ELEVATION PLANS

1.4.a Transmission Line

The new 345-kV double circuit transmission line will be constructed using steel poles. A single pole will be used for most transmission pole locations; however, two transmission poles will be required in certain locations where the weight of the conductor requires extra structural support. These are typically 'angle locations' where the line changes direction. Each transmission pole will be placed on a concrete foundation. Voltage, conductor sag, pole type, terrain, length of span between transmission poles, and minimum clearances of existing buildings influence the necessary height of transmission pole. The transmission poles will be weathering steel and a brown or rust color. The anticipated physical characteristics of a double-circuit pole are summarized in Table 4, and a representative transmission pole with line is shown in Figure 4.

Table 4: Typical 345-kV Double Circuit Transmission Line Characteristics

Characteristic	Anticipated Design
Typical height	105-140 feet (poles will not exceed 199-foot maximum height)
Right-of-way	150 feet total, 75 feet on either side of the centerline
Span length	Typically 950 feet between transmission poles
Material/color	Weathering steel, brown or rust color
Clearance	Maintain all clearances as required by National Electrical Safety Code

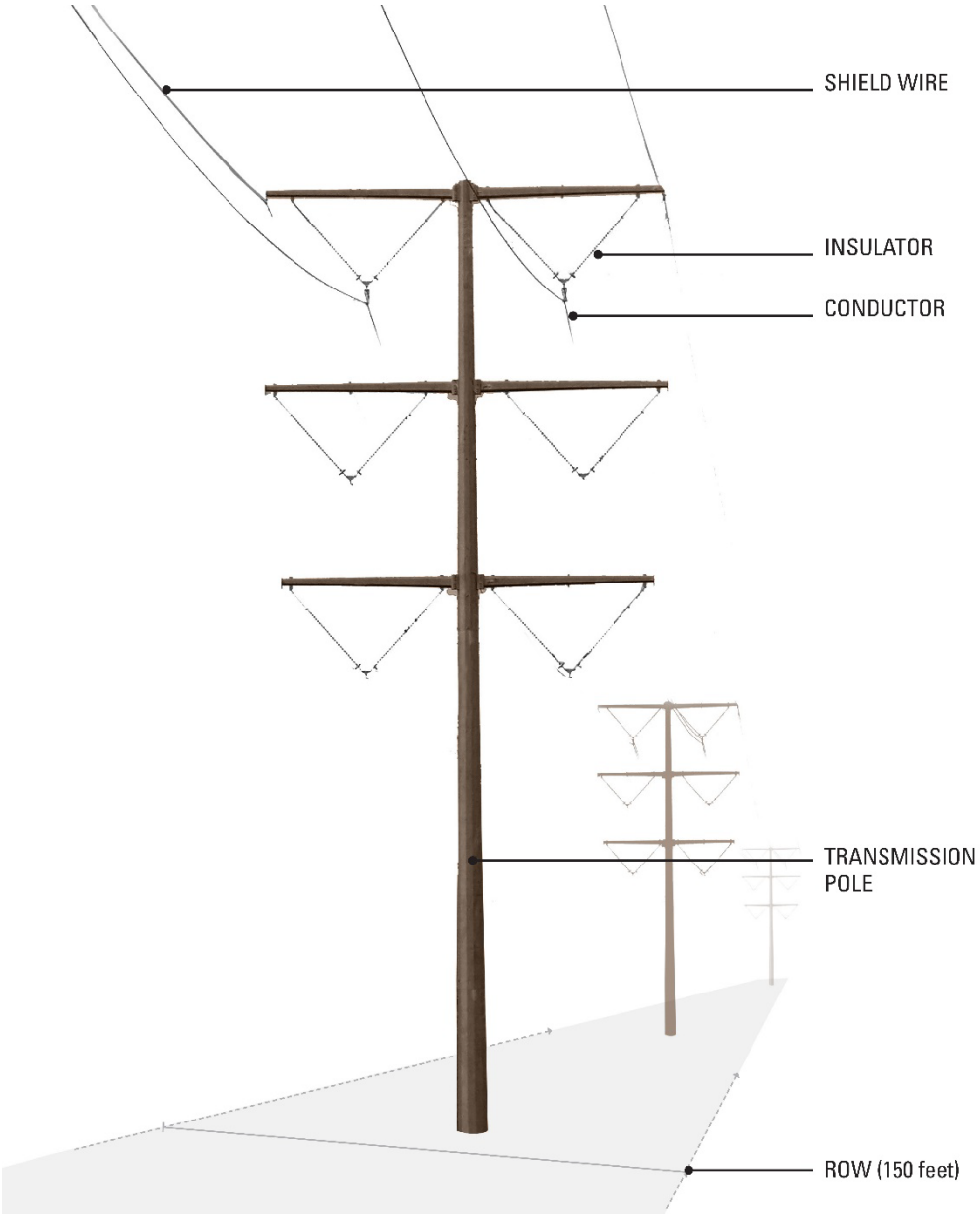


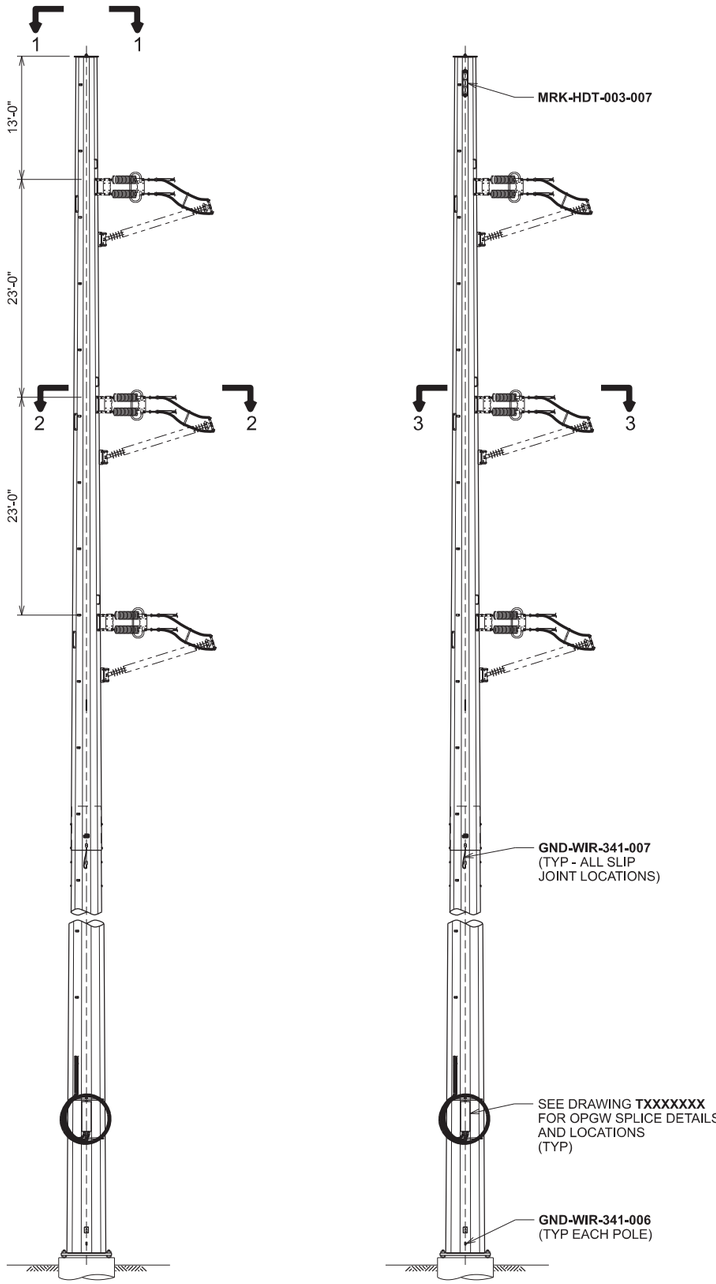
Figure 1: Typical Transmission Pole Configuration (Illustrative)

4.2.b Types of Poles Used (5.201.2.b)

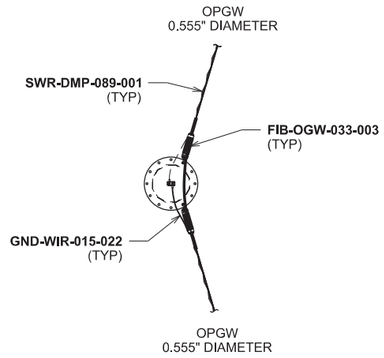
See Section 1.4.a for the description of the transmission poles. Pole details, representative photographs, and simulations are provided in Attachment J.

ATTACHMENT J: POLE DETAILS, REPRESENTATIVE PHOTOGRAPHS, AND SIMULATIONS

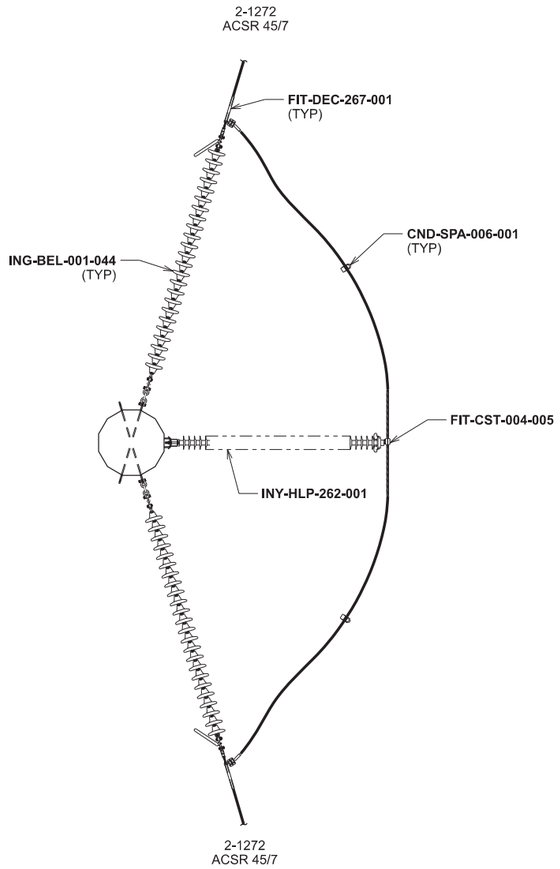
J1: Typical Transmission Pole Configurations



ELEVATION VIEW
SCALE: 1/16" = 1'-0"

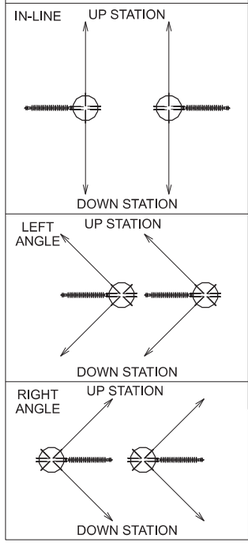


SECTION 1-1
OPGW SHIELD WIRE
SCALE: NONE
(TYPICAL BOTH POLES)



SECTION 2-2
CONDUCTOR
SCALE: NONE
(TYPICAL BOTH POLES)

JUMPER POST ORIENTATION



ASSEMBLY
STR SWDBHLZ1-P1
FOR STEEL POLES
LD T366C007

QTY	SUBASSEMBLIES
12	CND-SPA-006-001
4	FIB-OGW-033-003
3	FIT-CST-004-005
12	FIT-DEC-267-001
4	GND-WIR-015-022
2	GND-WIR-341-006
4	GND-WIR-341-007
6	ING-BEL-001-044
3	INY-HLP-262-001
1	MRK-HDT-003-007
4	SWR-DMP-089-001

ASSEMBLY
STR SWDBHLZ1-P2

QTY	SUBASSEMBLIES
3	FIT-CST-004-005
12	FIT-DEC-267-001
6	ING-BEL-001-044
3	INY-HLP-262-001

NOTE:

1. TWO SLIP JOINTS ASSUMED FOR BONDING SUBASSEMBLY GND-WIR-341-007 QUANTITY ON THIS TYPICAL DRAWING. ADDITIONAL QUANTITY WILL BE PROVIDED FOR POLES WITH MORE THAN TWO JOINTS.

DRAWING REFERENCE

PLAN & PROFILE _____ XXXXXXXX
SUBASSEMBLY INDEX _____ XXXXXXXX

THIS PE SEAL IS ONLY APPLICABLE TO THE CURRENT CONSTRUCTION REVISION

REV	DATE	WBS 4	REVISION DESCRIPTION
0	10/26/2021	A.0001672.004.001.003	IFC - INSTALLATION OF 345KV TRANSMISSION LINE

ISSUED BY ENGINEERING DEPT FOR: CONSTRUCTION

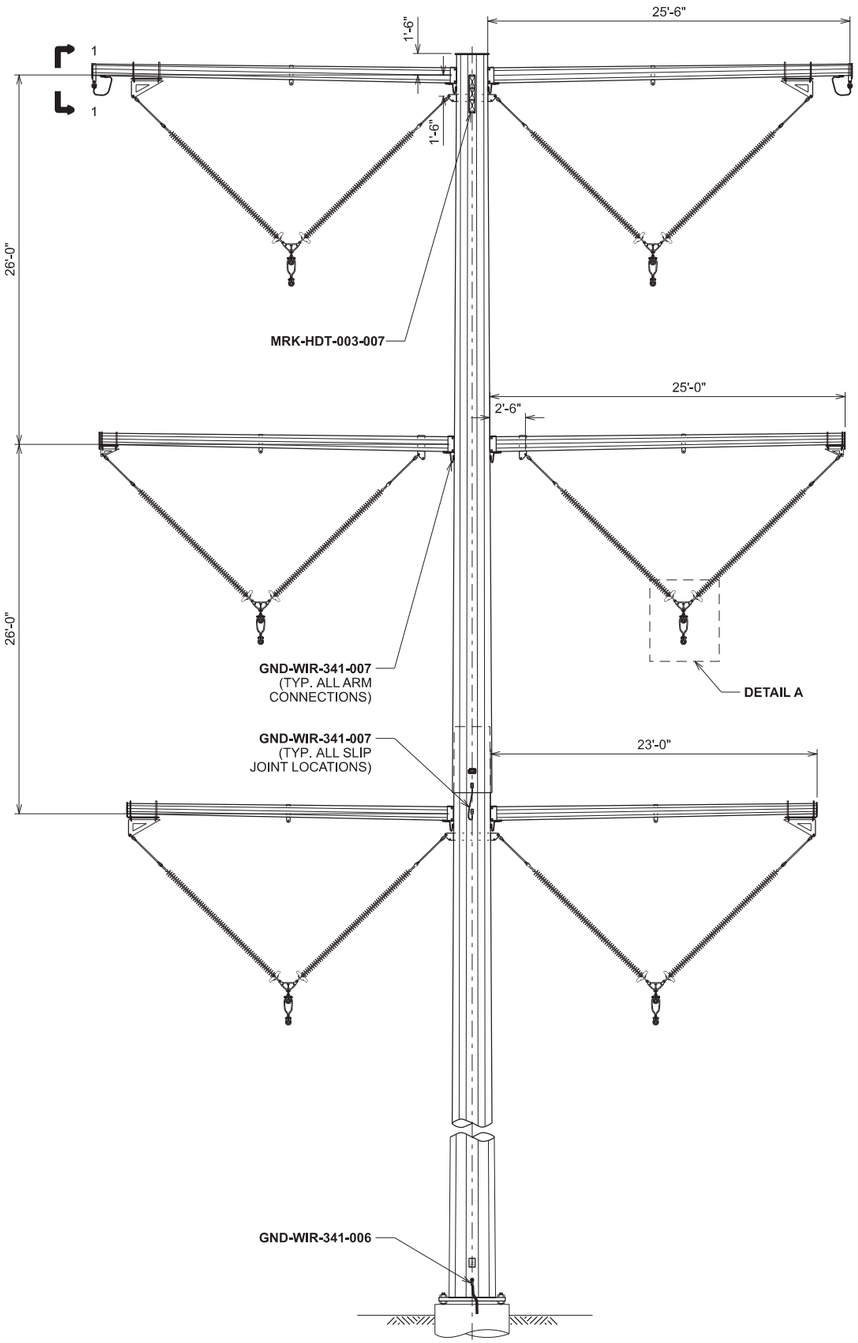
CIRCUIT 7251 345 kV

DEADEND (2 POLES)

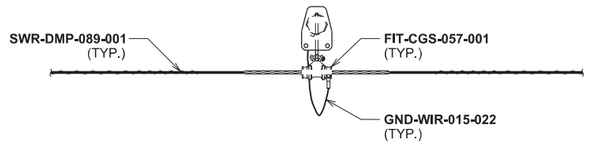
Xcel Energy® | SWDBHLZ1-1 | SCALE: AS NOTED | REV: 0

SWDBHLZ1-1.DGN

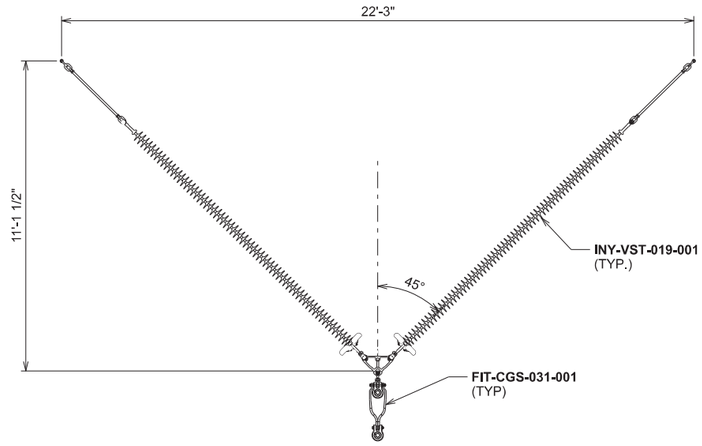
8/26/2021 9:15:14 AM



ELEVATION VIEW
LOOKING AHEAD



SECTION 1-1
OPGW
SCALE: NONE
TYPICAL BOTH SIDES



DETAIL A
CONDUCTOR SUSPENSION
SCALE: NONE

ASSEMBLY
STR SWSAHQZ1-P1
FOR STEEL POLES
LD T366C017

QTY	SUBASSEMBLIES
2	FIT-CGS-057-001
3	FIT-CGS-031-001
2	GND-WIR-015-022
1	GND-WIR-341-006
8	GND-WIR-341-007
3	INY-VST-019-001
1	MRK-HDT-003-007
4	SWR-DMP-089-001

ASSEMBLY
STR SWSAHQZ1-P2
FOR STEEL POLES
LD T366C017

QTY	SUBASSEMBLIES
3	FIT-CGS-031-001
3	INY-VST-019-001

NOTE:

1. TWO SLIP JOINTS ASSUMED FOR BONDING SUBASSEMBLY GND-WIR-341-007 QUANTITY ON THIS TYPICAL DRAWING. ADDITIONAL QUANTITY WILL BE PROVIDED FOR POLES WITH MORE THAN TWO JOINTS.

DRAWING REFERENCE

PLAN & PROFILE _____ T366G001
SUBASSEMBLY INDEX _____ T366X001

ELEVATION: <7,300 FT

REV	DATE	WBS 4	REVISION DESCRIPTION
0	10/26/2021	A.0001672.004.001.003	IFC - INSTALLATION OF 345KV TRANSMISSION LINE

ISSUED BY ENGINEERING DEPT FOR: CONSTRUCTION

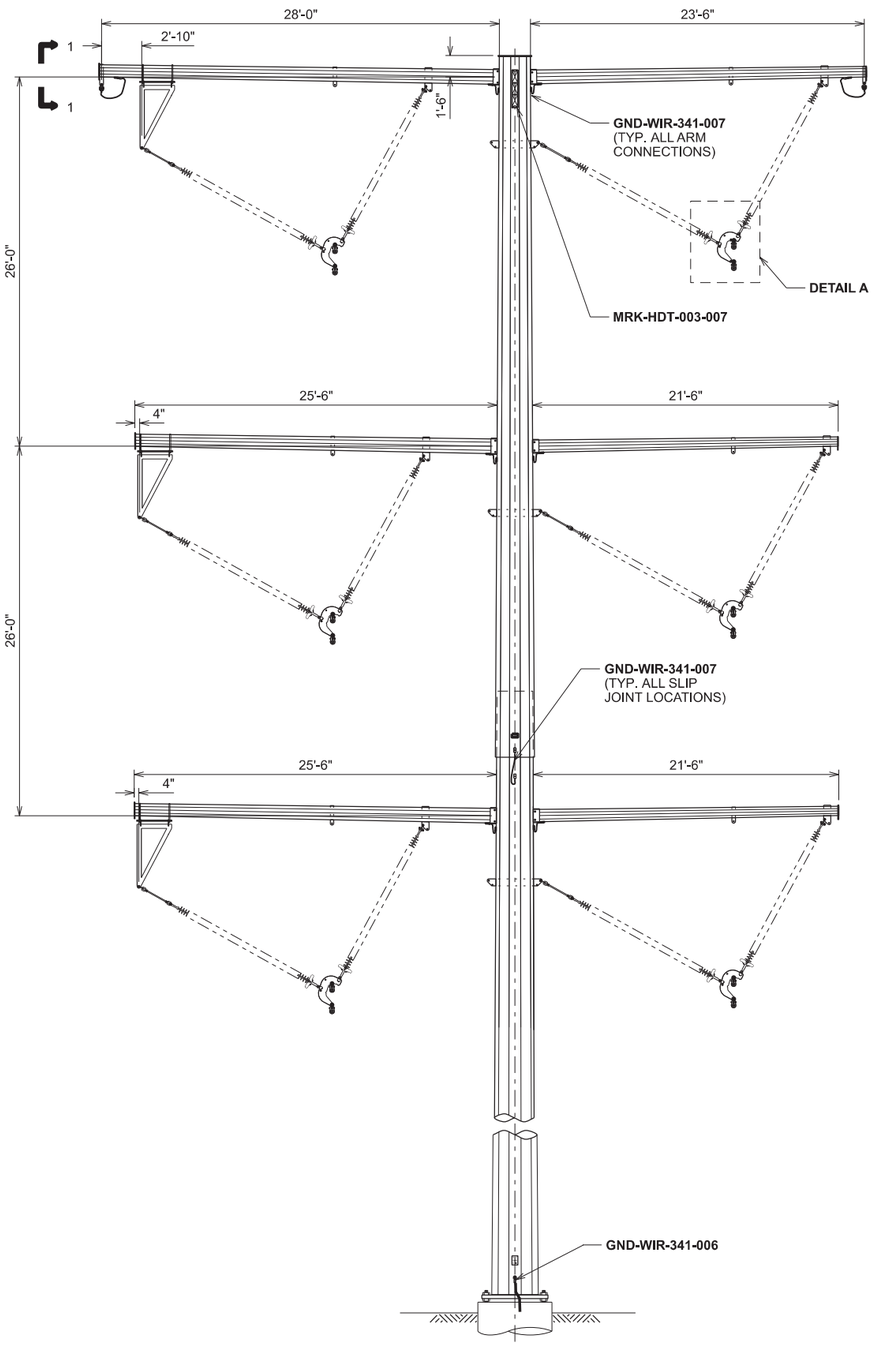
CIRCUIT 7251 345 kV

TANGENT POLE

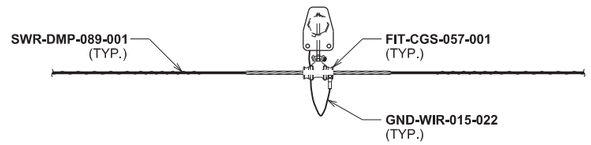
Xcel Energy® | SWSAHQZ1-1 | SCALE: AS NOTED | REV: 0

5330.1-345-4.DGN

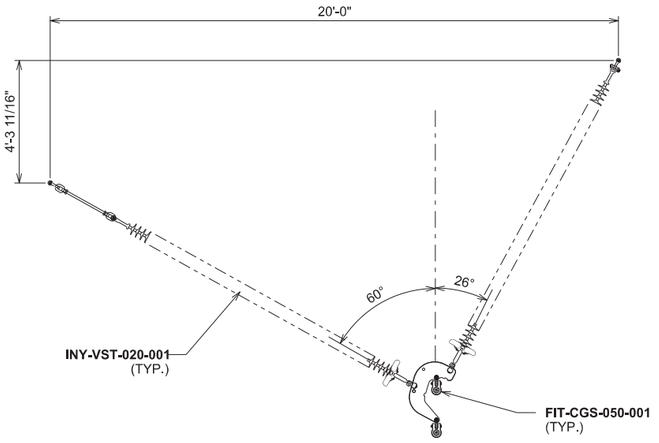
8/2/2021 8:29:25 AM



ELEVATION VIEW



SECTION 1-1
OPGW
SCALE: NONE
TYPICAL BOTH SIDES



DETAIL A
CONDUCTOR SUSPENSION
SCALE: NONE

POLE SHOWN IS RIGHT (POSITIVE) ANGLE CONFIGURATION - ROTATE 180° FOR LEFT (NEGATIVE) ANGLE CONFIGURATION

ASSEMBLY
STR SWSAHQZ2-P1
FOR STEEL POLES
LD T366C028

QTY	SUBASSEMBLIES
2	FIT-CGS-057-001
6	FIT-CGS-050-001
2	GND-WIR-015-022
1	GND-WIR-341-006
8	GND-WIR-341-007
3	INY-VST-020-001
1	MRK-HDT-003-007
4	SWR-DMP-089-001

ASSEMBLY
STR SWSAHQZ2-P2
FOR STEEL POLES
LD T366C028

QTY	SUBASSEMBLIES
6	FIT-CGS-050-001
3	INY-VST-020-001

NOTE:

1. TWO SLIP JOINTS ASSUMED FOR BONDING SUBASSEMBLY GND-WIR-341-007 QUANTITY ON THIS TYPICAL DRAWING. ADDITIONAL QUANTITY WILL BE PROVIDED FOR POLES WITH MORE THAN TWO JOINTS.

DRAWING REFERENCE

PLAN & PROFILE _____ T366G001
SUBASSEMBLY INDEX _____ T366X001

ELEVATION: <7,300 FT

REV	DATE	WBS 4	REVISION DESCRIPTION
0	10/26/2021	A.0001672.004.001.003	IFC - INSTALLATION OF 345KV TRANSMISSION LINE

ISSUED BY ENGINEERING DEPT FOR: CONSTRUCTION

CIRCUIT 7251 345 kV

ANGLE POLE

Xcel Energy® SWSAHQZ2-1 SCALE AS NOTED REV 0

5340.1-345-18.DGN

8/18/2021 11:50:49 AM

J2: Representative Photograph

Representative Transmission Line

J3: Representative Photographic Simulations

COLORADO'S POWER PATHWAY

EL PASO COUNTY VISUAL SIMULATIONS

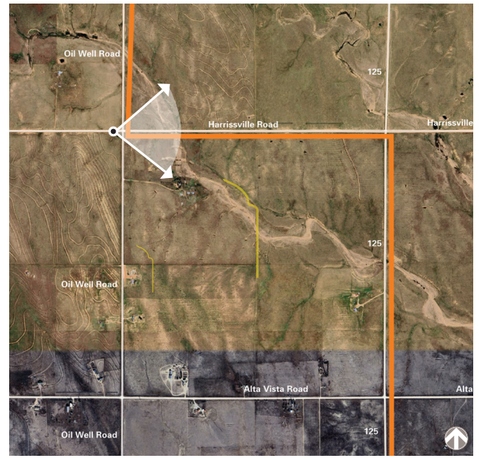
March 2024

KOP 7: Harrisville Road

EXISTING CONDITION

PRINT GUIDE / IMAGE NOTES:

This sheet should be printed at 11 by 17 inches; full size with no scaling; and viewed at 10 inches. If viewed on a computer monitor, the document should be scaled to 100 percent and viewed at 10 inches away.



KEY LOCATION MAP

Viewpoint Number:	7
Viewpoint Location:	Harrisville Rd
Date of Photograph:	12/15/2023
Time of Photograph:	2:13PM (MST)
Latitude:	39.042140°
Longitude:	-104.109667°
Viewing Direction:	East
Weather Condition:	Clear
Ground Elevation + Camera Height:	6 feet

IMAGE DATA

KOP 7: Harrisville Road

SIMULATED CONDITION

PRINT GUIDE / IMAGE NOTES:

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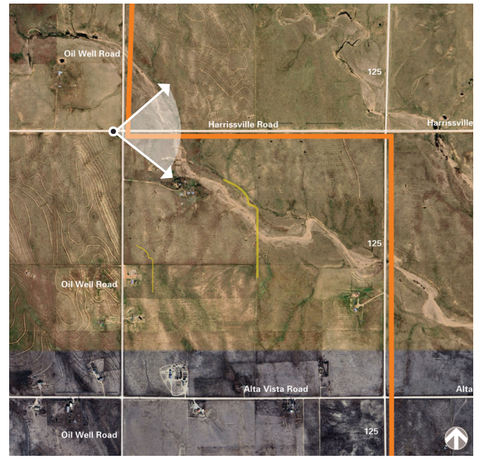


KEY LOCATION MAP

Viewpoint Number:	7
Viewpoint Location:	Harrisville Rd
Date of Photograph:	12/15/2023
Time of Photograph:	2:13PM (MST)
Latitude:	39.042140°
Longitude:	-104.109667°
Viewing Direction:	East
Weather Condition:	Clear
Ground Elevation + Camera Height:	6 feet

IMAGE DATA

KOP 8: NORTH RUSH ROAD

EXISTING CONDITION

PRINT GUIDE / IMAGE NOTES:

This sheet should be printed at 11 by 17 inches; full size with no scaling; and viewed at 10 inches. If viewed on a computer monitor, the document should be scaled to 100 percent and viewed at 10 inches away.

KEY LOCATION MAP

Viewpoint Number:	8
Viewpoint Location:	North Rush Rd
Date of Photograph:	12/15/2023
Time of Photograph:	2:34PM (MST)
Latitude:	38.976496°
Longitude:	-104.090412°
Viewing Direction:	South
Weather Condition:	Partly Cloudy
Ground Elevation + Camera Height:	6 feet

IMAGE DATA

KOP 8: NORTH RUSH ROAD

SIMULATED CONDITION

PRINT GUIDE / IMAGE NOTES:

This sheet should be printed at 11 by 17 inches; full size with no scaling; and viewed at 10 inches. If viewed on a computer monitor, the document should be scaled to 100 percent and viewed at 10 inches away.

KEY LOCATION MAP

Viewpoint Number:	8
Viewpoint Location:	North Rush Rd
Date of Photograph:	12/15/2023
Time of Photograph:	2:34PM (MST)
Latitude:	38.976496°
Longitude:	-104.090412°
Viewing Direction:	South
Weather Condition:	Partly Cloudy
Ground Elevation + Camera Height:	6 feet

IMAGE DATA

KOP 9: Highway 94

EXISTING CONDITION

PRINT GUIDE / IMAGE NOTES:

This sheet should be printed at 11 by 17 inches; full size with no scaling; and viewed at 10 inches. If viewed on a computer monitor, the document should be scaled to 100 percent and viewed at 10 inches away.

KEY LOCATION MAP

Viewpoint Number:	9
Viewpoint Location:	Highway 94
Date of Photograph:	2/06/2023
Time of Photograph:	2:27PM (MST)
Latitude:	38.840097°
Longitude:	-104.065228°
Viewing Direction:	East
Weather Condition:	Partly Cloudy
Ground Elevation + Camera Height:	6 feet

IMAGE DATA

KOP 9: Highway 94

SIMULATED CONDITION

PRINT GUIDE / IMAGE NOTES:

This sheet should be printed at 11 by 17 inches; full size with no scaling; and viewed at 10 inches. If viewed on a computer monitor, the document should be scaled to 100 percent and viewed at 10 inches away.

KEY LOCATION MAP

Viewpoint Number:	9
Viewpoint Location:	Highway 94
Date of Photograph:	2/06/2023
Time of Photograph:	2:27PM (MST)
Latitude:	38.840097°
Longitude:	-104.065228°
Viewing Direction:	East
Weather Condition:	Partly Cloudy
Ground Elevation + Camera Height:	6 feet

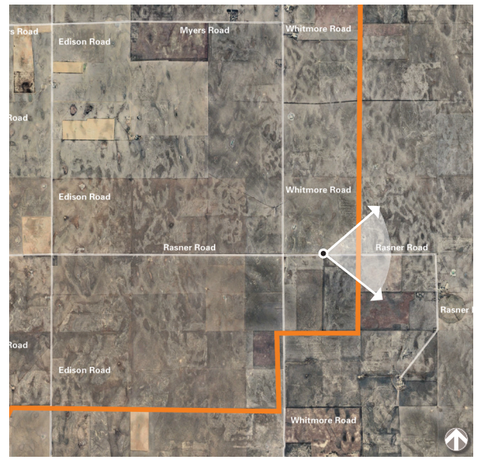
IMAGE DATA

KOP 10: RASNER ROAD

EXISTING CONDITION

PRINT GUIDE / IMAGE NOTES:

This sheet should be printed at 11 by 17 inches; full size with no scaling; and viewed at 10 inches. If viewed on a computer monitor, the document should be scaled to 100 percent and viewed at 10 inches away.



KEY LOCATION MAP

Viewpoint Number:	10
Viewpoint Location:	Rasner Road
Date of Photograph:	12/15/2023
Time of Photograph:	3:49PM (MST)
Latitude:	38.551038°
Longitude:	-104.099791°
Viewing Direction:	East
Weather Condition:	Partly Cloudy
Ground Elevation + Camera Height:	6 feet

IMAGE DATA

KOP 10: RASNER ROAD

SIMULATED CONDITION

PRINT GUIDE / IMAGE NOTES:

This sheet should be printed at 11 by 17 inches; full size with no scaling; and viewed at 10 inches. If viewed on a computer monitor, the document should be scaled to 100 percent and viewed at 10 inches away.

KEY LOCATION MAP

Viewpoint Number:	10
Viewpoint Location:	Rasner Road
Date of Photograph:	12/15/2023
Time of Photograph:	3:49PM (MST)
Latitude:	38.551038°
Longitude:	-104.099791°
Viewing Direction:	East
Weather Condition:	Partly Cloudy
Ground Elevation + Camera Height:	6 feet

IMAGE DATA