

Prepared for:
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 Northern Arizona University

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 Steven Bloomfield

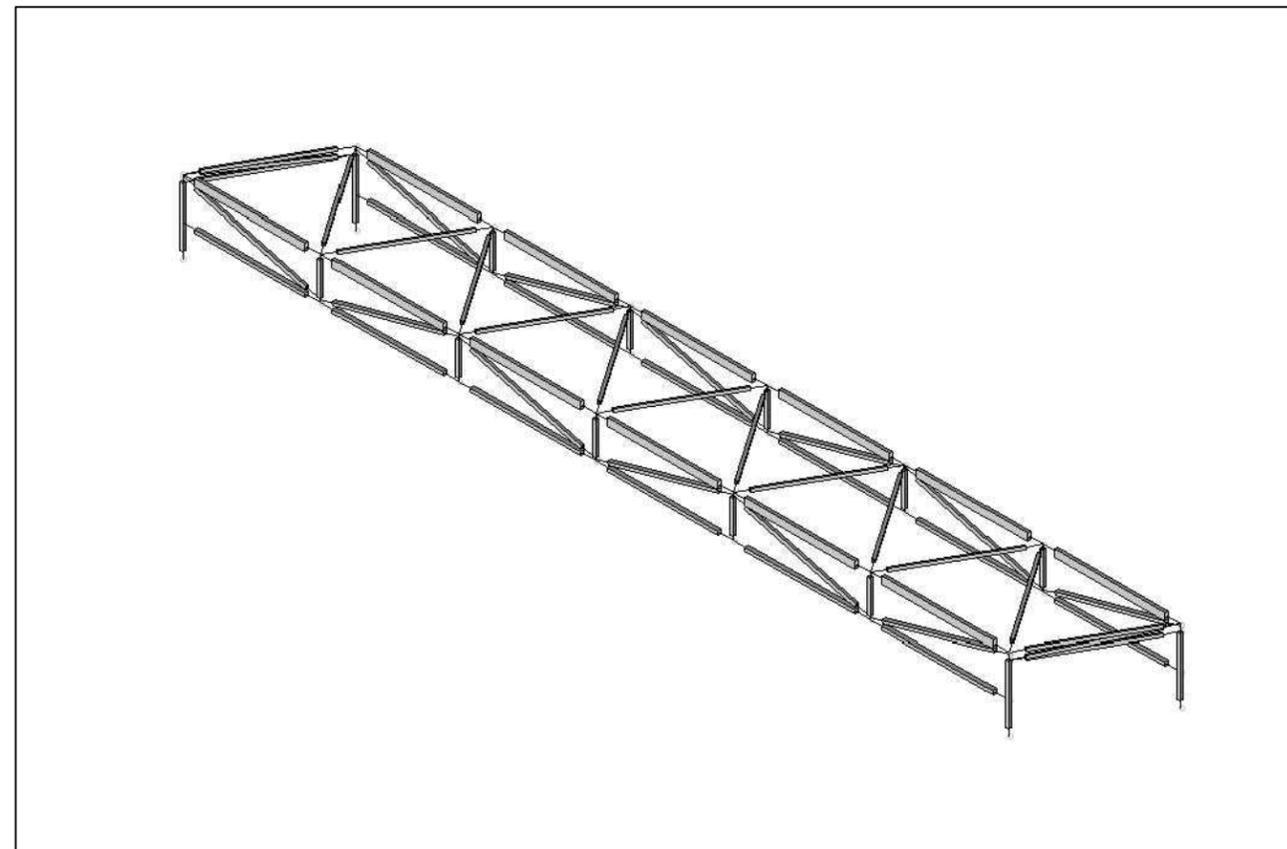
Sponsored by:
 K-Zell Metals
 Page Steel
 Copper State Nut & Bolt Co.
 Mingus Highschool Welding Team

Notes:

- All bolt holes are $\frac{7}{16}$ " in diameter.
- All bolt hole dimensions identified are outer edge of steel to center of hole.
- All bolt holes go through both walls of steel.

2020 NAU AISC STEEL BRIDGE

CENE 486: Senior Design



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6	M2	Member BC, AB, EF, and AC
7	M3	Member CE, AE and Bracing
8	CON	Connections

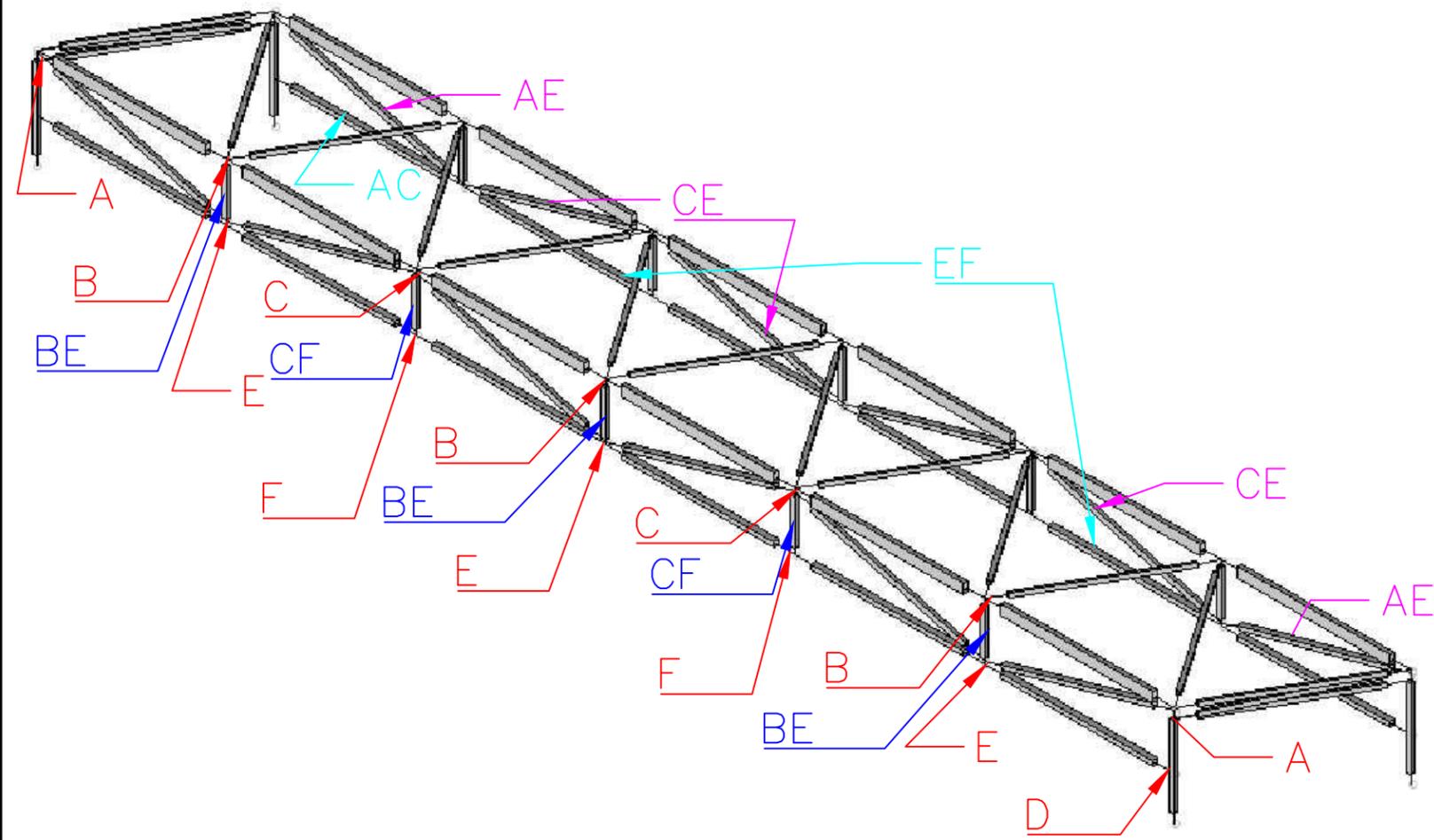
Abbreviations:

- TYP. = Typical
- \emptyset = Diameter
- R = Radius



NO.	DATE:
1	2/1/2020
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SHEET SET:	CVR
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Member	Material	Length	Quantity
AA	1"x1"x.065" HSS Tube	1'-8"	6
AB	1"x2"x.083" HSS Tube	3'-4 1/2"	6
AC	1"x1"x.065" HSS Tube	3'-3 1/2"	6
AE	1"x1"x.065" HSS Tube	3'-3"	6
BC	1"x2"x.083" HSS Tube	3'-4"	10
BE	1"x1"x.065" HSS Tube	0'-10 1/2"	6
CE	1"x1"x.065" HSS Tube	3'-3"	6
CF	1"x1"x.065" HSS Tube	0'-10 1/2"	10
EC	1"x1"x.065" HSS Tube	3'-3"	6
EF	1"x1"x.065" HSS Tube	3'-4"	10

Member	Material	Length	Quantity
AG	.75X.75X.065 HSS TUBE	3'-3"	8
AH	.75X.75X.065 HSS TUBE	3'-3"	4
AI	.75X.75X.065 HSS TUBE	3'-3"	5
AJ	.75X.75X.065 HSS TUBE	3'-3"	4
AK	.75X.75X.065 HSS TUBE	3'-3"	4
AL	.75X.75X.065 HSS TUBE	3'-3"	4

Member	Area (squ. inch)	Quantity
A	1'-5 7/8"	8
B	1'-1 1/8"	12
C	2'-2 11/32"	8
D	0'-7 1/16"	8
E	1'-1 1/16"	12
F	0'-7 1/8"	8
Tab	0'-2 13/16"	18

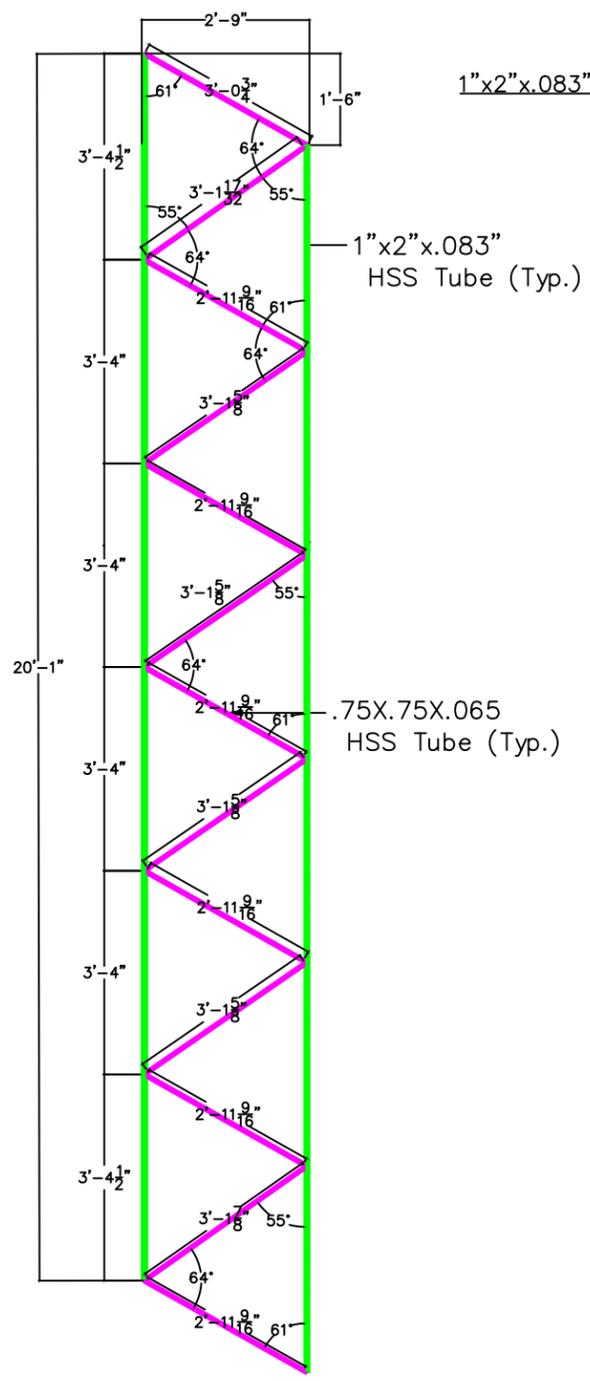
Note: All Connections are ASTM 1011 Steel with a yield strength of 50 ksi.

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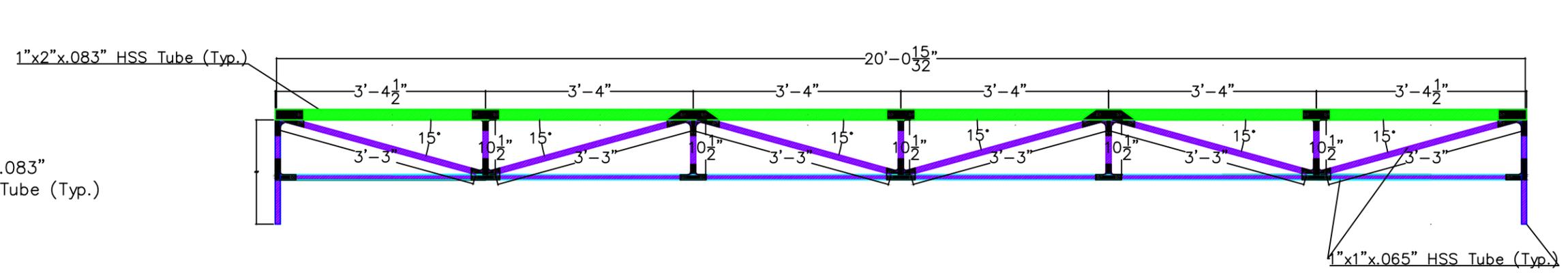
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2020 STEEL BRIDGE TEAM
90% PLAN SET

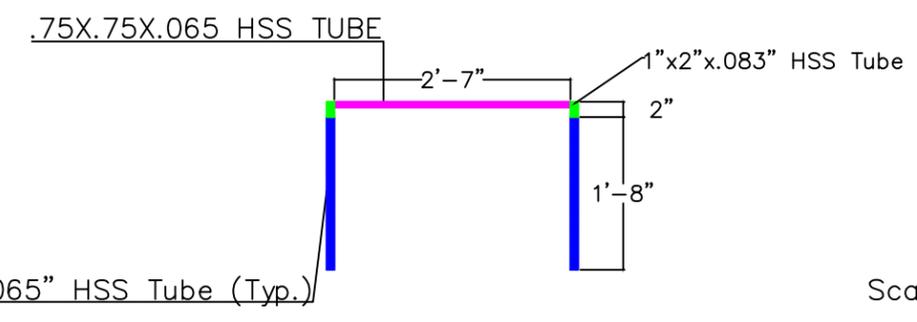
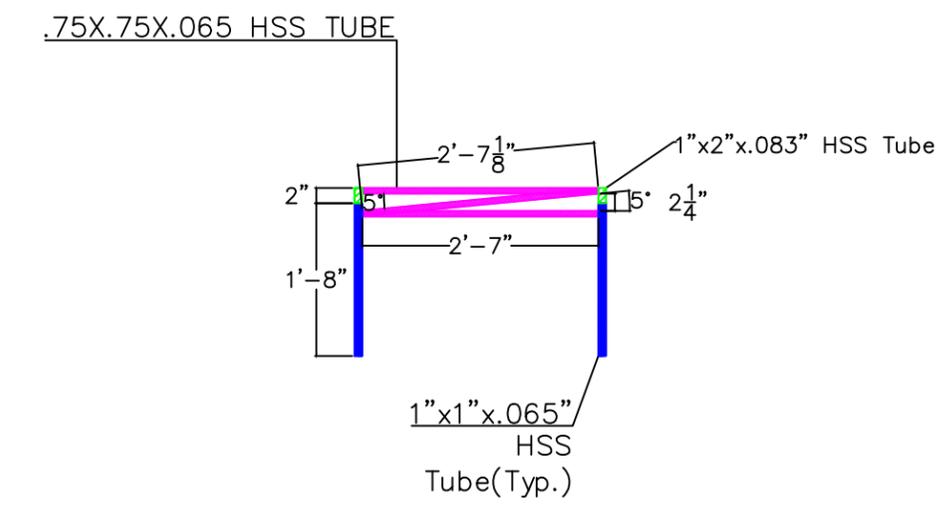
Plan View



Elevation View



End View

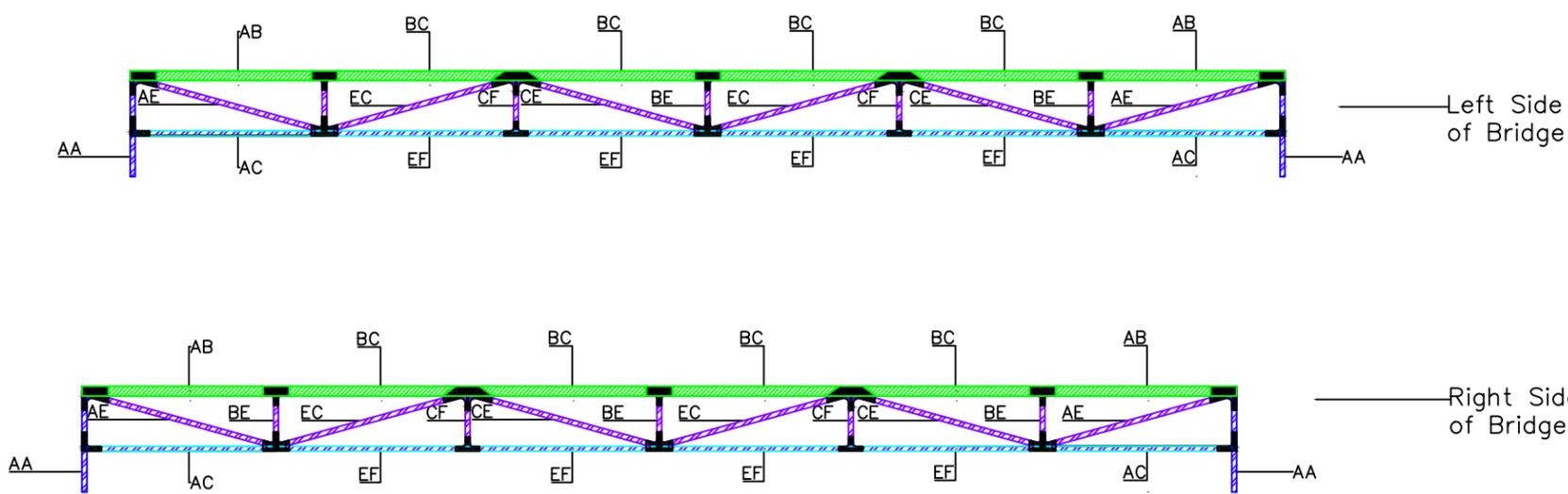


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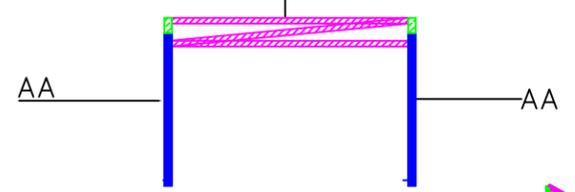
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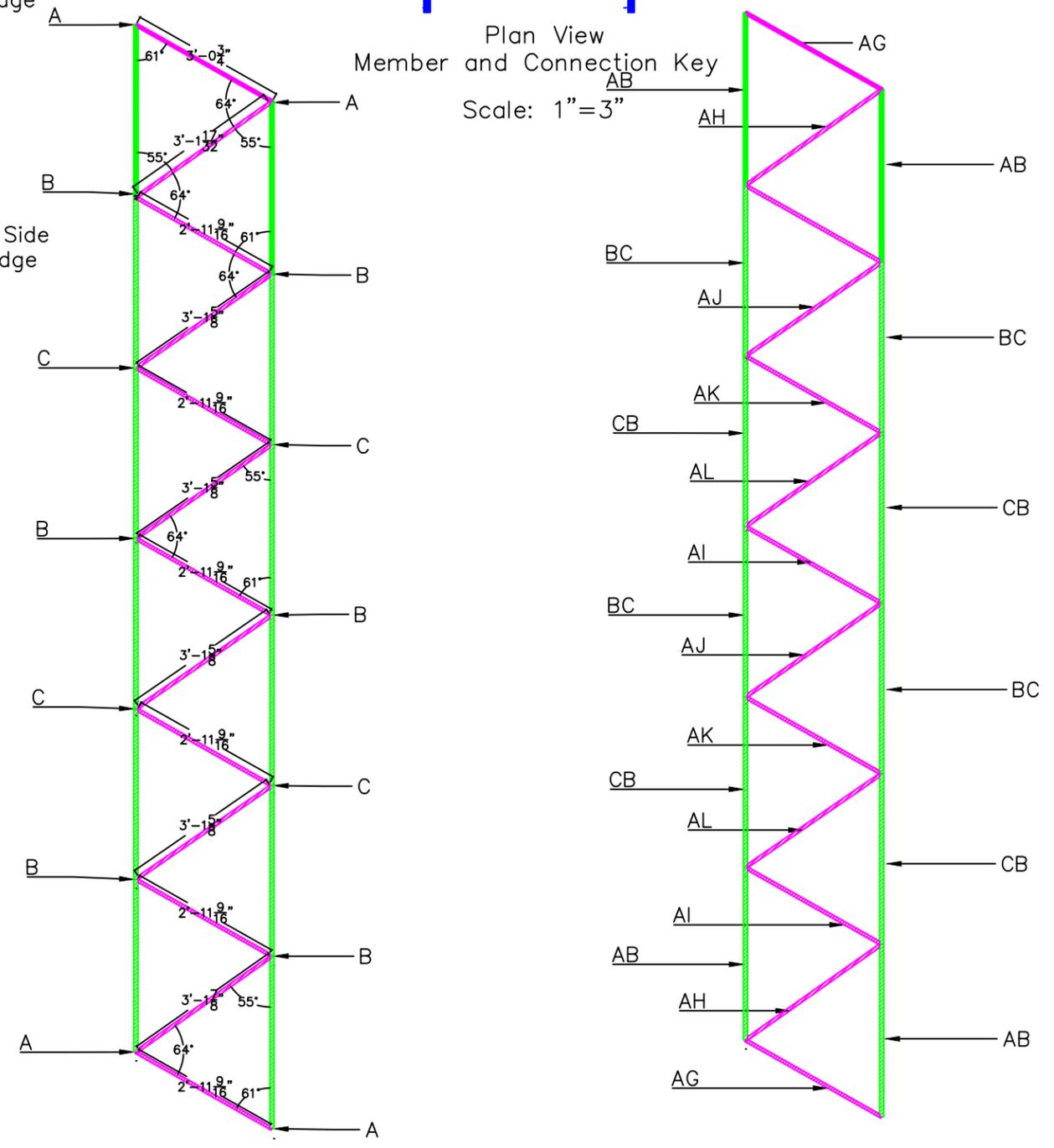
Elevation View
Member Key
Scale: 1"=2"



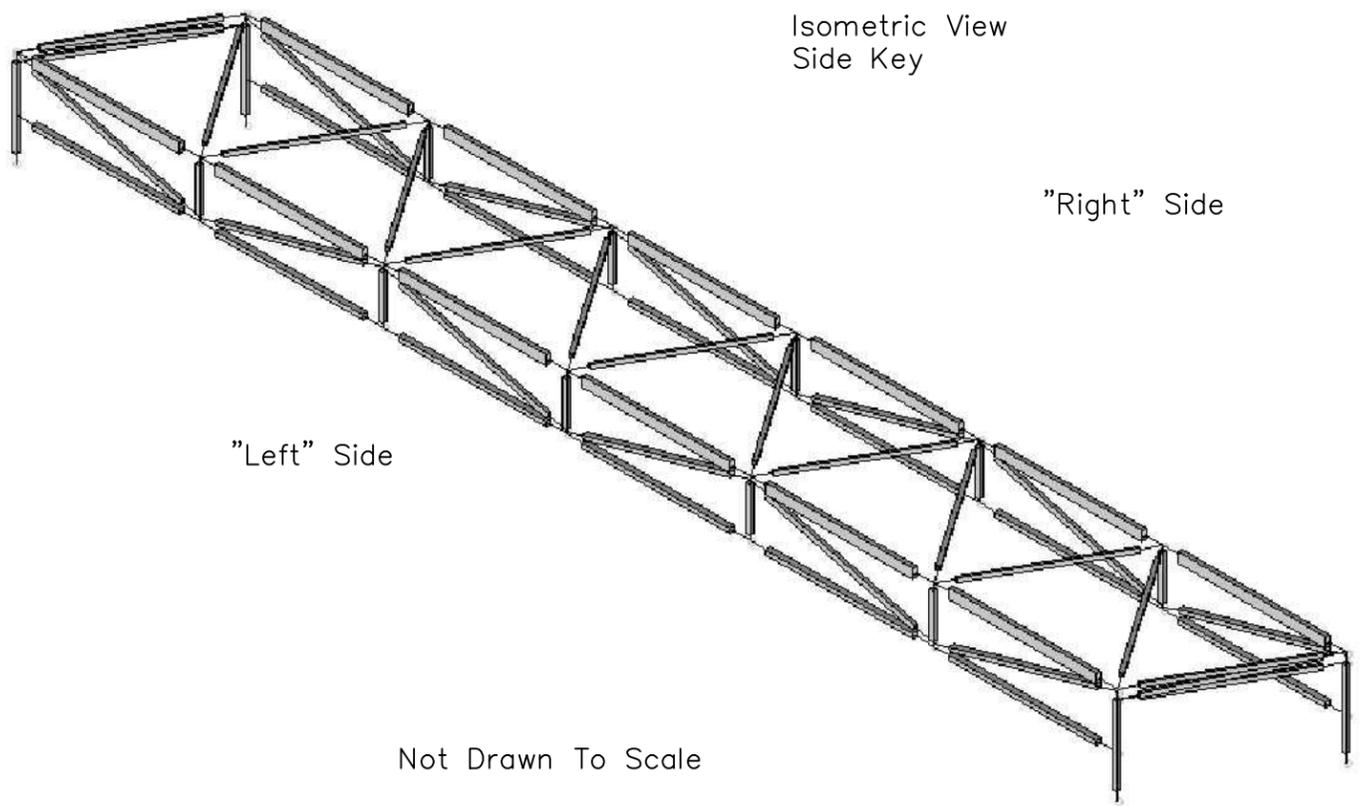
End View
Member Key
Scale: 1"=2"



Plan View
Member and Connection Key
Scale: 1"=3"

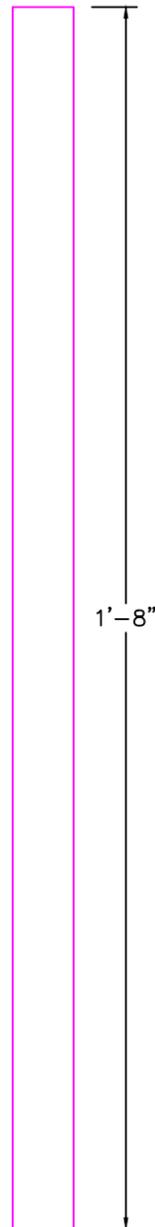


Isometric View
Side Key

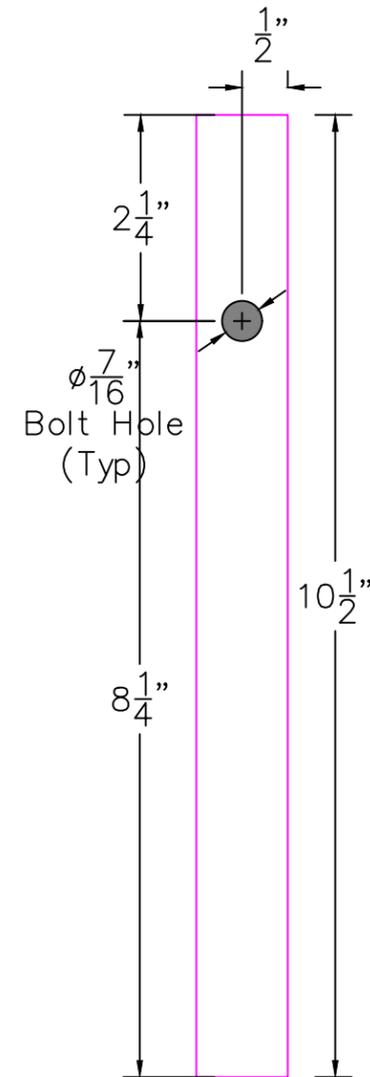
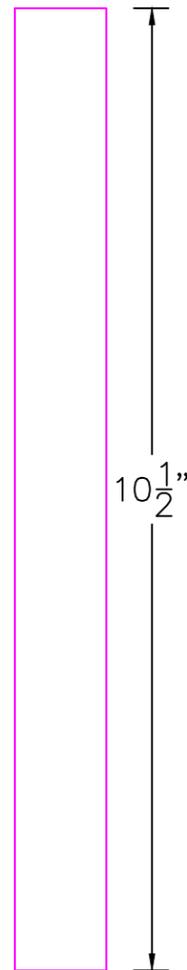


Not Drawn To Scale

Member AA
 Quantity: 6
 1"x1"x.065"
 HHS Tube
 Scale: 1"=3'



Member BE
 Quantity: 6
 1"x1"x.065"
 HHS Tube
 Scale: 1"=2'



Member CF
 Quantity: 6
 1"x1"x.065"
 HHS Tube
 Scale: 1"=2'

Note: All bolt holes are going through both walls of the tube.

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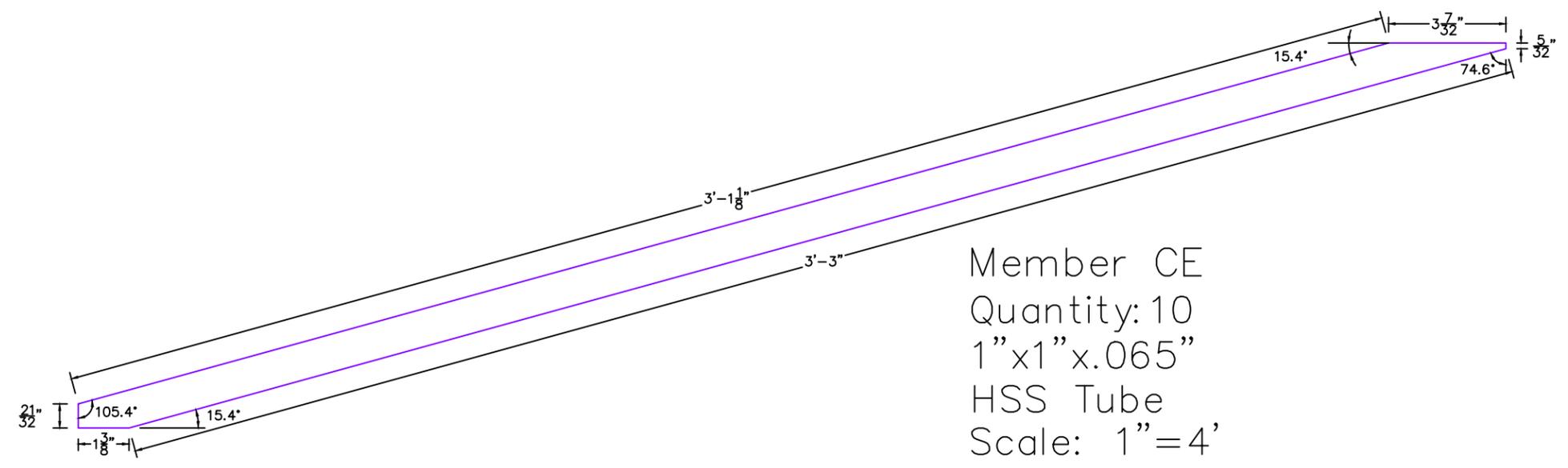
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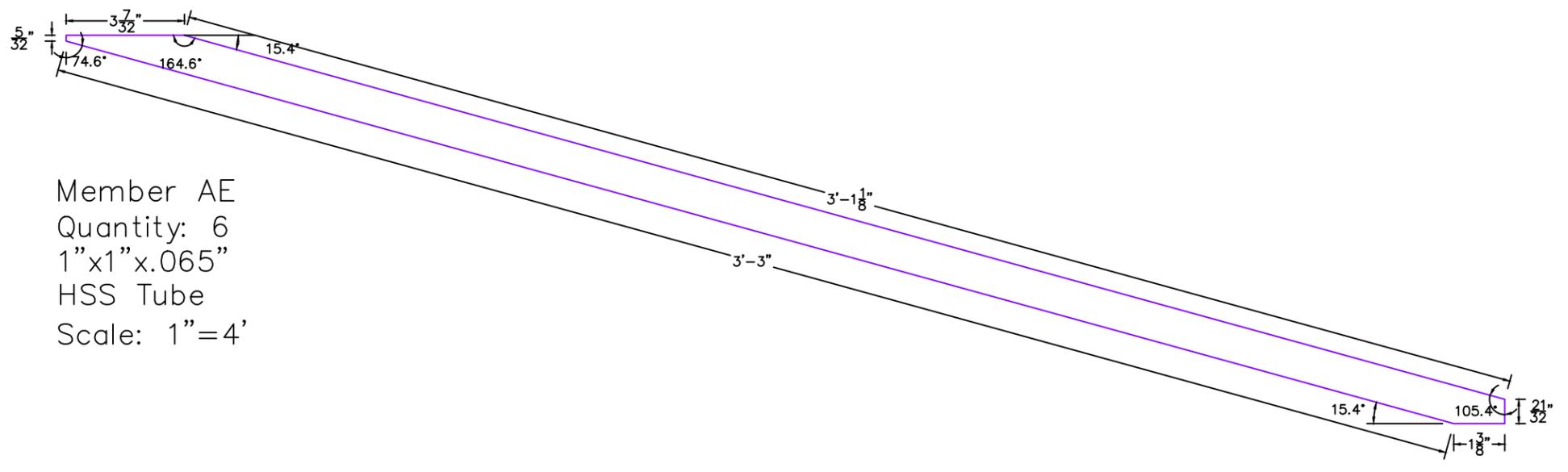
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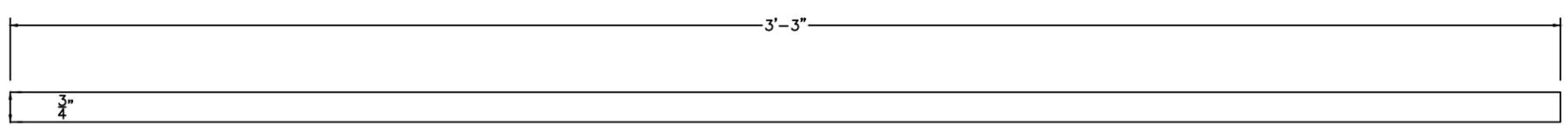
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Member CE
Quantity: 10
1"x1"x.065"
HSS Tube
Scale: 1"=4'



Member AE
Quantity: 6
1"x1"x.065"
HSS Tube
Scale: 1"=4'

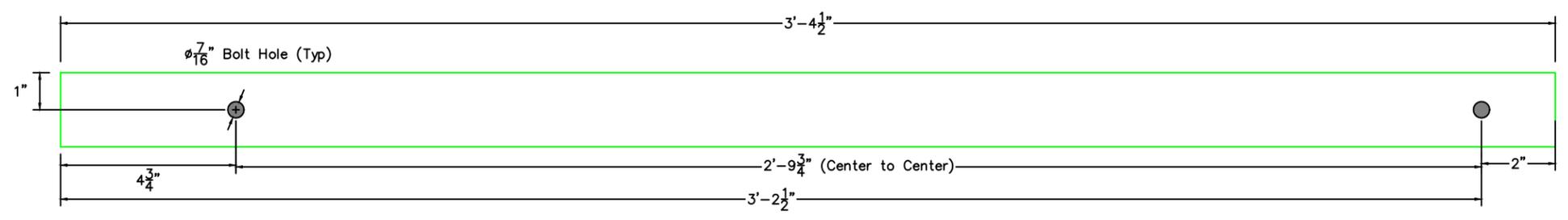


Bracing
Quantity: 20
.75"x.75"x.065"HSS Tube
Scale: 1"=4'

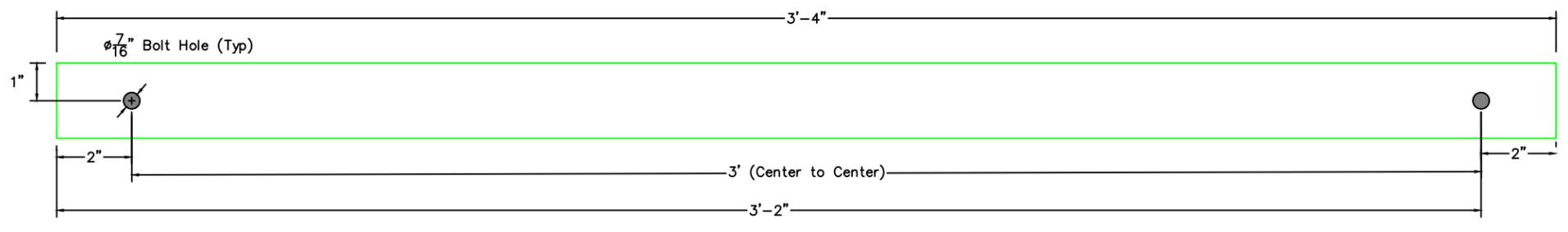
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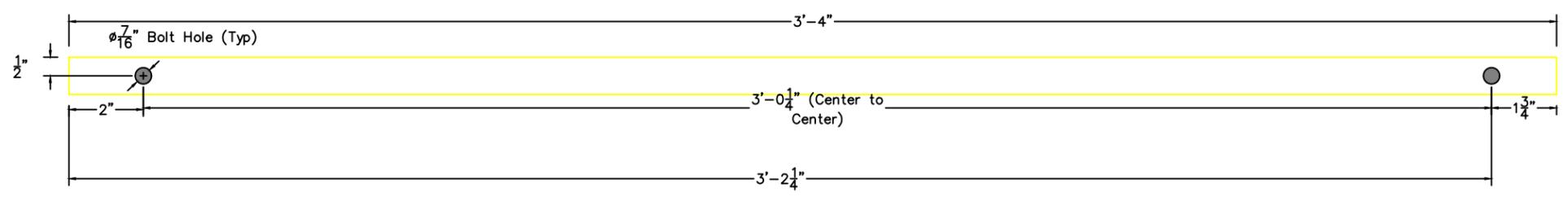
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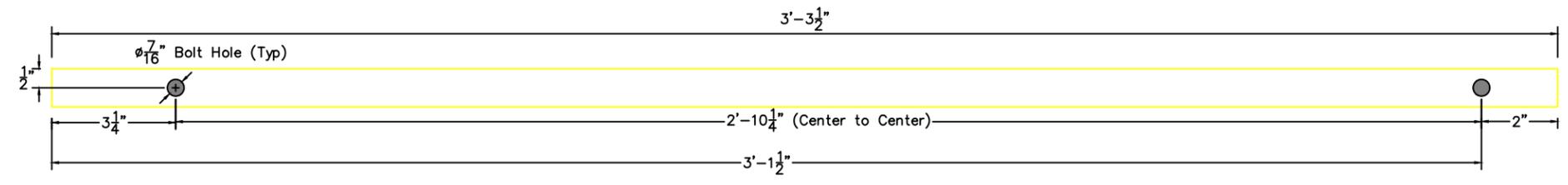
Member AB
Quantity: 6
1"x2"x.083"
HSS Tube
Scale: 1"=4'



Member BC
Quantity: 6
1"x2"x.083"
HSS Tube
Scale: 1"=4'



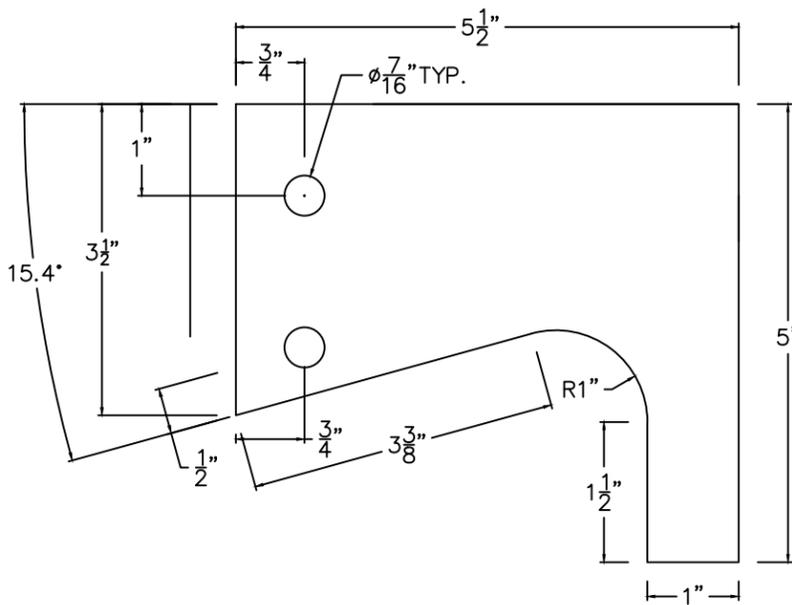
Member EF
Quantity: 6
1"x1"x.065"
HSS Tube
Scale: 1"=4'



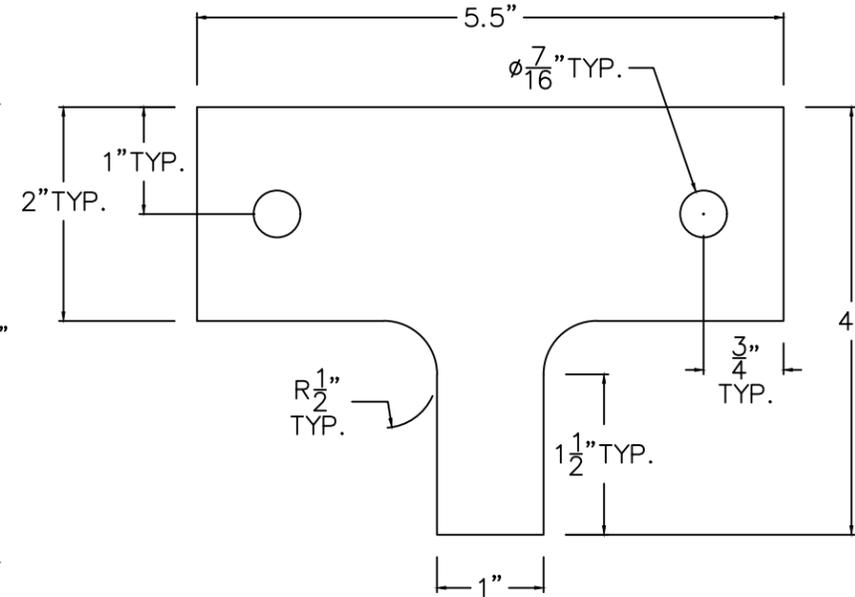
Member AC
Quantity: 6
1"x1"x.065"
HSS Tube
Scale: 1"=4'

Note: All bolt holes are going through both walls of the tube.

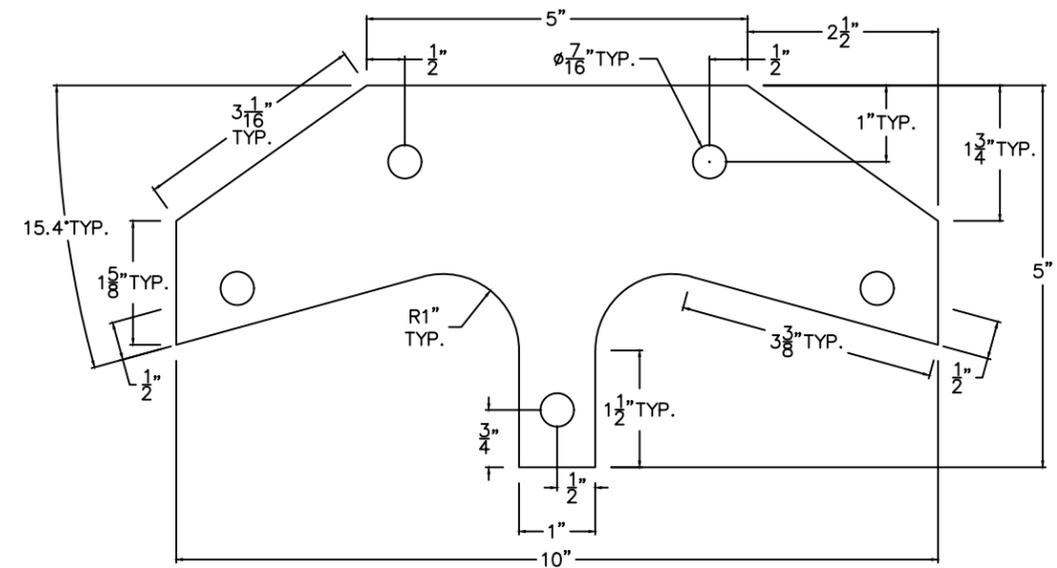
Connection A
Scale: 1"=6'



Connection B
Scale: 1"=7'

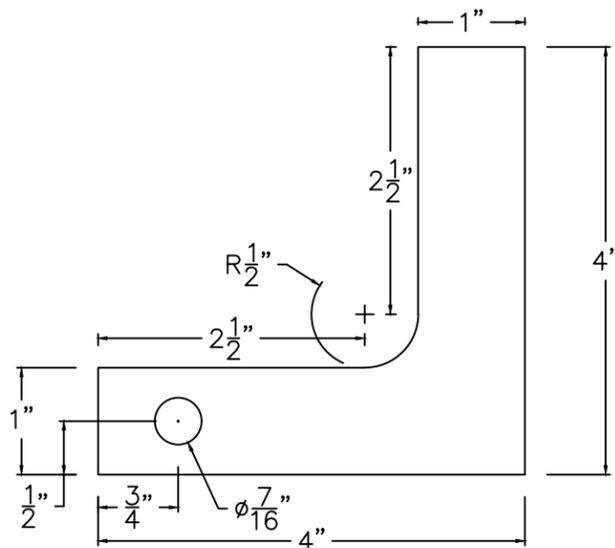


Connection C
Scale: 1"=6'

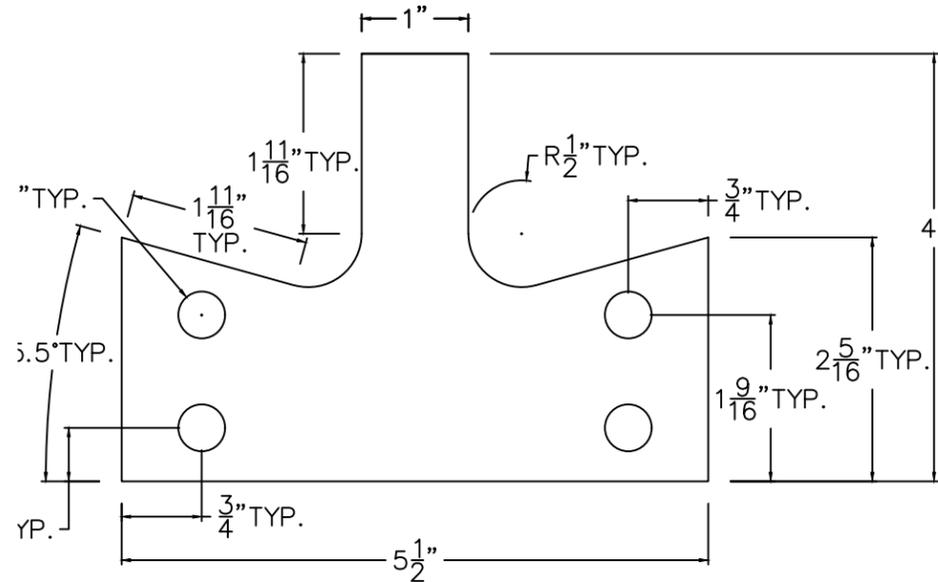


Note: All Connections are ASTM 1011, yield strength 50 ksi.

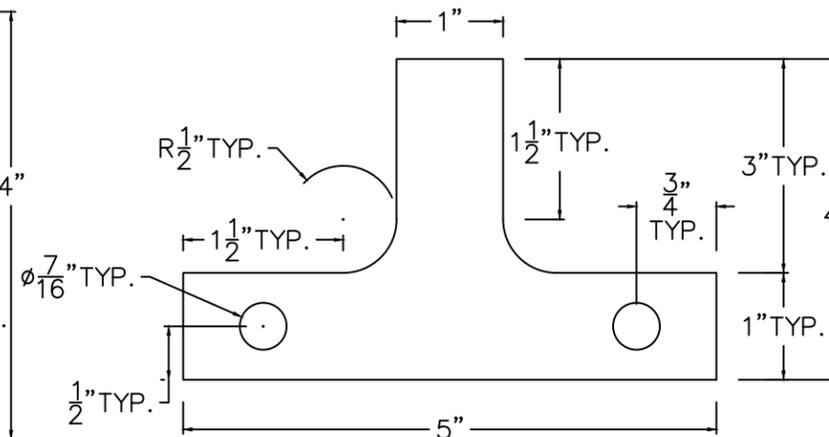
Connection D
Scale: 1"=7'



Connection E
Scale: 1"=7'

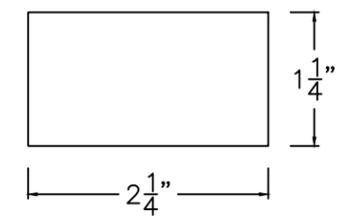


Connection F
Scale: 1"=7'



Tabs
Scale: 1"=7'

PLAN VIEW



NO.	DATE
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SCALE:	NA

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