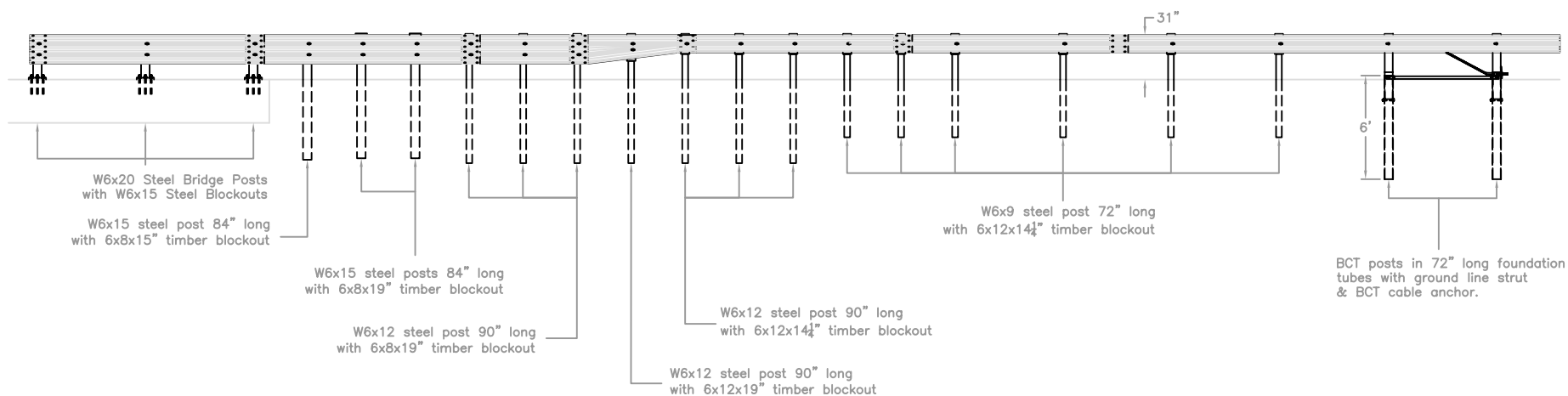
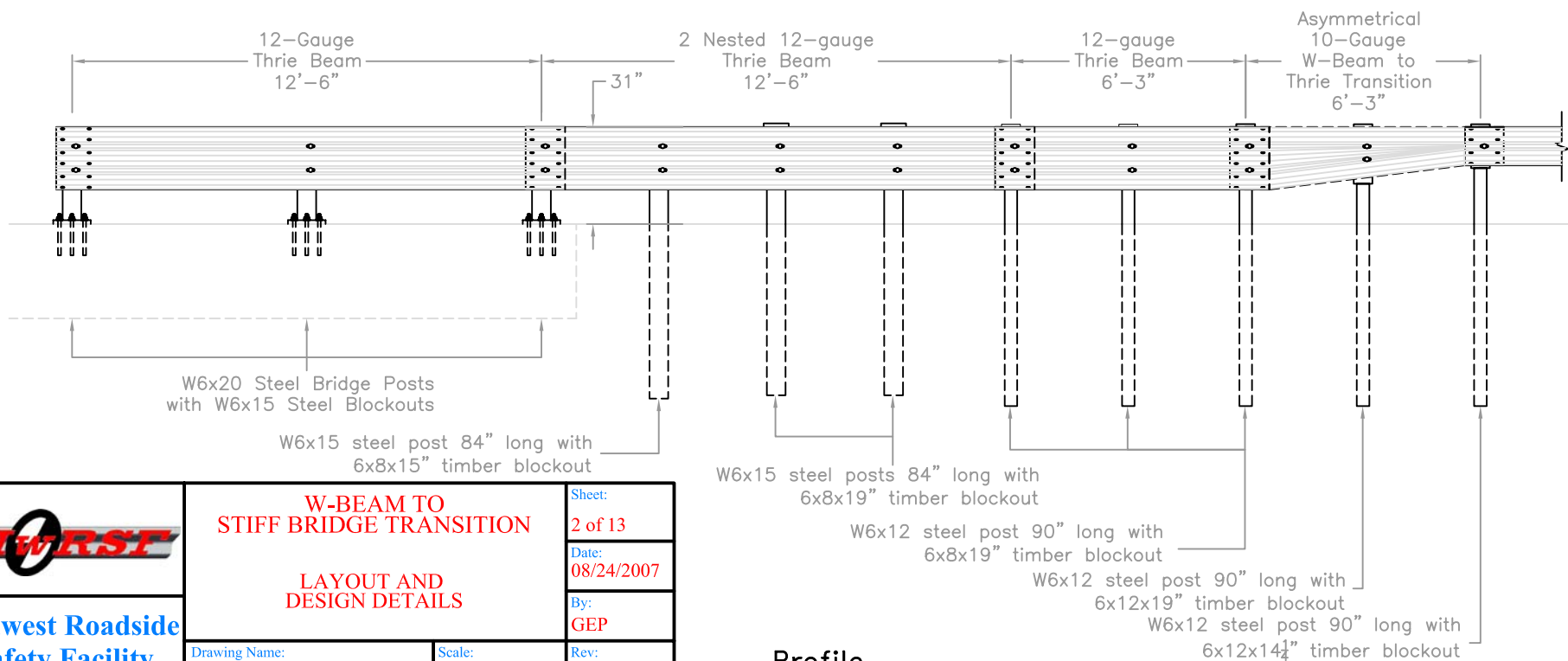
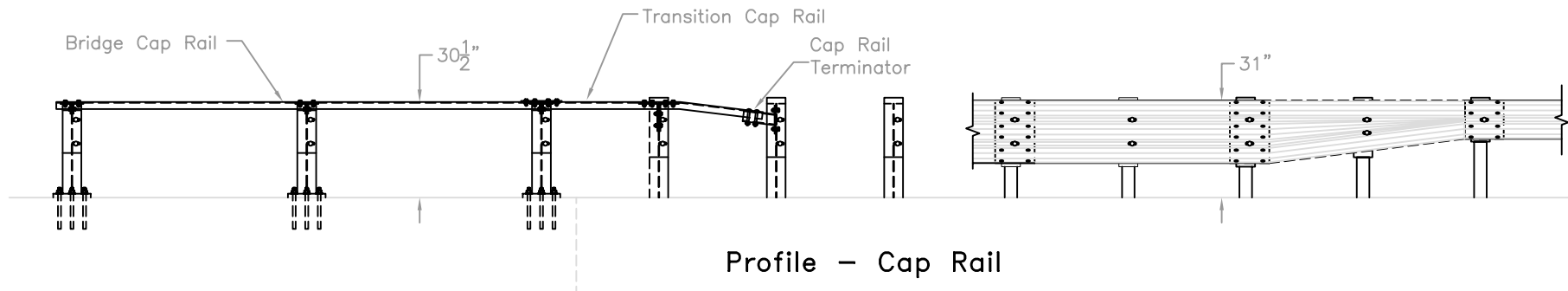
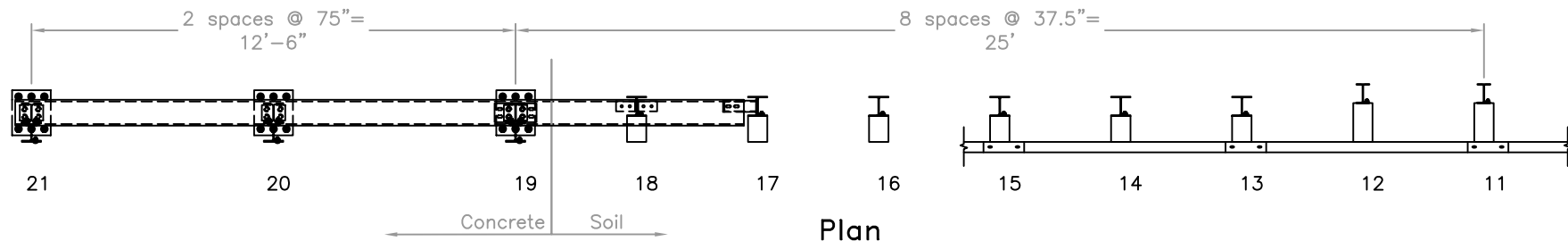


Plan



Profile

	W-BEAM TO STIFF BRIDGE TRANSITION MWT-5 LAYOUT		Sheet:
			1 of 13
			Date:
			08/24/2007
Midwest Roadside Safety Facility			By:
			GEP
Drawing Name:		Scale:	Rev:
MWT-5 R8.dwg		None	EMA



**Midwest Roadside
Safety Facility**

**W-BEAM TO
STIFF BRIDGE TRANSITION**

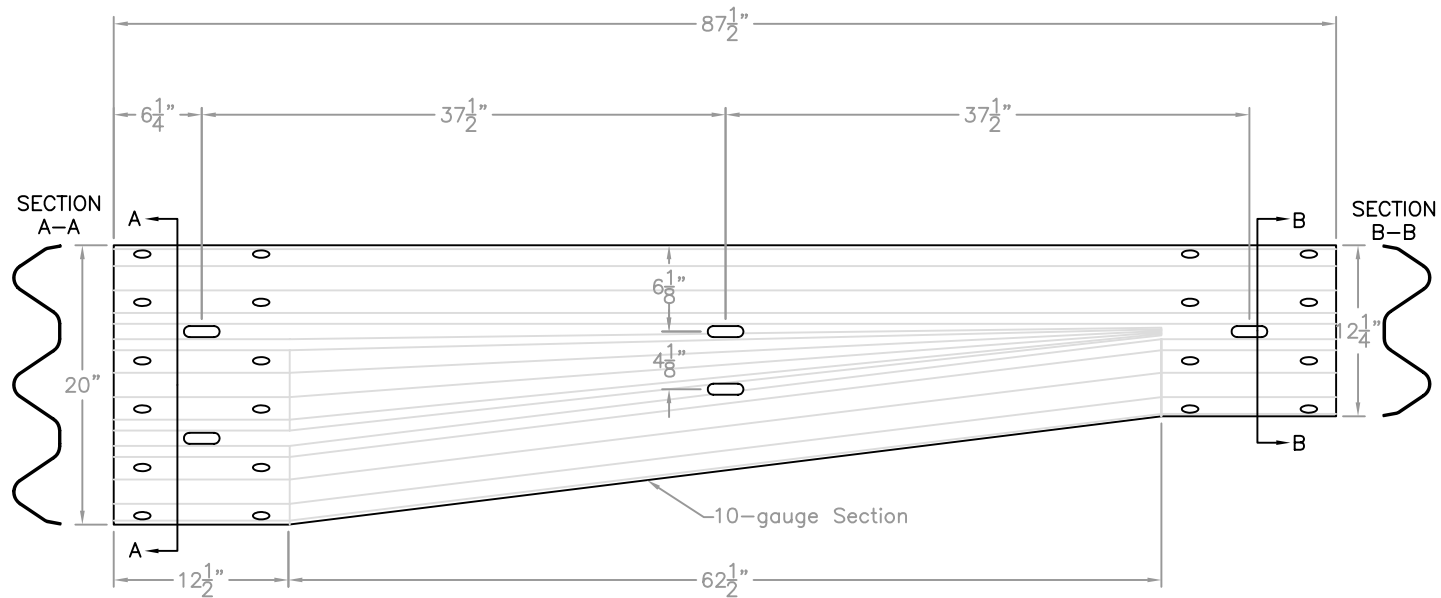
**LAYOUT AND
DESIGN DETAILS**

Drawing Name:
MWT-5 R8.dwg

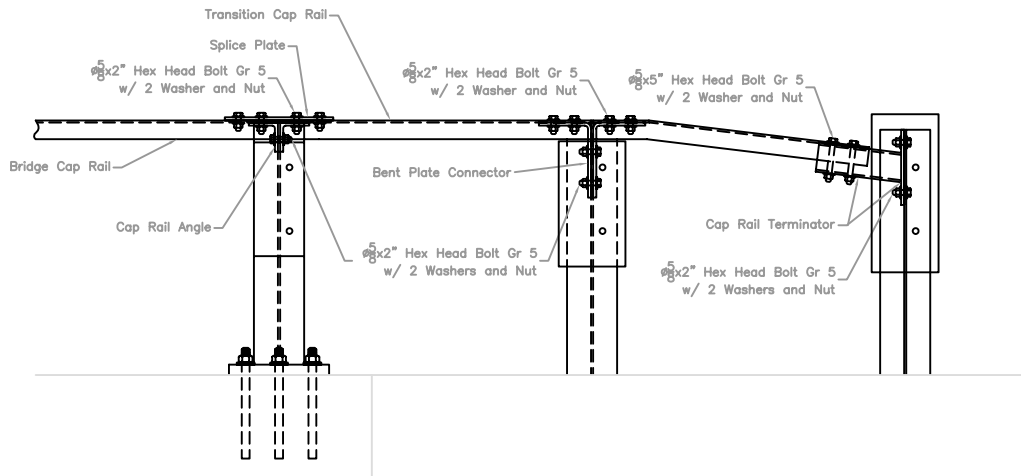
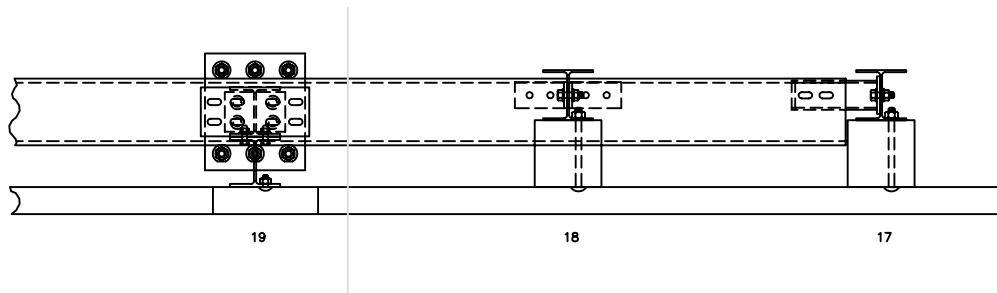
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Sheet:
2 of 13
Date:
08/24/2007
By:
GEP
Rev:
EMA

Profile

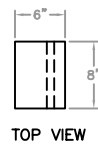
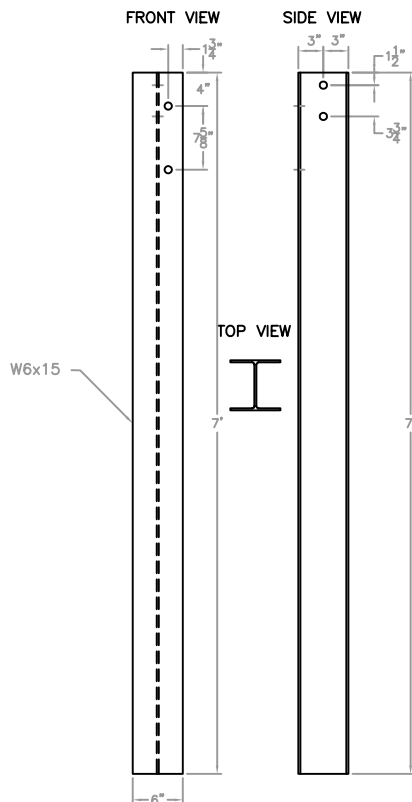


	W-BEAM TO STIFF BRIDGE TRANSITION		Sheet:
	Asymmetrical W-Beam to Thrie Beam Transition Rail Detail		3 of 13
			Date:
			08/24/2007
Midwest Roadside Safety Facility	Drawing Name: MWT-5 R8.dwg		By:
	Scale: 1=10		GEP
		Rev:	EMA

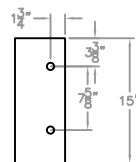


**THRIE BEAM POST
(Post No. 18)**

THRIE BEAM BLOCKOUT THRIE BEAM SUPPORT DETAILS

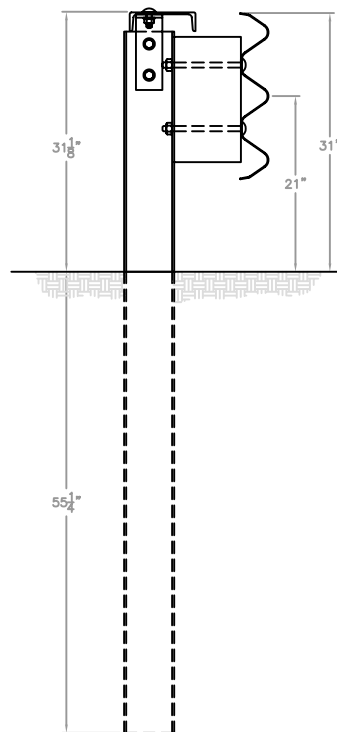


TOP VIEW



FRONT VIEW

- NOTES:
 (1) Steel for wide-flange shall meet ASTM A36.
 (2) All holes drilled or punched to $\frac{3}{4}$ " diameter.
 (3) All bolts are $\frac{5}{8}$ " diameter.



**Midwest Roadside
Safety Facility**

**W-BEAM TO
STIFF BRIDGE TRANSITION**

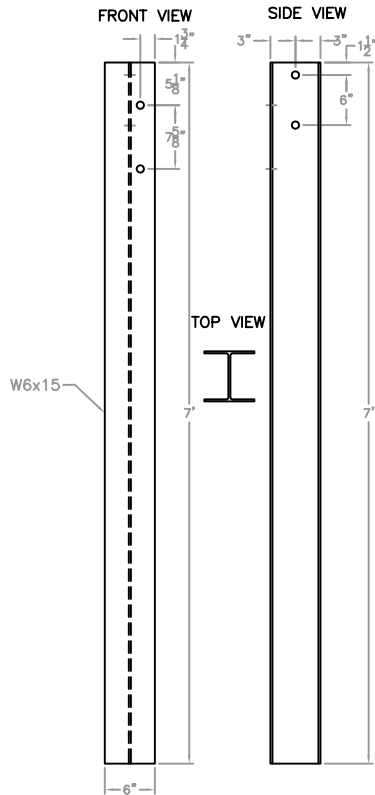
**CAP RAIL DETAIL &
POST 18**

Drawing Name:
MWT-5 R8.dwg

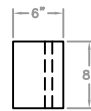
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Sheet:
4 of 13
Date:
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By:
GEP
Rev:
EMA

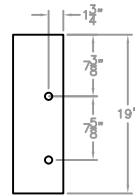
THRIE BEAM POST (Post No. 17)



THRIE BEAM BLOCKOUT THRIE BEAM SUPPORT DETAILS

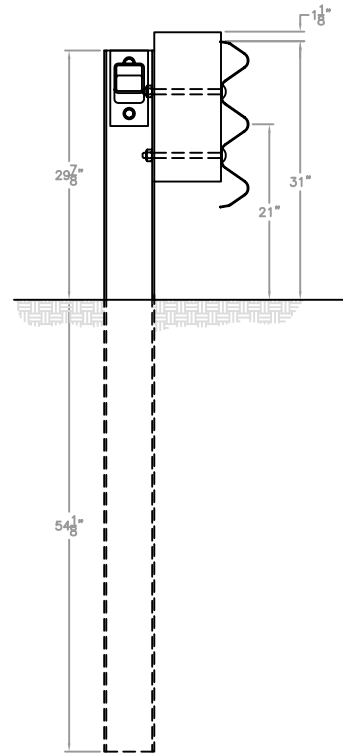


TOP VIEW

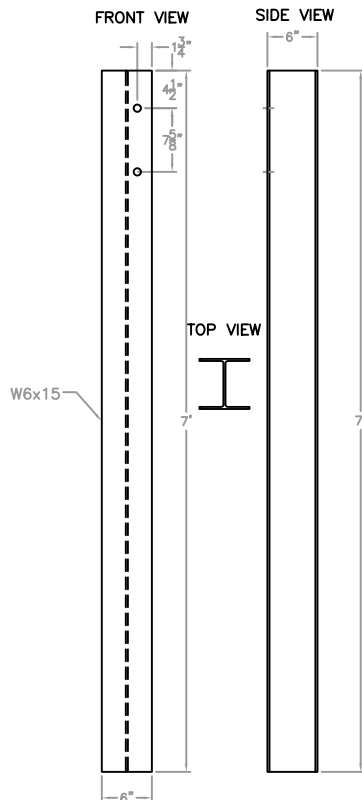


FRONT VIEW

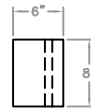
- NOTES:
 (1) Steel for wide-flange shall meet ASTM A36.
 (2) All holes drilled or punched to $\frac{3}{4}$ " diameter.
 (3) All bolts are $\frac{5}{8}$ " diameter.



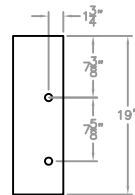
THRIE BEAM POST (Post No. 16)



THRIE BEAM BLOCKOUT THRIE BEAM SUPPORT DETAILS

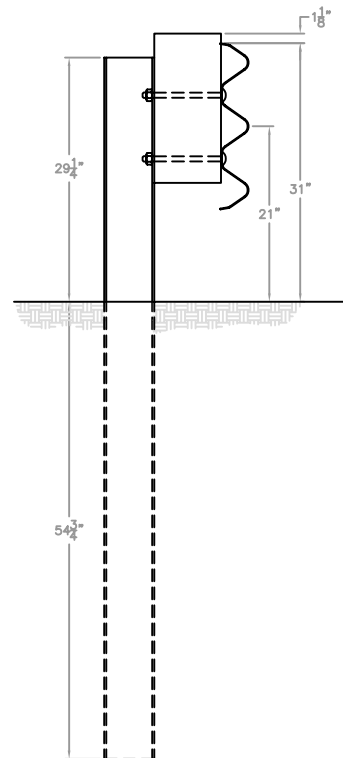


TOP VIEW



FRONT VIEW

- NOTES:
 (1) Steel for wide-flange shall meet ASTM A36.
 (2) All holes drilled or punched to $\frac{3}{4}$ " diameter.
 (3) All bolts are $\frac{5}{8}$ " diameter.



Midwest Roadside
Safety Facility

W-BEAM TO
STIFF BRIDGE TRANSTION

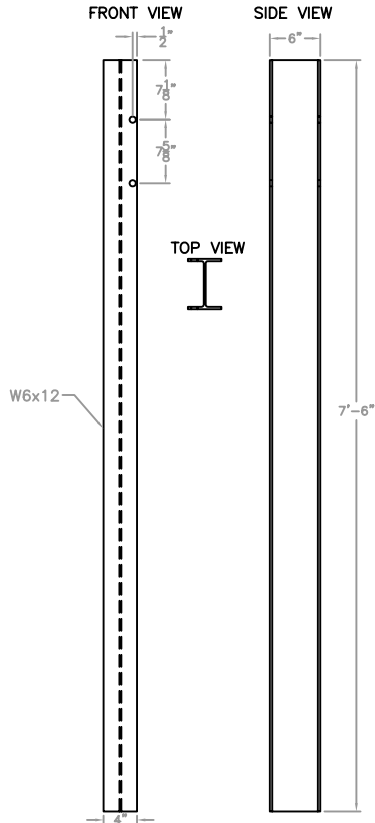
POST 16 & 17

Drawing Name:
MWT-5 R8.dwg

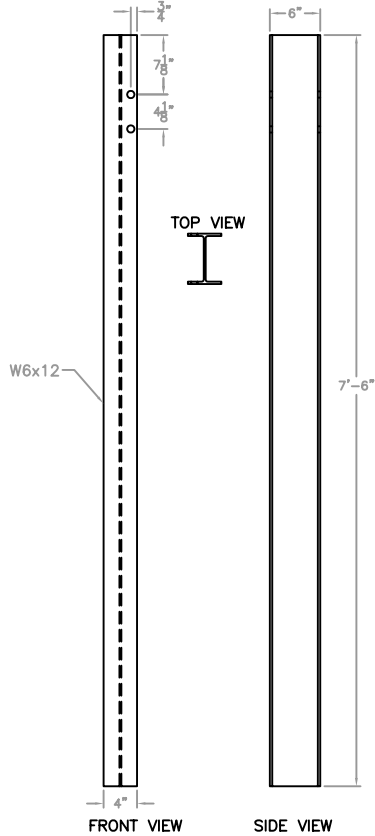
Scale:
None

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EMA

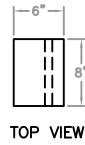
THRIE BEAM POST (Post No. 13-15)



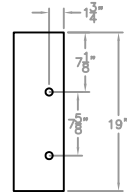
W-BEAM TO THRIE BEAM MID-POST (Post No. 12)



THRIE BEAM BLOCKOUT THRIE BEAM SUPPORT DETAILS

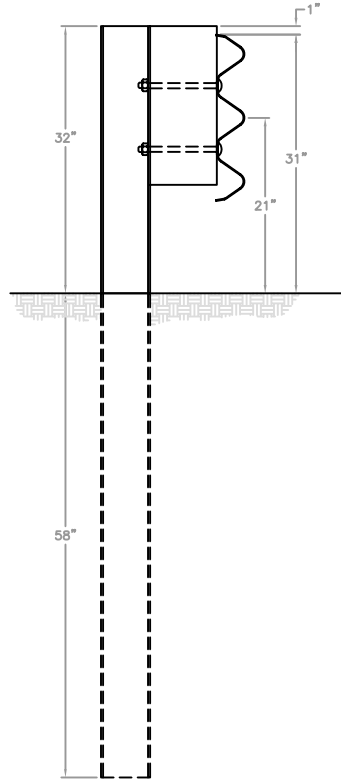


TOP VIEW



FRONT VIEW

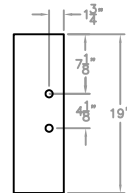
- NOTES:
(1) Steel for wide-flange shall meet ASTM A36.
(2) All holes drilled or punched to 3/4" diameter.
(3) All bolts are 5/8" diameter.



W-BEAM TO THRIE BEAM MID-POST BLOCKOUT



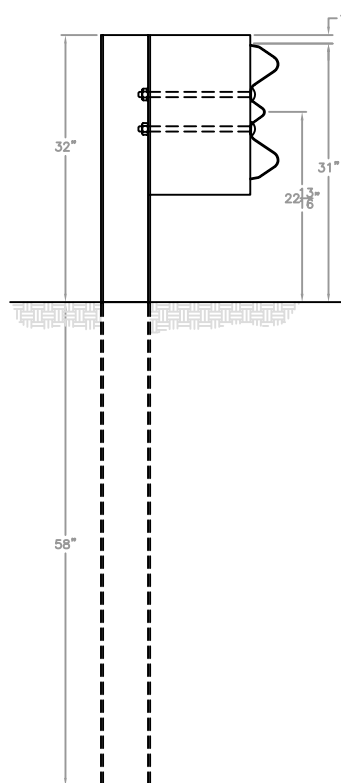
TOP VIEW



FRONT VIEW

- NOTES:
(1) Steel for wide-flange shall meet ASTM A36.
(2) All holes drilled or punched to 3/4" diameter.
(3) All bolts are 5/8" diameter.

W-BEAM TO THRIE BEAM SUPPORT DETAILS



Midwest Roadside
Safety Facility

W-BEAM TO
STIFF BRIDGE TRANSTION

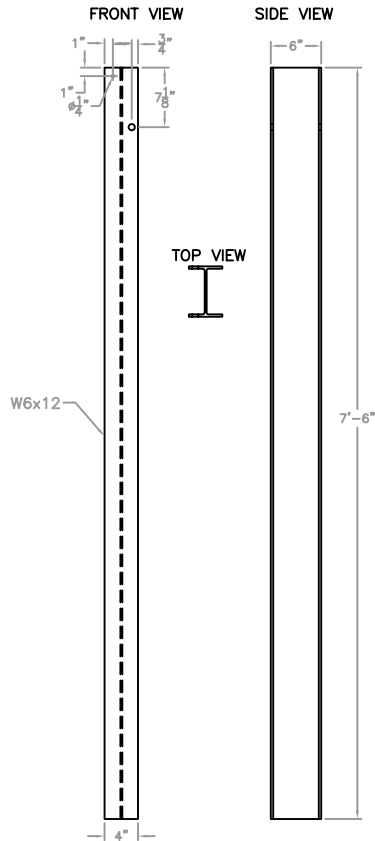
POST 13-15 &
POST 12

Drawing Name:
MWT-5 R8.dwg

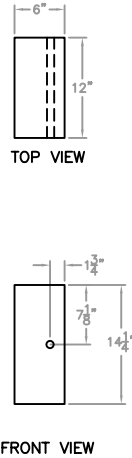
Scale:
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Sheet:
6 of 13
Date:
08/24/2007
By:
GEP
Rev:
EMA

**W-BEAM POST
(Post No. 9-11)**

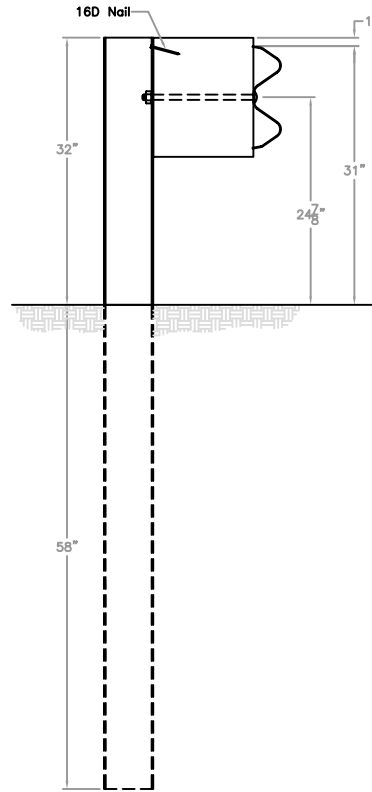


W-BEAM BLOCKOUT

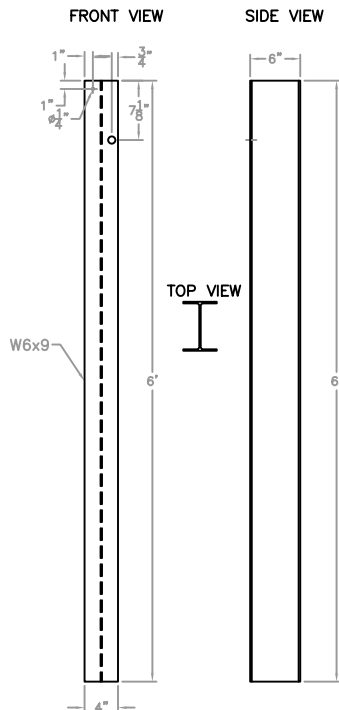


NOTES:
(1) Steel for wide-flange shall meet ASTM A36.
(2) All holes drilled or punched to $\frac{3}{4}$ " diameter.
(3) All bolts are $\frac{5}{8}$ " diameter.

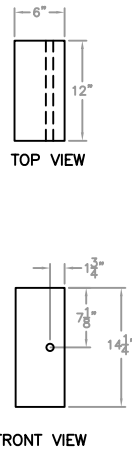
W-BEAM SUPPORT DETAILS



**W-BEAM POST
(Post No. 3-8)**

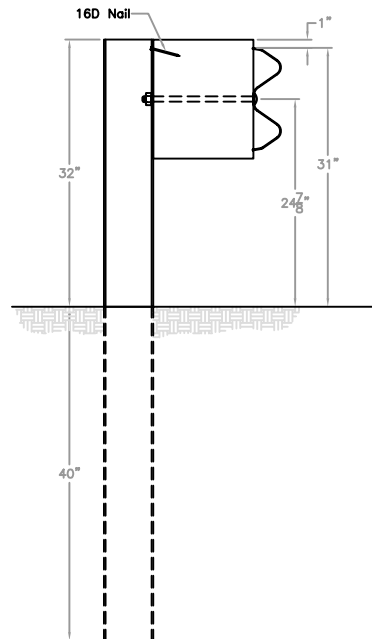


W-BEAM BLOCKOUT



NOTES:
(1) Steel for wide-flange shall meet ASTM A36.
(2) All holes drilled or punched to $\frac{3}{4}$ " diameter.
(3) All bolts are $\frac{5}{8}$ " diameter.

W-BEAM SUPPORT DETAILS



**Midwest Roadside
Safety Facility**

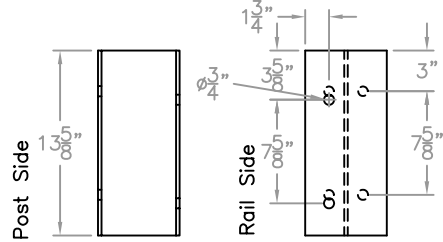
**W-BEAM TO
STIFF BRIDGE TRANSTION**

**POST 9-11 &
POST 3-8**

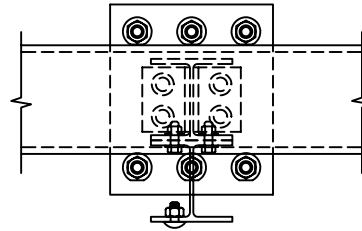
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MWT-5 R8.dwg

Scale:
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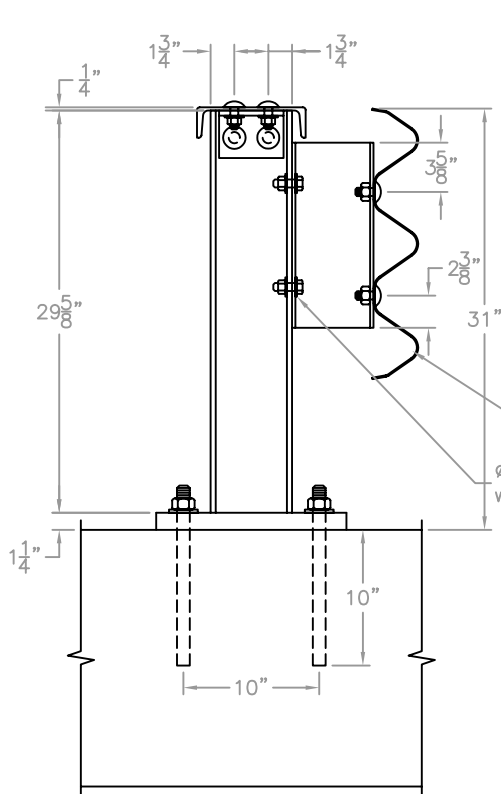
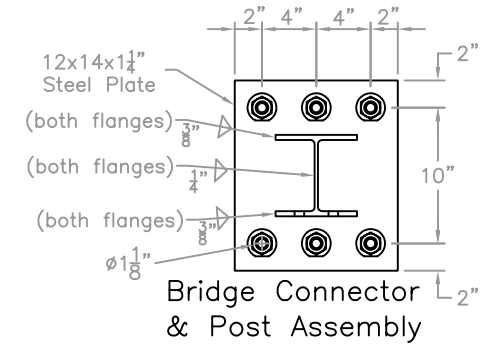
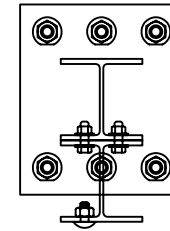
Sheet:
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Date:
08/24/2007
By:
GEP
Rev:
EMA



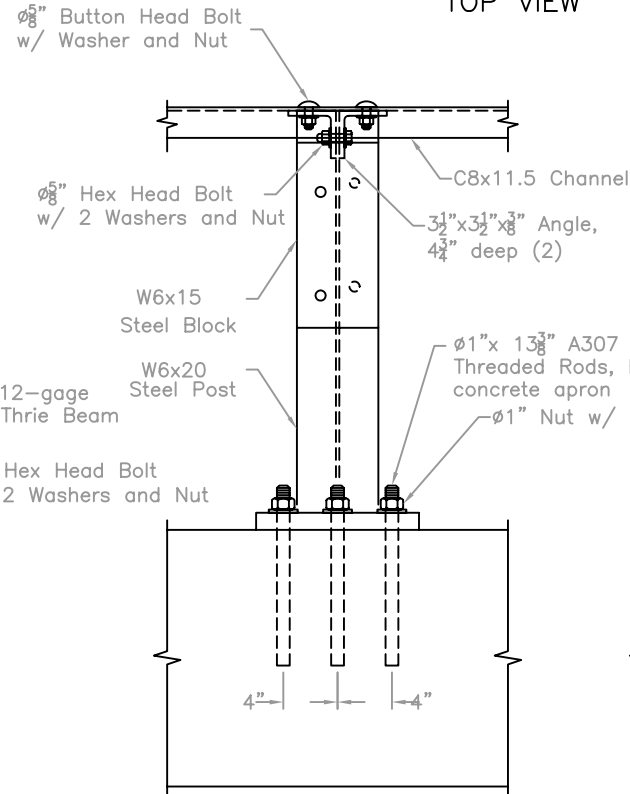
STEEL BLOCKOUT



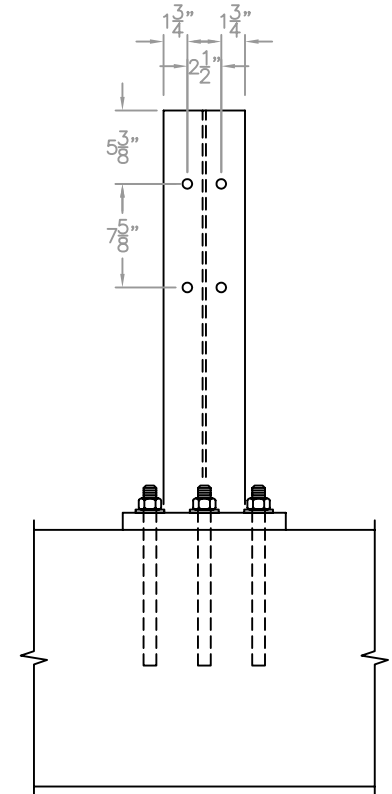
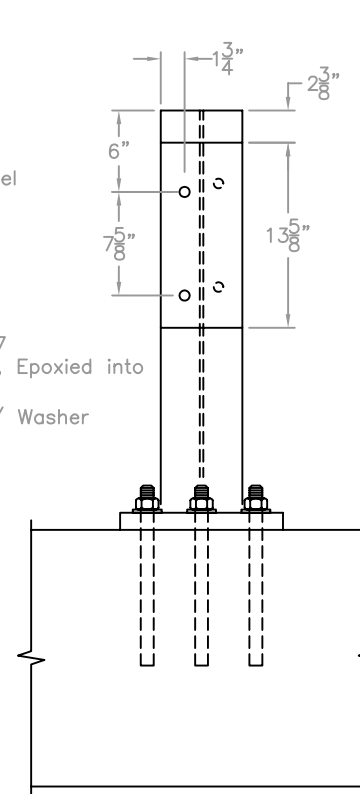
TOP VIEW



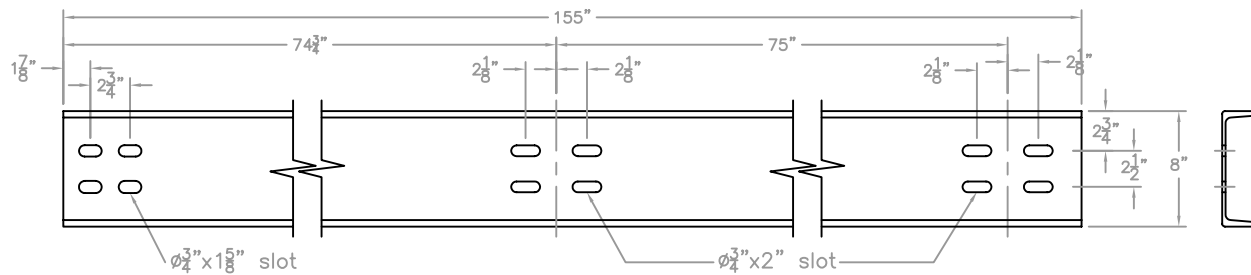
SIDE VIEW



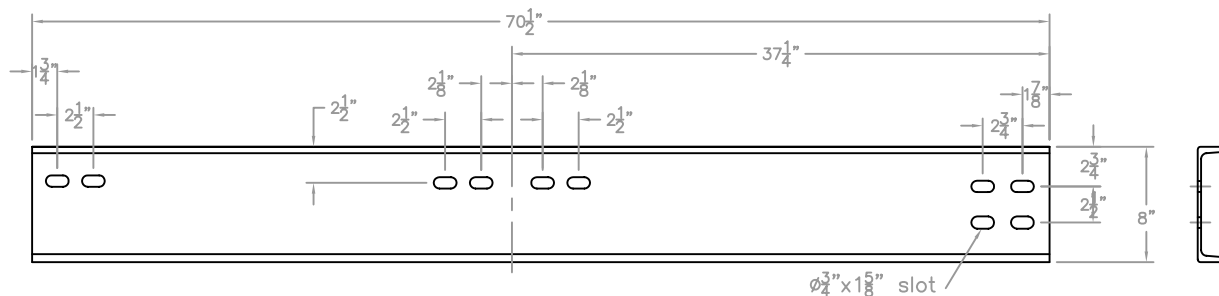
FRONT VIEW
(Guardrail Omitted)



	W-BEAM TO STIFF BRIDGE TRANSITION		Sheet:
	CHANNEL BRIDGE RAIL DESIGN DETAILS		8 of 13
	Drawing Name: MWT-5 R8.dwg		Date: 08/24/2007
	Scale: None		By: GEP
Rev: EMA			

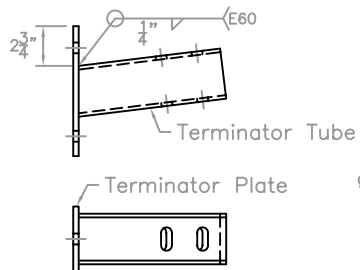


Bridge Cap Rail
C8x11.5

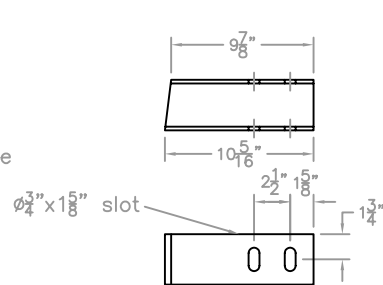


Notch channel legs if
needed to enable bend

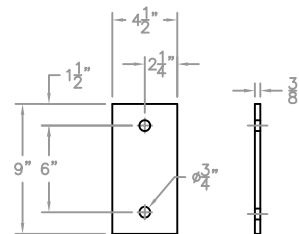
Transition Cap Rail
C8x11.5



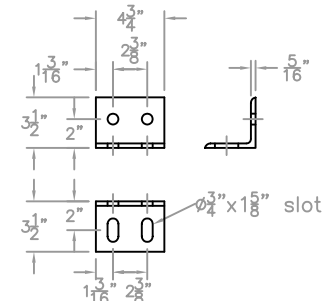
Terminator Assembly



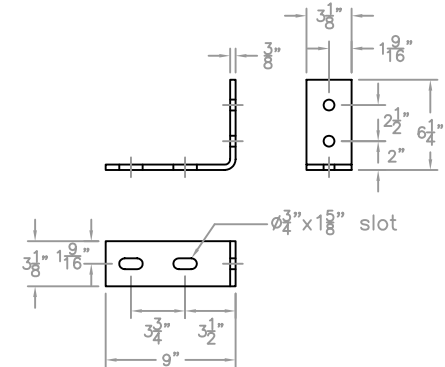
Terminator Tube
TS 3 $\frac{1}{2}$ " x 3 $\frac{1}{2}$ " x 4"



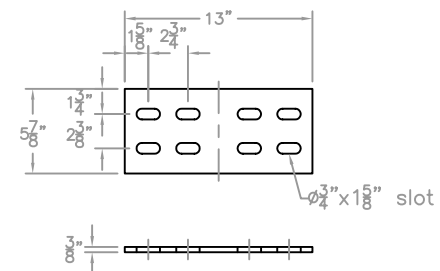
Terminator Plate
9" x 4 $\frac{1}{2}$ " x $\frac{3}{8}$ "



Cap Rail Angle
L 3 $\frac{1}{2}$ " x 3 $\frac{1}{2}$ " x $\frac{5}{16}$ "



Bent Plate Connector
L 6 $\frac{1}{4}$ " x 9" x $\frac{3}{8}$ "



Splice Plate
5 $\frac{7}{8}$ " x 13" x $\frac{3}{8}$ "



Midwest Roadside
Safety Facility

W-BEAM TO
STIFF BRIDGE TRANSITION

CHANNEL BRIDGE RAIL
DESIGN DETAILS (CONT'D)

Drawing Name:
MWT-5 R8.dwg

Scale:
None

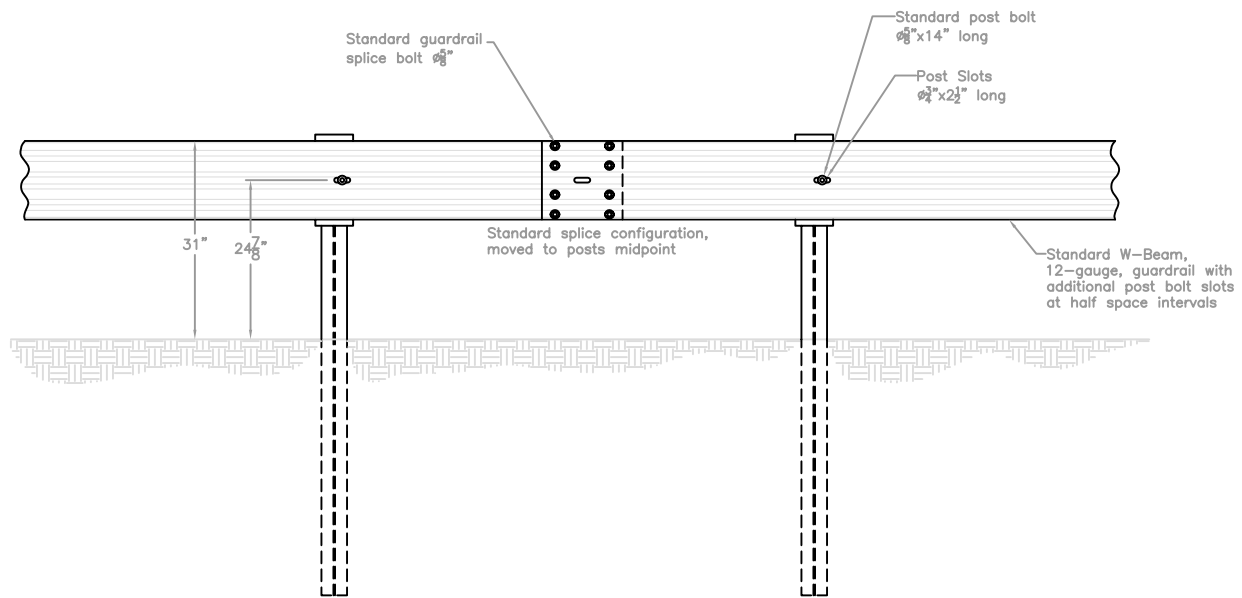
Sheet:

9 of 13

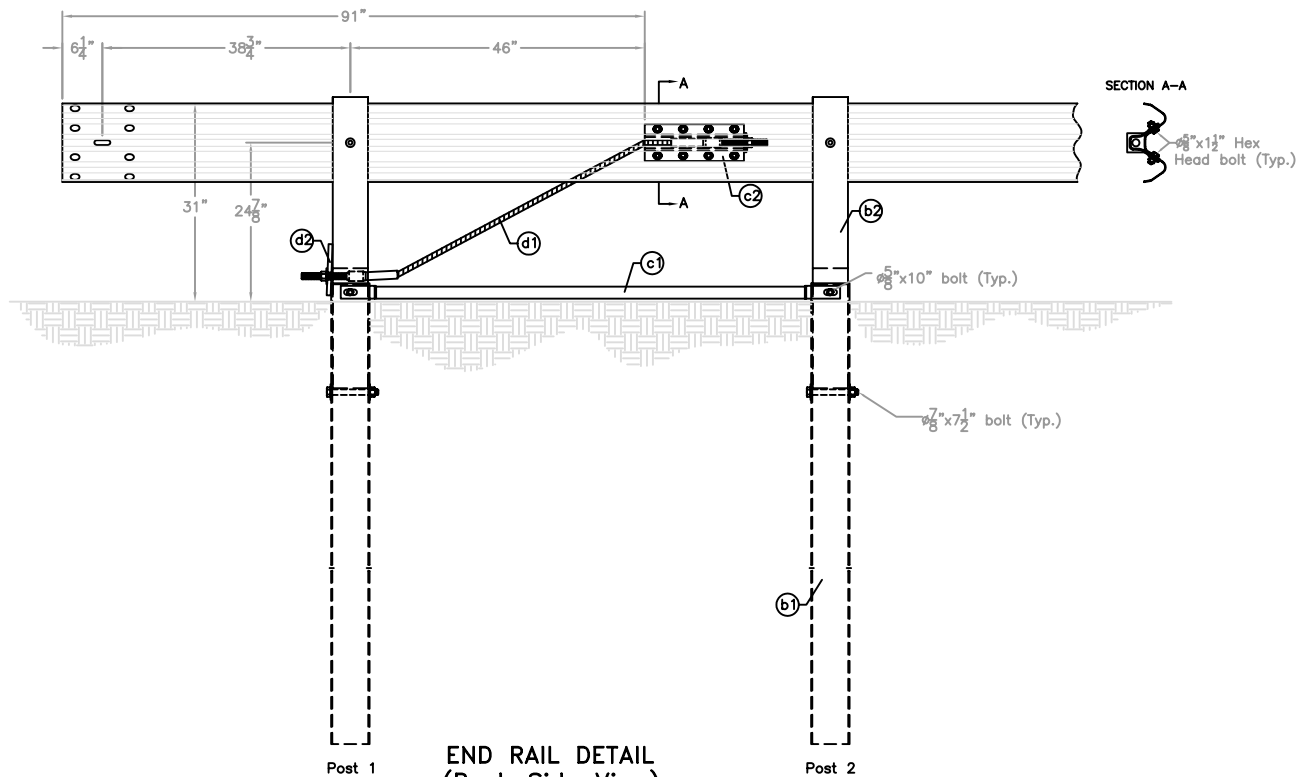
Date:
08/24/2007

By:
GEP

Rev:
EMA



SPLICE DETAIL



END RAIL DETAIL
(Back Side View)



Midwest Roadside
Safety Facility

W-BEAM TO
STIFF BRIDGE TRANSITION

Rail Detail
End BCT Detail

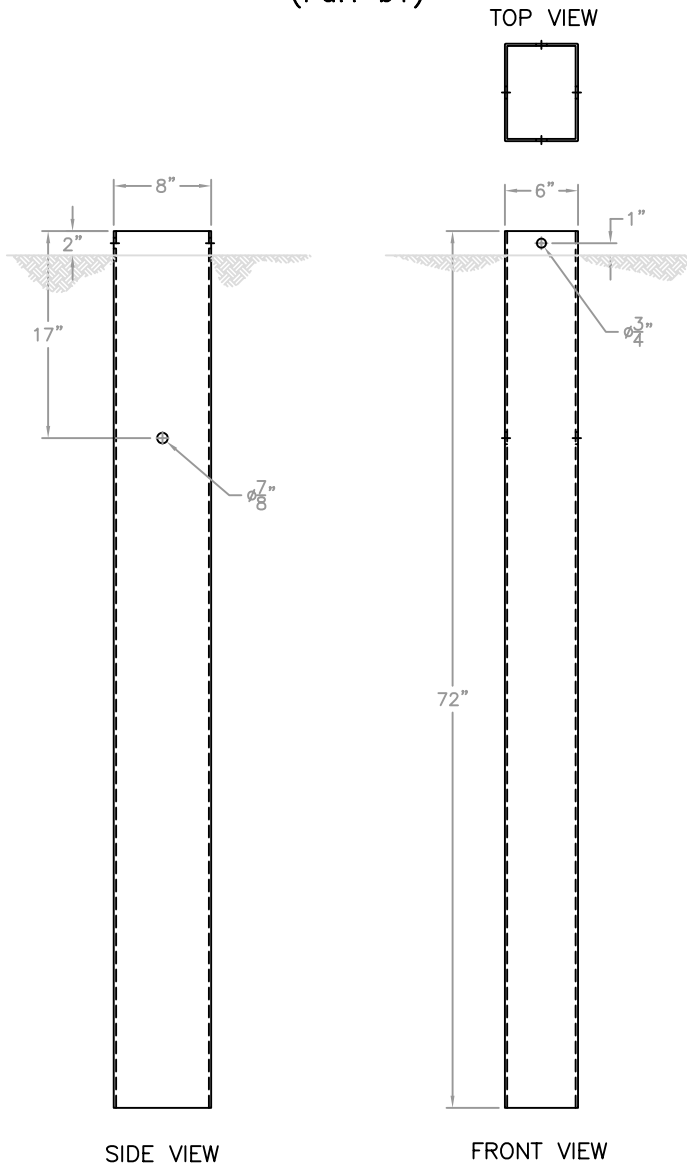
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MWT-5 R8.dwg

Scale:
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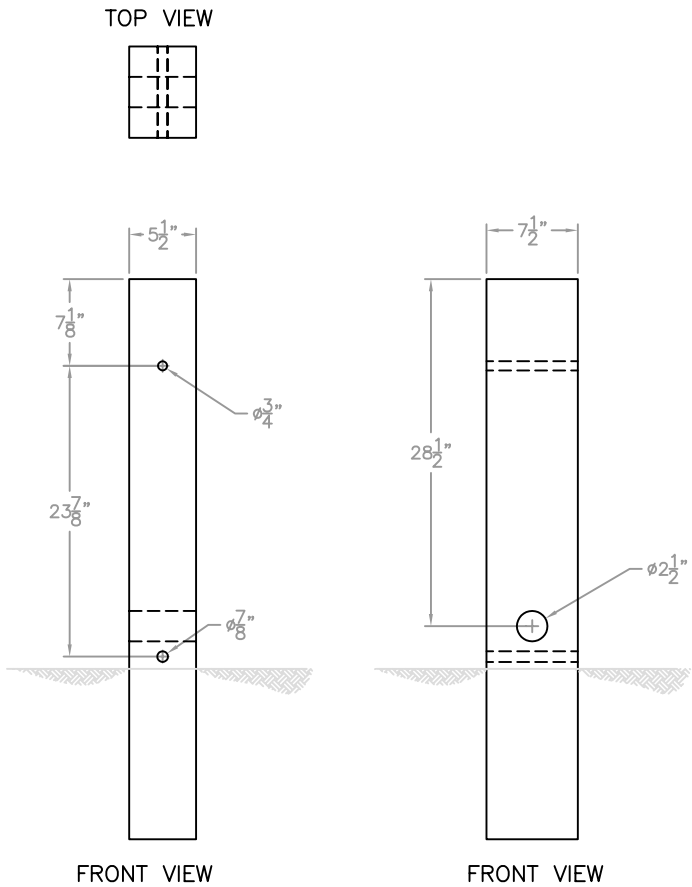
Sheet:	10 of 13
Date:	08/24/2007
By:	GEP
Rev:	EMA

ITEM	QTY	DESCRIPTION	MATERIAL
b1	2	Foundation Tubes	PTE05
b2	2	BCT Timber Post	PDF01

MGS FOUNDATION TUBE
(Part b1)



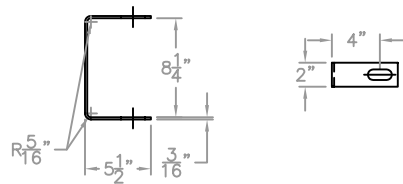
MGS BCT TIMBER POST
(Part b2)



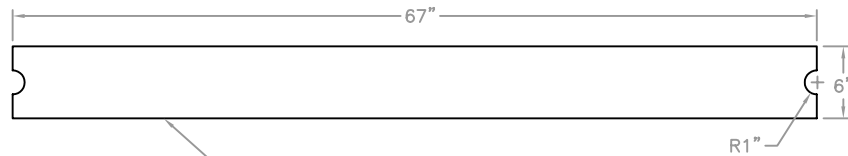
	W-BEAM TO STIFF BRIDGE TRANSITION		Sheet:
	BCT POST & TUBE DETAIL		11 of 13
	Drawing Name: MWT-5 R8.dwg		Date: 08/24/2007
	Scale: 1=16		By: GEP
		Rev:	EMA

ITEM	QTY	DESCRIPTION	MATERIAL
c1	2	Cable Strut	PFP01
c2	2	Anchor Bracket	FPA01

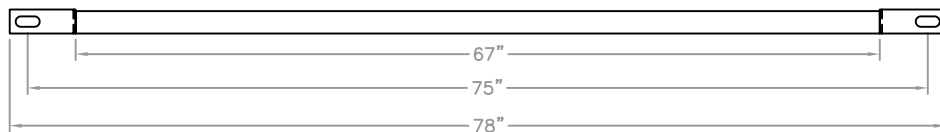
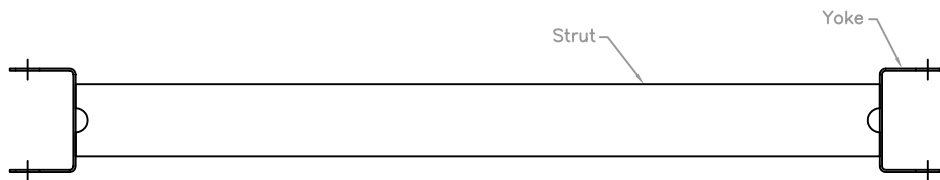
Yoke Details



Strut Details

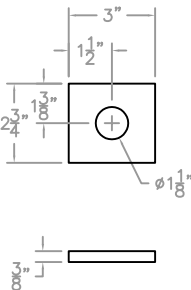
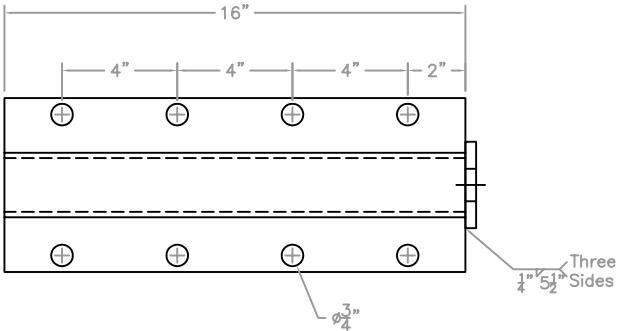


C152x12.2 Channel Section

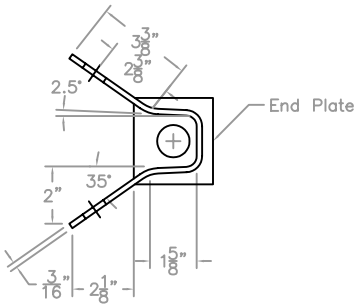


Cable Strut
(Part c1)

Anchor Bracket
(Part c2)



End Plate

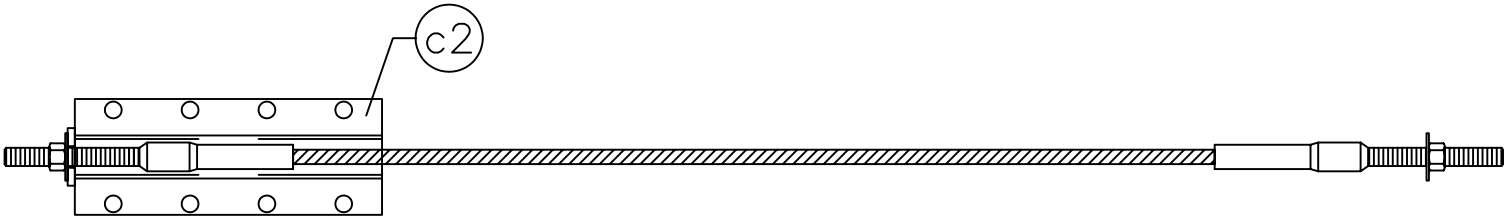
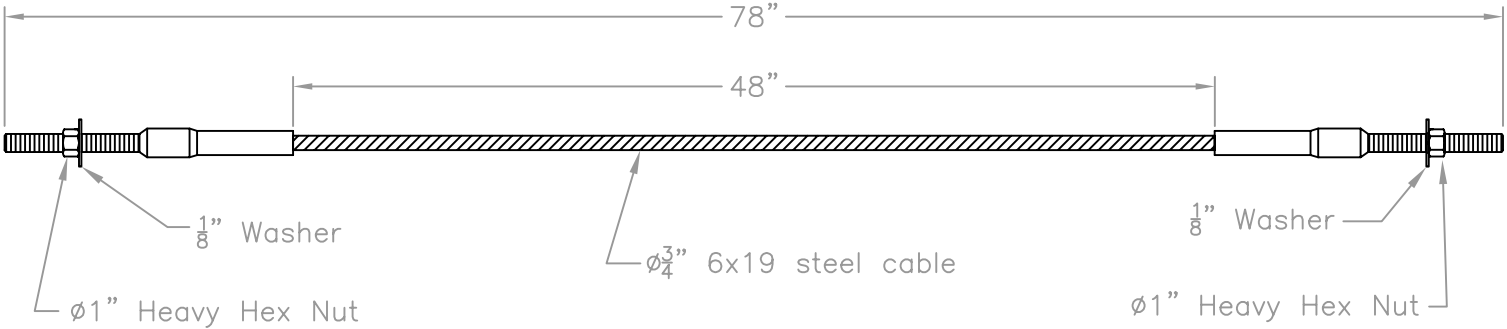


End View

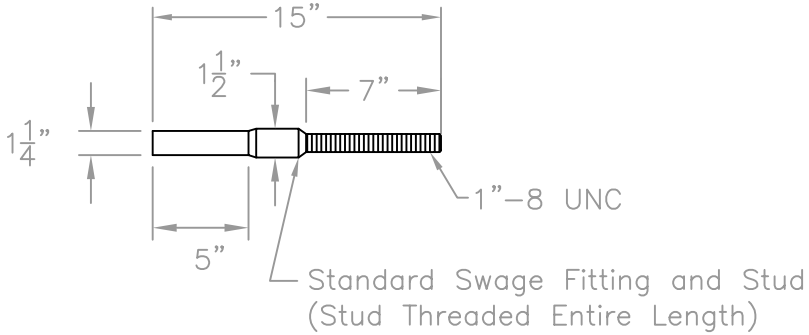
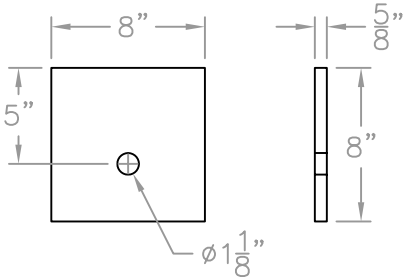
	W-BEAM TO STIFF BRIDGE TRANSITION		Sheet: 12 of 13
	CABLE STRUT & ANCHOR BRACKET		Date: 08/24/2007
	Drawing Name: MWT-5 R8.dwg		By: GEP
	Scale: None		Rev: EMA

ITEM	QTY	DESCRIPTION	MATERIAL
d1	2	Anchor Cable	FCA01
a2	2	Bearing Plate	FPB01

Anchor Cable
(Part d1)



Bearing Plate
(Part d2)



	W-BEAM TO STIFF BRIDGE TRANSITION		Sheet: 13 of 13
	ANCHOR CABLE DETAILS		Date: 08/24/2007
			By: GEP
	Drawing Name: MWT-5 R8.dwg	Scale: 1=10	Rev: EMA