
| GUID=b6145641-8cad-4f49-8aab-64de847d1874 |                 |                     |            |        |      |              |                                           |
| Joint=3730                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=0.2  | Z=-1 | SpecialJt=No |                                           |
| GUID=cc06b416-660a-417a-9045-64feb38ea155 |                 |                     |            |        |      |              |                                           |
| Joint=3731                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=0.3  | Z=-1 | SpecialJt=No |                                           |
| GUID=94a44363-f9b0-41a3-adfc-b907e26ed6a7 |                 |                     |            |        |      |              |                                           |
| Joint=3732                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=0.4  | Z=-1 | SpecialJt=No |                                           |
| GUID=d62589f7-1efb-4011-82e2-16a868fa2210 |                 |                     |            |        |      |              |                                           |
| Joint=3733                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=0.5  | Z=-1 | SpecialJt=No |                                           |
| GUID=50dd2cdb-07e3-4d42-8b1a-98ed605eadc9 |                 |                     |            |        |      |              |                                           |
| Joint=3734                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=0.6  | Z=-1 | SpecialJt=No |                                           |
| GUID=9b14a146-9313-4dff-8e4b-1402ef52db0f |                 |                     |            |        |      |              |                                           |
| Joint=3735                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=0.7  | Z=-1 | SpecialJt=No | GUID=fab8fa80-7b9c-4beb-b676-ebb4e098380c |
| Joint=3736                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=0.8  | Z=-1 | SpecialJt=No |                                           |
| GUID=253e0b8e-de73-40d6-b7a8-2fe28f169894 |                 |                     |            |        |      |              |                                           |
| Joint=3737                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=0.9  | Z=-1 | SpecialJt=No |                                           |
| GUID=568cb0b1-99bd-4aac-80ef-b7a4f4a14141 |                 |                     |            |        |      |              |                                           |
| Joint=3738                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=1    | Z=-1 | SpecialJt=No | GUID=fdd2e508-4e16-4eff-bad3-1ce586072aa5 |
| Joint=3739                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=1.1  | Z=-1 | SpecialJt=No | GUID=f42153f4-d254-43b1-b2b7-8173ca8d12eb |
| Joint=3740                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=1.2  | Z=-1 | SpecialJt=No |                                           |
| GUID=3137c93f-afb4-4b5e-8343-d168d02ce4b7 |                 |                     |            |        |      |              |                                           |
| Joint=3741                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=1.3  | Z=-1 | SpecialJt=No |                                           |
| GUID=7b1b1ec6-306b-4888-8227-ed994aac6788 |                 |                     |            |        |      |              |                                           |
| Joint=3742                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=1.4  | Z=-1 | SpecialJt=No | GUID=d1fbfaca-fb5e-46e4-8630-3def764cedb7 |
| Joint=3743                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=1.5  | Z=-1 | SpecialJt=No | GUID=f3a5fb9c-9a5e-4095-bf37-3ac59a76ff34 |
| Joint=3744                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=1.6  | Z=-1 | SpecialJt=No | GUID=0eee462b-439e-4c1f-a617-ebe4a427183b |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                           |                 |                     |            |        |      |              |
|-------------------------------------------|-----------------|---------------------|------------|--------|------|--------------|
| Joint=3745                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=1.7  | Z=-1 | SpecialJt=No |
| GUID=1b278e4f-efcd-4b1d-8942-ea7b7208930d |                 |                     |            |        |      |              |
| Joint=3746                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=1.8  | Z=-1 | SpecialJt=No |
| GUID=bd663bb6-7988-4638-bd6d-ff8b67b70529 |                 |                     |            |        |      |              |
| Joint=3747                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=1.9  | Z=-1 | SpecialJt=No |
| GUID=d77a6a45-873d-4734-a0b7-967271f951d4 |                 |                     |            |        |      |              |
| Joint=3748                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=2    | Z=-1 | SpecialJt=No |
| GUID=fb06-4d31-8724-0478521e7cd0          |                 |                     |            |        |      |              |
| Joint=3749                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=2.1  | Z=-1 | SpecialJt=No |
| GUID=eb98daab-bba9-4101-be9c-c8e6b49f0e0b |                 |                     |            |        |      |              |
| Joint=3750                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.15 | Y=2.2  | Z=-1 | SpecialJt=No |
| GUID=76679846-71a4-49a9-ad7c-420ba6222763 |                 |                     |            |        |      |              |
| Joint=3751                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-2.2 | Z=-1 | SpecialJt=No |
| GUID=fae435f4-d4e0-4a7b-a4b2-53ce3a4f36d6 |                 |                     |            |        |      |              |
| Joint=3752                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-2.1 | Z=-1 | SpecialJt=No |
| GUID=d89d97fb-8dc2-4737-81ca-cd7e29ccb4e1 |                 |                     |            |        |      |              |
| Joint=3753                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-2   | Z=-1 | SpecialJt=No |
| GUID=7e5086c5-faa9-429d-9cc2-63242b79405d |                 |                     |            |        |      |              |
| Joint=3754                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-1.9 | Z=-1 | SpecialJt=No |
| GUID=17a0c873-9694-416e-8889-ff447e81ec72 |                 |                     |            |        |      |              |
| Joint=3755                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-1.8 | Z=-1 | SpecialJt=No |
| GUID=158ed781-c3d5-412b-b277-08cfa0e995a5 |                 |                     |            |        |      |              |
| Joint=3756                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-1.7 | Z=-1 | SpecialJt=No |
| GUID=c8e7715b-37db-4c4e-838c-54b370cb2688 |                 |                     |            |        |      |              |
| Joint=3757                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-1.6 | Z=-1 | SpecialJt=No |
| GUID=86fa6e1b-8aab-4d21-9b94-af7521b3c7bb |                 |                     |            |        |      |              |
| Joint=3758                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-1.5 | Z=-1 | SpecialJt=No |
| GUID=69b506d8-6937-4a5d-a61e-e93c8c128d8c |                 |                     |            |        |      |              |
| Joint=3759                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-1.4 | Z=-1 | SpecialJt=No |
| GUID=8af9ac80-e312-453d-a847-0d2c73cb3308 |                 |                     |            |        |      |              |
| Joint=3760                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-1.3 | Z=-1 | SpecialJt=No |
| GUID=8ab87df1-756a-4103-bfc4-cc38c2751013 |                 |                     |            |        |      |              |
| Joint=3761                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-1.2 | Z=-1 | SpecialJt=No |
| GUID=151dce0b-e131-4585-9c0b-418f6a2fb29e |                 |                     |            |        |      |              |
| Joint=3762                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-1.1 | Z=-1 | SpecialJt=No |
| GUID=c0447b4e-b775-4e9b-82aa-ab3bd275e1b0 |                 |                     |            |        |      |              |
| Joint=3763                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-1   | Z=-1 | SpecialJt=No |
| GUID=30ee1948-221a-493d-aa67-b05e2043e87e |                 |                     |            |        |      |              |
| Joint=3764                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-0.9 | Z=-1 | SpecialJt=No |
| GUID=e44fe7e7-dbef-46fa-86f9-ff110c84424e |                 |                     |            |        |      |              |
| Joint=3765                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-0.8 | Z=-1 | SpecialJt=No |
| GUID=577cca9d-3504-4f33-8a0c-b7e283bb9259 |                 |                     |            |        |      |              |
| Joint=3766                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-0.7 | Z=-1 | SpecialJt=No |
| GUID=33a70f5b-b383-49f3-aeff-6d734c125fc6 |                 |                     |            |        |      |              |
| Joint=3767                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-0.6 | Z=-1 | SpecialJt=No |
| GUID=04e11961-8dc0-4e4e-9f5a-33aa5a814e2f |                 |                     |            |        |      |              |
| Joint=3768                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-0.5 | Z=-1 | SpecialJt=No |
| GUID=a21bf3cd-b392-4887-a60f-2c7e83060bb4 |                 |                     |            |        |      |              |
| Joint=3769                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-0.4 | Z=-1 | SpecialJt=No |
| GUID=ad2b18dc-3ca0-4535-94a8-601842a537e2 |                 |                     |            |        |      |              |
| Joint=3770                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-0.3 | Z=-1 | SpecialJt=No |
| GUID=b49522de-f46c-404f-a61a-78edac3de30d |                 |                     |            |        |      |              |
| Joint=3771                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-0.2 | Z=-1 | SpecialJt=No |
| GUID=29cc9dec-67e3-4a63-8f2e-75fec2b2e322 |                 |                     |            |        |      |              |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|            |                 |                     |            |                        |      |              |                                           |
|------------|-----------------|---------------------|------------|------------------------|------|--------------|-------------------------------------------|
| Joint=3772 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-0.1                 | Z=-1 | SpecialJt=No | GUID=b58366de-24d6-451e-92b8-049d07b9a88b |
| Joint=3773 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=5.55111512312578E-17 | Z=-1 | SpecialJt=No | GUID=5c2d52fe-80a8-4eb0-82c8-599400f78dbc |
| Joint=3774 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=0.099999999999999998 | Z=-1 | SpecialJt=No | GUID=be81fe85-b565-4174-b749-a1fff7c5c916 |
| Joint=3775 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=0.2                  | Z=-1 | SpecialJt=No | GUID=27b58155-bc4a-4f0b-8aff-85fc6c858af0 |
| Joint=3776 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=0.3                  | Z=-1 | SpecialJt=No | GUID=e07b01ad-910d-4749-9355-e72002686489 |
| Joint=3777 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=0.4                  | Z=-1 | SpecialJt=No | GUID=4629ee48-b2e8-4266-be88-2f36cd5fcfed |
| Joint=3778 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=0.5                  | Z=-1 | SpecialJt=No | GUID=7cd80d57-f409-490b-8938-956a20a4a32c |
| Joint=3779 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=0.6                  | Z=-1 | SpecialJt=No | GUID=a445a7f6-650f-493a-a75e-d436e47e69cd |
| Joint=3780 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=0.7                  | Z=-1 | SpecialJt=No | GUID=e7c451cc-5fc0-499b-8979-bd8c31453053 |
| Joint=3781 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=0.8                  | Z=-1 | SpecialJt=No | GUID=2f572a41-e69f-485b-94b6-c4b6eda7a33b |
| Joint=3782 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=0.9                  | Z=-1 | SpecialJt=No | GUID=852050ba-3489-4b7f-a350-692e638a9152 |
| Joint=3783 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=1                    | Z=-1 | SpecialJt=No | GUID=f55a7aa8-6946-4c2c-a104-89646763f171 |
| Joint=3784 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=1.1                  | Z=-1 | SpecialJt=No | GUID=3691bd08-cb8a-46f6-83e7-dd6c44d5ba37 |
| Joint=3785 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=1.2                  | Z=-1 | SpecialJt=No | GUID=a57a70ee-ea46-4749-a1a0-1840cb3b22f5 |
| Joint=3786 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=1.3                  | Z=-1 | SpecialJt=No | GUID=1f655b68-7978-47c8-a5fe-ed5a9a0a1212 |
| Joint=3787 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=1.4                  | Z=-1 | SpecialJt=No | GUID=2f6d3732-692d-4856-8c67-d80037a5a7d8 |
| Joint=3788 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=1.5                  | Z=-1 | SpecialJt=No | GUID=95cf2fbe-a560-46c2-8415-bf1ae876f0ed |
| Joint=3789 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=1.6                  | Z=-1 | SpecialJt=No | GUID=20735a7b-6617-4f6c-a8c3-60ace8e95642 |
| Joint=3790 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=1.7                  | Z=-1 | SpecialJt=No | GUID=68350e1a-8e30-43e2-9b8c-e42b50db13d0 |
| Joint=3791 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=1.8                  | Z=-1 | SpecialJt=No | GUID=76b1e8ce-1359-4c96-a51e-9d85ca391668 |
| Joint=3792 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=1.9                  | Z=-1 | SpecialJt=No | GUID=7531e565-f2eb-4bd7-a884-618d27e36eb8 |
| Joint=3793 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=2                    | Z=-1 | SpecialJt=No | GUID=7bf611f8-364a-4191-a6cb-e534865ebc75 |
| Joint=3794 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=2.1                  | Z=-1 | SpecialJt=No | GUID=32166def-785d-4a12-bde0-a330132e3680 |
| Joint=3795 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=2.2                  | Z=-1 | SpecialJt=No | GUID=55aa67ad-1961-4f64-8629-aa5c2e2870ad |
| Joint=3796 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.35 | Y=-2.2                 | Z=-1 | SpecialJt=No | GUID=a0a90ea5-6539-471e-84cc-289a7c86313f |
| Joint=3797 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.35 | Y=-2.1                 | Z=-1 | SpecialJt=No | GUID=90742f30-245e-4db2-96b5-c2c394a83756 |
| Joint=3798 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.35 | Y=-2                   | Z=-1 | SpecialJt=No | GUID=366dd08b-8ffb-411a-81fc-3e686bba01a4 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                           |                 |                     |            |                         |      |              |
|-------------------------------------------|-----------------|---------------------|------------|-------------------------|------|--------------|
| Joint=3799                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.35 | Y=-1.9                  | Z=-1 | SpecialJt=No |
| GUID=4e59dd0a-0757-4ffe-89a5-bca7c994978f |                 |                     |            |                         |      |              |
| Joint=3800                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.35 | Y=-1.8                  | Z=-1 | SpecialJt=No |
| GUID=310568dd-f5e3-4eab-b6a9-0e08e09548c7 |                 |                     |            |                         |      |              |
| Joint=3801                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.35 | Y=-1.7                  | Z=-1 | SpecialJt=No |
| GUID=6b3d30a7-0ddf-44ff-bedf-858a5c09e3d6 |                 |                     |            |                         |      |              |
| Joint=3802                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.35 | Y=-1.6                  | Z=-1 | SpecialJt=No |
| GUID=1b8ef4b6-562c-4b31-b49c-92fa63c2dc67 |                 |                     |            |                         |      |              |
| Joint=3803                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.35 | Y=-1.5                  | Z=-1 | SpecialJt=No |
| GUID=2567580c-5154-48c1-a606-d01997cb87ef |                 |                     |            |                         |      |              |
| Joint=3804                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.35 | Y=-1.4                  | Z=-1 | SpecialJt=No |
| GUID=62ca2252-ff4f-46a6-a15c-592014e8c289 |                 |                     |            |                         |      |              |
| Joint=3805                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.35 | Y=-1.3                  | Z=-1 | SpecialJt=No |
| GUID=ccac27cf-8f0e-4af5-904c-21bca8fb65e8 |                 |                     |            |                         |      |              |
| Joint=3806                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.35 | Y=-1.2                  | Z=-1 | SpecialJt=No |
| GUID=2e662207-dc13-43a8-b346-ee7c19481769 |                 |                     |            |                         |      |              |
| Joint=3807                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.35 | Y=-1.1                  | Z=-1 | SpecialJt=No |
| GUID=a45dc06d-f0e2-454a-b469-1266a8a0d7b1 |                 |                     |            |                         |      |              |
| Joint=3808                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.35 | Y=-1                    | Z=-1 | SpecialJt=No |
| GUID=77f65cae-7afc-462e-9d67-0ab25fd5cfff |                 |                     |            |                         |      |              |
| Joint=3809                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.35 | Y=-0.9                  | Z=-1 | SpecialJt=No |
| GUID=0b2b4292-8aa4-4e2b-ba8c-ac03abb3e898 |                 |                     |            |                         |      |              |
| Joint=3810                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.35 | Y=-0.8                  | Z=-1 | SpecialJt=No |
| GUID=a5d74457-2cdc-4128-8c9a-16e5c60ffb5d |                 |                     |            |                         |      |              |
| Joint=3811                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.35 | Y=-0.7                  | Z=-1 | SpecialJt=No |
| GUID=f6c00508-95b7-4dc1-b81d-d81f13037872 |                 |                     |            |                         |      |              |
| Joint=3812                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.35 | Y=-0.6                  | Z=-1 | SpecialJt=No |
| GUID=ffe77c1e-2229-4d86-a9ed-ac9ec40252bc |                 |                     |            |                         |      |              |
| Joint=3813                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.35 | Y=-0.5                  | Z=-1 | SpecialJt=No |
| GUID=94c75737-c386-4cb8-9e18-271728b6c928 |                 |                     |            |                         |      |              |
| Joint=3814                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.35 | Y=-0.4                  | Z=-1 | SpecialJt=No |
| GUID=2f3a6d81-23b1-4d76-bc73-c4baa87cd2bb |                 |                     |            |                         |      |              |
| Joint=3815                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.35 | Y=-0.3                  | Z=-1 | SpecialJt=No |
| GUID=91c6a0ac-2943-4845-b9e0-3fb520fe0fa  |                 |                     |            |                         |      |              |
| Joint=3816                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.35 | Y=-0.2                  | Z=-1 | SpecialJt=No |
| GUID=f9733d9c-d251-4052-aa4f-98ae7c4cf96b |                 |                     |            |                         |      |              |
| Joint=3817                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.35 | Y=-0.09999999999999998  | Z=-1 | SpecialJt=No |
| GUID=b882bcb9-aa6c-4388-882b-94f768db3d56 |                 |                     |            |                         |      |              |
| Joint=3818                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.35 | Y=-2.77555756156289E-17 | Z=-1 | SpecialJt=No |
| GUID=9e802dfc-d208-4d29-8d35-c9d71d201a0c |                 |                     |            |                         |      |              |
| Joint=3819                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.35 | Y=0.09999999999999997   | Z=-1 | SpecialJt=No |
| GUID=e3b2f115-c281-47b1-a39d-17cbc02c327e |                 |                     |            |                         |      |              |
| Joint=3820                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.35 | Y=0.2                   | Z=-1 | SpecialJt=No |
| GUID=5846d1d1-0906-4575-ba02-5be1fff577ed |                 |                     |            |                         |      |              |
| Joint=3821                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.35 | Y=0.3                   | Z=-1 | SpecialJt=No |
| GUID=ba57ab08-02b0-4aee-8a9a-7e51dcb6fd70 |                 |                     |            |                         |      |              |
| Joint=3822                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.35 | Y=0.4                   | Z=-1 | SpecialJt=No |
| GUID=f7ff5304-3bc8-4306-86ec-56fb3ed81f96 |                 |                     |            |                         |      |              |
| Joint=3823                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.35 | Y=0.5                   | Z=-1 | SpecialJt=No |
| GUID=250f3397-2041-4ad9-891a-0746096db0e3 |                 |                     |            |                         |      |              |
| Joint=3824                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.35 | Y=0.6                   | Z=-1 | SpecialJt=No |
| GUID=9f643bde-78b6-4bee-8528-d4929a2031e4 |                 |                     |            |                         |      |              |
| Joint=3825                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.35 | Y=0.7                   | Z=-1 | SpecialJt=No |
| GUID=d8d7d294-abe0-4a48-a394-e79335a73bb1 |                 |                     |            |                         |      |              |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=3826 CoordSys=GLOBAL CoordType=Cartesian XorR=24.35 Y=0.8 Z=-1 SpecialJt=No  
GUID=09ca0c5a-d944-497d-8564-bf5ef2640e89

Joint=3827 CoordSys=GLOBAL CoordType=Cartesian XorR=24.35 Y=0.9 Z=-1 SpecialJt=No  
GUID=ca9f3926-0c3a-4794-a4a4-78b2df7f8f1d

Joint=3828 CoordSys=GLOBAL CoordType=Cartesian XorR=24.35 Y=1 Z=-1 SpecialJt=No GUID=782a4790-  
f035-4725-a7e6-13aca4be06c7

Joint=3829 CoordSys=GLOBAL CoordType=Cartesian XorR=24.35 Y=1.1 Z=-1 SpecialJt=No  
GUID=ee244f5d-fcf3-4ba1-bc84-bf5ed902fe4e

Joint=3830 CoordSys=GLOBAL CoordType=Cartesian XorR=24.35 Y=1.2 Z=-1 SpecialJt=No GUID=af92fc36-  
95a1-4957-90ed-966e24706bea

Joint=3831 CoordSys=GLOBAL CoordType=Cartesian XorR=24.35 Y=1.3 Z=-1 SpecialJt=No  
GUID=21db9917-f4b4-4d5a-888c-985c64a85df3

Joint=3832 CoordSys=GLOBAL CoordType=Cartesian XorR=24.35 Y=1.4 Z=-1 SpecialJt=No  
GUID=c8213e77-5290-4365-81b6-2ef1e439369f

Joint=3833 CoordSys=GLOBAL CoordType=Cartesian XorR=24.35 Y=1.5 Z=-1 SpecialJt=No  
GUID=15b93440-1d5c-46d1-9a73-b4c52bc23e9f

Joint=3834 CoordSys=GLOBAL CoordType=Cartesian XorR=24.35 Y=1.6 Z=-1 SpecialJt=No  
GUID=66e64efc-8e90-473b-a6da-2b9004c8af32

Joint=3835 CoordSys=GLOBAL CoordType=Cartesian XorR=24.35 Y=1.7 Z=-1 SpecialJt=No  
GUID=a72400d7-231a-43c9-bd26-dfc68c77ffb7

Joint=3836 CoordSys=GLOBAL CoordType=Cartesian XorR=24.35 Y=1.8 Z=-1 SpecialJt=No  
GUID=c7c22e91-ff76-459b-9490-dbcac97e1fd9

Joint=3837 CoordSys=GLOBAL CoordType=Cartesian XorR=24.35 Y=1.9 Z=-1 SpecialJt=No  
GUID=029e6160-73fc-4f8a-b855-797a8837cd32

Joint=3838 CoordSys=GLOBAL CoordType=Cartesian XorR=24.35 Y=2 Z=-1 SpecialJt=No GUID=d7c1d15e-  
caa9-414f-9cfe-34111ac2ce74

Joint=3839 CoordSys=GLOBAL CoordType=Cartesian XorR=24.35 Y=2.1 Z=-1 SpecialJt=No  
GUID=38cd2e62-adfe-4d73-a479-ff2dfc529ea

Joint=3840 CoordSys=GLOBAL CoordType=Cartesian XorR=24.35 Y=2.2 Z=-1 SpecialJt=No  
GUID=9c5df2aa-ddbc-47be-8d94-a765aabc71e7

Joint=3841 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=-2.2 Z=-1 SpecialJt=No  
GUID=db016466-5f46-40fe-ac24-ad305734d557

Joint=3842 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=-2.1 Z=-1 SpecialJt=No  
GUID=a859c3d2-1984-48f3-883f-0bd68af0bed8

Joint=3843 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=-2 Z=-1 SpecialJt=No GUID=863d1c5e-  
f46e-410a-9c3c-000837eef5e4

Joint=3844 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=-1.9 Z=-1 SpecialJt=No  
GUID=c150d52d-acd9-4a35-95f0-2f4808021c3f

Joint=3845 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=-1.8 Z=-1 SpecialJt=No  
GUID=c7f0883f-6c45-4b20-b06b-13f46a72148e

Joint=3846 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=-1.7 Z=-1 SpecialJt=No  
GUID=cb8d3b0d-7312-4d6f-8ad9-ce84bd037840

Joint=3847 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=-1.6 Z=-1 SpecialJt=No  
GUID=96cb1f90-1390-45e9-a766-8859afa08443

Joint=3848 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=-1.5 Z=-1 SpecialJt=No  
GUID=296e7a3a-8d73-4f35-96fa-5fbc053da930

Joint=3849 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=-1.4 Z=-1 SpecialJt=No  
GUID=e41ef831-4293-4696-a41f-3aeb97554ead

Joint=3850 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=-1.3 Z=-1 SpecialJt=No  
GUID=7c0443d3-3bc3-4411-b44c-31c25ae1c550

Joint=3851 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=-1.2 Z=-1 SpecialJt=No  
GUID=2878c13d-54f7-4d60-81ae-b5472bfe0d71

Joint=3852 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=-1.1 Z=-1 SpecialJt=No  
GUID=e6bd1100-0ee0-48da-8c63-5933ab6091ae



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=3853 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=-1 Z=-1 SpecialJt=No GUID=7aca7e44-fd0f-49be-82f8-229ba956a88a

Joint=3854 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=-0.9 Z=-1 SpecialJt=No GUID=102bbfd6-ab7a-4ccf-aa47-a29d7677f4fc

Joint=3855 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=-0.8 Z=-1 SpecialJt=No GUID=cb24e774-d033-4114-8443-090608116177

Joint=3856 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=-0.7 Z=-1 SpecialJt=No GUID=d5a6e951-c475-48cd-b08f-7edd32b9c6f1

Joint=3857 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=-0.6 Z=-1 SpecialJt=No GUID=5f94b4b9-c408-48ab-bb68-52276cd87562

Joint=3858 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=-0.5 Z=-1 SpecialJt=No GUID=7c9a3255-7447-4772-aa64-fdc265f97100

Joint=3859 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=-0.4 Z=-1 SpecialJt=No GUID=2b85758d-682a-4936-9c6e-468bd3a362ae

Joint=3860 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=-0.3 Z=-1 SpecialJt=No GUID=96e7cb3f-3b05-43ea-b1ea-9f37fc5548f2

Joint=3861 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=-0.2 Z=-1 SpecialJt=No GUID=ab12db23-ff68-4dac-aaff-a379263ba13a

Joint=3862 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=-0.09999999999999998 Z=-1 SpecialJt=No GUID=6ec4cf06-187a-45be-a1ec-6d65d4c361f8

Joint=3863 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=2.77555756156289E-17 Z=-1 SpecialJt=No GUID=9ca6c6d1-fd67-4300-9d88-397219ef4bb3

Joint=3864 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=0.1 Z=-1 SpecialJt=No GUID=8a2ff573-fe3d-4f61-a357-2ee453f2bc1f

Joint=3865 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=0.2 Z=-1 SpecialJt=No GUID=4d0a2036-e344-4065-b432-667e1de08e7b

Joint=3866 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=0.3 Z=-1 SpecialJt=No GUID=c2d42e91-2683-4076-9551-3812be1abefe

Joint=3867 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=0.4 Z=-1 SpecialJt=No GUID=f2ea3daa-7fe3-4d4f-8ed4-57de5e700af1

Joint=3868 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=0.5 Z=-1 SpecialJt=No GUID=f864f134-61bb-449f-867d-31d6992ac243

Joint=3869 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=0.6 Z=-1 SpecialJt=No GUID=afdad2f7-da19-42df-ba4b-32dd366fd6ee

Joint=3870 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=0.7 Z=-1 SpecialJt=No GUID=1f912e67-4de8-4ab1-bcea-adfaefc00b81

Joint=3871 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=0.8 Z=-1 SpecialJt=No GUID=e917629e-8c3a-4c68-a66d-059846bffc9c

Joint=3872 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=0.9 Z=-1 SpecialJt=No GUID=af65c70d-ee77-433b-9a50-aa7cf8d0a338

Joint=3873 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=1 Z=-1 SpecialJt=No GUID=176d627f-7a54-4ad3-9db9-24026eed1f64

Joint=3874 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=1.1 Z=-1 SpecialJt=No GUID=18923717-f6ef-4878-8696-ef7e1e814dc0

Joint=3875 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=1.2 Z=-1 SpecialJt=No GUID=d8e5b61b-da4e-4ff3-81d9-a43268394bca

Joint=3876 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=1.3 Z=-1 SpecialJt=No GUID=e12d31e6-0bec-4811-92f9-b71f90f8d410

Joint=3877 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=1.4 Z=-1 SpecialJt=No GUID=81bfae2-351a-4771-bf02-caec31b741c2

Joint=3878 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=1.5 Z=-1 SpecialJt=No GUID=365d2994-27d6-424f-8827-ec33220abb8b

Joint=3879 CoordSys=GLOBAL CoordType=Cartesian XorR=24.45 Y=1.6 Z=-1 SpecialJt=No GUID=e6b1ecfa-a041-4924-8b78-f848e7f8e27e



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                            |                 |                     |            |        |      |              |
|--------------------------------------------|-----------------|---------------------|------------|--------|------|--------------|
| Joint=3880                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.45 | Y=1.7  | Z=-1 | SpecialJt=No |
| GUID=f3328e61-156b-4655-92d3-10e75f39890f  |                 |                     |            |        |      |              |
| Joint=3881                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.45 | Y=1.8  | Z=-1 | SpecialJt=No |
| GUID=bbebacf0-2e7f-4b15-904e-48b4495af45b  |                 |                     |            |        |      |              |
| Joint=3882                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.45 | Y=1.9  | Z=-1 | SpecialJt=No |
| GUID=e364e0aa-e61c-45db-81b7-224f3190672c  |                 |                     |            |        |      |              |
| Joint=3883                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.45 | Y=2    | Z=-1 | SpecialJt=No |
| GUID=06290cd0-88ac-4e56-b3ce-7d215402a423  |                 |                     |            |        |      |              |
| Joint=3884                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.45 | Y=2.1  | Z=-1 | SpecialJt=No |
| GUID=e2782c70-839b-4b70-8b35-abb8d610b165  |                 |                     |            |        |      |              |
| Joint=3885                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.45 | Y=2.2  | Z=-1 | SpecialJt=No |
| GUID=51ee8033-d105-4f44-9804-0bbc3f6424c5  |                 |                     |            |        |      |              |
| Joint=3886                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.55 | Y=-2.2 | Z=-1 | SpecialJt=No |
| GUID=3c5944b9-18e0-42d5-89fb-085159b8e2a1  |                 |                     |            |        |      |              |
| Joint=3887                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.55 | Y=-2.1 | Z=-1 | SpecialJt=No |
| GUID=d6cc15cd-4768-4042-9270-983bbd14047b  |                 |                     |            |        |      |              |
| Joint=3888                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.55 | Y=-2   | Z=-1 | SpecialJt=No |
| GUID=ce0351cc-860e-4b92-ba27-d465422f99e2  |                 |                     |            |        |      |              |
| Joint=3889                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.55 | Y=-1.9 | Z=-1 | SpecialJt=No |
| GUID=d53d42ac-8402-43a2-8830-e6f8b72f4c55  |                 |                     |            |        |      |              |
| Joint=3890                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.55 | Y=-1.8 | Z=-1 | SpecialJt=No |
| GUID=8081acfa-78a7-45e3-8974-6cb40a25e95e  |                 |                     |            |        |      |              |
| Joint=3891                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.55 | Y=-1.7 | Z=-1 | SpecialJt=No |
| GUID=563fcd1c-5e09-46fc-93de-e12029d219e8  |                 |                     |            |        |      |              |
| Joint=3892                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.55 | Y=-1.6 | Z=-1 | SpecialJt=No |
| GUID=066fe9a8-05ff-432b-a401-8828ade2c0be  |                 |                     |            |        |      |              |
| Joint=3893                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.55 | Y=-1.5 | Z=-1 | SpecialJt=No |
| GUID=d6152f6a-b342-4220-89bc-1d768055d167  |                 |                     |            |        |      |              |
| Joint=3894                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.55 | Y=-1.4 | Z=-1 | SpecialJt=No |
| GUID=0ee49221-d620-4f07-851f-84d03980016e  |                 |                     |            |        |      |              |
| Joint=3895                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.55 | Y=-1.3 | Z=-1 | SpecialJt=No |
| GUID=c5b2ba08-c350-47fd-a780-547ae3746cee  |                 |                     |            |        |      |              |
| Joint=3896                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.55 | Y=-1.2 | Z=-1 | SpecialJt=No |
| GUID=8ded2c73-db47-40fe-a0a7-949f0edba968  |                 |                     |            |        |      |              |
| Joint=3897                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.55 | Y=-1.1 | Z=-1 | SpecialJt=No |
| GUID=0976472b-7fca-43af-ab67-a5db41b88d31  |                 |                     |            |        |      |              |
| Joint=3898                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.55 | Y=-1   | Z=-1 | SpecialJt=No |
| GUID=7bd472fb-cf1a-4b2d-b65c-7f7d97ec2e7e  |                 |                     |            |        |      |              |
| Joint=3899                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.55 | Y=-0.9 | Z=-1 | SpecialJt=No |
| GUID=37d0e0e9-34fa-4080-9ba1-aaf45aa942cd  |                 |                     |            |        |      |              |
| Joint=3900                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.55 | Y=-0.8 | Z=-1 | SpecialJt=No |
| GUID=709c7552-92b3-40e9-9be1-46992d234e80  |                 |                     |            |        |      |              |
| Joint=3901                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.55 | Y=-0.7 | Z=-1 | SpecialJt=No |
| GUID=770916f5-c3ea-42d7-a8f7-096bf82200f5  |                 |                     |            |        |      |              |
| Joint=3902                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.55 | Y=-0.6 | Z=-1 | SpecialJt=No |
| GUID=e7cd51de-dbafe-46f1-b5c2-a79d7998fb6e |                 |                     |            |        |      |              |
| Joint=3903                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.55 | Y=-0.5 | Z=-1 | SpecialJt=No |
| GUID=e990a869-d461-4706-b66a-0d090b713483  |                 |                     |            |        |      |              |
| Joint=3904                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.55 | Y=-0.4 | Z=-1 | SpecialJt=No |
| GUID=49c4bfc8-d415-4f0c-97ae-2238dcc3b25a  |                 |                     |            |        |      |              |
| Joint=3905                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.55 | Y=-0.3 | Z=-1 | SpecialJt=No |
| GUID=f1d17106-584c-4bc1-baeb-df41717c5e5e  |                 |                     |            |        |      |              |
| Joint=3906                                 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.55 | Y=-0.2 | Z=-1 | SpecialJt=No |
| GUID=09ed545b-07f3-42a4-bddb-afe83fc9a96b  |                 |                     |            |        |      |              |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                           |                                           |                     |            |                         |      |              |
|-------------------------------------------|-------------------------------------------|---------------------|------------|-------------------------|------|--------------|
| Joint=3907                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.55 | Y=-0.09999999999999998  | Z=-1 |              |
| SpecialJt=No                              | GUID=15549d82-e5a8-4d5b-b502-0af23f47f088 |                     |            |                         |      |              |
| Joint=3908                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.55 | Y=-4.16333634234434E-17 | Z=-1 |              |
| SpecialJt=No                              | GUID=aeae4c90-8292-4210-bef5-7a680982feae |                     |            |                         |      |              |
| Joint=3909                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.55 | Y=0.1                   | Z=-1 | SpecialJt=No |
| GUID=734b278d-12ee-432f-80d9-7513d525d047 |                                           |                     |            |                         |      |              |
| Joint=3910                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.55 | Y=0.2                   | Z=-1 | SpecialJt=No |
| GUID=eab3e46e-d467-47a8-a72e-7b9fd47c545c |                                           |                     |            |                         |      |              |
| Joint=3911                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.55 | Y=0.3                   | Z=-1 | SpecialJt=No |
| GUID=99da2f0a-3201-4b43-8ef7-215595b1f3fa |                                           |                     |            |                         |      |              |
| Joint=3912                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.55 | Y=0.4                   | Z=-1 | SpecialJt=No |
| GUID=a18f68d2-79ab-4401-85c3-f0327c01fab5 |                                           |                     |            |                         |      |              |
| Joint=3913                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.55 | Y=0.5                   | Z=-1 | SpecialJt=No |
| GUID=40a3fd52-322d-4a73-96a2-fdaa0cce5d65 |                                           |                     |            |                         |      |              |
| Joint=3914                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.55 | Y=0.6                   | Z=-1 | SpecialJt=No |
| GUID=77db11d6-a01d-43d9-9152-3ecbb21ef421 |                                           |                     |            |                         |      |              |
| Joint=3915                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.55 | Y=0.7                   | Z=-1 | SpecialJt=No |
| GUID=06e608d7-053a-47a0-813a-cde24255da8c |                                           |                     |            |                         |      |              |
| Joint=3916                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.55 | Y=0.8                   | Z=-1 | SpecialJt=No |
| GUID=1b1b02ef-53d1-45a8-9bd3-acf8dceaa024 |                                           |                     |            |                         |      |              |
| Joint=3917                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.55 | Y=0.9                   | Z=-1 | SpecialJt=No |
| GUID=f7d343ac-0b97-4697-a11c-607283276d7b |                                           |                     |            |                         |      |              |
| Joint=3918                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.55 | Y=1                     | Z=-1 | SpecialJt=No |
| GUID=d5e86cc9-e6e5-4552-822c-969f459a16d1 |                                           |                     |            |                         |      |              |
| Joint=3919                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.55 | Y=1.1                   | Z=-1 | SpecialJt=No |
| GUID=b4160f47-32c2-4de8-b946-4065c4af779b |                                           |                     |            |                         |      |              |
| Joint=3920                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.55 | Y=1.2                   | Z=-1 | SpecialJt=No |
| GUID=3c30a914-6aa7-4366-af28-557544f0773d |                                           |                     |            |                         |      |              |
| Joint=3921                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.55 | Y=1.3                   | Z=-1 | SpecialJt=No |
| GUID=2f212213-b066-49e3-9afc-72dd81d4a418 |                                           |                     |            |                         |      |              |
| Joint=3922                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.55 | Y=1.4                   | Z=-1 | SpecialJt=No |
| GUID=54b480c0-94c2-4ea9-8fcd-7e963fb8739d |                                           |                     |            |                         |      |              |
| Joint=3923                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.55 | Y=1.5                   | Z=-1 | SpecialJt=No |
| GUID=80020b4b-0f7f-43df-a9ae-c74ff33389aa |                                           |                     |            |                         |      |              |
| Joint=3924                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.55 | Y=1.6                   | Z=-1 | SpecialJt=No |
| GUID=e384cf8d-59e5-46b9-918f-4b39c4b63f3c |                                           |                     |            |                         |      |              |
| Joint=3925                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.55 | Y=1.7                   | Z=-1 | SpecialJt=No |
| GUID=aa465364-a670-41ff-89a7-83af526a0523 |                                           |                     |            |                         |      |              |
| Joint=3926                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.55 | Y=1.8                   | Z=-1 | SpecialJt=No |
| GUID=9d360e2f-d27b-4f12-a8f5-549714aa0d17 |                                           |                     |            |                         |      |              |
| Joint=3927                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.55 | Y=1.9                   | Z=-1 | SpecialJt=No |
| GUID=a7f75c33-b2a1-47ab-ac9e-2298d0562b84 |                                           |                     |            |                         |      |              |
| Joint=3928                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.55 | Y=2                     | Z=-1 | SpecialJt=No |
| GUID=5034dddd-7455-411e-829b-5b69b9777fd6 |                                           |                     |            |                         |      |              |
| Joint=3929                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.55 | Y=2.1                   | Z=-1 | SpecialJt=No |
| GUID=be8b231f-5f4e-4d1d-bb3a-320a9d5f6d8b |                                           |                     |            |                         |      |              |
| Joint=3930                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.55 | Y=2.2                   | Z=-1 | SpecialJt=No |
| GUID=92a31663-c5e3-4777-b0e7-5c26223a9eab |                                           |                     |            |                         |      |              |
| Joint=3931                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.65 | Y=-2.2                  | Z=-1 | SpecialJt=No |
| GUID=828237b4-ae0d-4f9d-8e26-380e7c7307ad |                                           |                     |            |                         |      |              |
| Joint=3932                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.65 | Y=-2.1                  | Z=-1 | SpecialJt=No |
| GUID=6828bc13-5db5-4e7e-b2e9-576517fbeb68 |                                           |                     |            |                         |      |              |
| Joint=3933                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.65 | Y=-2                    | Z=-1 | SpecialJt=No |
| GUID=2bf55351-860f-455e-a253-0143e26d7e3d |                                           |                     |            |                         |      |              |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                           |                 |                     |            |                        |      |              |
|-------------------------------------------|-----------------|---------------------|------------|------------------------|------|--------------|
| Joint=3934                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.65 | Y=-1.9                 | Z=-1 | SpecialJt=No |
| GUID=927d095b-246f-4f7f-a9b5-c68b79f86860 |                 |                     |            |                        |      |              |
| Joint=3935                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.65 | Y=-1.8                 | Z=-1 | SpecialJt=No |
| GUID=ffffe4e8-0bfa-4e22-9a59-b944ee1f0e05 |                 |                     |            |                        |      |              |
| Joint=3936                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.65 | Y=-1.7                 | Z=-1 | SpecialJt=No |
| GUID=94ec748d-80d6-4b33-82f9-d0f01ba1005e |                 |                     |            |                        |      |              |
| Joint=3937                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.65 | Y=-1.6                 | Z=-1 | SpecialJt=No |
| GUID=defdfb3e-30f7-4baf-9d7d-3809a60f5b19 |                 |                     |            |                        |      |              |
| Joint=3938                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.65 | Y=-1.5                 | Z=-1 | SpecialJt=No |
| GUID=558c7391-6b01-4979-a931-6a8db6f89a37 |                 |                     |            |                        |      |              |
| Joint=3939                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.65 | Y=-1.4                 | Z=-1 | SpecialJt=No |
| GUID=8a84dbd5-9843-4d14-9814-6fc3707db557 |                 |                     |            |                        |      |              |
| Joint=3940                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.65 | Y=-1.3                 | Z=-1 | SpecialJt=No |
| GUID=c092e24e-5431-4817-8a9d-fa35c73ecd82 |                 |                     |            |                        |      |              |
| Joint=3941                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.65 | Y=-1.2                 | Z=-1 | SpecialJt=No |
| GUID=e532f719-5728-48c3-8611-a8415230fa44 |                 |                     |            |                        |      |              |
| Joint=3942                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.65 | Y=-1.1                 | Z=-1 | SpecialJt=No |
| GUID=047a77d0-7400-4bea-8c77-b83841faf7f5 |                 |                     |            |                        |      |              |
| Joint=3943                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.65 | Y=-1                   | Z=-1 | SpecialJt=No |
| GUID=2ed1e388-9158-4511-b8df-f12cdfd0cb22 |                 |                     |            |                        |      |              |
| Joint=3944                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.65 | Y=-0.9                 | Z=-1 | SpecialJt=No |
| GUID=e350c35c-b7bb-4a80-b081-807d2ad50ea5 |                 |                     |            |                        |      |              |
| Joint=3945                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.65 | Y=-0.8                 | Z=-1 | SpecialJt=No |
| GUID=503310ed-8cd0-4d2a-abf0-c1b40c3868b2 |                 |                     |            |                        |      |              |
| Joint=3946                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.65 | Y=-0.7                 | Z=-1 | SpecialJt=No |
| GUID=764d5ce7-b27b-4704-a29d-b1830f703c4f |                 |                     |            |                        |      |              |
| Joint=3947                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.65 | Y=-0.6                 | Z=-1 | SpecialJt=No |
| GUID=aaa0f60c-ad24-4d79-9365-fed589a505e5 |                 |                     |            |                        |      |              |
| Joint=3948                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.65 | Y=-0.5                 | Z=-1 | SpecialJt=No |
| GUID=59c0cdb8-b379-4a8e-ad2b-732164a5c4de |                 |                     |            |                        |      |              |
| Joint=3949                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.65 | Y=-0.4                 | Z=-1 | SpecialJt=No |
| GUID=f30c7b0b-71d7-4141-892a-de23190489c1 |                 |                     |            |                        |      |              |
| Joint=3950                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.65 | Y=-0.3                 | Z=-1 | SpecialJt=No |
| GUID=c7c0a6de-793f-4ab7-93b4-ad7d25b2163c |                 |                     |            |                        |      |              |
| Joint=3951                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.65 | Y=-0.2                 | Z=-1 | SpecialJt=No |
| GUID=dfea21d0-0767-48cb-9fcf-da5f18b3ebdd |                 |                     |            |                        |      |              |
| Joint=3952                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.65 | Y=-0.09999999999999998 | Z=-1 | SpecialJt=No |
| GUID=62b4c9f0-5a3a-4f7f-95cc-6164f69a0a93 |                 |                     |            |                        |      |              |
| Joint=3953                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.65 | Y=1.11022302462516E-16 | Z=-1 | SpecialJt=No |
| GUID=7f9b5350-45e9-4a9a-bdd2-254a253f952c |                 |                     |            |                        |      |              |
| Joint=3954                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.65 | Y=0.09999999999999997  | Z=-1 | SpecialJt=No |
| GUID=1fa70285-ff11-4659-b418-255a368dc9f8 |                 |                     |            |                        |      |              |
| Joint=3955                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.65 | Y=0.2                  | Z=-1 | SpecialJt=No |
| GUID=6dbd6d08-077d-4eda-b564-a5efca1b23ea |                 |                     |            |                        |      |              |
| Joint=3956                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.65 | Y=0.3                  | Z=-1 | SpecialJt=No |
| GUID=8deecb9-2f0d-482b-8314-ad84a6e6b3b5  |                 |                     |            |                        |      |              |
| Joint=3957                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.65 | Y=0.4                  | Z=-1 | SpecialJt=No |
| GUID=fb1a8c3a-098c-4f93-bf58-220f16295a59 |                 |                     |            |                        |      |              |
| Joint=3958                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.65 | Y=0.5                  | Z=-1 | SpecialJt=No |
| GUID=a0fcd3a1-e4ab-474e-821a-10c4bab6b1f3 |                 |                     |            |                        |      |              |
| Joint=3959                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.65 | Y=0.6                  | Z=-1 | SpecialJt=No |
| GUID=fa58ae61-42c5-41e8-957c-b8a8a2dba241 |                 |                     |            |                        |      |              |
| Joint=3960                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.65 | Y=0.7                  | Z=-1 | SpecialJt=No |
| GUID=f6766370-2611-41cc-a54d-b9f394a3186d |                 |                     |            |                        |      |              |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=3961 CoordSys=GLOBAL CoordType=Cartesian XorR=24.65 Y=0.8 Z=-1 SpecialJt=No GUID=c4814f9f-bde7-4c5a-8592-9e068d48bc84

Joint=3962 CoordSys=GLOBAL CoordType=Cartesian XorR=24.65 Y=0.9 Z=-1 SpecialJt=No GUID=d97c7f60-74e0-41fc-9a3c-d6e0e7fdb299

Joint=3963 CoordSys=GLOBAL CoordType=Cartesian XorR=24.65 Y=1 Z=-1 SpecialJt=No GUID=38d459ca-eeb9-4e40-a39e-d09927349c1f

Joint=3964 CoordSys=GLOBAL CoordType=Cartesian XorR=24.65 Y=1.1 Z=-1 SpecialJt=No GUID=60ade3c7-8114-4128-b0ca-e509f0f3bfd1

Joint=3965 CoordSys=GLOBAL CoordType=Cartesian XorR=24.65 Y=1.2 Z=-1 SpecialJt=No GUID=397718dd-2fbb-4cdd-9f9f-a30dad881ddf

Joint=3966 CoordSys=GLOBAL CoordType=Cartesian XorR=24.65 Y=1.3 Z=-1 SpecialJt=No GUID=df7d4234-b952-44e4-b818-5ca54e175e56

Joint=3967 CoordSys=GLOBAL CoordType=Cartesian XorR=24.65 Y=1.4 Z=-1 SpecialJt=No GUID=4126c295-5c1a-4e88-b4c7-0152f2242b68

Joint=3968 CoordSys=GLOBAL CoordType=Cartesian XorR=24.65 Y=1.5 Z=-1 SpecialJt=No GUID=5ddcd987-e871-4948-9f4b-28d01cad1122

Joint=3969 CoordSys=GLOBAL CoordType=Cartesian XorR=24.65 Y=1.6 Z=-1 SpecialJt=No GUID=ffe70aea-b75b-4cea-b89b-261a5c95ee81

Joint=3970 CoordSys=GLOBAL CoordType=Cartesian XorR=24.65 Y=1.7 Z=-1 SpecialJt=No GUID=73a7bd43-7c4a-4a03-8b8c-7ae39e669ce3

Joint=3971 CoordSys=GLOBAL CoordType=Cartesian XorR=24.65 Y=1.8 Z=-1 SpecialJt=No GUID=12210fe2-7522-4b73-af76-f77dcc160ea9

Joint=3972 CoordSys=GLOBAL CoordType=Cartesian XorR=24.65 Y=1.9 Z=-1 SpecialJt=No GUID=0b0d10a0-32fe-4ac1-9baf-c95170a8d6c7

Joint=3973 CoordSys=GLOBAL CoordType=Cartesian XorR=24.65 Y=2 Z=-1 SpecialJt=No GUID=b7b212d8-7587-49ab-a385-b16e29b21293

Joint=3974 CoordSys=GLOBAL CoordType=Cartesian XorR=24.65 Y=2.1 Z=-1 SpecialJt=No GUID=b784bb80-e690-4756-899b-df3baf6ffe04

Joint=3975 CoordSys=GLOBAL CoordType=Cartesian XorR=24.65 Y=2.2 Z=-1 SpecialJt=No GUID=b32041d8-b6d7-4d6b-9ed0-c3a1cae4639f

Joint=3976 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=-2.2 Z=-1 SpecialJt=No GUID=76eb4b08-9b6b-43f1-a57b-482d57d71910

Joint=3977 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=-2.1 Z=-1 SpecialJt=No GUID=76c169fd-6bea-4751-8f26-fc845ff32512

Joint=3978 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=-2 Z=-1 SpecialJt=No GUID=18c77224-e21a-440a-b044-99b93071d679

Joint=3979 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=-1.9 Z=-1 SpecialJt=No GUID=cdbb75a4-eaf9-4bb6-b9aa-6918be73b973

Joint=3980 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=-1.8 Z=-1 SpecialJt=No GUID=b1774e96-8896-444d-9fc2-c51d3dc7c9ab

Joint=3981 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=-1.7 Z=-1 SpecialJt=No GUID=87883182-b66c-481c-b2be-28349aff0e36

Joint=3982 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=-1.6 Z=-1 SpecialJt=No GUID=e13dde2f-795b-4adf-8d1e-f72253f45440

Joint=3983 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=-1.5 Z=-1 SpecialJt=No GUID=bc73e551-5113-476f-92f0-31f5ac1984f1

Joint=3984 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=-1.4 Z=-1 SpecialJt=No GUID=6e049dac-65c2-43d3-b82c-2686f4925686

Joint=3985 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=-1.3 Z=-1 SpecialJt=No GUID=a5416e88-101e-43e1-9586-43745f67de21

Joint=3986 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=-1.2 Z=-1 SpecialJt=No GUID=b41b99e5-1ca5-4833-ac98-c39ab88a2f7f

Joint=3987 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=-1.1 Z=-1 SpecialJt=No GUID=5e778e91-fa4d-495e-8897-9c775edb9a73



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=3988 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=-1 Z=-1 SpecialJt=No GUID=7eee227c-ac77-4e99-86dc-1c8a7880502d

Joint=3989 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=-0.9 Z=-1 SpecialJt=No GUID=9ca0b865-d64a-49b9-aed7-3303508dcef4

Joint=3990 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=-0.8 Z=-1 SpecialJt=No GUID=fc125026-62d0-49cd-953d-457d2ef177d4

Joint=3991 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=-0.7 Z=-1 SpecialJt=No GUID=53780d52-1117-4725-8a76-d42fa6373592

Joint=3992 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=-0.6 Z=-1 SpecialJt=No GUID=f292ca01-d46e-4eeb-886f-4c210dfbcd9c

Joint=3993 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=-0.5 Z=-1 SpecialJt=No GUID=0e3824e3-ba49-44fe-821b-ca8341adced4

Joint=3994 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=-0.4 Z=-1 SpecialJt=No GUID=ffe8d57f-9bf5-43b1-b2c6-21ce4a4893ec

Joint=3995 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=-0.3 Z=-1 SpecialJt=No GUID=ecbaee41-176c-4fcf-ad92-bd66721fec07

Joint=3996 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=-0.2 Z=-1 SpecialJt=No GUID=e3d60c48-ff51-41d7-8943-e5a4db1e0e53

Joint=3997 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=-0.09999999999999998 Z=-1 SpecialJt=No GUID=02cbce45-0e6f-4931-859b-6b713f8e45f2

Joint=3998 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=-8.32667268468867E-17 Z=-1 SpecialJt=No GUID=05eb8222-300a-4b2d-acc6-b6f3a545a92c

Joint=3999 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=0.09999999999999998 Z=-1 SpecialJt=No GUID=bbe656b7-646f-4178-a846-d29362bd8586

Joint=4000 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=0.2 Z=-1 SpecialJt=No GUID=a9c066dd-487e-40ce-8323-885d1b92e298

Joint=4001 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=0.3 Z=-1 SpecialJt=No GUID=bd2dcc7b-b4b4-4426-b72d-a934796e372b

Joint=4002 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=0.4 Z=-1 SpecialJt=No GUID=6eb7d2dc-db2c-4349-bbda-8b2372f9a99a

Joint=4003 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=0.5 Z=-1 SpecialJt=No GUID=bb47c312-f06a-436c-b125-912314b193f0

Joint=4004 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=0.6 Z=-1 SpecialJt=No GUID=9187434f-fc69-441d-a60a-5c4787d97572

Joint=4005 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=0.7 Z=-1 SpecialJt=No GUID=bd8616c4-022c-4fe2-96fb-b9b24b12b56b

Joint=4006 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=0.8 Z=-1 SpecialJt=No GUID=c06e75b6-1732-4823-8c2d-68bf87a4458a

Joint=4007 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=0.9 Z=-1 SpecialJt=No GUID=1abbaf9b-2a7b-42a3-95e2-e11c0d00bb4d

Joint=4008 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=1 Z=-1 SpecialJt=No GUID=15994071-c423-414c-ae23-10507813e0c9

Joint=4009 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=1.1 Z=-1 SpecialJt=No GUID=b235fbda-2a9f-442a-a03d-a017d3960846

Joint=4010 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=1.2 Z=-1 SpecialJt=No GUID=cfec7662-aaa9-4a49-b3d9-0cad29ba18c8

Joint=4011 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=1.3 Z=-1 SpecialJt=No GUID=b46d4e8a-206e-4bd0-bd13-ba64327f9485

Joint=4012 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=1.4 Z=-1 SpecialJt=No GUID=5f76c154-e792-4055-96af-bdf34dbe0558

Joint=4013 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=1.5 Z=-1 SpecialJt=No GUID=7933dfed-a334-421b-ab4b-b63cad64b17

Joint=4014 CoordSys=GLOBAL CoordType=Cartesian XorR=24.75 Y=1.6 Z=-1 SpecialJt=No GUID=be0d9776-1600-4da5-bb0b-eec66868e635

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|            |                 |                     |            |        |      |              |                                           |
|------------|-----------------|---------------------|------------|--------|------|--------------|-------------------------------------------|
| Joint=4015 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.75 | Y=1.7  | Z=-1 | SpecialJt=No | GUID=307c0cd9-fb3f-48ee-a3c0-2841381d4bfc |
| Joint=4016 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.75 | Y=1.8  | Z=-1 | SpecialJt=No | GUID=7d725973-d0f4-4c15-96f7-32280bbec856 |
| Joint=4017 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.75 | Y=1.9  | Z=-1 | SpecialJt=No | GUID=3a9f009c-3620-44f4-a280-a5ec9c4f83d1 |
| Joint=4018 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.75 | Y=2    | Z=-1 | SpecialJt=No | GUID=d9063bda-75e6-4c96-bf73-0dfb8198cb72 |
| Joint=4019 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.75 | Y=2.1  | Z=-1 | SpecialJt=No | GUID=aa2c7b78-35fe-4d5c-8e2b-806d2c394af4 |
| Joint=4020 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.75 | Y=2.2  | Z=-1 | SpecialJt=No | GUID=3dbcad05-539b-4813-8d74-09a717437b55 |
| Joint=4021 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.85 | Y=-2.2 | Z=-1 | SpecialJt=No | GUID=82adab60-27e8-4ae8-ad68-af6d450026a9 |
| Joint=4022 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.85 | Y=-2.1 | Z=-1 | SpecialJt=No | GUID=73d511e1-f983-43f8-9b18-41a618610dea |
| Joint=4023 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.85 | Y=-2   | Z=-1 | SpecialJt=No | GUID=e794ab61-88e6-4d8a-8725-694de4e8efde |
| Joint=4024 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.85 | Y=-1.9 | Z=-1 | SpecialJt=No | GUID=94556695-02e7-488b-b151-6d88198a65ad |
| Joint=4025 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.85 | Y=-1.8 | Z=-1 | SpecialJt=No | GUID=073bd33e-9ee5-496c-afbe-1b7cefd8e4f0 |
| Joint=4026 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.85 | Y=-1.7 | Z=-1 | SpecialJt=No | GUID=f8cefc6e-c4ca-4300-9e9f-9d35465d6dcb |
| Joint=4027 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.85 | Y=-1.6 | Z=-1 | SpecialJt=No | GUID=db8cf792-3984-451c-9255-60e52e98098f |
| Joint=4028 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.85 | Y=-1.5 | Z=-1 | SpecialJt=No | GUID=766f96bc-2911-43b1-b911-b2b0fcd0614  |
| Joint=4029 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.85 | Y=-1.4 | Z=-1 | SpecialJt=No | GUID=26ce174f-f809-4e5b-8d32-fa28db10174b |
| Joint=4030 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.85 | Y=-1.3 | Z=-1 | SpecialJt=No | GUID=1c3cff3f-3a07-4c84-acce-cdc0defcfd4  |
| Joint=4031 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.85 | Y=-1.2 | Z=-1 | SpecialJt=No | GUID=4664a17e-6a22-4297-b05d-890c3aad9629 |
| Joint=4032 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.85 | Y=-1.1 | Z=-1 | SpecialJt=No | GUID=06030303-f965-4789-8339-f8353e2bc699 |
| Joint=4033 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.85 | Y=-1   | Z=-1 | SpecialJt=No | GUID=728d011b-2d43-455d-a0cd-4f1002eee75f |
| Joint=4034 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.85 | Y=-0.9 | Z=-1 | SpecialJt=No | GUID=b5c4fcad-e0f6-4621-9110-4de854f3e134 |
| Joint=4035 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.85 | Y=-0.8 | Z=-1 | SpecialJt=No | GUID=0cc112d2-2199-4c45-b179-7e386dac0842 |
| Joint=4036 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.85 | Y=-0.7 | Z=-1 | SpecialJt=No | GUID=1cfb36ac-eac1-42ed-b623-7cdf5f9d929e |
| Joint=4037 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.85 | Y=-0.6 | Z=-1 | SpecialJt=No | GUID=f14b3a79-0aec-416d-8423-f8f92cabe9db |
| Joint=4038 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.85 | Y=-0.5 | Z=-1 | SpecialJt=No | GUID=392152bf-0d74-42e3-9faa-120ef1428476 |
| Joint=4039 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.85 | Y=-0.4 | Z=-1 | SpecialJt=No | GUID=eef3aa97-2a0c-4777-9d00-cf0be4ccde19 |
| Joint=4040 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.85 | Y=-0.3 | Z=-1 | SpecialJt=No | GUID=3fced5b4-2983-4eac-85e1-6c5e948825a9 |
| Joint=4041 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.85 | Y=-0.2 | Z=-1 | SpecialJt=No | GUID=36bc31a3-bb22-48c9-9a23-84864e9edbe6 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                           |                                           |                     |            |                        |      |              |
|-------------------------------------------|-------------------------------------------|---------------------|------------|------------------------|------|--------------|
| Joint=4042                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.85 | Y=-0.0999999999999999  | Z=-1 |              |
| SpecialJt=No                              | GUID=af6ee3d2-15d5-4713-aec0-db17a2534369 |                     |            |                        |      |              |
| Joint=4043                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.85 | Y=6.93889390390723E-17 | Z=-1 |              |
| SpecialJt=No                              | GUID=93a51155-3de7-4f7b-9845-26f2dbebc0a4 |                     |            |                        |      |              |
| Joint=4044                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.85 | Y=0.0999999999999999   | Z=-1 |              |
| SpecialJt=No                              | GUID=bd4df23c-f1a5-4909-a30f-1d27a9100bb7 |                     |            |                        |      |              |
| Joint=4045                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.85 | Y=0.2                  | Z=-1 | SpecialJt=No |
| GUID=0e044bf4-e905-4698-b615-668103148d22 |                                           |                     |            |                        |      |              |
| Joint=4046                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.85 | Y=0.3                  | Z=-1 | SpecialJt=No |
| GUID=6f84088d-9735-43ee-b698-21c105ce25ad |                                           |                     |            |                        |      |              |
| Joint=4047                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.85 | Y=0.4                  | Z=-1 | SpecialJt=No |
| GUID=c1ad807c-3dee-4e9f-9d01-56df42c2d84e |                                           |                     |            |                        |      |              |
| Joint=4048                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.85 | Y=0.5                  | Z=-1 | SpecialJt=No |
| GUID=2a77858e-42d0-4cb2-af91-39aaf9af7ba6 |                                           |                     |            |                        |      |              |
| Joint=4049                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.85 | Y=0.6                  | Z=-1 | SpecialJt=No |
| GUID=1e7964ef-96b5-4dd8-bf12-06439ebc393b |                                           |                     |            |                        |      |              |
| Joint=4050                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.85 | Y=0.7                  | Z=-1 | SpecialJt=No |
| GUID=df489068-4053-4bc9-9a78-84151e82d799 |                                           |                     |            |                        |      |              |
| Joint=4051                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.85 | Y=0.8                  | Z=-1 | SpecialJt=No |
| GUID=f5f8a631-fe22-49ba-aaf8-d9fc88f9eb98 |                                           |                     |            |                        |      |              |
| Joint=4052                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.85 | Y=0.9                  | Z=-1 | SpecialJt=No |
| GUID=cc2b4afb-e806-4434-bc45-b3441ee276c0 |                                           |                     |            |                        |      |              |
| Joint=4053                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.85 | Y=1                    | Z=-1 | SpecialJt=No |
| GUID=689258e3-387e-4204-aba0-3a20e72b48ba |                                           |                     |            |                        |      |              |
| Joint=4054                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.85 | Y=1.1                  | Z=-1 | SpecialJt=No |
| GUID=09bff4d8-f089-47da-b08f-830854e1a88f |                                           |                     |            |                        |      |              |
| Joint=4055                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.85 | Y=1.2                  | Z=-1 | SpecialJt=No |
| GUID=afbdc982-1f68-454c-a378-b483c391450c |                                           |                     |            |                        |      |              |
| Joint=4056                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.85 | Y=1.3                  | Z=-1 | SpecialJt=No |
| GUID=3bbae7f4-0255-4434-b0c4-437f6185c402 |                                           |                     |            |                        |      |              |
| Joint=4057                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.85 | Y=1.4                  | Z=-1 | SpecialJt=No |
| GUID=ab5062f2-21a5-476d-ab03-f563ab2ca2cc |                                           |                     |            |                        |      |              |
| Joint=4058                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.85 | Y=1.5                  | Z=-1 | SpecialJt=No |
| GUID=4627e5da-5eeb-486b-a5a8-ee6c03ca961a |                                           |                     |            |                        |      |              |
| Joint=4059                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.85 | Y=1.6                  | Z=-1 | SpecialJt=No |
| GUID=42d98741-85f9-4583-9415-2ca84a6d44d4 |                                           |                     |            |                        |      |              |
| Joint=4060                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.85 | Y=1.7                  | Z=-1 | SpecialJt=No |
| GUID=1cdf2893-049c-49fe-acec-fbc408b06a92 |                                           |                     |            |                        |      |              |
| Joint=4061                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.85 | Y=1.8                  | Z=-1 | SpecialJt=No |
| GUID=69676030-43b7-49d4-a1d4-1361e9bc1274 |                                           |                     |            |                        |      |              |
| Joint=4062                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.85 | Y=1.9                  | Z=-1 | SpecialJt=No |
| GUID=f5d19899-40da-40ed-8a38-472a3433fdf5 |                                           |                     |            |                        |      |              |
| Joint=4063                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.85 | Y=2                    | Z=-1 | SpecialJt=No |
| GUID=dbf2797e-8627-4fa7-92f7-945347a3a449 |                                           |                     |            |                        |      |              |
| Joint=4064                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.85 | Y=2.1                  | Z=-1 | SpecialJt=No |
| GUID=f54d3b8a-26d2-4816-ac0b-1ab585c7a4c0 |                                           |                     |            |                        |      |              |
| Joint=4065                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.85 | Y=2.2                  | Z=-1 | SpecialJt=No |
| GUID=7fbd8539-e081-4893-9bc6-52e3e6b48b1e |                                           |                     |            |                        |      |              |
| Joint=4066                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.95 | Y=-2.1                 | Z=-1 | SpecialJt=No |
| GUID=77e8798c-59f6-4246-ad25-1991907d4236 |                                           |                     |            |                        |      |              |
| Joint=4067                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.95 | Y=-2                   | Z=-1 | SpecialJt=No |
| GUID=83c6a8ba-6cb9-407d-becf-2107b27f56fc |                                           |                     |            |                        |      |              |
| Joint=4068                                | CoordSys=GLOBAL                           | CoordType=Cartesian | XorR=24.95 | Y=-1.9                 | Z=-1 | SpecialJt=No |
| GUID=1954a235-8f9a-464d-8175-b0d80c6670e0 |                                           |                     |            |                        |      |              |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                           |                 |                     |            |        |      |              |                                           |
|-------------------------------------------|-----------------|---------------------|------------|--------|------|--------------|-------------------------------------------|
| Joint=4069                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.95 | Y=-1.8 | Z=-1 | SpecialJt=No |                                           |
| GUID=c17d110a-f116-42db-b0e9-7fe863853823 |                 |                     |            |        |      |              |                                           |
| Joint=4070                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.95 | Y=-1.7 | Z=-1 | SpecialJt=No |                                           |
| GUID=f43afdf3-67f5-4697-81df-0d765df4a83b |                 |                     |            |        |      |              |                                           |
| Joint=4071                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.95 | Y=-1.6 | Z=-1 | SpecialJt=No |                                           |
| GUID=c9067165-de13-41ef-b31b-6d7495ddd5a2 |                 |                     |            |        |      |              |                                           |
| Joint=4072                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.95 | Y=-1.5 | Z=-1 | SpecialJt=No |                                           |
| GUID=30838bff-dd24-48e9-8254-2977c044ac2a |                 |                     |            |        |      |              |                                           |
| Joint=4073                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.95 | Y=-1.4 | Z=-1 | SpecialJt=No |                                           |
| GUID=db25af21-6424-4f1e-85f2-2433be38210c |                 |                     |            |        |      |              |                                           |
| Joint=4074                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.95 | Y=-1.3 | Z=-1 | SpecialJt=No |                                           |
| GUID=59c891a5-5dde-4b45-a3fd-746df4a8b1f3 |                 |                     |            |        |      |              |                                           |
| Joint=4075                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.95 | Y=-1.2 | Z=-1 | SpecialJt=No |                                           |
| GUID=741af776-f825-45a6-906a-4490bcb8eab4 |                 |                     |            |        |      |              |                                           |
| Joint=4076                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.95 | Y=-1.1 | Z=-1 | SpecialJt=No |                                           |
| GUID=3474acbe-77a7-49a7-9115-36bfb165fe9c |                 |                     |            |        |      |              |                                           |
| Joint=4077                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.95 | Y=-1   | Z=-1 | SpecialJt=No |                                           |
| GUID=71653563-faa4-41e8-85ae-98ac1d15f82f |                 |                     |            |        |      |              |                                           |
| Joint=4078                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.95 | Y=-0.9 | Z=-1 | SpecialJt=No |                                           |
| GUID=bd3c5d45-be15-42db-8d08-9ba22a902c87 |                 |                     |            |        |      |              |                                           |
| Joint=4079                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.95 | Y=-0.8 | Z=-1 | SpecialJt=No |                                           |
| GUID=dd19d2bb-81cc-406f-8557-5670a4a1e8c5 |                 |                     |            |        |      |              |                                           |
| Joint=4080                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.95 | Y=-0.7 | Z=-1 | SpecialJt=No |                                           |
| GUID=67ca7c82-2087-4a62-8aac-db56802172d3 |                 |                     |            |        |      |              |                                           |
| Joint=4081                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.95 | Y=-0.6 | Z=-1 | SpecialJt=No |                                           |
| GUID=6bfcd83b-47fc-4548-9610-9855af3dde0a |                 |                     |            |        |      |              |                                           |
| Joint=4082                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.95 | Y=-0.5 | Z=-1 | SpecialJt=No |                                           |
| GUID=2a69d6e0-bf6f-4b28-b214-1a92a8913dbf |                 |                     |            |        |      |              |                                           |
| Joint=4083                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.95 | Y=-0.4 | Z=-1 | SpecialJt=No |                                           |
| GUID=fb54e1e3-8c51-4f41-bcad-8f038ef62c26 |                 |                     |            |        |      |              |                                           |
| Joint=4084                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.95 | Y=-0.3 | Z=-1 | SpecialJt=No |                                           |
| GUID=584ede78-628c-4bf4-8448-e97d98414dec |                 |                     |            |        |      |              |                                           |
| Joint=4085                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.95 | Y=-0.2 | Z=-1 | SpecialJt=No |                                           |
| GUID=834bb532-fb9f-40b1-8d34-12cd69198b02 |                 |                     |            |        |      |              |                                           |
| Joint=4086                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.95 | Y=-0.1 | Z=-1 | SpecialJt=No |                                           |
| GUID=1a0c7f6a-9dc4-4209-a154-2b0dc48832ce |                 |                     |            |        |      |              |                                           |
| Joint=4087                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.95 | Y=0    | Z=-1 | SpecialJt=No | GUID=f723a7ba-2553-4a59-a80c-9a3c6491d701 |
| Joint=4088                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.95 | Y=0.1  | Z=-1 | SpecialJt=No |                                           |
| GUID=b6fb2850-b5d6-42eb-876d-ef558b92ce59 |                 |                     |            |        |      |              |                                           |
| Joint=4089                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.95 | Y=0.2  | Z=-1 | SpecialJt=No |                                           |
| GUID=615405b5-9941-41c2-852c-291e88022473 |                 |                     |            |        |      |              |                                           |
| Joint=4090                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.95 | Y=0.3  | Z=-1 | SpecialJt=No |                                           |
| GUID=a6971b9e-9959-4587-929c-8b441663ec1a |                 |                     |            |        |      |              |                                           |
| Joint=4091                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.95 | Y=0.4  | Z=-1 | SpecialJt=No |                                           |
| GUID=4410e5de-3d4e-4685-96dd-25de3af1d93d |                 |                     |            |        |      |              |                                           |
| Joint=4092                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.95 | Y=0.5  | Z=-1 | SpecialJt=No |                                           |
| GUID=ae8959e3-bbc4-4309-8ae1-73b85d3d0483 |                 |                     |            |        |      |              |                                           |
| Joint=4093                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.95 | Y=0.6  | Z=-1 | SpecialJt=No |                                           |
| GUID=ba76dadd-7c6c-40bd-b7fa-e627868a760f |                 |                     |            |        |      |              |                                           |
| Joint=4094                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.95 | Y=0.7  | Z=-1 | SpecialJt=No |                                           |
| GUID=f0c6ea5c-e098-48c3-81d1-ced0c4efb554 |                 |                     |            |        |      |              |                                           |
| Joint=4095                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.95 | Y=0.8  | Z=-1 | SpecialJt=No |                                           |
| GUID=d2461143-93fe-4034-abd1-4a9cbca440d7 |                 |                     |            |        |      |              |                                           |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=4096 CoordSys=GLOBAL CoordType=Cartesian XorR=24.95 Y=0.9 Z=-1 SpecialJt=No  
GUID=88810d1f-eb97-43a3-b499-d3b080f50af1

Joint=4097 CoordSys=GLOBAL CoordType=Cartesian XorR=24.95 Y=1 Z=-1 SpecialJt=No GUID=e99a521b-5f80-4271-a3c2-9feb709d5350

Joint=4098 CoordSys=GLOBAL CoordType=Cartesian XorR=24.95 Y=1.1 Z=-1 SpecialJt=No  
GUID=226d8d4c-df08-4b6f-9b48-1a6875135e05

Joint=4099 CoordSys=GLOBAL CoordType=Cartesian XorR=24.95 Y=1.2 Z=-1 SpecialJt=No  
GUID=94f25133-3b6d-41cd-a0ea-855d466437de

Joint=4100 CoordSys=GLOBAL CoordType=Cartesian XorR=24.95 Y=1.3 Z=-1 SpecialJt=No  
GUID=16756397-98a9-4793-b291-2d614408e956

Joint=4101 CoordSys=GLOBAL CoordType=Cartesian XorR=24.95 Y=1.4 Z=-1 SpecialJt=No GUID=f33f9826-42ce-4f5d-b643-fefc2c13b8f7

Joint=4102 CoordSys=GLOBAL CoordType=Cartesian XorR=24.95 Y=1.5 Z=-1 SpecialJt=No  
GUID=083b91c5-4d05-4647-bc76-ae9c93866b02

Joint=4103 CoordSys=GLOBAL CoordType=Cartesian XorR=24.95 Y=1.6 Z=-1 SpecialJt=No  
GUID=fd658707-e7cb-445f-80c8-383705508ea1

Joint=4104 CoordSys=GLOBAL CoordType=Cartesian XorR=24.95 Y=1.7 Z=-1 SpecialJt=No  
GUID=3c611ca8-1048-440e-8040-42486b8203a9

Joint=4105 CoordSys=GLOBAL CoordType=Cartesian XorR=24.95 Y=1.8 Z=-1 SpecialJt=No  
GUID=5cb1f95c-6cf1-438e-85c3-7cceaefa5c2f

Joint=4106 CoordSys=GLOBAL CoordType=Cartesian XorR=24.95 Y=1.9 Z=-1 SpecialJt=No  
GUID=7178d218-dfce-44c7-b401-89a7e7a40969

Joint=4107 CoordSys=GLOBAL CoordType=Cartesian XorR=24.95 Y=2 Z=-1 SpecialJt=No GUID=9fa70d17-25ab-4724-b6e6-fe5a456c2af0

Joint=4108 CoordSys=GLOBAL CoordType=Cartesian XorR=24.95 Y=2.1 Z=-1 SpecialJt=No  
GUID=b6ae4753-e7c8-4566-8031-53714158b335

Joint=4109 CoordSys=GLOBAL CoordType=Cartesian XorR=21.25 Y=1.5 Z=-13 SpecialJt=Yes  
GUID=b9bd270e-4fae-4f4c-817d-8fba3d9a31a1

Joint=4110 CoordSys=GLOBAL CoordType=Cartesian XorR=21.25 Y=1.5 Z=-12 SpecialJt=No  
GUID=9fe39efe-d68c-41d3-ac37-38793099eac8

Joint=4111 CoordSys=GLOBAL CoordType=Cartesian XorR=21.25 Y=1.5 Z=-11 SpecialJt=No  
GUID=3662dbe6-4b4c-4db0-abba-dd3cbd424fc0

Joint=4112 CoordSys=GLOBAL CoordType=Cartesian XorR=21.25 Y=1.5 Z=-10 SpecialJt=No  
GUID=4db4c15b-420c-43f1-9fda-3fad340c1046

Joint=4113 CoordSys=GLOBAL CoordType=Cartesian XorR=21.25 Y=1.5 Z=-9 SpecialJt=No  
GUID=0939d582-2581-4b0f-bb85-9c5293142b1c

Joint=4114 CoordSys=GLOBAL CoordType=Cartesian XorR=21.25 Y=1.5 Z=-8 SpecialJt=No  
GUID=84f6219b-1caa-4daf-9cfe-aa41581d13c3

Joint=4115 CoordSys=GLOBAL CoordType=Cartesian XorR=21.25 Y=1.5 Z=-7 SpecialJt=No  
GUID=3ac70852-c646-4cd2-94d9-48d5bfbf1218

Joint=4116 CoordSys=GLOBAL CoordType=Cartesian XorR=21.25 Y=1.5 Z=-6 SpecialJt=No  
GUID=8bfb5ba2-9d8c-4edd-9ae6-f3ee36d00f33

Joint=4117 CoordSys=GLOBAL CoordType=Cartesian XorR=21.25 Y=1.5 Z=-5 SpecialJt=No  
GUID=a96ade20-26ae-4446-9b6a-f8e40b75bd6f

Joint=4118 CoordSys=GLOBAL CoordType=Cartesian XorR=21.25 Y=1.5 Z=-4 SpecialJt=No  
GUID=53258ba9-ecce-441c-866f-cb44b3171e88

Joint=4119 CoordSys=GLOBAL CoordType=Cartesian XorR=21.25 Y=1.5 Z=-3 SpecialJt=No  
GUID=b6847227-98dc-46db-8924-22fce426d285

Joint=4120 CoordSys=GLOBAL CoordType=Cartesian XorR=21.25 Y=1.5 Z=-2 SpecialJt=No  
GUID=992cb9d9-e73b-430d-981d-4b62cf3ff8cf

Joint=4121 CoordSys=GLOBAL CoordType=Cartesian XorR=24.25 Y=1.5 Z=-13 SpecialJt=Yes  
GUID=10a1d55d-420f-46a0-be4b-3632699eafcd

Joint=4122 CoordSys=GLOBAL CoordType=Cartesian XorR=24.25 Y=1.5 Z=-12 SpecialJt=No  
GUID=bc8b81f8-91f5-4320-98cf-9f205bb6d452

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|            |                 |                     |            |        |       |               |                                           |
|------------|-----------------|---------------------|------------|--------|-------|---------------|-------------------------------------------|
| Joint=4123 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=1.5  | Z=-11 | SpecialJt=No  | GUID=f890eeeb-9712-4bd9-b398-9731cbe1818a |
| Joint=4124 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=1.5  | Z=-10 | SpecialJt=No  | GUID=0bd52dc3-4c21-48e7-b4ce-111a1492228d |
| Joint=4125 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=1.5  | Z=-9  | SpecialJt=No  | GUID=3405577a-4228-4c78-ac05-5b5f59fb37b5 |
| Joint=4126 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=1.5  | Z=-8  | SpecialJt=No  | GUID=df1e078b-e345-4411-9e3a-f2e24b87d7d1 |
| Joint=4127 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=1.5  | Z=-7  | SpecialJt=No  | GUID=b8ededdd-c44b-420c-8afc-d548e12065f9 |
| Joint=4128 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=1.5  | Z=-6  | SpecialJt=No  | GUID=064e08a2-4d63-4774-8554-69288ff09a11 |
| Joint=4129 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=1.5  | Z=-5  | SpecialJt=No  | GUID=e288df62-c458-4306-ba4a-e26ce8f05531 |
| Joint=4130 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=1.5  | Z=-4  | SpecialJt=No  | GUID=b7346141-66d2-4ee2-b993-d0e3944c2955 |
| Joint=4131 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=1.5  | Z=-3  | SpecialJt=No  | GUID=470a874e-e9f8-4bd4-8410-d638d80ed8e1 |
| Joint=4132 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=1.5  | Z=-2  | SpecialJt=No  | GUID=87e7c95c-2d73-4015-ad7a-d00be1028b03 |
| Joint=4133 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-1.5 | Z=-13 | SpecialJt=Yes | GUID=8630f655-3a13-4fc6-b550-4212d250734f |
| Joint=4134 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-1.5 | Z=-12 | SpecialJt=No  | GUID=aeb8843f-2c32-4b80-a61a-40a5fa60aae2 |
| Joint=4135 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-1.5 | Z=-11 | SpecialJt=No  | GUID=ab83c6e2-d272-43f8-b546-4518e28e5898 |
| Joint=4136 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-1.5 | Z=-10 | SpecialJt=No  | GUID=bd4db177-89e4-44dc-baa2-72cbf285ade8 |
| Joint=4137 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-1.5 | Z=-9  | SpecialJt=No  | GUID=9407a0cf-b179-4790-b872-ad6704ee83f0 |
| Joint=4138 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-1.5 | Z=-8  | SpecialJt=No  | GUID=990acff-237d-4c86-a9bd-98e107ac07fb  |
| Joint=4139 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-1.5 | Z=-7  | SpecialJt=No  | GUID=0a2244f1-924e-4e04-9919-1205d4e946b7 |
| Joint=4140 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-1.5 | Z=-6  | SpecialJt=No  | GUID=f9e62595-2577-46c8-bad7-7c46e4adc5be |
| Joint=4141 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-1.5 | Z=-5  | SpecialJt=No  | GUID=f8c72daa-b2a1-4dc8-833d-6bac9c63e392 |
| Joint=4142 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-1.5 | Z=-4  | SpecialJt=No  | GUID=9ed15765-0781-40b6-bc71-196dae6bd14a |
| Joint=4143 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-1.5 | Z=-3  | SpecialJt=No  | GUID=4563a114-2ba2-45f2-837e-c9bed27f7035 |
| Joint=4144 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=21.25 | Y=-1.5 | Z=-2  | SpecialJt=No  | GUID=9146402a-dcbd-46a8-a292-b679b6b6b4b3 |
| Joint=4145 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-1.5 | Z=-13 | SpecialJt=Yes | GUID=dc48d30b-cea7-4128-af77-a0965ad51fdc |
| Joint=4146 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-1.5 | Z=-12 | SpecialJt=No  | GUID=25e804a6-3247-453b-8fab-06efa369440e |
| Joint=4147 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-1.5 | Z=-11 | SpecialJt=No  | GUID=bf6d2d04-2beb-4981-b015-56e56317afaa |
| Joint=4148 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-1.5 | Z=-10 | SpecialJt=No  | GUID=529a169e-7c40-4569-a443-29b575e7b9d3 |
| Joint=4149 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-1.5 | Z=-9  | SpecialJt=No  | GUID=5a182ffc-c850-4a25-ac92-ddf52f7e0938 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|            |                 |                     |            |        |      |               |                                           |
|------------|-----------------|---------------------|------------|--------|------|---------------|-------------------------------------------|
| Joint=4150 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-1.5 | Z=-8 | SpecialJt=No  | GUID=e4a49bc3-dc69-4096-abe6-278e05aa6e78 |
| Joint=4151 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-1.5 | Z=-7 | SpecialJt=No  | GUID=2e1e92c4-fbbc-485c-a5c4-b0273fd59a62 |
| Joint=4152 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-1.5 | Z=-6 | SpecialJt=No  | GUID=fad35d09-b4c0-4345-bb5b-3285ae7273d6 |
| Joint=4153 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-1.5 | Z=-5 | SpecialJt=No  | GUID=c36a85c0-8c66-4b07-babe-6b5354c0dd66 |
| Joint=4154 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-1.5 | Z=-4 | SpecialJt=No  | GUID=653f14a0-f650-4330-ad77-e8f4acb9ca4c |
| Joint=4155 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-1.5 | Z=-3 | SpecialJt=No  | GUID=b2a6da78-367f-412d-9d8e-a206f583dc1a |
| Joint=4156 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=24.25 | Y=-1.5 | Z=-2 | SpecialJt=No  | GUID=f0e11eef-8c0f-4b13-a0f4-c554f6773577 |
| Joint=4157 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=17.1  | Y=2.3  | Z=-1 | SpecialJt=Yes | GUID=51a8ca15-f15c-4616-bd7d-2e4aa0c463e8 |
| Joint=4158 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.5  | Y=2.3  | Z=-1 | SpecialJt=Yes | GUID=2ca58766-84bc-42a6-a25c-8169484a0a32 |
| Joint=4159 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=17.1  | Y=-2.3 | Z=-1 | SpecialJt=Yes | GUID=4f33590f-5aad-44d8-9965-833903ea5339 |
| Joint=4160 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.5  | Y=-2.3 | Z=-1 | SpecialJt=Yes | GUID=253cd5c2-e941-42db-afea-03c0c86d2e24 |
| Joint=4161 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.6  | Y=-2.3 | Z=-1 | SpecialJt=No  | GUID=16a7d525-dc8b-4371-bbc4-f7483645b20c |
| Joint=4162 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.6  | Y=-2.2 | Z=-1 | SpecialJt=No  | GUID=e2d7c4cd-15e5-4cc6-ae8c-e8307042824c |
| Joint=4163 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.5  | Y=-2.2 | Z=-1 | SpecialJt=No  | GUID=075c98c5-25f1-440e-b59d-2c1d74c72750 |
| Joint=4164 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.6  | Y=-2.1 | Z=-1 | SpecialJt=No  | GUID=d04cd3e0-30be-4dab-b69f-fa270271dc8d |
| Joint=4165 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.5  | Y=-2.1 | Z=-1 | SpecialJt=No  | GUID=fe4f5b5e-79d7-466e-a27e-5c095117d6d7 |
| Joint=4166 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.6  | Y=-2   | Z=-1 | SpecialJt=No  | GUID=88d50979-61ce-46f4-a86a-ae4e4a781442 |
| Joint=4167 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.5  | Y=-2   | Z=-1 | SpecialJt=No  | GUID=f483b2c9-ebc0-44ed-8600-6bbfc830667d |
| Joint=4168 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.6  | Y=-1.9 | Z=-1 | SpecialJt=No  | GUID=d736f7e2-c138-4dee-a516-518e8f67cb53 |
| Joint=4169 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.5  | Y=-1.9 | Z=-1 | SpecialJt=No  | GUID=c0c3dadd-cf5a-4b48-b770-111af786a834 |
| Joint=4170 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.6  | Y=-1.8 | Z=-1 | SpecialJt=No  | GUID=47124017-0b84-497b-86b4-be53100fbec2 |
| Joint=4171 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.5  | Y=-1.8 | Z=-1 | SpecialJt=No  | GUID=5e7ab873-959c-4e27-8cd0-c7c7fcd2542f |
| Joint=4172 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.6  | Y=-1.7 | Z=-1 | SpecialJt=No  | GUID=9cd1152a-d1b7-42b1-9e7f-8482c192f21e |
| Joint=4173 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.5  | Y=-1.7 | Z=-1 | SpecialJt=No  | GUID=8b42ab60-4f8c-4b7f-b6e9-3dcf286703ba |
| Joint=4174 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.6  | Y=-1.6 | Z=-1 | SpecialJt=No  | GUID=3a78c3af-9aff-4700-b905-6dfa927c6d49 |
| Joint=4175 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.5  | Y=-1.6 | Z=-1 | SpecialJt=No  | GUID=f37417b8-7913-497b-be27-55bc5bd44190 |
| Joint=4176 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.6  | Y=-1.5 | Z=-1 | SpecialJt=No  | GUID=6e780022-8293-4b45-a777-28a7ee406a11 |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|            |                 |                     |           |        |      |              |                                           |
|------------|-----------------|---------------------|-----------|--------|------|--------------|-------------------------------------------|
| Joint=4177 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.5 | Y=-1.5 | Z=-1 | SpecialJt=No | GUID=37b46223-896f-438c-adbf-0f84efae161c |
| Joint=4178 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.6 | Y=-1.4 | Z=-1 | SpecialJt=No | GUID=ee0ec146-00af-420c-9f85-18eb771b2be3 |
| Joint=4179 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.5 | Y=-1.4 | Z=-1 | SpecialJt=No | GUID=e212ce9e-eb12-466f-aa5e-b1a481cc5fc7 |
| Joint=4180 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.6 | Y=-1.3 | Z=-1 | SpecialJt=No | GUID=43eadf28-2ce5-4d17-b19c-8c41c0603134 |
| Joint=4181 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.5 | Y=-1.3 | Z=-1 | SpecialJt=No | GUID=473d42aa-2459-40e1-aa39-0b007459ecab |
| Joint=4182 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.6 | Y=-1.2 | Z=-1 | SpecialJt=No | GUID=f48b50be-41a7-4b2d-b548-f8d4404d53fa |
| Joint=4183 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.5 | Y=-1.2 | Z=-1 | SpecialJt=No | GUID=4632f7cc-252a-42a6-af12-c2b9604c5134 |
| Joint=4184 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.6 | Y=-1.1 | Z=-1 | SpecialJt=No | GUID=69449762-ff0d-4e0e-95b9-ebd5e52ed23e |
| Joint=4185 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.5 | Y=-1.1 | Z=-1 | SpecialJt=No | GUID=c58b3707-7900-42f7-95e1-4a8f8fe80863 |
| Joint=4186 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.6 | Y=-1   | Z=-1 | SpecialJt=No | GUID=9b8c1ca7-9405-418f-bd5f-a0bd19413a3d |
| Joint=4187 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.5 | Y=-1   | Z=-1 | SpecialJt=No | GUID=010ee4c5-eb68-46a2-b1a7-3ce9e73dae77 |
| Joint=4188 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.6 | Y=-0.9 | Z=-1 | SpecialJt=No | GUID=3053bf14-52e4-45ce-b800-8926445c13e4 |
| Joint=4189 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.5 | Y=-0.9 | Z=-1 | SpecialJt=No | GUID=3d5facca-aa8d-4b71-aa12-46a3fc3f1f7f |
| Joint=4190 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.6 | Y=-0.8 | Z=-1 | SpecialJt=No | GUID=152e35f7-35c3-4f98-a890-872bc631b71f |
| Joint=4191 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.5 | Y=-0.8 | Z=-1 | SpecialJt=No | GUID=99cd4d85-231f-438b-8618-7b03c49718df |
| Joint=4192 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.6 | Y=-0.7 | Z=-1 | SpecialJt=No | GUID=5a0e22d4-bb98-4f35-9b36-b24bf51ca141 |
| Joint=4193 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.5 | Y=-0.7 | Z=-1 | SpecialJt=No | GUID=21559f1a-2c41-43ba-8f1b-56636c0f3436 |
| Joint=4194 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.6 | Y=-0.6 | Z=-1 | SpecialJt=No | GUID=0b0f92ea-0f8a-4beb-8cb0-b5829e5b8d55 |
| Joint=4195 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.5 | Y=-0.6 | Z=-1 | SpecialJt=No | GUID=e560e5d4-8c67-4f45-a4a9-15abf526e3d0 |
| Joint=4196 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.6 | Y=-0.5 | Z=-1 | SpecialJt=No | GUID=675f097b-6da5-4f6a-bd97-2fcea6f0a92  |
| Joint=4197 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.5 | Y=-0.5 | Z=-1 | SpecialJt=No | GUID=9ffd72fd-9479-45b1-9eaa-7be2cedb6c9d |
| Joint=4198 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.6 | Y=-0.4 | Z=-1 | SpecialJt=No | GUID=5ea4768b-2649-44bc-81b4-017b6eebf932 |
| Joint=4199 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.5 | Y=-0.4 | Z=-1 | SpecialJt=No | GUID=c45c8d71-8890-4e41-93d3-5d7d18885321 |
| Joint=4200 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.6 | Y=-0.3 | Z=-1 | SpecialJt=No | GUID=ed8a9109-ca97-41d3-ad74-9701120312e2 |
| Joint=4201 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.5 | Y=-0.3 | Z=-1 | SpecialJt=No | GUID=d9653aef-cb20-415f-b4fb-75d42971bb11 |
| Joint=4202 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.6 | Y=-0.2 | Z=-1 | SpecialJt=No | GUID=bbd93dea-6011-4317-91c9-3d64ffe74c4a |
| Joint=4203 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.5 | Y=-0.2 | Z=-1 | SpecialJt=No | GUID=064b0413-6251-4fc0-b00f-2aa10c7c73e4 |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=4204 CoordSys=GLOBAL CoordType=Cartesian XorR=12.6 Y=-0.1 Z=-1 SpecialJt=No  
GUID=9a6b1d09-f933-4066-9f43-8be4de4db727

Joint=4205 CoordSys=GLOBAL CoordType=Cartesian XorR=12.5 Y=-0.1 Z=-1 SpecialJt=No  
GUID=862a2f9e-0afc-448e-ad0f-0b0e69e9a748

Joint=4206 CoordSys=GLOBAL CoordType=Cartesian XorR=12.6 Y=0 Z=-1 SpecialJt=No GUID=655c99b2-  
6d28-4acf-bc2f-76538e89d4d3

Joint=4207 CoordSys=GLOBAL CoordType=Cartesian XorR=12.5 Y=0 Z=-1 SpecialJt=No GUID=ecbd2714-  
651f-4a0e-b812-46b4bc400a73

Joint=4208 CoordSys=GLOBAL CoordType=Cartesian XorR=12.6 Y=0.1 Z=-1 SpecialJt=No GUID=94e43686-  
1055-4c59-9e7e-5ec13ab604db

Joint=4209 CoordSys=GLOBAL CoordType=Cartesian XorR=12.5 Y=0.1 Z=-1 SpecialJt=No GUID=e4293466-  
31c9-47f4-888e-e4ac24f1f5b5

Joint=4210 CoordSys=GLOBAL CoordType=Cartesian XorR=12.6 Y=0.2 Z=-1 SpecialJt=No GUID=6ad23f35-  
1f49-4794-a6a7-d6df46851929

Joint=4211 CoordSys=GLOBAL CoordType=Cartesian XorR=12.5 Y=0.2 Z=-1 SpecialJt=No GUID=54d2a679-  
e34b-4eb0-b3e4-634f82b325d4

Joint=4212 CoordSys=GLOBAL CoordType=Cartesian XorR=12.6 Y=0.3 Z=-1 SpecialJt=No GUID=1499e283-  
8c90-42ce-bb53-9f762e754a50

Joint=4213 CoordSys=GLOBAL CoordType=Cartesian XorR=12.5 Y=0.3 Z=-1 SpecialJt=No GUID=1120119f-  
b1eb-42b0-a976-4f7d4ba76d2e

Joint=4214 CoordSys=GLOBAL CoordType=Cartesian XorR=12.6 Y=0.4 Z=-1 SpecialJt=No GUID=5bff066c-  
f51b-4f52-a44e-3b06eaf19255

Joint=4215 CoordSys=GLOBAL CoordType=Cartesian XorR=12.5 Y=0.4 Z=-1 SpecialJt=No GUID=edc3e388-  
9767-4663-958b-cfec06f1b759

Joint=4216 CoordSys=GLOBAL CoordType=Cartesian XorR=12.6 Y=0.5 Z=-1 SpecialJt=No GUID=84e91836-  
f1a4-4edc-b334-e2fdac7e0b4f

Joint=4217 CoordSys=GLOBAL CoordType=Cartesian XorR=12.5 Y=0.5 Z=-1 SpecialJt=No GUID=c7b9ce8c-  
40c2-4efe-8af8-adf2b6174e0c

Joint=4218 CoordSys=GLOBAL CoordType=Cartesian XorR=12.6 Y=0.6 Z=-1 SpecialJt=No GUID=2e959beb-  
cbbd-4ea5-8243-d3f4a67dca57

Joint=4219 CoordSys=GLOBAL CoordType=Cartesian XorR=12.5 Y=0.6 Z=-1 SpecialJt=No GUID=646de2b3-  
2eaa-445f-9a34-9c0d04c8a81f

Joint=4220 CoordSys=GLOBAL CoordType=Cartesian XorR=12.6 Y=0.7 Z=-1 SpecialJt=No GUID=a5ec3acf-  
8d7b-48b5-a9c2-33574c45ad50

Joint=4221 CoordSys=GLOBAL CoordType=Cartesian XorR=12.5 Y=0.7 Z=-1 SpecialJt=No GUID=9d35cc9d-  
14f4-4bec-ba6e-514c79667cd0

Joint=4222 CoordSys=GLOBAL CoordType=Cartesian XorR=12.6 Y=0.8 Z=-1 SpecialJt=No GUID=950a64bf-  
c6ad-48e1-96b7-a438618a3e03

Joint=4223 CoordSys=GLOBAL CoordType=Cartesian XorR=12.5 Y=0.8 Z=-1 SpecialJt=No GUID=014f7208-  
5483-48c4-a4a1-f2b5f2fcb8eb

Joint=4224 CoordSys=GLOBAL CoordType=Cartesian XorR=12.6 Y=0.9 Z=-1 SpecialJt=No GUID=184bf235-  
ed38-4cf1-950a-b46e38284ec8

Joint=4225 CoordSys=GLOBAL CoordType=Cartesian XorR=12.5 Y=0.9 Z=-1 SpecialJt=No GUID=b6195e7b-  
8148-4a62-b7f4-027226beb887

Joint=4226 CoordSys=GLOBAL CoordType=Cartesian XorR=12.6 Y=1 Z=-1 SpecialJt=No GUID=8301b90e-  
8f3e-4795-9309-d41f8d839061

Joint=4227 CoordSys=GLOBAL CoordType=Cartesian XorR=12.5 Y=1 Z=-1 SpecialJt=No GUID=bb6bed1f-  
df90-4a63-9e83-b425a4a88481

Joint=4228 CoordSys=GLOBAL CoordType=Cartesian XorR=12.6 Y=1.1 Z=-1 SpecialJt=No GUID=0f721c57-  
95eb-4c58-b7cd-71e33a208f03

Joint=4229 CoordSys=GLOBAL CoordType=Cartesian XorR=12.5 Y=1.1 Z=-1 SpecialJt=No GUID=c9ffdab2-  
e61d-4931-a3a0-cfd0d113d820

Joint=4230 CoordSys=GLOBAL CoordType=Cartesian XorR=12.6 Y=1.2 Z=-1 SpecialJt=No GUID=36e87d03-  
8577-4868-8839-0d71cf7042d5

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=4231 CoordSys=GLOBAL CoordType=Cartesian XorR=12.5 Y=1.2 Z=-1 SpecialJt=No GUID=49ae8823-ba09-42f6-b4c8-daac5db9f4d2

Joint=4232 CoordSys=GLOBAL CoordType=Cartesian XorR=12.6 Y=1.3 Z=-1 SpecialJt=No GUID=da957096-0d69-422e-bd84-7a581c38c4c7

Joint=4233 CoordSys=GLOBAL CoordType=Cartesian XorR=12.5 Y=1.3 Z=-1 SpecialJt=No GUID=34889c91-d919-4160-9217-00fbf54ee301

Joint=4234 CoordSys=GLOBAL CoordType=Cartesian XorR=12.6 Y=1.4 Z=-1 SpecialJt=No GUID=77e6547c-be2b-42b8-a886-953d9525bc77

Joint=4235 CoordSys=GLOBAL CoordType=Cartesian XorR=12.5 Y=1.4 Z=-1 SpecialJt=No GUID=7bada488-00a7-4384-974c-d7adf092732c

Joint=4236 CoordSys=GLOBAL CoordType=Cartesian XorR=12.6 Y=1.5 Z=-1 SpecialJt=No GUID=74364f7d-528e-4352-a499-fe202892e923

Joint=4237 CoordSys=GLOBAL CoordType=Cartesian XorR=12.5 Y=1.5 Z=-1 SpecialJt=No GUID=2ae2b201-00a7-429c-b9fd-e4fb9130c3a6

Joint=4238 CoordSys=GLOBAL CoordType=Cartesian XorR=12.6 Y=1.6 Z=-1 SpecialJt=No GUID=086bd666-dc1a-4334-a1bc-81cdebfb1bab

Joint=4239 CoordSys=GLOBAL CoordType=Cartesian XorR=12.5 Y=1.6 Z=-1 SpecialJt=No GUID=803be3f8-8bdd-4211-bf0a-856846b47f11

Joint=4240 CoordSys=GLOBAL CoordType=Cartesian XorR=12.6 Y=1.7 Z=-1 SpecialJt=No GUID=d0a8afb2-fdb8-434a-b545-031f9e6244e9

Joint=4241 CoordSys=GLOBAL CoordType=Cartesian XorR=12.5 Y=1.7 Z=-1 SpecialJt=No GUID=3723f6c5-ee65-4abe-afd1-427a11d4e7be

Joint=4242 CoordSys=GLOBAL CoordType=Cartesian XorR=12.6 Y=1.8 Z=-1 SpecialJt=No GUID=2fc4b683-eaa4-4993-91ae-ae4ccc635eec

Joint=4243 CoordSys=GLOBAL CoordType=Cartesian XorR=12.5 Y=1.8 Z=-1 SpecialJt=No GUID=0940840c-6953-48fc-9cd2-742b470aedc1

Joint=4244 CoordSys=GLOBAL CoordType=Cartesian XorR=12.6 Y=1.9 Z=-1 SpecialJt=No GUID=37bdc9ac-f8e4-4118-9425-07261aa95b3c

Joint=4245 CoordSys=GLOBAL CoordType=Cartesian XorR=12.5 Y=1.9 Z=-1 SpecialJt=No GUID=9cdeb402-1230-4d36-ae63-c8040de1b5c6

Joint=4246 CoordSys=GLOBAL CoordType=Cartesian XorR=12.6 Y=2 Z=-1 SpecialJt=No GUID=92e6e2d6-c86b-4efe-80eb-f60a79d642da

Joint=4247 CoordSys=GLOBAL CoordType=Cartesian XorR=12.5 Y=2 Z=-1 SpecialJt=No GUID=0bfca2c4-0316-4328-899d-87dec588c8f1

Joint=4248 CoordSys=GLOBAL CoordType=Cartesian XorR=12.6 Y=2.1 Z=-1 SpecialJt=No GUID=3272b2bf-209b-4468-852b-71cdf48fa30c

Joint=4249 CoordSys=GLOBAL CoordType=Cartesian XorR=12.5 Y=2.1 Z=-1 SpecialJt=No GUID=0d7864d3-840d-4029-8367-a6c7fbdfa58d

Joint=4250 CoordSys=GLOBAL CoordType=Cartesian XorR=12.6 Y=2.2 Z=-1 SpecialJt=No GUID=57fce387-9d6a-44de-ab05-30f21a4209aa

Joint=4251 CoordSys=GLOBAL CoordType=Cartesian XorR=12.5 Y=2.2 Z=-1 SpecialJt=No GUID=2c0ec64f-e0a9-4bd5-986d-d18e1ac53d35

Joint=4252 CoordSys=GLOBAL CoordType=Cartesian XorR=12.6 Y=2.3 Z=-1 SpecialJt=No GUID=53cfed73-55ab-40c1-b790-f1c1fb41ca0c

Joint=4253 CoordSys=GLOBAL CoordType=Cartesian XorR=12.7 Y=-2.3 Z=-1 SpecialJt=No GUID=e3053e4d-3469-4f11-a9a2-3f08a1f066dc

Joint=4254 CoordSys=GLOBAL CoordType=Cartesian XorR=12.7 Y=-2.2 Z=-1 SpecialJt=No GUID=f05b8107-c06f-409a-aa5d-d16ec5ef7747

Joint=4255 CoordSys=GLOBAL CoordType=Cartesian XorR=12.7 Y=-2.1 Z=-1 SpecialJt=No GUID=de2b8f1b-e6ab-48da-9f0a-d6c5847f93ea

Joint=4256 CoordSys=GLOBAL CoordType=Cartesian XorR=12.7 Y=-2 Z=-1 SpecialJt=No GUID=cbe26f8b-5955-4774-bd4f-eeef04ecd5b3

Joint=4257 CoordSys=GLOBAL CoordType=Cartesian XorR=12.7 Y=-1.9 Z=-1 SpecialJt=No GUID=a3c5f874-7e68-4f22-8ba3-76b15e7e8a50



|            |                 |                     |           |                        |      |              |                                           |
|------------|-----------------|---------------------|-----------|------------------------|------|--------------|-------------------------------------------|
| Joint=4258 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.7 | Y=-1.8                 | Z=-1 | SpecialJt=No | GUID=baf2ed6c-cc42-4740-ac8a-a23e41d0f579 |
| Joint=4259 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.7 | Y=-1.7                 | Z=-1 | SpecialJt=No | GUID=80f6c607-157b-48b5-a98f-1105edb7f863 |
| Joint=4260 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.7 | Y=-1.6                 | Z=-1 | SpecialJt=No | GUID=48151347-7e86-4a5c-82c6-acc75244f18f |
| Joint=4261 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.7 | Y=-1.5                 | Z=-1 | SpecialJt=No | GUID=5075cc33-8de5-4631-8886-c7b189a18f62 |
| Joint=4262 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.7 | Y=-1.4                 | Z=-1 | SpecialJt=No | GUID=d9129ea2-23f0-4f52-84eb-033a99494923 |
| Joint=4263 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.7 | Y=-1.3                 | Z=-1 | SpecialJt=No | GUID=44d59d49-90a7-4f49-878c-bf0ea7a61afc |
| Joint=4264 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.7 | Y=-1.2                 | Z=-1 | SpecialJt=No | GUID=8586a649-1385-45fe-b1fa-17d111901b34 |
| Joint=4265 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.7 | Y=-1.1                 | Z=-1 | SpecialJt=No | GUID=2ac0b9d2-f51d-4f69-b359-0560a66a147b |
| Joint=4266 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.7 | Y=-1                   | Z=-1 | SpecialJt=No | GUID=99e35ce4-8403-455f-8176-b204739af51a |
| Joint=4267 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.7 | Y=-0.9                 | Z=-1 | SpecialJt=No | GUID=344f44cd-11ec-4110-9019-eff2654cd811 |
| Joint=4268 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.7 | Y=-0.8                 | Z=-1 | SpecialJt=No | GUID=68d3b7a5-bf4b-42c3-87aa-9b80e717693e |
| Joint=4269 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.7 | Y=-0.7                 | Z=-1 | SpecialJt=No | GUID=8285d26c-dd34-44cb-83a9-eea792b4688c |
| Joint=4270 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.7 | Y=-0.6                 | Z=-1 | SpecialJt=No | GUID=71167e00-c89d-4f41-8513-6f0d9c0105f4 |
| Joint=4271 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.7 | Y=-0.5                 | Z=-1 | SpecialJt=No | GUID=84de7306-5c74-465d-9dba-35132d752272 |
| Joint=4272 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.7 | Y=-0.4                 | Z=-1 | SpecialJt=No | GUID=eadda401-e68d-4f1c-986d-a82bea3dc92f |
| Joint=4273 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.7 | Y=-0.3                 | Z=-1 | SpecialJt=No | GUID=4afc10ea-b46f-42ca-8b0c-9e9e04c3e31d |
| Joint=4274 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.7 | Y=-0.2                 | Z=-1 | SpecialJt=No | GUID=7033166e-a859-4e43-b2b6-0a03cbe73097 |
| Joint=4275 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.7 | Y=-0.09999999999999999 | Z=-1 | SpecialJt=No | GUID=c262a713-361f-4628-aaf1-e4f7fe0bcfea |
| Joint=4276 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.7 | Y=0                    | Z=-1 | SpecialJt=No | GUID=1e19525b-d59c-4b21-81b7-2b71249c345b |
| Joint=4277 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.7 | Y=0.09999999999999999  | Z=-1 | SpecialJt=No | GUID=fb139716-5b9f-49d3-8d36-9fc80c8c3fa8 |
| Joint=4278 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.7 | Y=0.2                  | Z=-1 | SpecialJt=No | GUID=ef1b6acc-ddad-4125-97b8-77d40d608386 |
| Joint=4279 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.7 | Y=0.3                  | Z=-1 | SpecialJt=No | GUID=2762d5fb-bda3-4373-845a-607e913ff43d |
| Joint=4280 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.7 | Y=0.4                  | Z=-1 | SpecialJt=No | GUID=31f24a32-bf9e-4b5c-9436-e934eea21a6c |
| Joint=4281 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.7 | Y=0.5                  | Z=-1 | SpecialJt=No | GUID=3b4e5b89-8f4d-408d-abe1-aed0f7269985 |
| Joint=4282 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.7 | Y=0.6                  | Z=-1 | SpecialJt=No | GUID=74dfdda9-58c4-417b-bde7-769dd7546c06 |
| Joint=4283 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.7 | Y=0.7                  | Z=-1 | SpecialJt=No | GUID=24988c52-3b1b-4fc0-a81a-f555108a08d8 |
| Joint=4284 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=12.7 | Y=0.8                  | Z=-1 | SpecialJt=No | GUID=23f106ca-9bc6-4571-a6d9-7569b9e8c7db |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=4285 CoordSys=GLOBAL CoordType=Cartesian XorR=12.7 Y=0.9 Z=-1 SpecialJt=No GUID=1d131a53-8457-45a8-a15f-0eab7d67817c

Joint=4286 CoordSys=GLOBAL CoordType=Cartesian XorR=12.7 Y=1 Z=-1 SpecialJt=No GUID=d61fc62d-76fc-4677-a2f3-b9f32bd2e1d1

Joint=4287 CoordSys=GLOBAL CoordType=Cartesian XorR=12.7 Y=1.1 Z=-1 SpecialJt=No GUID=f1096757-174b-4d94-bd71-e5db8d562854

Joint=4288 CoordSys=GLOBAL CoordType=Cartesian XorR=12.7 Y=1.2 Z=-1 SpecialJt=No GUID=e58d0ee8-96fd-436b-86af-6df36d0b92f6

Joint=4289 CoordSys=GLOBAL CoordType=Cartesian XorR=12.7 Y=1.3 Z=-1 SpecialJt=No GUID=b93d0f52-931b-4984-8eef-8bcc917e772d

Joint=4290 CoordSys=GLOBAL CoordType=Cartesian XorR=12.7 Y=1.4 Z=-1 SpecialJt=No GUID=3d9cd8d9-23e8-42a5-810f-bca77ed141a8

Joint=4291 CoordSys=GLOBAL CoordType=Cartesian XorR=12.7 Y=1.5 Z=-1 SpecialJt=No GUID=98ccfd8f-a539-4da0-93ba-06159fb833f4

Joint=4292 CoordSys=GLOBAL CoordType=Cartesian XorR=12.7 Y=1.6 Z=-1 SpecialJt=No GUID=bc08b4f6-f79f-440a-904e-ac48a43804f0

Joint=4293 CoordSys=GLOBAL CoordType=Cartesian XorR=12.7 Y=1.7 Z=-1 SpecialJt=No GUID=92fd280f-1298-4a73-8b1a-c3ff4b400b53

Joint=4294 CoordSys=GLOBAL CoordType=Cartesian XorR=12.7 Y=1.8 Z=-1 SpecialJt=No GUID=e3c4da69-ab6b-4ba3-aebf-2a4c90b2725a

Joint=4295 CoordSys=GLOBAL CoordType=Cartesian XorR=12.7 Y=1.9 Z=-1 SpecialJt=No GUID=409daf20-1cd3-432f-b454-c26bc227effc

Joint=4296 CoordSys=GLOBAL CoordType=Cartesian XorR=12.7 Y=2 Z=-1 SpecialJt=No GUID=3d3560e8-d39c-45c7-9da8-a25f95b46d45

Joint=4297 CoordSys=GLOBAL CoordType=Cartesian XorR=12.7 Y=2.1 Z=-1 SpecialJt=No GUID=8e6de9a9-846f-4df6-b16d-2d7890a8e86c

Joint=4298 CoordSys=GLOBAL CoordType=Cartesian XorR=12.7 Y=2.2 Z=-1 SpecialJt=No GUID=a0782d73-c9b2-4e40-9f19-ea7db13018ab

Joint=4299 CoordSys=GLOBAL CoordType=Cartesian XorR=12.7 Y=2.3 Z=-1 SpecialJt=No GUID=344245fc-cdb1-42a7-84ee-d26f09b1f284

Joint=4300 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=-2.3 Z=-1 SpecialJt=No GUID=3d3b8785-3bc1-439c-956d-1975f7265911

Joint=4301 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=-2.2 Z=-1 SpecialJt=No GUID=83112642-c213-4033-a47b-edbcd17e0308

Joint=4302 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=-2.1 Z=-1 SpecialJt=No GUID=d2a29521-e138-4e20-b9c7-ad9d7ab8b1a9

Joint=4303 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=-2 Z=-1 SpecialJt=No GUID=da1368da-bdc3-44f5-b0c2-e79b2ad22061

Joint=4304 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=-1.9 Z=-1 SpecialJt=No GUID=2f0ca259-5690-4063-a7c4-18cefbbeaf0f

Joint=4305 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=-1.8 Z=-1 SpecialJt=No GUID=b734b052-cc91-4845-af54-fb1b5ff8ea53

Joint=4306 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=-1.7 Z=-1 SpecialJt=No GUID=88b49ca8-b247-41af-9fa7-74e5d8698bd3

Joint=4307 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=-1.6 Z=-1 SpecialJt=No GUID=9a61c85c-319e-4b6c-b854-faf09769aa53

Joint=4308 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=-1.5 Z=-1 SpecialJt=No GUID=dcd0892c-1da2-4576-b04b-71b6e1132578

Joint=4309 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=-1.4 Z=-1 SpecialJt=No GUID=f9c59f4e-496e-4979-ad52-da29660a0328

Joint=4310 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=-1.3 Z=-1 SpecialJt=No GUID=a5686d05-a070-4246-b547-4b2c7b3b2686

Joint=4311 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=-1.2 Z=-1 SpecialJt=No GUID=94c51089-ee73-4cc1-81de-845ef83ce020



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=4312 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=-1.1 Z=-1 SpecialJt=No  
GUID=475ee346-7b17-4939-accd-ef271e336718

Joint=4313 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=-1 Z=-1 SpecialJt=No GUID=9ec55f39-  
d10b-436e-9ad4-e228044af814

Joint=4314 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=-0.9 Z=-1 SpecialJt=No  
GUID=06cb04c3-10b5-4588-a500-b5df3d28bb0d

Joint=4315 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=-0.8 Z=-1 SpecialJt=No  
GUID=12a2dd99-74ed-48a6-a951-6bfc2a34a458

Joint=4316 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=-0.7 Z=-1 SpecialJt=No  
GUID=4b591fb0-29f2-4fd8-8742-0bf70b07298b

Joint=4317 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=-0.6 Z=-1 SpecialJt=No GUID=9c2e8f79-  
194f-48b6-a2f5-8c51e3f08dcd

Joint=4318 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=-0.5 Z=-1 SpecialJt=No GUID=65afcb4a-  
d4f9-4573-b930-c0dd12ad8fa6

Joint=4319 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=-0.4 Z=-1 SpecialJt=No  
GUID=69e4e735-697c-483b-b99d-ae1f24d2c8b5

Joint=4320 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=-0.3 Z=-1 SpecialJt=No  
GUID=e8e2a08f-0a1b-4a70-ac14-92baf6ad5361

Joint=4321 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=-0.2 Z=-1 SpecialJt=No GUID=f43cb6b7-  
b234-4a56-92f5-53809caebd5

Joint=4322 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=-0.1 Z=-1 SpecialJt=No  
GUID=1e6e02f1-8024-40c3-82c3-ce90b4bdb430

Joint=4323 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=0 Z=-1 SpecialJt=No GUID=b81db18d-  
1aa4-4525-8c85-df4406de9c91

Joint=4324 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=0.1 Z=-1 SpecialJt=No GUID=16269bf7-  
fbcd-46d8-8332-4c2e3fd3cc8a

Joint=4325 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=0.2 Z=-1 SpecialJt=No GUID=ec3d9b41-  
07f2-401a-860c-03f817f05941

Joint=4326 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=0.3 Z=-1 SpecialJt=No GUID=81bf0199-  
76a8-48c4-8c39-a6c395afb35

Joint=4327 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=0.4 Z=-1 SpecialJt=No GUID=803431eb-  
7aa4-4d9c-a4c7-4922dc1dc266

Joint=4328 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=0.5 Z=-1 SpecialJt=No GUID=bc8a9dd7-  
4b2b-4f28-bc77-79c7cd7418a7

Joint=4329 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=0.6 Z=-1 SpecialJt=No GUID=4df967f2-  
5294-457f-ad57-b534db04c8d3

Joint=4330 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=0.7 Z=-1 SpecialJt=No GUID=7a6187a3-  
62e2-4243-bfd7-09d432b0d6c3

Joint=4331 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=0.8 Z=-1 SpecialJt=No GUID=a47bc2b1-  
cf81-4bdb-8db6-9c8116a7952a

Joint=4332 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=0.9 Z=-1 SpecialJt=No GUID=b4cec780-  
8edc-4e33-bb11-2013c046aa0c

Joint=4333 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=1 Z=-1 SpecialJt=No GUID=fa604652-  
89d5-4ba7-bccc-358be97848b3

Joint=4334 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=1.1 Z=-1 SpecialJt=No GUID=9cd38cb4-  
e442-4ad1-a8b0-db3d634941b4

Joint=4335 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=1.2 Z=-1 SpecialJt=No GUID=d72596c8-  
ddcd-4e6f-87f2-ada0f92d9db8

Joint=4336 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=1.3 Z=-1 SpecialJt=No GUID=041ffc84-  
7f45-4b38-be30-0cc4767f596a

Joint=4337 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=1.4 Z=-1 SpecialJt=No GUID=c3cab1e5-  
87ad-4df0-994c-10457eb655ba

Joint=4338 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=1.5 Z=-1 SpecialJt=No GUID=083e90ee-  
fb8d-4288-97c6-2bbafaf309cd

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=4339 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=1.6 Z=-1 SpecialJt=No GUID=813bde76-91a3-4296-bcfd-6640bfcfb971

Joint=4340 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=1.7 Z=-1 SpecialJt=No GUID=79f7c382-4b2e-4ad0-87e3-d6c39ea40e1a

Joint=4341 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=1.8 Z=-1 SpecialJt=No GUID=ed53eced-cec4-4b12-9ad1-59912925e79a

Joint=4342 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=1.9 Z=-1 SpecialJt=No GUID=d0f67a51-854c-4682-9949-81dada2a216e

Joint=4343 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=2 Z=-1 SpecialJt=No GUID=b46169b2-25f4-415d-8be2-76c3568aca20

Joint=4344 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=2.1 Z=-1 SpecialJt=No GUID=18012233-0a8b-46c0-be3c-03f4f9b8f570

Joint=4345 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=2.2 Z=-1 SpecialJt=No GUID=99726ebd-d781-473c-ba74-662f9a11584f

Joint=4346 CoordSys=GLOBAL CoordType=Cartesian XorR=12.8 Y=2.3 Z=-1 SpecialJt=No GUID=e6987355-f860-4d6d-937c-e1ed565eba66

Joint=4347 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=-2.3 Z=-1 SpecialJt=No GUID=4501f136-a6e3-4ddf-8288-cd68bee1aefe

Joint=4348 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=-2.2 Z=-1 SpecialJt=No GUID=b89b9c3f-21e5-430f-bf47-37dc621ffc08

Joint=4349 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=-2.1 Z=-1 SpecialJt=No GUID=bb796591-6fb0-458a-8c20-25d060d5f70d

Joint=4350 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=-2 Z=-1 SpecialJt=No GUID=8e2d522c-2e3f-427c-a1de-5426bfa8e260

Joint=4351 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=-1.9 Z=-1 SpecialJt=No GUID=be2254e7-e55c-4215-9ac7-89438312a3de

Joint=4352 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=-1.8 Z=-1 SpecialJt=No GUID=9e6a5788-268e-4285-915b-b39f9d1474af

Joint=4353 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=-1.7 Z=-1 SpecialJt=No GUID=eeb44cde-d2bf-40f4-b6e8-b566f993fe84

Joint=4354 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=-1.6 Z=-1 SpecialJt=No GUID=989352ad-401d-4c8b-83db-d6ab2296abca

Joint=4355 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=-1.5 Z=-1 SpecialJt=No GUID=f0886fc6-e3a7-4355-b528-212d0c1bd676

Joint=4356 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=-1.4 Z=-1 SpecialJt=No GUID=fa781860-c544-4200-a15b-1d0e4f91978f

Joint=4357 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=-1.3 Z=-1 SpecialJt=No GUID=12689600-c014-4d3b-a0c7-d9d9e2fd5db1

Joint=4358 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=-1.2 Z=-1 SpecialJt=No GUID=74b9517e-7365-4e80-b231-2af00c57fc5a

Joint=4359 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=-1.1 Z=-1 SpecialJt=No GUID=ee793036-a68a-440c-9937-2cd9506080c9

Joint=4360 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=-1 Z=-1 SpecialJt=No GUID=7b448f99-a3d4-40e0-af64-b65a7b642130

Joint=4361 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=-0.9 Z=-1 SpecialJt=No GUID=07848e33-0ce3-428e-a2a7-174017ca40ed

Joint=4362 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=-0.8 Z=-1 SpecialJt=No GUID=d33fe11a-4c2f-4c7b-93ec-3e99504f3a87

Joint=4363 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=-0.7 Z=-1 SpecialJt=No GUID=4ce8a8bf-716c-427b-932f-8bc3b26b0cb5

Joint=4364 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=-0.6 Z=-1 SpecialJt=No GUID=5aaf97dd-e4f3-46ed-ba5e-88f508d446a4

Joint=4365 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=-0.5 Z=-1 SpecialJt=No GUID=d6d02aad-7f3c-414e-a4ea-962ff184fdcb

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=4366 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=-0.4 Z=-1 SpecialJt=No  
GUID=645bef29-1228-4eaf-af5c-fd90753c4114

Joint=4367 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=-0.3 Z=-1 SpecialJt=No  
GUID=93e317e3-ae2-4409-9486-d6efbe860450

Joint=4368 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=-0.2 Z=-1 SpecialJt=No  
GUID=3c9494ae-f697-4869-a07a-6d2da548bf74

Joint=4369 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=-0.0999999999999999 Z=-1  
SpecialJt=No GUID=1093d549-3286-4211-ae9f-1f03cf042319

Joint=4370 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=0 Z=-1 SpecialJt=No GUID=a0e5a065-  
cc37-4c18-8ab9-51c3044982e0

Joint=4371 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=0.0999999999999998 Z=-1 SpecialJt=No  
GUID=b239eb50-76bc-436e-b4cb-cec8e4b2d316

Joint=4372 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=0.2 Z=-1 SpecialJt=No GUID=cd166f43-  
859e-43e9-bd53-40bd55360c45

Joint=4373 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=0.3 Z=-1 SpecialJt=No GUID=6f8c3f92-  
2841-439f-8752-1e15553cc85b

Joint=4374 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=0.4 Z=-1 SpecialJt=No GUID=dd5a3b5e-  
be1a-4146-ab87-397779241640

Joint=4375 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=0.5 Z=-1 SpecialJt=No GUID=5389cdd1-  
da45-461a-a140-8b5ac6537030

Joint=4376 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=0.6 Z=-1 SpecialJt=No GUID=077974c6-  
1b21-4c52-8715-833dfac17e74

Joint=4377 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=0.7 Z=-1 SpecialJt=No GUID=c33c662e-  
dc86-4827-a0a7-c1db84fb5dde

Joint=4378 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=0.8 Z=-1 SpecialJt=No GUID=a069ee83-  
5bdd-4fb1-8a7d-e42232587616

Joint=4379 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=0.9 Z=-1 SpecialJt=No GUID=1c190e2e-  
853c-4090-9bf0-4c502e81abfd

Joint=4380 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=1 Z=-1 SpecialJt=No GUID=bc78eefa-  
dff8-4573-bb0d-1a7cae1c8e23

Joint=4381 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=1.1 Z=-1 SpecialJt=No GUID=3e597cc3-  
9b8f-4ef0-ac92-7bafa8c3f87a

Joint=4382 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=1.2 Z=-1 SpecialJt=No GUID=28e706c9-  
f149-4e61-acd4-2d2e102bc108

Joint=4383 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=1.3 Z=-1 SpecialJt=No GUID=4ef4ecca-  
916e-462b-be4e-067c6323c81b

Joint=4384 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=1.4 Z=-1 SpecialJt=No GUID=2525a082-  
648c-45da-adbf-eebcfc9e10e

Joint=4385 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=1.5 Z=-1 SpecialJt=No GUID=d963f407-  
4c7c-456f-9d4e-ec4aca2974a8

Joint=4386 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=1.6 Z=-1 SpecialJt=No GUID=93f965fa-  
2668-4f91-850a-0110aeeace42

Joint=4387 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=1.7 Z=-1 SpecialJt=No GUID=b9187e07-  
d4b8-49a7-b169-3c2785a519a9

Joint=4388 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=1.8 Z=-1 SpecialJt=No GUID=dd332e22-  
72ad-4872-aff2-d7d42a8b2467

Joint=4389 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=1.9 Z=-1 SpecialJt=No GUID=12fc51f7-  
ab09-4f62-a537-635142eb57db

Joint=4390 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=2 Z=-1 SpecialJt=No GUID=5cbcbab8-  
3714-45a2-a502-9a6ab86b8c00

Joint=4391 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=2.1 Z=-1 SpecialJt=No GUID=c4ba128a-  
639a-4cff-af5c-29ce98821c37

Joint=4392 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=2.2 Z=-1 SpecialJt=No GUID=2532e930-  
4869-418b-b925-9a62e382bfde

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=4393 CoordSys=GLOBAL CoordType=Cartesian XorR=12.9 Y=2.3 Z=-1 SpecialJt=No GUID=6a952e63-e448-4d67-b3f5-c682a744b795

Joint=4394 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=-2.3 Z=-1 SpecialJt=No GUID=186c0436-5c70-44fb-ab54-804cb1d7f162

Joint=4395 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=-2.2 Z=-1 SpecialJt=No GUID=a291a409-1643-4640-84fb-1f3a0b5808b7

Joint=4396 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=-2.1 Z=-1 SpecialJt=No GUID=c562d396-ae9c-4aff-9864-4ecfd13f1c45

Joint=4397 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=-2 Z=-1 SpecialJt=No GUID=487d1601-4658-4fba-877d-3a0fdc47252c

Joint=4398 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=-1.9 Z=-1 SpecialJt=No GUID=8abcb18d-045f-4cc9-b26e-fab8ae607fab

Joint=4399 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=-1.8 Z=-1 SpecialJt=No GUID=5865346d-c5e7-4066-8622-a50c349fd0d8

Joint=4400 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=-1.7 Z=-1 SpecialJt=No GUID=b24293c5-119f-408d-8905-759b98354a7c

Joint=4401 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=-1.6 Z=-1 SpecialJt=No GUID=b575f31c-4b48-4f58-8442-ba0898724106

Joint=4402 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=-1.5 Z=-1 SpecialJt=No GUID=1586c8d5-f7bc-42c9-8954-8395942b6b51

Joint=4403 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=-1.4 Z=-1 SpecialJt=No GUID=11c12292-f7ec-4381-8309-798bcbadd0ca

Joint=4404 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=-1.3 Z=-1 SpecialJt=No GUID=0ea84867-6e4c-408e-adba-ee9e96236c7c

Joint=4405 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=-1.2 Z=-1 SpecialJt=No GUID=b316313b-f9df-4204-924b-f823b6105ab6

Joint=4406 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=-1.1 Z=-1 SpecialJt=No GUID=f89bef4e-8a50-4496-aeb5-fefeed713a8

Joint=4407 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=-1 Z=-1 SpecialJt=No GUID=82d78452-2f61-438f-a40e-e91f67bd037a

Joint=4408 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=-0.9 Z=-1 SpecialJt=No GUID=fd8f78a1-be62-4023-997c-9396c9302ae4

Joint=4409 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=-0.8 Z=-1 SpecialJt=No GUID=ca8b0590-e1b8-4220-961d-7bfe9403135d

Joint=4410 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=-0.7 Z=-1 SpecialJt=No GUID=4b997a54-2f76-4336-959f-6a18a452f69a

Joint=4411 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=-0.6 Z=-1 SpecialJt=No GUID=b893290b-9d1f-459d-85e1-897c8d654c82

Joint=4412 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=-0.5 Z=-1 SpecialJt=No GUID=a43ba402-fe0a-4d06-9d3e-62f810f05309

Joint=4413 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=-0.4 Z=-1 SpecialJt=No GUID=b179be1e-bcd8-42f4-803d-85cb761b6a17

Joint=4414 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=-0.3 Z=-1 SpecialJt=No GUID=36774575-d67c-4c7f-ae21-dc230662c5dc

Joint=4415 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=-0.2 Z=-1 SpecialJt=No GUID=6972eb2e-6b8d-4c32-85b0-ec64611078e7

Joint=4416 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=-0.09999999999999996 Z=-1 SpecialJt=No GUID=e918bd9d-f193-4290-9acb-1e61524bb218

Joint=4417 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=0 Z=-1 SpecialJt=No GUID=6fa4a526-9104-45c1-a38b-aba04f6f2d00

Joint=4418 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=0.09999999999999998 Z=-1 SpecialJt=No GUID=d6f309dd-f8cb-46b6-897b-b3e90e84cb52

Joint=4419 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=0.2 Z=-1 SpecialJt=No GUID=4106f1c4-12eb-443b-ba4b-513f8bdaf8c7



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=4420 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=0.3 Z=-1 SpecialJt=No GUID=242f219d-8429-4960-8ce4-54855af3709c

Joint=4421 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=0.4 Z=-1 SpecialJt=No GUID=ffd27447-e92a-4a38-8743-479ffe0b94a3

Joint=4422 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=0.5 Z=-1 SpecialJt=No GUID=d3640448-3340-4360-be1c-6ed7ea11f50f

Joint=4423 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=0.6 Z=-1 SpecialJt=No GUID=08e2114a-33f4-48a1-8be2-5aec55b8fed2

Joint=4424 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=0.7 Z=-1 SpecialJt=No GUID=3fb1033f-2c24-41f4-a35f-35d534e7cc30

Joint=4425 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=0.8 Z=-1 SpecialJt=No GUID=f05f514e-c689-46a2-b22e-10aff228eacc

Joint=4426 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=0.9 Z=-1 SpecialJt=No GUID=0df856d5-1dc8-4dac-9044-f644750309d6

Joint=4427 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=1 Z=-1 SpecialJt=No GUID=e2fcacc9-1af1-4b78-ac58-8c9bf8ce360c

Joint=4428 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=1.1 Z=-1 SpecialJt=No GUID=0af4bba9-d446-4573-a8b5-111bf2f8ac1d

Joint=4429 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=1.2 Z=-1 SpecialJt=No GUID=02ffdb6b-8ae8-4428-bd19-322578dfaa7a

Joint=4430 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=1.3 Z=-1 SpecialJt=No GUID=4d08f8c1-306d-459c-b97a-170816d97d97

Joint=4431 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=1.4 Z=-1 SpecialJt=No GUID=4c0e1bd8-e838-49ed-aa84-e4c7fb5a8473

Joint=4432 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=1.5 Z=-1 SpecialJt=No GUID=c3239762-cd46-4b1c-9f6a-9e9589bfab3b

Joint=4433 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=1.6 Z=-1 SpecialJt=No GUID=ff5d8e8d-1efa-498d-bf0e-19ff63e3b7c0

Joint=4434 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=1.7 Z=-1 SpecialJt=No GUID=b2b468ba-f54d-4fc7-9fb0-28567f7f9157

Joint=4435 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=1.8 Z=-1 SpecialJt=No GUID=160d5ce6-56f3-408d-992a-c5d3c87cfe15

Joint=4436 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=1.9 Z=-1 SpecialJt=No GUID=1b9ecbdf-b390-4f2c-ba6f-d0b1546c3630

Joint=4437 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=2 Z=-1 SpecialJt=No GUID=13401cc3-0a4f-429e-9489-566716e01adc

Joint=4438 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=2.1 Z=-1 SpecialJt=No GUID=b012adbf-bc90-4600-9e77-4e06ac144b70

Joint=4439 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=2.2 Z=-1 SpecialJt=No GUID=1442d1ef-f6f1-444e-af46-b7a1d8cd4015

Joint=4440 CoordSys=GLOBAL CoordType=Cartesian XorR=13 Y=2.3 Z=-1 SpecialJt=No GUID=a31d887b-32fe-48e4-a418-83a304ac3f29

Joint=4441 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=-2.3 Z=-1 SpecialJt=No GUID=ce8b4c71-964e-4c2a-9688-7c40dcb38f5e

Joint=4442 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=-2.2 Z=-1 SpecialJt=No GUID=49ed1ca0-15d3-4927-8a9f-3c6e04f337a2

Joint=4443 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=-2.1 Z=-1 SpecialJt=No GUID=f1957c5f-c40e-436c-a12e-1c6169fabd20

Joint=4444 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=-2 Z=-1 SpecialJt=No GUID=53a727aa-9234-46b4-a2f4-9da12f54352c

Joint=4445 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=-1.9 Z=-1 SpecialJt=No GUID=3e2a294e-84ab-4345-8cf7-f600a66d7b99

Joint=4446 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=-1.8 Z=-1 SpecialJt=No GUID=ae556b5f-4328-4c85-8407-f863541c0c38

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=4447 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=-1.7 Z=-1 SpecialJt=No  
 GUID=e91a5cb3-476a-4566-a800-d4e122817743  
 Joint=4448 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=-1.6 Z=-1 SpecialJt=No  
 GUID=4585c1cd-1f7b-4ae1-87aa-60f314acda89  
 Joint=4449 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=-1.5 Z=-1 SpecialJt=No  
 GUID=3bbd80bd-fd1e-421e-a367-b9f6a67a4b0f  
 Joint=4450 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=-1.4 Z=-1 SpecialJt=No  
 GUID=8918e54d-d769-47f3-b4e1-ad16b451dbcd  
 Joint=4451 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=-1.3 Z=-1 SpecialJt=No  
 GUID=243b09b2-bd73-430d-941a-9b2a9a86ae83  
 Joint=4452 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=-1.2 Z=-1 SpecialJt=No  
 GUID=7dc9aa93-5d49-4dc3-9348-a10a1c291f9a  
 Joint=4453 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=-1.1 Z=-1 SpecialJt=No  
 GUID=ed4bf936-af7b-47bf-a877-0e5b331416d9  
 Joint=4454 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=-1 Z=-1 SpecialJt=No GUID=960b3755-  
 2539-4207-982a-f7978f87c761  
 Joint=4455 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=-0.9 Z=-1 SpecialJt=No  
 GUID=01ad9e07-fa0d-42cd-a276-62567be7a3bd  
 Joint=4456 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=-0.8 Z=-1 SpecialJt=No  
 GUID=ce4ec163-7726-4d9c-9e41-80bc9df35bf2  
 Joint=4457 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=-0.7 Z=-1 SpecialJt=No  
 GUID=d09b1a80-9ba5-40d8-b68a-a7ed9f29d579  
 Joint=4458 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=-0.6 Z=-1 SpecialJt=No GUID=fe43c337-  
 d89e-4a49-b3b5-e0548be079c1  
 Joint=4459 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=-0.5 Z=-1 SpecialJt=No  
 GUID=b3290283-f604-4d66-a382-a3412b0bb037  
 Joint=4460 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=-0.4 Z=-1 SpecialJt=No  
 GUID=73122395-4d4b-4d12-8b4d-5b15839d9a6f  
 Joint=4461 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=-0.3 Z=-1 SpecialJt=No GUID=4c47af73-  
 3415-42db-9133-2d05adf8007a  
 Joint=4462 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=-0.2 Z=-1 SpecialJt=No GUID=c35afd58-  
 4184-4507-be80-dfcd047a95b2  
 Joint=4463 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=-0.1 Z=-1 SpecialJt=No  
 GUID=dc2116e3-5548-497a-be6b-e87a08f53474  
 Joint=4464 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=0 Z=-1 SpecialJt=No GUID=217845c6-  
 c381-4b80-a109-9ec828f5d1de  
 Joint=4465 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=0.1 Z=-1 SpecialJt=No GUID=b6d08868-  
 74d0-47a8-a5ef-1e5c7ceba2c  
 Joint=4466 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=0.2 Z=-1 SpecialJt=No GUID=07222e08-  
 b1c9-43ac-a29f-2386f6ea0910  
 Joint=4467 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=0.3 Z=-1 SpecialJt=No GUID=72b79d26-  
 50fc-45a6-abf7-87e2c3a68a7f  
 Joint=4468 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=0.4 Z=-1 SpecialJt=No GUID=79e1118d-  
 e503-4e7b-b2e4-6aed636ace46  
 Joint=4469 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=0.5 Z=-1 SpecialJt=No GUID=e3ca0601-  
 a234-4b0e-905f-1228027dbd00  
 Joint=4470 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=0.6 Z=-1 SpecialJt=No GUID=75d47f1e-  
 1438-436f-b3e9-d3e47669222c  
 Joint=4471 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=0.7 Z=-1 SpecialJt=No GUID=3114d7d8-  
 da86-4518-b3b5-98ca0d691612  
 Joint=4472 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=0.8 Z=-1 SpecialJt=No GUID=e9160c93-  
 bad7-4c8e-b298-2f74bba874e3  
 Joint=4473 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=0.9 Z=-1 SpecialJt=No GUID=f9374a3e-  
 2489-446d-b846-c8ef4de578e6

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=4474 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=1 Z=-1 SpecialJt=No GUID=d4c7786e-ab66-483a-aafe-2a4d63c84960

Joint=4475 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=1.1 Z=-1 SpecialJt=No GUID=70dbbd03-fbd7-4edb-ae32-717445f45793

Joint=4476 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=1.2 Z=-1 SpecialJt=No GUID=d8b60d9f-3bfc-43d9-8d0e-cc69dad07e06

Joint=4477 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=1.3 Z=-1 SpecialJt=No GUID=a2449d37-c6cd-4e71-a933-8b3d5281d400

Joint=4478 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=1.4 Z=-1 SpecialJt=No GUID=f830eb28-92db-47e1-a7c8-ab9d56766106

Joint=4479 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=1.5 Z=-1 SpecialJt=No GUID=3495a69b-8688-4472-8785-dab3ef339a07

Joint=4480 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=1.6 Z=-1 SpecialJt=No GUID=d14538a2-7b6b-426d-813f-71745c499c4d

Joint=4481 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=1.7 Z=-1 SpecialJt=No GUID=14c74649-ec10-421d-95f0-b7407db6dcac

Joint=4482 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=1.8 Z=-1 SpecialJt=No GUID=320d4f7d-436f-4132-8e28-e5720f700be0

Joint=4483 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=1.9 Z=-1 SpecialJt=No GUID=34ea35db-ae7e-41ef-b1f7-1987ef049ca7

Joint=4484 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=2 Z=-1 SpecialJt=No GUID=aff15f78-2d42-4f69-b619-926a78556afa

Joint=4485 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=2.1 Z=-1 SpecialJt=No GUID=a7f8e257-e51c-4cf8-8fae-8b6d0a5d5a0e

Joint=4486 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=2.2 Z=-1 SpecialJt=No GUID=746492ad-9866-404f-9234-a7eed5d9507c

Joint=4487 CoordSys=GLOBAL CoordType=Cartesian XorR=13.1 Y=2.3 Z=-1 SpecialJt=No GUID=d3de4ba6-837e-48dc-94fa-bfaede5faf8d

Joint=4488 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=-2.3 Z=-1 SpecialJt=No GUID=1da1759c-4f55-44ee-a49b-c80c049b1b9e

Joint=4489 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=-2.2 Z=-1 SpecialJt=No GUID=7ac3ad1b-e266-43cb-b030-e9991b9e25f0

Joint=4490 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=-2.1 Z=-1 SpecialJt=No GUID=7d1716a8-01ed-4b1c-acb1-cfdec0b801b4

Joint=4491 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=-2 Z=-1 SpecialJt=No GUID=e5ebbb26-7b78-4d65-af38-dd151f52ddd9

Joint=4492 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=-1.9 Z=-1 SpecialJt=No GUID=75f2e08a-47ef-446c-bdc4-d95b85522b8a

Joint=4493 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=-1.8 Z=-1 SpecialJt=No GUID=40abbc9c-40ea-4723-9d17-3768fe5adc66

Joint=4494 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=-1.7 Z=-1 SpecialJt=No GUID=fcaa5ad0-8d7b-4f43-81a5-9a48f62919bf

Joint=4495 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=-1.6 Z=-1 SpecialJt=No GUID=51ff8a85-8350-4d02-8d6d-8ea399ad075e

Joint=4496 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=-1.5 Z=-1 SpecialJt=No GUID=4fc580e9-ea75-437d-b9fb-0d272c86b1fe

Joint=4497 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=-1.4 Z=-1 SpecialJt=No GUID=6e70f900-f6bd-445f-bf3e-720a6fad80cd

Joint=4498 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=-1.3 Z=-1 SpecialJt=No GUID=4f0b091c-c3d4-4438-8dec-2f0ef8af0068

Joint=4499 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=-1.2 Z=-1 SpecialJt=No GUID=f69cc20b-9075-4e0b-8271-a9685d01c021

Joint=4500 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=-1.1 Z=-1 SpecialJt=No GUID=fdd23657-857c-49c9-9500-1ecddefd2c3ee

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=4501 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=-1 Z=-1 SpecialJt=No GUID=05e62ecf-7365-4760-a880-e6b2032275f4

Joint=4502 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=-0.9 Z=-1 SpecialJt=No GUID=0e5c46a8-c619-4874-9d8d-53c9fc32e274

Joint=4503 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=-0.8 Z=-1 SpecialJt=No GUID=d4352a8c-4e0d-40fa-b26b-3f30fe4af8e2

Joint=4504 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=-0.7 Z=-1 SpecialJt=No GUID=66d41e3a-6859-403d-b235-5cb6cd9275eb

Joint=4505 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=-0.6 Z=-1 SpecialJt=No GUID=fb1b5301-1b54-4b23-a889-81f3b3556020

Joint=4506 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=-0.5 Z=-1 SpecialJt=No GUID=21350e9c-043e-4b53-82b7-808c330f33b0

Joint=4507 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=-0.4 Z=-1 SpecialJt=No GUID=09f8c18c-09a5-4b27-b821-83ba4cc3aad2

Joint=4508 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=-0.3 Z=-1 SpecialJt=No GUID=507f4ca1-c1de-46ff-b373-ddae1ae2788d

Joint=4509 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=-0.2 Z=-1 SpecialJt=No GUID=d66be7cc-ed47-4c81-a68b-7ee3e9a61c0f

Joint=4510 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=-0.1 Z=-1 SpecialJt=No GUID=5fab4533-c335-4524-aa86-1a4f5422d7a1

Joint=4511 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=0 Z=-1 SpecialJt=No GUID=149ded26-9334-44fb-b95e-ec8d6133a352

Joint=4512 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=0.1 Z=-1 SpecialJt=No GUID=1c883a2f-8351-48dc-9d74-ce958922a7db

Joint=4513 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=0.2 Z=-1 SpecialJt=No GUID=216bc8ab-a53b-473a-82b6-18c42550ea86

Joint=4514 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=0.3 Z=-1 SpecialJt=No GUID=e51f6a09-7606-46c2-9d18-9c9383694628

Joint=4515 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=0.4 Z=-1 SpecialJt=No GUID=086e5c3f-79f0-45c1-957d-e1e105969a22

Joint=4516 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=0.5 Z=-1 SpecialJt=No GUID=cc03ddf9-52f3-4129-8839-70691c4b5eee

Joint=4517 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=0.6 Z=-1 SpecialJt=No GUID=76d0f82e-1b9f-437e-b46a-67452a26b4a4

Joint=4518 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=0.7 Z=-1 SpecialJt=No GUID=e44d7058-16e5-4290-bfa0-9d3d04c7157b

Joint=4519 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=0.8 Z=-1 SpecialJt=No GUID=0d8f993e-9b42-4859-b1d7-2a3af5187caa

Joint=4520 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=0.9 Z=-1 SpecialJt=No GUID=ea7252b4-0ad2-405a-b8dc-c491499f8d84

Joint=4521 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=1 Z=-1 SpecialJt=No GUID=4ff40844-7509-4986-a7a9-2a2c799a08b5

Joint=4522 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=1.1 Z=-1 SpecialJt=No GUID=ec6432c9-7902-4f95-b00a-e7427f28da5f

Joint=4523 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=1.2 Z=-1 SpecialJt=No GUID=b7ce6e29-7750-442d-997a-60ea6ccc0778

Joint=4524 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=1.3 Z=-1 SpecialJt=No GUID=50ce392c-6fba-4d72-847a-bf84e37d00bf

Joint=4525 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=1.4 Z=-1 SpecialJt=No GUID=b595997d-75f8-4a11-93bc-f5861178fe14

Joint=4526 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=1.5 Z=-1 SpecialJt=No GUID=06cd4e4f-27a4-4c10-9ff4-9218705d7bf9

Joint=4527 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=1.6 Z=-1 SpecialJt=No GUID=8fa19544-b6b3-44ca-beec-133bc92b62b4



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=4528 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=1.7 Z=-1 SpecialJt=No GUID=bd93f922-ebc9-45f3-929b-fc8dadd6d446

Joint=4529 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=1.8 Z=-1 SpecialJt=No GUID=9ca10747-b9f8-40df-bed7-eb4541260d33

Joint=4530 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=1.9 Z=-1 SpecialJt=No GUID=cecbab13-bafe-4dac-a854-0b302093051e

Joint=4531 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=2 Z=-1 SpecialJt=No GUID=ea4ceaf1-008b-43a2-af7f-9457cd2a6bb8

Joint=4532 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=2.1 Z=-1 SpecialJt=No GUID=a5e57ad2-ba73-4c3b-a733-73a35d13fd17

Joint=4533 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=2.2 Z=-1 SpecialJt=No GUID=2eacfbdb3-eeba-43e9-9957-7655f67598c1

Joint=4534 CoordSys=GLOBAL CoordType=Cartesian XorR=13.2 Y=2.3 Z=-1 SpecialJt=No GUID=9c8e490b-a451-483d-804f-db12c434154b

Joint=4535 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=-2.3 Z=-1 SpecialJt=No GUID=f6adac79-6ff5-49ae-9c66-6732a8239151

Joint=4536 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=-2.2 Z=-1 SpecialJt=No GUID=8793ae07-4e7d-416e-82f7-1d81a6cc49ad

Joint=4537 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=-2.1 Z=-1 SpecialJt=No GUID=83996be6-dceb-4ea7-8e03-6f554b420328

Joint=4538 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=-2 Z=-1 SpecialJt=No GUID=fd7d482d-8d0e-4667-b8d6-5aefb515b4a5

Joint=4539 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=-1.9 Z=-1 SpecialJt=No GUID=0bfc9fb9-3a92-40d7-a185-45a8cb400b3b

Joint=4540 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=-1.8 Z=-1 SpecialJt=No GUID=7ef496ff-e608-4876-926f-b52b5ada32e2

Joint=4541 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=-1.7 Z=-1 SpecialJt=No GUID=f51465a0-0ede-4a91-9193-d30f035aad93

Joint=4542 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=-1.6 Z=-1 SpecialJt=No GUID=567243e1-7d3f-452c-8c37-3cf9486b7a79

Joint=4543 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=-1.5 Z=-1 SpecialJt=No GUID=80d6a5c3-084b-4e74-b30b-345fd3711e66

Joint=4544 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=-1.4 Z=-1 SpecialJt=No GUID=2b3d0f8b-f966-4e66-9aff-82ebbe3897ff

Joint=4545 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=-1.3 Z=-1 SpecialJt=No GUID=a9e8b1af-e054-4e4b-9404-8d867df778ff

Joint=4546 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=-1.2 Z=-1 SpecialJt=No GUID=e7d39b4c-1add-4e50-9d3e-2ed4f67aad25

Joint=4547 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=-1.1 Z=-1 SpecialJt=No GUID=05201dc4-4e7a-4cdd-9117-7a6b135131f0

Joint=4548 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=-1 Z=-1 SpecialJt=No GUID=9768cb31-836a-4028-a6e1-8a937d92471c

Joint=4549 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=-0.9 Z=-1 SpecialJt=No GUID=0c98db78-4980-4fbc-a9de-4c47808a923d

Joint=4550 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=-0.8 Z=-1 SpecialJt=No GUID=3da847e8-c038-442f-92dd-f97dcabc8636

Joint=4551 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=-0.7 Z=-1 SpecialJt=No GUID=4b107e6d-b004-4f81-a682-4e218b172f60

Joint=4552 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=-0.6 Z=-1 SpecialJt=No GUID=22c74550-02e2-41f6-ad98-dfda30091936

Joint=4553 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=-0.5 Z=-1 SpecialJt=No GUID=e5a85e7c-5648-4806-98fe-dc843bbd0d46

Joint=4554 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=-0.4 Z=-1 SpecialJt=No GUID=08768c6d-d9de-4ae2-a74b-a7d6dedbefa9

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=4555 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=-0.3 Z=-1 SpecialJt=No  
GUID=b521b2d5-72a7-4922-b365-05204e7553e1

Joint=4556 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=-0.2 Z=-1 SpecialJt=No GUID=97c5f230-  
a01c-46c9-9816-5b0ef31005b7

Joint=4557 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=-0.1 Z=-1 SpecialJt=No GUID=5bdf4c21-  
11a6-4dbc-8e0d-f170820d0a03

Joint=4558 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=0 Z=-1 SpecialJt=No GUID=7c31fa3d-  
e5be-4b7f-920a-d94b7ae5c0f6

Joint=4559 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=0.0999999999999998 Z=-1 SpecialJt=No  
GUID=60563737-e193-4c95-ba01-b0253af62c74

Joint=4560 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=0.2 Z=-1 SpecialJt=No GUID=2a75d5cb-  
53ec-44eb-896a-05176ce6636e

Joint=4561 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=0.3 Z=-1 SpecialJt=No GUID=87a95cc2-  
6aa3-421d-9922-bcb55791a116

Joint=4562 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=0.4 Z=-1 SpecialJt=No GUID=336aca44-  
d41e-4ffa-b96f-dce1e5349803

Joint=4563 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=0.5 Z=-1 SpecialJt=No GUID=738f501d-  
7def-4a62-8a87-e70ff37f46a7

Joint=4564 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=0.6 Z=-1 SpecialJt=No GUID=e3f16e2c-  
d003-48c8-ba0c-52c22882b689

Joint=4565 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=0.7 Z=-1 SpecialJt=No GUID=a54faa36-  
bb7a-4c32-afe4-f8a6abb2656e

Joint=4566 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=0.8 Z=-1 SpecialJt=No GUID=db031345-  
183d-4f6d-af1d-4e1957394ffe

Joint=4567 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=0.9 Z=-1 SpecialJt=No GUID=db79a1a3-  
3eea-4d04-b0e5-d23ffc64f44

Joint=4568 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=1 Z=-1 SpecialJt=No GUID=73e1a3fa-  
df55-47b3-abbd-4254efa067c6

Joint=4569 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=1.1 Z=-1 SpecialJt=No GUID=33bff38a-  
0565-4878-9460-a3cccd363beb

Joint=4570 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=1.2 Z=-1 SpecialJt=No GUID=779948a6-  
6c86-406b-b0b8-75b5ffde935a

Joint=4571 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=1.3 Z=-1 SpecialJt=No GUID=e13d626a-  
e4eb-4d4d-aa8c-418af949d15d

Joint=4572 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=1.4 Z=-1 SpecialJt=No GUID=40cb1c36-  
592f-4d30-97fc-cb931dabdcba

Joint=4573 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=1.5 Z=-1 SpecialJt=No GUID=41fa03ca-  
402f-46c7-aef2-a2e0429548f3

Joint=4574 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=1.6 Z=-1 SpecialJt=No GUID=722499fb-  
c282-4e01-bc1a-085a2c8cd406

Joint=4575 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=1.7 Z=-1 SpecialJt=No GUID=0985c87d-  
83c6-40fd-ad83-ae31184b66ff

Joint=4576 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=1.8 Z=-1 SpecialJt=No GUID=257b6e2d-  
2be8-40fa-bfb1-a5edaf980e62

Joint=4577 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=1.9 Z=-1 SpecialJt=No GUID=5a82a5d4-  
0159-41d0-ad70-24a8463d00e3

Joint=4578 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=2 Z=-1 SpecialJt=No GUID=106475e7-  
9f12-44b2-8e2a-d040bba55389

Joint=4579 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=2.1 Z=-1 SpecialJt=No GUID=f2694f71-  
d40a-4a3e-bc01-a913659d4b5e

Joint=4580 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=2.2 Z=-1 SpecialJt=No GUID=56c25597-  
0d28-4902-bfe0-4a8f0f01dbd5

Joint=4581 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=2.3 Z=-1 SpecialJt=No GUID=a5ddf667-  
cf3c-4ea2-905f-2935a5c848c3



|                                           |                 |                     |           |                       |      |              |
|-------------------------------------------|-----------------|---------------------|-----------|-----------------------|------|--------------|
| Joint=4582                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.4 | Y=-2.3                | Z=-1 | SpecialJt=No |
| GUID=f5eedaa3-6ca6-4d5a-b0e7-5c53e9c884b1 |                 |                     |           |                       |      |              |
| Joint=4583                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.4 | Y=-2.2                | Z=-1 | SpecialJt=No |
| GUID=b5c13393-5998-4601-973a-6e3295096b36 |                 |                     |           |                       |      |              |
| Joint=4584                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.4 | Y=-2.1                | Z=-1 | SpecialJt=No |
| GUID=a6bdc422-8f37-4ff2-b9d2-a9a6b9ec154d |                 |                     |           |                       |      |              |
| Joint=4585                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.4 | Y=-2                  | Z=-1 | SpecialJt=No |
| GUID=02311cce-818a-4419-8656-c445de271327 |                 |                     |           |                       |      |              |
| Joint=4586                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.4 | Y=-1.9                | Z=-1 | SpecialJt=No |
| GUID=282b737d-de81-4251-8ee2-66774c7a3203 |                 |                     |           |                       |      |              |
| Joint=4587                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.4 | Y=-1.8                | Z=-1 | SpecialJt=No |
| GUID=e7734807-ef63-4cfa-9b74-94f418250cc5 |                 |                     |           |                       |      |              |
| Joint=4588                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.4 | Y=-1.7                | Z=-1 | SpecialJt=No |
| GUID=daea4ff1-cf9f-4a3c-a9fb-23e8c0fb8fa5 |                 |                     |           |                       |      |              |
| Joint=4589                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.4 | Y=-1.6                | Z=-1 | SpecialJt=No |
| GUID=01c977b4-c608-4bb4-a610-2704baf2dd6  |                 |                     |           |                       |      |              |
| Joint=4590                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.4 | Y=-1.5                | Z=-1 | SpecialJt=No |
| GUID=12130135-444b-478f-98ce-de97a12aef3a |                 |                     |           |                       |      |              |
| Joint=4591                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.4 | Y=-1.4                | Z=-1 | SpecialJt=No |
| GUID=64b2ac09-0336-48fd-a710-155dd2ba81d1 |                 |                     |           |                       |      |              |
| Joint=4592                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.4 | Y=-1.3                | Z=-1 | SpecialJt=No |
| GUID=1088453e-b5ba-4035-8919-5c9dfba41d7a |                 |                     |           |                       |      |              |
| Joint=4593                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.4 | Y=-1.2                | Z=-1 | SpecialJt=No |
| GUID=51452c1b-0556-408c-81a8-4d0d7e6d5f08 |                 |                     |           |                       |      |              |
| Joint=4594                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.4 | Y=-1.1                | Z=-1 | SpecialJt=No |
| GUID=ddd50c18-df82-48ca-9a5c-92a52819b5be |                 |                     |           |                       |      |              |
| Joint=4595                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.4 | Y=-1                  | Z=-1 | SpecialJt=No |
| GUID=d3548810-6324-4626-87a4-e2ed2e3b5be7 |                 |                     |           |                       |      |              |
| Joint=4596                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.4 | Y=-0.9                | Z=-1 | SpecialJt=No |
| GUID=81685b43-ec5c-4bb4-a8e9-431bc3653191 |                 |                     |           |                       |      |              |
| Joint=4597                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.4 | Y=-0.8                | Z=-1 | SpecialJt=No |
| GUID=7eb02b49-c77c-44bc-a5ae-41280f8dd538 |                 |                     |           |                       |      |              |
| Joint=4598                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.4 | Y=-0.7                | Z=-1 | SpecialJt=No |
| GUID=fd7a6dae-ab42-4ec4-8a50-740f2791e13f |                 |                     |           |                       |      |              |
| Joint=4599                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.4 | Y=-0.6                | Z=-1 | SpecialJt=No |
| GUID=9f03c1f5-da02-4cd9-8d6e-c9a2e3b6d1de |                 |                     |           |                       |      |              |
| Joint=4600                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.4 | Y=-0.5                | Z=-1 | SpecialJt=No |
| GUID=3eda8e4c-96d8-40b6-97dd-9c94f857de4b |                 |                     |           |                       |      |              |
| Joint=4601                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.4 | Y=-0.4                | Z=-1 | SpecialJt=No |
| GUID=2d858968-8466-44c8-9cce-8fee797f8c41 |                 |                     |           |                       |      |              |
| Joint=4602                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.4 | Y=-0.3                | Z=-1 | SpecialJt=No |
| GUID=4b0086bf-ab05-45ab-93c2-2abdc07612fa |                 |                     |           |                       |      |              |
| Joint=4603                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.4 | Y=-0.2                | Z=-1 | SpecialJt=No |
| GUID=ffa1f697-da60-4359-87cf-11317700fc07 |                 |                     |           |                       |      |              |
| Joint=4604                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.4 | Y=-0.1                | Z=-1 | SpecialJt=No |
| GUID=4c41f8cd-205f-4771-9a18-0a32dedf2932 |                 |                     |           |                       |      |              |
| Joint=4605                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.4 | Y=0                   | Z=-1 | SpecialJt=No |
| GUID=e34d5a71-7f0e-4030-ac76-2350316bf847 |                 |                     |           |                       |      |              |
| Joint=4606                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.4 | Y=0.09999999999999999 | Z=-1 | SpecialJt=No |
| GUID=e5ecc04f-da73-43a8-844d-0f3b8ccfb78b |                 |                     |           |                       |      |              |
| Joint=4607                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.4 | Y=0.2                 | Z=-1 | SpecialJt=No |
| GUID=f90c4570-5624-418e-a327-4935e4d96b96 |                 |                     |           |                       |      |              |
| Joint=4608                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.4 | Y=0.3                 | Z=-1 | SpecialJt=No |
| GUID=a00bd49a-9ca6-4e20-9953-a10b18938a18 |                 |                     |           |                       |      |              |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=4609 CoordSys=GLOBAL CoordType=Cartesian XorR=13.4 Y=0.4 Z=-1 SpecialJt=No GUID=6520c16e-4b2b-4eae-99b5-1f34f2b80d69  
 Joint=4610 CoordSys=GLOBAL CoordType=Cartesian XorR=13.4 Y=0.5 Z=-1 SpecialJt=No GUID=ee8f6c65-29a0-4043-8fab-1a1fb9847b52  
 Joint=4611 CoordSys=GLOBAL CoordType=Cartesian XorR=13.4 Y=0.6 Z=-1 SpecialJt=No GUID=37d85555-0465-4031-a2bd-b3612d2fd717  
 Joint=4612 CoordSys=GLOBAL CoordType=Cartesian XorR=13.4 Y=0.7 Z=-1 SpecialJt=No GUID=7b516a4a-077c-421f-b60a-2b9b00718cbb  
 Joint=4613 CoordSys=GLOBAL CoordType=Cartesian XorR=13.4 Y=0.8 Z=-1 SpecialJt=No GUID=7de72708-fe1c-4270-b4d7-8d20521db469  
 Joint=4614 CoordSys=GLOBAL CoordType=Cartesian XorR=13.4 Y=0.9 Z=-1 SpecialJt=No GUID=c7591d70-3f6e-467f-9749-37ca2de17a4b  
 Joint=4615 CoordSys=GLOBAL CoordType=Cartesian XorR=13.4 Y=1 Z=-1 SpecialJt=No GUID=c594d841-d088-4889-b8a8-840f33b928b2  
 Joint=4616 CoordSys=GLOBAL CoordType=Cartesian XorR=13.4 Y=1.1 Z=-1 SpecialJt=No GUID=603141a6-18e3-4050-ac1f-e2190367ed2b  
 Joint=4617 CoordSys=GLOBAL CoordType=Cartesian XorR=13.4 Y=1.2 Z=-1 SpecialJt=No GUID=f83082a6-68af-413e-8c06-2976ab679f96  
 Joint=4618 CoordSys=GLOBAL CoordType=Cartesian XorR=13.4 Y=1.3 Z=-1 SpecialJt=No GUID=2a98a1a8-8fb6-43c1-b0d3-f12bbbef1d15  
 Joint=4619 CoordSys=GLOBAL CoordType=Cartesian XorR=13.4 Y=1.4 Z=-1 SpecialJt=No GUID=04de9808-ce10-4734-913d-7adcb5e28292  
 Joint=4620 CoordSys=GLOBAL CoordType=Cartesian XorR=13.4 Y=1.5 Z=-1 SpecialJt=No GUID=1e17eefa-24ed-44c9-9d25-f9c5d6e2b076  
 Joint=4621 CoordSys=GLOBAL CoordType=Cartesian XorR=13.4 Y=1.6 Z=-1 SpecialJt=No GUID=e468eb80-9b91-46c3-afab-8fd23b9e053e  
 Joint=4622 CoordSys=GLOBAL CoordType=Cartesian XorR=13.4 Y=1.7 Z=-1 SpecialJt=No GUID=0c4e576f-46a7-4224-b931-43e8f0ae7f65  
 Joint=4623 CoordSys=GLOBAL CoordType=Cartesian XorR=13.4 Y=1.8 Z=-1 SpecialJt=No GUID=bffdb22b-e21d-4692-9a97-2c27147760d1  
 Joint=4624 CoordSys=GLOBAL CoordType=Cartesian XorR=13.4 Y=1.9 Z=-1 SpecialJt=No GUID=1a0f92de-5308-4f13-88aa-1d015d0d99b8  
 Joint=4625 CoordSys=GLOBAL CoordType=Cartesian XorR=13.4 Y=2 Z=-1 SpecialJt=No GUID=4f212659-fd58-462e-9075-f738184ce3d2  
 Joint=4626 CoordSys=GLOBAL CoordType=Cartesian XorR=13.4 Y=2.1 Z=-1 SpecialJt=No GUID=871a7ee6-937f-488c-862f-682ef4332166  
 Joint=4627 CoordSys=GLOBAL CoordType=Cartesian XorR=13.4 Y=2.2 Z=-1 SpecialJt=No GUID=889d7eb3-0762-4e0f-9719-f2a98c1cd1e0  
 Joint=4628 CoordSys=GLOBAL CoordType=Cartesian XorR=13.4 Y=2.3 Z=-1 SpecialJt=No GUID=be0825b6-0946-4e78-bd60-84fbf8bcf429  
 Joint=4629 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=-2.3 Z=-1 SpecialJt=No GUID=3d6a3f85-d3d4-43fe-97f3-0fe2f7f2dee  
 Joint=4630 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=-2.2 Z=-1 SpecialJt=No GUID=eaafc96e-7165-4f10-a493-e2766ec4c6b9  
 Joint=4631 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=-2.1 Z=-1 SpecialJt=No GUID=abd9376e-42a7-4333-a014-52c04626abfe  
 Joint=4632 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=-2 Z=-1 SpecialJt=No GUID=b015a2c7-e44d-4a0d-8c0c-30755ba0d2d2  
 Joint=4633 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=-1.9 Z=-1 SpecialJt=No GUID=4cb886aa-04fb-4968-a1b8-7c2101a39942  
 Joint=4634 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=-1.8 Z=-1 SpecialJt=No GUID=294a998f-7092-4368-aedc-a5d26fb32ade  
 Joint=4635 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=-1.7 Z=-1 SpecialJt=No GUID=8540ac62-99b7-411b-8681-15e15e49646d



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=4636 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=-1.6 Z=-1 SpecialJt=No  
GUID=1399a821-e244-4061-9d9f-e9add61831e4

Joint=4637 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=-1.5 Z=-1 SpecialJt=No  
GUID=96a76026-2ab3-499b-8788-ac39c84b06dd

Joint=4638 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=-1.4 Z=-1 SpecialJt=No  
GUID=916571f7-760b-4bc4-84f3-910f341df606

Joint=4639 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=-1.3 Z=-1 SpecialJt=No  
GUID=c082bb2c-ba74-498b-8ad6-a4cdda0f3f93

Joint=4640 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=-1.2 Z=-1 SpecialJt=No  
GUID=1bd45456-1861-4eb2-9ccb-2e2a98052505

Joint=4641 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=-1.1 Z=-1 SpecialJt=No  
GUID=083ccba6-5bd3-4a23-85f0-ba569f742fb5

Joint=4642 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=-1 Z=-1 SpecialJt=No GUID=e8b5147b-99ad-41d8-9fd3-3e6068fd170b

Joint=4643 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=-0.9 Z=-1 SpecialJt=No  
GUID=922e45a6-2a42-4136-b008-491c2f3a44d5

Joint=4644 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=-0.8 Z=-1 SpecialJt=No  
GUID=75d219e5-4126-4940-be35-6878228b8574

Joint=4645 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=-0.7 Z=-1 SpecialJt=No  
GUID=f724e90a-3ffb-41f6-901f-9ec9447203dc

Joint=4646 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=-0.6 Z=-1 SpecialJt=No  
GUID=d860becd-b5de-4ab8-80bb-099570fb990c

Joint=4647 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=-0.5 Z=-1 SpecialJt=No  
GUID=0e8b6d84-157a-452f-b45e-9a5a33bec0b

Joint=4648 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=-0.4 Z=-1 SpecialJt=No  
GUID=099bde0-3a4c-44c4-a3dc-20fd7c54c029

Joint=4649 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=-0.3 Z=-1 SpecialJt=No  
GUID=24a9d37d-005c-43e6-940c-ad84fecf8bca

Joint=4650 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=-0.2 Z=-1 SpecialJt=No  
GUID=20d5a51e-3f94-44e2-8de3-2b48acb4f786

Joint=4651 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=-0.1 Z=-1 SpecialJt=No  
GUID=472c348b-0112-4005-855c-f8eb7951faeb

Joint=4652 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=1.11022302462516E-16 Z=-1  
SpecialJt=No GUID=0b0c1f6d-d168-4656-94df-62a46e4432b5

Joint=4653 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=0.0999999999999999 Z=-1 SpecialJt=No  
GUID=d4370a90-6e97-4836-b9f6-9a4661eb7b74

Joint=4654 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=0.2 Z=-1 SpecialJt=No GUID=3e34449e-851d-40a7-8367-726e3cc195ba

Joint=4655 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=0.3 Z=-1 SpecialJt=No GUID=9bd6fbec-9432-4e20-bf43-ebb2837bd485

Joint=4656 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=0.4 Z=-1 SpecialJt=No GUID=b8a12eff-ed24-4288-84f6-64665709a607

Joint=4657 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=0.5 Z=-1 SpecialJt=No GUID=69509398-bf10-43a0-ada4-cc87d6c16cc9

Joint=4658 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=0.6 Z=-1 SpecialJt=No GUID=961e08f3-76e6-4561-a8ea-da73efbf7b37

Joint=4659 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=0.7 Z=-1 SpecialJt=No GUID=e3ec83b5-09db-4cb4-8fba-c65bfa6ff5b5

Joint=4660 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=0.8 Z=-1 SpecialJt=No GUID=8dd0ed37-9e3e-4172-a2ad-69fe6c2b31a6

Joint=4661 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=0.9 Z=-1 SpecialJt=No GUID=d35e1908-b482-4657-8139-c252bb71758f

Joint=4662 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=1 Z=-1 SpecialJt=No GUID=d5cc67e5-0a7b-49aa-b2e8-ca018b3a6bc1

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=4663 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=1.1 Z=-1 SpecialJt=No GUID=7e4d927a-afda-4e83-beb9-632c432e8756

Joint=4664 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=1.2 Z=-1 SpecialJt=No GUID=0f34b99e-603b-46ce-9f9d-82f945df4029

Joint=4665 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=1.3 Z=-1 SpecialJt=No GUID=502dcc46-d800-4573-ab8b-64f2b701ed15

Joint=4666 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=1.4 Z=-1 SpecialJt=No GUID=66bbe472-8a86-4a30-9740-4eca1a3eee29

Joint=4667 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=1.5 Z=-1 SpecialJt=No GUID=4b0e912e-aa11-4c00-8191-4f2cf0b65124

Joint=4668 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=1.6 Z=-1 SpecialJt=No GUID=2e57a06a-25fc-42b9-8305-53af7c2f7c5b

Joint=4669 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=1.7 Z=-1 SpecialJt=No GUID=402e623e-2c5b-461c-9968-217c2b392d68

Joint=4670 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=1.8 Z=-1 SpecialJt=No GUID=0780050f-1bd7-48cf-b0db-0cfad7db8fa3

Joint=4671 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=1.9 Z=-1 SpecialJt=No GUID=59ee9ae2-94eb-49c4-b22b-170558a7db1f

Joint=4672 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=2 Z=-1 SpecialJt=No GUID=0012b7b4-42b8-4d64-9a6f-d55c2ccab72a

Joint=4673 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=2.1 Z=-1 SpecialJt=No GUID=4c76f789-fc9c-45d7-81f0-62887e695ddf

Joint=4674 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=2.2 Z=-1 SpecialJt=No GUID=f37ce4d6-0a49-486e-9a1a-e92542ff74a1

Joint=4675 CoordSys=GLOBAL CoordType=Cartesian XorR=13.5 Y=2.3 Z=-1 SpecialJt=No GUID=2c63a4a8-bf40-433d-99aa-60d4d60657b1

Joint=4676 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=-2.3 Z=-1 SpecialJt=No GUID=20744e2a-7500-489a-8590-57e09ca12a3c

Joint=4677 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=-2.2 Z=-1 SpecialJt=No GUID=9717b3d4-523f-4149-a4c6-fb25919f5efb

Joint=4678 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=-2.1 Z=-1 SpecialJt=No GUID=a4d246cf-c255-4102-8c1f-a6b5fe088964

Joint=4679 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=-2 Z=-1 SpecialJt=No GUID=b7f0bde4-13b3-43f4-928a-4c0e060129b0

Joint=4680 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=-1.9 Z=-1 SpecialJt=No GUID=2a011c23-8937-43d0-bfc0-8958d2691841

Joint=4681 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=-1.8 Z=-1 SpecialJt=No GUID=4fe526c4-05bc-40c2-8f33-4359081f80ac

Joint=4682 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=-1.7 Z=-1 SpecialJt=No GUID=ee528c5c-3faf-4f0a-897a-d560ae3097fc

Joint=4683 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=-1.6 Z=-1 SpecialJt=No GUID=77ef606b-e15a-4a57-92f2-152e76be5efe

Joint=4684 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=-1.5 Z=-1 SpecialJt=No GUID=d9a1577a-0dcf-4a8e-939c-e8bad6b3eeb3

Joint=4685 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=-1.4 Z=-1 SpecialJt=No GUID=ecb191e2-93c1-41b9-aad6-823fffd3c169

Joint=4686 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=-1.3 Z=-1 SpecialJt=No GUID=16e43d8e-1e8c-4ab3-ae49-89df17e68d68

Joint=4687 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=-1.2 Z=-1 SpecialJt=No GUID=da8369ac-1b85-4f6d-952a-18f64e9b04d2

Joint=4688 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=-1.1 Z=-1 SpecialJt=No GUID=761a7c69-b0b3-412d-af9e-a58342151035

Joint=4689 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=-1 Z=-1 SpecialJt=No GUID=c893643a-61a8-4e5a-a14c-ae939f536d39

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=4690 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=-0.9 Z=-1 SpecialJt=No  
 GUID=669ea6e2-41c8-4d30-914c-fd38118a5bfa  
 Joint=4691 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=-0.8 Z=-1 SpecialJt=No  
 GUID=0b5ca948-f27b-47b4-a370-9b351680f57c  
 Joint=4692 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=-0.7 Z=-1 SpecialJt=No  
 GUID=ce743d89-5ec4-4179-a01e-b6ae132f04ba  
 Joint=4693 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=-0.6 Z=-1 SpecialJt=No  
 GUID=6c67dc50-60d2-47c9-a4cc-88f444f1cf57  
 Joint=4694 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=-0.5 Z=-1 SpecialJt=No GUID=3f1ef791-  
 c22c-4c0e-bd7c-722a5a41a961  
 Joint=4695 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=-0.4 Z=-1 SpecialJt=No  
 GUID=be840e73-8653-42e8-affb-ecc1e5e9f84c  
 Joint=4696 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=-0.3 Z=-1 SpecialJt=No  
 GUID=8e4d5a95-5730-4c84-89f3-5c2765e16e87  
 Joint=4697 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=-0.2 Z=-1 SpecialJt=No  
 GUID=c428c571-ac33-450b-a5fb-71ad60c0015b  
 Joint=4698 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=-0.1 Z=-1 SpecialJt=No  
 GUID=987ecc9b-cd90-4c99-96d9-45daab9dd0b1  
 Joint=4699 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=0 Z=-1 SpecialJt=No GUID=98b2d4c4-  
 480e-4423-9afb-b030e9c3796a  
 Joint=4700 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=0.09999999999999998 Z=-1 SpecialJt=No  
 GUID=60af7e1e-94f0-4b78-9a10-7c79b28e8803  
 Joint=4701 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=0.2 Z=-1 SpecialJt=No GUID=5ec8446f-  
 f3fa-4213-8214-d5e72972acd9  
 Joint=4702 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=0.3 Z=-1 SpecialJt=No GUID=4b269018-  
 a1f3-4891-b686-b18b46d4753d  
 Joint=4703 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=0.4 Z=-1 SpecialJt=No GUID=76c6396e-  
 b013-4e4e-b43e-cf8e6c2f2efa  
 Joint=4704 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=0.5 Z=-1 SpecialJt=No GUID=31026d75-  
 14d9-4171-a237-f43d20e288d4  
 Joint=4705 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=0.6 Z=-1 SpecialJt=No GUID=15583e18-  
 c9f7-43d0-b8f6-2e7aa1d18077  
 Joint=4706 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=0.7 Z=-1 SpecialJt=No GUID=905cef05-  
 a92a-4a02-a407-ad105e1913a8  
 Joint=4707 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=0.8 Z=-1 SpecialJt=No GUID=13836758-  
 3018-40f4-bb06-5f2a5bce18b2  
 Joint=4708 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=0.9 Z=-1 SpecialJt=No GUID=8c84822a-  
 003a-4595-a984-6e3f748b3d77  
 Joint=4709 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=1 Z=-1 SpecialJt=No GUID=579e6098-  
 2100-45ef-8d57-cf7f675f95ca  
 Joint=4710 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=1.1 Z=-1 SpecialJt=No GUID=7fb0228c-  
 4ad2-4d6b-98ca-2338280f1afb  
 Joint=4711 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=1.2 Z=-1 SpecialJt=No GUID=bb7e022c-  
 4ce9-4168-8aab-0be5d16ca534  
 Joint=4712 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=1.3 Z=-1 SpecialJt=No GUID=f5944ed3-  
 dfb8-44bd-a4a4-d391edc29fe9  
 Joint=4713 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=1.4 Z=-1 SpecialJt=No GUID=44859ea1-  
 5abf-4386-9e86-91c38f84d5fc  
 Joint=4714 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=1.5 Z=-1 SpecialJt=No GUID=d246fa18-  
 4b24-4fd1-9159-c05d879a4c7c  
 Joint=4715 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=1.6 Z=-1 SpecialJt=No GUID=74950ed4-  
 176a-4e06-8fa3-c7197e9fdb6f  
 Joint=4716 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=1.7 Z=-1 SpecialJt=No GUID=6910accd-  
 12cc-42ab-baa9-682afde68ae0

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=4717 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=1.8 Z=-1 SpecialJt=No GUID=80d6aac7-16ad-4cb9-82ae-ef3d7cc9daf8

Joint=4718 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=1.9 Z=-1 SpecialJt=No GUID=a704726f-9236-4821-96a7-7980e8493447

Joint=4719 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=2 Z=-1 SpecialJt=No GUID=7101c3db-104b-430d-8468-4f13d6426aaf

Joint=4720 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=2.1 Z=-1 SpecialJt=No GUID=b19a34d2-caa5-4d78-9b82-b82eb0b182a1

Joint=4721 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=2.2 Z=-1 SpecialJt=No GUID=9fba603e-c0e4-497a-870c-dc27a3b05dbc

Joint=4722 CoordSys=GLOBAL CoordType=Cartesian XorR=13.6 Y=2.3 Z=-1 SpecialJt=No GUID=035e725d-451d-41ef-8317-476653e6ba17

Joint=4723 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=-2.3 Z=-1 SpecialJt=No GUID=a2b275ec-b542-419b-8380-7edde6da0a9c

Joint=4724 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=-2.2 Z=-1 SpecialJt=No GUID=33bf2ea0-a4e3-478f-8e45-5bc66c37e474

Joint=4725 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=-2.1 Z=-1 SpecialJt=No GUID=7f3575b8-6c08-4f96-baec-0609f3cb6138

Joint=4726 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=-2 Z=-1 SpecialJt=No GUID=47a44671-2e31-4c00-b40a-d52bc1ead5d5

Joint=4727 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=-1.9 Z=-1 SpecialJt=No GUID=865ab370-7a2d-4f12-a7ff-4949edcd73a0

Joint=4728 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=-1.8 Z=-1 SpecialJt=No GUID=09d8b96a-f3a2-4e96-8621-50b9135d9431

Joint=4729 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=-1.7 Z=-1 SpecialJt=No GUID=7c9516eb-a30e-4644-acae-8213a0c3ae86

Joint=4730 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=-1.6 Z=-1 SpecialJt=No GUID=668173f2-9092-4143-9e8f-fe7ba07357d1

Joint=4731 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=-1.5 Z=-1 SpecialJt=No GUID=b0b29fa5-9564-4b2b-87d2-4f23df8e9b97

Joint=4732 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=-1.4 Z=-1 SpecialJt=No GUID=0556ceb3-70b2-4850-ac0a-f537e41b81ad

Joint=4733 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=-1.3 Z=-1 SpecialJt=No GUID=9c1a529a-399d-4ca1-b14d-8ed58cfaa978

Joint=4734 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=-1.2 Z=-1 SpecialJt=No GUID=4fa978a6-b84a-4a8f-abfc-5e28b4987dc2

Joint=4735 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=-1.1 Z=-1 SpecialJt=No GUID=3cbaf7c6-f718-4061-8b96-c8ddb02608e8

Joint=4736 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=-1 Z=-1 SpecialJt=No GUID=1bf71c81-d19c-4474-a073-dfba7651ce6b

Joint=4737 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=-0.9 Z=-1 SpecialJt=No GUID=2349c8cd-f8b2-4eb4-99d2-d4aa367214d8

Joint=4738 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=-0.8 Z=-1 SpecialJt=No GUID=2cc17d1c-191d-4011-bdc9-13b676363da2

Joint=4739 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=-0.7 Z=-1 SpecialJt=No GUID=d3f6dae8-80ff-4859-9faf-d76b49588323

Joint=4740 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=-0.6 Z=-1 SpecialJt=No GUID=b8076021-0d98-4e96-976b-51bd30566b02

Joint=4741 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=-0.5 Z=-1 SpecialJt=No GUID=ed68e0a1-6739-43c5-8c6d-ff82306c6094

Joint=4742 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=-0.4 Z=-1 SpecialJt=No GUID=876b111a-e344-47f8-aa51-8515efd78c38

Joint=4743 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=-0.3 Z=-1 SpecialJt=No GUID=03c255d9-68bc-4b27-9b96-376324275731



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=4744 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=-0.2 Z=-1 SpecialJt=No  
GUID=85ee1e25-c3f6-417a-a1df-1b0bf8bda8e7

Joint=4745 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=-0.1 Z=-1 SpecialJt=No  
GUID=566e16e1-f018-4737-9f4d-77ca7eadec5f

Joint=4746 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=0 Z=-1 SpecialJt=No GUID=df8aac5a-  
fd1a-4a88-9367-9a6dc9e9255d

Joint=4747 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=0.1 Z=-1 SpecialJt=No GUID=9ff428bb-  
8bf0-4288-bbea-2cbb2ee7ee4a

Joint=4748 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=0.2 Z=-1 SpecialJt=No GUID=d94e1160-  
8ec4-4c2b-aa9c-2b41581cefc9

Joint=4749 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=0.3 Z=-1 SpecialJt=No GUID=9873dc7b-  
3d50-4e42-b37d-352436525483

Joint=4750 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=0.4 Z=-1 SpecialJt=No GUID=56ba27f3-  
bcc3-4716-b822-56c26ae887a5

Joint=4751 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=0.5 Z=-1 SpecialJt=No GUID=612c4015-  
ecae-454c-a195-7a17d169b09f

Joint=4752 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=0.6 Z=-1 SpecialJt=No GUID=99cab15e-  
eeab-4a33-b2f1-7f4008aacfa0

Joint=4753 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=0.7 Z=-1 SpecialJt=No GUID=846752dd-  
3849-432d-99b7-e6557ec3d2e1

Joint=4754 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=0.8 Z=-1 SpecialJt=No GUID=40b3a1ef-  
f506-4720-9051-0176caaced07

Joint=4755 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=0.9 Z=-1 SpecialJt=No GUID=d552dac5-  
9d03-494c-ab11-2de58f15fad

Joint=4756 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=1 Z=-1 SpecialJt=No GUID=1d33c4c2-  
5a78-48c4-8cfc-13605aa150b6

Joint=4757 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=1.1 Z=-1 SpecialJt=No GUID=4c2065b4-  
99ab-4f68-af1c-72ea0bcb9443

Joint=4758 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=1.2 Z=-1 SpecialJt=No GUID=8d1a9f1d-  
2035-4036-a6e9-68aece10b085

Joint=4759 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=1.3 Z=-1 SpecialJt=No GUID=a83211ee-  
cef3-45d0-877f-2cdca374d1b1

Joint=4760 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=1.4 Z=-1 SpecialJt=No GUID=9044a5b9-  
1b43-44de-a269-33a18790cdd9

Joint=4761 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=1.5 Z=-1 SpecialJt=No GUID=0360a401-  
9f86-413e-9f19-b9dd186160ff

Joint=4762 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=1.6 Z=-1 SpecialJt=No GUID=7ba6b8af-  
8e05-4321-bda0-a38de6faec6f

Joint=4763 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=1.7 Z=-1 SpecialJt=No GUID=18782ab5-  
4415-4b5a-a181-3f316cb85179

Joint=4764 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=1.8 Z=-1 SpecialJt=No GUID=8e5b0ea8-  
c4a1-4cf9-b8f3-3cefe71aee90

Joint=4765 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=1.9 Z=-1 SpecialJt=No GUID=7a1b3993-  
2c2d-40e6-ad79-e18116811c62

Joint=4766 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=2 Z=-1 SpecialJt=No GUID=3640c5c8-  
bdfb-4b93-a9b0-97018638c449

Joint=4767 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=2.1 Z=-1 SpecialJt=No GUID=43676d0b-  
6b65-47f9-97d7-fe5cc25b2698

Joint=4768 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=2.2 Z=-1 SpecialJt=No GUID=78bb77b2-  
ef88-4a31-baf0-b4553bdb4c4f

Joint=4769 CoordSys=GLOBAL CoordType=Cartesian XorR=13.7 Y=2.3 Z=-1 SpecialJt=No GUID=0b0c849c-  
2db0-48c6-a514-c575d8170bdd

Joint=4770 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=-2.3 Z=-1 SpecialJt=No  
GUID=2eafb11b-9237-43f9-bb60-9a0fe68a24c0

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=4771 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=-2.2 Z=-1 SpecialJt=No  
GUID=e5f0e438-c600-41e3-b6d3-926d25857edc

Joint=4772 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=-2.1 Z=-1 SpecialJt=No GUID=def0dca6-286b-431c-9770-19684227332c

Joint=4773 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=-2 Z=-1 SpecialJt=No GUID=b3085509-672f-4b58-9334-332af445ddb8

Joint=4774 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=-1.9 Z=-1 SpecialJt=No  
GUID=4bc5d0db-8d71-4fbc-8f3f-cfeb921d941c

Joint=4775 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=-1.8 Z=-1 SpecialJt=No  
GUID=87649264-1397-45af-91c8-628f97875354

Joint=4776 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=-1.7 Z=-1 SpecialJt=No GUID=b3f046f7-faca-460d-801b-4ad29dbb88d4

Joint=4777 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=-1.6 Z=-1 SpecialJt=No  
GUID=9125d751-e68e-4bae-bd18-32757e752c5a

Joint=4778 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=-1.5 Z=-1 SpecialJt=No  
GUID=ba0ae694-09a0-48fd-8bc5-bc04037f5702

Joint=4779 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=-1.4 Z=-1 SpecialJt=No  
GUID=00442825-91a3-4cd6-bb0b-c644c5fa8ef6

Joint=4780 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=-1.3 Z=-1 SpecialJt=No  
GUID=04489b45-3dcd-4e69-9d77-bb41a7a2575a

Joint=4781 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=-1.2 Z=-1 SpecialJt=No  
GUID=bf6ea7bb-850b-4f80-bcf0-e6db4ed1acfb

Joint=4782 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=-1.1 Z=-1 SpecialJt=No  
GUID=45515b81-4030-4584-aae5-37c3a6ea1025

Joint=4783 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=-1 Z=-1 SpecialJt=No GUID=dc7ef892-eec6-4e96-9167-216d0c8c74fd

Joint=4784 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=-0.9 Z=-1 SpecialJt=No  
GUID=3e2a223d-7df4-40f9-9a53-eb9624d98d73

Joint=4785 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=-0.8 Z=-1 SpecialJt=No  
GUID=095c6542-0a62-40ef-a369-3fdca8b7047d

Joint=4786 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=-0.7 Z=-1 SpecialJt=No  
GUID=9b0dc261-45ae-4d3b-98a5-1a2702e069b4

Joint=4787 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=-0.6 Z=-1 SpecialJt=No  
GUID=4b920302-e08e-42c0-8e64-fcf8b64b6a98

Joint=4788 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=-0.5 Z=-1 SpecialJt=No GUID=56219cfd-a0aa-426a-bfc2-e11768cd321f

Joint=4789 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=-0.4 Z=-1 SpecialJt=No GUID=f5ccb998-2c31-4a1f-b19e-d6dd941637e1

Joint=4790 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=-0.3 Z=-1 SpecialJt=No  
GUID=7f6a2e7b-cdc7-43b5-a32a-8b74ebde6b33

Joint=4791 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=-0.2 Z=-1 SpecialJt=No  
GUID=dbfa8472-ec80-4d40-b6df-a3b645672256

Joint=4792 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=-0.1 Z=-1 SpecialJt=No  
GUID=c096ab05-980a-4557-a616-5a34eb4cdd85

Joint=4793 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=1.11022302462516E-16 Z=-1  
SpecialJt=No GUID=2848e3b5-b271-4b00-b337-b315597d5fac

Joint=4794 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=0.0999999999999999 Z=-1 SpecialJt=No  
GUID=c06b03cb-c938-49da-ad08-f0a02e137b15

Joint=4795 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=0.2 Z=-1 SpecialJt=No GUID=c689d64e-ebb6-492f-a343-e958c79482c6

Joint=4796 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=0.3 Z=-1 SpecialJt=No GUID=50abd413-e72f-4425-962d-a39137df6444

Joint=4797 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=0.4 Z=-1 SpecialJt=No GUID=2de63ca8-e35c-44fe-815f-092a5f56cdf9

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=4798 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=0.5 Z=-1 SpecialJt=No GUID=9dc2de7a-2210-42c5-8a82-31607a8546ae

Joint=4799 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=0.6 Z=-1 SpecialJt=No GUID=d600221d-0074-431e-8a40-b44b4948c961

Joint=4800 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=0.7 Z=-1 SpecialJt=No GUID=c9a12222-10ac-410f-b1b8-556b4bc0455e

Joint=4801 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=0.8 Z=-1 SpecialJt=No GUID=552767dc-47ad-4587-97f7-0d85a7e7712d

Joint=4802 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=0.9 Z=-1 SpecialJt=No GUID=0a2e71cb-7994-4387-8441-649581e6ace9

Joint=4803 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=1 Z=-1 SpecialJt=No GUID=92fbc886-e1e6-4b85-a99d-61ecd74daecd

Joint=4804 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=1.1 Z=-1 SpecialJt=No GUID=6909e965-37c8-46ed-9f53-1932afde127c

Joint=4805 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=1.2 Z=-1 SpecialJt=No GUID=7687dde2-65c4-4eda-b5c6-d37f95fbfda3

Joint=4806 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=1.3 Z=-1 SpecialJt=No GUID=28972a6d-ab21-4a33-adc9-40d4992c6761

Joint=4807 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=1.4 Z=-1 SpecialJt=No GUID=c1730722-8c21-4373-923a-db83311c06ee

Joint=4808 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=1.5 Z=-1 SpecialJt=No GUID=fe7f5ab4-22b7-4dd5-9593-7e2916601b8a

Joint=4809 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=1.6 Z=-1 SpecialJt=No GUID=24ef659b-3069-4356-b68f-2118e9c248c2

Joint=4810 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=1.7 Z=-1 SpecialJt=No GUID=f6fb5825-8ac6-4719-a3e8-74c24cd86d99

Joint=4811 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=1.8 Z=-1 SpecialJt=No GUID=7aefae9e-a1e9-4022-a0c5-c7f925a6dbd3

Joint=4812 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=1.9 Z=-1 SpecialJt=No GUID=c642469a-79f4-4524-b557-895afa165384

Joint=4813 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=2 Z=-1 SpecialJt=No GUID=6b24402c-5ddd-4f8a-adcc-89fa45893b99

Joint=4814 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=2.1 Z=-1 SpecialJt=No GUID=8996f05f-1a0b-4191-8408-aa18bddc0568

Joint=4815 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=2.2 Z=-1 SpecialJt=No GUID=848132a1-3990-4b6f-96ed-edc5a1a07a04

Joint=4816 CoordSys=GLOBAL CoordType=Cartesian XorR=13.8 Y=2.3 Z=-1 SpecialJt=No GUID=7c4a7d3a-7c83-4ec2-a644-7c2db2334e29

Joint=4817 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=-2.3 Z=-1 SpecialJt=No GUID=234003bd-cc4e-4ba9-b9db-da2a76b3af44

Joint=4818 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=-2.2 Z=-1 SpecialJt=No GUID=ea227f5f-dca7-4921-823b-f80384e318af

Joint=4819 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=-2.1 Z=-1 SpecialJt=No GUID=19146db1-5851-415d-a3bf-560f6d280dce

Joint=4820 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=-2 Z=-1 SpecialJt=No GUID=943fed75-4e41-410b-bf36-5ede259c6533

Joint=4821 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=-1.9 Z=-1 SpecialJt=No GUID=b443024a-95e4-4a8e-871d-e1f40fc1c31a

Joint=4822 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=-1.8 Z=-1 SpecialJt=No GUID=90857063-f486-4ea3-9d95-d20266ff7ce9

Joint=4823 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=-1.7 Z=-1 SpecialJt=No GUID=b96db96e-f241-42df-83ea-89ae0e28d6b9

Joint=4824 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=-1.6 Z=-1 SpecialJt=No GUID=b8adbb0f-cba8-40f6-86b1-184757bfa094

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=4825 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=-1.5 Z=-1 SpecialJt=No  
GUID=94b50ecb-a6de-42e9-829c-d4fb80a99b4d

Joint=4826 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=-1.4 Z=-1 SpecialJt=No GUID=fc406191-  
ced0-4f51-a473-90364e577934

Joint=4827 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=-1.3 Z=-1 SpecialJt=No GUID=c2e9fc25-  
2670-406d-97b7-b430a18e6b27

Joint=4828 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=-1.2 Z=-1 SpecialJt=No  
GUID=949d140c-7d4f-4a64-858b-61f3baac63d7

Joint=4829 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=-1.1 Z=-1 SpecialJt=No  
GUID=97c8233b-97a2-40bf-8dff-7d21e4ffe994

Joint=4830 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=-1 Z=-1 SpecialJt=No GUID=730ed563-  
7bf4-4134-a5b8-3c5b57957175

Joint=4831 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=-0.9 Z=-1 SpecialJt=No  
GUID=5e18100f-32a5-4896-ba05-9c654d95c2b0

Joint=4832 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=-0.8 Z=-1 SpecialJt=No  
GUID=b7e2d93c-4cec-4bd7-8a48-14e0ba4908df

Joint=4833 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=-0.7 Z=-1 SpecialJt=No  
GUID=c4c16967-ba62-42c2-87e2-c77f6c4eba64

Joint=4834 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=-0.6 Z=-1 SpecialJt=No  
GUID=f8ddd87e-2e48-492e-90ff-bc9bcbefadfa3

Joint=4835 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=-0.5 Z=-1 SpecialJt=No  
GUID=9e49150f-65f3-4085-a45f-2f57296252a4

Joint=4836 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=-0.4 Z=-1 SpecialJt=No  
GUID=6884931e-1763-45a7-96e8-6ad9da234114

Joint=4837 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=-0.3 Z=-1 SpecialJt=No  
GUID=56f0d5a5-bf71-4dd8-b3cf-8a0e1dd49dce

Joint=4838 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=-0.2 Z=-1 SpecialJt=No  
GUID=6ad0d8e1-bb18-4c75-807d-ef63dd3de93e

Joint=4839 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=-0.09999999999999998 Z=-1  
SpecialJt=No GUID=7e3945b0-5e84-49eb-a479-415c5a9a5fb5

Joint=4840 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=0 Z=-1 SpecialJt=No GUID=8f72bee4-  
7fb3-4f6d-b74b-1c090e70b013

Joint=4841 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=0.09999999999999998 Z=-1 SpecialJt=No  
GUID=d85499ea-bfcd-4680-a9c0-c8bb2a1dd0aa

Joint=4842 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=0.2 Z=-1 SpecialJt=No GUID=8f0257f5-  
5211-4d8e-8118-62327d92f207

Joint=4843 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=0.3 Z=-1 SpecialJt=No GUID=ce5c83b3-  
413f-4f73-89cd-e70f5f57e98a

Joint=4844 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=0.4 Z=-1 SpecialJt=No GUID=de6b7ba1-  
d0d5-4198-8bd3-7b0ce409ecd4

Joint=4845 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=0.5 Z=-1 SpecialJt=No GUID=d545e1c0-  
5311-4bc9-91b3-d369c99436f2

Joint=4846 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=0.6 Z=-1 SpecialJt=No GUID=fbe5c550-  
7753-4bff-8b9f-45b4c88ac7d1

Joint=4847 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=0.7 Z=-1 SpecialJt=No GUID=70b97ada-  
8670-43eb-9970-99b3374fe9e4

Joint=4848 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=0.8 Z=-1 SpecialJt=No GUID=43e276ec-  
dfeb-4ba1-abfa-8e4299004c51

Joint=4849 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=0.9 Z=-1 SpecialJt=No GUID=88be84a5-  
4173-4434-8c36-5b018402982b

Joint=4850 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=1 Z=-1 SpecialJt=No GUID=535fade6-  
2823-48f0-a057-7f0edff75dd4

Joint=4851 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=1.1 Z=-1 SpecialJt=No GUID=43031403-  
54ce-49b5-8f5a-bb3d57b778dc



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=4852 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=1.2 Z=-1 SpecialJt=No GUID=5a8592a5-4780-4de6-b99b-4d3f84eedf61

Joint=4853 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=1.3 Z=-1 SpecialJt=No GUID=ebb4c0b4-5a8e-480e-a7d9-43d12f452789

Joint=4854 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=1.4 Z=-1 SpecialJt=No GUID=abcae7a4-5587-45c1-abc8-3d00b98685e8

Joint=4855 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=1.5 Z=-1 SpecialJt=No GUID=b63b9096-d5a2-457f-8e78-8a55b82668c1

Joint=4856 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=1.6 Z=-1 SpecialJt=No GUID=202d2cbd-8fff-4f3b-9808-a96d5d04dbbc

Joint=4857 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=1.7 Z=-1 SpecialJt=No GUID=1aa6d94d-61a6-446d-a65a-f5caf18405f7

Joint=4858 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=1.8 Z=-1 SpecialJt=No GUID=c32976ac-97ed-42fc-a198-75834247e39d

Joint=4859 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=1.9 Z=-1 SpecialJt=No GUID=59fc783a-85f7-4295-a643-415fa78c8a91

Joint=4860 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=2 Z=-1 SpecialJt=No GUID=a9336d70-2fcc-4c02-8732-b7ead135f758

Joint=4861 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=2.1 Z=-1 SpecialJt=No GUID=d6dec952-9a01-487e-9549-557d9a739fdc

Joint=4862 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=2.2 Z=-1 SpecialJt=No GUID=55171323-732e-47ca-97c2-3c3ed5053be9

Joint=4863 CoordSys=GLOBAL CoordType=Cartesian XorR=13.9 Y=2.3 Z=-1 SpecialJt=No GUID=4d3bad06-c877-4a08-9137-4fc591164635

Joint=4864 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=-2.3 Z=-1 SpecialJt=No GUID=56bd12a5-958a-4206-8ccd-bf7b382b57a9

Joint=4865 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=-2.2 Z=-1 SpecialJt=No GUID=24fccb68-d1fe-4079-af6a-e37cce797843

Joint=4866 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=-2.1 Z=-1 SpecialJt=No GUID=dc61bc79-36c7-4d69-9175-b55f199bb824

Joint=4867 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=-2 Z=-1 SpecialJt=No GUID=556fe720-6cc2-477c-bf20-a5f390767bc3

Joint=4868 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=-1.9 Z=-1 SpecialJt=No GUID=19eda221-a594-4f91-8dea-8738a55e11c6

Joint=4869 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=-1.8 Z=-1 SpecialJt=No GUID=eefeb54e-566c-4ead-963b-776c177c50fb

Joint=4870 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=-1.7 Z=-1 SpecialJt=No GUID=aef91893-c23e-4538-bb9a-7754d0f5f846

Joint=4871 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=-1.6 Z=-1 SpecialJt=No GUID=8bb740f2-06b2-4556-9abf-797b991a9923

Joint=4872 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=-1.5 Z=-1 SpecialJt=No GUID=08ddb697-8a24-485a-84a9-b050a7381041

Joint=4873 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=-1.4 Z=-1 SpecialJt=No GUID=5c48ee65-0f22-4633-9195-be756de1d6a3

Joint=4874 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=-1.3 Z=-1 SpecialJt=No GUID=c0375b35-9a09-4960-8982-62c86ef21e41

Joint=4875 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=-1.2 Z=-1 SpecialJt=No GUID=a0ea7523-7ae0-4185-8036-3af35c9d3238

Joint=4876 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=-1.1 Z=-1 SpecialJt=No GUID=99ab461f-3f56-4b0a-9abb-6cc9e8a2f1f4

Joint=4877 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=-1 Z=-1 SpecialJt=No GUID=2e740a0b-04f1-4e2f-ae30-70dd6454e117

Joint=4878 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=-0.9 Z=-1 SpecialJt=No GUID=3ac620b6-50ed-46fb-8ec3-8798b8e51a99

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=4879 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=-0.8 Z=-1 SpecialJt=No GUID=a5f54b06-fead-4b78-898a-dec4f3e22217

Joint=4880 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=-0.7 Z=-1 SpecialJt=No GUID=7516004a-c0c5-4753-8584-bf68b6dfdbab

Joint=4881 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=-0.6 Z=-1 SpecialJt=No GUID=500a956e-b493-4173-8d4c-d2092dcf7740

Joint=4882 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=-0.5 Z=-1 SpecialJt=No GUID=be448d98-6d9b-4402-bacc-411796c6fa8d

Joint=4883 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=-0.4 Z=-1 SpecialJt=No GUID=88fecbae-0dfa-464d-800c-fa9b321fb1f8

Joint=4884 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=-0.3 Z=-1 SpecialJt=No GUID=802c2d72-7f69-47b1-8630-9f51f281a9d2

Joint=4885 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=-0.2 Z=-1 SpecialJt=No GUID=e58fd3bb-447a-4f20-a7d0-97218274b13d

Joint=4886 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=-0.09999999999999996 Z=-1 SpecialJt=No GUID=bd7a70fd-8682-461e-8c73-4e6d302c4936

Joint=4887 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=0 Z=-1 SpecialJt=No GUID=af9c340e-9e7c-4eba-ae64-3ad46c0b9764

Joint=4888 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=0.09999999999999998 Z=-1 SpecialJt=No GUID=0e1a8632-fc87-4b3b-a603-88a0ebc1c27f

Joint=4889 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=0.2 Z=-1 SpecialJt=No GUID=fdb50b72-fb3e-4553-832f-dd8392aacbab

Joint=4890 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=0.3 Z=-1 SpecialJt=No GUID=4f8f55e7-433a-4f67-808d-d7633f451376

Joint=4891 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=0.4 Z=-1 SpecialJt=No GUID=35073994-3d10-4d44-9fa5-6d2d429bca9e

Joint=4892 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=0.5 Z=-1 SpecialJt=No GUID=3275e16d-06e5-4d37-902c-2fe9cea91f11

Joint=4893 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=0.6 Z=-1 SpecialJt=No GUID=b6e04d7e-57ed-4dc1-aec2-142209c70d40

Joint=4894 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=0.7 Z=-1 SpecialJt=No GUID=45389f6a-de3e-416a-bed7-ca264a8cf4b1

Joint=4895 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=0.8 Z=-1 SpecialJt=No GUID=cd7433f2-2ca1-4da1-b743-635a747dc446

Joint=4896 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=0.9 Z=-1 SpecialJt=No GUID=7bdc4d10-7cd6-4a54-b2de-3822410a5d86

Joint=4897 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=1 Z=-1 SpecialJt=No GUID=10ae05f5-fa91-43cc-9b6d-750b32b976b9

Joint=4898 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=1.1 Z=-1 SpecialJt=No GUID=7dadbf99-326d-4a6c-8ddd-6e0d20e3a0e9

Joint=4899 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=1.2 Z=-1 SpecialJt=No GUID=3121f1bb-280a-4e41-9741-df329a5da7bf

Joint=4900 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=1.3 Z=-1 SpecialJt=No GUID=6e479771-d003-49d0-adb8-89c25e7dfee5

Joint=4901 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=1.4 Z=-1 SpecialJt=No GUID=9900a846-427a-4286-a107-0d9738a01257

Joint=4902 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=1.5 Z=-1 SpecialJt=No GUID=8b64d4ee-199d-460f-81d7-34ac24306bf2

Joint=4903 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=1.6 Z=-1 SpecialJt=No GUID=a4168b4d-2c16-4d9d-ae8e-1bdcf7dc4010

Joint=4904 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=1.7 Z=-1 SpecialJt=No GUID=5cca1e91-ed89-4700-bcd4-0861a14b9f00

Joint=4905 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=1.8 Z=-1 SpecialJt=No GUID=f531653d-acc7-4f3e-b2cb-bb3447758942

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=4906 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=1.9 Z=-1 SpecialJt=No GUID=bfaba6ae-227a-403a-b1da-1d70a1d3a131

Joint=4907 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=2 Z=-1 SpecialJt=No GUID=a3cb1bcb-9204-4e4d-a247-f508e83692b3

Joint=4908 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=2.1 Z=-1 SpecialJt=No GUID=73bf5a3e-fc67-4221-b1cb-313fc9eb308

Joint=4909 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=2.2 Z=-1 SpecialJt=No GUID=09977efa-5893-4d23-9588-ae7a5e212f20

Joint=4910 CoordSys=GLOBAL CoordType=Cartesian XorR=14 Y=2.3 Z=-1 SpecialJt=No GUID=a81699fe-0a6b-4509-9643-5650452a4447

Joint=4911 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=-2.3 Z=-1 SpecialJt=No GUID=024f7e00-17d7-4497-b978-82dc1a6f02af

Joint=4912 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=-2.2 Z=-1 SpecialJt=No GUID=3b7f2c67-2eef-415d-b5b4-381795673613

Joint=4913 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=-2.1 Z=-1 SpecialJt=No GUID=50f1c5eb-a274-4b2d-b8e3-10d1498e289a

Joint=4914 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=-2 Z=-1 SpecialJt=No GUID=ab180cb3-ed86-4b1b-897d-01ed67a85c39

Joint=4915 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=-1.9 Z=-1 SpecialJt=No GUID=4122856d-2d4b-47c5-a690-5dcd23313fc3

Joint=4916 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=-1.8 Z=-1 SpecialJt=No GUID=64670df8-9900-4d4c-88b4-cd86bf1afe2c

Joint=4917 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=-1.7 Z=-1 SpecialJt=No GUID=0bbf146a-108b-4fb2-bc73-cb699cce6282

Joint=4918 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=-1.6 Z=-1 SpecialJt=No GUID=aea3028b-ad03-4da9-a233-ee80e96d5d07

Joint=4919 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=-1.5 Z=-1 SpecialJt=No GUID=cea8fc41-cf7d-4d91-8a27-d730f4a6070c

Joint=4920 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=-1.4 Z=-1 SpecialJt=No GUID=261c5353-73a1-4fd5-a8a2-e59bb83676d2

Joint=4921 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=-1.3 Z=-1 SpecialJt=No GUID=af9d4d71-6a0b-49ab-b749-acabf0e7fe48

Joint=4922 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=-1.2 Z=-1 SpecialJt=No GUID=506f0ac6-8c5e-495d-8720-ab33f23edd26

Joint=4923 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=-1.1 Z=-1 SpecialJt=No GUID=af6f511b-bb06-46f5-9fe5-ce2bd94845ae

Joint=4924 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=-1 Z=-1 SpecialJt=No GUID=460e43ae-a35a-4f78-ae9d-ad8e8b31d767

Joint=4925 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=-0.9 Z=-1 SpecialJt=No GUID=bd7ad6c4-12d7-4ac4-adba-8cbd63e5b725

Joint=4926 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=-0.8 Z=-1 SpecialJt=No GUID=d9d961cc-b50c-46c0-8603-c2b6dc898119

Joint=4927 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=-0.7 Z=-1 SpecialJt=No GUID=212f5392-5c17-4c4f-81ae-3c21b1f6d2f5

Joint=4928 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=-0.6 Z=-1 SpecialJt=No GUID=a91d9847-1650-4846-9215-3b4e96916243

Joint=4929 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=-0.5 Z=-1 SpecialJt=No GUID=c1e618ad-46cc-4e3c-af6e-99dfc1a5119c

Joint=4930 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=-0.4 Z=-1 SpecialJt=No GUID=a7428230-4901-468d-898b-e5d550ff8dd9

Joint=4931 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=-0.3 Z=-1 SpecialJt=No GUID=3b2530ea-73da-48d6-b145-fbadde0cab46

Joint=4932 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=-0.2 Z=-1 SpecialJt=No GUID=9e2a3cfd-f93f-4528-a1bf-bb2058a55bb3

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=4933 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=-0.09999999999999996 Z=-1 SpecialJt=No GUID=d5483ba4-0ba1-40be-9196-8eab6bf1cb29

Joint=4934 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=0 Z=-1 SpecialJt=No GUID=e3f97c5a-1f36-49ed-b897-dd68b4585e53

Joint=4935 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=0.09999999999999998 Z=-1 SpecialJt=No GUID=9b033113-cdc9-4b92-8e01-cd107f04b883

Joint=4936 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=0.2 Z=-1 SpecialJt=No GUID=0e359c4e-21ca-47a5-995c-a75a15b90617

Joint=4937 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=0.3 Z=-1 SpecialJt=No GUID=a7f3b0fc-012c-4ebd-a60b-afaa19990ee0

Joint=4938 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=0.4 Z=-1 SpecialJt=No GUID=24dbc305-694a-4a24-a791-118721bd0ad6

Joint=4939 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=0.5 Z=-1 SpecialJt=No GUID=e1f72d3a-5883-4c9f-aaba-60d9c6beadc8

Joint=4940 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=0.6 Z=-1 SpecialJt=No GUID=fd053e59-9604-4a20-8344-ae835a31cf7a

Joint=4941 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=0.7 Z=-1 SpecialJt=No GUID=3c282b41-5786-421d-9cc1-c027b5d83558

Joint=4942 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=0.8 Z=-1 SpecialJt=No GUID=6f3b90e2-3b5c-4f23-9397-6ad24c624add

Joint=4943 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=0.9 Z=-1 SpecialJt=No GUID=71ef9182-f8e2-44ae-a20a-cbda1e11ce39

Joint=4944 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=1 Z=-1 SpecialJt=No GUID=e78c40f9-7f22-4439-b597-dbe90f2dff2

Joint=4945 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=1.1 Z=-1 SpecialJt=No GUID=d7d53289-43a6-4a03-a668-c74d6b4fe0e5

Joint=4946 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=1.2 Z=-1 SpecialJt=No GUID=3983c5cc-46e4-423e-b308-126992eaa935

Joint=4947 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=1.3 Z=-1 SpecialJt=No GUID=c0f308bb-2360-43f2-8470-9d25ef0c51ad

Joint=4948 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=1.4 Z=-1 SpecialJt=No GUID=a9509f3f-401e-448e-b3ea-aea024c0a2bc

Joint=4949 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=1.5 Z=-1 SpecialJt=No GUID=e0c0e3f8-0a36-4a45-b03a-0d1967ed9562

Joint=4950 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=1.6 Z=-1 SpecialJt=No GUID=b3c7bfb9-b4b2-46dd-a34a-a431fef7d754

Joint=4951 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=1.7 Z=-1 SpecialJt=No GUID=ebfad5f7-3339-49fc-b542-e7ae9adca59e

Joint=4952 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=1.8 Z=-1 SpecialJt=No GUID=fb444a0f-4e48-4521-aab9-bd11fb557368

Joint=4953 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=1.9 Z=-1 SpecialJt=No GUID=f4575adc-2abb-4771-8d91-85eb42b37359

Joint=4954 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=2 Z=-1 SpecialJt=No GUID=84a54ab3-2035-4fd1-b090-9ac3c6fc2eaa

Joint=4955 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=2.1 Z=-1 SpecialJt=No GUID=ba2ad094-f839-481c-af59-c50323cb5815

Joint=4956 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=2.2 Z=-1 SpecialJt=No GUID=0dca3f13-bafa-4374-b80a-64f0d33e1d2e

Joint=4957 CoordSys=GLOBAL CoordType=Cartesian XorR=14.1 Y=2.3 Z=-1 SpecialJt=No GUID=53d3ac4e-781e-4bc4-80dc-9821d3185523

Joint=4958 CoordSys=GLOBAL CoordType=Cartesian XorR=14.2 Y=-2.3 Z=-1 SpecialJt=No GUID=65a65b93-d06a-4314-b8bd-e1cccc665536

Joint=4959 CoordSys=GLOBAL CoordType=Cartesian XorR=14.2 Y=-2.2 Z=-1 SpecialJt=No GUID=179d00e1-fabf-430b-a4c8-51918e89707d





|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=4987 CoordSys=GLOBAL CoordType=Cartesian XorR=14.2 Y=0.6 Z=-1 SpecialJt=No GUID=e9435ddc-fcdf-46a9-9d8c-875ad5989838  
 Joint=4988 CoordSys=GLOBAL CoordType=Cartesian XorR=14.2 Y=0.7 Z=-1 SpecialJt=No GUID=a8660f13-dee2-4971-b4a8-b824232f9c91  
 Joint=4989 CoordSys=GLOBAL CoordType=Cartesian XorR=14.2 Y=0.8 Z=-1 SpecialJt=No GUID=89496423-40d6-4e12-b607-6b87812dac02  
 Joint=4990 CoordSys=GLOBAL CoordType=Cartesian XorR=14.2 Y=0.9 Z=-1 SpecialJt=No GUID=492cbef2-e751-47d0-ac30-11571e6cce5c  
 Joint=4991 CoordSys=GLOBAL CoordType=Cartesian XorR=14.2 Y=1 Z=-1 SpecialJt=No GUID=29df8426-8354-47ac-a6c6-f1a82dc2ddd4  
 Joint=4992 CoordSys=GLOBAL CoordType=Cartesian XorR=14.2 Y=1.1 Z=-1 SpecialJt=No GUID=fe19ccf3-bb04-4d50-99b4-526bd53a211f  
 Joint=4993 CoordSys=GLOBAL CoordType=Cartesian XorR=14.2 Y=1.2 Z=-1 SpecialJt=No GUID=a226ed1e-3b38-49d0-b549-301edde49d40  
 Joint=4994 CoordSys=GLOBAL CoordType=Cartesian XorR=14.2 Y=1.3 Z=-1 SpecialJt=No GUID=514c69e1-031a-498d-9b72-ef8cb76fb092  
 Joint=4995 CoordSys=GLOBAL CoordType=Cartesian XorR=14.2 Y=1.4 Z=-1 SpecialJt=No GUID=add9bd20-d616-42e0-8ad9-96f2ff058d02  
 Joint=4996 CoordSys=GLOBAL CoordType=Cartesian XorR=14.2 Y=1.5 Z=-1 SpecialJt=No GUID=b87706cc-7a0c-4f80-b18e-87764695be1d  
 Joint=4997 CoordSys=GLOBAL CoordType=Cartesian XorR=14.2 Y=1.6 Z=-1 SpecialJt=No GUID=ff62a70d-4af6-461d-977b-166517abaca7  
 Joint=4998 CoordSys=GLOBAL CoordType=Cartesian XorR=14.2 Y=1.7 Z=-1 SpecialJt=No GUID=97eb5b64-b91a-4883-ac82-0a73c71a6798  
 Joint=4999 CoordSys=GLOBAL CoordType=Cartesian XorR=14.2 Y=1.8 Z=-1 SpecialJt=No GUID=6beb5efc-39a2-4565-8b26-6882ef83a0de  
 Joint=5000 CoordSys=GLOBAL CoordType=Cartesian XorR=14.2 Y=1.9 Z=-1 SpecialJt=No GUID=e02a9bed-b9e0-4e40-8d3a-8f9d807672d1  
 Joint=5001 CoordSys=GLOBAL CoordType=Cartesian XorR=14.2 Y=2 Z=-1 SpecialJt=No GUID=48bc9a39-2ba3-4ac9-b844-26792e0d1649  
 Joint=5002 CoordSys=GLOBAL CoordType=Cartesian XorR=14.2 Y=2.1 Z=-1 SpecialJt=No GUID=91fef4f9-82c0-499b-b804-12cda12fe3ce  
 Joint=5003 CoordSys=GLOBAL CoordType=Cartesian XorR=14.2 Y=2.2 Z=-1 SpecialJt=No GUID=f946446e-5e4e-4652-9b5b-0c742bdaded1  
 Joint=5004 CoordSys=GLOBAL CoordType=Cartesian XorR=14.2 Y=2.3 Z=-1 SpecialJt=No GUID=c02350ff-c8a5-4de9-a52e-7f91c42a1239  
 Joint=5005 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=-2.3 Z=-1 SpecialJt=No GUID=fd6b07be-bf40-4363-aad4-6f2a7e916554  
 Joint=5006 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=-2.2 Z=-1 SpecialJt=No GUID=96b61fb0-5f1c-4e56-9a75-19295bcc69b5  
 Joint=5007 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=-2.1 Z=-1 SpecialJt=No GUID=1c863ada-f1d8-4538-840d-fe56b7b5f862  
 Joint=5008 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=-2 Z=-1 SpecialJt=No GUID=a183b625-3cea-417e-8e6a-35807d8033e7  
 Joint=5009 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=-1.9 Z=-1 SpecialJt=No GUID=10062a7e-1772-45e0-87d0-0b0371c8dfdf  
 Joint=5010 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=-1.8 Z=-1 SpecialJt=No GUID=dfadab51-1625-4646-a577-34446480f632  
 Joint=5011 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=-1.7 Z=-1 SpecialJt=No GUID=e60b0e03-ff2f-43c1-bd9f-51234ad5baa3  
 Joint=5012 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=-1.6 Z=-1 SpecialJt=No GUID=8ac5f8f2-02d9-41f5-9b96-5b037ccdca4e  
 Joint=5013 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=-1.5 Z=-1 SpecialJt=No GUID=f4e130d8-ef4f-43c8-99a3-7f577708fe2e

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5014 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=-1.4 Z=-1 SpecialJt=No GUID=5c697f51-0ca4-4dc2-b3ea-909189230a86

Joint=5015 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=-1.3 Z=-1 SpecialJt=No GUID=7db53e10-edcc-4419-8e1d-f82118ea56f2

Joint=5016 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=-1.2 Z=-1 SpecialJt=No GUID=73804ae6-7a81-4011-8a5e-e61bb87f54de

Joint=5017 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=-1.1 Z=-1 SpecialJt=No GUID=da5dd099-daec-4708-adfd-639c1610d372

Joint=5018 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=-1 Z=-1 SpecialJt=No GUID=0866f279-6e07-4cbf-a8bd-7487ac53aba1

Joint=5019 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=-0.9 Z=-1 SpecialJt=No GUID=9deecaff-c0a8-42b8-a9b5-f463f9d230e1

Joint=5020 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=-0.8 Z=-1 SpecialJt=No GUID=ad150653-d2d8-487e-b843-047982f5d09f

Joint=5021 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=-0.7 Z=-1 SpecialJt=No GUID=a25be097-54dc-4945-a8c0-6bdb05cc2d31

Joint=5022 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=-0.6 Z=-1 SpecialJt=No GUID=830f93d3-11a5-4e84-838d-ff7fd8acdcef

Joint=5023 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=-0.5 Z=-1 SpecialJt=No GUID=c47c74a5-37f7-41a2-b470-0768f65ab7e2

Joint=5024 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=-0.4 Z=-1 SpecialJt=No GUID=7720397e-2fc1-432d-8c5f-741ed0b23662

Joint=5025 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=-0.3 Z=-1 SpecialJt=No GUID=1e895a20-d7b8-4bc2-ba0b-02c00af43142

Joint=5026 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=-0.2 Z=-1 SpecialJt=No GUID=1dcff79d-636b-4fcd-8691-26a97a2a122d

Joint=5027 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=-0.1 Z=-1 SpecialJt=No GUID=63de9790-55f6-4565-8e4b-cc3685442787

Joint=5028 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=0 Z=-1 SpecialJt=No GUID=ff49aa0a-952f-41a8-8371-0fe940ee12c8

Joint=5029 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=0.1 Z=-1 SpecialJt=No GUID=180c3d35-6a83-4951-b379-99b71adc7fd2

Joint=5030 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=0.2 Z=-1 SpecialJt=No GUID=7614a4d7-4839-4ceb-83b0-9eb6dd123710

Joint=5031 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=0.3 Z=-1 SpecialJt=No GUID=fbcfc94b-1d74-4757-ab5c-83323797621f

Joint=5032 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=0.4 Z=-1 SpecialJt=No GUID=928cf5c2-3362-465e-86e2-9c67bbfac1f3

Joint=5033 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=0.5 Z=-1 SpecialJt=No GUID=087762fd-55a7-494b-b6c9-60810ce47db9

Joint=5034 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=0.6 Z=-1 SpecialJt=No GUID=bd6e3a5f-4a54-4adc-af91-03af29951ae0

Joint=5035 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=0.7 Z=-1 SpecialJt=No GUID=1deb4cce-b9c0-4325-86f3-fac86325700d

Joint=5036 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=0.8 Z=-1 SpecialJt=No GUID=51004e26-e63f-48b0-8893-4e81e0dbf5d6

Joint=5037 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=0.9 Z=-1 SpecialJt=No GUID=19e3242a-0a09-4be9-abb7-1add78e5fe44

Joint=5038 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=1 Z=-1 SpecialJt=No GUID=612c200f-81c9-48aa-8b07-a83ac3065079

Joint=5039 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=1.1 Z=-1 SpecialJt=No GUID=e797d305-f5ba-4c49-bd56-171ad614e836

Joint=5040 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=1.2 Z=-1 SpecialJt=No GUID=58ae492d-bc0e-4d09-8c39-b3ea5c186037

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5041 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=1.3 Z=-1 SpecialJt=No GUID=24036caf-b3a7-411d-86e3-c4c792743879

Joint=5042 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=1.4 Z=-1 SpecialJt=No GUID=110994da-a784-4178-865e-d8e2c2daf083

Joint=5043 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=1.5 Z=-1 SpecialJt=No GUID=119c60f9-5095-4ea1-9e24-b2079d6864bd

Joint=5044 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=1.6 Z=-1 SpecialJt=No GUID=4444f8c4-4ece-4269-b6b1-df62bc305c31

Joint=5045 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=1.7 Z=-1 SpecialJt=No GUID=8dff6b06-265c-4c5e-9793-8c69879b85eb

Joint=5046 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=1.8 Z=-1 SpecialJt=No GUID=2733e997-51e5-43ee-81a9-1d9f65e3e387

Joint=5047 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=1.9 Z=-1 SpecialJt=No GUID=c89333b4-4eba-4ddf-858b-688a13f4747b

Joint=5048 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=2 Z=-1 SpecialJt=No GUID=21cd6ca4-ff5b-4a7b-80d5-c3b125de19ed

Joint=5049 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=2.1 Z=-1 SpecialJt=No GUID=a00a5181-20fb-4c76-b09f-ae322f43f83

Joint=5050 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=2.2 Z=-1 SpecialJt=No GUID=a15bef05-5a06-418a-a0d6-a9e609015fb2

Joint=5051 CoordSys=GLOBAL CoordType=Cartesian XorR=14.3 Y=2.3 Z=-1 SpecialJt=No GUID=ef2228b5-765e-45f2-b0f4-7d6efb4d84b2

Joint=5052 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=-2.3 Z=-1 SpecialJt=No GUID=3cadf64e-8adb-4c2c-b2ec-ee862f5203c0

Joint=5053 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=-2.2 Z=-1 SpecialJt=No GUID=56351136-9d88-4319-9bb4-a31aa0b7ec38

Joint=5054 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=-2.1 Z=-1 SpecialJt=No GUID=3b8a9063-2c27-44d0-a446-47f2a3c80bc5

Joint=5055 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=-2 Z=-1 SpecialJt=No GUID=5488dc44-ff9c-4d42-9ae7-f89cf686bf86

Joint=5056 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=-1.9 Z=-1 SpecialJt=No GUID=29166a60-ad28-43f7-a09a-294c5b50aeb9

Joint=5057 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=-1.8 Z=-1 SpecialJt=No GUID=8e768486-64bf-4425-993c-49e105eb59aa

Joint=5058 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=-1.7 Z=-1 SpecialJt=No GUID=5b57ec87-29a7-4b50-af3a-292814d776eb

Joint=5059 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=-1.6 Z=-1 SpecialJt=No GUID=4ed79b80-5ca4-4297-a762-dcc713d9122d

Joint=5060 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=-1.5 Z=-1 SpecialJt=No GUID=562951b9-8012-47cd-8b36-a7ba9eba046f

Joint=5061 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=-1.4 Z=-1 SpecialJt=No GUID=63cf7de2-75a8-4fcc-aaf1-bc2cfbc4d70

Joint=5062 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=-1.3 Z=-1 SpecialJt=No GUID=3caadb61-24a7-4b63-b94c-93c4bb3eaf13

Joint=5063 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=-1.2 Z=-1 SpecialJt=No GUID=cbf5aea7-9796-473a-9258-d411702d3feb

Joint=5064 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=-1.1 Z=-1 SpecialJt=No GUID=8f66632b-d76e-4844-9b9c-d3f5fb82fd6f

Joint=5065 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=-1 Z=-1 SpecialJt=No GUID=61e05644-8381-459e-9998-03b594878259

Joint=5066 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=-0.9 Z=-1 SpecialJt=No GUID=02426ea3-ea32-4525-b12a-2645267006b7

Joint=5067 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=-0.8 Z=-1 SpecialJt=No GUID=6dc6e83e-55d9-4574-8f64-f61bd67da294



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5068 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=-0.7 Z=-1 SpecialJt=No  
GUID=d323b296-58a0-4027-b649-4a693336216f

Joint=5069 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=-0.6 Z=-1 SpecialJt=No GUID=7cd20f1b-5dee-4b4a-916f-bc2c379a3879

Joint=5070 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=-0.5 Z=-1 SpecialJt=No  
GUID=65c8c679-65af-4acc-9b2e-7c64bb5d16a4

Joint=5071 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=-0.4 Z=-1 SpecialJt=No  
GUID=4b9c5b25-6776-4308-bf60-f4f6c27c40ad

Joint=5072 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=-0.3 Z=-1 SpecialJt=No  
GUID=f6054307-f68b-40ed-8f61-7914c15aa314

Joint=5073 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=-0.2 Z=-1 SpecialJt=No  
GUID=0b8619d4-743a-42c7-84c3-097d2a303530

Joint=5074 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=-0.1 Z=-1 SpecialJt=No  
GUID=85e8f5e7-d4bf-483f-88e1-943ee9cbdf20

Joint=5075 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=0 Z=-1 SpecialJt=No GUID=bf82a90b-bb0e-408d-8361-035cdf9c909f

Joint=5076 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=0.1 Z=-1 SpecialJt=No GUID=8c514757-a67e-46ff-b706-02d9a73e81b2

Joint=5077 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=0.2 Z=-1 SpecialJt=No GUID=a1933f4e-5e41-479b-ac04-179e12e62df7

Joint=5078 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=0.3 Z=-1 SpecialJt=No GUID=11fb96f8-377f-44cd-97ee-6da9c414acc6

Joint=5079 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=0.4 Z=-1 SpecialJt=No GUID=1f6f000d-9cd5-425c-8012-75306c73b0ad

Joint=5080 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=0.5 Z=-1 SpecialJt=No GUID=8ed71b16-3d6e-40b4-844b-2082814509bd

Joint=5081 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=0.6 Z=-1 SpecialJt=No GUID=79f91b08-96d3-4c18-bf02-c75beda5981c

Joint=5082 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=0.7 Z=-1 SpecialJt=No GUID=7601a3a8-6585-46aa-b88d-c5ecd0c3d4b2

Joint=5083 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=0.8 Z=-1 SpecialJt=No GUID=b087f698-778b-4897-8db8-32c195390b12

Joint=5084 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=0.9 Z=-1 SpecialJt=No GUID=f7ecc5af-e30a-4730-bbd8-9a1ecb5ef97b

Joint=5085 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=1 Z=-1 SpecialJt=No GUID=f5e4a268-10a1-4700-88d5-7629fe7fa162

Joint=5086 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=1.1 Z=-1 SpecialJt=No GUID=dc904f-4ec3-40a4-b9fe-e09b202f7c09

Joint=5087 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=1.2 Z=-1 SpecialJt=No GUID=6e2058e9-6efc-4c4b-ade9-2a0c3642bc2d

Joint=5088 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=1.3 Z=-1 SpecialJt=No GUID=007e12cc-fd8b-4472-8c32-3917298cb80b

Joint=5089 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=1.4 Z=-1 SpecialJt=No GUID=dc03cbe7-74c5-402c-8701-65d30e993f8e

Joint=5090 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=1.5 Z=-1 SpecialJt=No GUID=ff96227f-f8f6-4e32-b7d3-2902bf7f8f61

Joint=5091 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=1.6 Z=-1 SpecialJt=No GUID=fe136bf9-83a8-45bc-aa82-7b4ae09dd481

Joint=5092 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=1.7 Z=-1 SpecialJt=No GUID=a60b36f7-ebe1-482e-b596-b9062a97a3e5

Joint=5093 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=1.8 Z=-1 SpecialJt=No GUID=34304dda-e90f-4278-9ef3-6735ff2f2329

Joint=5094 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=1.9 Z=-1 SpecialJt=No GUID=241aa270-eb9c-407b-a066-1be9917485fd

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5095 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=2 Z=-1 SpecialJt=No GUID=a4d66248-afa1-445b-bac9-c49cf6c5d1bd

Joint=5096 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=2.1 Z=-1 SpecialJt=No GUID=c1528c10-fa88-46ef-bc51-8136491acef2

Joint=5097 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=2.2 Z=-1 SpecialJt=No GUID=d42d8170-7c86-427b-8284-d2d6ba839af7

Joint=5098 CoordSys=GLOBAL CoordType=Cartesian XorR=14.4 Y=2.3 Z=-1 SpecialJt=No GUID=adb292a9-a44e-4d62-ac15-de6896e315c9

Joint=5099 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=-2.3 Z=-1 SpecialJt=No GUID=a257bbba-42ae-431f-bcb4-03a7bf7dd2f9

Joint=5100 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=-2.2 Z=-1 SpecialJt=No GUID=e5cf4ff6-f445-4bc4-91d0-ac9cd837d195

Joint=5101 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=-2.1 Z=-1 SpecialJt=No GUID=dae95f09-cc04-406e-8ec2-4ecfb4dd7ae5

Joint=5102 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=-2 Z=-1 SpecialJt=No GUID=fa2a82eb-d91c-424a-ac1a-8c4d0b488b3c

Joint=5103 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=-1.9 Z=-1 SpecialJt=No GUID=cdd407b5-6a70-426a-8ecd-867df6f9b0da

Joint=5104 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=-1.8 Z=-1 SpecialJt=No GUID=7191bb8c-42ab-4b8d-9c13-bd7950a1041a

Joint=5105 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=-1.7 Z=-1 SpecialJt=No GUID=eb0098c7-eb72-4ac6-9833-3711845d2f05

Joint=5106 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=-1.6 Z=-1 SpecialJt=No GUID=4fc54ef9-55c0-4652-a032-d80e6f035f18

Joint=5107 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=-1.5 Z=-1 SpecialJt=No GUID=77e92376-0570-4cd3-a512-1430a64a98ec

Joint=5108 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=-1.4 Z=-1 SpecialJt=No GUID=bdca9ae-1e82-4e50-a762-ef67f1771805

Joint=5109 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=-1.3 Z=-1 SpecialJt=No GUID=4b0388e8-5d91-4f93-91d0-5be582f7af08

Joint=5110 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=-1.2 Z=-1 SpecialJt=No GUID=b1c3dd45-3096-4659-9940-7d22ed116300

Joint=5111 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=-1.1 Z=-1 SpecialJt=No GUID=e91bbfb7-f664-4cef-b3cd-1414269286d0

Joint=5112 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=-1 Z=-1 SpecialJt=No GUID=2ad9e778-73f7-42d4-9be8-f294b83f0889

Joint=5113 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=-0.9 Z=-1 SpecialJt=No GUID=1c1f4390-dd6a-44b0-ae51-0a60603abec4

Joint=5114 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=-0.8 Z=-1 SpecialJt=No GUID=e0e2c740-c54b-4a8d-b3d5-2b9ed1b6601b

Joint=5115 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=-0.7 Z=-1 SpecialJt=No GUID=3668736c-4353-490c-ba0c-185342fc049d

Joint=5116 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=-0.6 Z=-1 SpecialJt=No GUID=46feefcd-928f-408a-916e-5114e913544c

Joint=5117 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=-0.5 Z=-1 SpecialJt=No GUID=fbb5076b-a396-4af6-8f7d-9df14784b880

Joint=5118 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=-0.4 Z=-1 SpecialJt=No GUID=d47e63c9-7107-434a-8473-45f1b89de500

Joint=5119 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=-0.3 Z=-1 SpecialJt=No GUID=510c84ae-6008-4d15-a616-570b09b63586

Joint=5120 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=-0.2 Z=-1 SpecialJt=No GUID=a63cb766-c4ea-4fef-b3e8-8995a1a77bdf

Joint=5121 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=-0.1 Z=-1 SpecialJt=No GUID=b9967dbe-9cf2-4aa3-881d-9e545a2161bc

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5122 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=1.11022302462516E-16 Z=-1 SpecialJt=No GUID=5d96e25b-a5c7-4b43-9024-1dc9fc58eaf8

Joint=5123 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=0.1 Z=-1 SpecialJt=No GUID=85c5a739-3e13-4939-9ca8-2c2dbeec59bc

Joint=5124 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=0.2 Z=-1 SpecialJt=No GUID=bcd44717-0856-4002-a8b1-1a9a89514282

Joint=5125 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=0.3 Z=-1 SpecialJt=No GUID=a6733e45-5554-4210-aead-ba35cdd4416e

Joint=5126 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=0.4 Z=-1 SpecialJt=No GUID=c2eb7ae5-ad1d-415f-b8e4-4545d200e4b2

Joint=5127 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=0.5 Z=-1 SpecialJt=No GUID=97c6c920-0ee9-4c0e-a43c-3b37c9be67a4

Joint=5128 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=0.6 Z=-1 SpecialJt=No GUID=e99141db-a696-489a-9cb9-d20f606a1cad

Joint=5129 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=0.7 Z=-1 SpecialJt=No GUID=e26a59dc-b425-44f7-b9b5-bd1cd4135dd3

Joint=5130 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=0.8 Z=-1 SpecialJt=No GUID=429c3fa6-139f-47de-93f8-8c0e3221e106

Joint=5131 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=0.9 Z=-1 SpecialJt=No GUID=5e67308b-e75c-4db9-bf6a-9f469c6d3670

Joint=5132 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=1 Z=-1 SpecialJt=No GUID=316bf34e-cdb5-4b3d-96ed-1a17175b3319

Joint=5133 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=1.1 Z=-1 SpecialJt=No GUID=ff97bdaf-a022-431f-97fd-6c58f8c59884

Joint=5134 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=1.2 Z=-1 SpecialJt=No GUID=cfc9e9bd-af55-4a5c-abb-ba184802e40e

Joint=5135 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=1.3 Z=-1 SpecialJt=No GUID=f6c41c56-9922-4f6d-b770-ad5d21060344

Joint=5136 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=1.4 Z=-1 SpecialJt=No GUID=ead1e5fc-84b9-4211-a3be-fa1586d03b28

Joint=5137 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=1.5 Z=-1 SpecialJt=No GUID=ca9c5dc9-073b-40bb-b6b3-5372c7127b4c

Joint=5138 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=1.6 Z=-1 SpecialJt=No GUID=e020472f-456a-4c7a-950a-1988bdebd9ce

Joint=5139 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=1.7 Z=-1 SpecialJt=No GUID=451158f7-53b3-4efe-b69e-b4baa9ff67e9

Joint=5140 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=1.8 Z=-1 SpecialJt=No GUID=941f6a68-8223-4032-96e8-143b87bcccc9

Joint=5141 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=1.9 Z=-1 SpecialJt=No GUID=4e45138a-6180-46b0-8443-52c2468f13c1

Joint=5142 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=2 Z=-1 SpecialJt=No GUID=666a397b-e6cf-4daa-9ae1-d83c03bd748a

Joint=5143 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=2.1 Z=-1 SpecialJt=No GUID=1f462d43-6b0c-4827-91c3-e01abaa94e48

Joint=5144 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=2.2 Z=-1 SpecialJt=No GUID=117e5747-99a3-4df6-b779-1be0dee2e4a9

Joint=5145 CoordSys=GLOBAL CoordType=Cartesian XorR=14.5 Y=2.3 Z=-1 SpecialJt=No GUID=4b760312-572a-4c68-87c8-4e9d0606f767

Joint=5146 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=-2.3 Z=-1 SpecialJt=No GUID=dab932b7-130b-4020-8e90-543608a274d7

Joint=5147 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=-2.2 Z=-1 SpecialJt=No GUID=af3658a9-d582-48f0-8e66-d98c9edd8556

Joint=5148 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=-2.1 Z=-1 SpecialJt=No GUID=a98afd39-d9c7-4354-9510-426bd6373d41

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5149 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=-2 Z=-1 SpecialJt=No GUID=0f9d9fb4-76d1-44a8-9a18-6d9c3f73c19d

Joint=5150 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=-1.9 Z=-1 SpecialJt=No GUID=4a6bed44-b03d-4d79-8c58-a663db0b06f5

Joint=5151 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=-1.8 Z=-1 SpecialJt=No GUID=7906c2fb-9fb4-4f18-8e74-aa5650985b6a

Joint=5152 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=-1.7 Z=-1 SpecialJt=No GUID=46040152-ce74-4497-8aa0-5b7ec8a9738f

Joint=5153 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=-1.6 Z=-1 SpecialJt=No GUID=2c37cd7b-74ac-400a-ba04-edb70ae9bc38

Joint=5154 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=-1.5 Z=-1 SpecialJt=No GUID=6a22a870-122b-4fd0-87ca-74a91dac3b78

Joint=5155 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=-1.4 Z=-1 SpecialJt=No GUID=66a84cd5-811c-4eb5-9a81-09521fd5a6ba

Joint=5156 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=-1.3 Z=-1 SpecialJt=No GUID=1ea2bb38-59fc-4d59-a301-4580e4dfe492

Joint=5157 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=-1.2 Z=-1 SpecialJt=No GUID=e255e082-6fc0-487d-8d9b-b22af1dec157

Joint=5158 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=-1.1 Z=-1 SpecialJt=No GUID=f3234825-b8c4-4c71-9706-b478a07e732e

Joint=5159 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=-1 Z=-1 SpecialJt=No GUID=2ddc9883-f4ad-4d32-97f1-9aff1db63f22

Joint=5160 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=-0.9 Z=-1 SpecialJt=No GUID=7afa70da-2faf-45fe-9ead-b44298d3c4ba

Joint=5161 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=-0.8 Z=-1 SpecialJt=No GUID=159a68db-bdbc-4265-9d4f-cb7d4770ce5b

Joint=5162 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=-0.7 Z=-1 SpecialJt=No GUID=57882df0-bb66-46a3-91c0-e51f68e0c698

Joint=5163 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=-0.6 Z=-1 SpecialJt=No GUID=c3dabb254-51bf-4053-bf1f-2b9b427f3865

Joint=5164 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=-0.5 Z=-1 SpecialJt=No GUID=8604392d-2365-4af4-ba50-f08b036b6bee

Joint=5165 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=-0.4 Z=-1 SpecialJt=No GUID=1f154079-991c-4e9f-8ee5-4a8001916d70

Joint=5166 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=-0.3 Z=-1 SpecialJt=No GUID=8b410cdb-b809-4ec0-a4bc-d0ea12cd6617

Joint=5167 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=-0.2 Z=-1 SpecialJt=No GUID=0a00e588-f0b8-4e5b-8187-223bafc1d36f

Joint=5168 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=-0.09999999999999999 Z=-1 SpecialJt=No GUID=a8d3113f-8c79-4b94-a016-2ce62b996a8b

Joint=5169 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=-1.11022302462516E-16 Z=-1 SpecialJt=No GUID=1da81486-7b9d-47fa-a59d-6db45338e83d

Joint=5170 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=0.09999999999999999 Z=-1 SpecialJt=No GUID=9aeb4e4e-4e44-4625-9c94-b928633b0aeb

Joint=5171 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=0.2 Z=-1 SpecialJt=No GUID=9ee0a6a3-a6f3-4cb2-9877-b388fe4ec3c8

Joint=5172 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=0.3 Z=-1 SpecialJt=No GUID=f993bfae-7378-4590-b9c3-1c1705657f39

Joint=5173 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=0.4 Z=-1 SpecialJt=No GUID=d2e7573d-6847-4cce-847d-e5a89a840e23

Joint=5174 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=0.5 Z=-1 SpecialJt=No GUID=7bb836a0-ef5c-4c25-966b-d0268d8fd726

Joint=5175 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=0.6 Z=-1 SpecialJt=No GUID=7099e5ed-2f11-477f-befd-5b0d59394d06



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5176 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=0.7 Z=-1 SpecialJt=No GUID=4c0315d6-c293-4853-b90a-d31733a0b1d7

Joint=5177 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=0.8 Z=-1 SpecialJt=No GUID=b5e7f94b-59dc-4636-aa43-8d2b07d6d967

Joint=5178 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=0.9 Z=-1 SpecialJt=No GUID=3fb3ffa9-7985-47c4-b017-e6253d493b0d

Joint=5179 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=1 Z=-1 SpecialJt=No GUID=9fad39b5-90ab-4e23-9509-8fd284630d5d

Joint=5180 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=1.1 Z=-1 SpecialJt=No GUID=879725ba-06f1-4236-8665-85a28037f971

Joint=5181 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=1.2 Z=-1 SpecialJt=No GUID=43d22e70-ca76-4871-809f-fd70553c882d

Joint=5182 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=1.3 Z=-1 SpecialJt=No GUID=b28ab471-9fc2-4d1f-8c20-65012231b7d4

Joint=5183 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=1.4 Z=-1 SpecialJt=No GUID=2a4773f3-9239-4a0b-85b1-7af30b826e31

Joint=5184 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=1.5 Z=-1 SpecialJt=No GUID=38725b21-cdd5-4696-a91c-b5cb8ac135ca

Joint=5185 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=1.6 Z=-1 SpecialJt=No GUID=ddeb74ca-c49a-4b61-b31f-5bc6aa6831e6

Joint=5186 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=1.7 Z=-1 SpecialJt=No GUID=ba828278-71f4-4410-9607-fb08aed2eda2

Joint=5187 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=1.8 Z=-1 SpecialJt=No GUID=64e1c300-539e-465e-af14-8bf8ec2d025e

Joint=5188 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=1.9 Z=-1 SpecialJt=No GUID=50e31532-5d63-405e-8de7-3ae21fd5a3eb

Joint=5189 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=2 Z=-1 SpecialJt=No GUID=f4df3466-775e-41b3-a3ae-4153e4db39c8

Joint=5190 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=2.1 Z=-1 SpecialJt=No GUID=d25b5332-003b-4ea6-a903-df65808e577c

Joint=5191 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=2.2 Z=-1 SpecialJt=No GUID=15a13d6e-a264-480f-a519-a96727d65ed8

Joint=5192 CoordSys=GLOBAL CoordType=Cartesian XorR=14.6 Y=2.3 Z=-1 SpecialJt=No GUID=3a73aa60-ddf3-4350-a47f-2f9254ba9b24

Joint=5193 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=-2.3 Z=-1 SpecialJt=No GUID=c15bc4f3-8723-48a5-ab31-b6f133ae4e4e

Joint=5194 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=-2.2 Z=-1 SpecialJt=No GUID=072d664d-f151-4c8b-ac81-13402a2472b7

Joint=5195 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=-2.1 Z=-1 SpecialJt=No GUID=583efbe7-8c05-498c-a65c-18dccc5d8499f

Joint=5196 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=-2 Z=-1 SpecialJt=No GUID=4f9e5de9-356e-4fd9-a56f-29131ad349f7

Joint=5197 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=-1.9 Z=-1 SpecialJt=No GUID=b9d564c1-adbe-4c45-8012-3c70b795fcd1

Joint=5198 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=-1.8 Z=-1 SpecialJt=No GUID=17631bef-c948-4b2c-97ae-9119276d3a7b

Joint=5199 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=-1.7 Z=-1 SpecialJt=No GUID=caef886-2684-43bc-992f-87c6a07a3ea0

Joint=5200 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=-1.6 Z=-1 SpecialJt=No GUID=7066edb5-ed40-4709-adfd-867b8f986720

Joint=5201 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=-1.5 Z=-1 SpecialJt=No GUID=07744ada-9da3-4998-a7ec-5f04be27a344

Joint=5202 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=-1.4 Z=-1 SpecialJt=No GUID=dd254633-a9f8-456f-a9e0-bd10c50c0f4a

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5203 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=-1.3 Z=-1 SpecialJt=No  
GUID=4fabeddb-4663-4e90-b6ff-20cd077ae9d4

Joint=5204 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=-1.2 Z=-1 SpecialJt=No  
GUID=3057f877-c366-4b00-8d0e-64067511ed8e

Joint=5205 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=-1.1 Z=-1 SpecialJt=No  
GUID=b7153086-4a48-4f41-8a61-984e19628fa2

Joint=5206 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=-1 Z=-1 SpecialJt=No GUID=a2dce2d8-  
dbb4-418d-ab2e-74896ad932ff

Joint=5207 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=-0.9 Z=-1 SpecialJt=No  
GUID=84564924-d448-4226-8795-278d4bea4a5a

Joint=5208 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=-0.8 Z=-1 SpecialJt=No GUID=cfca9e1b-  
6601-48ed-85f1-6b3e24a86758

Joint=5209 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=-0.7 Z=-1 SpecialJt=No  
GUID=5208d3f2-6e1d-4f5e-adee-004d0edcebc6

Joint=5210 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=-0.6 Z=-1 SpecialJt=No  
GUID=637ea7da-c0b8-4d19-967d-990dab6d6dfb

Joint=5211 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=-0.5 Z=-1 SpecialJt=No  
GUID=91c94e86-7ef9-42c6-9783-df9fe16e3005

Joint=5212 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=-0.4 Z=-1 SpecialJt=No  
GUID=0f17382b-9540-41b5-8bbc-0bd4d8399c4d

Joint=5213 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=-0.3 Z=-1 SpecialJt=No GUID=09f1e8cc-  
7b99-4448-adc2-3cf488052246

Joint=5214 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=-0.2 Z=-1 SpecialJt=No  
GUID=dec52ac7-6bc7-4336-addf-54ced37e1e43

Joint=5215 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=-0.09999999999999999 Z=-1  
SpecialJt=No GUID=d8bb47e3-6a9c-4e66-ab20-6d0dcc09f68f

Joint=5216 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=0 Z=-1 SpecialJt=No GUID=a14ec7d3-  
3bf5-4745-a5b6-bfcae4c84f24

Joint=5217 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=0.1 Z=-1 SpecialJt=No GUID=fce10948-  
0804-4ec1-a80b-399e70420471

Joint=5218 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=0.2 Z=-1 SpecialJt=No GUID=85ca4c45-  
8226-4028-a062-9d89109b03d6

Joint=5219 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=0.3 Z=-1 SpecialJt=No GUID=4437d9cd-  
222c-4927-9189-be796f5e8f41

Joint=5220 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=0.4 Z=-1 SpecialJt=No GUID=332e2dd5-  
299d-438a-b6ee-c35e1ab5414d

Joint=5221 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=0.5 Z=-1 SpecialJt=No GUID=0ba7382d-  
caeb-4dce-a1d1-a89d5a99cd7c

Joint=5222 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=0.6 Z=-1 SpecialJt=No GUID=e660e66a-  
320b-4a99-bb28-4beb50ee4bf2

Joint=5223 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=0.7 Z=-1 SpecialJt=No GUID=a34a4f98-  
a249-42c7-a3ee-51b491e2bc5c

Joint=5224 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=0.8 Z=-1 SpecialJt=No GUID=5eabd08f-  
343a-4d5d-aa81-d1d00b1b4ad3

Joint=5225 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=0.9 Z=-1 SpecialJt=No GUID=9507cc52-  
09e4-4b3b-b41e-a6b0ce6ad4be

Joint=5226 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=1 Z=-1 SpecialJt=No GUID=21642a9f-  
7adc-416c-ab9a-d8dee173f64c

Joint=5227 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=1.1 Z=-1 SpecialJt=No GUID=9260bd4d-  
d494-41c5-b061-d8fb8b161f09

Joint=5228 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=1.2 Z=-1 SpecialJt=No GUID=0e3b7b63-  
8c27-49da-9713-59f90eca271e

Joint=5229 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=1.3 Z=-1 SpecialJt=No GUID=1fa21292-  
4420-45fc-9fcc-295b22f06e6c

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5230 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=1.4 Z=-1 SpecialJt=No GUID=907eb3f6-48ca-4ce3-8697-d9fd6460ae2f

Joint=5231 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=1.5 Z=-1 SpecialJt=No GUID=054a72b9-cce3-4b3a-ac03-99ba00392f5b

Joint=5232 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=1.6 Z=-1 SpecialJt=No GUID=a538c7c1-fad9-4082-894f-266a89ae023f

Joint=5233 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=1.7 Z=-1 SpecialJt=No GUID=01f99609-bbaa-489b-bb8e-228d3089c9ae

Joint=5234 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=1.8 Z=-1 SpecialJt=No GUID=be192dd6-c6f6-4b9a-9a3e-94b8801cd9f3

Joint=5235 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=1.9 Z=-1 SpecialJt=No GUID=217c7156-2338-4b1f-b3a0-e41e0117f783

Joint=5236 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=2 Z=-1 SpecialJt=No GUID=bfd253e1-e002-4911-b335-05f3eb30ad09

Joint=5237 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=2.1 Z=-1 SpecialJt=No GUID=4729e931-780a-4088-ba23-93904076a3b4

Joint=5238 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=2.2 Z=-1 SpecialJt=No GUID=392f5e35-28c1-4d4c-b20d-46a3477e8bf2

Joint=5239 CoordSys=GLOBAL CoordType=Cartesian XorR=14.7 Y=2.3 Z=-1 SpecialJt=No GUID=72e3276b-14ee-4d1c-ab2b-df84e2b3df35

Joint=5240 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=-2.3 Z=-1 SpecialJt=No GUID=7c278484-ed32-489e-9b02-d9288fc248a0

Joint=5241 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=-2.2 Z=-1 SpecialJt=No GUID=070277df-111d-4af5-9076-2909bcc8aa3b

Joint=5242 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=-2.1 Z=-1 SpecialJt=No GUID=b29524c0-d5b8-4fc2-8ade-98c02ae6598e

Joint=5243 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=-2 Z=-1 SpecialJt=No GUID=df7f5ba0-0a1f-45cc-bf33-d2852737bdc6

Joint=5244 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=-1.9 Z=-1 SpecialJt=No GUID=99550dd9-c33b-47f4-a85a-12addc36db1e

Joint=5245 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=-1.8 Z=-1 SpecialJt=No GUID=5e7b9a03-5b47-4e8a-a7d4-fd9808270d53

Joint=5246 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=-1.7 Z=-1 SpecialJt=No GUID=e913284d-3b55-4e9a-9b36-f4b0df68d772

Joint=5247 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=-1.6 Z=-1 SpecialJt=No GUID=b60c2c15-b659-472b-b758-d6612c4398e2

Joint=5248 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=-1.5 Z=-1 SpecialJt=No GUID=51f8c785-c82a-41bc-82ca-eb076a12910f

Joint=5249 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=-1.4 Z=-1 SpecialJt=No GUID=ff7374bd-4315-4788-9fb3-c086097fa10f

Joint=5250 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=-1.3 Z=-1 SpecialJt=No GUID=f32b5619-9158-49c4-ac0d-18a668265685

Joint=5251 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=-1.2 Z=-1 SpecialJt=No GUID=e91c883c-51e9-4341-97bb-3e692db246b9

Joint=5252 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=-1.1 Z=-1 SpecialJt=No GUID=71cb64f8-ac35-4ee1-ace6-c9566787d15e

Joint=5253 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=-1 Z=-1 SpecialJt=No GUID=4d2f08fb-1291-4059-b9fd-12c71b341127

Joint=5254 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=-0.9 Z=-1 SpecialJt=No GUID=f2eb08c1-6ded-4e30-b732-99b689b08063

Joint=5255 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=-0.8 Z=-1 SpecialJt=No GUID=86e4e2c1-10d0-47d2-b858-baba1358236b

Joint=5256 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=-0.7 Z=-1 SpecialJt=No GUID=eddd395d-3c20-44bd-8ade-a960ac8042ab

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|                                           |                 |                     |           |        |      |              |                                           |
|-------------------------------------------|-----------------|---------------------|-----------|--------|------|--------------|-------------------------------------------|
| Joint=5257                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.8 | Y=-0.6 | Z=-1 | SpecialJt=No |                                           |
| GUID=695167c3-8384-4a6a-a568-c04ab7009bd2 |                 |                     |           |        |      |              |                                           |
| Joint=5258                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.8 | Y=-0.5 | Z=-1 | SpecialJt=No |                                           |
| GUID=0ab916e3-0614-4843-af96-c4db87b481c5 |                 |                     |           |        |      |              |                                           |
| Joint=5259                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.8 | Y=-0.4 | Z=-1 | SpecialJt=No |                                           |
| GUID=437d89fb-d5ef-4f06-aefc-4805a72238f8 |                 |                     |           |        |      |              |                                           |
| Joint=5260                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.8 | Y=-0.3 | Z=-1 | SpecialJt=No |                                           |
| GUID=a744ea92-de6a-4766-8f15-3a6ad3a70339 |                 |                     |           |        |      |              |                                           |
| Joint=5261                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.8 | Y=-0.2 | Z=-1 | SpecialJt=No |                                           |
| GUID=c720924c-fb15-4e70-9aa0-a7a4883f9279 |                 |                     |           |        |      |              |                                           |
| Joint=5262                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.8 | Y=-0.1 | Z=-1 | SpecialJt=No |                                           |
| GUID=84888fb5-4930-4f64-82ef-fefdf5abdeb  |                 |                     |           |        |      |              |                                           |
| Joint=5263                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.8 | Y=0.1  | Z=-1 | SpecialJt=No | GUID=ba0dfd8c-1974-48b1-b099-0cb196ae8f1c |
| Joint=5264                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.8 | Y=0.2  | Z=-1 | SpecialJt=No | GUID=d2885142-c9e4-486f-b74b-815459a96b4d |
| Joint=5265                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.8 | Y=0.3  | Z=-1 | SpecialJt=No | GUID=8027bbf9-be2a-4c34-9f99-ef9a0f2f194a |
| Joint=5266                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.8 | Y=0.4  | Z=-1 | SpecialJt=No | GUID=5e61a196-4355-4cb5-b9e9-500a0b1ee982 |
| Joint=5267                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.8 | Y=0.5  | Z=-1 | SpecialJt=No | GUID=97b777a4-f0a3-4f1f-9f7b-22bf4c921c41 |
| Joint=5268                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.8 | Y=0.6  | Z=-1 | SpecialJt=No | GUID=2299ac9c-e47f-438c-bdb9-8788a07993e3 |
| Joint=5269                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.8 | Y=0.7  | Z=-1 | SpecialJt=No | GUID=2aa6107b-2a55-46ec-a85f-429402d03018 |
| Joint=5270                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.8 | Y=0.8  | Z=-1 | SpecialJt=No | GUID=b9d40e83-a33e-4f94-8b21-b9b815e65e9f |
| Joint=5271                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.8 | Y=0.9  | Z=-1 | SpecialJt=No | GUID=89b41a3c-14ca-4e34-b532-a5989ea97270 |
| Joint=5272                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.8 | Y=1    | Z=-1 | SpecialJt=No | GUID=bb29f52f-53d5-466f-8a82-8f2a54cf52c7 |
| Joint=5273                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.8 | Y=1.1  | Z=-1 | SpecialJt=No | GUID=b35f5fff-1702-4578-8be4-e4b8dd62ae4b |
| Joint=5274                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.8 | Y=1.2  | Z=-1 | SpecialJt=No | GUID=71de8b64-47e6-405d-968a-18ec5f917cdd |
| Joint=5275                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.8 | Y=1.3  | Z=-1 | SpecialJt=No | GUID=c0f33055-175a-4d06-939e-62f26a7015e2 |
| Joint=5276                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.8 | Y=1.4  | Z=-1 | SpecialJt=No | GUID=0446d65c-fe3e-4221-8c95-75b73598b582 |
| Joint=5277                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.8 | Y=1.5  | Z=-1 | SpecialJt=No | GUID=e17ca832-5849-4032-883f-e5044d758474 |
| Joint=5278                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.8 | Y=1.6  | Z=-1 | SpecialJt=No | GUID=468aee7f-d3ef-4bd1-809a-8ffa38d5533a |
| Joint=5279                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.8 | Y=1.7  | Z=-1 | SpecialJt=No | GUID=d5069f85-e474-4108-8ca1-a7814ad4248e |
| Joint=5280                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.8 | Y=1.8  | Z=-1 | SpecialJt=No | GUID=8fdf3ca4-1685-48b9-879f-4709c96d4915 |
| Joint=5281                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.8 | Y=1.9  | Z=-1 | SpecialJt=No | GUID=bb80360f-9288-4570-a5d9-b285201e37f5 |
| Joint=5282                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.8 | Y=2    | Z=-1 | SpecialJt=No | GUID=3e868a19-9fbd-496e-ac0b-a3c75f5a1c31 |
| Joint=5283                                | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.8 | Y=2.1  | Z=-1 | SpecialJt=No | GUID=2bfb77e2-d5e6-4ac6-a78c-b9f70e6a5f58 |





|            |                 |                     |           |                       |      |              |                                           |
|------------|-----------------|---------------------|-----------|-----------------------|------|--------------|-------------------------------------------|
| Joint=5284 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.8 | Y=2.2                 | Z=-1 | SpecialJt=No | GUID=b16db03a-ffd2-4b50-9900-d7a334025e69 |
| Joint=5285 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.8 | Y=2.3                 | Z=-1 | SpecialJt=No | GUID=9d2e0b37-1765-49d9-8c7d-a69b6575e4f2 |
| Joint=5286 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.9 | Y=-2.3                | Z=-1 | SpecialJt=No | GUID=d014750c-b26f-4d38-b508-35a40927ed7b |
| Joint=5287 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.9 | Y=-2.2                | Z=-1 | SpecialJt=No | GUID=6f697802-bcd0-440b-8997-bdebc373af31 |
| Joint=5288 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.9 | Y=-2.1                | Z=-1 | SpecialJt=No | GUID=71592799-cf26-42b2-95ad-98102aadbe48 |
| Joint=5289 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.9 | Y=-2                  | Z=-1 | SpecialJt=No | GUID=8e060771-f796-4cb6-83c6-6f9731106530 |
| Joint=5290 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.9 | Y=-1.9                | Z=-1 | SpecialJt=No | GUID=d2b770db-6805-40b5-86a8-9d6ed70530ef |
| Joint=5291 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.9 | Y=-1.8                | Z=-1 | SpecialJt=No | GUID=3c0f52f5-4416-4863-a9bc-24257061e4ec |
| Joint=5292 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.9 | Y=-1.7                | Z=-1 | SpecialJt=No | GUID=83154788-18e1-4a0d-a2ed-219b3f490866 |
| Joint=5293 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.9 | Y=-1.6                | Z=-1 | SpecialJt=No | GUID=d2a9847c-4241-4bee-aea9-f7acc7fa4965 |
| Joint=5294 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.9 | Y=-1.5                | Z=-1 | SpecialJt=No | GUID=3ace02dd-cd68-4b00-9a38-8ab5d21a06cb |
| Joint=5295 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.9 | Y=-1.4                | Z=-1 | SpecialJt=No | GUID=e85b5478-ed57-4975-9a6d-424f616e5e9d |
| Joint=5296 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.9 | Y=-1.3                | Z=-1 | SpecialJt=No | GUID=5decebc7-60eb-47fd-a7a2-c0fac1819c1d |
| Joint=5297 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.9 | Y=-1.2                | Z=-1 | SpecialJt=No | GUID=3d31f36f-6389-4df8-8df3-27b5f699584d |
| Joint=5298 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.9 | Y=-1.1                | Z=-1 | SpecialJt=No | GUID=914446c1-b835-4fb8-a5b6-5ace3fc68dbf |
| Joint=5299 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.9 | Y=-1                  | Z=-1 | SpecialJt=No | GUID=d10c4b7f-3ab1-43bc-ac3d-5f81561461da |
| Joint=5300 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.9 | Y=-0.9                | Z=-1 | SpecialJt=No | GUID=13133219-206d-4e9b-a4db-ed0c465d3020 |
| Joint=5301 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.9 | Y=-0.8                | Z=-1 | SpecialJt=No | GUID=db5e854a-2595-4fa4-a21f-bcf41abe7579 |
| Joint=5302 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.9 | Y=-0.7                | Z=-1 | SpecialJt=No | GUID=c192e323-9144-48b4-a37e-98159aeb30c  |
| Joint=5303 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.9 | Y=-0.6                | Z=-1 | SpecialJt=No | GUID=c9411067-54c5-4db4-a350-184ee227c058 |
| Joint=5304 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.9 | Y=-0.5                | Z=-1 | SpecialJt=No | GUID=0c78cdea-038e-426a-a2b9-b7975a41b2cd |
| Joint=5305 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.9 | Y=-0.4                | Z=-1 | SpecialJt=No | GUID=2199bd5e-e174-46b0-8363-28c08916a716 |
| Joint=5306 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.9 | Y=-0.3                | Z=-1 | SpecialJt=No | GUID=07a85312-ea90-4c46-8194-5213d322a884 |
| Joint=5307 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.9 | Y=-0.2                | Z=-1 | SpecialJt=No | GUID=822cb216-4d93-44fa-a3fa-a0ac4a54bc44 |
| Joint=5308 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.9 | Y=-0.0999999999999999 | Z=-1 | SpecialJt=No | GUID=539a5ec6-cc0e-4de5-a2e3-900fea8694e3 |
| Joint=5309 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.9 | Y=0                   | Z=-1 | SpecialJt=No | GUID=0e07b235-1f88-4ab8-b565-0b78fb7fa535 |
| Joint=5310 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.9 | Y=0.1                 | Z=-1 | SpecialJt=No | GUID=4ac93a43-30bf-4d44-a39e-6d38ee2debd6 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5311 CoordSys=GLOBAL CoordType=Cartesian XorR=14.9 Y=0.2 Z=-1 SpecialJt=No GUID=fe3191e5-1286-4a6e-a7b5-adbfef91951b

Joint=5312 CoordSys=GLOBAL CoordType=Cartesian XorR=14.9 Y=0.3 Z=-1 SpecialJt=No GUID=a3ee01fc-c89d-4ebc-b917-1e4be4c6aa4d

Joint=5313 CoordSys=GLOBAL CoordType=Cartesian XorR=14.9 Y=0.4 Z=-1 SpecialJt=No GUID=6492ed9f-a38d-4f31-a404-321415cf797f

Joint=5314 CoordSys=GLOBAL CoordType=Cartesian XorR=14.9 Y=0.5 Z=-1 SpecialJt=No GUID=5c189c57-c7f4-490e-9a62-61e64e64d4e3

Joint=5315 CoordSys=GLOBAL CoordType=Cartesian XorR=14.9 Y=0.6 Z=-1 SpecialJt=No GUID=f96ee908-48d4-4fb8-a9f4-100d8a0c566b

Joint=5316 CoordSys=GLOBAL CoordType=Cartesian XorR=14.9 Y=0.7 Z=-1 SpecialJt=No GUID=58cc3988-efd0-49be-94ba-37932c2098db

Joint=5317 CoordSys=GLOBAL CoordType=Cartesian XorR=14.9 Y=0.8 Z=-1 SpecialJt=No GUID=c80cb418-97e1-4c83-af3b-03fe8e0a5b60

Joint=5318 CoordSys=GLOBAL CoordType=Cartesian XorR=14.9 Y=0.9 Z=-1 SpecialJt=No GUID=f8b1c0d3-a957-41cb-b5b4-eef42d077962

Joint=5319 CoordSys=GLOBAL CoordType=Cartesian XorR=14.9 Y=1 Z=-1 SpecialJt=No GUID=ce47e5d0-d1f1-4655-a303-c0410efcd692

Joint=5320 CoordSys=GLOBAL CoordType=Cartesian XorR=14.9 Y=1.1 Z=-1 SpecialJt=No GUID=7701cbaf-fa9b-4d3e-8b6e-56b0054556ca

Joint=5321 CoordSys=GLOBAL CoordType=Cartesian XorR=14.9 Y=1.2 Z=-1 SpecialJt=No GUID=a7fdc701-22bf-4c85-a149-aa347c7900c3

Joint=5322 CoordSys=GLOBAL CoordType=Cartesian XorR=14.9 Y=1.3 Z=-1 SpecialJt=No GUID=0fb92c5e-50d8-468b-b1eb-e550bc65ed6a

Joint=5323 CoordSys=GLOBAL CoordType=Cartesian XorR=14.9 Y=1.4 Z=-1 SpecialJt=No GUID=0360dfea-cfbd-4a55-b6b3-e08ae1f4308a

Joint=5324 CoordSys=GLOBAL CoordType=Cartesian XorR=14.9 Y=1.5 Z=-1 SpecialJt=No GUID=f0ce66fb-e5da-4b50-942c-5e4ba7f67d5b

Joint=5325 CoordSys=GLOBAL CoordType=Cartesian XorR=14.9 Y=1.6 Z=-1 SpecialJt=No GUID=b6899b6b-ada7-4ae4-b426-a74e116fabb0

Joint=5326 CoordSys=GLOBAL CoordType=Cartesian XorR=14.9 Y=1.7 Z=-1 SpecialJt=No GUID=6793c7b4-a996-4230-8a0e-65fb6266a2ec

Joint=5327 CoordSys=GLOBAL CoordType=Cartesian XorR=14.9 Y=1.8 Z=-1 SpecialJt=No GUID=ecf3a5e5-25bd-4998-adbf-bcd9e89947cf

Joint=5328 CoordSys=GLOBAL CoordType=Cartesian XorR=14.9 Y=1.9 Z=-1 SpecialJt=No GUID=a77905d0-6659-4140-bfa7-59b50325632b

Joint=5329 CoordSys=GLOBAL CoordType=Cartesian XorR=14.9 Y=2 Z=-1 SpecialJt=No GUID=6fc48877-9ebf-47de-b168-600dc115d33d

Joint=5330 CoordSys=GLOBAL CoordType=Cartesian XorR=14.9 Y=2.1 Z=-1 SpecialJt=No GUID=8c710236-eae1-401a-ad98-8971f74a4201

Joint=5331 CoordSys=GLOBAL CoordType=Cartesian XorR=14.9 Y=2.2 Z=-1 SpecialJt=No GUID=86877d09-cf19-417c-b444-c7b9c32e2e4c

Joint=5332 CoordSys=GLOBAL CoordType=Cartesian XorR=14.9 Y=2.3 Z=-1 SpecialJt=No GUID=538a6642-66e3-4d4d-8db9-7a3de3b2bacf

Joint=5333 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=-2.3 Z=-1 SpecialJt=No GUID=34b12af5-c0ec-4d6c-bba8-f1bf4f91c57b

Joint=5334 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=-2.2 Z=-1 SpecialJt=No GUID=ace43216-9893-4814-9d4e-6b8d8be19616

Joint=5335 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=-2.1 Z=-1 SpecialJt=No GUID=c61e7044-a630-4591-afba-3bf1d806d5b4

Joint=5336 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=-2 Z=-1 SpecialJt=No GUID=6693a57b-cbe7-43a8-96b2-65763b63b9a8

Joint=5337 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=-1.9 Z=-1 SpecialJt=No GUID=5230036a-a06f-4f2f-b425-a47507fcd6d2

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5338 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=-1.8 Z=-1 SpecialJt=No GUID=3ed70182-6687-4be8-8b55-c728ca18eca2

Joint=5339 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=-1.7 Z=-1 SpecialJt=No GUID=aa3833ed-e1bd-43fb-8399-6f2f9ef5f4bb

Joint=5340 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=-1.6 Z=-1 SpecialJt=No GUID=56089a2c-b5ba-424c-bf9e-413ce08ce917

Joint=5341 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=-1.5 Z=-1 SpecialJt=No GUID=6b393fe3-0e0d-40b7-b98b-704096e043e1

Joint=5342 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=-1.4 Z=-1 SpecialJt=No GUID=f7ab96c9-2983-4d45-8db9-73409651a3f0

Joint=5343 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=-1.3 Z=-1 SpecialJt=No GUID=ab96feac-b9d6-4a14-baaa-19eca2126257

Joint=5344 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=-1.2 Z=-1 SpecialJt=No GUID=46e8ac93-0571-4ae7-a479-ea04433f8ae8

Joint=5345 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=-1.1 Z=-1 SpecialJt=No GUID=4285120f-2ef9-4c33-8141-7a85fc855fc3

Joint=5346 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=-1 Z=-1 SpecialJt=No GUID=34baeb8e-1f6b-49f9-ae7c-183f75362769

Joint=5347 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=-0.9 Z=-1 SpecialJt=No GUID=52873aff-07dd-4298-80ca-6f256969b85d

Joint=5348 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=-0.8 Z=-1 SpecialJt=No GUID=59384e1e-c850-4015-81ed-f9d79b2790d3

Joint=5349 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=-0.7 Z=-1 SpecialJt=No GUID=f7a28207-b084-404d-ab14-7c817f6bae67

Joint=5350 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=-0.6 Z=-1 SpecialJt=No GUID=cf90bdd5-4563-48fd-91c3-1753c988e51b

Joint=5351 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=-0.5 Z=-1 SpecialJt=No GUID=1bea9231-a17b-4c1e-b4c3-57ea347dfee2

Joint=5352 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=-0.4 Z=-1 SpecialJt=No GUID=815af74f-c848-4689-8d69-2452c013f1f5

Joint=5353 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=-0.3 Z=-1 SpecialJt=No GUID=6adf7483-c84f-4147-9757-78ff8a27be06

Joint=5354 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=-0.2 Z=-1 SpecialJt=No GUID=b71d0ab1-5125-4e8e-879a-04c32149c91b

Joint=5355 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=-0.09999999999999999 Z=-1 SpecialJt=No GUID=db76ff0d-7fa0-4959-b920-d1e31598de1e

Joint=5356 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=0 Z=-1 SpecialJt=No GUID=c69044a0-5582-417f-a9c9-1d0a480f4548

Joint=5357 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=0.1 Z=-1 SpecialJt=No GUID=02c3a396-e72c-40e8-96ab-1cfa67005f2f

Joint=5358 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=0.2 Z=-1 SpecialJt=No GUID=59e71056-70ab-4a1d-9086-07521a9c017e

Joint=5359 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=0.3 Z=-1 SpecialJt=No GUID=4586df32-4f05-4c92-8b03-78d7aa2e2cbf

Joint=5360 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=0.4 Z=-1 SpecialJt=No GUID=24af4e5e-48b1-4676-b099-af54e816bb98

Joint=5361 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=0.5 Z=-1 SpecialJt=No GUID=01b84e9a-b2ec-455e-bd58-672b0c7fae32

Joint=5362 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=0.6 Z=-1 SpecialJt=No GUID=fd59271a-8779-4c26-a9d7-d5c1daa49fae

Joint=5363 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=0.7 Z=-1 SpecialJt=No GUID=f895b600-155d-4695-bce0-b3db897c7a96

Joint=5364 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=0.8 Z=-1 SpecialJt=No GUID=10fe02d4-c303-4bbc-8d41-f99c55826479

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5365 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=0.9 Z=-1 SpecialJt=No GUID=f4e8f4ea-f53a-4c89-b8ec-ae5646c5c610

Joint=5366 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=1 Z=-1 SpecialJt=No GUID=44bfc151-b0bb-4875-bc86-27aad238bc6

Joint=5367 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=1.1 Z=-1 SpecialJt=No GUID=e1f0e79b-bcff-4e33-a4bc-515dc9765224

Joint=5368 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=1.2 Z=-1 SpecialJt=No GUID=0ec3a099-b4ca-4638-a970-dcb7a80d0f6d

Joint=5369 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=1.3 Z=-1 SpecialJt=No GUID=a4fa5f02-54d2-4e1d-a853-82fc849791c5

Joint=5370 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=1.4 Z=-1 SpecialJt=No GUID=082e49b0-747a-419a-b249-d9486acc127f

Joint=5371 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=1.5 Z=-1 SpecialJt=No GUID=216b7f54-8ae8-44cf-a9a4-eea568c02e4b

Joint=5372 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=1.6 Z=-1 SpecialJt=No GUID=8e54355e-6576-4e8d-ab13-b901a9949421

Joint=5373 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=1.7 Z=-1 SpecialJt=No GUID=b45c8834-1d9e-424d-bdf8-d9fee60e1ca6

Joint=5374 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=1.8 Z=-1 SpecialJt=No GUID=51d400ef-620b-41ce-b2b8-dcbdd17adc75

Joint=5375 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=1.9 Z=-1 SpecialJt=No GUID=f443e1d5-95a6-41f2-ab04-eb457adb5dd7

Joint=5376 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=2 Z=-1 SpecialJt=No GUID=659ff1be-046b-4524-85ed-73ac8ad19c21

Joint=5377 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=2.1 Z=-1 SpecialJt=No GUID=596cf2b1-57cf-4066-9c56-e823b8c55f62

Joint=5378 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=2.2 Z=-1 SpecialJt=No GUID=161fbe53-c757-4668-af1f-b9067897579f

Joint=5379 CoordSys=GLOBAL CoordType=Cartesian XorR=15 Y=2.3 Z=-1 SpecialJt=No GUID=eadd7029-1077-4cc2-b9b2-86cad452ca9c

Joint=5380 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=-2.3 Z=-1 SpecialJt=No GUID=87f0cf35-8fc7-4074-8d96-0165a5430d19

Joint=5381 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=-2.2 Z=-1 SpecialJt=No GUID=5b5d0cc1-7bd3-40c2-b9f3-535989873a5c

Joint=5382 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=-2.1 Z=-1 SpecialJt=No GUID=769aefa5-92e1-483a-94e7-8a80451ade4f

Joint=5383 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=-2 Z=-1 SpecialJt=No GUID=0e98a07c-c7d7-405c-855d-5ad8e442d2c6

Joint=5384 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=-1.9 Z=-1 SpecialJt=No GUID=0c6c69c3-e0d6-48eb-834a-671552928efa

Joint=5385 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=-1.8 Z=-1 SpecialJt=No GUID=e154c711-2431-4aa5-ad92-e6a3d5c20ad7

Joint=5386 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=-1.7 Z=-1 SpecialJt=No GUID=4c1fe72e-2d0d-4585-9d25-a8378a741fa7

Joint=5387 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=-1.6 Z=-1 SpecialJt=No GUID=aa549a8c-53c0-4e78-83ee-ba38554da76e

Joint=5388 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=-1.5 Z=-1 SpecialJt=No GUID=c2f721f5-47d8-489c-b771-0946860c0c92

Joint=5389 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=-1.4 Z=-1 SpecialJt=No GUID=e103a1d0-a868-49f3-81f9-4a611e5ceda1

Joint=5390 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=-1.3 Z=-1 SpecialJt=No GUID=14084420-9ec1-42f0-a1e0-22ddba0ef6d0

Joint=5391 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=-1.2 Z=-1 SpecialJt=No GUID=5d0191e5-c519-48dd-b69b-e3ad734accb3



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5392 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=-1.1 Z=-1 SpecialJt=No  
GUID=28d5f80b-06eb-4bc1-887c-a51a6b12ac3b

Joint=5393 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=-1 Z=-1 SpecialJt=No GUID=66aea730-  
7895-46e9-848b-6dc89ac11728

Joint=5394 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=-0.9 Z=-1 SpecialJt=No GUID=bbf662f5-  
501c-413f-be4e-4abcbd503f4

Joint=5395 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=-0.8 Z=-1 SpecialJt=No GUID=70aa4cbf-  
3b66-4a25-8968-9a3b1acd52bf

Joint=5396 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=-0.7 Z=-1 SpecialJt=No  
GUID=a154ec26-c69b-4caa-a421-9c52cd79bacb

Joint=5397 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=-0.6 Z=-1 SpecialJt=No  
GUID=92bc5c1b-de3c-42c0-82ed-fb6083cb7572

Joint=5398 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=-0.5 Z=-1 SpecialJt=No GUID=fb3608c6-  
12c8-4107-99b6-0e3d56084b66

Joint=5399 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=-0.4 Z=-1 SpecialJt=No  
GUID=f81d5342-4d45-4c4b-815f-23cff746cce2

Joint=5400 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=-0.3 Z=-1 SpecialJt=No GUID=fca1d653-  
0d3a-446d-9aac-8ac10256d761

Joint=5401 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=-0.2 Z=-1 SpecialJt=No  
GUID=2b472fb6-3a2d-4130-beff-a4e0874b4117

Joint=5402 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=-0.09999999999999999 Z=-1  
SpecialJt=No GUID=0369ea12-770a-48ca-bb50-842b57d364d3

Joint=5403 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=0 Z=-1 SpecialJt=No GUID=d4289576-  
c375-4cfc-aabf-2b949964e6d1

Joint=5404 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=0.1 Z=-1 SpecialJt=No GUID=f49dbbbc-  
3e97-4155-ba0b-5656d4b13dee

Joint=5405 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=0.2 Z=-1 SpecialJt=No GUID=397168ad-  
6f9c-4b34-9fa8-27dd550ddaad

Joint=5406 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=0.3 Z=-1 SpecialJt=No GUID=b91a34fa-  
0a78-4180-be97-d7329f0262fd

Joint=5407 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=0.4 Z=-1 SpecialJt=No GUID=8377b4bf-  
ca9e-4477-8507-286988320e62

Joint=5408 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=0.5 Z=-1 SpecialJt=No GUID=f797e870-  
19e6-4706-b22f-f759501f2279

Joint=5409 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=0.6 Z=-1 SpecialJt=No GUID=b49b4e82-  
7bdf-4d2c-852c-011d41f117fb

Joint=5410 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=0.7 Z=-1 SpecialJt=No GUID=4dde9fed-  
6c82-4a76-9f61-a23fc4067d7e

Joint=5411 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=0.8 Z=-1 SpecialJt=No GUID=18b62bf4-  
1a30-436b-b966-e729065fcd6a

Joint=5412 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=0.9 Z=-1 SpecialJt=No GUID=bb52e709-  
de0c-4882-a251-d6c07ae17448

Joint=5413 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=1 Z=-1 SpecialJt=No GUID=ec999287-  
91da-4713-b733-19886ec4794d

Joint=5414 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=1.1 Z=-1 SpecialJt=No GUID=b5cfa0f5-  
55b0-42ae-99a5-c00a28125b6a

Joint=5415 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=1.2 Z=-1 SpecialJt=No GUID=a06b236d-  
47ef-48de-9516-7f5cb4b0af6e

Joint=5416 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=1.3 Z=-1 SpecialJt=No GUID=ecd779b6-  
6b0b-46db-a1f2-02d5f762c60b

Joint=5417 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=1.4 Z=-1 SpecialJt=No GUID=a67b50e7-  
683b-408c-ba92-10277da6fa4b

Joint=5418 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=1.5 Z=-1 SpecialJt=No GUID=e729ac2c-  
d5ba-493d-b88c-5f82821c969e

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5419 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=1.6 Z=-1 SpecialJt=No GUID=0ae7f5da-6b90-43a6-a054-9fdad818e3a7

Joint=5420 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=1.7 Z=-1 SpecialJt=No GUID=5371c9b8-24c1-47ea-9136-914f9c58f21e

Joint=5421 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=1.8 Z=-1 SpecialJt=No GUID=0ecfb29b-91e8-4fb9-ae75-ee5507804c6e

Joint=5422 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=1.9 Z=-1 SpecialJt=No GUID=2ddc356a-df5b-439e-99fe-729b8604f027

Joint=5423 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=2 Z=-1 SpecialJt=No GUID=257f15aa-10cc-45f4-b9b9-84d232943eaf

Joint=5424 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=2.1 Z=-1 SpecialJt=No GUID=636f606c-10bb-4edc-83bd-44e67b2caa9c

Joint=5425 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=2.2 Z=-1 SpecialJt=No GUID=0fdd8a33-e889-4118-aba1-35a2f7d25e83

Joint=5426 CoordSys=GLOBAL CoordType=Cartesian XorR=15.1 Y=2.3 Z=-1 SpecialJt=No GUID=2e83991d-ef7d-4e68-aff8-49b9e8a32555

Joint=5427 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=-2.3 Z=-1 SpecialJt=No GUID=4ddb86ef-6af0-4a8c-882a-3e724d31cb4a

Joint=5428 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=-2.2 Z=-1 SpecialJt=No GUID=639d7ab8-58dc-438b-aaa0-155a873e280d

Joint=5429 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=-2.1 Z=-1 SpecialJt=No GUID=db62b827-37c0-4db2-9816-05bfe950c9bf

Joint=5430 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=-2 Z=-1 SpecialJt=No GUID=efa0429b-ab20-4b1e-ae13-b55386b8cb05

Joint=5431 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=-1.9 Z=-1 SpecialJt=No GUID=00db4aa3-f79a-46d2-b55b-313b4f07a4da

Joint=5432 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=-1.8 Z=-1 SpecialJt=No GUID=5fd6f054-c2c6-4f4b-b646-8c2960f08c92

Joint=5433 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=-1.7 Z=-1 SpecialJt=No GUID=087051cf-887b-426a-be1f-5eca2adeff4c

Joint=5434 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=-1.6 Z=-1 SpecialJt=No GUID=2f800d66-1457-4d35-8913-4c6c7ebd6613

Joint=5435 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=-1.5 Z=-1 SpecialJt=No GUID=020d29b4-6794-46c7-8f76-529acdaa315b

Joint=5436 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=-1.4 Z=-1 SpecialJt=No GUID=8d9811eb-8cca-4216-ba25-bd87592813b3

Joint=5437 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=-1.3 Z=-1 SpecialJt=No GUID=a74f9b2f-8d35-44cb-9d90-c8fa952c533e

Joint=5438 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=-1.2 Z=-1 SpecialJt=No GUID=627051d8-a1ee-4c79-a12f-9a9a8cac77a9

Joint=5439 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=-1.1 Z=-1 SpecialJt=No GUID=ebf76310-0019-44b7-a2fd-0d40e64d67de

Joint=5440 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=-1 Z=-1 SpecialJt=No GUID=a2d4a8d0-ab7d-46c6-9627-08c8f2f95a3b

Joint=5441 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=-0.8999999999999999 Z=-1 SpecialJt=No GUID=b3617089-92ae-4c6e-8aee-6f0a68dbed6a

Joint=5442 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=-0.8 Z=-1 SpecialJt=No GUID=76fe5d07-e919-45c2-b4ae-d17adfe97d5b

Joint=5443 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=-0.7 Z=-1 SpecialJt=No GUID=779fa0ad-492a-4af4-9a86-c279217d5a7f

Joint=5444 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=-0.6 Z=-1 SpecialJt=No GUID=e9db099d-c9db-4796-bfd3-d1f719ba5119

Joint=5445 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=-0.5 Z=-1 SpecialJt=No GUID=f6ffec34-a718-45d3-92c0-c937de6da96f

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5446 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=-0.4 Z=-1 SpecialJt=No  
GUID=775dd210-da26-4cfa-ad78-32eac81c4ebb

Joint=5447 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=-0.3 Z=-1 SpecialJt=No  
GUID=c6419a85-10f6-4e95-92ef-e885d29b4185

Joint=5448 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=-0.2 Z=-1 SpecialJt=No GUID=c71ffc9-  
aac9-4098-8da0-550d1e408c45

Joint=5449 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=-0.1 Z=-1 SpecialJt=No  
GUID=0e845137-d95e-4a6f-827a-4b12fa24c0df

Joint=5450 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=5.55111512312578E-17 Z=-1  
SpecialJt=No GUID=367e11b9-aa55-4ad6-9cbe-d7d0ad138200

Joint=5451 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=0.1 Z=-1 SpecialJt=No GUID=be614647-  
55be-4a91-9916-1c2397ba3da2

Joint=5452 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=0.2 Z=-1 SpecialJt=No GUID=c31cdf45-  
1527-4a6b-9a0d-e27ffac0fc65

Joint=5453 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=0.3 Z=-1 SpecialJt=No GUID=1466782d-  
1930-4990-a675-d3a1749b393c

Joint=5454 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=0.4 Z=-1 SpecialJt=No GUID=2dcf39ce-  
e320-463a-9eac-3064c2504ee4

Joint=5455 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=0.5 Z=-1 SpecialJt=No GUID=703f91ae-  
bec7-4bae-80ae-c346d8baab5e

Joint=5456 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=0.6 Z=-1 SpecialJt=No GUID=b86821ac-  
7710-4302-8fcf-e45605c01cfd

Joint=5457 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=0.7 Z=-1 SpecialJt=No GUID=1351bd41-  
d44b-4559-83e3-004289f0c587

Joint=5458 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=0.8 Z=-1 SpecialJt=No GUID=6b3325ad-  
bbae-4a23-8c7e-d03f8b725485

Joint=5459 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=0.9 Z=-1 SpecialJt=No GUID=965b3301-  
06d7-4f79-98dc-f178c3fc2818

Joint=5460 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=1 Z=-1 SpecialJt=No GUID=62c04f83-  
61ee-478d-a9d4-4de4e49f736a

Joint=5461 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=1.1 Z=-1 SpecialJt=No GUID=b388c6b7-  
de0c-43ad-b043-2d6e4a5ccb49

Joint=5462 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=1.2 Z=-1 SpecialJt=No GUID=5897a337-  
766d-4e3a-a9ed-b10772284892

Joint=5463 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=1.3 Z=-1 SpecialJt=No GUID=133ec388-  
e48d-4742-ae5d-46f4a2d299b9

Joint=5464 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=1.4 Z=-1 SpecialJt=No GUID=c843510c-  
12a9-42ae-ac45-60562805bfdd

Joint=5465 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=1.5 Z=-1 SpecialJt=No GUID=7bb1a1c5-  
02ee-40c8-8bf9-e778d3d9d66a

Joint=5466 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=1.6 Z=-1 SpecialJt=No GUID=efc4050a-  
e1c4-4af0-8733-a02d5f736dad

Joint=5467 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=1.7 Z=-1 SpecialJt=No GUID=06e2af03-  
9ba8-4e13-98e3-9126da226950

Joint=5468 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=1.8 Z=-1 SpecialJt=No GUID=6f1b6b07-  
387f-449e-849c-71d51b097634

Joint=5469 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=1.9 Z=-1 SpecialJt=No GUID=31e641ce-  
7739-4749-95ed-313e420d984d

Joint=5470 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=2 Z=-1 SpecialJt=No GUID=3724f07e-  
5ac1-46a9-b2b9-4cd3bd248a92

Joint=5471 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=2.1 Z=-1 SpecialJt=No GUID=7a8c39ed-  
30b9-4f8a-b59c-82fa6095542b

Joint=5472 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=2.2 Z=-1 SpecialJt=No GUID=58a0cc34-  
87e0-4711-9d4b-c33ec2fd1902



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5473 CoordSys=GLOBAL CoordType=Cartesian XorR=15.2 Y=2.3 Z=-1 SpecialJt=No GUID=b89e4996-9546-48bf-8325-67b1da0207c0

Joint=5474 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=-2.3 Z=-1 SpecialJt=No GUID=0d83b295-8c54-429f-a524-6b576d1d5443

Joint=5475 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=-2.2 Z=-1 SpecialJt=No GUID=16e51590-98b7-4b8f-bfb4-0800610ad40a

Joint=5476 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=-2.1 Z=-1 SpecialJt=No GUID=0968ef35-7850-4aa9-9e43-7ef04dac14ae

Joint=5477 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=-2 Z=-1 SpecialJt=No GUID=dee2e451-b229-4bf8-b6b6-9d53d4d58a76

Joint=5478 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=-1.9 Z=-1 SpecialJt=No GUID=7e3b3bcc-0db4-4558-a2ab-3ef00df9b4a4

Joint=5479 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=-1.8 Z=-1 SpecialJt=No GUID=314bef5e-89fc-42f6-8f5e-aa296e5df8b7

Joint=5480 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=-1.7 Z=-1 SpecialJt=No GUID=093b91fb-e5ad-4fc2-8285-b408c434f950

Joint=5481 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=-1.6 Z=-1 SpecialJt=No GUID=c9329bbb-5d0e-4250-8462-078be02c6a1d

Joint=5482 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=-1.5 Z=-1 SpecialJt=No GUID=32a466e4-48ec-4b1a-90c2-294dbc6e791d

Joint=5483 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=-1.4 Z=-1 SpecialJt=No GUID=974b013c-0608-45aa-a75f-8668c071880d

Joint=5484 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=-1.3 Z=-1 SpecialJt=No GUID=c2d950ee-2417-4c55-b160-47f09527a8a5

Joint=5485 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=-1.2 Z=-1 SpecialJt=No GUID=4005622b-968f-48c5-9ee0-6c3520c489b7

Joint=5486 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=-1.1 Z=-1 SpecialJt=No GUID=2fef054e-b28e-4c68-9eb8-cd5000add67d

Joint=5487 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=-1 Z=-1 SpecialJt=No GUID=94cd816e-dc3c-4615-9962-e595d56b3a31

Joint=5488 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=-0.9 Z=-1 SpecialJt=No GUID=9d0ba8ad-99c8-46dd-b999-499475387dd8

Joint=5489 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=-0.8 Z=-1 SpecialJt=No GUID=56420623-9347-46ef-9353-8b0138d86462

Joint=5490 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=-0.7 Z=-1 SpecialJt=No GUID=60b8a875-baee-4461-9380-bc9ec891c802

Joint=5491 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=-0.6 Z=-1 SpecialJt=No GUID=8c3ec4b9-e7c3-47fd-bd68-16fe6722aa4e

Joint=5492 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=-0.5 Z=-1 SpecialJt=No GUID=1501790d-6696-47f0-9798-5efa5e4369ab

Joint=5493 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=-0.4 Z=-1 SpecialJt=No GUID=f2759248-f566-42e3-a00f-b441dc4a73cd

Joint=5494 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=-0.3 Z=-1 SpecialJt=No GUID=fe43bd3a-444e-4dac-af8c-7696dd89aa38

Joint=5495 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=-0.2 Z=-1 SpecialJt=No GUID=d9bf4039-507d-47b2-a32e-2b41f90dd31f

Joint=5496 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=-0.1 Z=-1 SpecialJt=No GUID=1503fc36-036d-4900-9169-cc150ea9af98

Joint=5497 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=-5.55111512312578E-17 Z=-1 SpecialJt=No GUID=76afea63-a710-43b5-a396-a1476d972687

Joint=5498 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=0.1 Z=-1 SpecialJt=No GUID=22b84b44-b8db-4029-a2ef-746143d57095

Joint=5499 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=0.2 Z=-1 SpecialJt=No GUID=99bce837-c48f-4220-a2c2-69b2048d9cd8



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5500 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=0.3 Z=-1 SpecialJt=No GUID=338eeff-cd3d-4823-9902-be132667b3c0

Joint=5501 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=0.4 Z=-1 SpecialJt=No GUID=898d27ad-fb06-4704-9ded-97f7afdee2c3

Joint=5502 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=0.5 Z=-1 SpecialJt=No GUID=6932e1f5-7169-4599-b548-3d7a4260dce0

Joint=5503 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=0.6 Z=-1 SpecialJt=No GUID=ee99898a-44a2-4546-b8e9-2e2f8722ef42

Joint=5504 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=0.7 Z=-1 SpecialJt=No GUID=63bb85cb-29f6-4f86-a6de-c3e278566d7c

Joint=5505 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=0.8 Z=-1 SpecialJt=No GUID=755fa7e2-be91-4be0-af34-87f9f860e1ab

Joint=5506 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=0.9 Z=-1 SpecialJt=No GUID=5f4e67de-44a9-4818-a67f-55338ef1746c

Joint=5507 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=1 Z=-1 SpecialJt=No GUID=02a8527a-d23c-4cf7-8af5-e08224b570ff

Joint=5508 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=1.1 Z=-1 SpecialJt=No GUID=632c19a3-ca81-4e38-81ee-69accdd4f63d

Joint=5509 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=1.2 Z=-1 SpecialJt=No GUID=166e53f9-aad8-407f-9ba7-29c5d1baef0c

Joint=5510 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=1.3 Z=-1 SpecialJt=No GUID=b7ac5be9-2638-442c-b493-0f9787a9a071

Joint=5511 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=1.4 Z=-1 SpecialJt=No GUID=563afc51-385f-4f44-8f5e-0b2249713676

Joint=5512 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=1.5 Z=-1 SpecialJt=No GUID=e3e15ce0-26ee-4e2b-9bf6-1c34cc9df537

Joint=5513 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=1.6 Z=-1 SpecialJt=No GUID=f3b45606-306d-4aa5-917e-6f09b88db8f2

Joint=5514 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=1.7 Z=-1 SpecialJt=No GUID=fac88dde-1ac8-4159-82b8-9e2cf38613fc

Joint=5515 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=1.8 Z=-1 SpecialJt=No GUID=6a94d2fa-5c17-446b-afa0-2ac1c0df8303

Joint=5516 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=1.9 Z=-1 SpecialJt=No GUID=b0dc402a-10e6-466e-b2e9-429a0fe0797c

Joint=5517 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=2 Z=-1 SpecialJt=No GUID=a471774c-869a-4977-b586-9d706594204f

Joint=5518 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=2.1 Z=-1 SpecialJt=No GUID=3e4ef4c0-6352-4d8b-986a-4e68af47b10a

Joint=5519 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=2.2 Z=-1 SpecialJt=No GUID=797b5f9a-b4c7-46d0-80a7-b21de9f57c13

Joint=5520 CoordSys=GLOBAL CoordType=Cartesian XorR=15.3 Y=2.3 Z=-1 SpecialJt=No GUID=317c1931-b03b-470c-bf1a-2c8551361f4f

Joint=5521 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=-2.3 Z=-1 SpecialJt=No GUID=53397642-9665-4e03-b607-93f0a8c841ab

Joint=5522 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=-2.2 Z=-1 SpecialJt=No GUID=d51c83b2-ea85-40af-aa46-34bb3b407c08

Joint=5523 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=-2.1 Z=-1 SpecialJt=No GUID=475e7ace-1aa8-4ce4-85e5-49e0f54dda95

Joint=5524 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=-2 Z=-1 SpecialJt=No GUID=836d46b7-eee5-4ac5-b3f8-0dad43406cbf

Joint=5525 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=-1.9 Z=-1 SpecialJt=No GUID=36e64e7c-df8c-47c6-8e01-32b15dec1aa9

Joint=5526 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=-1.8 Z=-1 SpecialJt=No GUID=192b0e1e-c714-461b-b8a6-aec6107b2490

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5527 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=-1.7 Z=-1 SpecialJt=No  
GUID=a091f19a-7aad-466f-8ac3-51eb62169e36

Joint=5528 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=-1.6 Z=-1 SpecialJt=No  
GUID=29fd0dbb-3768-42f3-bff7-5b6d1ff690a7

Joint=5529 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=-1.5 Z=-1 SpecialJt=No GUID=e07ca4f1-  
e6f1-4f27-b34b-9b5349c61bbf

Joint=5530 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=-1.4 Z=-1 SpecialJt=No GUID=f091ec68-  
7011-4dfe-803c-010c84f82add

Joint=5531 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=-1.3 Z=-1 SpecialJt=No GUID=cc62e9f2-  
800e-49a2-b892-644e1399b87c

Joint=5532 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=-1.2 Z=-1 SpecialJt=No GUID=576c414f-  
86d3-4375-9515-2e79c1297e92

Joint=5533 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=-1.1 Z=-1 SpecialJt=No  
GUID=671c5de8-5b01-4074-898c-a2cb191a1522

Joint=5534 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=-1 Z=-1 SpecialJt=No GUID=9f0907cf-  
5d4d-4a88-9276-e62f633720ea

Joint=5535 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=-0.9 Z=-1 SpecialJt=No  
GUID=56b9ecd7-bcfb-4dfa-b5e7-9a3a15e9908d

Joint=5536 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=-0.8 Z=-1 SpecialJt=No  
GUID=6a7e2a89-aa40-475b-b3f7-d2ac65ad8451

Joint=5537 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=-0.7 Z=-1 SpecialJt=No  
GUID=69823316-df84-44c4-880a-7a9468154317

Joint=5538 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=-0.6 Z=-1 SpecialJt=No  
GUID=974a40d3-fbc0-40e0-b49a-33d0f916cbcd

Joint=5539 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=-0.5 Z=-1 SpecialJt=No  
GUID=cb150698-cb7c-43bd-ad92-e710b166bcd1

Joint=5540 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=-0.4 Z=-1 SpecialJt=No  
GUID=71650d40-877c-4496-8f77-0875071e6002

Joint=5541 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=-0.3 Z=-1 SpecialJt=No  
GUID=780104d2-ccc1-4149-bf4b-5822b212d5b3

Joint=5542 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=-0.2 Z=-1 SpecialJt=No GUID=4fb63b4f-  
edd0-4b58-b91b-54b8dcc8cf

Joint=5543 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=-0.09999999999999997 Z=-1  
SpecialJt=No GUID=5d8db830-2ceb-4373-99e7-c81794446772

Joint=5544 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=0 Z=-1 SpecialJt=No GUID=f14e35a8-  
89d7-4300-855f-f2fc49da9bb4

Joint=5545 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=0.09999999999999997 Z=-1 SpecialJt=No  
GUID=29df4df0-634f-4a68-8496-9a460366c604

Joint=5546 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=0.2 Z=-1 SpecialJt=No GUID=2aabb741-  
6a6a-40e7-b7a7-6195f445860f

Joint=5547 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=0.3 Z=-1 SpecialJt=No GUID=ad11f46a-  
fcf6-4fc1-9cd0-3125ee4c6a0e

Joint=5548 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=0.4 Z=-1 SpecialJt=No GUID=16112f9e-  
f24d-4bff-97af-9d7943b7e112

Joint=5549 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=0.5 Z=-1 SpecialJt=No GUID=204a4689-  
8e1a-49dd-9dc8-e95ff0e9eb4b

Joint=5550 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=0.6 Z=-1 SpecialJt=No GUID=e17d7a59-  
32ee-42d9-953c-8c7e21f77c32

Joint=5551 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=0.7 Z=-1 SpecialJt=No GUID=6b2f1588-  
9ed5-4578-b994-d4d577b0c87a

Joint=5552 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=0.8 Z=-1 SpecialJt=No GUID=27174887-  
4b33-4905-85da-b79054ce2eb9

Joint=5553 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=0.9 Z=-1 SpecialJt=No GUID=23579a3b-  
6933-40e1-8c86-322b75c9770b

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5554 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=1 Z=-1 SpecialJt=No GUID=7503821e-b296-4164-9c81-75a919773a13

Joint=5555 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=1.1 Z=-1 SpecialJt=No GUID=1b9f227d-a5c3-493f-be0c-1af713b4b9d2

Joint=5556 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=1.2 Z=-1 SpecialJt=No GUID=7c07f4d3-b026-4745-b301-72f74de8df6c

Joint=5557 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=1.3 Z=-1 SpecialJt=No GUID=1ab2fa6d-00ab-4c57-951a-84b26b59cd65

Joint=5558 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=1.4 Z=-1 SpecialJt=No GUID=18b477f3-1fed-4ec0-bde2-35c12c455f14

Joint=5559 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=1.5 Z=-1 SpecialJt=No GUID=b5f25921-6e70-4b66-8fc5-4cc9867ca15c

Joint=5560 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=1.6 Z=-1 SpecialJt=No GUID=a5715719-d077-4b89-87ad-4ad9103bee41

Joint=5561 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=1.7 Z=-1 SpecialJt=No GUID=dc930637-7dbf-41a9-82ea-a2c909d1582f

Joint=5562 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=1.8 Z=-1 SpecialJt=No GUID=9c21211d-a254-4367-b465-e0a447f3ff7c

Joint=5563 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=1.9 Z=-1 SpecialJt=No GUID=2f141be7-34d5-4420-9214-ccb863c69ec1

Joint=5564 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=2 Z=-1 SpecialJt=No GUID=6b8712c5-8a28-4476-a5dd-054124bf39b9

Joint=5565 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=2.1 Z=-1 SpecialJt=No GUID=9d2aa32e-1ad1-4d5a-99df-3a9dead4eefb

Joint=5566 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=2.2 Z=-1 SpecialJt=No GUID=4bd46aab-f622-45c3-9a71-28e1f81f70aa

Joint=5567 CoordSys=GLOBAL CoordType=Cartesian XorR=15.4 Y=2.3 Z=-1 SpecialJt=No GUID=ad9c3ed3-1d65-4013-8430-5599914fa536

Joint=5568 CoordSys=GLOBAL CoordType=Cartesian XorR=15.5 Y=-2.3 Z=-1 SpecialJt=No GUID=89d6469c-baf0-49a7-84aa-d85a52a8da65

Joint=5569 CoordSys=GLOBAL CoordType=Cartesian XorR=15.5 Y=-2.2 Z=-1 SpecialJt=No GUID=03663819-7052-4891-850a-34eeede397a5

Joint=5570 CoordSys=GLOBAL CoordType=Cartesian XorR=15.5 Y=-2.1 Z=-1 SpecialJt=No GUID=9b392cec-6db9-4384-9379-ef8a2b2582e7

Joint=5571 CoordSys=GLOBAL CoordType=Cartesian XorR=15.5 Y=-2 Z=-1 SpecialJt=No GUID=bc1af45b-5a4b-4ccc-b126-ad2240d8799a

Joint=5572 CoordSys=GLOBAL CoordType=Cartesian XorR=15.5 Y=-1.9 Z=-1 SpecialJt=No GUID=0fd398f6-90c1-4285-a9a6-dd337328f9f5

Joint=5573 CoordSys=GLOBAL CoordType=Cartesian XorR=15.5 Y=-1.8 Z=-1 SpecialJt=No GUID=03d2ad72-1b6f-4103-bedb-dc351d172a2d

Joint=5574 CoordSys=GLOBAL CoordType=Cartesian XorR=15.5 Y=-1.7 Z=-1 SpecialJt=No GUID=f80b6164-cb1e-491f-bd74-8f7735dd2a99

Joint=5575 CoordSys=GLOBAL CoordType=Cartesian XorR=15.5 Y=-1.6 Z=-1 SpecialJt=No GUID=93f8ac18-d8b1-411c-b72d-3d84a2974cd1

Joint=5576 CoordSys=GLOBAL CoordType=Cartesian XorR=15.5 Y=-1.5 Z=-1 SpecialJt=No GUID=759cf0ce-227d-4c52-9dd8-297a87c544a0

Joint=5577 CoordSys=GLOBAL CoordType=Cartesian XorR=15.5 Y=-1.4 Z=-1 SpecialJt=No GUID=8d7e58d9-c71b-4ec2-bff7-3e594c0f3897

Joint=5578 CoordSys=GLOBAL CoordType=Cartesian XorR=15.5 Y=-1.3 Z=-1 SpecialJt=No GUID=cbbfe1f5-81b7-47c5-bb24-6effd4a6b379

Joint=5579 CoordSys=GLOBAL CoordType=Cartesian XorR=15.5 Y=-1.2 Z=-1 SpecialJt=No GUID=ef675d5a-98ce-4bc4-8d1c-d44d817b9d41

Joint=5580 CoordSys=GLOBAL CoordType=Cartesian XorR=15.5 Y=-1.1 Z=-1 SpecialJt=No GUID=6eb1f997-83dc-4a7a-8e5c-0e27f6d43cc8



|            |                 |                     |           |                         |      |              |                                           |
|------------|-----------------|---------------------|-----------|-------------------------|------|--------------|-------------------------------------------|
| Joint=5581 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=15.5 | Y=-1                    | Z=-1 | SpecialJt=No | GUID=778b34b8-05a4-48c3-b02f-832f0e101b19 |
| Joint=5582 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=15.5 | Y=-0.9                  | Z=-1 | SpecialJt=No | GUID=5d564849-3fff-4732-8e90-53dd1dceff3e |
| Joint=5583 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=15.5 | Y=-0.8                  | Z=-1 | SpecialJt=No | GUID=94f4a846-aa44-45eb-855e-33cd91ab0559 |
| Joint=5584 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=15.5 | Y=-0.7                  | Z=-1 | SpecialJt=No | GUID=0faa4558-585d-4c48-827f-f049b5d1cba2 |
| Joint=5585 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=15.5 | Y=-0.6                  | Z=-1 | SpecialJt=No | GUID=e2cc657b-7b65-48b8-a621-56b0d48fcb81 |
| Joint=5586 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=15.5 | Y=-0.5                  | Z=-1 | SpecialJt=No | GUID=b213aae4-01d7-4a67-8e0b-023f0b565df9 |
| Joint=5587 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=15.5 | Y=-0.4                  | Z=-1 | SpecialJt=No | GUID=a206b461-a438-4f31-887a-926a3bfd442a |
| Joint=5588 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=15.5 | Y=-0.3                  | Z=-1 | SpecialJt=No | GUID=635401b9-ca84-4fd3-95a7-1c2b9a09aacb |
| Joint=5589 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=15.5 | Y=-0.2                  | Z=-1 | SpecialJt=No | GUID=7a6c4bb1-ab40-47a2-b4a6-f0da1245e3cb |
| Joint=5590 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=15.5 | Y=-0.099999999999999996 | Z=-1 | SpecialJt=No | GUID=8d532cde-75ff-4cef-a19a-a12a79ce0b33 |
| Joint=5591 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=15.5 | Y=5.55111512312578E-17  | Z=-1 | SpecialJt=No | GUID=63075e79-1cce-4df4-a679-4ab6450bf986 |
| Joint=5592 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=15.5 | Y=0.09999999999999998   | Z=-1 | SpecialJt=No | GUID=07d5085c-09b2-4035-9310-6b45a4fcadd1 |
| Joint=5593 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=15.5 | Y=0.2                   | Z=-1 | SpecialJt=No | GUID=8ba75e7f-6c7c-455a-9992-94bacc1dd498 |
| Joint=5594 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=15.5 | Y=0.3                   | Z=-1 | SpecialJt=No | GUID=4ea000cf-1613-4092-866a-ec1da611d052 |
| Joint=5595 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=15.5 | Y=0.4                   | Z=-1 | SpecialJt=No | GUID=d06dc58f-7c11-4f02-993d-dff2a9058d06 |
| Joint=5596 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=15.5 | Y=0.5                   | Z=-1 | SpecialJt=No | GUID=0b7ae26f-a37e-4f63-b748-1fd0125cb52b |
| Joint=5597 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=15.5 | Y=0.6                   | Z=-1 | SpecialJt=No | GUID=e5ed997a-c478-49bb-ab62-5c1906e87ae5 |
| Joint=5598 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=15.5 | Y=0.7                   | Z=-1 | SpecialJt=No | GUID=af8111d9-0100-4211-889a-c6690d384dbe |
| Joint=5599 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=15.5 | Y=0.8                   | Z=-1 | SpecialJt=No | GUID=e7d5f7b0-b9e1-4c83-acc4-30196d4d2d7f |
| Joint=5600 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=15.5 | Y=0.9                   | Z=-1 | SpecialJt=No | GUID=ca34b344-aa93-4c00-8aec-aa69d3f31586 |
| Joint=5601 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=15.5 | Y=1                     | Z=-1 | SpecialJt=No | GUID=16ec2fb5-65c4-418c-b94f-430057055814 |
| Joint=5602 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=15.5 | Y=1.1                   | Z=-1 | SpecialJt=No | GUID=c7a20845-b417-40cf-8eca-3f8c2800abf4 |
| Joint=5603 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=15.5 | Y=1.2                   | Z=-1 | SpecialJt=No | GUID=324354ac-14f0-4b0f-b47c-dd72be3d02ec |
| Joint=5604 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=15.5 | Y=1.3                   | Z=-1 | SpecialJt=No | GUID=c49145ee-65d8-4f9f-8b7d-336210cba6d7 |
| Joint=5605 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=15.5 | Y=1.4                   | Z=-1 | SpecialJt=No | GUID=11d1ce46-afc6-482d-8a8c-cad850ef06d0 |
| Joint=5606 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=15.5 | Y=1.5                   | Z=-1 | SpecialJt=No | GUID=9a945a5e-dc53-4661-9bfe-80e49525d63a |
| Joint=5607 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=15.5 | Y=1.6                   | Z=-1 | SpecialJt=No | GUID=db110bc0-83ff-4252-b5d2-05009baf6655 |



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5608 CoordSys=GLOBAL CoordType=Cartesian XorR=15.5 Y=1.7 Z=-1 SpecialJt=No GUID=78d29124-4bdf-4aa9-9385-872f3c18dbcb

Joint=5609 CoordSys=GLOBAL CoordType=Cartesian XorR=15.5 Y=1.8 Z=-1 SpecialJt=No GUID=2629cddb-584c-4760-860a-8059624b9b8a

Joint=5610 CoordSys=GLOBAL CoordType=Cartesian XorR=15.5 Y=1.9 Z=-1 SpecialJt=No GUID=521d1207-67b3-4b85-b8fe-3c9a9c0e06d5

Joint=5611 CoordSys=GLOBAL CoordType=Cartesian XorR=15.5 Y=2 Z=-1 SpecialJt=No GUID=db073823-0cc1-4021-aeb9-ba181678656e

Joint=5612 CoordSys=GLOBAL CoordType=Cartesian XorR=15.5 Y=2.1 Z=-1 SpecialJt=No GUID=12e29726-4b37-4182-b25a-67a3f49b4aac

Joint=5613 CoordSys=GLOBAL CoordType=Cartesian XorR=15.5 Y=2.2 Z=-1 SpecialJt=No GUID=33e448c7-1bf5-41e5-93e9-3a781be9d8e2

Joint=5614 CoordSys=GLOBAL CoordType=Cartesian XorR=15.5 Y=2.3 Z=-1 SpecialJt=No GUID=3e03961f-06f4-40a2-8473-f9a297790ec2

Joint=5615 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=-2.3 Z=-1 SpecialJt=No GUID=a6974399-c3cf-44b6-a551-47b05cd888b0

Joint=5616 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=-2.2 Z=-1 SpecialJt=No GUID=1c1efe40-6fde-4eaa-bee3-b13b30099b2a

Joint=5617 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=-2.1 Z=-1 SpecialJt=No GUID=98f70f28-39bb-497a-8253-bccf6bb4ea17

Joint=5618 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=-2 Z=-1 SpecialJt=No GUID=555fa871-382d-494f-ab71-2d7f4b8e1261

Joint=5619 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=-1.9 Z=-1 SpecialJt=No GUID=27f9b200-167e-4d1a-ac35-c64e920cd12f

Joint=5620 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=-1.8 Z=-1 SpecialJt=No GUID=5d6daf18-8f7a-4ee1-b6a4-c6c80653d6fc

Joint=5621 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=-1.7 Z=-1 SpecialJt=No GUID=b7badd9e-5f2d-4357-8d0f-2a2ebecebb0f

Joint=5622 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=-1.6 Z=-1 SpecialJt=No GUID=ebb3c2bb-fb05-4241-9734-7192384490b6

Joint=5623 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=-1.5 Z=-1 SpecialJt=No GUID=e86c8117-0674-4217-8494-4f420e468477

Joint=5624 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=-1.4 Z=-1 SpecialJt=No GUID=7a98d412-35a8-493a-8533-9ba665357719

Joint=5625 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=-1.3 Z=-1 SpecialJt=No GUID=c2ed2173-4bdf-4828-8fbc-6a50b7d9c2f8

Joint=5626 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=-1.2 Z=-1 SpecialJt=No GUID=288ff75d-a9a1-4e70-9292-475fbd32861f

Joint=5627 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=-1.1 Z=-1 SpecialJt=No GUID=c8516bbd-7dec-4028-9887-dd91c7f22033

Joint=5628 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=-1 Z=-1 SpecialJt=No GUID=68ec84e7-7588-4050-97a5-b23ecb28e863

Joint=5629 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=-0.9 Z=-1 SpecialJt=No GUID=c6f80f9b-eb70-43dc-bbfe-31cca481afec

Joint=5630 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=-0.8 Z=-1 SpecialJt=No GUID=5d0453f8-1b7f-4032-a873-714f0d235337

Joint=5631 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=-0.7 Z=-1 SpecialJt=No GUID=e5e0c8b2-490d-4a45-aebe-cd49da032af1

Joint=5632 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=-0.6 Z=-1 SpecialJt=No GUID=928d6131-e327-4774-8174-9bbd6e6b4ea8

Joint=5633 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=-0.5 Z=-1 SpecialJt=No GUID=ba1e5515-6f5d-4458-af99-0fee0427ef47

Joint=5634 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=-0.4 Z=-1 SpecialJt=No GUID=b759711e-2bf8-4b20-b2b2-d051692644b8

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5635 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=-0.3 Z=-1 SpecialJt=No  
GUID=4bde91f3-b16a-43af-950a-e331fad0931e

Joint=5636 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=-0.2 Z=-1 SpecialJt=No  
GUID=4f9b9683-a9c0-4241-b75a-b9af8e7b5321

Joint=5637 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=-0.099999999999999996 Z=-1  
SpecialJt=No GUID=26595a11-2106-45d0-a5e4-da197c9a67c8

Joint=5638 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=0 Z=-1 SpecialJt=No GUID=a6a5cad5-  
cf4b-41b4-a9c4-509164aef134

Joint=5639 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=0.09999999999999998 Z=-1 SpecialJt=No  
GUID=681ff318-a2d2-488b-b0e2-925bc8bffaee

Joint=5640 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=0.2 Z=-1 SpecialJt=No GUID=bb2d7fcc-  
61a7-4476-80d9-e2d8d6fd6eec

Joint=5641 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=0.3 Z=-1 SpecialJt=No GUID=c55f08e9-  
ff65-4b2f-96c5-f63a712abe16

Joint=5642 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=0.4 Z=-1 SpecialJt=No GUID=7307e6a3-  
90d4-4e5c-9fcc-640c9e89852c

Joint=5643 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=0.5 Z=-1 SpecialJt=No GUID=43f31a9e-  
279e-4e4a-9e97-d123f08eaff2

Joint=5644 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=0.6 Z=-1 SpecialJt=No GUID=5cb3fa62-  
a8ed-47fe-8315-908db4a82266

Joint=5645 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=0.7 Z=-1 SpecialJt=No GUID=7a9c211e-  
14d8-419d-8af1-fba20f35459b

Joint=5646 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=0.8 Z=-1 SpecialJt=No GUID=ecab7dfb-  
628c-4022-8034-6ae3b8acb193

Joint=5647 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=0.9 Z=-1 SpecialJt=No GUID=c0f2beb9-  
1419-4153-bac4-cbae6a66ba6d

Joint=5648 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=1 Z=-1 SpecialJt=No GUID=f3ac88da-  
17e4-4461-ad9c-6d4eeda5e398

Joint=5649 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=1.1 Z=-1 SpecialJt=No GUID=cc9a7837-  
8f03-4929-afdb-be47d513cb0d

Joint=5650 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=1.2 Z=-1 SpecialJt=No GUID=b7578724-  
8218-4cd1-9b76-fbeaf7f182a2

Joint=5651 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=1.3 Z=-1 SpecialJt=No GUID=294df558-  
b19f-4d1c-85f8-64202614b668

Joint=5652 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=1.4 Z=-1 SpecialJt=No GUID=39052e35-  
4023-4cc6-ae2a-4da3a0949202

Joint=5653 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=1.5 Z=-1 SpecialJt=No GUID=4e22288d-  
1e2f-4c1e-97d2-c28611e983e2

Joint=5654 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=1.6 Z=-1 SpecialJt=No GUID=89d731f0-  
b1f1-4c9e-acb5-e488f7efe1ed

Joint=5655 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=1.7 Z=-1 SpecialJt=No GUID=8dbad3e5-  
958d-483b-b9d3-bdf8bd9ddd64

Joint=5656 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=1.8 Z=-1 SpecialJt=No GUID=83f37801-  
38e3-4d5c-9b8d-57d447f85f0b

Joint=5657 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=1.9 Z=-1 SpecialJt=No GUID=9802b935-  
6321-4b6e-a752-d73a61c07f78

Joint=5658 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=2 Z=-1 SpecialJt=No GUID=0aec9f83-  
72c5-4b8e-8a22-ca9a3d619c2b

Joint=5659 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=2.1 Z=-1 SpecialJt=No GUID=037b33f2-  
bb82-4f26-ab25-36dd1fdd05d0

Joint=5660 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=2.2 Z=-1 SpecialJt=No GUID=5a88b872-  
ddaf-4bda-a47b-771c7e214261

Joint=5661 CoordSys=GLOBAL CoordType=Cartesian XorR=15.6 Y=2.3 Z=-1 SpecialJt=No GUID=8c62a670-  
9532-4bd3-b3f9-5f3f660dba01

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5662 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=-2.3 Z=-1 SpecialJt=No  
GUID=1ea94c05-27fa-4fce-a0bf-6d1e006675c2

Joint=5663 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=-2.2 Z=-1 SpecialJt=No  
GUID=d8155f06-22d6-43b3-80d7-eed93aa07723

Joint=5664 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=-2.1 Z=-1 SpecialJt=No GUID=afa3c1cb-  
e9fb-4c16-84cc-c64c46632d49

Joint=5665 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=-2 Z=-1 SpecialJt=No GUID=bab49eb9-  
ac4a-4d68-8618-dad174120b40

Joint=5666 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=-1.9 Z=-1 SpecialJt=No  
GUID=4f9b814d-34ac-4c0f-b98f-57ed919341e9

Joint=5667 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=-1.8 Z=-1 SpecialJt=No  
GUID=fe34b323-0192-45bb-abc7-4f098e527a35

Joint=5668 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=-1.7 Z=-1 SpecialJt=No  
GUID=3eadd645-5ebd-4aeb-8919-af0e02e1e23b

Joint=5669 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=-1.6 Z=-1 SpecialJt=No  
GUID=aa38dc97-dbab-4e9f-994a-98e792638072

Joint=5670 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=-1.5 Z=-1 SpecialJt=No GUID=24ff4b1f-  
86dc-40c2-af81-4fb91e030b30

Joint=5671 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=-1.4 Z=-1 SpecialJt=No  
GUID=42b04594-d8c7-4a80-ad08-71612bde124b

Joint=5672 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=-1.3 Z=-1 SpecialJt=No  
GUID=02576682-77c3-48df-bd89-c1284ef29016

Joint=5673 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=-1.2 Z=-1 SpecialJt=No  
GUID=30a016bf-5fc5-48c9-a940-8a55ae02f658

Joint=5674 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=-1.1 Z=-1 SpecialJt=No  
GUID=34cd1267-5ad8-4a0d-8631-eedd0c83ab0e

Joint=5675 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=-1 Z=-1 SpecialJt=No GUID=e528204a-  
4678-4ef4-8c74-38d883aeb8cc

Joint=5676 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=-0.9 Z=-1 SpecialJt=No GUID=7cb4fc06-  
f3c9-4ab9-9a4c-62f7b4c6e210

Joint=5677 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=-0.8 Z=-1 SpecialJt=No  
GUID=e870bb4f-04da-4cc3-9e75-5a791e1ed8f6

Joint=5678 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=-0.7 Z=-1 SpecialJt=No  
GUID=ca2ed669-6b30-42eb-8934-d2ae927f67f8

Joint=5679 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=-0.6 Z=-1 SpecialJt=No  
GUID=930512be-251c-4bc0-abb6-672131da7208

Joint=5680 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=-0.5 Z=-1 SpecialJt=No GUID=593c8cbf-  
a73b-485e-9834-c8fd56139423

Joint=5681 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=-0.4 Z=-1 SpecialJt=No  
GUID=deb6d5c3-13a4-4a8f-a28e-96f67c74f94f

Joint=5682 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=-0.3 Z=-1 SpecialJt=No  
GUID=1846241f-b08f-4750-8c2f-11972ca5cc9f

Joint=5683 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=-0.2 Z=-1 SpecialJt=No  
GUID=815ae46d-e858-4278-a0da-9b6fcf0b1c79

Joint=5684 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=-0.0999999999999999 Z=-1  
SpecialJt=No GUID=1617012c-7922-41b7-8809-114f50fb3fc9

Joint=5685 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=0 Z=-1 SpecialJt=No GUID=c3592c05-  
036f-4060-9796-e0d8dbe6b749

Joint=5686 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=0.0999999999999999 Z=-1 SpecialJt=No  
GUID=22489bba-62cf-481a-8da3-6cf5456a886d

Joint=5687 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=0.2 Z=-1 SpecialJt=No GUID=0c91276c-  
3ebb-4cc7-ba5a-9ce217fe2c54

Joint=5688 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=0.3 Z=-1 SpecialJt=No GUID=d8a0594b-  
6c95-492f-8c97-25f68723fc64

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5689 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=0.4 Z=-1 SpecialJt=No GUID=ff228d77-ee81-4b6c-99b3-06d54262531e

Joint=5690 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=0.5 Z=-1 SpecialJt=No GUID=745935fa-af18-444e-bb00-714d18a45106

Joint=5691 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=0.6 Z=-1 SpecialJt=No GUID=5e7a5426-8de4-4a7c-bd85-ab2269095998

Joint=5692 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=0.7 Z=-1 SpecialJt=No GUID=ea2102a0-d58e-4cb6-839e-c6dbf249e717

Joint=5693 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=0.8 Z=-1 SpecialJt=No GUID=edf34d91-1380-48e7-9934-69feaf141ef9

Joint=5694 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=0.9 Z=-1 SpecialJt=No GUID=80133a53-6c07-4428-a574-88db2cff6dee

Joint=5695 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=1 Z=-1 SpecialJt=No GUID=f95fcd1a-fba8-4030-a68d-10c921ef6a99

Joint=5696 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=1.1 Z=-1 SpecialJt=No GUID=ef1805e9-1404-4dd2-bc68-38c321d97ecf

Joint=5697 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=1.2 Z=-1 SpecialJt=No GUID=8b65e373-d509-4548-ada3-aac3223742f4

Joint=5698 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=1.3 Z=-1 SpecialJt=No GUID=b910dc87-cbd4-41b6-8472-1acd7f80d861

Joint=5699 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=1.4 Z=-1 SpecialJt=No GUID=bffaf6c3-b49b-4035-905d-455a7f298e63

Joint=5700 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=1.5 Z=-1 SpecialJt=No GUID=9b66d9a9-13a9-4731-bd5e-50482fdee191

Joint=5701 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=1.6 Z=-1 SpecialJt=No GUID=d94db6a4-b13f-44ac-91db-6e6c3f524371

Joint=5702 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=1.7 Z=-1 SpecialJt=No GUID=6bb0575b-4bc5-4236-90bc-781836c2521d

Joint=5703 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=1.8 Z=-1 SpecialJt=No GUID=6e5657c6-5ad8-4832-81c9-138a02e1ffa8

Joint=5704 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=1.9 Z=-1 SpecialJt=No GUID=4e567345-d99c-4075-9f49-59b34b5980b7

Joint=5705 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=2 Z=-1 SpecialJt=No GUID=cc6e4f00-9414-4419-8ab1-7881916c9a20

Joint=5706 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=2.1 Z=-1 SpecialJt=No GUID=3cdba072-ce3a-4fc6-975b-1ea68b73f9de

Joint=5707 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=2.2 Z=-1 SpecialJt=No GUID=5f222217-2524-482b-b4b8-2025d1edb5d9

Joint=5708 CoordSys=GLOBAL CoordType=Cartesian XorR=15.7 Y=2.3 Z=-1 SpecialJt=No GUID=13d74f60-3b9e-46bc-b132-c8c48de14686

Joint=5709 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=-2.3 Z=-1 SpecialJt=No GUID=20b43087-59bd-41b2-abba-189139cd2015

Joint=5710 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=-2.2 Z=-1 SpecialJt=No GUID=b95df3de-0b6a-4b5e-8931-384b24fec9ea

Joint=5711 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=-2.1 Z=-1 SpecialJt=No GUID=776d2e7d-d93a-4e54-9566-295b65ed26a8

Joint=5712 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=-2 Z=-1 SpecialJt=No GUID=d2429298-19f0-4044-818c-2f1bb796332d

Joint=5713 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=-1.9 Z=-1 SpecialJt=No GUID=642034a3-e502-4c0d-85f2-54554995f239

Joint=5714 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=-1.8 Z=-1 SpecialJt=No GUID=6edff597-402a-4a4d-a5e9-b6fa72fbd787

Joint=5715 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=-1.7 Z=-1 SpecialJt=No GUID=eb972448-dcb2-4c79-abdb-7ff587b03f4f



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5716 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=-1.6 Z=-1 SpecialJt=No  
GUID=48bc2874-73f7-4ac1-b035-72315c1ad5c0

Joint=5717 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=-1.5 Z=-1 SpecialJt=No  
GUID=78944a59-6e16-4858-a25f-c72f69fe9c13

Joint=5718 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=-1.4 Z=-1 SpecialJt=No  
GUID=1635ab66-004e-45b5-aabc-e45d5f06621d

Joint=5719 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=-1.3 Z=-1 SpecialJt=No  
GUID=8c2337b2-fd00-44da-bbe5-e9f30934955a

Joint=5720 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=-1.2 Z=-1 SpecialJt=No  
GUID=05802a78-b5b6-495e-afa8-cd0a08c84f48

Joint=5721 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=-1.1 Z=-1 SpecialJt=No  
GUID=1495be45-dd16-48e6-9d2b-ba70fcf19bae

Joint=5722 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=-1 Z=-1 SpecialJt=No GUID=f8d020e7-  
f7e0-4ca3-80a2-6f86c6a234ab

Joint=5723 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=-0.9 Z=-1 SpecialJt=No  
GUID=309e8b1b-af4b-45e8-89aa-21f408c0e127

Joint=5724 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=-0.8 Z=-1 SpecialJt=No  
GUID=92e731d6-f297-4bf5-99ca-b660b5c67dc6

Joint=5725 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=-0.7 Z=-1 SpecialJt=No  
GUID=aa7cb556-04fe-488a-bf9f-d68ea38180d6

Joint=5726 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=-0.6 Z=-1 SpecialJt=No GUID=c1f889c7-  
d6d1-4451-874a-9320cd7b4f77

Joint=5727 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=-0.5 Z=-1 SpecialJt=No  
GUID=a0351c74-2353-4a90-a419-fe50826071ec

Joint=5728 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=-0.4 Z=-1 SpecialJt=No  
GUID=efd500d2-8121-43c3-bc2c-dc2a1c775141

Joint=5729 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=-0.3 Z=-1 SpecialJt=No  
GUID=c46560eb-8417-459d-8d38-f5105d1f052c

Joint=5730 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=-0.2 Z=-1 SpecialJt=No GUID=25dfcc6d-  
2472-42e2-a5a0-018798e5ba7d

Joint=5731 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=-0.0999999999999999 Z=-1  
SpecialJt=No GUID=65c1ad11-070b-4201-9a0d-12265151d443

Joint=5732 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=-5.55111512312578E-17 Z=-1  
SpecialJt=No GUID=33d9d54f-491f-448b-9ca2-2fc2342e1948

Joint=5733 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=0.0999999999999999 Z=-1 SpecialJt=No  
GUID=857b310b-c05c-405a-956f-6b6a27e6673c

Joint=5734 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=0.2 Z=-1 SpecialJt=No GUID=f65e4784-  
50ef-4210-ab6e-71657d1ea1f9

Joint=5735 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=0.3 Z=-1 SpecialJt=No GUID=893796c6-  
1fef-4d03-8ff5-5b5f96471ffe

Joint=5736 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=0.4 Z=-1 SpecialJt=No GUID=1e7e8e92-  
e355-4384-a187-4d3919b3c018

Joint=5737 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=0.5 Z=-1 SpecialJt=No GUID=5035d4a3-  
4ffd-41e6-971e-ae2413143531

Joint=5738 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=0.6 Z=-1 SpecialJt=No GUID=b334f787-  
3e0e-4cd4-8011-db88c378498f

Joint=5739 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=0.7 Z=-1 SpecialJt=No GUID=521f563e-  
16e7-4f71-8c28-d49004d7b79d

Joint=5740 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=0.8 Z=-1 SpecialJt=No GUID=512421f3-  
afc9-4b3d-af46-097967d65095

Joint=5741 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=0.9 Z=-1 SpecialJt=No GUID=ec142262-  
ca7e-48be-9187-aa661821dfa6

Joint=5742 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=1 Z=-1 SpecialJt=No GUID=8aca80ad-  
ffc9-44fa-93dc-2f69f3cdca0e

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5743 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=1.1 Z=-1 SpecialJt=No GUID=7ed21ac9-2ccf-4152-b424-fd35047a3775

Joint=5744 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=1.2 Z=-1 SpecialJt=No GUID=9ad0085e-36cb-4311-a75f-c25d8f00ede3

Joint=5745 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=1.3 Z=-1 SpecialJt=No GUID=40d60357-3441-4139-9ed7-51e6d47ea790

Joint=5746 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=1.4 Z=-1 SpecialJt=No GUID=4f3a7db5-359c-4805-94c0-41f65a7bd290

Joint=5747 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=1.5 Z=-1 SpecialJt=No GUID=7bf73194-623c-4929-9b62-f19fd0840461

Joint=5748 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=1.6 Z=-1 SpecialJt=No GUID=bbdb2dee-2b89-4a2f-8a1a-cacd6d3c5e47

Joint=5749 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=1.7 Z=-1 SpecialJt=No GUID=db3982c3-9b4f-4b90-a305-8c295efa413a

Joint=5750 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=1.8 Z=-1 SpecialJt=No GUID=93b8a215-7a56-484d-8944-200bcc6fde7e

Joint=5751 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=1.9 Z=-1 SpecialJt=No GUID=7c251983-7ec8-49fe-81aa-073b942a55f1

Joint=5752 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=2 Z=-1 SpecialJt=No GUID=dfbf9f8f-7ceb-4ac4-a1ba-1aa8661ddcf9

Joint=5753 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=2.1 Z=-1 SpecialJt=No GUID=126f9a91-4307-4cbb-8c68-c303596141ad

Joint=5754 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=2.2 Z=-1 SpecialJt=No GUID=a0ca5966-c9bf-4eb3-ae9e-a174f019fa11

Joint=5755 CoordSys=GLOBAL CoordType=Cartesian XorR=15.8 Y=2.3 Z=-1 SpecialJt=No GUID=ca0b967f-09a9-4974-b2f9-e5ba2591939c

Joint=5756 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=-2.3 Z=-1 SpecialJt=No GUID=58e58923-b117-43b1-a3d2-cd5fd6737d62

Joint=5757 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=-2.2 Z=-1 SpecialJt=No GUID=d93d55c3-0646-455a-9af4-f7de96fd7782

Joint=5758 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=-2.1 Z=-1 SpecialJt=No GUID=0d695f2c-7077-4d9e-a4af-8294aa202695

Joint=5759 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=-2 Z=-1 SpecialJt=No GUID=05b2d80e-e9d1-4bdf-9dfc-adf01cca280c

Joint=5760 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=-1.9 Z=-1 SpecialJt=No GUID=8a1760f6-d55b-4718-a2fd-b026f1c57e06

Joint=5761 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=-1.8 Z=-1 SpecialJt=No GUID=231b76a3-ddc1-435c-a413-534752b17115

Joint=5762 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=-1.7 Z=-1 SpecialJt=No GUID=21cc120e-02b4-4b37-a7e2-b8ff73869169

Joint=5763 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=-1.6 Z=-1 SpecialJt=No GUID=6ee7eb8e-d59a-4175-98d4-c935f6e234ac

Joint=5764 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=-1.5 Z=-1 SpecialJt=No GUID=1efbc5dc-b7ef-4449-ad72-4d614f160d5b

Joint=5765 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=-1.4 Z=-1 SpecialJt=No GUID=a5106cf5-93dc-43cf-b332-9d8167be4e30

Joint=5766 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=-1.3 Z=-1 SpecialJt=No GUID=04d557af-5603-474f-a518-1a354359143c

Joint=5767 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=-1.2 Z=-1 SpecialJt=No GUID=5ee82c25-74c4-4b9e-80a6-2712fbcfbfb68

Joint=5768 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=-1.1 Z=-1 SpecialJt=No GUID=cab4bce4-c87a-436b-a971-4f7404ee564e

Joint=5769 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=-1 Z=-1 SpecialJt=No GUID=8104deee-a0dc-4cb9-83ad-88a1c11a2ecb

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5770 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=-0.9 Z=-1 SpecialJt=No  
GUID=e8adc530-9a5d-4341-85cf-3ee7182b1e5b

Joint=5771 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=-0.8 Z=-1 SpecialJt=No  
GUID=d0d9651d-3302-4c45-bab4-0f40d1d40a6e

Joint=5772 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=-0.7 Z=-1 SpecialJt=No  
GUID=b800dfa1-b4e8-47b9-a7f9-993af04542b7

Joint=5773 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=-0.6 Z=-1 SpecialJt=No  
GUID=a36f841e-ae66-44fb-b74c-1307b7f6f6b6

Joint=5774 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=-0.5 Z=-1 SpecialJt=No GUID=87b9c0bf-  
bb5a-4ddd-83b3-aadfa192c7c1

Joint=5775 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=-0.4 Z=-1 SpecialJt=No GUID=0ff166b8-  
a068-4fc7-a270-d98672ece537

Joint=5776 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=-0.3 Z=-1 SpecialJt=No  
GUID=a2a3ee66-d396-4e73-ab6f-a23491b1b868

Joint=5777 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=-0.2 Z=-1 SpecialJt=No  
GUID=c21d5c20-6af1-4f68-a886-67ae768b921c

Joint=5778 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=-0.1 Z=-1 SpecialJt=No GUID=b5c6fab0-  
64f3-4f6e-8e14-504fb13b231e

Joint=5779 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=0 Z=-1 SpecialJt=No GUID=4d144e71-  
2f5e-47ea-b3d1-281633d72853

Joint=5780 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=0.1 Z=-1 SpecialJt=No GUID=b4f7ae71-  
8bd6-403e-b1ac-bd6099028b7e

Joint=5781 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=0.2 Z=-1 SpecialJt=No GUID=c91eacbb-  
27d7-4bd9-8cbb-592788a2b0f5

Joint=5782 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=0.3 Z=-1 SpecialJt=No GUID=4d0eb3d3-  
c8bf-412f-b3e2-08a167570489

Joint=5783 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=0.4 Z=-1 SpecialJt=No GUID=19488326-  
0684-40ad-83cd-755b066be84a

Joint=5784 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=0.5 Z=-1 SpecialJt=No GUID=27d9baa3-  
0af2-4acf-b8ee-cf7ea81f0b00

Joint=5785 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=0.6 Z=-1 SpecialJt=No GUID=55993672-  
e0ec-4efb-a972-d05bb154bf22

Joint=5786 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=0.7 Z=-1 SpecialJt=No GUID=11a49315-  
2d19-42ae-965b-f1c93fd3f636

Joint=5787 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=0.8 Z=-1 SpecialJt=No GUID=34eb523e-  
e764-4382-9bd6-912c5cb09f0a

Joint=5788 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=0.9 Z=-1 SpecialJt=No GUID=ef117900-  
ad27-44e5-b37e-c66948233945

Joint=5789 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=1 Z=-1 SpecialJt=No GUID=9c8efc71-  
fb80-43a6-b0b5-fab72a3399e4

Joint=5790 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=1.1 Z=-1 SpecialJt=No GUID=48696259-  
5f03-4ffe-aeb0-e4696ea20e6a

Joint=5791 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=1.2 Z=-1 SpecialJt=No GUID=a9987a1d-  
be96-439e-87e6-c8e0e7028be7

Joint=5792 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=1.3 Z=-1 SpecialJt=No GUID=0baf0b2e-  
e34f-40ff-9628-4b49d98e55a2

Joint=5793 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=1.4 Z=-1 SpecialJt=No GUID=3bec19af-  
16f4-4f10-8712-997ffd3d5106

Joint=5794 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=1.5 Z=-1 SpecialJt=No GUID=788d50f7-  
d0a4-4369-b8ce-bd2671d7f9fa

Joint=5795 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=1.6 Z=-1 SpecialJt=No GUID=92f1afe4-  
7c08-4653-a57f-8bb0fd7e1fe7

Joint=5796 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=1.7 Z=-1 SpecialJt=No GUID=95103c49-  
28b9-4f7f-9a22-4cf14b262db1

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5797 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=1.8 Z=-1 SpecialJt=No GUID=c2084ff9-e197-4324-a4f3-eef748f68ba3

Joint=5798 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=1.9 Z=-1 SpecialJt=No GUID=6f244851-5e14-4d9f-9ce5-b87dc5843c21

Joint=5799 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=2 Z=-1 SpecialJt=No GUID=3f6ec3d0-20e1-46e4-bca0-e0948f8feac4

Joint=5800 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=2.1 Z=-1 SpecialJt=No GUID=5c73ff67-0feb-4358-832a-c4a626ddfb42

Joint=5801 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=2.2 Z=-1 SpecialJt=No GUID=e553bd4f-cbf8-4d63-b1a2-73ea697378b1

Joint=5802 CoordSys=GLOBAL CoordType=Cartesian XorR=15.9 Y=2.3 Z=-1 SpecialJt=No GUID=57528110-d5a1-4b36-9854-0ba7000e305d

Joint=5803 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=-2.3 Z=-1 SpecialJt=No GUID=ce455271-831f-4094-b29a-0c610d6329fe

Joint=5804 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=-2.2 Z=-1 SpecialJt=No GUID=8d9e6fce-299b-4f85-a260-256ddb4a410a

Joint=5805 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=-2.1 Z=-1 SpecialJt=No GUID=e24ba461-3af6-42df-9481-726b2107e69f

Joint=5806 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=-2 Z=-1 SpecialJt=No GUID=08a52a14-ba4e-4a63-bcc7-a396f1c26f7f

Joint=5807 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=-1.9 Z=-1 SpecialJt=No GUID=06109f94-b9f5-4b6b-86c4-8320b66d96ec

Joint=5808 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=-1.8 Z=-1 SpecialJt=No GUID=857d37a0-2e1d-4506-bc6b-8c9b0102a3e6

Joint=5809 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=-1.7 Z=-1 SpecialJt=No GUID=eacc7a34-4c79-4f9b-8727-8b708e7a8300

Joint=5810 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=-1.6 Z=-1 SpecialJt=No GUID=a48f87c3-e8a2-4cd3-a810-a7d926bcfe2b

Joint=5811 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=-1.5 Z=-1 SpecialJt=No GUID=41c3a2ab-d91e-449f-8b47-f886e172918c

Joint=5812 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=-1.4 Z=-1 SpecialJt=No GUID=a3ee3848-8241-4155-ba21-ca015d4adaca

Joint=5813 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=-1.3 Z=-1 SpecialJt=No GUID=af4e10b9-50ae-4c38-bc02-f421c7dc50ef

Joint=5814 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=-1.2 Z=-1 SpecialJt=No GUID=bb88091f-f402-42d1-b976-cb251a4bb269

Joint=5815 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=-1.1 Z=-1 SpecialJt=No GUID=e21b60a2-1097-4d78-9ae8-ea9924bb6eae

Joint=5816 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=-1 Z=-1 SpecialJt=No GUID=abc8b10c-a922-4f80-82a1-616cec523107

Joint=5817 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=-0.9 Z=-1 SpecialJt=No GUID=1ab03223-cd58-4961-a35e-bf30e17c358f

Joint=5818 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=-0.8 Z=-1 SpecialJt=No GUID=895847b2-2190-4a09-97f3-99b81845f5ce

Joint=5819 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=-0.7 Z=-1 SpecialJt=No GUID=38f9f753-4ccd-4a2e-8310-b60560fac499

Joint=5820 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=-0.6 Z=-1 SpecialJt=No GUID=752af3a4-c9e2-47c4-a88e-05b58d201fe4

Joint=5821 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=-0.5 Z=-1 SpecialJt=No GUID=5a97f986-cbe3-4355-90f8-09a53f937a2b

Joint=5822 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=-0.4 Z=-1 SpecialJt=No GUID=52401d70-77a1-4a93-9128-a5c60e1214d4

Joint=5823 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=-0.3 Z=-1 SpecialJt=No GUID=82ede29e-ad85-411f-81cf-4571b08065b9



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5824 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=-0.2 Z=-1 SpecialJt=No GUID=2a29e7d9-b661-48e1-90f0-baf8bfb1f7c9

Joint=5825 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=-0.0999999999999998 Z=-1 SpecialJt=No GUID=676c1252-5e9c-446e-9996-bf26aa31bc9f

Joint=5826 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=0 Z=-1 SpecialJt=No GUID=1f060fb3-af74-45f4-89d5-6cdb45499775

Joint=5827 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=0.0999999999999998 Z=-1 SpecialJt=No GUID=bd8009e7-af76-4a8b-b6d1-c8920cb51f9c

Joint=5828 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=0.2 Z=-1 SpecialJt=No GUID=b66a2524-1675-491a-b3bd-0481a62bf379

Joint=5829 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=0.3 Z=-1 SpecialJt=No GUID=6a82a8f7-a3c2-4d8c-a0e9-2e076c104ebd

Joint=5830 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=0.4 Z=-1 SpecialJt=No GUID=da3d837e-8655-4ecb-8c1b-c12e9e27a5e8

Joint=5831 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=0.5 Z=-1 SpecialJt=No GUID=e8dd59a0-a70a-4d62-9dca-50395966c25b

Joint=5832 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=0.6 Z=-1 SpecialJt=No GUID=a42d6530-9e77-4e2a-bc7c-083a2543677f

Joint=5833 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=0.7 Z=-1 SpecialJt=No GUID=a9276d06-f525-4b55-99d8-d189b00abd04

Joint=5834 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=0.8 Z=-1 SpecialJt=No GUID=98eeb98f-608e-4604-9f7b-c1f6a8deb5b2

Joint=5835 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=0.9 Z=-1 SpecialJt=No GUID=536a8fa1-2243-474b-8c1b-90727d2c7142

Joint=5836 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=1 Z=-1 SpecialJt=No GUID=66deb862-4338-4088-9b1d-226708e9818f

Joint=5837 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=1.1 Z=-1 SpecialJt=No GUID=4983659a-e4e9-4e65-b2d6-b3044fa682ae

Joint=5838 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=1.2 Z=-1 SpecialJt=No GUID=1d23cede-a6df-48f3-bb66-6736381ba6c7

Joint=5839 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=1.3 Z=-1 SpecialJt=No GUID=10575973-83fb-420f-9f8b-b4da8a4e5cc0

Joint=5840 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=1.4 Z=-1 SpecialJt=No GUID=23ae9bf4-a6a4-4f10-91d4-b310f4c7a795

Joint=5841 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=1.5 Z=-1 SpecialJt=No GUID=453b40e8-8fc9-4d67-a6a8-000fe6b9978f

Joint=5842 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=1.6 Z=-1 SpecialJt=No GUID=6f0202ec-348a-43f7-851d-37964bc3b903

Joint=5843 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=1.7 Z=-1 SpecialJt=No GUID=c5d6fae5-0025-4946-8402-0c60bdf073f3

Joint=5844 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=1.8 Z=-1 SpecialJt=No GUID=cfe454fc-ac83-4dcb-9e8f-3c38cfa6bbf

Joint=5845 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=1.9 Z=-1 SpecialJt=No GUID=131ebbc7-f0ab-469d-bf43-b18a14420720

Joint=5846 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=2 Z=-1 SpecialJt=No GUID=04056585-b1f6-4cd7-97c6-dbe034839605

Joint=5847 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=2.1 Z=-1 SpecialJt=No GUID=54465785-85b7-41d4-82b1-763d65f1432e

Joint=5848 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=2.2 Z=-1 SpecialJt=No GUID=5acee87e-3599-4840-967b-a4444b1d39c7

Joint=5849 CoordSys=GLOBAL CoordType=Cartesian XorR=16 Y=2.3 Z=-1 SpecialJt=No GUID=5e2c91b0-2f6d-4a1a-83f9-9ba8136a1075

Joint=5850 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=-2.3 Z=-1 SpecialJt=No GUID=4baea3dd-be5a-439f-9888-b235e1157bcf

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5851 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=-2.2 Z=-1 SpecialJt=No  
GUID=56995c52-b6ae-4a52-8d24-f561891c60e2

Joint=5852 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=-2.1 Z=-1 SpecialJt=No  
GUID=99d0846c-bdb7-4ab4-8e7f-9ca27908ee0c

Joint=5853 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=-2 Z=-1 SpecialJt=No GUID=74934756-6519-42e8-9416-b4aa7dbfd4e6

Joint=5854 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=-1.9 Z=-1 SpecialJt=No  
GUID=4e8f4124-8470-4a2a-9d1c-1e289a5fd3e0

Joint=5855 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=-1.8 Z=-1 SpecialJt=No  
GUID=7c322d43-a747-4dfe-8b7b-398a9e9be0b0

Joint=5856 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=-1.7 Z=-1 SpecialJt=No  
GUID=c526963d-74b6-437f-bac6-c95bc521d51c

Joint=5857 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=-1.6 Z=-1 SpecialJt=No  
GUID=1949495f-15ea-4353-8fc3-8d957dfb3409

Joint=5858 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=-1.5 Z=-1 SpecialJt=No  
GUID=b814e506-3021-447c-b260-b4444ccc0a7a

Joint=5859 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=-1.4 Z=-1 SpecialJt=No  
GUID=5f457448-78ad-454f-946f-085453c0bcf9

Joint=5860 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=-1.3 Z=-1 SpecialJt=No  
GUID=186375e3-4c4d-468d-b537-9818d72a1b66

Joint=5861 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=-1.2 Z=-1 SpecialJt=No GUID=836a6f5c-5546-49b1-9a73-4c0021c8b4ea

Joint=5862 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=-1.1 Z=-1 SpecialJt=No  
GUID=06579250-211f-4c6e-ba15-be99c593c780

Joint=5863 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=-1 Z=-1 SpecialJt=No GUID=ea089666-83fb-4044-926d-a6aa79ad3dc8

Joint=5864 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=-0.9 Z=-1 SpecialJt=No  
GUID=3f03a2b7-9d3b-4a38-9a6a-a2e0847f7f7d

Joint=5865 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=-0.8 Z=-1 SpecialJt=No  
GUID=3448b640-5e38-4ca4-a3af-54d00eeca47

Joint=5866 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=-0.7 Z=-1 SpecialJt=No  
GUID=48fd1975-d06d-4662-bcfd-0c11c7efde59

Joint=5867 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=-0.6 Z=-1 SpecialJt=No  
GUID=1289b1d8-bbe8-414b-8bb0-f0de3ef048e0

Joint=5868 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=-0.5 Z=-1 SpecialJt=No GUID=52ff7e0e-0cf4-4ec7-b218-a0e9d08c7aaf

Joint=5869 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=-0.4 Z=-1 SpecialJt=No  
GUID=942e595b-7b60-4df0-ad3d-e783cb6d57ac

Joint=5870 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=-0.3 Z=-1 SpecialJt=No  
GUID=7c148474-02d6-4f6d-83fe-131c14ce96dd

Joint=5871 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=-0.2 Z=-1 SpecialJt=No  
GUID=63974e18-3839-48e1-9838-d37d641dc4d4

Joint=5872 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=-0.09999999999999997 Z=-1  
SpecialJt=No GUID=25d72b1c-149b-47ca-9136-aac13485f263

Joint=5873 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=5.55111512312578E-17 Z=-1  
SpecialJt=No GUID=5708e4cb-c7cf-4d13-b814-1ad773e0263c

Joint=5874 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=0.09999999999999998 Z=-1 SpecialJt=No  
GUID=d4cc476a-6e13-4230-99cb-6c9d5612b98d

Joint=5875 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=0.2 Z=-1 SpecialJt=No GUID=0f87258d-36be-47e6-80f0-ce7bf6a302d5

Joint=5876 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=0.3 Z=-1 SpecialJt=No GUID=1ab455a7-18ab-48d7-b019-53debff04af31

Joint=5877 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=0.4 Z=-1 SpecialJt=No GUID=42de0c48-daec-492e-9324-2db9bd1fad76

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5878 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=0.5 Z=-1 SpecialJt=No GUID=5ee0293c-a108-483b-8fef-7fcd2cc93bde

Joint=5879 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=0.6 Z=-1 SpecialJt=No GUID=ea9d5e4c-b316-4dd0-9563-bd5d2eedc8a3

Joint=5880 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=0.7 Z=-1 SpecialJt=No GUID=e93a87e8-6711-41bb-bddb-b7c5faf9027f

Joint=5881 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=0.8 Z=-1 SpecialJt=No GUID=ecd27153-9673-4d3b-aa05-93f41f7405a5

Joint=5882 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=0.9 Z=-1 SpecialJt=No GUID=59e8cef8-3812-4e68-8ae9-6ed073a6361c

Joint=5883 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=1 Z=-1 SpecialJt=No GUID=75114c78-ff88-4d9d-9280-3683bc719407

Joint=5884 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=1.1 Z=-1 SpecialJt=No GUID=ca41b82d-c6ec-410f-9c75-f1c9299f8a4a

Joint=5885 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=1.2 Z=-1 SpecialJt=No GUID=6c1297a0-04b6-4804-a200-6fbce2271793

Joint=5886 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=1.3 Z=-1 SpecialJt=No GUID=49cf888a-db9f-4764-8298-2ae0597e8db1

Joint=5887 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=1.4 Z=-1 SpecialJt=No GUID=d31fc3b2-9775-4ec3-a92f-684966fc13e8

Joint=5888 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=1.5 Z=-1 SpecialJt=No GUID=e9ced240-71bc-4dc4-ac9f-deca2ca0acb1

Joint=5889 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=1.6 Z=-1 SpecialJt=No GUID=c119d323-e67c-45f4-85de-3b334df3a7dc

Joint=5890 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=1.7 Z=-1 SpecialJt=No GUID=62065bc3-6d16-464b-9415-84c78fa86dab

Joint=5891 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=1.8 Z=-1 SpecialJt=No GUID=9b3031fb-97d5-479b-91f3-9470521b2854

Joint=5892 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=1.9 Z=-1 SpecialJt=No GUID=1a465a9e-8a09-46a4-a8f0-f6a76f11e59d

Joint=5893 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=2 Z=-1 SpecialJt=No GUID=71620973-43b7-452d-9964-b0ed4a6f4e1d

Joint=5894 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=2.1 Z=-1 SpecialJt=No GUID=4bcc389e-923c-4c5a-803b-49f324d32ade

Joint=5895 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=2.2 Z=-1 SpecialJt=No GUID=6d62229f-7d65-43a7-8bb4-a51c63178d14

Joint=5896 CoordSys=GLOBAL CoordType=Cartesian XorR=16.1 Y=2.3 Z=-1 SpecialJt=No GUID=f8dc1aa9-e40c-48f1-83de-544bad62ca1f

Joint=5897 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=-2.3 Z=-1 SpecialJt=No GUID=2ac75a2c-373b-44f2-bc0d-fbf472b1cb07

Joint=5898 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=-2.2 Z=-1 SpecialJt=No GUID=ec8dcb5b-ac53-4aea-8af3-23a61809ac07

Joint=5899 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=-2.1 Z=-1 SpecialJt=No GUID=aef8051f-6ed8-4f09-af56-fc202377a9cf

Joint=5900 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=-2 Z=-1 SpecialJt=No GUID=e1836aa0-3c0a-43a5-be9b-cecd04652ad6

Joint=5901 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=-1.9 Z=-1 SpecialJt=No GUID=9b25deda-cc77-4ae7-83e5-b17531099748

Joint=5902 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=-1.8 Z=-1 SpecialJt=No GUID=62d7264c-1e0f-4c76-ada3-dfbaf16c8fbd

Joint=5903 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=-1.7 Z=-1 SpecialJt=No GUID=537021ac-7a74-41a3-be8c-7e62715a7520

Joint=5904 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=-1.6 Z=-1 SpecialJt=No GUID=4197d76a-4e36-4193-a131-9a38b3669387

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5905 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=-1.5 Z=-1 SpecialJt=No GUID=6ceeef42-f62d-42d9-8bd5-49ee4704d0c0

Joint=5906 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=-1.4 Z=-1 SpecialJt=No GUID=a6f44ec3-fd14-4b13-a2bf-e3fa8dddb6ac

Joint=5907 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=-1.3 Z=-1 SpecialJt=No GUID=5787a641-adca-4184-9fd7-5f15613ff9d2

Joint=5908 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=-1.2 Z=-1 SpecialJt=No GUID=2b148bf2-d081-4e4c-9249-9063d0c8efb4

Joint=5909 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=-1.1 Z=-1 SpecialJt=No GUID=bf227314-169a-47bb-9462-51d630332564

Joint=5910 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=-1 Z=-1 SpecialJt=No GUID=421e8f6b-4b4a-4410-8407-a8d3dca5b5f4

Joint=5911 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=-0.9 Z=-1 SpecialJt=No GUID=dec50277-c198-4fde-994c-2a376fe0129e

Joint=5912 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=-0.8 Z=-1 SpecialJt=No GUID=fb9386c6-4ba6-4add-9e03-d9f12f7414fb

Joint=5913 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=-0.7 Z=-1 SpecialJt=No GUID=f5983ee0-60d5-4299-ba06-7f59d51ce300

Joint=5914 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=-0.6 Z=-1 SpecialJt=No GUID=fa7608a3-4c84-4797-9ab3-4c839a84d3ae

Joint=5915 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=-0.5 Z=-1 SpecialJt=No GUID=fffe7599-501b-4dd2-b2dd-568755e7c78e

Joint=5916 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=-0.4 Z=-1 SpecialJt=No GUID=e22d6dc8-4ea5-4a41-8f13-7a5146cb8208

Joint=5917 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=-0.3 Z=-1 SpecialJt=No GUID=397d8429-f111-4b56-8776-f0fe9ced8810

Joint=5918 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=-0.2 Z=-1 SpecialJt=No GUID=b74c0393-9bfd-43f2-ad21-a5acafb4447b

Joint=5919 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=-0.1 Z=-1 SpecialJt=No GUID=11ca11fb-92bf-4d88-87e9-7d7b0e048465

Joint=5920 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=-2.77555756156289E-17 Z=-1 SpecialJt=No GUID=9e498ce2-7fd9-409d-bf41-42d37bab95cf

Joint=5921 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=0.1 Z=-1 SpecialJt=No GUID=48738837-d4d1-434a-b84a-0acbe958597a

Joint=5922 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=0.2 Z=-1 SpecialJt=No GUID=76042aba-a6f2-4a1e-bd16-75a45ae70a33

Joint=5923 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=0.3 Z=-1 SpecialJt=No GUID=53d80262-25d7-4d12-a83f-d642585f6efb

Joint=5924 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=0.4 Z=-1 SpecialJt=No GUID=f29beecd-1010-46aa-9347-b2c28d1ba3a1

Joint=5925 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=0.5 Z=-1 SpecialJt=No GUID=d4921baa-a64f-4df6-b46f-6b855748e8ee

Joint=5926 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=0.6 Z=-1 SpecialJt=No GUID=bd291912-707a-4122-80de-1378eb1a39f6

Joint=5927 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=0.7 Z=-1 SpecialJt=No GUID=a1bd7875-75cc-4b7c-9ad9-a08361f225a1

Joint=5928 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=0.8 Z=-1 SpecialJt=No GUID=4ec23dad-b8ee-4ee7-9acf-0958a0f40947

Joint=5929 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=0.9 Z=-1 SpecialJt=No GUID=db5aaf8d-0d22-422f-8303-eed77d4f47c7

Joint=5930 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=1 Z=-1 SpecialJt=No GUID=2fb522b9-5425-4c20-aac7-506f8eda4b4d

Joint=5931 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=1.1 Z=-1 SpecialJt=No GUID=f21913eb-915d-45cc-9ee2-a8440e12e801



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5932 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=1.2 Z=-1 SpecialJt=No GUID=f54bfeef-04a8-48db-b0ae-f9e105baba61

Joint=5933 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=1.3 Z=-1 SpecialJt=No GUID=47378b95-763f-4443-ae21-ceeeb94037e8

Joint=5934 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=1.4 Z=-1 SpecialJt=No GUID=05fc0620-6032-4690-81cd-e3305b82e1aa

Joint=5935 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=1.5 Z=-1 SpecialJt=No GUID=4a6d5043-9063-409e-9f1c-c6b391ff577f

Joint=5936 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=1.6 Z=-1 SpecialJt=No GUID=08549fab-77ce-435a-9eb8-02f8364df47a

Joint=5937 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=1.7 Z=-1 SpecialJt=No GUID=59254b03-19b0-4f34-9b9f-e1c192d2d8bc

Joint=5938 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=1.8 Z=-1 SpecialJt=No GUID=b3c53b22-2215-4804-964e-74ffa51ad302

Joint=5939 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=1.9 Z=-1 SpecialJt=No GUID=ad17fe4b-5a52-422f-b6de-ed3004788f7a

Joint=5940 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=2 Z=-1 SpecialJt=No GUID=5fbb76e3-dfd7-48b9-9c57-155549ac61ec

Joint=5941 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=2.1 Z=-1 SpecialJt=No GUID=36a0e869-2e20-4556-8ef7-fcadec92ea60

Joint=5942 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=2.2 Z=-1 SpecialJt=No GUID=510b3345-8b38-4dc3-93c9-b35a149e7dc6

Joint=5943 CoordSys=GLOBAL CoordType=Cartesian XorR=16.2 Y=2.3 Z=-1 SpecialJt=No GUID=c430085d-3b9b-4916-afab-cbbb03f71665

Joint=5944 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=-2.3 Z=-1 SpecialJt=No GUID=fea0d058-e374-4faf-a100-ebb8b107e5c3

Joint=5945 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=-2.2 Z=-1 SpecialJt=No GUID=2dd9a4de-f373-4bf8-8474-b1ccab2c586b

Joint=5946 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=-2.1 Z=-1 SpecialJt=No GUID=27510854-420b-41c8-aaff-723ff81030c5

Joint=5947 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=-2 Z=-1 SpecialJt=No GUID=5172d466-8833-4efb-85b4-013ef4616c0b

Joint=5948 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=-1.9 Z=-1 SpecialJt=No GUID=aff9edeb-7bec-47be-94d7-699a0464c79f

Joint=5949 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=-1.8 Z=-1 SpecialJt=No GUID=66382d87-9b8b-45ea-9873-fa3f9556067a

Joint=5950 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=-1.7 Z=-1 SpecialJt=No GUID=41465678-1756-4f2c-8e64-47369006abc0

Joint=5951 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=-1.6 Z=-1 SpecialJt=No GUID=9fe11713-5de6-4344-b8d1-043e06b4fcf0

Joint=5952 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=-1.5 Z=-1 SpecialJt=No GUID=4385af70-8eaa-4b69-8909-6d38e9b41ec2

Joint=5953 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=-1.4 Z=-1 SpecialJt=No GUID=a73f40bc-60d6-42e4-9c57-9746b3173772

Joint=5954 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=-1.3 Z=-1 SpecialJt=No GUID=cb24f319-d04c-42de-9f8c-77545025ca55

Joint=5955 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=-1.2 Z=-1 SpecialJt=No GUID=3a2c5e3c-2748-4cda-a1ac-c2efb9e20222

Joint=5956 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=-1.1 Z=-1 SpecialJt=No GUID=dc9a3f53-ef1e-435c-b57e-222e2d69b924

Joint=5957 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=-1 Z=-1 SpecialJt=No GUID=1b273b7f-a105-4b59-abec-b13f6028d9f2

Joint=5958 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=-0.9 Z=-1 SpecialJt=No GUID=a90bbff2-a0c5-406e-b6c5-00cc45ba5d50

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5959 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=-0.8 Z=-1 SpecialJt=No  
GUID=8be899f9-06cc-4c1f-8558-febebe2a930e

Joint=5960 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=-0.7 Z=-1 SpecialJt=No GUID=dbb0bff7-  
9081-49af-b658-10f53c416459

Joint=5961 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=-0.6 Z=-1 SpecialJt=No  
GUID=8a5f0394-dbe5-4c21-bb8a-bfb1244961ea

Joint=5962 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=-0.5 Z=-1 SpecialJt=No  
GUID=5f8917e7-d841-499f-baa2-49b4d19c9f1d

Joint=5963 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=-0.4 Z=-1 SpecialJt=No  
GUID=e9ea8790-dbee-4541-9d43-aa23b692083d

Joint=5964 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=-0.3 Z=-1 SpecialJt=No  
GUID=797fa05b-237d-47c6-acb5-344f840eb18b

Joint=5965 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=-0.2 Z=-1 SpecialJt=No  
GUID=59dad6e6-41c9-4dfc-910d-3e3b7103f920

Joint=5966 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=-0.1 Z=-1 SpecialJt=No  
GUID=34a56785-f919-4d14-86d5-7513dcac3965

Joint=5967 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=2.77555756156289E-17 Z=-1  
SpecialJt=No GUID=f9bd97d4-8c07-4f4c-bb04-349511b5f038

Joint=5968 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=0.0999999999999998 Z=-1 SpecialJt=No  
GUID=aed5abd4-652a-4b2e-a97b-8b8974becba8

Joint=5969 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=0.2 Z=-1 SpecialJt=No GUID=e69dd9d1-  
1d8f-4d60-af72-d07db3bde8d

Joint=5970 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=0.3 Z=-1 SpecialJt=No GUID=390ed42b-  
7fc7-48e5-9eb2-9ca4335f94e8

Joint=5971 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=0.4 Z=-1 SpecialJt=No GUID=a8494509-  
577a-4fb6-9893-c5c8ce8beba4

Joint=5972 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=0.5 Z=-1 SpecialJt=No GUID=a279dfba-  
bd08-439e-8d63-70a96ff08099

Joint=5973 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=0.6 Z=-1 SpecialJt=No GUID=93fcfe8a-  
102c-45a0-96f0-79cea09ad55d

Joint=5974 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=0.7 Z=-1 SpecialJt=No GUID=6f09bf78-  
aee6-461f-9d6c-914f36f5d20f

Joint=5975 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=0.8 Z=-1 SpecialJt=No GUID=40a7fe6e-  
2458-4795-82dc-d0e1e2585b36

Joint=5976 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=0.9 Z=-1 SpecialJt=No GUID=fc1b25e4-  
271b-4a6a-bd8d-51328d258927

Joint=5977 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=1 Z=-1 SpecialJt=No GUID=d4e7640c-  
e401-48f4-8ae5-3de960a2f70c

Joint=5978 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=1.1 Z=-1 SpecialJt=No GUID=84aec2f9-  
500e-40cc-9ee8-9beeb0145220

Joint=5979 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=1.2 Z=-1 SpecialJt=No GUID=2aeaa5bc-  
32e9-4634-b669-20805c2c6cd6

Joint=5980 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=1.3 Z=-1 SpecialJt=No GUID=8610d59f-  
dec3-4934-99a7-2ad0150c5225

Joint=5981 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=1.4 Z=-1 SpecialJt=No GUID=9005934a-  
69bb-44db-bacc-3791356ab8e8

Joint=5982 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=1.5 Z=-1 SpecialJt=No GUID=0c27aed3-  
118a-4392-85ac-fb682891693a

Joint=5983 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=1.6 Z=-1 SpecialJt=No GUID=de9f6c38-  
ea36-45ef-80d0-29d6bddc78d9

Joint=5984 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=1.7 Z=-1 SpecialJt=No GUID=bced8a91-  
f987-40ed-a114-8088d565dc50

Joint=5985 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=1.8 Z=-1 SpecialJt=No GUID=109127e9-  
4a55-4a3f-9866-28231ad04077

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=5986 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=1.9 Z=-1 SpecialJt=No GUID=765d1a53-f0e6-4207-bfa0-38bee0e1a0e8

Joint=5987 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=2 Z=-1 SpecialJt=No GUID=d751e7a6-b25b-427c-bf96-52646659763c

Joint=5988 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=2.1 Z=-1 SpecialJt=No GUID=d36a82ee-7c04-4dbc-ae0c-37010fe26d11

Joint=5989 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=2.2 Z=-1 SpecialJt=No GUID=641a0fea-4330-4d13-bdd3-d2232bae00af

Joint=5990 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=2.3 Z=-1 SpecialJt=No GUID=13af9d40-8e6c-4c47-8057-2ca71f6902e4

Joint=5991 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=-2.3 Z=-1 SpecialJt=No GUID=2cf083f2-66d1-4ff1-9571-23afedb31839

Joint=5992 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=-2.2 Z=-1 SpecialJt=No GUID=23751a1b-2efd-450e-bbbc-8b0a52ab217f

Joint=5993 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=-2.1 Z=-1 SpecialJt=No GUID=ed3b99c1-8881-4a15-a164-441a1c7c680f

Joint=5994 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=-2 Z=-1 SpecialJt=No GUID=f94611ac-0d04-4a86-b2f7-445339d58fc6

Joint=5995 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=-1.9 Z=-1 SpecialJt=No GUID=c40bf71a-627f-4bd0-96d5-1fb472efa506

Joint=5996 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=-1.8 Z=-1 SpecialJt=No GUID=e6f748c1-253a-4169-8656-b7465667df46

Joint=5997 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=-1.7 Z=-1 SpecialJt=No GUID=97b43abc-f62d-4fea-b85d-2f4863bc3154

Joint=5998 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=-1.6 Z=-1 SpecialJt=No GUID=be187e0d-bc73-44bf-b20a-020f9fcc186e

Joint=5999 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=-1.5 Z=-1 SpecialJt=No GUID=93d61941-37bd-4c19-a8e9-1500d87a9d04

Joint=6000 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=-1.4 Z=-1 SpecialJt=No GUID=308692cf-f0c3-45e0-8d04-852a15155636

Joint=6001 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=-1.3 Z=-1 SpecialJt=No GUID=227a02d2-9573-4aaa-a1cf-f7df7255d5c6

Joint=6002 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=-1.2 Z=-1 SpecialJt=No GUID=0be7a8e6-ac23-4b7b-80ea-901213ec4e0b

Joint=6003 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=-1.1 Z=-1 SpecialJt=No GUID=751d79d5-83bd-4c8d-895a-f04b543eae49

Joint=6004 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=-1 Z=-1 SpecialJt=No GUID=8cd04d7d-d61d-45b4-8aa8-3d2c54c82c6e

Joint=6005 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=-0.9 Z=-1 SpecialJt=No GUID=81f13194-86df-4d11-8a66-6c25c870994d

Joint=6006 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=-0.8 Z=-1 SpecialJt=No GUID=8e6eacae-cabd-4691-8f45-b7143eb15aef

Joint=6007 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=-0.7 Z=-1 SpecialJt=No GUID=b94e630f-2a54-42da-9e01-00340d58bfe2

Joint=6008 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=-0.6 Z=-1 SpecialJt=No GUID=0ce932d0-63a9-470e-85ec-aca3965154b5

Joint=6009 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=-0.5 Z=-1 SpecialJt=No GUID=4c10d7aa-6363-4d70-8e9e-da7732767fd8

Joint=6010 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=-0.4 Z=-1 SpecialJt=No GUID=28dc3519-cda1-4471-9dfe-d6661c3261d6

Joint=6011 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=-0.3 Z=-1 SpecialJt=No GUID=5668a812-61cb-4e26-8a64-a4fda81a6b78

Joint=6012 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=-0.2 Z=-1 SpecialJt=No GUID=ca9b239b-d29c-4c34-8ae6-7d55efaa6774

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=6013 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=-0.1 Z=-1 SpecialJt=No GUID=6ce62dff-2b79-4d7d-a171-b6e9eb952562

Joint=6014 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=-5.55111512312578E-17 Z=-1 SpecialJt=No GUID=a4830561-0577-40b5-a226-528a5c19536b

Joint=6015 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=0.1 Z=-1 SpecialJt=No GUID=2c637a6d-cb9b-499a-9f33-e1c191a9c698

Joint=6016 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=0.2 Z=-1 SpecialJt=No GUID=cecdabb9-cd59-4a08-8adb-58216035817e

Joint=6017 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=0.3 Z=-1 SpecialJt=No GUID=b512cbbc-c24e-4a23-bbd3-73da4cecd0a9

Joint=6018 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=0.4 Z=-1 SpecialJt=No GUID=9607a57c-b528-4218-bb71-20939804cd42

Joint=6019 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=0.5 Z=-1 SpecialJt=No GUID=814a2f88-e8db-4235-8bfc-5a5ae7d22425

Joint=6020 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=0.6 Z=-1 SpecialJt=No GUID=bc3f37da-9ddd-442a-9907-808f07938a54

Joint=6021 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=0.7 Z=-1 SpecialJt=No GUID=663866c1-55cf-49f4-a912-2839fb61fd5d

Joint=6022 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=0.8 Z=-1 SpecialJt=No GUID=188cbf22-a805-448a-aa5c-53fd94252746

Joint=6023 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=0.9 Z=-1 SpecialJt=No GUID=343e9cb6-ef05-42de-896d-8f4e0d67ed31

Joint=6024 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=1 Z=-1 SpecialJt=No GUID=ce65cf44-3fe9-46ac-aa07-b9986a67c4f8

Joint=6025 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=1.1 Z=-1 SpecialJt=No GUID=cdb58e99-9353-4aab-880f-a394afa89915

Joint=6026 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=1.2 Z=-1 SpecialJt=No GUID=c558e52e-2c45-4a8e-99a7-c8a66c3c146f

Joint=6027 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=1.3 Z=-1 SpecialJt=No GUID=d8eeb1bb-c1bc-4ae9-8134-492d7f911fc5

Joint=6028 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=1.4 Z=-1 SpecialJt=No GUID=7b9a216c-11aa-43eb-afb4-24be160f1972

Joint=6029 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=1.5 Z=-1 SpecialJt=No GUID=bc3363fd-156e-475d-a032-59454e17952a

Joint=6030 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=1.6 Z=-1 SpecialJt=No GUID=e740155f-1197-4b95-ba87-0d25b321622c

Joint=6031 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=1.7 Z=-1 SpecialJt=No GUID=426d8c37-0218-4ee8-bd92-afb6736715a6

Joint=6032 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=1.8 Z=-1 SpecialJt=No GUID=1221c408-35bf-4d81-b44d-97d88e06bf22

Joint=6033 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=1.9 Z=-1 SpecialJt=No GUID=0c720d6b-3568-4b41-8962-dada582ba513

Joint=6034 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=2 Z=-1 SpecialJt=No GUID=4586eb6e-a563-4023-abb6-a417eec51f1a

Joint=6035 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=2.1 Z=-1 SpecialJt=No GUID=2d0dd7b4-90bc-4734-9d3c-2fdb432aaff6

Joint=6036 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=2.2 Z=-1 SpecialJt=No GUID=22777fea-8111-4272-9557-a4036facb3b6

Joint=6037 CoordSys=GLOBAL CoordType=Cartesian XorR=16.4 Y=2.3 Z=-1 SpecialJt=No GUID=afd7df14-d6d2-40b1-9c98-3d33502a4fba

Joint=6038 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=-2.3 Z=-1 SpecialJt=No GUID=1355efa6-b8ba-446a-b18e-c76b17d90814

Joint=6039 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=-2.2 Z=-1 SpecialJt=No GUID=ab103c94-4e75-4aaa-823f-09f3914312af



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=6040 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=-2.1 Z=-1 SpecialJt=No  
GUID=55b9ba65-98e7-4271-8e22-6a61f7b2df81

Joint=6041 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=-2 Z=-1 SpecialJt=No GUID=d1619ad2-5bc1-4935-b32c-819cc485c6cc

Joint=6042 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=-1.9 Z=-1 SpecialJt=No  
GUID=d831933c-d82a-4500-9a5b-4e315edc247e

Joint=6043 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=-1.8 Z=-1 SpecialJt=No  
GUID=3ddcc140-416b-49d2-bdd5-5d37c0aca887

Joint=6044 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=-1.7 Z=-1 SpecialJt=No  
GUID=fe47e50e-def9-427a-b784-ba4844fd9077

Joint=6045 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=-1.6 Z=-1 SpecialJt=No  
GUID=e21062f8-9b97-4488-a847-4009d827ddf5

Joint=6046 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=-1.5 Z=-1 SpecialJt=No GUID=881d7f1f-af0e-4459-82be-2baaf4cf0f72

Joint=6047 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=-1.4 Z=-1 SpecialJt=No  
GUID=a41814c7-0a8b-4326-abe5-683873f016f5

Joint=6048 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=-1.3 Z=-1 SpecialJt=No  
GUID=18de996e-0d37-4f50-b998-a7e206deb9fe

Joint=6049 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=-1.2 Z=-1 SpecialJt=No  
GUID=28a2bc8e-6c94-46af-9f6b-4864a6387799

Joint=6050 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=-1.1 Z=-1 SpecialJt=No GUID=c9c8f03c-e2b2-406f-bf84-90b444c40456

Joint=6051 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=-1 Z=-1 SpecialJt=No GUID=f72efa31-9a16-47c2-8405-d9b95fb4f487

Joint=6052 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=-0.9 Z=-1 SpecialJt=No  
GUID=7a69d842-3783-495c-bfea-edde817fe283

Joint=6053 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=-0.8 Z=-1 SpecialJt=No GUID=928c8f61-80a4-4d81-a697-3965cf6f600d

Joint=6054 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=-0.7 Z=-1 SpecialJt=No GUID=05ff2bc9-85aa-4881-98fe-f5335340db9d

Joint=6055 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=-0.6 Z=-1 SpecialJt=No  
GUID=cc36a447-a620-41a0-9143-cd29f078fbd4

Joint=6056 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=-0.5 Z=-1 SpecialJt=No GUID=732f6ff8-2510-488e-8918-529f67e44f07

Joint=6057 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=-0.4 Z=-1 SpecialJt=No  
GUID=04c16e7b-583f-4d9a-aa75-30e23f6317ab

Joint=6058 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=-0.3 Z=-1 SpecialJt=No GUID=cc2f7834-cb98-4b5b-821a-69c7b15a2dd0

Joint=6059 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=-0.2 Z=-1 SpecialJt=No  
GUID=710b8a19-1a9e-4c38-8c7b-a188bb055ad2

Joint=6060 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=-0.1 Z=-1 SpecialJt=No GUID=2f1e9fde-2321-4163-a0b1-acf44b6edf98

Joint=6061 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=0 Z=-1 SpecialJt=No GUID=e0dd68e4-07eb-4b7d-80a6-5a93a5544551

Joint=6062 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=0.1 Z=-1 SpecialJt=No GUID=93c11b46-e0c8-4b57-a30f-eb9d91052c13

Joint=6063 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=0.2 Z=-1 SpecialJt=No GUID=e0614de9-2aee-472c-902d-ebfe3c7d1a1a

Joint=6064 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=0.3 Z=-1 SpecialJt=No GUID=4188b801-5f92-4108-b48a-2d8150e3ed0f

Joint=6065 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=0.4 Z=-1 SpecialJt=No GUID=ba839052-3fd3-43a3-bd99-c4b780df4afc

Joint=6066 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=0.5 Z=-1 SpecialJt=No GUID=7b0b961a-26e2-43e6-abe7-b539378c00b6

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=6067 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=0.6 Z=-1 SpecialJt=No GUID=2853a0eb-f4c3-4d27-9aec-803ed39e074f

Joint=6068 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=0.7 Z=-1 SpecialJt=No GUID=ca97e5ea-d545-4df7-9c1b-d7430d76d2a6

Joint=6069 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=0.8 Z=-1 SpecialJt=No GUID=a1bb33b1-183f-4337-984f-17a767e55fab

Joint=6070 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=0.9 Z=-1 SpecialJt=No GUID=04755947-c77e-4b08-8086-1bf47324d3fc

Joint=6071 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=1 Z=-1 SpecialJt=No GUID=fca629d7-791f-439d-a7c8-1024fd4c44df

Joint=6072 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=1.1 Z=-1 SpecialJt=No GUID=c38f3264-5da4-43bc-8feb-59c01cfa4fd1

Joint=6073 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=1.2 Z=-1 SpecialJt=No GUID=53a57971-c943-4161-b5b2-1c6413004e68

Joint=6074 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=1.3 Z=-1 SpecialJt=No GUID=58753af1-ed54-4935-99bb-b2be45e79cb1

Joint=6075 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=1.4 Z=-1 SpecialJt=No GUID=08d89594-36d7-4b9b-8df4-20d1c1bf5d85

Joint=6076 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=1.5 Z=-1 SpecialJt=No GUID=a74162b6-076f-4e5f-8644-1ae12cd3b6d7

Joint=6077 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=1.6 Z=-1 SpecialJt=No GUID=04e76542-2183-401f-8631-752e96859f5c

Joint=6078 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=1.7 Z=-1 SpecialJt=No GUID=ee6cd27d-04c4-4d5f-8c10-1aae2c856596

Joint=6079 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=1.8 Z=-1 SpecialJt=No GUID=0b087d53-8380-4c7b-8522-7f8fa6ae4f8d

Joint=6080 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=1.9 Z=-1 SpecialJt=No GUID=43e4272e-5caa-4fb3-a801-b01f52435c74

Joint=6081 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=2 Z=-1 SpecialJt=No GUID=166632d1-8db4-4c1d-b01e-297366d79d0d

Joint=6082 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=2.1 Z=-1 SpecialJt=No GUID=3d16c96d-ec2f-4ac6-af9e-63bca7cc395

Joint=6083 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=2.2 Z=-1 SpecialJt=No GUID=b4cd63c9-45be-4038-ac8f-48238e3fed54

Joint=6084 CoordSys=GLOBAL CoordType=Cartesian XorR=16.5 Y=2.3 Z=-1 SpecialJt=No GUID=87437f6b-b7ee-4164-adff-1f110eeaf744

Joint=6085 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=-2.3 Z=-1 SpecialJt=No GUID=58895fac-49e0-4a12-88dd-f1821bee2c20

Joint=6086 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=-2.2 Z=-1 SpecialJt=No GUID=64866d6c-0492-4f57-be53-e7021e5ec3c7

Joint=6087 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=-2.1 Z=-1 SpecialJt=No GUID=cebaa855-a429-4b97-90d1-02441ba68429

Joint=6088 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=-2 Z=-1 SpecialJt=No GUID=e48d7134-4761-443c-99cc-7ee08c7b5b1e

Joint=6089 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=-1.9 Z=-1 SpecialJt=No GUID=5fb32783-835b-4b33-9577-73e624a05ef1

Joint=6090 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=-1.8 Z=-1 SpecialJt=No GUID=b9a9c246-1a4e-466f-a813-811da11ba3ec

Joint=6091 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=-1.7 Z=-1 SpecialJt=No GUID=483d7211-2531-45bc-a295-ff68c9f397c4

Joint=6092 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=-1.6 Z=-1 SpecialJt=No GUID=5e510f91-2a4d-4d4d-8a6d-4b8ae42f8053

Joint=6093 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=-1.5 Z=-1 SpecialJt=No GUID=ed6eb60d-689c-4ec9-ba78-eb5a909cdc02

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=6094 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=-1.4 Z=-1 SpecialJt=No  
GUID=e92c6e38-4ec5-41dd-b54c-97058844da7f

Joint=6095 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=-1.3 Z=-1 SpecialJt=No GUID=49cfa25c-  
bdf9-4c69-a7ac-ea58615e3f1e

Joint=6096 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=-1.2 Z=-1 SpecialJt=No GUID=401fbf98-  
a5fb-422b-ad1c-15a2815f9e7a

Joint=6097 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=-1.1 Z=-1 SpecialJt=No GUID=9ba230ff-  
44d1-4c10-9410-15fd7954ce6d

Joint=6098 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=-1 Z=-1 SpecialJt=No GUID=89cc2faf-  
2165-4688-a6bf-7ef443e7a7cd

Joint=6099 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=-0.9 Z=-1 SpecialJt=No GUID=b5ff5f5f-  
4af5-479d-b307-08231bbd9bf2

Joint=6100 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=-0.8 Z=-1 SpecialJt=No  
GUID=7d5482bb-bd8a-413e-b326-6a9a58762f41

Joint=6101 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=-0.7 Z=-1 SpecialJt=No  
GUID=2180a1f0-0835-4d0a-aa97-7c7a0fea312e

Joint=6102 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=-0.6 Z=-1 SpecialJt=No  
GUID=89571db6-1fd1-4eef-8031-ed4931003992

Joint=6103 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=-0.5 Z=-1 SpecialJt=No  
GUID=c969706d-ee01-42b8-ad28-97ea47b0c2c1

Joint=6104 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=-0.4 Z=-1 SpecialJt=No  
GUID=afd42237-8f33-43ed-8671-2391f939b396

Joint=6105 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=-0.3 Z=-1 SpecialJt=No  
GUID=411e771e-c8dd-4618-a311-731dba45dadb

Joint=6106 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=-0.2 Z=-1 SpecialJt=No  
GUID=34d3c074-26a8-4f07-ae9c-e7d5511ef17b

Joint=6107 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=-0.099999999999999999 Z=-1  
SpecialJt=No GUID=379e5970-b233-471f-a905-35254a0c351e

Joint=6108 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=2.77555756156289E-17 Z=-1  
SpecialJt=No GUID=f9c3a3df-e32e-41c7-bc79-f1ff3509fea4

Joint=6109 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=0.099999999999999998 Z=-1 SpecialJt=No  
GUID=6f28ebb9-108f-4248-bbf9-c94e7a6bf6cc

Joint=6110 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=0.2 Z=-1 SpecialJt=No GUID=25788380-  
30a3-43ed-a88b-183f539a0308

Joint=6111 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=0.3 Z=-1 SpecialJt=No GUID=d48f544b-  
4114-4f02-a4b9-7d0a89e9666e

Joint=6112 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=0.4 Z=-1 SpecialJt=No GUID=be895154-  
1f6e-4fbd-bf68-7b1a7f5cb321

Joint=6113 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=0.5 Z=-1 SpecialJt=No GUID=23dec492-  
76b8-4626-8d5a-b3e8c55347fc

Joint=6114 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=0.6 Z=-1 SpecialJt=No GUID=93efaa5a-  
a1cd-45a9-a50c-0a8ed8d1d336

Joint=6115 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=0.7 Z=-1 SpecialJt=No GUID=b34317bb-  
42d5-44bf-a57e-ba0eda6d31d4

Joint=6116 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=0.8 Z=-1 SpecialJt=No GUID=a64d81ff-  
0b74-4f6d-9b84-ee61f4c975dc

Joint=6117 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=0.9 Z=-1 SpecialJt=No GUID=012a21fd-  
63c2-47eb-9db9-add15f2d958d

Joint=6118 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=1 Z=-1 SpecialJt=No GUID=35086ff2-  
2ae6-49c8-a541-93f62a0bfc26

Joint=6119 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=1.1 Z=-1 SpecialJt=No GUID=22528237-  
9ee1-47f6-8583-cc3086c2e2ec

Joint=6120 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=1.2 Z=-1 SpecialJt=No GUID=e8c3fbf5-  
9399-4726-badf-36970361c1a9

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=6121 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=1.3 Z=-1 SpecialJt=No GUID=4cdd9643-94bf-4ddf-9253-4a92e3ad0123

Joint=6122 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=1.4 Z=-1 SpecialJt=No GUID=8b26bd23-1607-4dad-9406-df2fcd6fa83d

Joint=6123 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=1.5 Z=-1 SpecialJt=No GUID=9da5d942-7afe-4f59-80cf-c3a274902dfc

Joint=6124 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=1.6 Z=-1 SpecialJt=No GUID=4069a97c-6960-47b8-b068-c8f0c2fab515

Joint=6125 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=1.7 Z=-1 SpecialJt=No GUID=e1522314-2a83-4d3a-8298-90d16ae23e6c

Joint=6126 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=1.8 Z=-1 SpecialJt=No GUID=3b555269-f4db-46b0-8092-12742c448609

Joint=6127 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=1.9 Z=-1 SpecialJt=No GUID=93c888e5-e672-4928-9332-acd31aa3a3c3

Joint=6128 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=2 Z=-1 SpecialJt=No GUID=83253035-dbea-4fea-bf6e-fe05a2d20603

Joint=6129 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=2.1 Z=-1 SpecialJt=No GUID=2b031764-3e92-4348-ada4-21d231adfa28

Joint=6130 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=2.2 Z=-1 SpecialJt=No GUID=e9d7e7e0-a479-40d1-bc44-d101bfca73d

Joint=6131 CoordSys=GLOBAL CoordType=Cartesian XorR=16.6 Y=2.3 Z=-1 SpecialJt=No GUID=16dde682-2a51-45ce-8aae-18a628b3ed34

Joint=6132 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=-2.3 Z=-1 SpecialJt=No GUID=0c719f04-5d9b-45d9-b117-0e53eb1a72b6

Joint=6133 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=-2.2 Z=-1 SpecialJt=No GUID=51dc2ed7-248f-4d8f-8586-2b4346bc35cd

Joint=6134 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=-2.1 Z=-1 SpecialJt=No GUID=3337eb21-2c73-4208-8301-45ab53b33b4a

Joint=6135 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=-2 Z=-1 SpecialJt=No GUID=243678b0-cae0-4420-87b7-511e1ccc8ed0

Joint=6136 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=-1.9 Z=-1 SpecialJt=No GUID=8d120426-26fd-43d9-ae00-0ede2ee6e9ec

Joint=6137 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=-1.8 Z=-1 SpecialJt=No GUID=d97e0a54-1a1b-49c6-8245-78df68cc7c3d

Joint=6138 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=-1.7 Z=-1 SpecialJt=No GUID=4fe8a470-2f37-40b4-9542-33fa9d4056b8

Joint=6139 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=-1.6 Z=-1 SpecialJt=No GUID=8e222a8f-a60d-4e02-948e-d39a51ceb78f

Joint=6140 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=-1.5 Z=-1 SpecialJt=No GUID=3c7e815c-4fed-4f9a-a657-e96fdebfcdb3

Joint=6141 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=-1.4 Z=-1 SpecialJt=No GUID=9fc80248-2d55-403c-a59f-f24e63ce270f

Joint=6142 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=-1.3 Z=-1 SpecialJt=No GUID=3ebf1cff-653a-4b15-9d80-20efdbb3d3bb

Joint=6143 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=-1.2 Z=-1 SpecialJt=No GUID=d8ffa829-84c3-42af-8155-8be213f4c2bd

Joint=6144 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=-1.1 Z=-1 SpecialJt=No GUID=951ae247-563f-420f-88f5-4ea4f424669a

Joint=6145 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=-1 Z=-1 SpecialJt=No GUID=74c23c48-c5bc-47aa-8370-8186addf9716

Joint=6146 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=-0.9 Z=-1 SpecialJt=No GUID=d4649a48-45b4-4fa8-8b9a-0aa19b6d6af2

Joint=6147 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=-0.8 Z=-1 SpecialJt=No GUID=3c8185ea-2e82-4278-956e-dcff4af94fdf



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=6148 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=-0.7 Z=-1 SpecialJt=No  
GUID=02829847-b47a-4d21-a8a4-789a58a97bc6

Joint=6149 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=-0.6 Z=-1 SpecialJt=No GUID=53ff1d59-  
f276-41aa-9419-f8d367e021a8

Joint=6150 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=-0.5 Z=-1 SpecialJt=No  
GUID=eddd26d7-eb98-44e1-94f5-40e174935b12

Joint=6151 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=-0.4 Z=-1 SpecialJt=No GUID=1543fb9f-  
1da4-40ca-b86b-790d58a3ccd6

Joint=6152 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=-0.3 Z=-1 SpecialJt=No  
GUID=3097a005-daa8-44e2-8b47-2f06e8d62868

Joint=6153 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=-0.2 Z=-1 SpecialJt=No  
GUID=123e8178-55ee-46f2-9ab6-e8eb5a5b99a1

Joint=6154 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=-0.09999999999999997 Z=-1  
SpecialJt=No GUID=b69b1270-c02a-4ecd-abb-ba0f8c58fa861

Joint=6155 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=-4.16333634234434E-17 Z=-1  
SpecialJt=No GUID=7b72b50d-ed7c-4fff-aa60-b63de0d8ac20

Joint=6156 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=0.09999999999999996 Z=-1 SpecialJt=No  
GUID=14bfc454-e5d3-458b-a431-706a54c5f1ba

Joint=6157 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=0.2 Z=-1 SpecialJt=No GUID=c51b1e3f-  
7d59-4340-9a63-f4c402bb5914

Joint=6158 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=0.3 Z=-1 SpecialJt=No GUID=80c9e2ee-  
b4a3-4624-b39e-abb780a4b4c2

Joint=6159 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=0.4 Z=-1 SpecialJt=No GUID=7f813575-  
676a-400e-92d4-1155ad5d0a4b

Joint=6160 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=0.5 Z=-1 SpecialJt=No GUID=061373e3-  
4de8-4009-a9db-a05e541718bb

Joint=6161 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=0.6 Z=-1 SpecialJt=No GUID=457d7bd1-  
1875-49cd-8cdd-dc1e51634df6

Joint=6162 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=0.7 Z=-1 SpecialJt=No GUID=e54f5412-  
119d-41dd-880d-05f7f693105c

Joint=6163 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=0.8 Z=-1 SpecialJt=No GUID=608c842d-  
4573-4408-89bc-f5c9ceba853c

Joint=6164 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=0.9 Z=-1 SpecialJt=No GUID=79288876-  
dbed-4e9f-bd86-4ff6bb8572a7

Joint=6165 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=1 Z=-1 SpecialJt=No GUID=5efbe5ae-  
f247-405f-a762-5256e882e0eb

Joint=6166 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=1.1 Z=-1 SpecialJt=No GUID=f13d82cf-  
d507-4a9c-85f7-2e8fb2087eea

Joint=6167 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=1.2 Z=-1 SpecialJt=No GUID=7b525fa3-  
338f-4f10-8571-9cc2f405f1bf

Joint=6168 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=1.3 Z=-1 SpecialJt=No GUID=ad2aed8a-  
ff2e-4713-b8f8-10cddc66e807

Joint=6169 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=1.4 Z=-1 SpecialJt=No GUID=68aac40e-  
b2fa-48a8-87cb-fd2deab37f23

Joint=6170 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=1.5 Z=-1 SpecialJt=No GUID=9cfb3061-  
6d98-4c97-94b1-6d561d9f2ed5

Joint=6171 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=1.6 Z=-1 SpecialJt=No GUID=e8db8831-  
1778-4624-ab52-64c7c28e75a9

Joint=6172 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=1.7 Z=-1 SpecialJt=No GUID=53a0873b-  
6b5d-48f0-84eb-09ccb7389695

Joint=6173 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=1.8 Z=-1 SpecialJt=No GUID=3550217c-  
77e4-470c-88df-3fb5eb26ef76

Joint=6174 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=1.9 Z=-1 SpecialJt=No GUID=812861c7-  
754a-4b6f-8aec-7bbbf07eb8dc

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=6175 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=2 Z=-1 SpecialJt=No GUID=cd2efd12-fa0b-43b8-94bc-70262b451a02

Joint=6176 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=2.1 Z=-1 SpecialJt=No GUID=75a6bc77-4874-4561-906b-585338749212

Joint=6177 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=2.2 Z=-1 SpecialJt=No GUID=c3568ef2-db79-479c-85a0-b9373b040b2d

Joint=6178 CoordSys=GLOBAL CoordType=Cartesian XorR=16.7 Y=2.3 Z=-1 SpecialJt=No GUID=6e6d5c2e-295d-4ab2-bc11-f7b25217a93f

Joint=6179 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=-2.3 Z=-1 SpecialJt=No GUID=23497508-a5f2-4f63-8ef3-513155d670b6

Joint=6180 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=-2.2 Z=-1 SpecialJt=No GUID=1de736ee-f51a-401d-8f66-b4763e550a26

Joint=6181 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=-2.1 Z=-1 SpecialJt=No GUID=0117504a-0ff0-4b73-a043-b841424bd9b3

Joint=6182 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=-2 Z=-1 SpecialJt=No GUID=86e57623-b7da-4300-8982-9b377ef4a4f0

Joint=6183 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=-1.9 Z=-1 SpecialJt=No GUID=1f18a7e2-294d-4b3a-b58e-9a0ed6d396e1

Joint=6184 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=-1.8 Z=-1 SpecialJt=No GUID=ea6d6f9b-a142-438b-b02c-bfc314fac447

Joint=6185 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=-1.7 Z=-1 SpecialJt=No GUID=4e478703-bd2a-4a04-bc5f-ab144e88b3a8

Joint=6186 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=-1.6 Z=-1 SpecialJt=No GUID=b53b93ba-c9ff-4d09-aefa-704069c8db11

Joint=6187 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=-1.5 Z=-1 SpecialJt=No GUID=12ddfbbe-982b-42c4-8bc8-5346070139e9

Joint=6188 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=-1.4 Z=-1 SpecialJt=No GUID=53b581ae-b476-4308-b002-c453f3d02da6

Joint=6189 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=-1.3 Z=-1 SpecialJt=No GUID=48e64ac7-1312-4767-8d5f-c23aea69b298

Joint=6190 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=-1.2 Z=-1 SpecialJt=No GUID=7195d24c-6599-4f27-9092-fdddec9cd8de

Joint=6191 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=-1.1 Z=-1 SpecialJt=No GUID=d026169e-85a5-437d-96d9-d04d18dba8aa

Joint=6192 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=-1 Z=-1 SpecialJt=No GUID=4207e71f-7675-43ce-a88e-5d1626361d7b

Joint=6193 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=-0.9 Z=-1 SpecialJt=No GUID=972a0fa6-c66b-41e7-9b8b-4a0cb97ba24b

Joint=6194 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=-0.8 Z=-1 SpecialJt=No GUID=1164d4fa-5976-4ecb-a00b-247b89b4df11

Joint=6195 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=-0.7 Z=-1 SpecialJt=No GUID=53651741-9416-456c-bfd1-b5c872640ec5

Joint=6196 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=-0.6 Z=-1 SpecialJt=No GUID=62daccaf-ed1d-4890-ac5d-bd6b79c9c3d1

Joint=6197 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=-0.5 Z=-1 SpecialJt=No GUID=986416f9-16f9-41b4-8e48-474e11147472

Joint=6198 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=-0.4 Z=-1 SpecialJt=No GUID=8b34d6ed-c03e-4b19-a424-00d4d329f395

Joint=6199 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=-0.3 Z=-1 SpecialJt=No GUID=3a28c7dc-b414-44d3-8bce-aae300c42f02

Joint=6200 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=-0.2 Z=-1 SpecialJt=No GUID=5c794cbf-a9b1-4167-a8a6-e23def8867f3

Joint=6201 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=-0.1 Z=-1 SpecialJt=No GUID=e2055d48-62ba-415b-aca1-fa5f064c079f

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=6202 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=-1.38777878078145E-17 Z=-1 SpecialJt=No GUID=504dc4ab-6a5a-41ae-a63b-cdc514131965

Joint=6203 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=0.1 Z=-1 SpecialJt=No GUID=dfe72185-63a1-4833-a189-ea17a25d27af

Joint=6204 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=0.2 Z=-1 SpecialJt=No GUID=1191176f-a470-4929-b4de-7c3bb260f6d9

Joint=6205 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=0.3 Z=-1 SpecialJt=No GUID=c9e5dc4e-687f-4ef4-8e2b-b4d5b3b5e751

Joint=6206 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=0.4 Z=-1 SpecialJt=No GUID=8e761df7-d96d-4fe5-bb73-fae6469ceb84

Joint=6207 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=0.5 Z=-1 SpecialJt=No GUID=7b1c5964-76e6-46db-86a1-c2fac4ef9181

Joint=6208 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=0.6 Z=-1 SpecialJt=No GUID=44153672-c44e-4d10-b679-b440fdde0bc6

Joint=6209 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=0.7 Z=-1 SpecialJt=No GUID=eb94a7b4-9b1d-43c9-82ba-aae60cfaa1f0

Joint=6210 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=0.8 Z=-1 SpecialJt=No GUID=0b286fb0-5bb0-4c61-ac11-4cae18943a5

Joint=6211 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=0.9 Z=-1 SpecialJt=No GUID=51a46a64-264b-4294-83a1-058a31f5bc8a

Joint=6212 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=1 Z=-1 SpecialJt=No GUID=bb44e44b-a8d5-4d1a-ab54-23c5d581e13f

Joint=6213 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=1.1 Z=-1 SpecialJt=No GUID=c598e55f-4dea-4d2a-8450-0cef8c7f59d9

Joint=6214 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=1.2 Z=-1 SpecialJt=No GUID=3cfa4d54-f64d-4a4b-8eff-0a44a4dcb25c

Joint=6215 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=1.3 Z=-1 SpecialJt=No GUID=0b8d0203-9e4f-40f0-9c2c-d48298ca3aa9

Joint=6216 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=1.4 Z=-1 SpecialJt=No GUID=e7694f35-0e0a-40a5-bcb7-ded4f60bfc58

Joint=6217 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=1.5 Z=-1 SpecialJt=No GUID=076235bd-ed3b-4b93-b3e8-e7e0e65da5f0

Joint=6218 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=1.6 Z=-1 SpecialJt=No GUID=ebf70afa-4b90-42b5-bd0c-3553078fadae

Joint=6219 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=1.7 Z=-1 SpecialJt=No GUID=712d0994-aabf-46f1-a165-96cd2d7d79f7

Joint=6220 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=1.8 Z=-1 SpecialJt=No GUID=d758d005-180f-4ebd-af86-940d4890b226

Joint=6221 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=1.9 Z=-1 SpecialJt=No GUID=da2f9299-c0da-4fc0-a844-48a70e452624

Joint=6222 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=2 Z=-1 SpecialJt=No GUID=d01576c1-e4c4-465e-90a6-070fa611a6fa

Joint=6223 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=2.1 Z=-1 SpecialJt=No GUID=59dac946-d157-41af-ab30-570de4e8a24d

Joint=6224 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=2.2 Z=-1 SpecialJt=No GUID=04ca3661-bcaa-4f8e-a319-65330d73cc28

Joint=6225 CoordSys=GLOBAL CoordType=Cartesian XorR=16.8 Y=2.3 Z=-1 SpecialJt=No GUID=589f951a-d925-4cd0-961f-41b94df735bd

Joint=6226 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=-2.3 Z=-1 SpecialJt=No GUID=3e9dad42-7e90-4699-9b20-15a4f57925d5

Joint=6227 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=-2.2 Z=-1 SpecialJt=No GUID=28fe9733-57ee-4ac3-8456-741406f51524

Joint=6228 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=-2.1 Z=-1 SpecialJt=No GUID=dd39d703-45be-44c2-b7d7-16c1cfbacf0b

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=6229 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=-2 Z=-1 SpecialJt=No GUID=ed258192-d7dd-4e4a-867c-5fb897c37c81

Joint=6230 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=-1.9 Z=-1 SpecialJt=No GUID=5d49070d-b9a9-4bd0-955f-78decac7af5c

Joint=6231 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=-1.8 Z=-1 SpecialJt=No GUID=a147a9cf-6ada-45b3-8d6b-018b8e494bae

Joint=6232 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=-1.7 Z=-1 SpecialJt=No GUID=ec9f91a0-5597-48b1-b5c1-a9e5264dbb99

Joint=6233 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=-1.6 Z=-1 SpecialJt=No GUID=3011d12d-b21a-48b4-b948-747cdf1bbbeb4

Joint=6234 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=-1.5 Z=-1 SpecialJt=No GUID=02fc8f39-4315-4687-b63f-cafe5783a337

Joint=6235 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=-1.4 Z=-1 SpecialJt=No GUID=3ffd80b8-079d-4a0b-bb44-cbf1aae84d8a

Joint=6236 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=-1.3 Z=-1 SpecialJt=No GUID=4d31c390-c15b-4d79-afd0-9a89a3ce8ed6

Joint=6237 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=-1.2 Z=-1 SpecialJt=No GUID=5901be05-60b8-4087-82fc-a508e3e159a9

Joint=6238 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=-1.1 Z=-1 SpecialJt=No GUID=e26fe253-2e18-44b6-bdc7-50b225034bdd

Joint=6239 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=-1 Z=-1 SpecialJt=No GUID=16c88eb5-d88e-4307-b9ee-50d7d72fe145

Joint=6240 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=-0.9 Z=-1 SpecialJt=No GUID=2b655cc8-d92c-4a9c-b264-8cead1a6878f

Joint=6241 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=-0.8 Z=-1 SpecialJt=No GUID=77085e30-9af4-4225-839d-c437793e938b

Joint=6242 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=-0.7 Z=-1 SpecialJt=No GUID=82ffa5e6-2929-4f91-90c1-b5a09bc9e944

Joint=6243 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=-0.6 Z=-1 SpecialJt=No GUID=ae02e6a1-1004-48dd-ae39-29274ba4e490

Joint=6244 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=-0.5 Z=-1 SpecialJt=No GUID=70f876be-e464-45a3-91bd-ee6056a82d29

Joint=6245 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=-0.4 Z=-1 SpecialJt=No GUID=7322e506-a67d-4c39-82df-e0758790884e

Joint=6246 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=-0.3 Z=-1 SpecialJt=No GUID=8e7ba246-8b04-4440-b641-c5410fb15e3f

Joint=6247 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=-0.2 Z=-1 SpecialJt=No GUID=dfc27d7b-2583-4038-882a-cd46860b2d02

Joint=6248 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=-0.09999999999999998 Z=-1 SpecialJt=No GUID=1b37006b-2d50-4e9f-8438-a3637a7d1a0e

Joint=6249 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=-8.32667268468867E-17 Z=-1 SpecialJt=No GUID=4a072e9b-3c0d-4ea0-98c2-89c0b4b19d4d

Joint=6250 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=0.09999999999999999 Z=-1 SpecialJt=No GUID=ce66e779-2944-4cd0-ac1f-2360d85c7cd7

Joint=6251 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=0.2 Z=-1 SpecialJt=No GUID=02b3a866-efd4-473f-8931-40de4b014527

Joint=6252 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=0.3 Z=-1 SpecialJt=No GUID=d38ef1ee-04c7-4fd6-abcc-92aa356b537f

Joint=6253 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=0.4 Z=-1 SpecialJt=No GUID=7fa9bb50-b47c-4948-b99f-378de9483570

Joint=6254 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=0.5 Z=-1 SpecialJt=No GUID=a8cbf821-0292-46c9-9a95-7ea65038b200

Joint=6255 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=0.6 Z=-1 SpecialJt=No GUID=991d3734-3746-4d6f-9728-390719f9c305



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=6256 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=0.7 Z=-1 SpecialJt=No GUID=0c01c6d2-8168-4bae-9e7c-3c09f939bc67

Joint=6257 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=0.8 Z=-1 SpecialJt=No GUID=446aedf2-775c-4de1-9fd4-c9645732bb12

Joint=6258 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=0.9 Z=-1 SpecialJt=No GUID=84a98983-bb0e-44e7-af5f-7f9c82164c4e

Joint=6259 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=1 Z=-1 SpecialJt=No GUID=a1e6c175-5092-4f4b-be85-012eaa49162c

Joint=6260 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=1.1 Z=-1 SpecialJt=No GUID=d44818ce-bb44-4dca-9038-f7d467a06a27

Joint=6261 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=1.2 Z=-1 SpecialJt=No GUID=8277a480-aa38-4b90-85eb-51524f801f11

Joint=6262 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=1.3 Z=-1 SpecialJt=No GUID=c58736b7-ce64-4efb-8ca0-284858a774dd

Joint=6263 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=1.4 Z=-1 SpecialJt=No GUID=4790910d-df00-4ac8-94d1-733e87ad2968

Joint=6264 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=1.5 Z=-1 SpecialJt=No GUID=f652edff-fa4a-44c2-874b-ccb82bd890d

Joint=6265 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=1.6 Z=-1 SpecialJt=No GUID=17549e76-bf08-4c59-9f82-d2f1c09de4d3

Joint=6266 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=1.7 Z=-1 SpecialJt=No GUID=637f4373-b1cc-4827-ab58-859f49942e99

Joint=6267 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=1.8 Z=-1 SpecialJt=No GUID=5d5ed5ea-9ef5-4577-9d97-46a7ad2b95f8

Joint=6268 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=1.9 Z=-1 SpecialJt=No GUID=690b2f7a-7d0b-4559-8725-762e45abb9ab

Joint=6269 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=2 Z=-1 SpecialJt=No GUID=82a975da-c353-401a-bc1b-87d186de3b95

Joint=6270 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=2.1 Z=-1 SpecialJt=No GUID=7eb30945-a424-4a76-821c-926b55d0c717

Joint=6271 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=2.2 Z=-1 SpecialJt=No GUID=81a4cfd9-0686-4894-8ee0-19beec3b14fd

Joint=6272 CoordSys=GLOBAL CoordType=Cartesian XorR=16.9 Y=2.3 Z=-1 SpecialJt=No GUID=889fb8eb-03e3-4f6d-8702-b5e0154fbffb

Joint=6273 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=-2.3 Z=-1 SpecialJt=No GUID=46cd0c73-828a-42b9-90b7-e4278b24a511

Joint=6274 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=-2.2 Z=-1 SpecialJt=No GUID=2f6e9ad5-9a89-4234-889c-1d619bf70937

Joint=6275 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=-2.1 Z=-1 SpecialJt=No GUID=9ae70a71-83e5-4bd8-bc59-995e12351391

Joint=6276 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=-2 Z=-1 SpecialJt=No GUID=24d3714a-6f73-4464-bb52-2fde818b46f8

Joint=6277 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=-1.9 Z=-1 SpecialJt=No GUID=42a74fd6-1098-4ea9-b40b-8a13d1c5d294

Joint=6278 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=-1.8 Z=-1 SpecialJt=No GUID=3f98cc06-23b7-4cab-ada5-546fe320ff1e

Joint=6279 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=-1.7 Z=-1 SpecialJt=No GUID=6c6f16db-8eac-4f86-a4b2-e1b391b865ee

Joint=6280 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=-1.6 Z=-1 SpecialJt=No GUID=dd70a1f6-3bda-42ab-82d8-33042ecdebcbf

Joint=6281 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=-1.5 Z=-1 SpecialJt=No GUID=42558e5b-4811-4083-b703-ebf8ea4e7e8e

Joint=6282 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=-1.4 Z=-1 SpecialJt=No GUID=c1a8b0be-042d-4af0-ac80-b2cdc0b2973a

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=6283 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=-1.3 Z=-1 SpecialJt=No GUID=6cfd783e-f662-4422-b5a1-378effbf7459b

Joint=6284 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=-1.2 Z=-1 SpecialJt=No GUID=849455f7-bf87-4d41-9526-d8050fbcef73

Joint=6285 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=-1.1 Z=-1 SpecialJt=No GUID=3ce06f07-d624-448e-9e76-2773f5493fbc

Joint=6286 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=-1 Z=-1 SpecialJt=No GUID=84a8b186-5e7d-43ef-bb24-8b1b145d9129

Joint=6287 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=-0.9 Z=-1 SpecialJt=No GUID=c5842706-d7ae-4617-8dfb-51b03fc4887c

Joint=6288 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=-0.8 Z=-1 SpecialJt=No GUID=6c7d5241-ed60-441e-8a89-b0e5e6c12223

Joint=6289 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=-0.7 Z=-1 SpecialJt=No GUID=f9099d7f-da27-4765-8b3e-f097115cf7f7

Joint=6290 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=-0.6 Z=-1 SpecialJt=No GUID=f3a8f866-4bbe-45f2-aa2a-d4181db161c4

Joint=6291 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=-0.5 Z=-1 SpecialJt=No GUID=927c31f2-81be-422f-a3c9-31ac88feafb3

Joint=6292 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=-0.4 Z=-1 SpecialJt=No GUID=cd49bb82-5709-4e33-8138-5942c9af6bb8

Joint=6293 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=-0.3 Z=-1 SpecialJt=No GUID=7a88bc32-302e-4c72-8d2f-b67ae0b468b9

Joint=6294 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=-0.2 Z=-1 SpecialJt=No GUID=8f47fd1e-4ecb-4989-b880-51838d14f650

Joint=6295 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=-0.1 Z=-1 SpecialJt=No GUID=8f136310-23fa-4357-a431-9dfe790285fe

Joint=6296 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=6.93889390390723E-17 Z=-1 SpecialJt=No GUID=0721b651-d568-4cc7-a773-1d43fe16cadb

Joint=6297 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=0.1 Z=-1 SpecialJt=No GUID=ed003c5a-a964-43b8-a739-0bc6cc7ecc6a

Joint=6298 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=0.2 Z=-1 SpecialJt=No GUID=42da2b01-e8eb-4109-8ec1-287c20be2369

Joint=6299 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=0.3 Z=-1 SpecialJt=No GUID=5ebe9d2c-1920-4300-a404-d33cb6ecba69

Joint=6300 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=0.4 Z=-1 SpecialJt=No GUID=196dca36-0ebe-42ca-962f-f52ae3f9c6e6

Joint=6301 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=0.5 Z=-1 SpecialJt=No GUID=54ca6d85-a2fb-416d-8055-6dc8901f8273

Joint=6302 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=0.6 Z=-1 SpecialJt=No GUID=59c50ede-b587-4eee-b71a-00dff75b021d

Joint=6303 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=0.7 Z=-1 SpecialJt=No GUID=0993864d-4b14-48ba-87f6-1912580b1f3f

Joint=6304 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=0.8 Z=-1 SpecialJt=No GUID=5f23168f-079b-4072-96c2-2ab72efe6f25

Joint=6305 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=0.9 Z=-1 SpecialJt=No GUID=d25dadb4-d8de-4623-ae28-a2b7e6fcbac

Joint=6306 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=1 Z=-1 SpecialJt=No GUID=a57d4d3a-bcac-4ad7-8794-a1b9b2a2cd4b

Joint=6307 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=1.1 Z=-1 SpecialJt=No GUID=bd18e704-01c3-41c2-a9d8-85459406cce7

Joint=6308 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=1.2 Z=-1 SpecialJt=No GUID=02e1d2c5-41f6-4c84-ac8f-9ded62ba3c17

Joint=6309 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=1.3 Z=-1 SpecialJt=No GUID=584a4748-3210-4947-bbac-029c9c22896e

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=6310 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=1.4 Z=-1 SpecialJt=No GUID=667dd114-5688-4162-b1a0-85301b07bba4

Joint=6311 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=1.5 Z=-1 SpecialJt=No GUID=40ce2125-1225-4ff7-a05d-3eca0c6366fe

Joint=6312 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=1.6 Z=-1 SpecialJt=No GUID=a4db373f-52a3-43d0-87c4-44133a6b1f02

Joint=6313 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=1.7 Z=-1 SpecialJt=No GUID=2fb650a5-3d93-4f99-9b65-8dbb6e57adde

Joint=6314 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=1.8 Z=-1 SpecialJt=No GUID=7a9df776-97a2-4a9e-8485-eb2a8c6dd668

Joint=6315 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=1.9 Z=-1 SpecialJt=No GUID=50872e26-e735-4f79-a267-835f107ea09c

Joint=6316 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=2 Z=-1 SpecialJt=No GUID=aad3fb5f-562e-4298-a4df-c4e9fb282a06

Joint=6317 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=2.1 Z=-1 SpecialJt=No GUID=8af181e0-f621-4e51-a7d4-ade199deb791

Joint=6318 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=2.2 Z=-1 SpecialJt=No GUID=5ca0ef45-a227-4d3f-9405-6a63365c6864

Joint=6319 CoordSys=GLOBAL CoordType=Cartesian XorR=17 Y=2.3 Z=-1 SpecialJt=No GUID=fe4f73fa-610a-4324-9f9f-d150cfd5c885

Joint=6320 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=-2.2 Z=-1 SpecialJt=No GUID=d83c6ac3-c518-4aed-9a2d-55688e69ba3c

Joint=6321 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=-2.1 Z=-1 SpecialJt=No GUID=23ef7641-6aae-4c33-95f4-e8fefe98f971

Joint=6322 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=-2 Z=-1 SpecialJt=No GUID=8e6c4a46-49c8-43a3-88c2-2f0b6988501e

Joint=6323 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=-1.9 Z=-1 SpecialJt=No GUID=7a483e13-f68b-4f71-98a9-235eb203acaa

Joint=6324 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=-1.8 Z=-1 SpecialJt=No GUID=bd8bef89-8c34-41bf-a9bb-7fa1f9acd650

Joint=6325 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=-1.7 Z=-1 SpecialJt=No GUID=d4e0704b-9ccc-4697-8bc0-c41bdacc16fe

Joint=6326 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=-1.6 Z=-1 SpecialJt=No GUID=fb851157-f598-49ce-a9c1-68b875b8c15c

Joint=6327 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=-1.5 Z=-1 SpecialJt=No GUID=f952d746-a8e4-4616-b5f3-2108da3c82ab

Joint=6328 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=-1.4 Z=-1 SpecialJt=No GUID=69243d1f-2595-466f-a145-beededfcf16c

Joint=6329 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=-1.3 Z=-1 SpecialJt=No GUID=2414cec3-5caa-4056-938f-32ff950a1d30

Joint=6330 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=-1.2 Z=-1 SpecialJt=No GUID=4f518f29-5906-46bd-a4a0-968fddb0b2b8

Joint=6331 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=-1.1 Z=-1 SpecialJt=No GUID=57f9eb8d-c896-482b-b327-afa0ff256929

Joint=6332 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=-1 Z=-1 SpecialJt=No GUID=3112fb41-d551-4b9c-8e13-9b97a09546bd

Joint=6333 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=-0.9 Z=-1 SpecialJt=No GUID=69a11a74-e154-4a28-af43-c65c15b6baa7

Joint=6334 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=-0.8 Z=-1 SpecialJt=No GUID=b2833c1e-c94d-4776-9729-56f1897dbfb5

Joint=6335 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=-0.7 Z=-1 SpecialJt=No GUID=ddd9137f-b967-4d84-a532-3d392ef6f7e1

Joint=6336 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=-0.6 Z=-1 SpecialJt=No GUID=8c527590-0557-43cb-a517-0a645cc167ad

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=6337 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=-0.5 Z=-1 SpecialJt=No GUID=fbc1bb05-ef82-4a1c-84b6-e02ba6b40069

Joint=6338 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=-0.4 Z=-1 SpecialJt=No GUID=2131a93f-8894-4513-8c07-99908ab8ab57

Joint=6339 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=-0.3 Z=-1 SpecialJt=No GUID=f19807f8-72ac-482a-bb3a-685f25a945bd

Joint=6340 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=-0.2 Z=-1 SpecialJt=No GUID=32152c9a-8d8b-48ad-9a12-8e110d8b4bef

Joint=6341 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=-0.1 Z=-1 SpecialJt=No GUID=b010d481-91a9-4e5e-9581-22162815ce9d

Joint=6342 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=0 Z=-1 SpecialJt=No GUID=765e55df-5885-4652-a18d-40b5156ac31b

Joint=6343 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=0.1 Z=-1 SpecialJt=No GUID=b1c17099-4731-4cae-b182-53f0d0a7f4b0

Joint=6344 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=0.2 Z=-1 SpecialJt=No GUID=da63bf4c-336c-4df7-9165-0b5ed7493ee6

Joint=6345 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=0.3 Z=-1 SpecialJt=No GUID=874777ce-a277-47ab-80e2-5cee0c33c904

Joint=6346 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=0.4 Z=-1 SpecialJt=No GUID=8aea102c-14a2-4135-82af-d52c4351c4cd

Joint=6347 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=0.5 Z=-1 SpecialJt=No GUID=edc965d0-6b82-43b1-8cb8-9ea3cc160e95

Joint=6348 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=0.6 Z=-1 SpecialJt=No GUID=dd2e56f3-8986-4f28-b51e-752eb8599ad1

Joint=6349 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=0.7 Z=-1 SpecialJt=No GUID=2e7f703f-d818-4646-896b-223dd2c8589a

Joint=6350 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=0.8 Z=-1 SpecialJt=No GUID=64ef40da-baf0-48e2-a8fa-b997d6204439

Joint=6351 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=0.9 Z=-1 SpecialJt=No GUID=165c342b-789b-4fbc-876e-f153208550c0

Joint=6352 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=1 Z=-1 SpecialJt=No GUID=1574779a-e9c0-4d6a-88b5-11a8fadf4ac4

Joint=6353 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=1.1 Z=-1 SpecialJt=No GUID=b89e9242-97f4-4a74-8cf7-d41a6f3111b5

Joint=6354 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=1.2 Z=-1 SpecialJt=No GUID=9afb0718-0972-4aed-a17e-c401c7ec827f

Joint=6355 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=1.3 Z=-1 SpecialJt=No GUID=64b1ee75-5aac-4ccb-bf4b-dc60fef7d39a

Joint=6356 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=1.4 Z=-1 SpecialJt=No GUID=025845b4-efd3-46cf-a4c1-7680f34906ec

Joint=6357 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=1.5 Z=-1 SpecialJt=No GUID=335de987-aab7-4b45-ae77-022cda67481b

Joint=6358 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=1.6 Z=-1 SpecialJt=No GUID=fcd0242-750d-48d9-b4c0-e1cf4b4db3f4

Joint=6359 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=1.7 Z=-1 SpecialJt=No GUID=506ca717-ce99-45e8-abb1-f773fa7adf9e

Joint=6360 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=1.8 Z=-1 SpecialJt=No GUID=f525689a-0ea1-4ab1-8afe-b0bf5d1ca2c1

Joint=6361 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=1.9 Z=-1 SpecialJt=No GUID=3c8274e4-e9cd-4053-bde5-e501c802ecb4

Joint=6362 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=2 Z=-1 SpecialJt=No GUID=85e63548-4718-4b90-b691-ae42d0ff8c1

Joint=6363 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=2.1 Z=-1 SpecialJt=No GUID=9e1df441-b87a-49aa-9789-944825007e2c



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=6364 CoordSys=GLOBAL CoordType=Cartesian XorR=17.1 Y=2.2 Z=-1 SpecialJt=No GUID=aa97db9d-3784-4870-835d-98ad85887312

Joint=6365 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=1.5 Z=-14 SpecialJt=Yes GUID=7085320b-4909-4f5c-8d97-414b4f1f2655

Joint=6366 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=1.5 Z=-13 SpecialJt=No GUID=b6530145-686b-4051-a389-7a77e615b1dc

Joint=6367 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=1.5 Z=-12 SpecialJt=No GUID=3a3ce388-e313-4a49-93e4-145c33048aab

Joint=6368 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=1.5 Z=-11 SpecialJt=No GUID=adb5d53a-14d4-485f-9d5a-171ac37cbec1

Joint=6369 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=1.5 Z=-10 SpecialJt=No GUID=6d44ebe2-26e8-4adb-b6d4-3ac614c77b4d

Joint=6370 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=1.5 Z=-9 SpecialJt=No GUID=71ec3b88-fd4f-4829-ba46-2d80f7f8ae42

Joint=6371 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=1.5 Z=-8 SpecialJt=No GUID=058143ba-9b8c-46c8-8ac0-f044974d45b1

Joint=6372 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=1.5 Z=-7 SpecialJt=No GUID=cc60e91f-ff3f-41f3-b7f6-ebd631fc9811

Joint=6373 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=1.5 Z=-6 SpecialJt=No GUID=5eca9fa0-6275-4427-bb26-042b45909014

Joint=6374 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=1.5 Z=-5 SpecialJt=No GUID=868a4674-5130-4a08-8d40-062b1b4ed4b3

Joint=6375 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=1.5 Z=-4 SpecialJt=No GUID=cc8c0f99-84f3-4fbf-a1f6-59935492a2ec

Joint=6376 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=1.5 Z=-3 SpecialJt=No GUID=29186bbd-9140-47ff-b29d-08923d5816f7

Joint=6377 CoordSys=GLOBAL CoordType=Cartesian XorR=13.3 Y=1.5 Z=-2 SpecialJt=No GUID=3e6648d7-f5f9-4331-a12f-f1434285139a

Joint=6378 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=1.5 Z=-14 SpecialJt=Yes GUID=fb6edc34-5e4f-49df-bcb8-6ade6c550d81

Joint=6379 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=1.5 Z=-13 SpecialJt=No GUID=8661feb9-706d-4696-bad1-683a793d1e79

Joint=6380 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=1.5 Z=-12 SpecialJt=No GUID=d30d8fc1-de7f-41c9-8219-1191e404371d

Joint=6381 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=1.5 Z=-11 SpecialJt=No GUID=e579dbcb-e580-4585-8ee2-1b7921886e5c

Joint=6382 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=1.5 Z=-10 SpecialJt=No GUID=f9eedfef-d3a8-4d4c-8bd7-9ae7ea2cfd6f

Joint=6383 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=1.5 Z=-9 SpecialJt=No GUID=4a1f5aea-4cc7-4adc-bfa6-ee7bc7bf1405

Joint=6384 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=1.5 Z=-8 SpecialJt=No GUID=71878250-4b67-4028-94bb-001567b3d7f5

Joint=6385 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=1.5 Z=-7 SpecialJt=No GUID=9adb58dc-a1b6-4fb6-89e1-3b7a59fa2c0a

Joint=6386 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=1.5 Z=-6 SpecialJt=No GUID=22b825c4-363c-4d74-95e0-e72995072640

Joint=6387 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=1.5 Z=-5 SpecialJt=No GUID=e3b3affd-62bd-4299-86d4-2cf77a72938b

Joint=6388 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=1.5 Z=-4 SpecialJt=No GUID=8bef89f5-d803-4781-9e91-6d53e4c3c469

Joint=6389 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=1.5 Z=-3 SpecialJt=No GUID=90feb155-6844-457e-8339-ed58687e2afd

Joint=6390 CoordSys=GLOBAL CoordType=Cartesian XorR=16.3 Y=1.5 Z=-2 SpecialJt=No GUID=65b1f8e1-6e38-4a22-9ec6-3d7f4429be0c

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

|            |                 |                     |           |                         |       |               |                                           |
|------------|-----------------|---------------------|-----------|-------------------------|-------|---------------|-------------------------------------------|
| Joint=6391 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.3 | Y=-1.5                  | Z=-14 | SpecialJt=Yes | GUID=7ed690be-de40-43d8-8e31-979a0d34170a |
| Joint=6392 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.3 | Y=-1.5                  | Z=-13 | SpecialJt=No  | GUID=f89a8a61-0241-48cc-a6d4-3e98d210eff1 |
| Joint=6393 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.3 | Y=-1.5                  | Z=-12 | SpecialJt=No  | GUID=951c540e-e5e8-4154-a701-3cd590c331c2 |
| Joint=6394 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.3 | Y=-1.5                  | Z=-11 | SpecialJt=No  | GUID=d1f70be6-c226-4c86-9bdd-a8be568428e5 |
| Joint=6395 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.3 | Y=-1.5                  | Z=-10 | SpecialJt=No  | GUID=dcfc305a-d2e6-4426-99d2-0a276ac4aaec |
| Joint=6396 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.3 | Y=-1.5                  | Z=-9  | SpecialJt=No  | GUID=15236f90-25be-4ad3-8761-18e412205826 |
| Joint=6397 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.3 | Y=-1.5                  | Z=-8  | SpecialJt=No  | GUID=ec221b54-0e30-4e5f-8fbd-49ed3f42f3ca |
| Joint=6398 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.3 | Y=-1.5                  | Z=-7  | SpecialJt=No  | GUID=75a86868-01a1-4634-bc43-5f4accc47c96 |
| Joint=6399 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.3 | Y=-1.5                  | Z=-6  | SpecialJt=No  | GUID=a13e52b1-e75e-43d3-b4a8-20655014169b |
| Joint=6400 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.3 | Y=-1.5                  | Z=-5  | SpecialJt=No  | GUID=503e898f-2b65-42e0-b17f-2ed19b92dc20 |
| Joint=6401 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.3 | Y=-1.5                  | Z=-4  | SpecialJt=No  | GUID=6582a030-ad86-4300-8581-487bb8fb3992 |
| Joint=6402 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.3 | Y=-1.5                  | Z=-3  | SpecialJt=No  | GUID=b5bee795-3c73-4313-a7dc-ff39339adc81 |
| Joint=6403 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=13.3 | Y=-1.5                  | Z=-2  | SpecialJt=No  | GUID=b961d681-090c-43f2-8c62-28151a4fd1d2 |
| Joint=6404 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=16.3 | Y=-1.5                  | Z=-14 | SpecialJt=Yes | GUID=beb13456-4528-489a-abd3-adcf4306fff7 |
| Joint=6405 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=16.3 | Y=-1.5                  | Z=-13 | SpecialJt=No  | GUID=0a03d6a6-cf32-4938-a27e-8d7fdb2d0026 |
| Joint=6406 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=16.3 | Y=-1.5                  | Z=-12 | SpecialJt=No  | GUID=45673321-4350-4b3e-a5c8-bd7614d2b651 |
| Joint=6407 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=16.3 | Y=-1.5                  | Z=-11 | SpecialJt=No  | GUID=1aceec73-83dd-40a0-90d4-0891c7f08ecf |
| Joint=6408 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=16.3 | Y=-1.5                  | Z=-10 | SpecialJt=No  | GUID=9dde4052-eabf-4353-ba39-5186519d7008 |
| Joint=6409 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=16.3 | Y=-1.5                  | Z=-9  | SpecialJt=No  | GUID=bfd9bc15-496d-41fe-b655-5b8d84622825 |
| Joint=6410 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=16.3 | Y=-1.5                  | Z=-8  | SpecialJt=No  | GUID=24d01d43-6a4d-4b14-af03-533231f8ca1d |
| Joint=6411 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=16.3 | Y=-1.5                  | Z=-7  | SpecialJt=No  | GUID=874f0e72-c307-4977-a17b-b7001e7ffca2 |
| Joint=6412 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=16.3 | Y=-1.5                  | Z=-6  | SpecialJt=No  | GUID=ab30786f-2ce2-4ba5-aec3-9c4e5affaf4b |
| Joint=6413 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=16.3 | Y=-1.5                  | Z=-5  | SpecialJt=No  | GUID=88d8532e-e813-4f90-8a90-027d2944aa94 |
| Joint=6414 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=16.3 | Y=-1.5                  | Z=-4  | SpecialJt=No  | GUID=476d2945-04eb-4a3d-9385-4e7b4be3b754 |
| Joint=6415 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=16.3 | Y=-1.5                  | Z=-3  | SpecialJt=No  | GUID=250976b0-6bb2-4720-8e9c-0473abed1230 |
| Joint=6416 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=16.3 | Y=-1.5                  | Z=-2  | SpecialJt=No  | GUID=9849dd87-eda5-4545-8fc4-a7a868a6de6a |
| Joint=6417 | CoordSys=GLOBAL | CoordType=Cartesian | XorR=14.8 | Y=-2.22044604925031E-16 | Z=-14 | SpecialJt=Yes | GUID=d2386a88-3b94-40de-b3be-2b36cc91b6b3 |

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=6418 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=0 Z=-13 SpecialJt=No GUID=fad7397c-506c-4303-98de-ac7d0430af73

Joint=6419 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=-2.22044604925031E-16 Z=-12 SpecialJt=No GUID=78776654-e055-4384-83e8-86e99f8d028e

Joint=6420 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=-4.44089209850063E-16 Z=-11 SpecialJt=No GUID=455bcb40-f8f9-4c07-8b0e-d70c98c2f644

Joint=6421 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=-2.22044604925031E-16 Z=-10 SpecialJt=No GUID=8480696f-0627-418f-b1ba-3912721706b8

Joint=6422 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=0 Z=-9 SpecialJt=No GUID=1c454655-1d0d-4c14-b407-446e23fbdf3

Joint=6423 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=-2.22044604925031E-16 Z=-8 SpecialJt=No GUID=0506eee2-4290-4262-a3e2-ccc496f0bbbe

Joint=6424 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=-2.22044604925031E-16 Z=-7 SpecialJt=No GUID=ac402376-db69-4110-9716-57a2acaad8e3

Joint=6425 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=-2.22044604925031E-16 Z=-6 SpecialJt=No GUID=05ec7c39-1c2b-4e4d-a482-4bfe5b0d9d5f

Joint=6426 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=-2.22044604925031E-16 Z=-5 SpecialJt=No GUID=ef92116a-83a6-460d-a72f-bebe1b23decb

Joint=6427 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=-2.22044604925031E-16 Z=-4 SpecialJt=No GUID=ee757928-a38a-4454-b84d-6818ac2282c2

Joint=6428 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=-2.22044604925031E-16 Z=-3 SpecialJt=No GUID=55a2830a-6b3e-45e3-8a78-89d12c2cb63e

Joint=6429 CoordSys=GLOBAL CoordType=Cartesian XorR=14.8 Y=-2.22044604925031E-16 Z=-2 SpecialJt=No GUID=ac47ed5d-b826-4d76-8304-94a6ba1c421a

#### TABLE: "JOINT LOADS - FORCE"

Joint=1 LoadPat="Peso estacion" CoordSys=GLOBAL F1=0 F2=0 F3=280 M1=0 M2=0 M3=0 GUID=9506278b-d480-4e65-9f85-f8f493b1e2d7

Joint=1 LoadPat="Carro en posicion adelantada" CoordSys=GLOBAL F1=0 F2=0 F3=-20 M1=0 M2=0 M3=0 GUID=c839d493-412a-4c54-8fa4-0f795a1c3c8e

Joint=1 LoadPat="Carro en posicion atras" CoordSys=GLOBAL F1=0 F2=0 F3=-15 M1=0 M2=0 M3=0 GUID=d41edfac-c40a-428c-8f6d-50c41d275330

Joint=1 LoadPat="Deflexion del cable" CoordSys=GLOBAL F1=35 F2=0 F3=-35 M1=0 M2=-60 M3=0 GUID=a80fa46d-0afc-478d-9bc9-86c1d48e93d5

Joint=1 LoadPat="Tension multiconductor" CoordSys=GLOBAL F1=10 F2=0 F3=-10 M1=0 M2=0 M3=0 GUID=cb955359-cc74-426d-bcd6-d03a54b41eb2

Joint=1 LoadPat="Viento lateral en operacion" CoordSys=GLOBAL F1=0 F2=0 F3=0 M1=0 M2=0 M3=0 GUID=830a0830-77b4-4839-9d3c-79b0a3098439

Joint=1 LoadPat="Viento lateral fuera de operacion" CoordSys=GLOBAL F1=0 F2=10 F3=0 M1=100 M2=0 M3=0 GUID=44825cbf-aa0f-4333-a9aa-dccb7408c898

Joint=1 LoadPat="Vehiculos en estacion (operacion)" CoordSys=GLOBAL F1=0 F2=0 F3=140 M1=460 M2=0 M3=0 GUID=cd0f090d-d7c1-4eac-9731-414b22be54af

Joint=1 LoadPat=Sx CoordSys=GLOBAL F1=31 F2=0 F3=0 M1=0 M2=0 M3=0 GUID=62211beb-c524-4e6b-be96-5e411a2891b0

Joint=1 LoadPat=Sy CoordSys=GLOBAL F1=0 F2=39 F3=0 M1=0 M2=0 M3=0 GUID=8eae5e9a-6855-4cc8-b7ea-3db1c3a53d51

Joint=2 LoadPat="Peso estacion" CoordSys=GLOBAL F1=0 F2=0 F3=270 M1=10 M2=0 M3=0 GUID=5ee36814-77c3-40b2-bbea-7aa413197d4b

Joint=2 LoadPat="Carro en posicion adelantada" CoordSys=GLOBAL F1=0 F2=0 F3=120 M1=0 M2=0 M3=0 GUID=32ff73b8-b173-4343-9b19-0df92114a3ec

Joint=2 LoadPat="Carro en posicion atras" CoordSys=GLOBAL F1=0 F2=0 F3=225 M1=0 M2=0 M3=0 GUID=3b0de7f7-0d90-4698-85f4-8fcfe06c1a92

Joint=2 LoadPat="Tension del cable" CoordSys=GLOBAL F1=700 F2=0 F3=0 M1=0 M2=1050 M3=0 GUID=7ff9b988-d469-4e5c-9dd6-0022b69b857e

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Joint=2 LoadPat="Tension multiconductor" CoordSys=GLOBAL F1=100 F2=0 F3=-20 M1=0 M2=-65 M3=0  
GUID=6d6290e4-d1ad-467f-bf54-1d8b8b0efb6c

Joint=2 LoadPat="Viento lateral en operacion" CoordSys=GLOBAL F1=0 F2=10 F3=0 M1=35 M2=0 M3=20  
GUID=ecf88a4a-e313-4871-b271-b5fe934ccf5b

Joint=2 LoadPat="Viento lateral fuera de operacion" CoordSys=GLOBAL F1=0 F2=50 F3=0 M1=150 M2=0  
M3=85 GUID=88df03ee-c1a6-4b04-a12b-b0a66bc64982

Joint=2 LoadPat="Viento longitudinal en operacion" CoordSys=GLOBAL F1=20 F2=0 F3=0 M1=0 M2=0  
M3=0 GUID=de6fee1d-7aba-4dce-82c5-4d959281e0db

Joint=2 LoadPat="Viento longitudinal fuera de operacion" CoordSys=GLOBAL F1=55 F2=0 F3=0 M1=0  
M2=0 M3=0 GUID=45cb19ab-810f-41a3-a7a8-957a73eb7f21

Joint=2 LoadPat="Vehiculos en estacion (operacion)" CoordSys=GLOBAL F1=0 F2=0 F3=90 M1=100 M2=0  
M3=0 GUID=e80599c6-9a25-4815-86c3-0b70c38d9a40

Joint=2 LoadPat=Sx CoordSys=GLOBAL F1=42 F2=0 F3=0 M1=0 M2=0 M3=0 GUID=a8ea891f-2ca4-  
4b01-99fb-ad84ce254e7e

Joint=2 LoadPat=Sy CoordSys=GLOBAL F1=0 F2=42 F3=0 M1=0 M2=0 M3=0 GUID=7c5b6077-5861-  
4744-8fdf-67efa466f192

Joint=3 LoadPat="Peso estacion" CoordSys=GLOBAL F1=0 F2=0 F3=350 M1=0 M2=0 M3=0  
GUID=6913c2e5-a32f-41fe-b4a0-425eec289460

Joint=3 LoadPat="Carro en posicion adelantada" CoordSys=GLOBAL F1=0 F2=0 F3=140 M1=0 M2=0 M3=0  
GUID=8eee388f-2443-4690-96c1-ef763c3066e6

Joint=3 LoadPat="Carro en posicion atras" CoordSys=GLOBAL F1=0 F2=0 F3=30 M1=0 M2=0 M3=0  
GUID=36881fc6-4d75-41ce-b5f8-76d1c8ee8a73

Joint=3 LoadPat="Deflexion del cable" CoordSys=GLOBAL F1=30 F2=0 F3=80 M1=100 M2=-400 M3=0  
GUID=37d7fd55-03fb-40ff-b0da-42b534c47991

Joint=3 LoadPat="Tension multiconductor" CoordSys=GLOBAL F1=0 F2=0 F3=30 M1=0 M2=-60 M3=0  
GUID=5577fb1e-41ad-4d18-a99f-abc77e364d01

Joint=3 LoadPat="Viento lateral en operacion" CoordSys=GLOBAL F1=0 F2=15 F3=0 M1=320 M2=0 M3=0  
GUID=b269a368-af12-4eba-bd96-b02796e9b0b8

Joint=3 LoadPat="Viento lateral fuera de operacion" CoordSys=GLOBAL F1=0 F2=70 F3=0 M1=1300 M2=0  
M3=0 GUID=444cefa5-c330-4146-bd7a-c8f1e3ddf23e

Joint=3 LoadPat="Vehiculos en estacion (operacion)" CoordSys=GLOBAL F1=0 F2=0 F3=60 M1=240 M2=0  
M3=0 GUID=9ce49541-a635-4ec7-b2ed-88ad8939fe0f

Joint=3 LoadPat=Sx CoordSys=GLOBAL F1=40 F2=0 F3=0 M1=0 M2=0 M3=0 GUID=678495c4-16bd-  
4d5a-b50e-105bcd4f155d

Joint=3 LoadPat=Sy CoordSys=GLOBAL F1=0 F2=40 F3=0 M1=0 M2=0 M3=0 GUID=b360a789-7fd1-  
4de6-9152-d95cb5c2a9b2

TABLE: "JOINT PATTERN DEFINITIONS"

Pattern=Default

TABLE: "JOINT RESTRAINT ASSIGNMENTS"

|            |        |        |        |       |       |       |
|------------|--------|--------|--------|-------|-------|-------|
| Joint=2037 | U1=Yes | U2=Yes | U3=Yes | R1=No | R2=No | R3=No |
| Joint=2049 | U1=Yes | U2=Yes | U3=Yes | R1=No | R2=No | R3=No |
| Joint=2061 | U1=Yes | U2=Yes | U3=Yes | R1=No | R2=No | R3=No |
| Joint=2073 | U1=Yes | U2=Yes | U3=Yes | R1=No | R2=No | R3=No |
| Joint=4109 | U1=Yes | U2=Yes | U3=Yes | R1=No | R2=No | R3=No |
| Joint=4121 | U1=Yes | U2=Yes | U3=Yes | R1=No | R2=No | R3=No |
| Joint=4133 | U1=Yes | U2=Yes | U3=Yes | R1=No | R2=No | R3=No |
| Joint=4145 | U1=Yes | U2=Yes | U3=Yes | R1=No | R2=No | R3=No |
| Joint=6365 | U1=Yes | U2=Yes | U3=Yes | R1=No | R2=No | R3=No |
| Joint=6378 | U1=Yes | U2=Yes | U3=Yes | R1=No | R2=No | R3=No |
| Joint=6391 | U1=Yes | U2=Yes | U3=Yes | R1=No | R2=No | R3=No |
| Joint=6404 | U1=Yes | U2=Yes | U3=Yes | R1=No | R2=No | R3=No |
| Joint=6417 | U1=Yes | U2=Yes | U3=Yes | R1=No | R2=No | R3=No |





|            |                 |                     |                     |      |      |      |      |
|------------|-----------------|---------------------|---------------------|------|------|------|------|
| Joint=4120 | CoordSys=GLOBAL | U1=32835.6068633425 | U2=32835.6068633425 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4122 | CoordSys=GLOBAL | U1=285871.69863869  | U2=285871.69863869  | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4123 | CoordSys=GLOBAL | U1=285871.69863869  | U2=285871.69863869  | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4124 | CoordSys=GLOBAL | U1=197020.015502685 | U2=197020.015502685 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4125 | CoordSys=GLOBAL | U1=197020.015502685 | U2=197020.015502685 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4126 | CoordSys=GLOBAL | U1=197020.015502685 | U2=197020.015502685 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4127 | CoordSys=GLOBAL | U1=197020.015502685 | U2=197020.015502685 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4128 | CoordSys=GLOBAL | U1=197020.015502685 | U2=197020.015502685 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4129 | CoordSys=GLOBAL | U1=117825.921483252 | U2=117825.921483252 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4130 | CoordSys=GLOBAL | U1=117825.921483252 | U2=117825.921483252 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4131 | CoordSys=GLOBAL | U1=32835.6068633425 | U2=32835.6068633425 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4132 | CoordSys=GLOBAL | U1=32835.6068633425 | U2=32835.6068633425 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4134 | CoordSys=GLOBAL | U1=285871.69863869  | U2=285871.69863869  | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4135 | CoordSys=GLOBAL | U1=285871.69863869  | U2=285871.69863869  | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4136 | CoordSys=GLOBAL | U1=197020.015502685 | U2=197020.015502685 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4137 | CoordSys=GLOBAL | U1=197020.015502685 | U2=197020.015502685 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4138 | CoordSys=GLOBAL | U1=197020.015502685 | U2=197020.015502685 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4139 | CoordSys=GLOBAL | U1=197020.015502685 | U2=197020.015502685 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4140 | CoordSys=GLOBAL | U1=197020.015502685 | U2=197020.015502685 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4141 | CoordSys=GLOBAL | U1=117825.921483252 | U2=117825.921483252 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4142 | CoordSys=GLOBAL | U1=117825.921483252 | U2=117825.921483252 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4143 | CoordSys=GLOBAL | U1=32835.6068633425 | U2=32835.6068633425 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4144 | CoordSys=GLOBAL | U1=32835.6068633425 | U2=32835.6068633425 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4146 | CoordSys=GLOBAL | U1=285871.69863869  | U2=285871.69863869  | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4147 | CoordSys=GLOBAL | U1=285871.69863869  | U2=285871.69863869  | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4148 | CoordSys=GLOBAL | U1=197020.015502685 | U2=197020.015502685 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4149 | CoordSys=GLOBAL | U1=197020.015502685 | U2=197020.015502685 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4150 | CoordSys=GLOBAL | U1=197020.015502685 | U2=197020.015502685 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4151 | CoordSys=GLOBAL | U1=197020.015502685 | U2=197020.015502685 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4152 | CoordSys=GLOBAL | U1=197020.015502685 | U2=197020.015502685 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4153 | CoordSys=GLOBAL | U1=117825.921483252 | U2=117825.921483252 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4154 | CoordSys=GLOBAL | U1=117825.921483252 | U2=117825.921483252 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4155 | CoordSys=GLOBAL | U1=32835.6068633425 | U2=32835.6068633425 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=4156 | CoordSys=GLOBAL | U1=32835.6068633425 | U2=32835.6068633425 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6366 | CoordSys=GLOBAL | U1=285872.090904698 | U2=285872.090904698 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6367 | CoordSys=GLOBAL | U1=285872.090904698 | U2=285872.090904698 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6368 | CoordSys=GLOBAL | U1=285872.090904698 | U2=285872.090904698 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6369 | CoordSys=GLOBAL | U1=197020.505835195 | U2=197020.505835195 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6370 | CoordSys=GLOBAL | U1=197020.505835195 | U2=197020.505835195 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6371 | CoordSys=GLOBAL | U1=197020.505835195 | U2=197020.505835195 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6372 | CoordSys=GLOBAL | U1=197020.505835195 | U2=197020.505835195 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6373 | CoordSys=GLOBAL | U1=197020.505835195 | U2=197020.505835195 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6374 | CoordSys=GLOBAL | U1=117826.019549754 | U2=117826.019549754 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6375 | CoordSys=GLOBAL | U1=117826.019549754 | U2=117826.019549754 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6376 | CoordSys=GLOBAL | U1=32837.5681933824 | U2=32837.5681933824 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6377 | CoordSys=GLOBAL | U1=32837.5681933824 | U2=32837.5681933824 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6379 | CoordSys=GLOBAL | U1=285872.090904698 | U2=285872.090904698 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6380 | CoordSys=GLOBAL | U1=285872.090904698 | U2=285872.090904698 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6381 | CoordSys=GLOBAL | U1=285872.090904698 | U2=285872.090904698 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6382 | CoordSys=GLOBAL | U1=197020.505835195 | U2=197020.505835195 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6383 | CoordSys=GLOBAL | U1=197020.505835195 | U2=197020.505835195 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6384 | CoordSys=GLOBAL | U1=197020.505835195 | U2=197020.505835195 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6385 | CoordSys=GLOBAL | U1=197020.505835195 | U2=197020.505835195 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6386 | CoordSys=GLOBAL | U1=197020.505835195 | U2=197020.505835195 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6387 | CoordSys=GLOBAL | U1=117826.019549754 | U2=117826.019549754 | U3=0 | R1=0 | R2=0 | R3=0 |

|            |                 |                     |                     |      |      |      |      |
|------------|-----------------|---------------------|---------------------|------|------|------|------|
| Joint=6388 | CoordSys=GLOBAL | U1=117826.019549754 | U2=117826.019549754 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6389 | CoordSys=GLOBAL | U1=32837.5681933824 | U2=32837.5681933824 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6390 | CoordSys=GLOBAL | U1=32837.5681933824 | U2=32837.5681933824 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6392 | CoordSys=GLOBAL | U1=285872.090904698 | U2=285872.090904698 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6393 | CoordSys=GLOBAL | U1=285872.090904698 | U2=285872.090904698 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6394 | CoordSys=GLOBAL | U1=285872.090904698 | U2=285872.090904698 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6395 | CoordSys=GLOBAL | U1=197020.505835195 | U2=197020.505835195 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6396 | CoordSys=GLOBAL | U1=197020.505835195 | U2=197020.505835195 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6397 | CoordSys=GLOBAL | U1=197020.505835195 | U2=197020.505835195 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6398 | CoordSys=GLOBAL | U1=197020.505835195 | U2=197020.505835195 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6399 | CoordSys=GLOBAL | U1=197020.505835195 | U2=197020.505835195 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6400 | CoordSys=GLOBAL | U1=117826.019549754 | U2=117826.019549754 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6401 | CoordSys=GLOBAL | U1=117826.019549754 | U2=117826.019549754 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6402 | CoordSys=GLOBAL | U1=32837.5681933824 | U2=32837.5681933824 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6403 | CoordSys=GLOBAL | U1=32837.5681933824 | U2=32837.5681933824 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6405 | CoordSys=GLOBAL | U1=285872.090904698 | U2=285872.090904698 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6406 | CoordSys=GLOBAL | U1=285872.090904698 | U2=285872.090904698 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6407 | CoordSys=GLOBAL | U1=285872.090904698 | U2=285872.090904698 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6408 | CoordSys=GLOBAL | U1=197020.505835195 | U2=197020.505835195 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6409 | CoordSys=GLOBAL | U1=197020.505835195 | U2=197020.505835195 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6410 | CoordSys=GLOBAL | U1=197020.505835195 | U2=197020.505835195 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6411 | CoordSys=GLOBAL | U1=197020.505835195 | U2=197020.505835195 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6412 | CoordSys=GLOBAL | U1=197020.505835195 | U2=197020.505835195 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6413 | CoordSys=GLOBAL | U1=117826.019549754 | U2=117826.019549754 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6414 | CoordSys=GLOBAL | U1=117826.019549754 | U2=117826.019549754 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6415 | CoordSys=GLOBAL | U1=32837.5681933824 | U2=32837.5681933824 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6416 | CoordSys=GLOBAL | U1=32837.5681933824 | U2=32837.5681933824 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6418 | CoordSys=GLOBAL | U1=285872.090904698 | U2=285872.090904698 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6419 | CoordSys=GLOBAL | U1=285872.090904698 | U2=285872.090904698 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6420 | CoordSys=GLOBAL | U1=285872.090904698 | U2=285872.090904698 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6421 | CoordSys=GLOBAL | U1=197020.505835195 | U2=197020.505835195 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6422 | CoordSys=GLOBAL | U1=197020.505835195 | U2=197020.505835195 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6423 | CoordSys=GLOBAL | U1=197020.505835195 | U2=197020.505835195 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6424 | CoordSys=GLOBAL | U1=197020.505835195 | U2=197020.505835195 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6425 | CoordSys=GLOBAL | U1=197020.505835195 | U2=197020.505835195 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6426 | CoordSys=GLOBAL | U1=117826.019549754 | U2=117826.019549754 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6427 | CoordSys=GLOBAL | U1=117826.019549754 | U2=117826.019549754 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6428 | CoordSys=GLOBAL | U1=32837.5681933824 | U2=32837.5681933824 | U3=0 | R1=0 | R2=0 | R3=0 |
| Joint=6429 | CoordSys=GLOBAL | U1=32837.5681933824 | U2=32837.5681933824 | U3=0 | R1=0 | R2=0 | R3=0 |

TABLE: "LOAD CASE DEFINITIONS"

Case=DEAD Type=LinStatic InitialCond=Zero DesTypeOpt="Prog Det" DesignType=Dead DesActOpt="Prog Det" DesignAct=Non-Composite AutoType=None RunCase=Yes GUID=0ee26c27-897d-421e-a0a6-ffe96b0e7b17

Case=MODAL Type=LinModal InitialCond=Zero DesTypeOpt="Prog Det" DesignType=Other DesActOpt="Prog Det" DesignAct=Other AutoType=None RunCase=No GUID=df3b2552-be07-4b67-b1c0-058eaf789022

Case="Peso estacion" Type=LinStatic InitialCond=Zero DesTypeOpt="Prog Det" DesignType=Dead DesActOpt="Prog Det" DesignAct=Non-Composite AutoType=None RunCase=Yes GUID=b377df6e-1231-4fd8-8b90-437cf9a6b3cf

Case="Carro en posicion adelantada" Type=LinStatic InitialCond=Zero DesTypeOpt="Prog Det" DesignType=Live DesActOpt="Prog Det" DesignAct="Short-Term Composite" AutoType=None RunCase=Yes GUID=f8f17fae-a381-4669-8948-cc630318d01f

Case="Carro en posicion atras" Type=LinStatic InitialCond=Zero DesTypeOpt="Prog Det" DesignType=Live DesActOpt="Prog Det" DesignAct="Short-Term Composite" AutoType=None RunCase=Yes GUID=0384d62d-6f6f-4e12-9ce2-57465bd13dc1



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Case="Deflexion del cable" Type=LinStatic InitialCond=Zero DesTypeOpt="Prog Det" DesignType=Live DesActOpt="Prog Det" DesignAct="Short-Term Composite" AutoType=None RunCase=Yes GUID=30704bb2-fe67-43fa-8a38-5cf3600eb009

Case="Tension multiconductor" Type=LinStatic InitialCond=Zero DesTypeOpt="Prog Det" DesignType=Live DesActOpt="Prog Det" DesignAct="Short-Term Composite" AutoType=None RunCase=Yes GUID=aaaa4a1b-94cf-4f02-9bcc-0be43f3434cb

Case="Viento lateral en operacion" Type=LinStatic InitialCond=Zero DesTypeOpt="Prog Det" DesignType=Wind DesActOpt="Prog Det" DesignAct="Short-Term Composite" AutoType=None RunCase=Yes GUID=de878842-6263-4631-898f-006ef8e6b3d6

Case="Viento lateral fuera de operacion" Type=LinStatic InitialCond=Zero DesTypeOpt="Prog Det" DesignType=Wind DesActOpt="Prog Det" DesignAct="Short-Term Composite" AutoType=None RunCase=Yes GUID=b2688595-e156-462e-b7bd-caf4b3ff0a68

Case="Vehiculos en estacion(operacion)" Type=LinStatic InitialCond=Zero DesTypeOpt="Prog Det" DesignType=Live DesActOpt="Prog Det" DesignAct="Short-Term Composite" AutoType=None RunCase=Yes GUID=384fb2da-55d0-4816-8ed1-802c4e85e441

Case=Sx Type=LinStatic InitialCond=Zero DesTypeOpt="Prog Det" DesignType=Quake DesActOpt="Prog Det" DesignAct="Short-Term Composite" AutoType=None RunCase=Yes GUID=d1aa725a-82bf-4627-a23b-1c01ea30c458

Case=Sy Type=LinStatic InitialCond=Zero DesTypeOpt="Prog Det" DesignType=Quake DesActOpt="Prog Det" DesignAct="Short-Term Composite" AutoType=None RunCase=Yes GUID=0bc4ad84-5026-4636-88cd-15959cd947bd

Case="Tension del cable" Type=LinStatic InitialCond=Zero DesTypeOpt="Prog Det" DesignType=Live DesActOpt="Prog Det" DesignAct="Short-Term Composite" AutoType=None RunCase=Yes GUID=a6caae83-051c-40e3-bfed-475614648a9a

Case="Viento longitudinal en operacion" Type=LinStatic InitialCond=Zero DesTypeOpt="Prog Det" DesignType=Wind DesActOpt="Prog Det" DesignAct="Short-Term Composite" AutoType=None RunCase=Yes GUID=7be21c88-970d-4ba2-b83a-3b6972aa798c

Case="Viento longitudinal fuera de operacion" Type=LinStatic InitialCond=Zero DesTypeOpt="Prog Det" DesignType=Wind DesActOpt="Prog Det" DesignAct="Short-Term Composite" AutoType=None RunCase=Yes GUID=3e200365-7856-42f3-8ec8-94e3e87e9044

#### TABLE: "LOAD PATTERN DEFINITIONS"

LoadPat=DEAD DesignType=Dead SelfWtMult=1 GUID=d35dc0d6-359a-419b-b9cd-b0786726eb25

LoadPat="Peso estacion" DesignType=Dead SelfWtMult=0 GUID=a8291923-ab66-4190-afb9-89e0284574d2

LoadPat="Carro en posicion adelantada" DesignType=Live SelfWtMult=0 GUID=528c07c2-e7b0-40ea-9aa5-e04583e38ffe

LoadPat="Carro en posicion atras" DesignType=Live SelfWtMult=0 GUID=d8579f6f-6dc8-467b-acea-4a3c43eb6485

LoadPat="Deflexion del cable" DesignType=Live SelfWtMult=0 GUID=c275747c-2e40-49ff-835f-0b4ec28ad1ff

LoadPat="Tension multiconductor" DesignType=Live SelfWtMult=0 GUID=414028a5-1491-4ab8-a402-a16a4f4ffc4d

LoadPat="Viento lateral en operacion" DesignType=Wind SelfWtMult=0 AutoLoad=None GUID=14d66b6a-3de2-4b5a-b5e0-605c7e564562

LoadPat="Viento lateral fuera de operacion" DesignType=Wind SelfWtMult=0 AutoLoad=None GUID=c746d2a3-9bf5-48f3-b44a-dde8425772c3

LoadPat="Vehiculos en estacion (operacion)" DesignType=Live SelfWtMult=0 GUID=cbc208c7-bb0b-4d9f-99c7-2ebaf11e1143

LoadPat=Sx DesignType=Quake SelfWtMult=0 AutoLoad=None GUID=d3a30a13-dbe9-4e88-985f-5d404a6dfd71

LoadPat=Sy DesignType=Quake SelfWtMult=0 AutoLoad=None GUID=9ee54ceb-b8cc-443d-983c-41725fae0379

LoadPat="Tension del cable" DesignType=Live SelfWtMult=0 GUID=29179a5b-ff85-4645-84df-c585ec17cef3

LoadPat="Viento longitudinal en operacion" DesignType=Wind SelfWtMult=0 AutoLoad=None GUID=b4e28fe7-056f-4b88-a999-ea8221683db8



|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

LoadPat="Viento longitudinal fuera de operacion" DesignType=Wind SelfWtMult=0 AutoLoad=None  
GUID=d8b37e3b-33a1-4eeb-b7b3-1c87c6135aae

TABLE: "MASS SOURCE"

MassSource=MSSSRC1 Elements=Yes Masses=Yes Loads=No IsDefault=Yes

TABLE: "MATERIAL PROPERTIES 01 - GENERAL"

Material=4000Psi Type=Concrete Grade="f'c 4000 psi" SymType=Isotropic TempDepend=No Color=Cyan  
Notes="Customary f'c 4000 psi 20/08/2021 02:42:06 p. m."  
Material=A-36 Type=Steel Grade="Grade 50" SymType=Isotropic TempDepend=No Color=Green  
Notes="ASTM A992 Grade 50 20/08/2021 02:42:06 p. m."  
Material=A416Gr270 Type=Tendon Grade="Grade 270" SymType=Uniaxial TempDepend=No Color=Blue  
GUID=77c8f8a8-1bea-4fec-a5a2-3e0f71e693e0 Notes="ASTM A416 Grade 270 17/11/2021 11:09:56 a. m."  
Material=A615Gr60 Type=Rebar Grade="Grade 60" SymType=Uniaxial TempDepend=No Color=White  
Notes="ASTM A615 Grade 60 20/08/2021 02:45:32 p. m."  
Material=A992Fy50 Type=Steel Grade="Grade 50" SymType=Isotropic TempDepend=No Color=Green  
Notes="ASTM A992 Grade 50 20/08/2021 02:42:06 p. m."  
Material="f'c=300kg/cm2" Type=Concrete Grade="f'c 4000 psi" SymType=Isotropic TempDepend=No  
Color=Cyan GUID=72896671-ee7f-418c-aa4f-fa69df75dc1c Notes="Customary f'c 4000 psi 20/08/2021 02:42:06 p. m."

TABLE: "MATERIAL PROPERTIES 02 - BASIC MECHANICAL PROPERTIES"

Material=4000Psi UnitWeight=23.5631216161854 UnitMass=2.40276960558926 E1=24855578.0600518  
G12=10356490.8583549 U12=0.2 A1=9.9E-06  
Material=A-36 UnitWeight=0 UnitMass=0 E1=199947978.795958 G12=76903068.7676762 U12=0.3  
A1=1.17E-05  
Material=A416Gr270 UnitWeight=76.9728639422648 UnitMass=7.84904737995992 E1=196500599.8512  
A1=1.16999994421006E-05  
Material=A615Gr60 UnitWeight=76.9728639422648 UnitMass=7.84904737995992 E1=199947978.795958  
A1=1.17E-05  
Material=A992Fy50 UnitWeight=76.9728639422648 UnitMass=7.84904737995992 E1=199947978.795958  
G12=76903068.7676762 U12=0.3 A1=1.17E-05  
Material="f'c=300kg/cm2" UnitWeight=23.5359604790556 UnitMass=2.4 E1=23779862.9510346  
G12=9908276.22959774 U12=0.2 A1=9.9E-06

TABLE: "MATERIAL PROPERTIES 03A - STEEL DATA"

Material=A-36 Fy=248108.250050045 Fu=448159.262818526 EffFy=379211.683923368  
EffFu=492975.189100378 SSCurveOpt=Simple SSHysType=Kinematic SHard=0.015 SMax=0.11 SRup=0.17  
FinalSlope=-0.1 CoupModType="Von Mises"  
Material=A992Fy50 Fy=344737.894475789 Fu=448159.262818526 EffFy=379211.683923368  
EffFu=492975.189100378 SSCurveOpt=Simple SSHysType=Kinematic SHard=0.015 SMax=0.11 SRup=0.17  
FinalSlope=-0.1 CoupModType="Von Mises"

TABLE: "MATERIAL PROPERTIES 03B - CONCRETE DATA"

Material=4000Psi Fc=27579.0315580631 eFc=27579.0315580631 LtWtConc=No SSCurveOpt=Mander  
SSHysType=Takeda SFc=0.00221914 SCap=0.005 FinalSlope=-0.1 FAngle=0 DAngle=0  
CoupModType="Modified Darwin-Pecknold"  
Material="f'c=300kg/cm2" Fc=29419.9505988196 eFc=29419.9505988196 LtWtConc=No SSCurveOpt=Mander  
SSHysType=Takeda SFc=0.00221914 SCap=0.005 FinalSlope=-0.1 FAngle=0 DAngle=0  
CoupModType="Modified Darwin-Pecknold"

TABLE: "MATERIAL PROPERTIES 03E - REBAR DATA"

Material=A615Gr60 Fy=413685.473370947 Fu=620528.21005642 EffFy=455054.020708041  
EffFu=682581.031062062 SSCurveOpt=Simple SSHysType=Kinematic SHard=0.01 SCap=0.09 FinalSlope=-0.1  
UseCTDef=No CoupModType="Von Mises"

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

TABLE: "MATERIAL PROPERTIES 03F - TENDON DATA"

Material=A416Gr270       $F_y=1689905.15872032$        $F_u=1861584.63016926$        $SSCurveOpt="270 \text{ ksi}"$   
 $SSHysType=Kinematic$      $FinalSlope=-0.1$      $CoupModType="Von Mises"$

TABLE: "MATERIAL PROPERTIES 03J - COUPLED NONLINEAR VON MISES DATA"

Material=A-36     $YieldStress=379211.683923368$      $LinIsoHard=No$      $LinKinHard=No$      $NLIsoSaHard=No$   
Material=A416Gr270     $YieldStress=1689905.15872032$      $LinIsoHard=No$      $LinKinHard=No$      $NLIsoSaHard=No$   
Material=A615Gr60     $YieldStress=455054.020708041$      $LinIsoHard=No$      $LinKinHard=No$      $NLIsoSaHard=No$   
Material=A992Fy50     $YieldStress=379211.683923368$      $LinIsoHard=No$      $LinKinHard=No$      $NLIsoSaHard=No$

TABLE: "MATERIAL PROPERTIES 06 - DAMPING PARAMETERS"

Material=4000Psi     $ModalRatio=0$      $VisMass=0$      $VisStiff=0$      $HysMass=0$      $HysStiff=0$   
Material=A-36     $ModalRatio=0$      $VisMass=0$      $VisStiff=0$      $HysMass=0$      $HysStiff=0$   
Material=A416Gr270     $ModalRatio=0$      $VisMass=0$      $VisStiff=0$      $HysMass=0$      $HysStiff=0$   
Material=A615Gr60     $ModalRatio=0$      $VisMass=0$      $VisStiff=0$      $HysMass=0$      $HysStiff=0$   
Material=A992Fy50     $ModalRatio=0$      $VisMass=0$      $VisStiff=0$      $HysMass=0$      $HysStiff=0$   
Material="f'c=300kg/cm2"     $ModalRatio=0$      $VisMass=0$      $VisStiff=0$      $HysMass=0$      $HysStiff=0$

TABLE: "MATERIAL PROPERTIES 09 - ACCEPTANCE CRITERIA"

Material=4000Psi     $IOTens=0.01$      $LSTens=0.02$      $CPTens=0.05$      $IOComp=-0.003$      $LSComp=-0.006$      $CPComp=-0.015$      $IgnoreTens=Yes$   
Material=A-36     $IOTens=0.01$      $LSTens=0.02$      $CPTens=0.05$      $IOComp=-0.005$      $LSComp=-0.01$      $CPComp=-0.02$   
Material=A416Gr270     $IOTens=0.015$      $LSTens=0.023$      $CPTens=0.03$      $IOComp=-0.015$      $LSComp=-0.023$      $CPComp=-0.03$   
Material=A615Gr60     $IOTens=0.01$      $LSTens=0.02$      $CPTens=0.05$      $IOComp=-0.005$      $LSComp=-0.01$      $CPComp=-0.02$   
Material=A992Fy50     $IOTens=0.01$      $LSTens=0.02$      $CPTens=0.05$      $IOComp=-0.005$      $LSComp=-0.01$      $CPComp=-0.02$   
Material="f'c=300kg/cm2"     $IOTens=0.01$      $LSTens=0.02$      $CPTens=0.05$      $IOComp=-0.003$      $LSComp=-0.006$      $CPComp=-0.015$      $IgnoreTens=Yes$

TABLE: "OPTIONS - COLORS - DISPLAY"

DeviceType=Screen    Points=White    LinesFrame=White    LinesFrmDL=Gray4    LinesCable=White  
LinesTendon=White    SpringLinks=Gray8Dark    Restraints=Gray8Dark    Releases=Gray4    Axes=White    Text=White  
ShadowLines=Gray4 \_  
GuideLines=Gray4    Highlight=Black    Selection=Black    AreaFillBot=Gray4    AreaFillTop=Gray8Dark  
AreaFillSd=Gray4    AreaEdge=Black    SolidF1=Gray1Light    SolidF2=Gray2    SolidF3=Gray3    SolidF4=Gray4  
SolidF5=Gray5 \_  
SolidF6=Gray6    SolidEdge=Black    Floor=Gray4    Background=Black    BGLowLeft=Black    BGLowRight=Black  
BGUpRight=Black    Darkness=0  
DeviceType=Printer    Points=Gray8Dark    LinesFrame=Black    LinesFrmDL=Gray4    LinesCable=Black  
LinesTendon=Black    SpringLinks=Gray8Dark    Restraints=Gray8Dark    Releases=Gray4    Axes=Black    Text=Black  
ShadowLines=Gray4 \_  
GuideLines=Gray4    Highlight=Black    Selection=Black    AreaFillBot=Gray4    AreaFillTop=Gray8Dark  
AreaFillSd=Gray4    AreaEdge=Black    SolidF1=Gray1Light    SolidF2=Gray2    SolidF3=Gray3    SolidF4=Gray4  
SolidF5=Gray5 \_  
SolidF6=Gray6    SolidEdge=Black    Floor=Gray4    Background=White    BGLowLeft=White    BGLowRight=White  
BGUpRight=White    Darkness=0.5  
DeviceType="Color Printer"    Points=Blue    LinesFrame=Blue    LinesFrmDL=Blue    LinesCable=Green  
LinesTendon=Green    SpringLinks=Green    Restraints=Green    Releases=Green    Axes=Cyan    Text=Black  
ShadowLines=Gray8Dark \_  
GuideLines=Gray8Dark    Highlight=Red    Selection=10504778    AreaFillBot=Red    AreaFillTop=16744703  
AreaFillSd=Red    AreaEdge=DarkRed    SolidF1=Red    SolidF2=Blue    SolidF3=Green    SolidF4=Yellow    SolidF5=White  
SolidF6=Cyan \_

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

SolidEdge=DarkRed Floor=Gray4 Background=White BGLowLeft=White BGLowRight=White  
BGUpRight=White Darkness=0.5

TABLE: "OPTIONS - COLORS - OUTPUT"

DeviceType=Screen Contour1=13107400 Contour2=6553828 Contour3=Red Contour4=16639  
Contour5=Orange Contour6=43775 Contour7=54527 Contour8=Yellow Contour9=65408 Contour10=Green  
Contour11=8453888 Contour12=Cyan \_  
Contour13=16755200 Contour14=16733440 Contour15=Blue Transpare=0.5 Ratio1=Cyan Ratio2=Green  
Ratio3=Yellow Ratio4=Orange Ratio5=Red RatioNotD=Gray4 RatioNotC=Red RatioVal1=0.5 RatioVal2=0.7  
RatioVal3=0.9 \_  
RatioVal4=1 DFillPos=Blue DFillNeg=Red DFillRPos=Green DFillRNeg=Green  
DeviceType=Printer Contour1=Black Contour2=3158064 Contour3=4210752 Contour4=5263440  
Contour5=6316128 Contour6=7368816 Contour7=Gray8Dark Contour8=Gray7 Contour9=Gray6  
Contour10=Gray5 Contour11=Gray4 \_  
Contour12=Gray3 Contour13=Gray2 Contour14=Gray1Light Contour15=White Transpare=0 Ratio1=Gray2  
Ratio2=Gray4 Ratio3=Gray8Dark Ratio4=4210752 Ratio5=Black RatioNotD=Gray4 RatioNotC=Black  
RatioVal1=0.5 \_  
RatioVal2=0.7 RatioVal3=0.9 RatioVal4=1 DFillPos=Gray8Dark DFillNeg=Gray8Dark DFillRPos=4210752  
DFillRNeg=4210752  
DeviceType="Color Printer" Contour1=13107400 Contour2=6553828 Contour3=Red Contour4=16639  
Contour5=Orange Contour6=43775 Contour7=54527 Contour8=Yellow Contour9=65408 Contour10=Green  
Contour11=8453888 \_  
Contour12=Cyan Contour13=16755200 Contour14=16733440 Contour15=Blue Transpare=0 Ratio1=Cyan  
Ratio2=Green Ratio3=Yellow Ratio4=Orange Ratio5=Red RatioNotD=Gray4 RatioNotC=Red RatioVal1=0.5  
RatioVal2=0.7 \_  
RatioVal3=0.9 RatioVal4=1 DFillPos=Blue DFillNeg=Red DFillRPos=Green DFillRNeg=Green

TABLE: "OVERWRITES - CONCRETE DESIGN - ACI 318-19"

|           |                     |             |                    |             |            |            |
|-----------|---------------------|-------------|--------------------|-------------|------------|------------|
| Frame=1   | DesignSect="Program | Determined" | FrameType="Program | Determined" | RLLF=0     | XMLMajor=0 |
| XLMinor=0 | XKMajor=0           | XKMinor=0   | CmMajor=0          | CmMinor=0   | DnsMajor=0 | DnsMinor=0 |
| Frame=2   | DesignSect="Program | Determined" | FrameType="Program | Determined" | RLLF=0     | XMLMajor=0 |
| XLMinor=0 | XKMajor=0           | XKMinor=0   | CmMajor=0          | CmMinor=0   | DnsMajor=0 | DnsMinor=0 |
| Frame=3   | DesignSect="Program | Determined" | FrameType="Program | Determined" | RLLF=0     | XMLMajor=0 |
| XLMinor=0 | XKMajor=0           | XKMinor=0   | CmMajor=0          | CmMinor=0   | DnsMajor=0 | DnsMinor=0 |
| Frame=5   | DesignSect="Program | Determined" | FrameType="Program | Determined" | RLLF=0     | XMLMajor=0 |
| XLMinor=0 | XKMajor=0           | XKMinor=0   | CmMajor=0          | CmMinor=0   | DnsMajor=0 | DnsMinor=0 |
| Frame=6   | DesignSect="Program | Determined" | FrameType="Program | Determined" | RLLF=0     | XMLMajor=0 |
| XLMinor=0 | XKMajor=0           | XKMinor=0   | CmMajor=0          | CmMinor=0   | DnsMajor=0 | DnsMinor=0 |
| Frame=7   | DesignSect="Program | Determined" | FrameType="Program | Determined" | RLLF=0     | XMLMajor=0 |
| XLMinor=0 | XKMajor=0           | XKMinor=0   | CmMajor=0          | CmMinor=0   | DnsMajor=0 | DnsMinor=0 |
| Frame=8   | DesignSect="Program | Determined" | FrameType="Program | Determined" | RLLF=0     | XMLMajor=0 |
| XLMinor=0 |                     |             |                    |             |            |            |
| Frame=9   | DesignSect="Program | Determined" | FrameType="Program | Determined" | RLLF=0     | XMLMajor=0 |
| XLMinor=0 |                     |             |                    |             |            |            |
| Frame=10  | DesignSect="Program | Determined" | FrameType="Program | Determined" | RLLF=0     | XMLMajor=0 |
| XLMinor=0 | XKMajor=0           | XKMinor=0   | CmMajor=0          | CmMinor=0   | DnsMajor=0 | DnsMinor=0 |
| Frame=11  | DesignSect="Program | Determined" | FrameType="Program | Determined" | RLLF=0     | XMLMajor=0 |
| XLMinor=0 | XKMajor=0           | XKMinor=0   | CmMajor=0          | CmMinor=0   | DnsMajor=0 | DnsMinor=0 |
| Frame=12  | DesignSect="Program | Determined" | FrameType="Program | Determined" | RLLF=0     | XMLMajor=0 |
| XLMinor=0 | XKMajor=0           | XKMinor=0   | CmMajor=0          | CmMinor=0   | DnsMajor=0 | DnsMinor=0 |
| Frame=15  | DesignSect="Program | Determined" | FrameType="Program | Determined" | RLLF=0     | XMLMajor=0 |
| XLMinor=0 | XKMajor=0           | XKMinor=0   | CmMajor=0          | CmMinor=0   | DnsMajor=0 | DnsMinor=0 |
| Frame=16  | DesignSect="Program | Determined" | FrameType="Program | Determined" | RLLF=0     | XMLMajor=0 |
| XLMinor=0 | XKMajor=0           | XKMinor=0   | CmMajor=0          | CmMinor=0   | DnsMajor=0 | DnsMinor=0 |

[illegible]















|            |                                 |                                |           |           |
|------------|---------------------------------|--------------------------------|-----------|-----------|
| Frame=153  | DesignSect="Program Determined" | FrameType="Program Determined" | RLLF=0    | XLMajor=0 |
| XLMinor=0  | XKMajor=0                       | XKMinor=0                      | CmMajor=0 | CmMinor=0 |
| DnsMajor=0 | DnsMinor=0                      | DsMajor=0                      | DsMinor=0 |           |
| Frame=154  | DesignSect="Program Determined" | FrameType="Program Determined" | RLLF=0    | XLMajor=0 |
| XLMinor=0  | XKMajor=0                       | XKMinor=0                      | CmMajor=0 | CmMinor=0 |
| DnsMajor=0 | DnsMinor=0                      | DsMajor=0                      | DsMinor=0 |           |
| Frame=155  | DesignSect="Program Determined" | FrameType="Program Determined" | RLLF=0    | XLMajor=0 |
| XLMinor=0  | XKMajor=0                       | XKMinor=0                      | CmMajor=0 | CmMinor=0 |
| DnsMajor=0 | DnsMinor=0                      | DsMajor=0                      | DsMinor=0 |           |
| Frame=156  | DesignSect="Program Determined" | FrameType="Program Determined" | RLLF=0    | XLMajor=0 |
| XLMinor=0  | XKMajor=0                       | XKMinor=0                      | CmMajor=0 | CmMinor=0 |
| DnsMajor=0 | DnsMinor=0                      | DsMajor=0                      | DsMinor=0 |           |
| Frame=157  | DesignSect="Program Determined" | FrameType="Program Determined" | RLLF=0    | XLMajor=0 |
| XLMinor=0  | XKMajor=0                       | XKMinor=0                      | CmMajor=0 | CmMinor=0 |
| DnsMajor=0 | DnsMinor=0                      | DsMajor=0                      | DsMinor=0 |           |
| Frame=158  | DesignSect="Program Determined" | FrameType="Program Determined" | RLLF=0    | XLMajor=0 |
| XLMinor=0  | XKMajor=0                       | XKMinor=0                      | CmMajor=0 | CmMinor=0 |
| DnsMajor=0 | DnsMinor=0                      | DsMajor=0                      | DsMinor=0 |           |
| Frame=159  | DesignSect="Program Determined" | FrameType="Program Determined" | RLLF=0    | XLMajor=0 |
| XLMinor=0  | XKMajor=0                       | XKMinor=0                      | CmMajor=0 | CmMinor=0 |
| DnsMajor=0 | DnsMinor=0                      | DsMajor=0                      | DsMinor=0 |           |
| Frame=160  | DesignSect="Program Determined" | FrameType="Program Determined" | RLLF=0    | XLMajor=0 |
| XLMinor=0  | XKMajor=0                       | XKMinor=0                      | CmMajor=0 | CmMinor=0 |
| DnsMajor=0 | DnsMinor=0                      | DsMajor=0                      | DsMinor=0 |           |
| Frame=161  | DesignSect="Program Determined" | FrameType="Program Determined" | RLLF=0    | XLMajor=0 |
| XLMinor=0  | XKMajor=0                       | XKMinor=0                      | CmMajor=0 | CmMinor=0 |
| DnsMajor=0 | DnsMinor=0                      | DsMajor=0                      | DsMinor=0 |           |
| Frame=162  | DesignSect="Program Determined" | FrameType="Program Determined" | RLLF=0    | XLMajor=0 |
| XLMinor=0  | XKMajor=0                       | XKMinor=0                      | CmMajor=0 | CmMinor=0 |
| DnsMajor=0 | DnsMinor=0                      | DsMajor=0                      | DsMinor=0 |           |
| Frame=163  | DesignSect="Program Determined" | FrameType="Program Determined" | RLLF=0    | XLMajor=0 |
| XLMinor=0  | XKMajor=0                       | XKMinor=0                      | CmMajor=0 | CmMinor=0 |
| DnsMajor=0 | DnsMinor=0                      | DsMajor=0                      | DsMinor=0 |           |
| Frame=164  | DesignSect="Program Determined" | FrameType="Program Determined" | RLLF=0    | XLMajor=0 |
| XLMinor=0  | XKMajor=0                       | XKMinor=0                      | CmMajor=0 | CmMinor=0 |
| DnsMajor=0 | DnsMinor=0                      | DsMajor=0                      | DsMinor=0 |           |
| Frame=165  | DesignSect="Program Determined" | FrameType="Program Determined" | RLLF=0    | XLMajor=0 |
| XLMinor=0  | XKMajor=0                       | XKMinor=0                      | CmMajor=0 | CmMinor=0 |
| DnsMajor=0 | DnsMinor=0                      | DsMajor=0                      | DsMinor=0 |           |
| Frame=166  | DesignSect="Program Determined" | FrameType="Program Determined" | RLLF=0    | XLMajor=0 |
| XLMinor=0  | XKMajor=0                       | XKMinor=0                      | CmMajor=0 | CmMinor=0 |
| DnsMajor=0 | DnsMinor=0                      | DsMajor=0                      | DsMinor=0 |           |
| Frame=167  | DesignSect="Program Determined" | FrameType="Program Determined" | RLLF=0    | XLMajor=0 |
| XLMinor=0  | XKMajor=0                       | XKMinor=0                      | CmMajor=0 | CmMinor=0 |
| DnsMajor=0 | DnsMinor=0                      | DsMajor=0                      | DsMinor=0 |           |
| Frame=168  | DesignSect="Program Determined" | FrameType="Program Determined" | RLLF=0    | XLMajor=0 |
| XLMinor=0  | XKMajor=0                       | XKMinor=0                      | CmMajor=0 | CmMinor=0 |
| DnsMajor=0 | DnsMinor=0                      | DsMajor=0                      | DsMinor=0 |           |
| Frame=169  | DesignSect="Program Determined" | FrameType="Program Determined" | RLLF=0    | XLMajor=0 |
| XLMinor=0  | XKMajor=0                       | XKMinor=0                      | CmMajor=0 | CmMinor=0 |
| DnsMajor=0 | DnsMinor=0                      | DsMajor=0                      | DsMinor=0 |           |
| Frame=170  | DesignSect="Program Determined" | FrameType="Program Determined" | RLLF=0    | XLMajor=0 |
| XLMinor=0  | XKMajor=0                       | XKMinor=0                      | CmMajor=0 | CmMinor=0 |
| DnsMajor=0 | DnsMinor=0                      | DsMajor=0                      | DsMinor=0 |           |
| Frame=171  | DesignSect="Program Determined" | FrameType="Program Determined" | RLLF=0    | XLMajor=0 |
| XLMinor=0  | XKMajor=0                       | XKMinor=0                      | CmMajor=0 | CmMinor=0 |
| DnsMajor=0 | DnsMinor=0                      | DsMajor=0                      | DsMinor=0 |           |
| Frame=172  | DesignSect="Program Determined" | FrameType="Program Determined" | RLLF=0    | XLMajor=0 |
| XLMinor=0  | XKMajor=0                       | XKMinor=0                      | CmMajor=0 | CmMinor=0 |
| DnsMajor=0 | DnsMinor=0                      | DsMajor=0                      | DsMinor=0 |           |
| Frame=173  | DesignSect="Program Determined" | FrameType="Program Determined" | RLLF=0    | XLMajor=0 |
| XLMinor=0  | XKMajor=0                       | XKMinor=0                      | CmMajor=0 | CmMinor=0 |
| DnsMajor=0 | DnsMinor=0                      | DsMajor=0                      | DsMinor=0 |           |
| Frame=174  | DesignSect="Program Determined" | FrameType="Program Determined" | RLLF=0    | XLMajor=0 |
| XLMinor=0  | XKMajor=0                       | XKMinor=0                      | CmMajor=0 | CmMinor=0 |
| DnsMajor=0 | DnsMinor=0                      | DsMajor=0                      | DsMinor=0 |           |
| Frame=175  | DesignSect="Program Determined" | FrameType="Program Determined" | RLLF=0    | XLMajor=0 |
| XLMinor=0  | XKMajor=0                       | XKMinor=0                      | CmMajor=0 | CmMinor=0 |
| DnsMajor=0 | DnsMinor=0                      | DsMajor=0                      | DsMinor=0 |           |
| Frame=176  | DesignSect="Program Determined" | FrameType="Program Determined" | RLLF=0    | XLMajor=0 |
| XLMinor=0  | XKMajor=0                       | XKMinor=0                      | CmMajor=0 | CmMinor=0 |
| DnsMajor=0 | DnsMinor=0                      | DsMajor=0                      | DsMinor=0 |           |

TABLE: "PREFERENCES - ALUMINUM DESIGN - AA 2015"

THDesign=Envelopes SRatioLimit=1 Provision=ASD LatFact=1.3333333333333333 UseLatFact=No Bridge=No  
OmegaTy=1.65 OmegaTr=1.95 OmegaC=1.65 OmegaBo=1.65 OmegaBr=1.95 OmegaVo=1.65 OmegaVr=1.95

TABLE: "PREFERENCES - COLD FORMED DESIGN - AISI-ASD96"

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

THDesign=Envelopes FrameType="Braced Frame" SRatioLimit=1 MaxIter=1 OmegaBS=1.67 OmegaBUS=1.67 OmegaBLTB=1.67 OmegaVS=1.67 OmegaVNS=1.5 OmegaT=1.67 OmegaC=1.8

TABLE: "PREFERENCES - CONCRETE DESIGN - ACI 318-19"

THDesign=Envelopes NumCurves=24 NumPoints=11 MinEccen=Yes PatLLF=0.75 UFLimit=0.95 SeisCat=D Rho=1 Sds=0.5 PhiT=0.9 PhiCTied=0.65 PhiCSpiral=0.75 PhiV=0.75 PhiVSeismic=0.6 PhiVJoint=0.85

TABLE: "PREFERENCES - DIMENSIONAL"

MergeTol=0.001 FineGrid=0.25 Nudge=0.25 SelectTol=3 SnapTol=12 SLineThick=2 PLineThick=4 MaxFont=8 MinFont=5 AutoZoom=10 ShrinkFact=70 TextFileLen=240

TABLE: "PREFERENCES - STEEL DESIGN - AISC 360-16"

THDesign=Envelopes FrameType=SMF PatLLF=0.75 SRatioLimit=0.95 MaxIter=1 SDC=D SeisCode=No SeisLoad=No ImpFactor=1 SystemRho=1 SystemSds=0.5 SystemR=8 SystemCd=5.5 Omega0=3 Provision=LRFD

AMethod="Direct Analysis" SOMethod="General 2nd Order" SRMethod="Tau-b Fixed" NLCoeff=0.002 PhiB=0.9 PhiC=0.9 PhiTY=0.9 PhiTF=0.75 PhiV=0.9 PhiVRolledI=1 PhiVT=0.9 PlugWeld=Yes HSSWelding=ERW HSSReduceT=No

CheckDefl=No DLRat=120 SDLAndLLRat=120 LLRat=360 TotalRat=240 NetRat=240

TABLE: "PROGRAM CONTROL"

ProgramName=SAP2000 Version=23.1.0 CurrUnits="KN, m, C" SteelCode="AISC 360-16" ConcCode="ACI 318-19" AlumCode="AA 2015" ColdCode=ALSI-ASD96 RegenHinge=Yes

TABLE: "PROJECT INFORMATION"

Item="Company Name" Data=Escuela

Item="Client Name"

Item="Project Name"

Item="Project Number"

Item="Model Name"

Item="Model Description"

Item="Revision Number"

Item="Frame Type"

Item=Engineer

Item=Checker

Item=Supervisor

Item="Issue Code"

Item="Design Code"



TABLE: "REBAR SIZES"

RebarID=#2 Area=3.2258E-05 Diameter=0.00635

RebarID=#3 Area=7.09675996154547E-05 Diameter=0.009525

RebarID=#4 Area=0.000129032001922727 Diameter=0.0127

RebarID=#5 Area=0.000199999601538181 Diameter=0.015875

RebarID=#6 Area=0.000283870398461819 Diameter=0.01905

RebarID=#7 Area=0.000387096015381813 Diameter=0.022225

RebarID=#8 Area=0.000509676413843632 Diameter=0.0254

RebarID=#9 Area=0.00064516 Diameter=0.0286512005329132

RebarID=#10 Area=0.00081935318769455 Diameter=0.0322579995155334

RebarID=#11 Area=0.00100644956308365 Diameter=0.0358139991521835

RebarID=#14 Area=0.00145161 Diameter=0.0430021989583969

RebarID=#18 Area=0.00258064 Diameter=0.0573277992248535

RebarID=10M Area=0.000100000004162606 Diameter=0.0113000003604438

RebarID=15M Area=0.000200000008325212 Diameter=0.0160000002402959

RebarID=20M Area=0.000300000012487818 Diameter=0.0195000002928606

|             |                           |                              |
|-------------|---------------------------|------------------------------|
| RebarID=25M | Area=0.000500000020813031 | Diameter=0.0252000011414055  |
| RebarID=30M | Area=0.000700000029138243 | Diameter=0.0299000000675832  |
| RebarID=35M | Area=0.00100000004162606  | Diameter=0.0357000012990997  |
| RebarID=45M | Area=0.00150000006243909  | Diameter=0.0437000014192476  |
| RebarID=55M | Area=0.00250000010406515  | Diameter=0.056400002372922   |
| RebarID=6d  | Area=2.83000004150781E-05 | Diameter=0.00600000009011096 |
| RebarID=8d  | Area=5.03000013308514E-05 | Diameter=0.00800000012014795 |
| RebarID=10d | Area=7.85000032676458E-05 | Diameter=0.010000001501849   |
| RebarID=12d | Area=0.000113000004703745 | Diameter=0.0120000001802219  |
| RebarID=14d | Area=0.000154000006410413 | Diameter=0.0140000002102589  |
| RebarID=16d | Area=0.000201000008366838 | Diameter=0.0160000002402959  |
| RebarID=20d | Area=0.000314000013070583 | Diameter=0.0200000003003699  |
| RebarID=25d | Area=0.000491000020438396 | Diameter=0.0250000003754623  |
| RebarID=26d | Area=0.000531000022103439 | Diameter=0.0260000003904808  |
| RebarID=28d | Area=0.000616000025641654 | Diameter=0.0280000004205178  |
| RebarID=N12 | Area=0.000113000004703745 | Diameter=0.0120000001802219  |
| RebarID=N16 | Area=0.000201000008366838 | Diameter=0.0160000002402959  |
| RebarID=N20 | Area=0.000314000013070583 | Diameter=0.0200000003003699  |
| RebarID=N24 | Area=0.00045200001881498  | Diameter=0.0240000003604438  |
| RebarID=N28 | Area=0.000616000025641654 | Diameter=0.0280000004205178  |
| RebarID=N32 | Area=0.000804000033467353 | Diameter=0.0320000004805918  |
| RebarID=N36 | Area=0.00102000004245858  | Diameter=0.0360000005406658  |

TABLE: "SECTION DESIGNER PROPERTIES 01 - GENERAL"

SectionName="MASTIL A2" DesignType="Concrete Column" DsgnOrChck=Design IncludeVStr=No  
AxisAngle=90 MeshSzAbs=0 MeshSzRel=0.05

TABLE: "SECTION DESIGNER PROPERTIES 02 - REINFORCING AT SHAPE EDGES"

SectionName="MASTIL A2" ShapeName=Rectangle1 EdgeID=1 BarSize=45M BarArea=0.00150000006243909  
Spacing=0.165 Cover=0.03  
SectionName="MASTIL A2" ShapeName=Rectangle1 EdgeID=2 BarSize=45M BarArea=0.00150000006243909  
Spacing=0.165 Cover=0.03  
SectionName="MASTIL A2" ShapeName=Rectangle1 EdgeID=3 BarSize=45M BarArea=0.00150000006243909  
Spacing=0.165 Cover=0.03  
SectionName="MASTIL A2" ShapeName=Rectangle1 EdgeID=4 BarSize=45M BarArea=0.00150000006243909  
Spacing=0.165 Cover=0.03

TABLE: "SECTION DESIGNER PROPERTIES 03 - REINFORCING AT SHAPE CORNERS"

|                             |                      |            |             |
|-----------------------------|----------------------|------------|-------------|
| SectionName="MASTIL A2"     | ShapeName=Rectangle1 | CornerID=1 | BarSize=45M |
| BarArea=0.00150000006243909 |                      |            |             |
| SectionName="MASTIL A2"     | ShapeName=Rectangle1 | CornerID=2 | BarSize=45M |
| BarArea=0.00150000006243909 |                      |            |             |
| SectionName="MASTIL A2"     | ShapeName=Rectangle1 | CornerID=3 | BarSize=45M |
| BarArea=0.00150000006243909 |                      |            |             |
| SectionName="MASTIL A2"     | ShapeName=Rectangle1 | CornerID=4 | BarSize=45M |
| BarArea=0.00150000006243909 |                      |            |             |

TABLE: "SECTION DESIGNER PROPERTIES 12 - SHAPE SOLID RECTANGLE"

SectionName="MASTIL A2" ShapeName=Rectangle1 ShapeMat=4000Psi ZOrder=1 FillColor=Cyan XCenter=0  
YCenter=0 Height=1.6 Width=1.2 Rotation=0 Reinforcing=Yes CoreDim="Program Determined"  
BCoreMajor=1.14  
BCoreMinor=1.54 DCoreMajorPositive=1.57 DCoreMajorNegative=1.57 DCoreMinorPositive=1.17  
DCoreMinorNegative=1.17 RebarMat=A615Gr60 ConcCover=OuterLBar ManderPlace=CenterCBar

TABLE: "SECTION DESIGNER PROPERTIES 30 - FIBER GENERAL"

|                                                                                   |                                                                                                                                                  |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <p>ACTUALIZACIÓN, AJUSTES Y COMPLEMENTACIÓN DE LA<br/>FACTIBILIDAD Y ESTUDIOS Y DISEÑOS DEL CABLE AÉREO EN<br/>SAN CRISTÓBAL, EN BOGOTÁ D.C.</p> |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

SectionName="MASTIL A2" NumFibersD2=3 NumFibersD3=3 CoordSys=Cartesian GridAngle=0  
LumpRebar=No FiberPMM=No FiberMC=No

TABLE: "SOLID PROPERTY DEFINITIONS"

SolidProp=Solid1 Material=A-36 MatAngleA=0 MatAngleB=0 MatAngleC=0 InComp=Yes Color=Green  
GUID=d0a9f097-27b0-4ec9-a3b3-6b33ade7ea88

SolidProp=Solid2 Material=4000Psi MatAngleA=0 MatAngleB=0 MatAngleC=0 InComp=Yes Color=Magenta  
GUID=23b119c8-4bda-45a8-b545-17f2f489f195

END TABLE DATA

