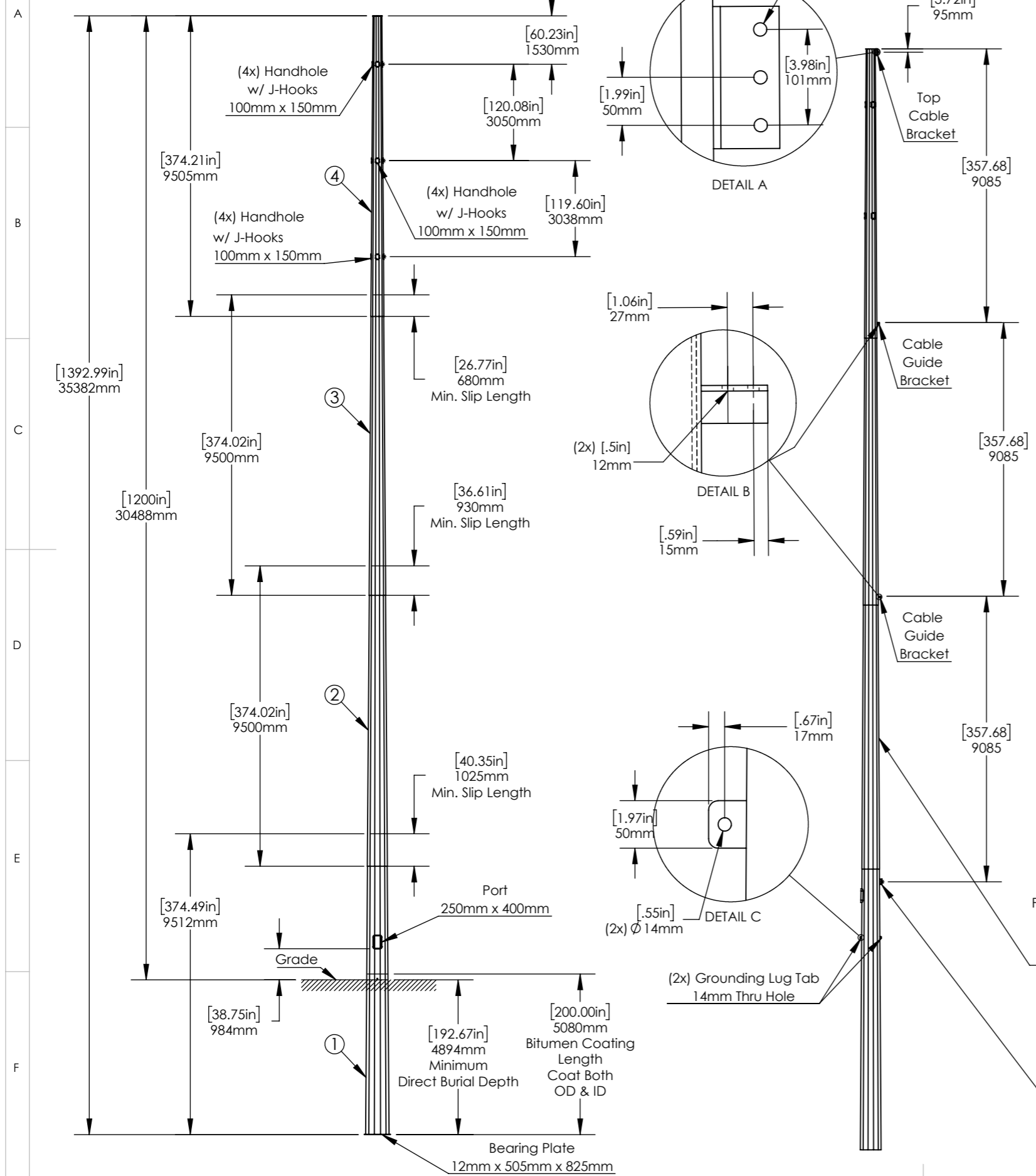


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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	initial release	9/27/20	MGC
B	Revised balloon #'s	12/11/20	MGC
C	Revised weight and format	5/5/21	MGC



- Survival Wind Speed: 90 MPH (40.2 m/s) (Basic)
  - Structure Class - II
  - Topographic - 1 (Crest Height - NA)
  - Exposure - C
- Design and Welding Codes:
  - TIA-222-G
  - AWS D1.1
- Material (or Equivalent)
  - Pole: ASTM A572 GR65
  - Equivalent (Q420B)
- Deflection: <2% at 60 MPH (26.8 m/s)
- Finish: Hot dip Galvanizing per ASTM A123
- Pole has 12 sides
- Pole Section Details

Pole Section	#1	#2	#3	#4
Thickness - (in)/ (mm)	0.315/ 8	0.236/ 6	0.197/ 5	0.197/5
Length - (in)/ (m)	374.5/ 9.512	374/9.5	374/ 9.5	374.2/ 9.505
Top Dia. - (in)/ (mm)	24/ 609	19.8/ 503	15.5/ 393	11/ 280
Bottom Dia. - (in)/ (mm)	29.2/ 742	25/ 635.5	20.7/ 526	16.26/ 413
Min Slip - (in)/ (mm)		40.35/ 1025	36.6/ 930	26.8/ 680
Weight (lbs)/ (kg)	2924/ 1329	1795/ 816	1208/ 549	931/ 423

Climbing Pegs  
This Side  
Placed Between  
Top & Bottom  
Cable Brackets  
(see pg. 2)

Bottom  
Cable Bracket  
Dimensions  
Same as Top  
Cable Bracket

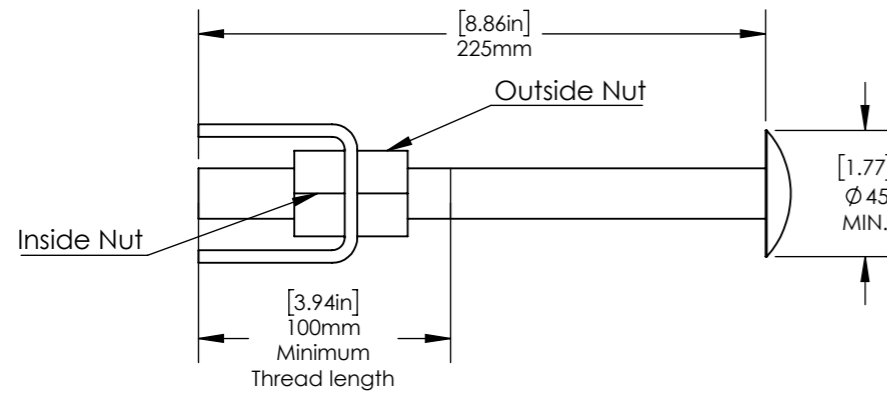
CAD-generated drawing do not manually update				1041 Grand Ave., #213 St. Paul, MN 55105 (651) 330-1263 www.aretelcom.com
<b>Total Weight</b> 6858 lbs (3117 kg) <small>Does not include fasteners</small>		<b>APPROVALS</b> DRAWN MGC CHECKED RESP ENG MFG ENG QUAL ENG	<b>DATE</b> 9/27/20	<b>100ft 4 Section Direct Burial Pole</b>
MATERIAL See Notes FINISH See Notes DO NOT SCALE DRAWING		Details and dimensions not shown on this drawing can be found in CAD file. scale NA rev. C size NA sheet 1 of 3		

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#	DESCRIPTION (Optional Grade)	QTY	Weight (lb/ kg)
1	Clip - ASTM A572 GR 50 (Q345 or Q355)	*1	1.2/ 0.54
2	Step Bolt - M20x2.5 x 225mm - A449 (GR 8.8) HDG	*1	0.88/ 0.64
3	Heavy Hex Nut, M20x2.5 - A563 GR DH (GR 8.8) HDG	*2	0.224/ 0.11

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	initial release	10/12/20	MGC
B	Revised BOM bolt length to 225mm	11/2/20	MGC

## CLIP-STEP BOLT

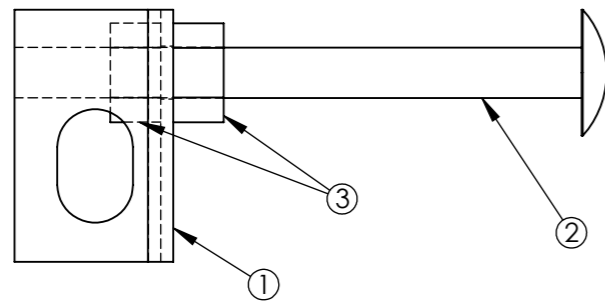


### Fabrication Notes:

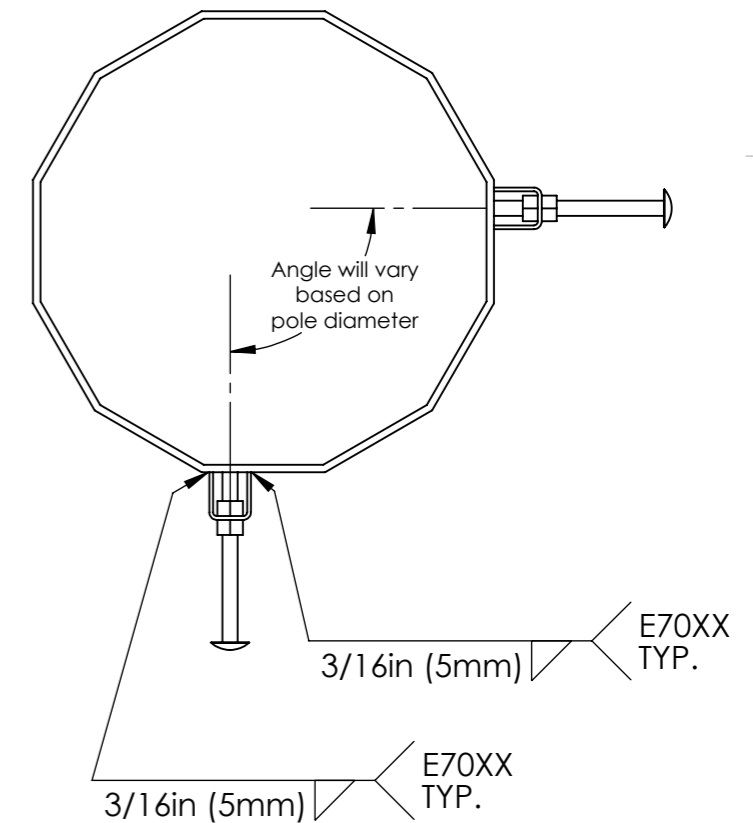
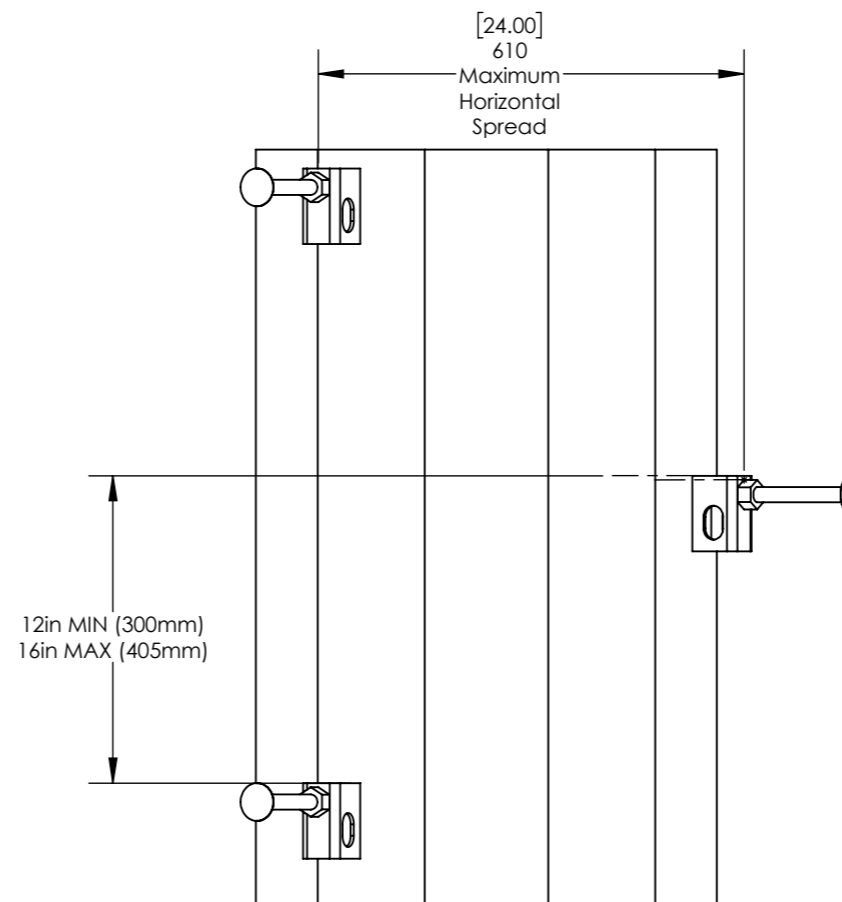
- \*The number of Clips/ Step Bolts will vary based on height of pole and shall be equally spaced between the upper and lower cable mount brackets (see pg. 2).
- All plate material shall have a minimum yield strength of 345 MPa (50 ksi)
- All welding shall conform to the minimum requirements of AWS D1.1
- All welding shall be done by welders qualified under AWS specifications, using E70XX, low hydrogen electrodes
- Hot Dip Galvanized in accordance with ASTM A123
- Debur all sharp edges

### Installation Steps:

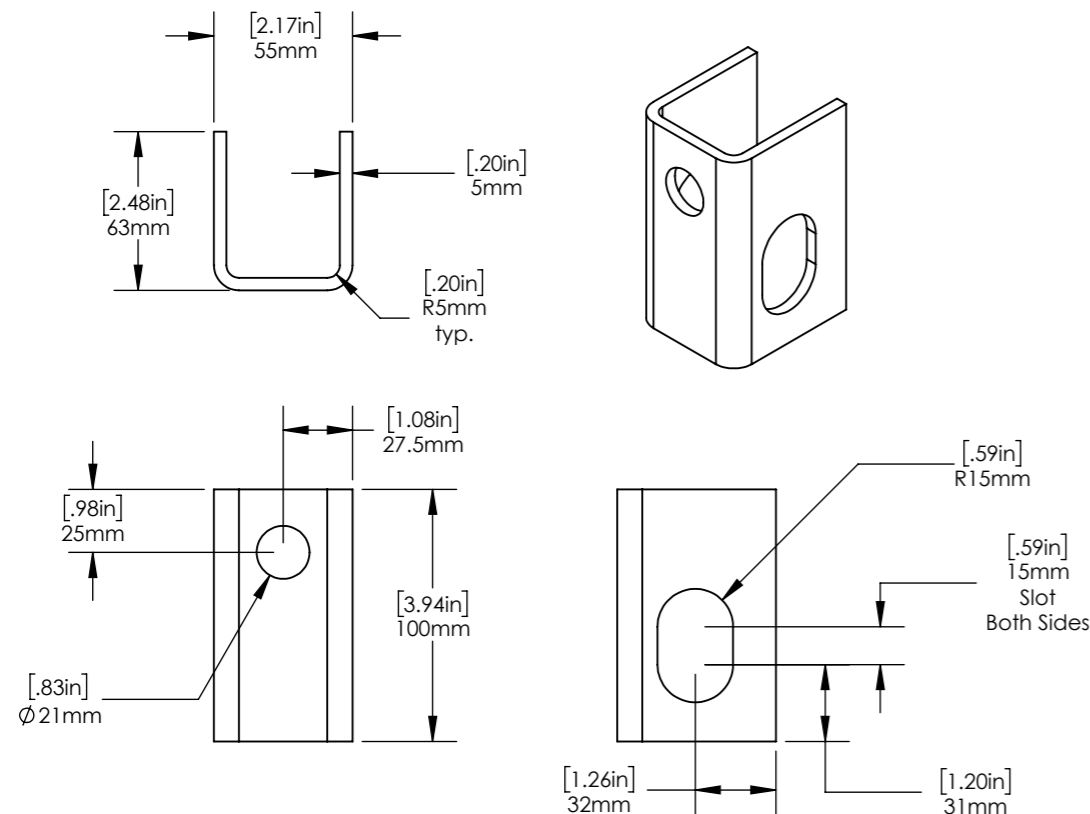
- Outside nut shall be turned to end of step bolt threads prior to installation.
- Step bolt shall be turned through inside nut until bolt makes snug contact with pole.
- Outside nut shall be snugged against clip then tightened 1/4 to 1/2 turn to achieve proper step bolt preload.



## CLIP-STEP BOLT SPACING



## CLIP



CAD-generated drawing do not manually update

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**Step Bolt/ Clip**

Total Weight: 3.1 lbs (1.41 kg)

APPROVALS	DATE
DRAWN MGC	10/12/20
CHECKED	
RESP ENG	
MFG ENG	
QUAL ENG	

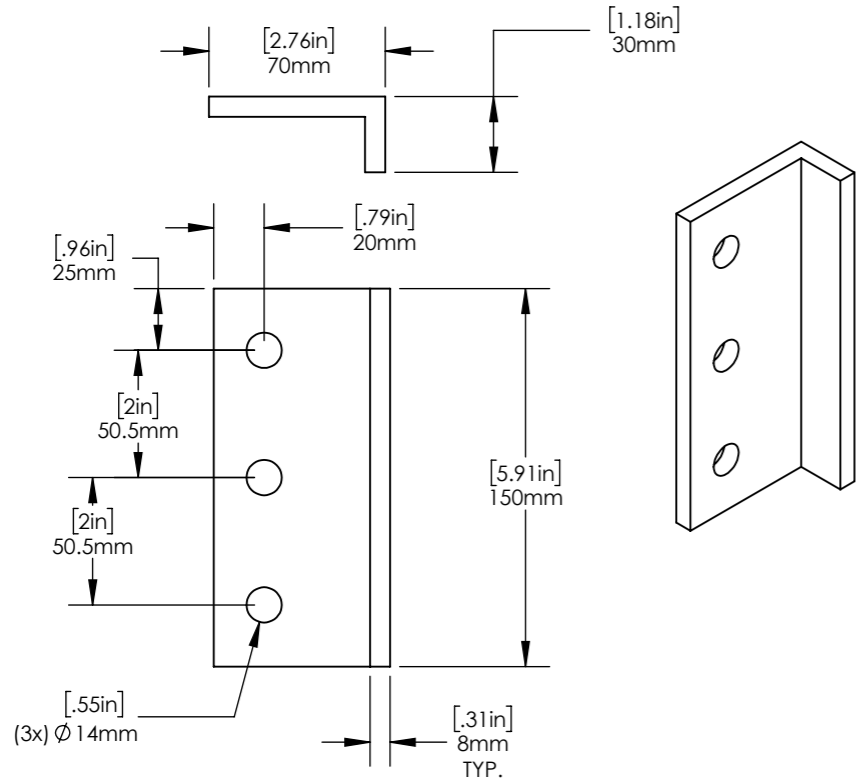
CAD file:  
Details and dimensions not shown on this drawing can be found in CAD file.

DO NOT SCALE DRAWING

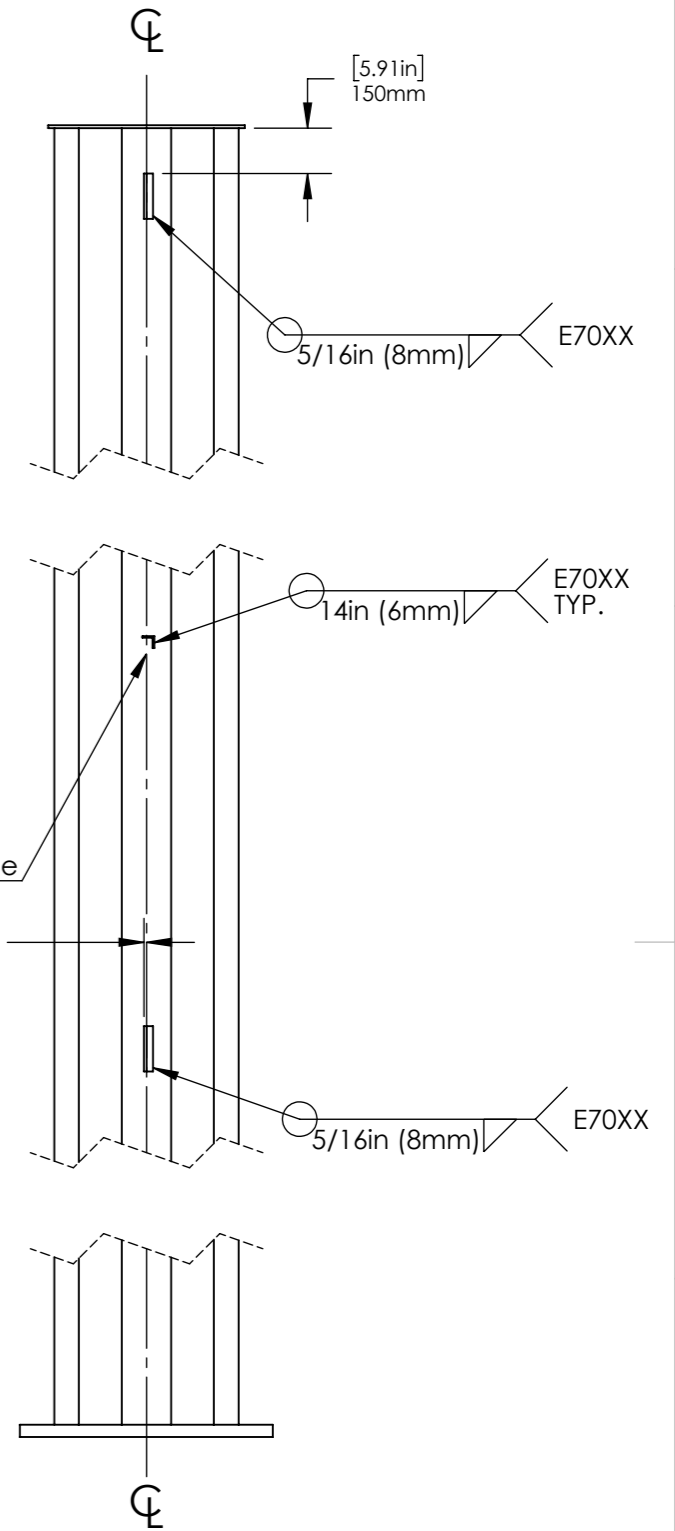
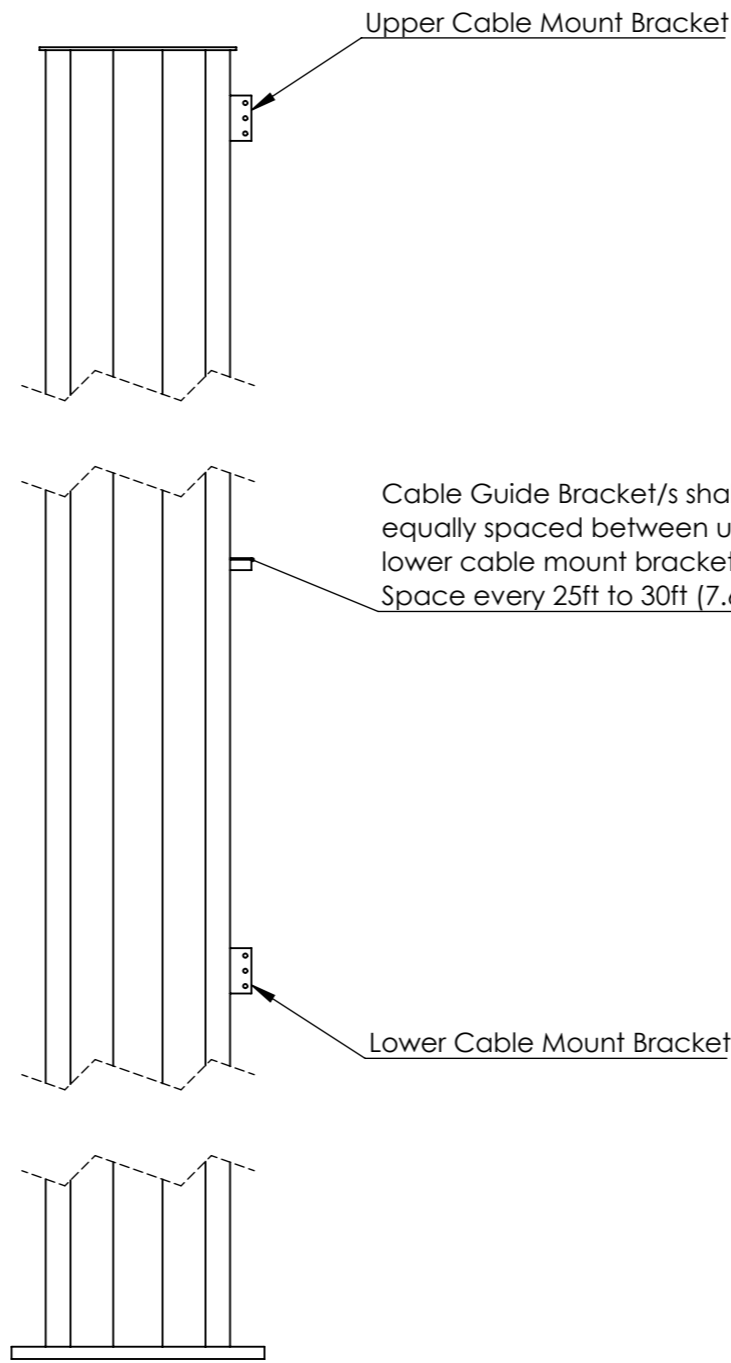
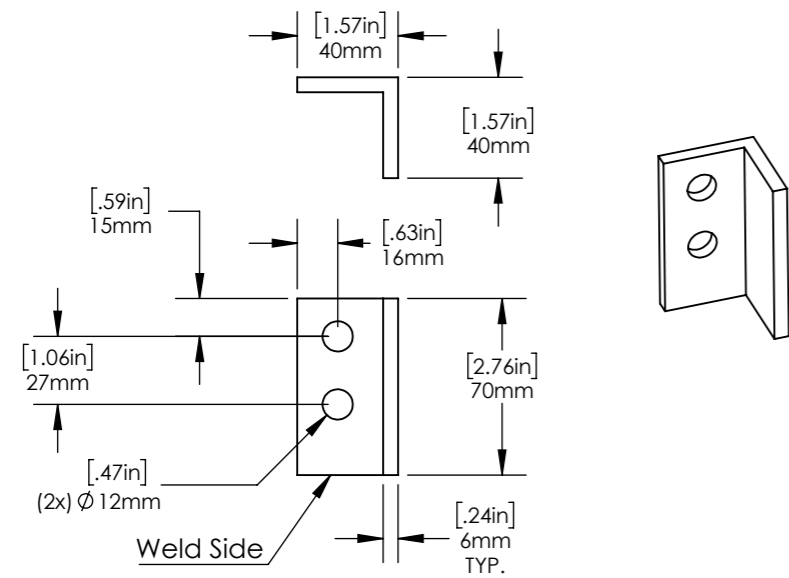
scale NA rev. B size NA sheet 2 of 3

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### Cable Mount Bracket



### Cable Guide Bracket



#### Fabrication Notes:

- \*The number of cable guides will vary based on height of pole and shall be equally spaced between the upper and lower cable mount brackets.
- All plate material shall have a minimum yield strength of 345 MPa (50 ksi)
- All welding shall conform to the minimum requirements of AWS D1.1
- All welding shall be done by welders qualified under AWS specifications, using E70XX, low hydrogen electrodes
- Hot Dip Galvanized in accordance with ASTM A123
- Debur all sharp edges

#	DESCRIPTION (Optional Grade)	QTY	Weight lb/ kg
1	Cable Mount Bracket-ASTM A572 GR 50 (Q345 or Q355)	2	1.85/ 0.84
2	Cable Guide Bracket-ASTM A572 GR 50 (Q345 or Q355)	*1 or more	0.51/ 0.23

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### Cable Mount/ Guide Brackets

Part #  
scale NA rev. B size NA sheet 3 of 3