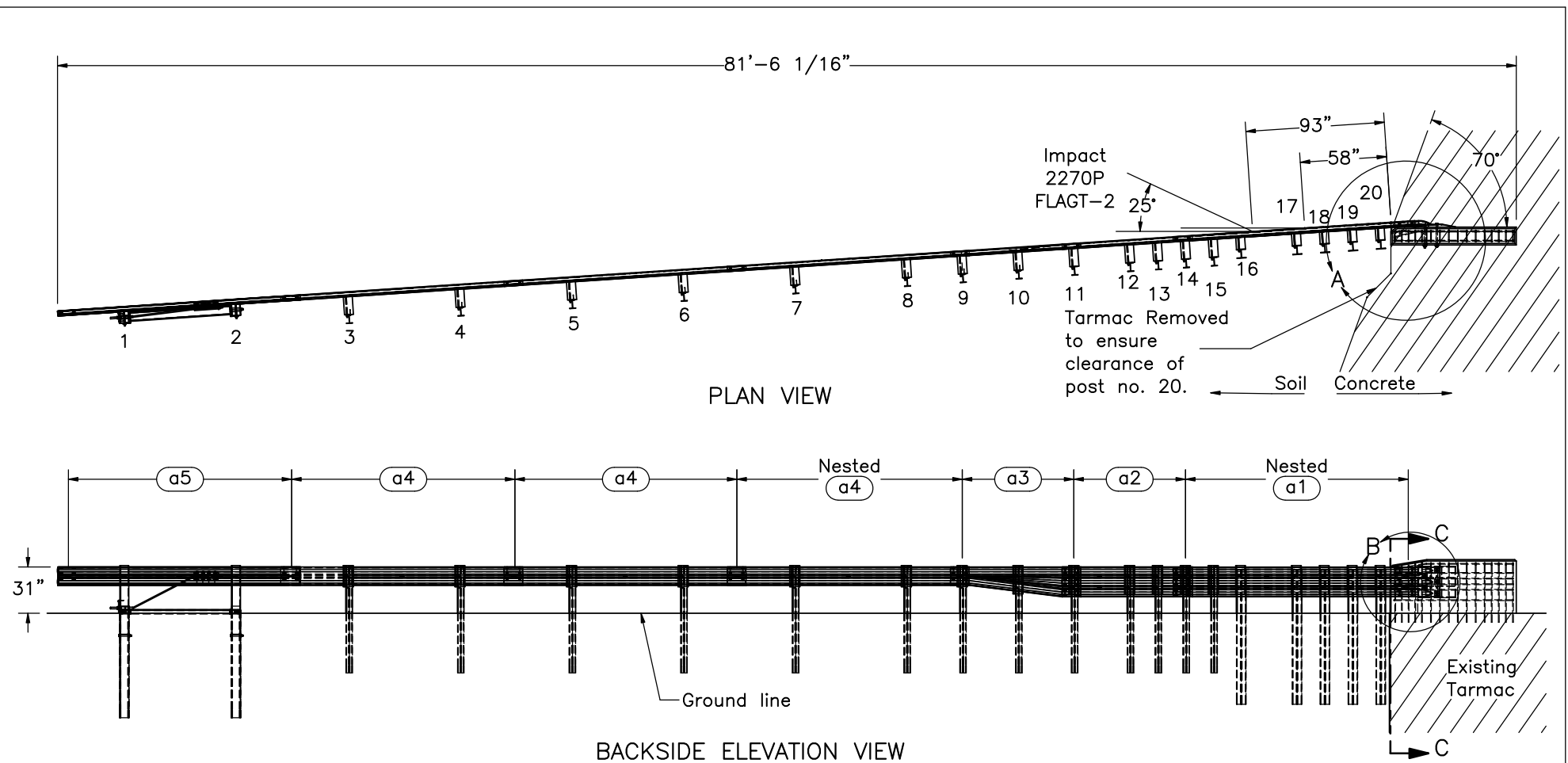




- Notes: (1) Test nos. 2 and 5 shall be performed according to test designation no. 3-21. Test nos. 3 and 4 shall be performed according to test designation no. 3-20 using MASH 2016 criteria.
- (2) Critical region for test nos. 2 and 3 is located between post nos. 12 and 20. Critical region for test nos. 4 and 5 is located between post nos. 5 and 12.
- (3) The impact location for test no. 2 is 93" from the upstream end of the buttress.



Midwest Roadside
Safety Facility

Flared AGT
Buttress
Test Nos. FLAGT-2

System Layout

DWG. NAME.
FLAGT-2_R7

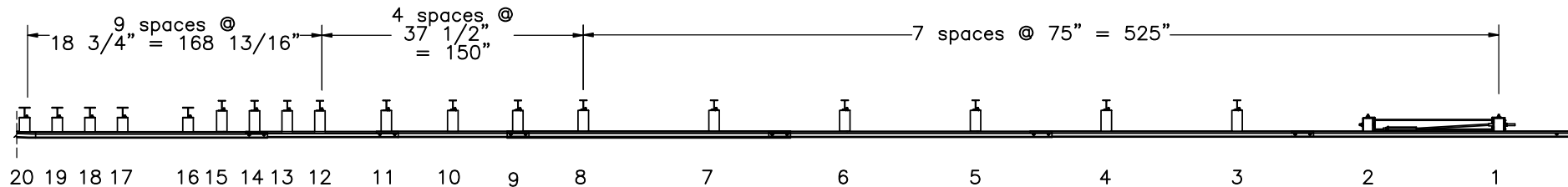
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UNITS: in.

SHEET:
1 of 28

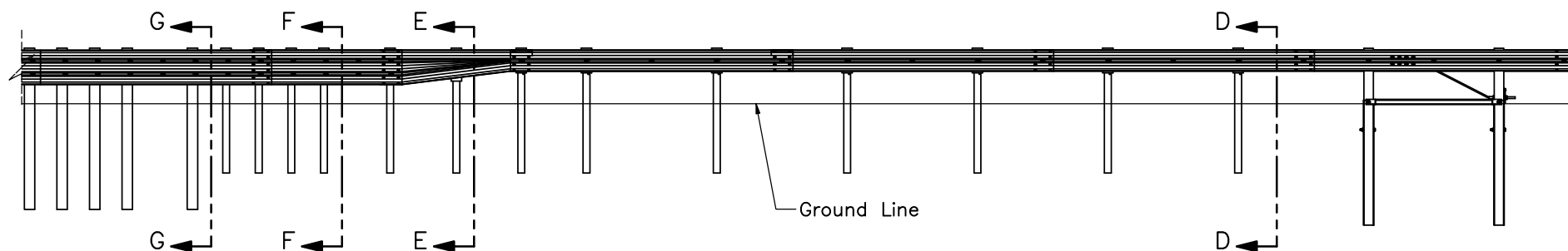
DATE:
5/24/2022

DRAWN BY:
LJP/JRF/SB
W/GHR

REV. BY:
RFB/KAL/S
KR



PLAN VIEW*



ELEVATION VIEW*

*These views are views normal to the front face of the rail upstream from the terminal connector.



Midwest Roadside
Safety Facility

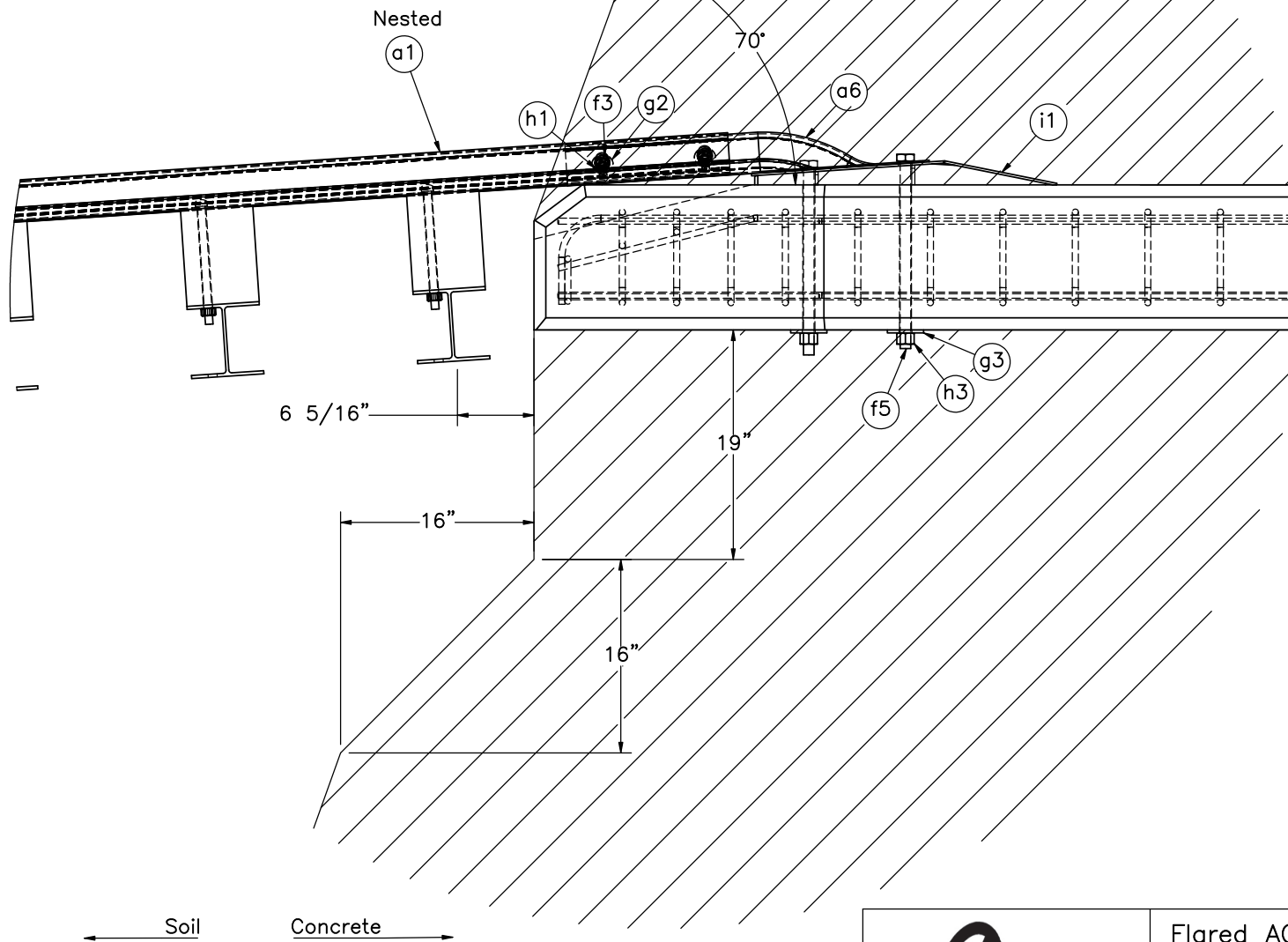
Flared AGT
Buttress
Test Nos. FLAGT-2

System Details

DWG. NAME.
FLAGT-2_R7

SCALE: 1:92
UNITS: in.

SHEET:
2 of 28
DATE:
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W/GHR
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KR



DETAIL A



Midwest Roadside
Safety Facility

Flared AGT
Buttress
Test Nos. FLAGT-2

Tarmac Cut Out Detail

DWG. NAME.
FLAGT-2_R7

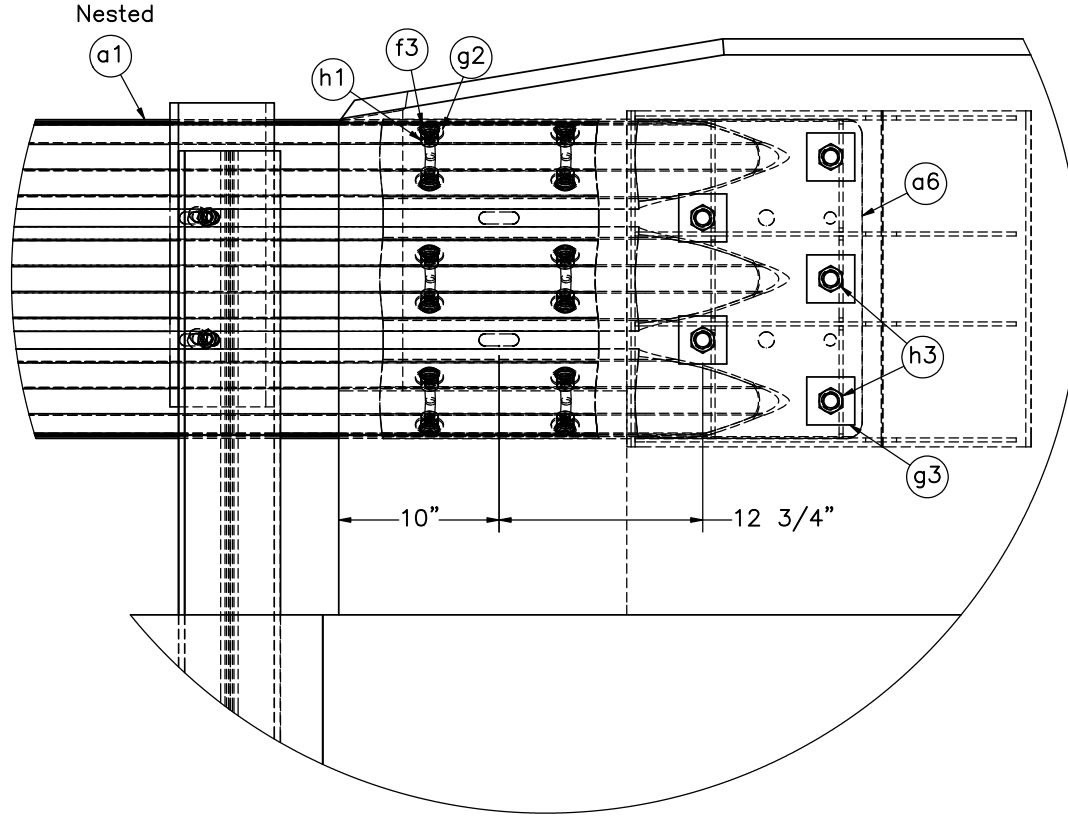
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SHEET:
3 of 28

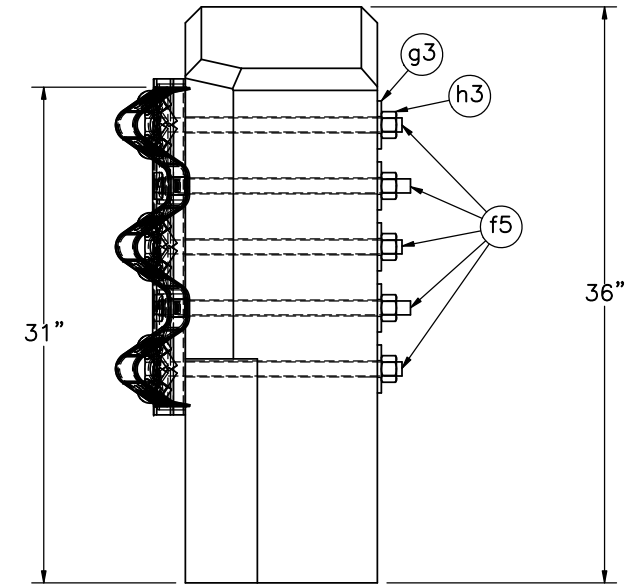
DATE:
5/24/2022

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W/GHR

REV. BY:
RFB/KAL/S
KR



DETAIL B



SECTION C-C

- Notes: (1) Buttress reinforcement hidden for clarity in details B and C.
 (2) Nested thrie beam sections sandwich thrie beam terminal connector at splice location.
 (3) Washers (part g2) placed between nuts and inner thrie beam section.
 (4) Guardrail bolts (part f4) may be used in place of guardrail bolts (part f3) in nested thrie beam splices if the nut can be fully threaded (dependent on thickness of stacked guardrail layers).



Midwest Roadside
Safety Facility

Flared AGT
Buttress
Test Nos. FLAGT-2

Thrie Beam End Connector and
Buttress Details

DWG. NAME:
FLAGT-2_R7

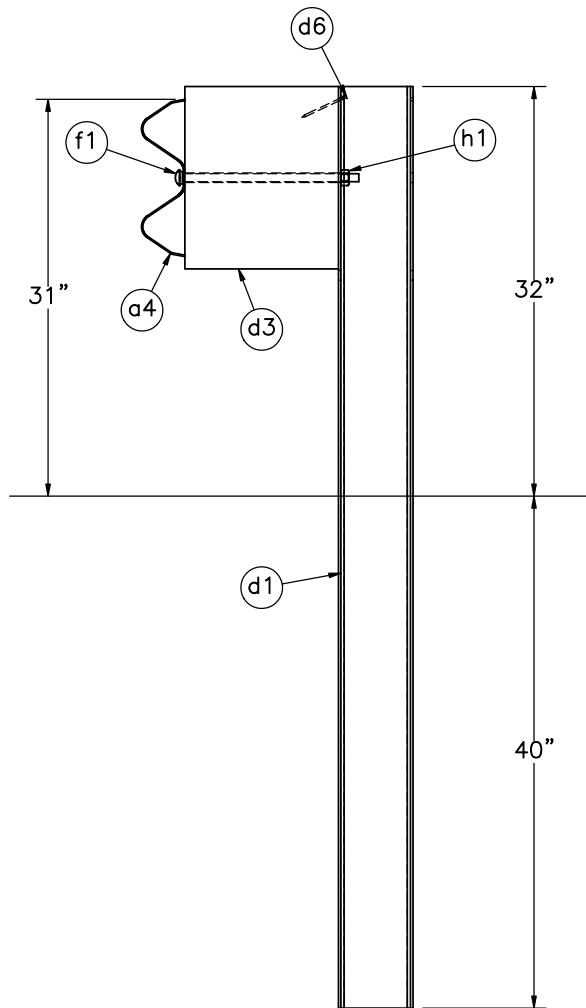
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SHEET:
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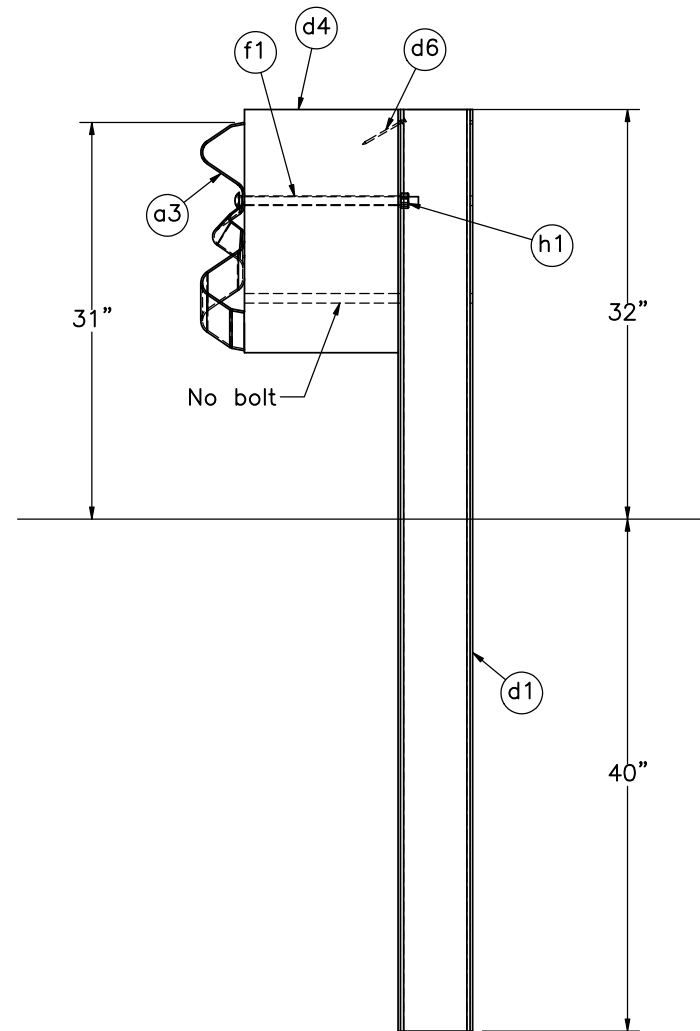
DATE:
5/24/2022

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SECTION D-D
Post nos. 3-9



SECTION E-E
Post no. 10



Midwest Roadside
Safety Facility

Flared AGT
Buttress
Test Nos. FLAGT-2
Post nos. 3-10 Details

DWG. NAME.
FLAGT-2_R7

SCALE: 1:15
UNITS: in.

SHEET:
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DATE:
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DRAWN BY:
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W/GHR
REV. BY:
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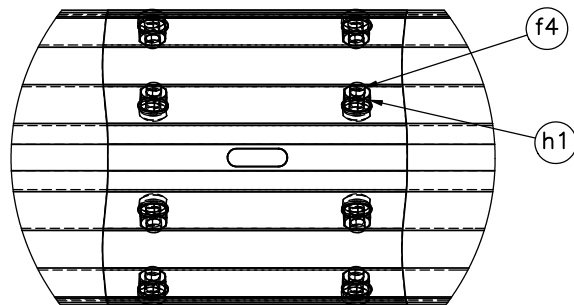
Note: (1) Nested W-Beam sections (Part a4) sandwich the W-Beam to Thrie-Beam Asymmetric Transition Section (Part a3) on the downstream end of the W-Beams to prevent snagging.



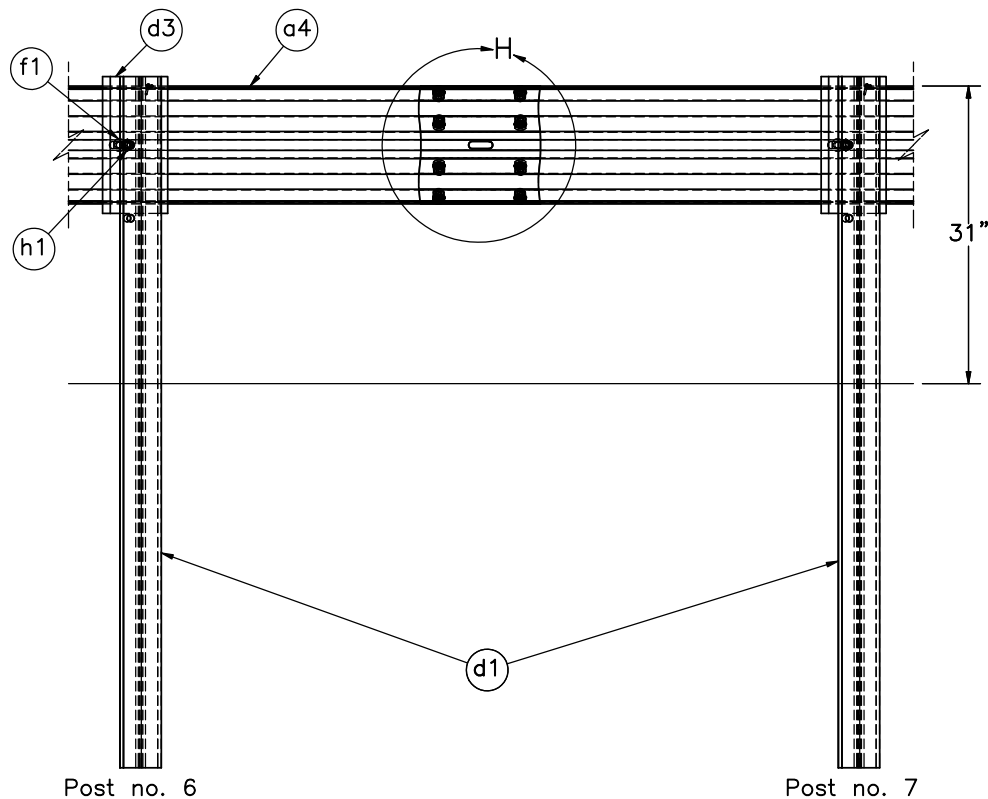
Post nos. 11-21 Details

SCALE: 1:16
UNITS: in.

REV. BY:	
RFB/KAL/S	
KR	



DETAIL H
SCALE 1:8



SPLICE DETAIL
BACKSIDE

- Note:
- (1) Guardrail bolts (part f1) on the upstream side of the web.
 - (2) Guardrail bolts (part f4) may be used in place of guardrail bolts (part f3) in nested W-beam splices if the nut can be fully threaded (dependent on thickness of stocked guardrail layers).
 - (3) Nested W-Beam sections (Part a4) sandwich the W-Beam to Thrie-Beam Asymmetric Transition Section (Part a3) on the downstream end of the W-Beams to prevent snagging.



Midwest Roadside
Safety Facility

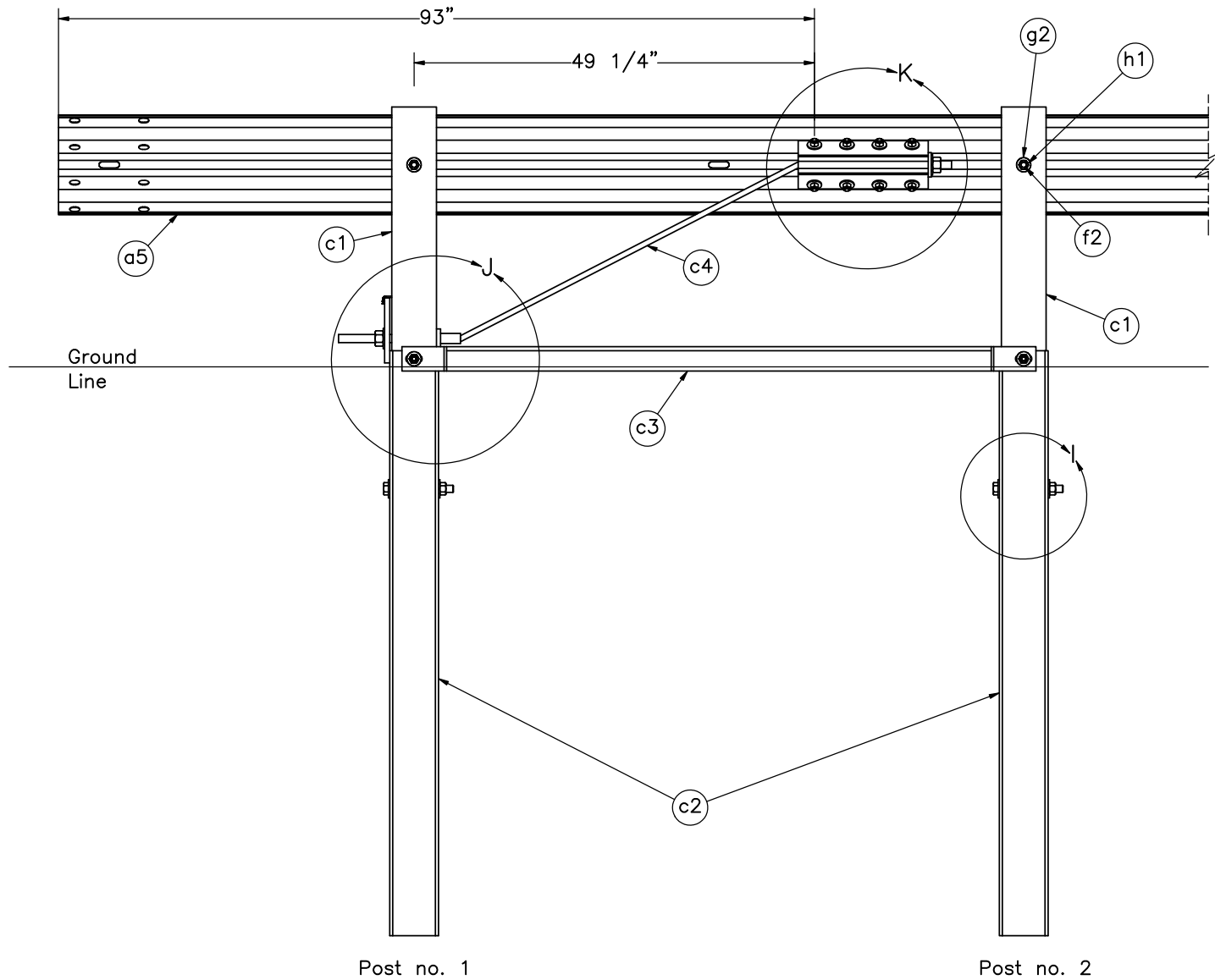
Flared AGT
Buttress
Test Nos. FLAGT-2

Splice Detail

DWG. NAME.
FLAGT-2_R7

SCALE: 1:20
UNITS: in.

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END SECTION DETAIL
BACKSIDE



Midwest Roadside
Safety Facility

Flared AGT
Buttress
Test Nos. FLAGT-2

End Section Detail

DWG. NAME.
FLAGT-2_R7

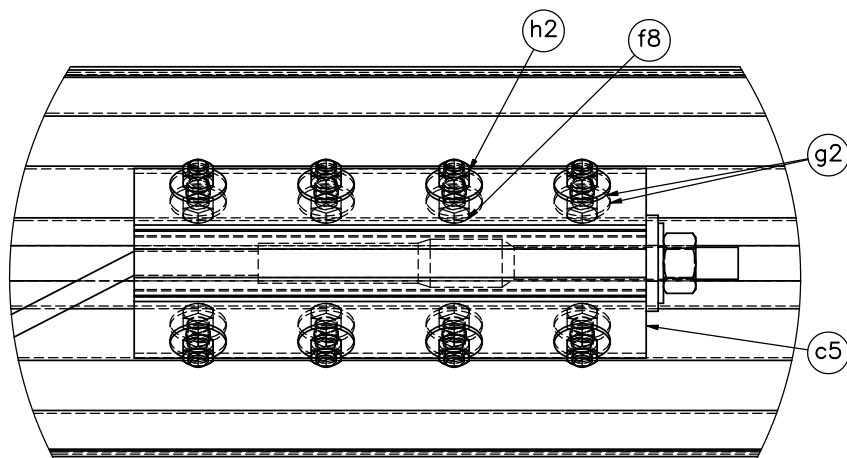
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SHEET:
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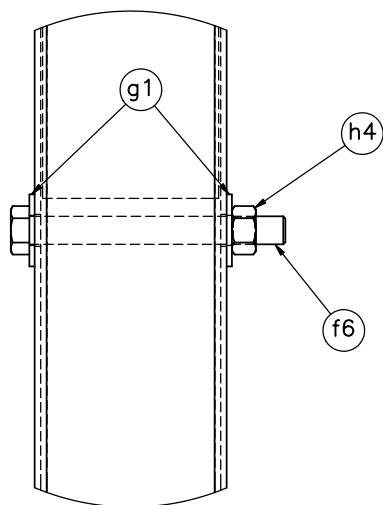
DATE:
5/24/2022

DRAWN BY:
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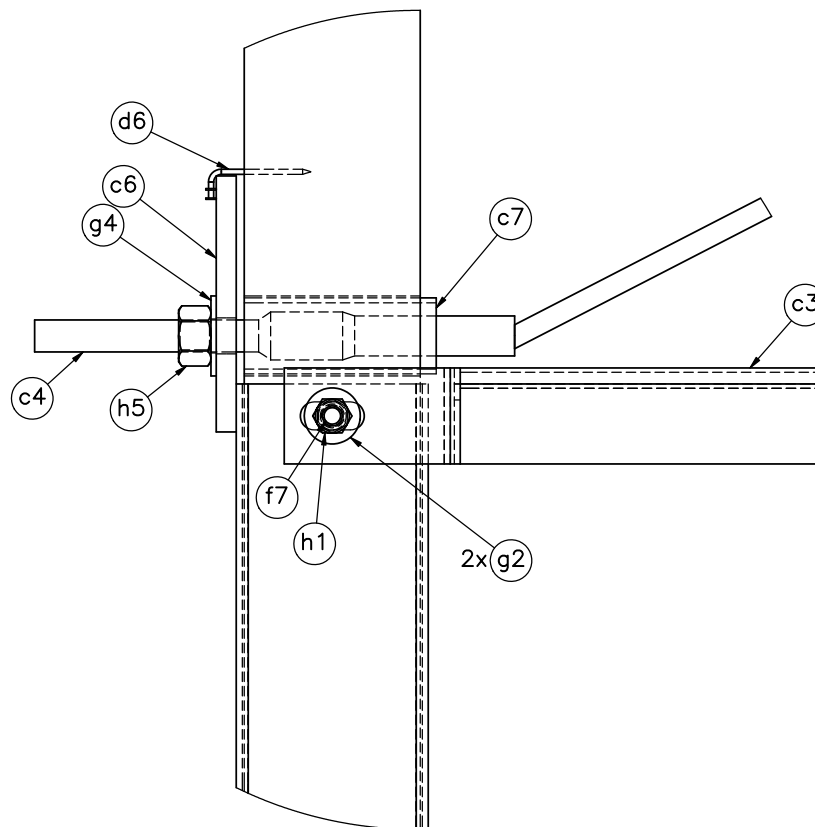
REV. BY:
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DETAIL K



DETAIL I



DETAIL J

- Note: (1) Additional washer (part g2) located on opposite side under the bolt (part f7).
 (2) Two nails (part d6) are used to hold the anchor bearing plate (part c6).



Midwest Roadside
Safety Facility

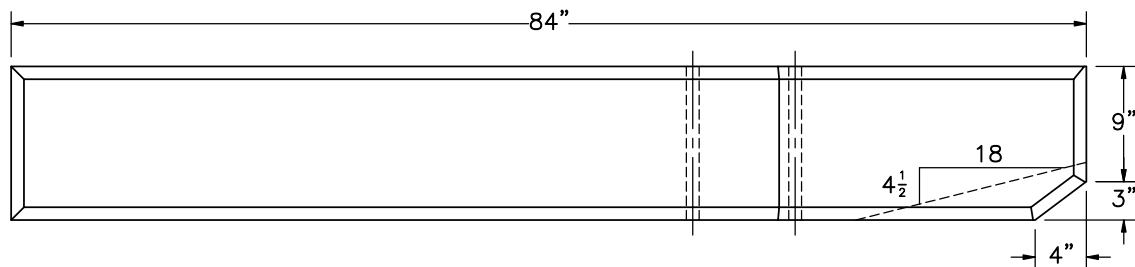
Flared AGT
Buttress
Test Nos. FLAGT-2

BCT Anchor Details

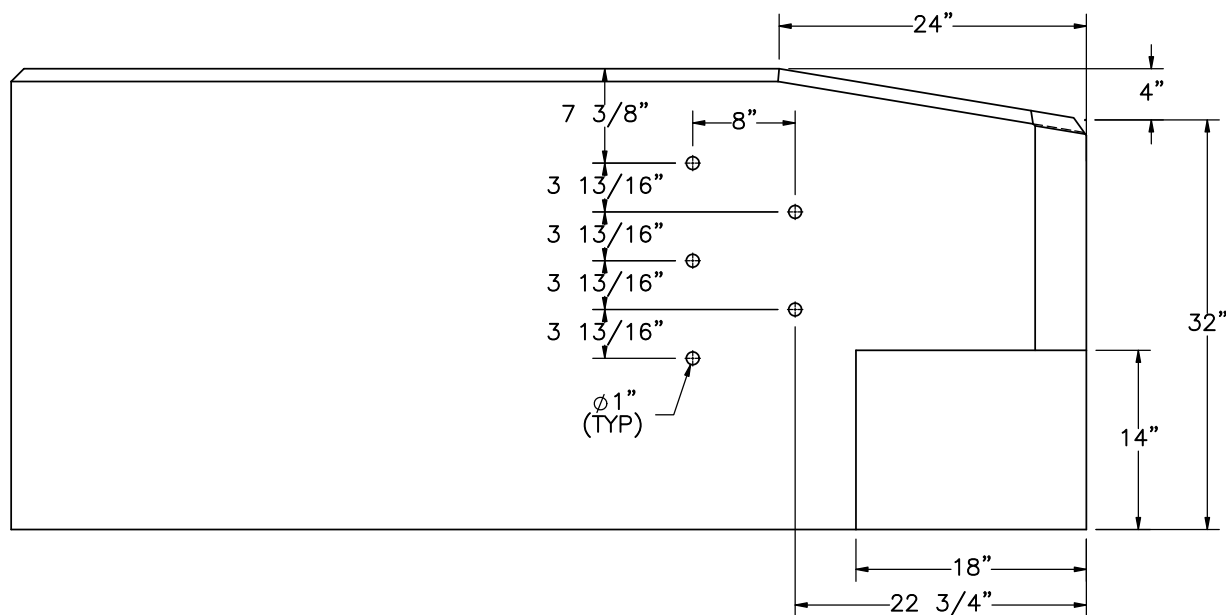
DWG. NAME.
FLAGT-2_R7

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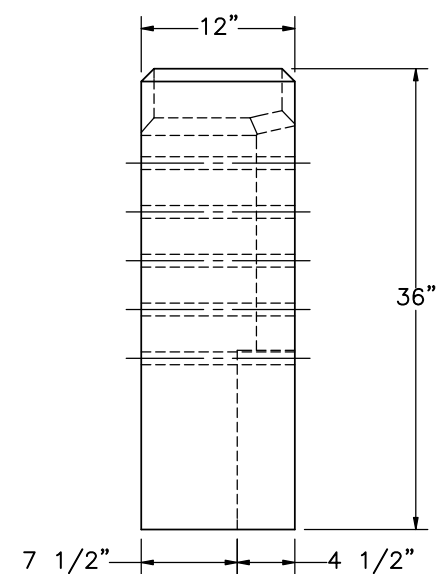
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PLAN VIEW



ELEVATION VIEW
Part b1



PROFILE VIEW

- Notes: (1) Lower setback has lateral flare of 1:4.
 (2) Five 1" diameter holes are required for placement of 7/8" diameter bolts.
 (3) All edges of the top of the buttress are chamfered 1".



Midwest Roadside
Safety Facility

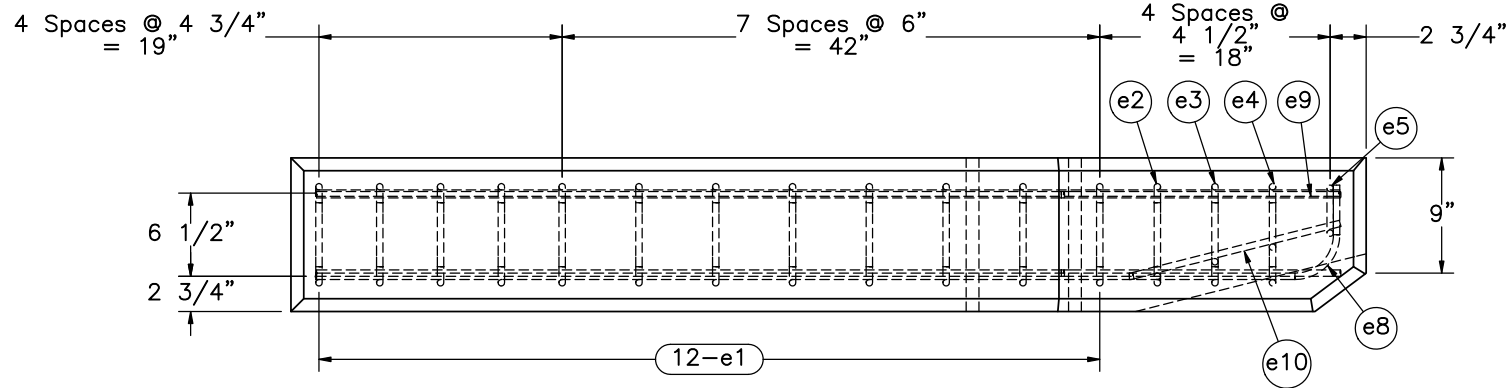
Flared AGT
Buttress
Test Nos. FLAGT-2

Buttress Details

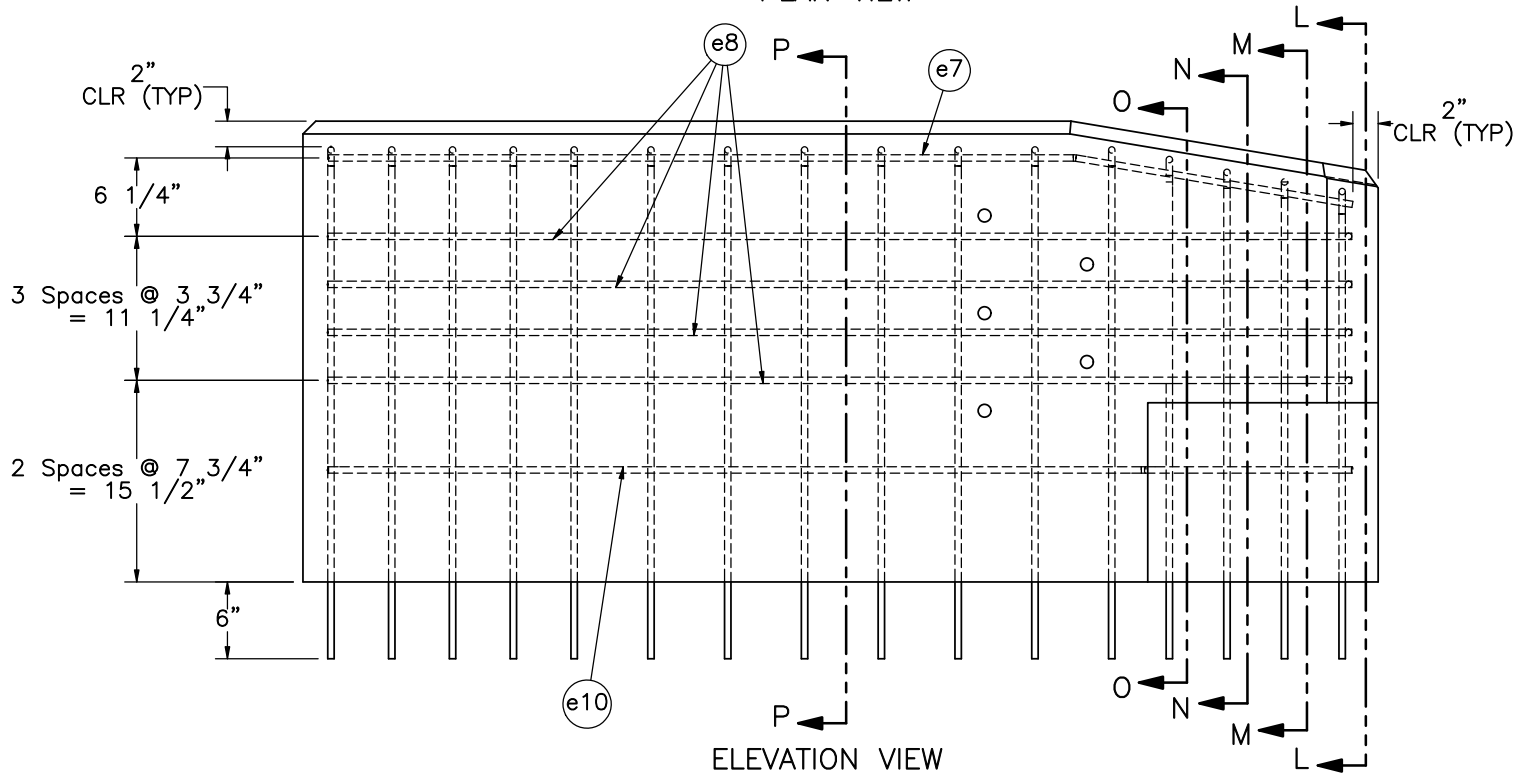
DWG. NAME.
FLAGT-2_R7

SCALE: 1:15
UNITS: in.

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PLAN VIEW



ELEVATION VIEW

- Note: (1) Vertical rebar embedded in tarmac with chemical epoxy adhesive with a minimum bond strength of 1,450 psi.
 (2) All edges of the top of the buttress are chamfered 1".



Midwest Roadside
Safety Facility

Flared AGT
Buttress
Test Nos. FLAGT-2

Rebar Detail

DWG. NAME.
FLAGT-2_R7

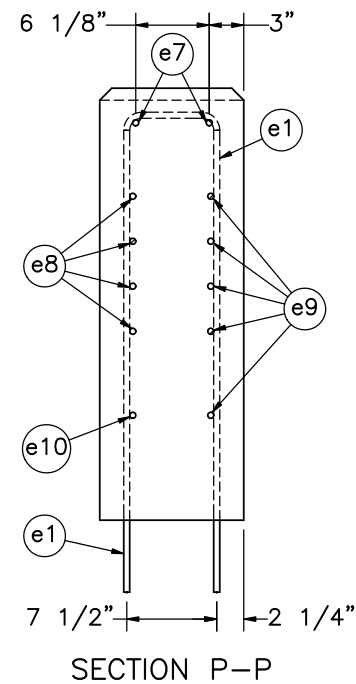
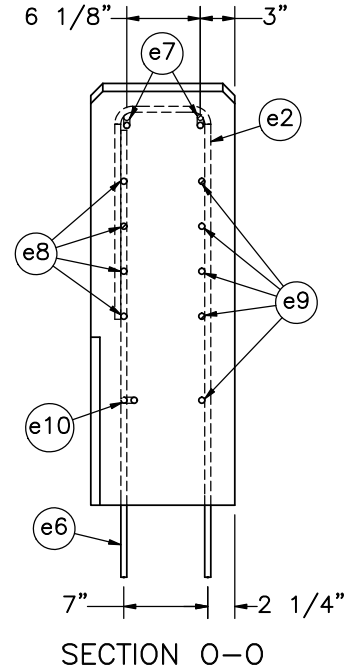
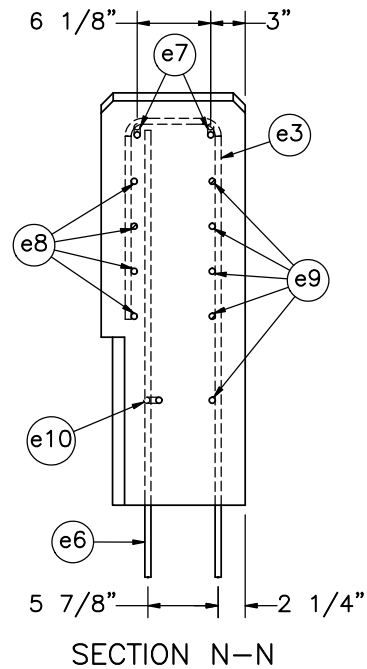
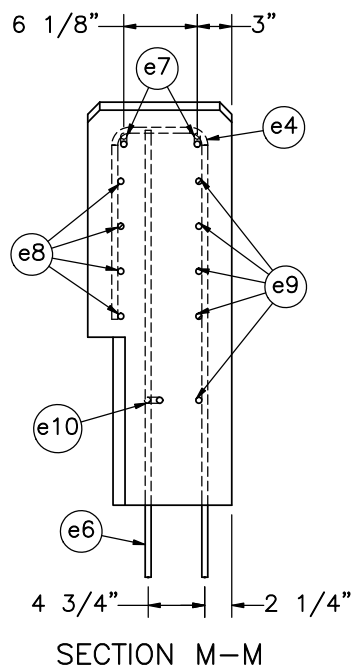
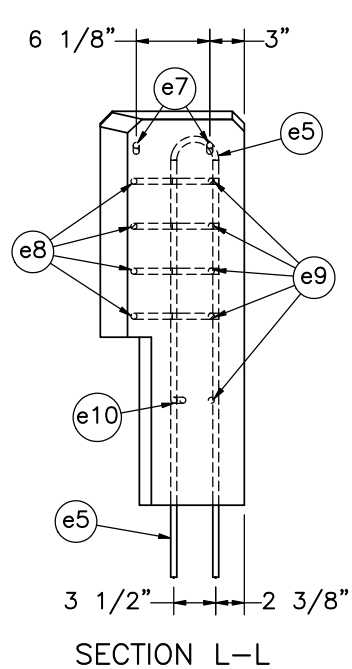
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UNITS: in.

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Note: (1) All stirrups have minimum 2" concrete clear cover.



Midwest Roadside
Safety Facility

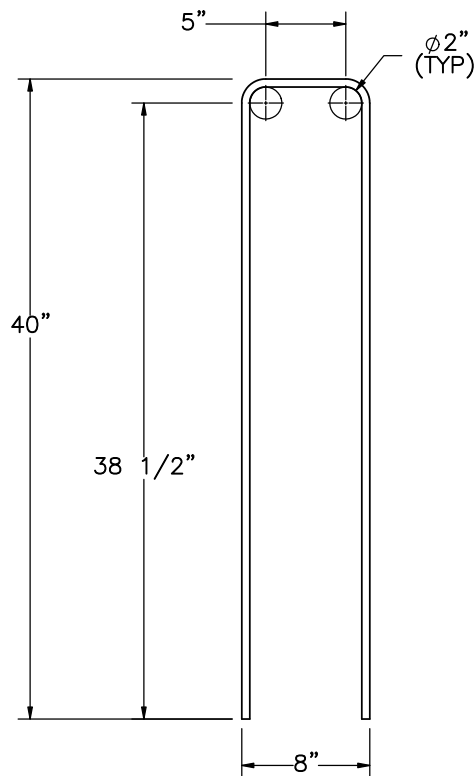
Flared AGT
Buttress
Test Nos. FLAGT-2

Rebar Detail Sections

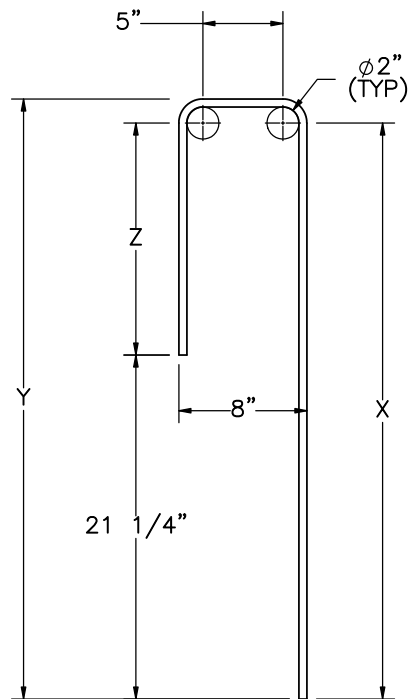
DWG. NAME.
FLAGT-2_R7

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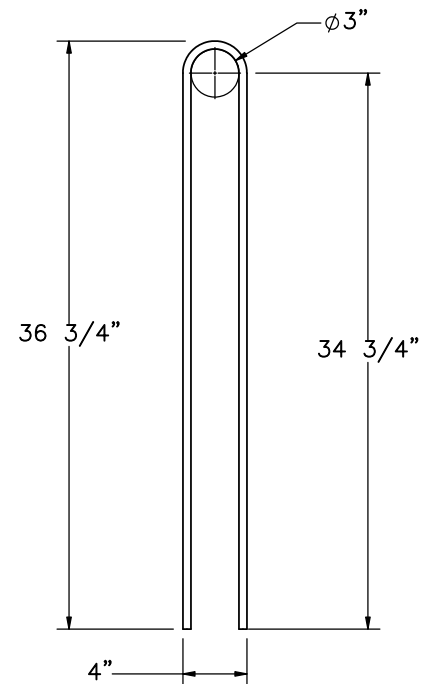
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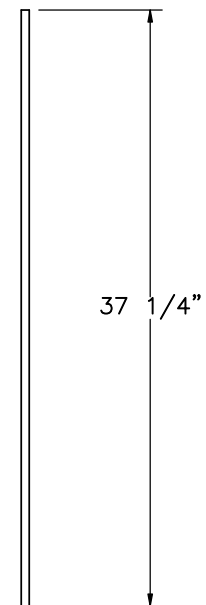
Bar e1



Bars e2, e3, e4



Bar e5



Bar e6

Bill of Bars						
Bar No.	QTY	Size	X	Y	Z	Unbent Length
e1	12	#4	38 1/2"	40"	—	86"
e2	1	#4	37 1/2"	39"	16 1/4"	62 3/4"
e3	1	#4	36 1/2"	38"	15 1/4"	60 1/2"
e4	1	#4	35 3/4"	37 1/4"	14 1/2"	59 1/4"
e5	1	#4	34 3/4"	36 3/4"	—	74 3/4"
e6	3	#4	—	—	—	37 1/4"

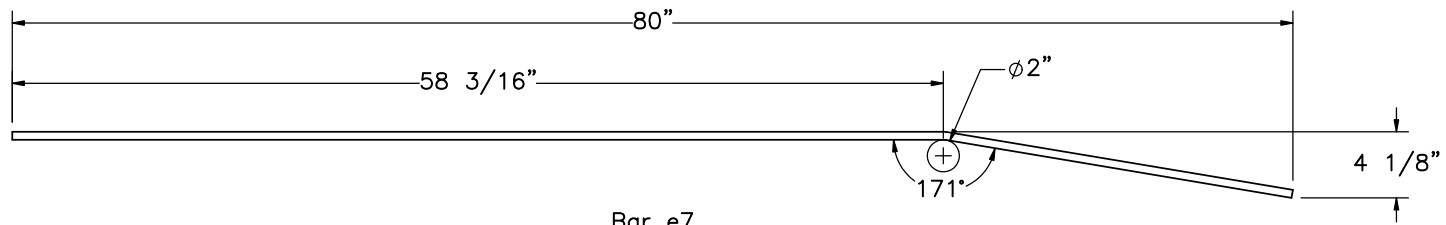


Flared AGT
Buttress
Test Nos. FLAGT-2
Vertical Bar Details

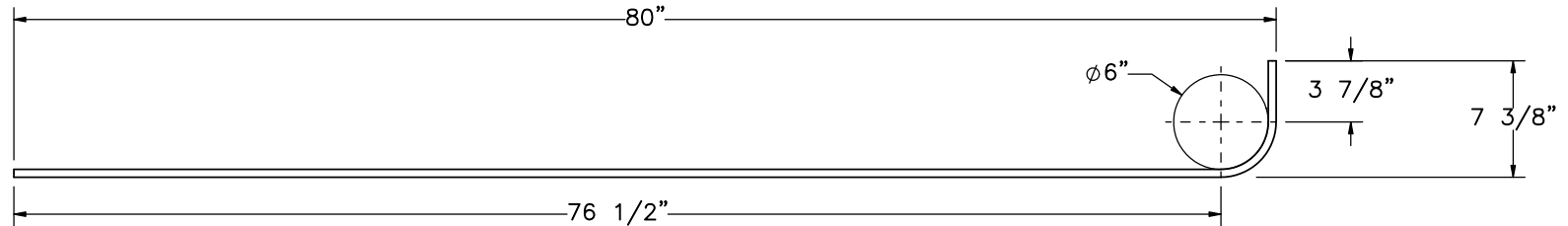
DWG. NAME.
FLAGT-2_R7

SCALE: 1:12
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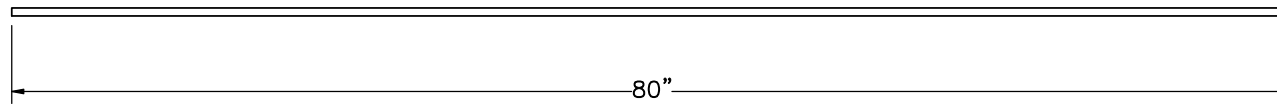
SHEET:
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DATE:
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W/GHR
REV. BY:
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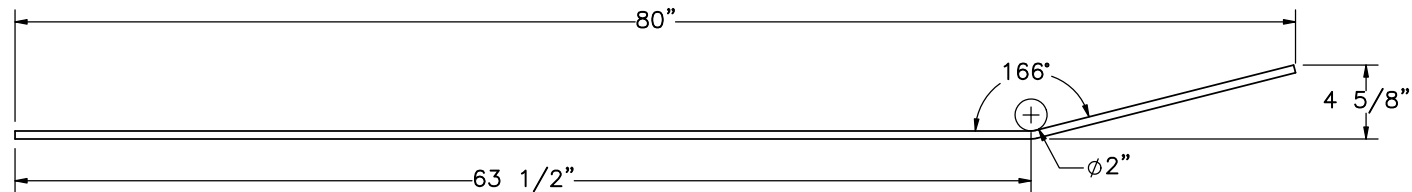
Bar e7



Bar e8



Bar e9



Bar e10

Bill of Bars

Bar No.	Qty.	Size	Unbent Length
e7	2	#4	80 1/4"
e8	4	#4	85 1/2"
e9	5	#4	80"
e10	1	#4	80 1/2"



Midwest Roadside
Safety Facility

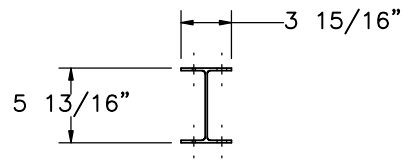
Flared AGT
Buttress
Test Nos. FLAGT-2

Horizontal Rebar Details

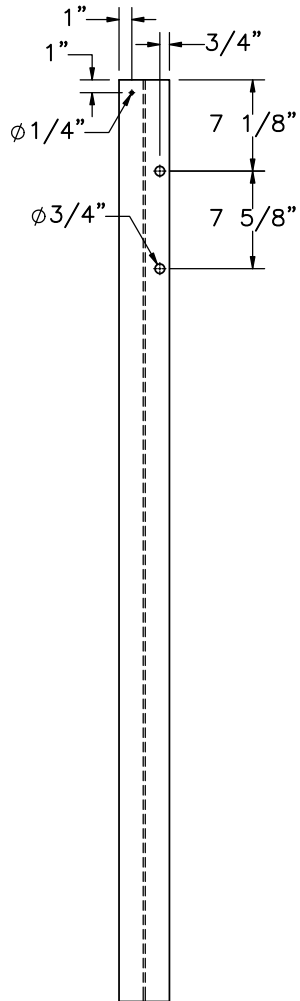
DWG. NAME.
FLAGT-2_R7

SCALE: 1:12
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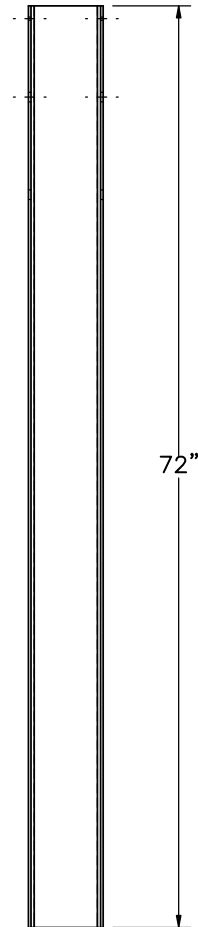
SHEET:
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W/GHR
REV. BY:
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KR



PLAN VIEW

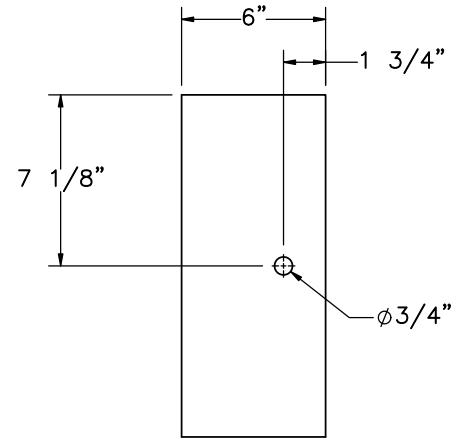


ELEVATION VIEW

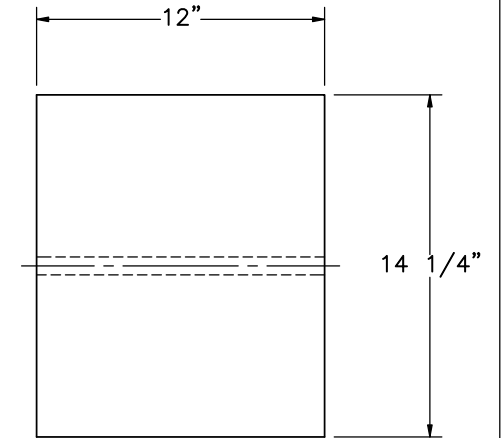


PROFILE VIEW

Part d1

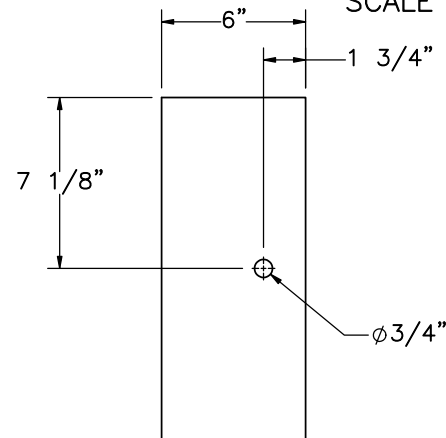


ELEVATION VIEW

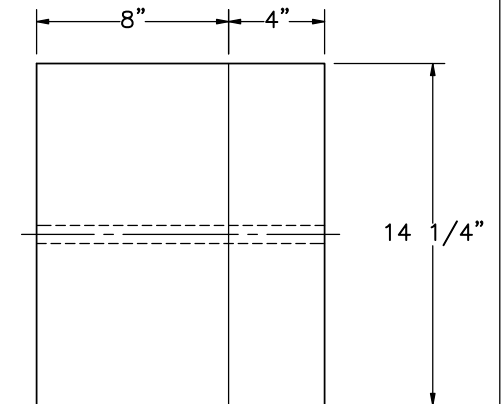


PROFILE VIEW

Part d3
SCALE 1:8



ELEVATION VIEW



PROFILE VIEW

Alternate Blockout Option
6"x4"x14 1/4" Blockout with 6"x8"x14 1/4" Blockout
SCALE 1:8



Midwest Roadside
Safety Facility

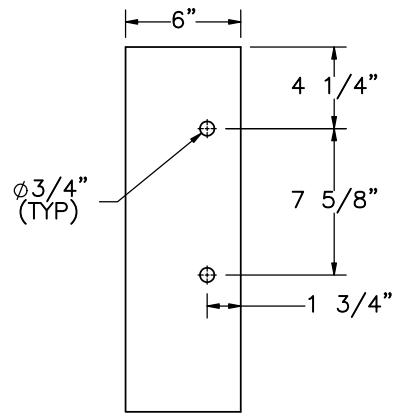
Flared AGT
Buttress
Test Nos. FLAGT-2

Post Nos. 3-9 Components

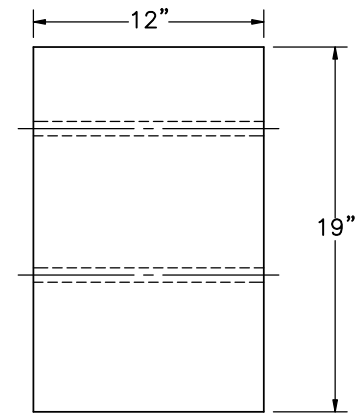
DWG. NAME.
FLAGT-2_R7

SCALE: 1:15
UNITS: in.

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W/GHR
REV. BY:
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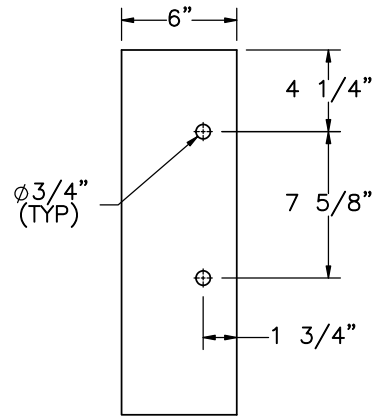


ELEVATION VIEW

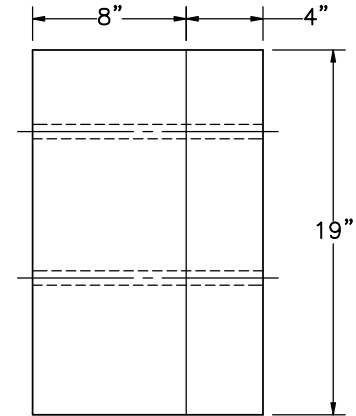


PROFILE VIEW

Part d4



ELEVATION VIEW



PROFILE VIEW

Alternate Blockout Option
6"x4"x19" Blockout with 6"x8"x19" Blockout



Midwest Roadside
Safety Facility

Flared AGT
Buttress
Test Nos. FLAGT-2

Post Nos. 10-15 Blockouts

DWG. NAME.
FLAGT-2_R7

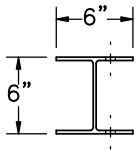
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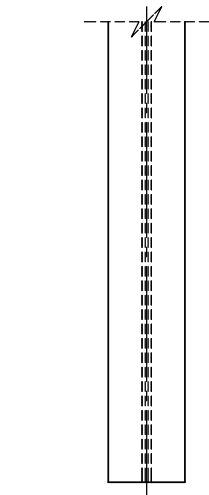
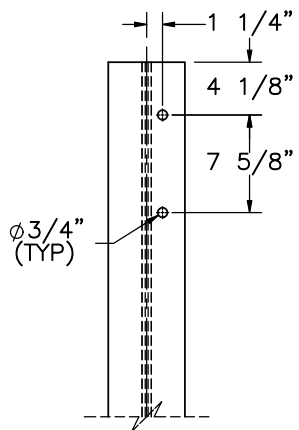
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5/24/2022

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LJF/JRF/SB
W/GHR

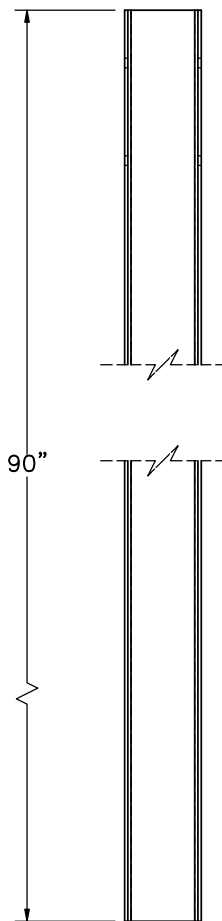
REV. BY:
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PLAN VIEW

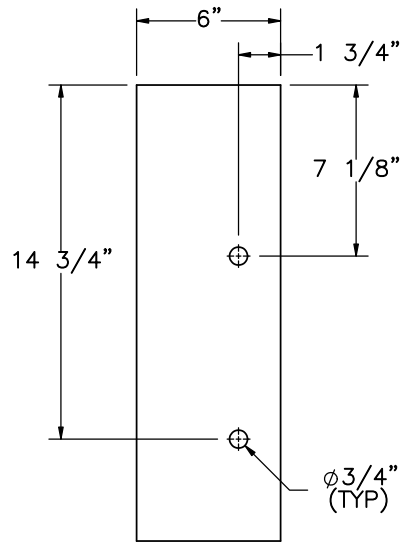


ELEVATION VIEW

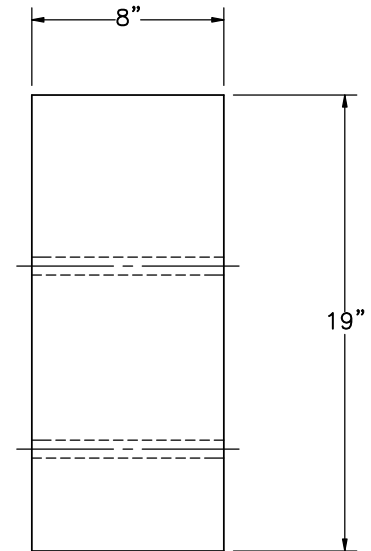


PROFILE VIEW

Part d2



ELEVATION VIEW



PROFILE VIEW

Part d5



Midwest Roadside
Safety Facility

Flared AGT
Buttress
Test Nos. FLAGT-2

Post Nos. 16-20 Components

DWG. NAME.
FLAGT-2_R7

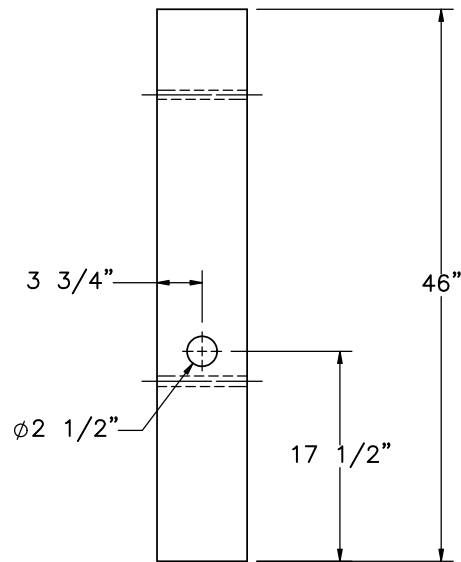
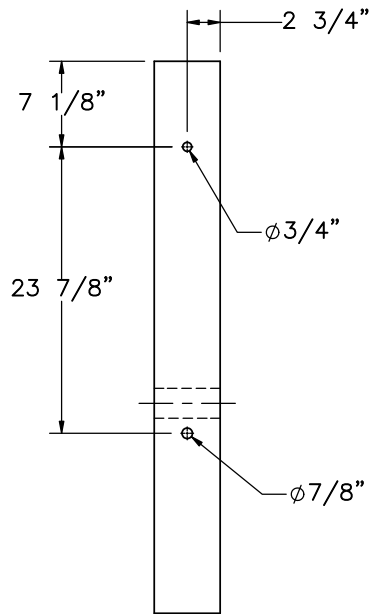
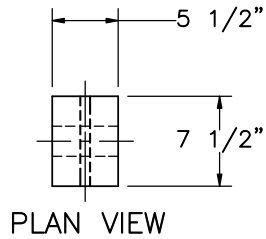
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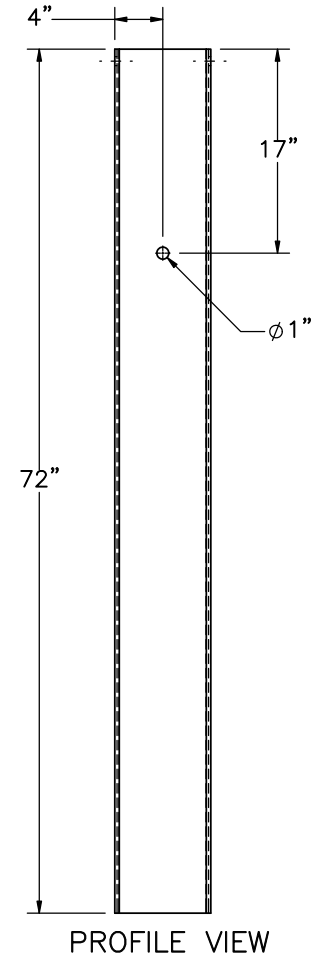
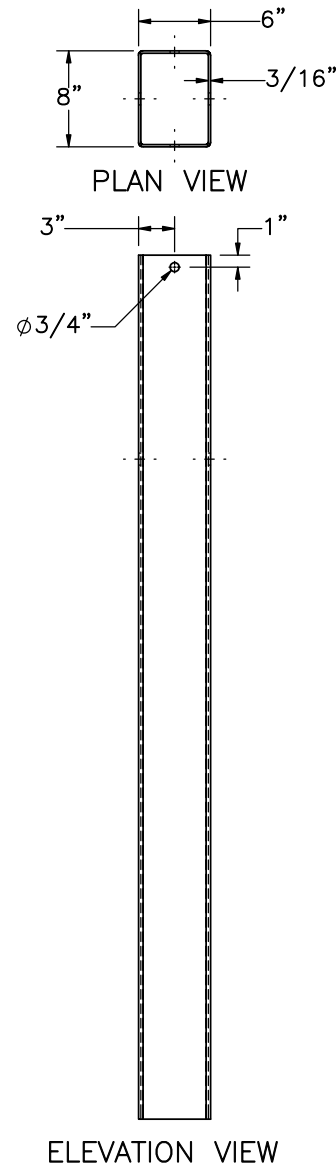
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Part c1



Part c2



Midwest Roadside
Safety Facility

Flared AGT
Buttress
Test Nos. FLAGT-2

BCT Timber Post and
Foundation Tube Details

DWG. NAME.
FLAGT-2_R7

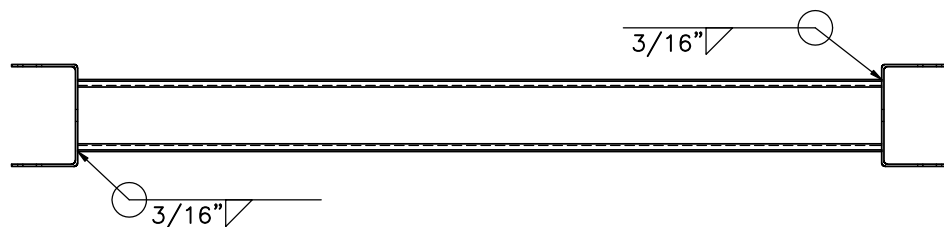
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SHEET:
18 of 28

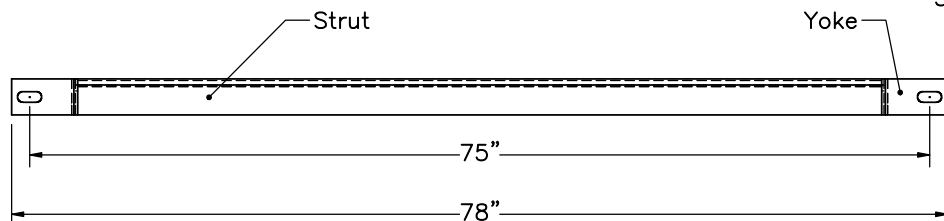
DATE:
5/24/2022

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LJF/JRF/SB
W/GHR

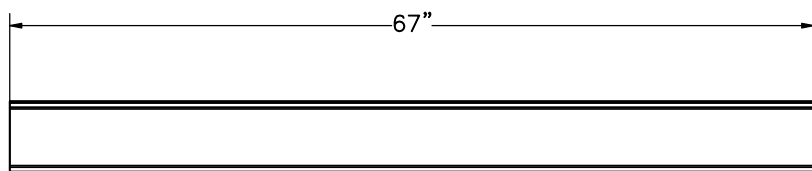
REV. BY:
RFB/KAL/S
KR



PLAN VIEW

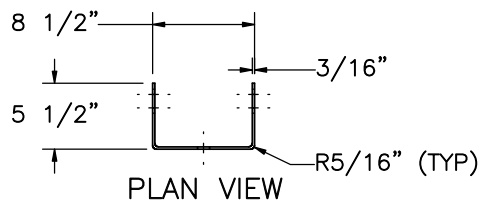


ELEVATION VIEW
Part c3

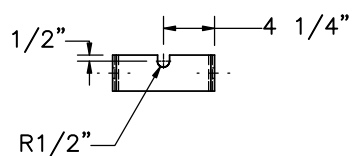


ELEVATION VIEW

6"x3" 10 Gauge Strut

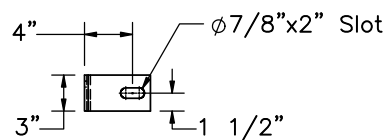


PLAN VIEW

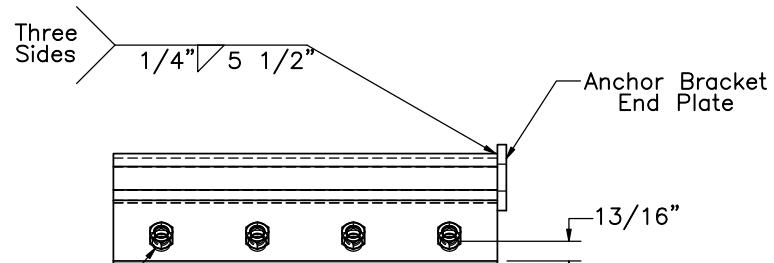


ELEVATION VIEW

Yoke

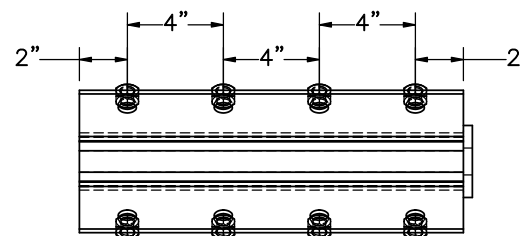


PROFILE VIEW



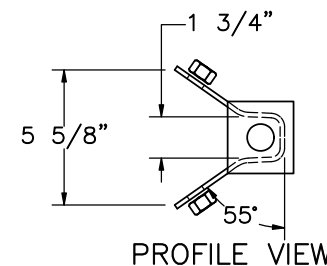
PLAN VIEW

3/4" (TYP)

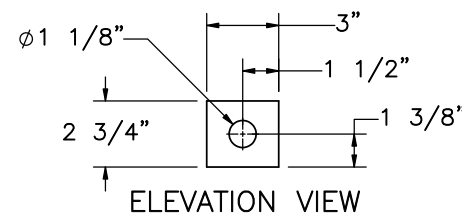


ELEVATION VIEW

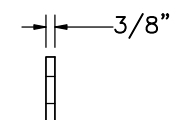
Part c5
SCALE 1:8



PROFILE VIEW



ELEVATION VIEW



PROFILE VIEW

Anchor Bracket End Plate
SCALE 1:8



Midwest Roadside
Safety Facility

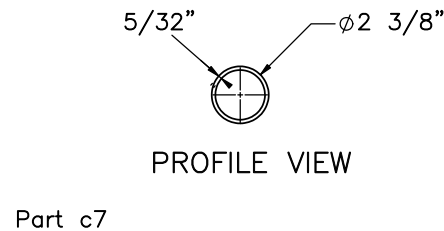
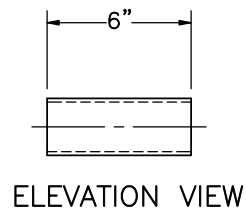
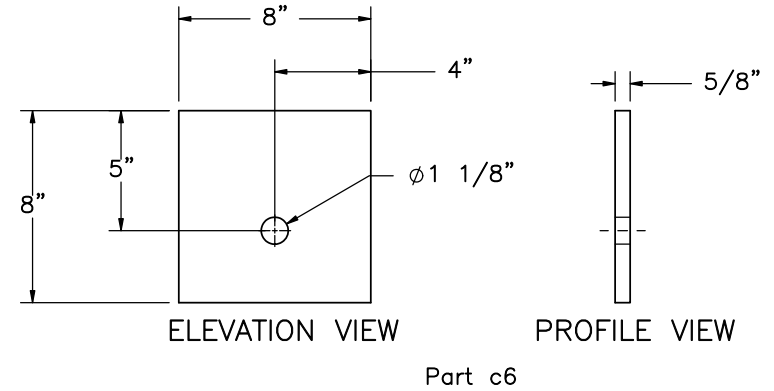
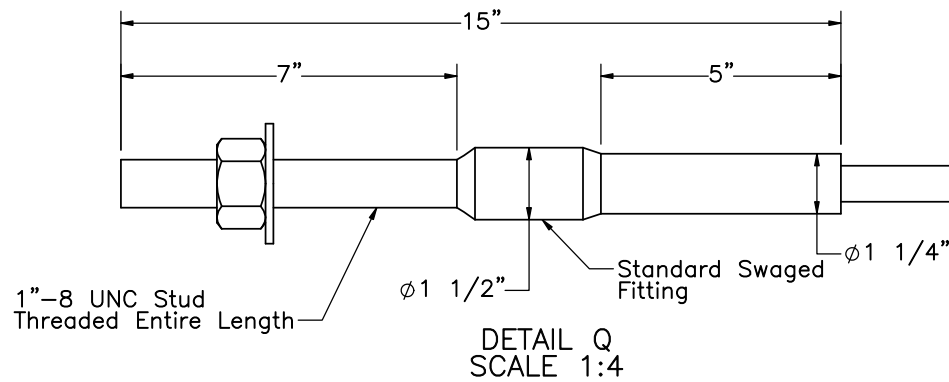
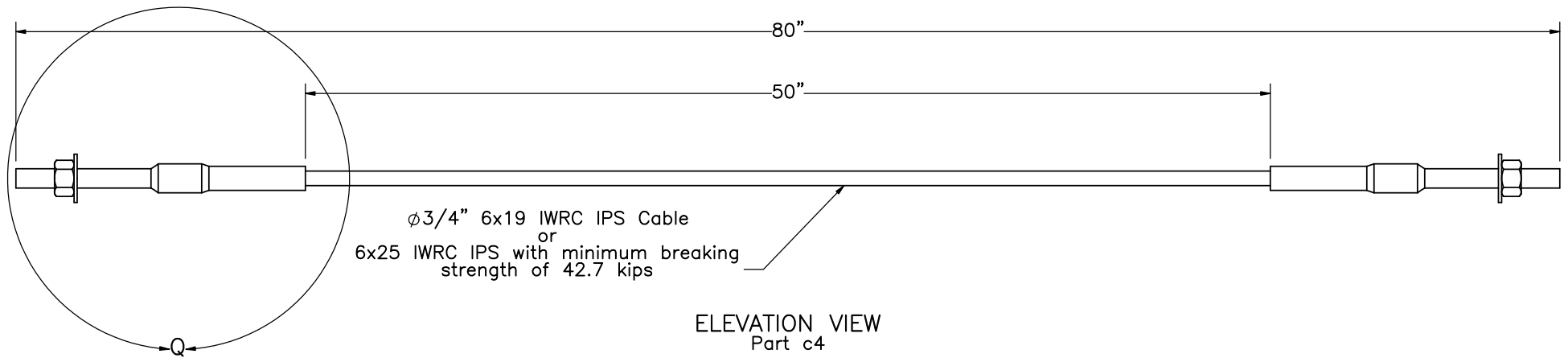
Flared AGT
Buttress
Test Nos. FLAGT-2

Ground Strut Details

DWG. NAME.
FLAGT-2_R7

SCALE: 1:16
UNITS: in.

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DRAWN BY:
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KR



Midwest Roadside
Safety Facility

Flared AGT
Buttress
Test Nos. FLAGT-2

BCT Anchor Cable

DWG. NAME.
FLAGT-2_R7

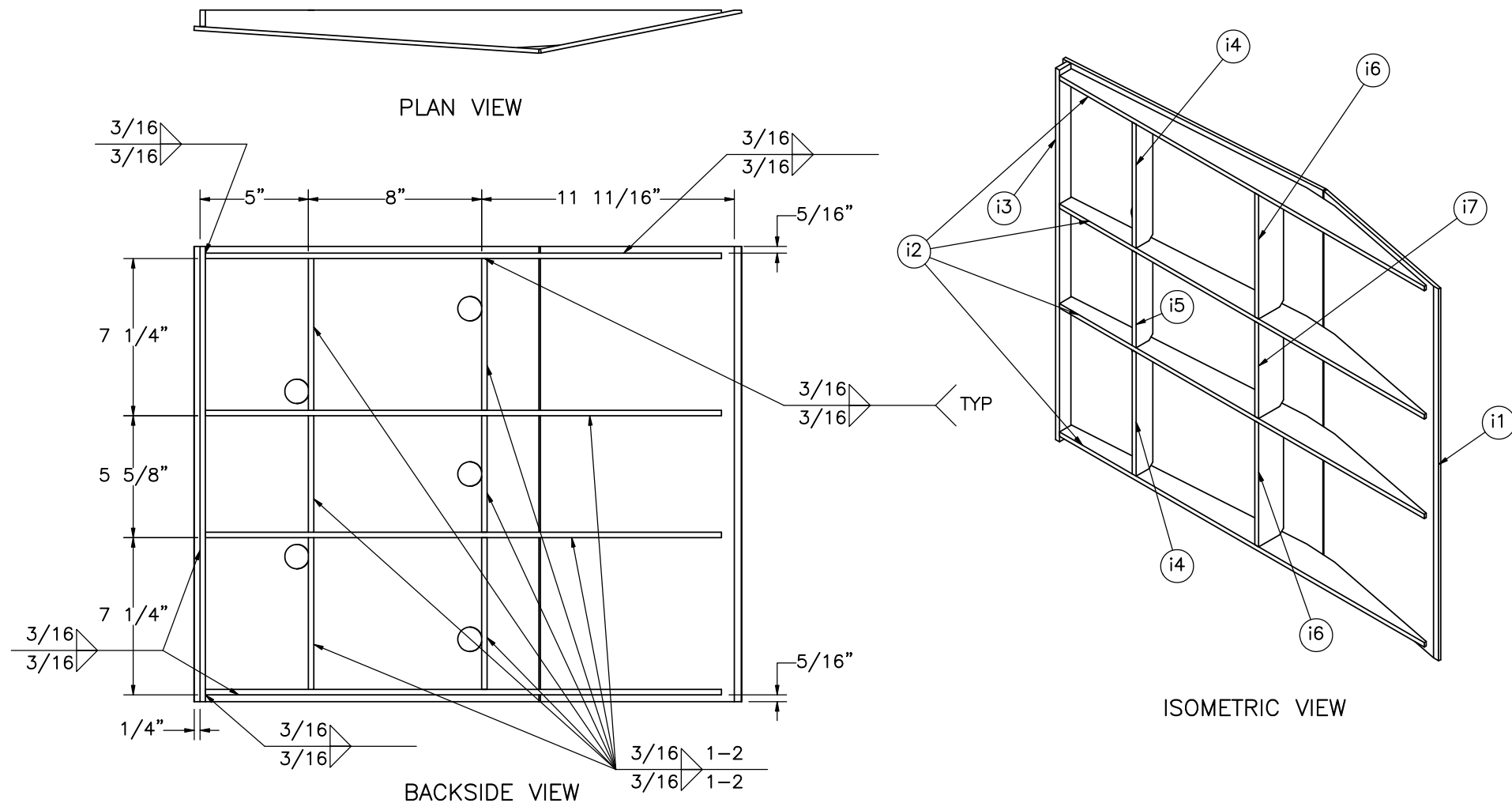
SCALE: 1:8
UNITS: in.

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DATE:
5/24/2022

DRAWN BY:
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W/GHR

REV. BY:
RFB/KAL/S
KR



Item No.	QTY.	Description	Material Specification	Treatment Specification
-	1	AGT Connector Assembly	ASTM A36	ASTM A123
i1	1	AGT Connector Face Plate	ASTM A36	See Assembly
i2	4	Horizontal Gusset	ASTM A36	See Assembly
i3	1	Vertical Gusset 1	ASTM A36	See Assembly
i4	2	Vertical Gusset 2	ASTM A36	See Assembly
i5	1	Veritcal Gusset 3	ASTM A36	See Assembly
i6	2	Vertical Gusset 4	ASTM A36	See Assembly
i7	1	Vertical Gusset 5	ASTM A36	See Assembly



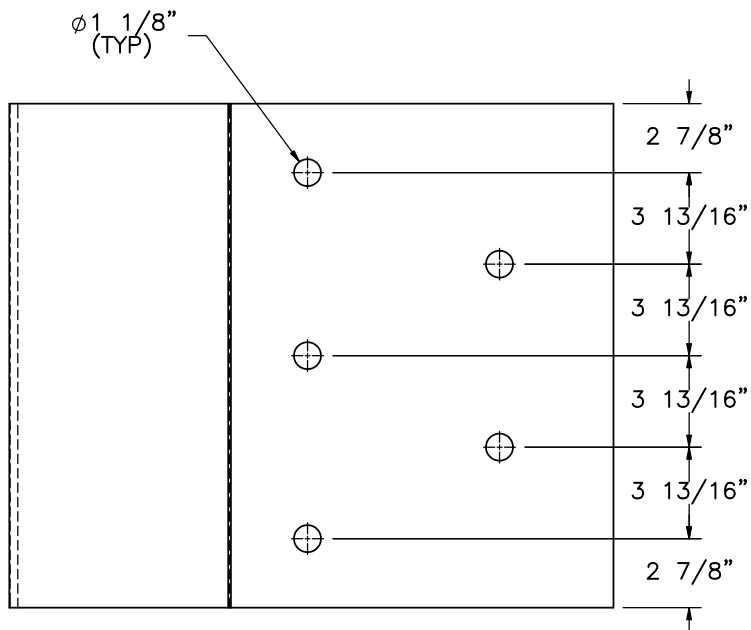
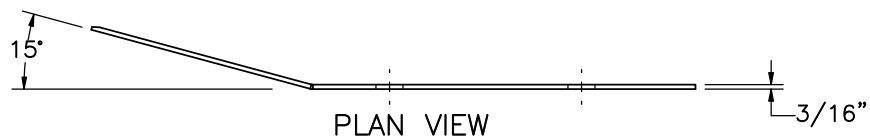
Midwest Roadside
Safety Facility

Flared AGT
Buttress
Test Nos. FLAGT-2
AGT Connector Assembly

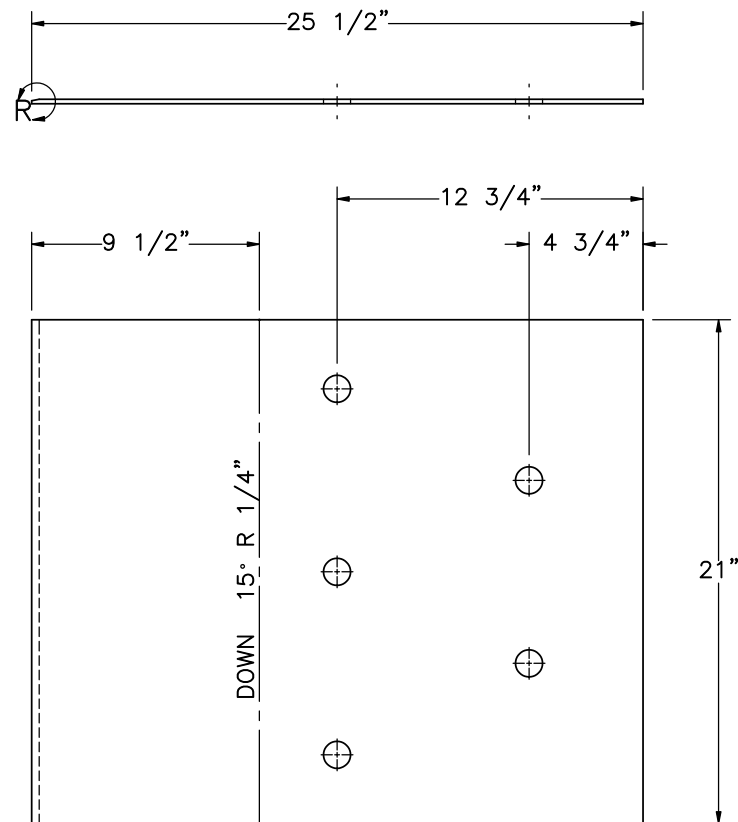
DWG. NAME.
FLAGT-2_R7

SCALE: 1:7
UNITS: in.

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DATE:
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DRAWN BY:
LJF/JRF/SB
W/GHR
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KR

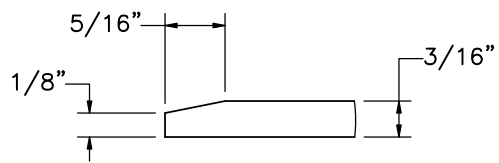


ELEVATION VIEW



FLAT PATTERN

Part i1



DETAIL R
SCALE 1 : 1



Midwest Roadside
Safety Facility

Flared AGT
Buttress
Test Nos. FLAGT-2

AGT Connector Face Plate
Details

DWG. NAME.
FLAGT-2_R7

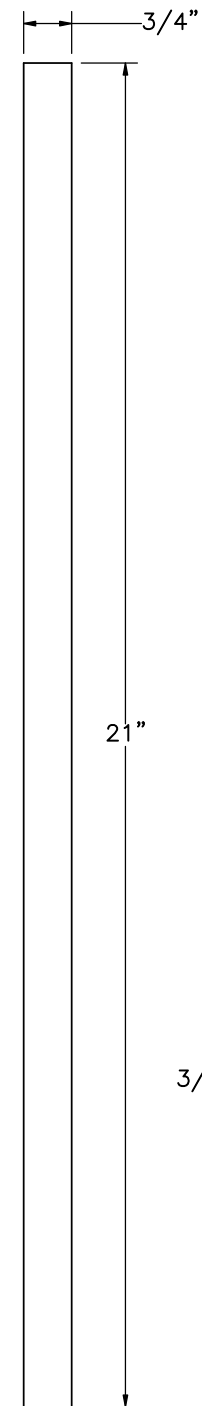
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UNITS: in.

SHEET:
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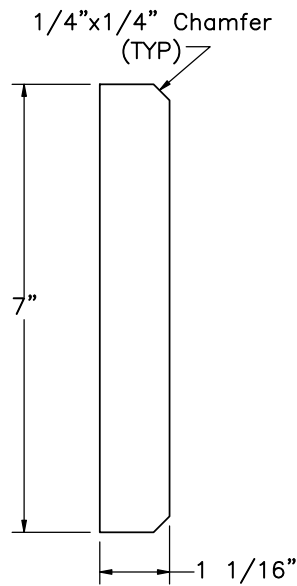
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5/24/2022

DRAWN BY:
LJF/JRF/SB
W/GHR

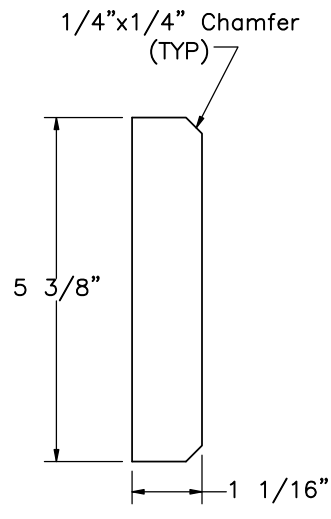
REV. BY:
RFB/KAL/S
KR



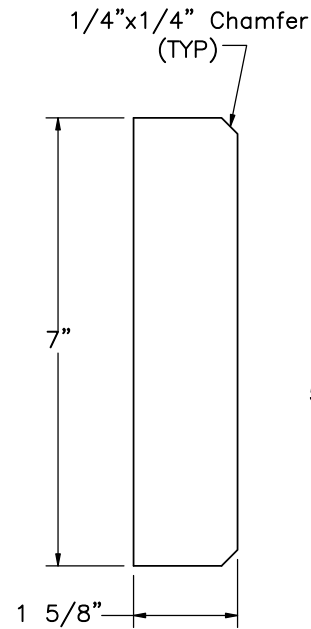
Part i3



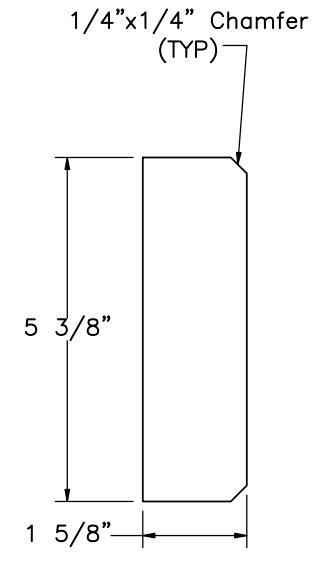
Part i4



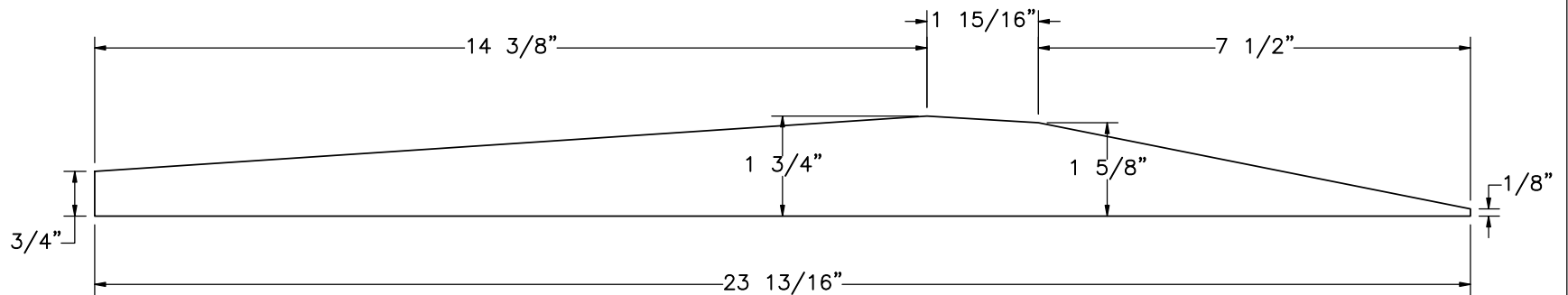
Part i5



Part i6



Part i7



Part i2

Note: (1) All parts on this sheet (i2-i7) are 1/4" thick.



Midwest Roadside
Safety Facility

Flared AGT
Buttress
Test Nos. FLAGT-2

AGT Connector Assembly
Components

DWG. NAME:
FLAGT-2_R7

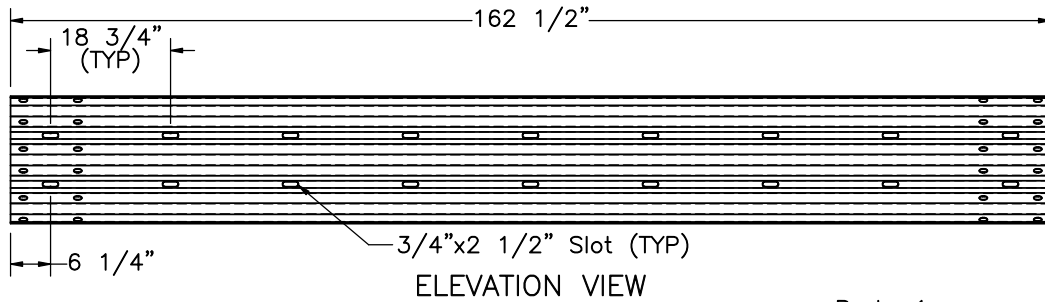
SCALE: 1:3
UNITS: in.

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DATE:
5/24/2022

DRAWN BY:
LJF/JRF/SB
W/GHR

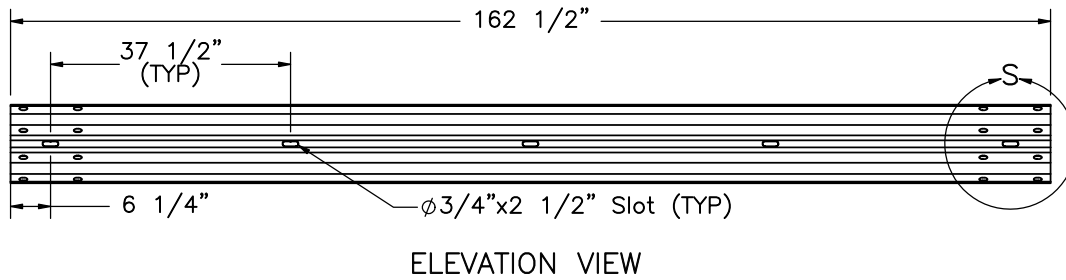
REV. BY:
RFB/KAL/S
KR



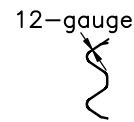
Part a1



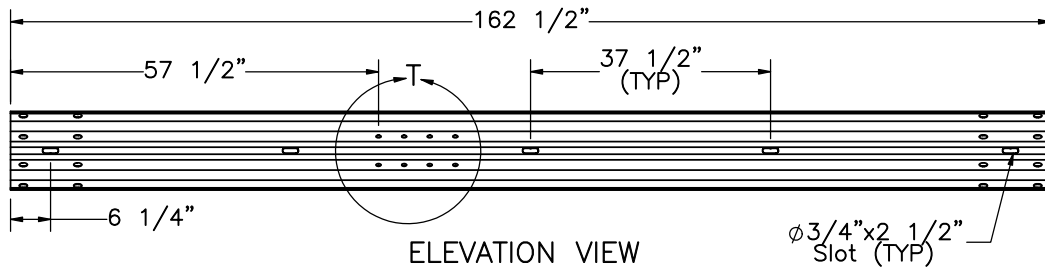
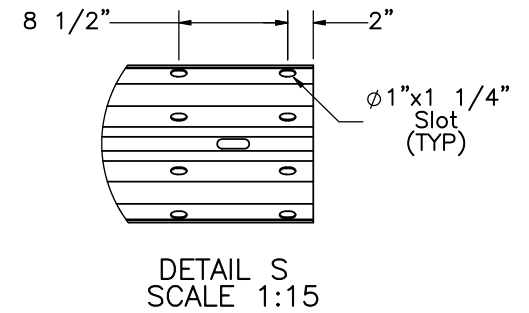
PROFILE VIEW



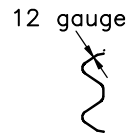
Part a4



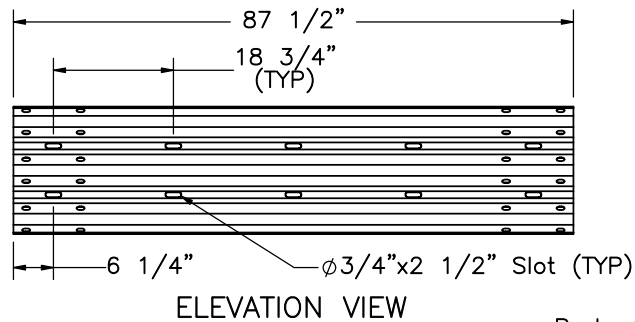
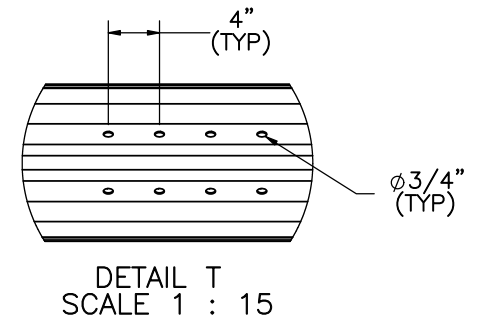
PROFILE VIEW



Part a5



PROFILE VIEW



Part a2



PROFILE VIEW



Midwest Roadside
Safety Facility

Flared AGT
Buttress
Test Nos. FLAGT-2

Guardrail Section Details

DWG. NAME.
FLAGT-2_R7

SCALE: 1:30
UNITS: in.

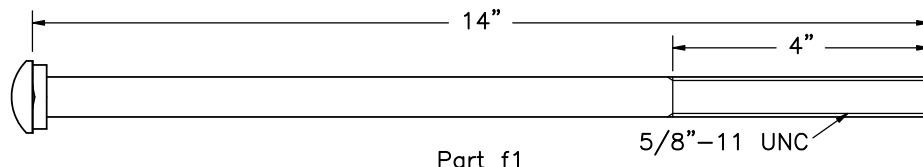
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DATE:
5/24/2022

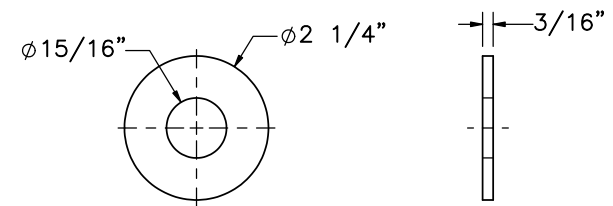
DRAWN BY:
LJP/JRF/SB
W/GHR

REV. BY:
RFB/KAL/S
KR

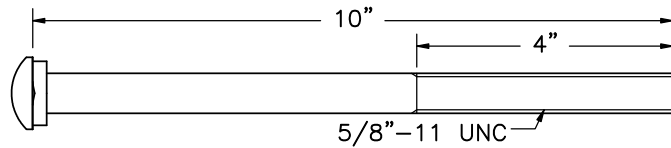
	Flared AGT Buttress Test Nos. FLAGT-2		SHEET: 25 of 28
	Rail Transition and Component Details		DATE: 5/24/2022
Midwest Roadside Safety Facility	DWG. NAME: FLAGT-2_R7	SCALE: 1:15 UNITS: in.	DRAWN BY: LJP/JRF/SB W/GHR REV. BY: RFB/KAL/S KR



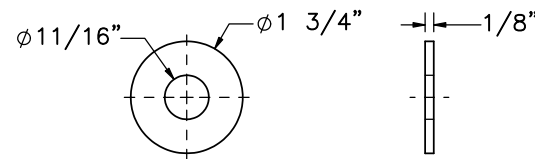
Part f1



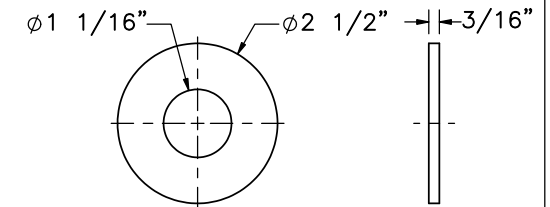
Part g1



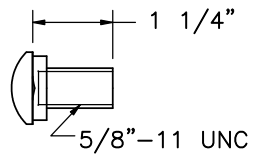
Part f2



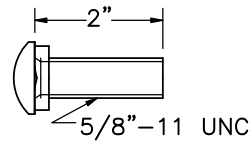
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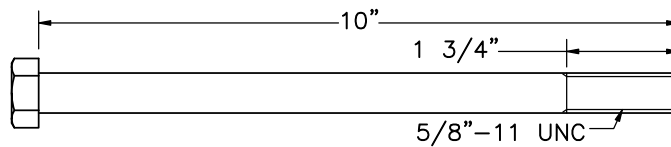
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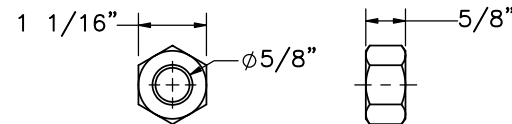
Part f4



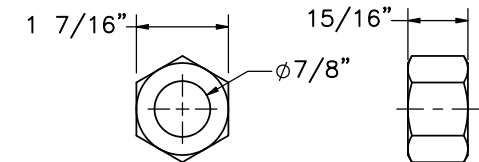
Part f3



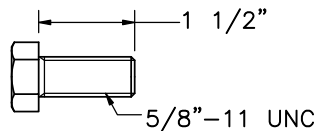
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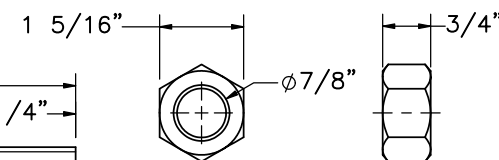
Part h1



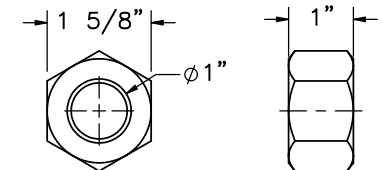
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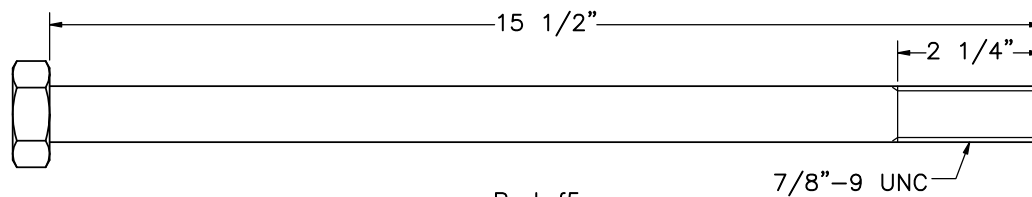
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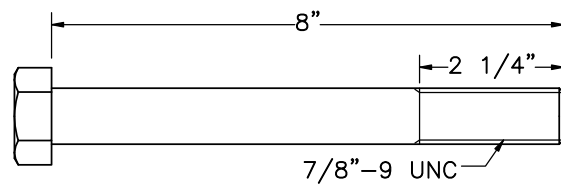
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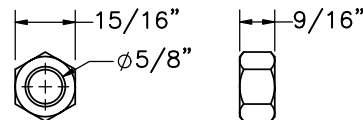
Part h5



Part f5



Part f6



Part h2



Midwest Roadside
Safety Facility

Flared AGT
Buttress
Test Nos. FLAGT-2

Hardware

DWG. NAME.
FLAGT-2_R7

SCALE: 1:3
UNITS: in.

SHEET:
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DATE:
5/24/2022

DRAWN BY:
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W/GHR

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RFB/KAL/S
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Item No.	QTY.	Description	Material Specification	Treatment Specification	Hardware Guide
a1	2	12'-6" 12-gauge Thrie Beam Section	AASHTO M180	ASTM A123 or A653	RTM08a
a2	1	6'-3" 12-gauge Thrie Beam Section	AASHTO M180	ASTM A123 or A653	RTM19a
a3	1	6'-3" 10-gauge W-Beam to Thrie-Beam Asymmetric Transition Section	AASHTO M180	ASTM A123 or A653	RWT02
a4	4	12'-6" 12-gauge W-Beam MGS Section	AASHTO M180	ASTM A123 or A653	RWM04a
a5	1	12'-6" 12-gauge W-Beam MGS End Section	AASHTO M180	ASTM A123 or A653	RWM14a
a6	1	10-gauge Thrie Beam Terminal Connector	AASHTO M180 Gr. 50 Min. yield strength = 50 ksi Min. ultimate strength = 70 ksi	ASTM A123 or A653	RTE01b
b1	1	Concrete – 21.9 cubic ft	Min. f'c = 4,000 psi	–	–
c1	2	BCT Timber Post – MGS Height	SYP Grade No. 1 or better (No knots +/- 18" from ground on tension face)	–	PDF01
c2	2	72" Long Foundation Tube	ASTM A500 Gr. B	*ASTM A123	PTE06
c3	1	Ground Strut Assembly	ASTM A36	*ASTM A123	–
c4	1	BCT Cable Anchor Assembly	–	–	FCA01
c5	1	Anchor Bracket Assembly	ASTM A36	*ASTM A123	FPA01
c6	1	8"x8"x5/8" Anchor Bearing Plate	ASTM A36	*ASTM A123	FPB01
c7	1	2 3/8" O.D. x 6" Long BCT Post Sleeve	ASTM A53 Gr. B Schedule 40	*ASTM A123	FMM02
d1	13	W6x8.5 or W6x9, 72" Long Steel Post	ASTM A992	*ASTM A123	PWE06
d2	5	W6x15, 90" Long Steel Post	ASTM A992	*ASTM A123	–
d3	7	6"x12"x14 1/4" Timber Blockout	SYP Grade No.1 or better	–	PDB10a
d4	6	6"x12"x19" Timber Blockout	SYP Grade No.1 or better	–	–
d5	5	6"x8"x19" Timber Blockout	SYP Grade No.1 or better	–	–
d6	10	16D Double Head Nail	–	–	–
e1	12	86" Unbent Length #4 Rebar	ASTM A615 Gr. 60	**Epoxy Coated (ASTM A775 or A934)	–
e2	1	62 3/4" Unbent Length #4 Rebar	ASTM A615 Gr. 60	**Epoxy Coated (ASTM A775 or A934)	–
e3	1	60 1/2" Unbent Length #4 Rebar	ASTM A615 Gr. 60	**Epoxy Coated (ASTM A775 or A934)	–
e4	1	59 1/4" Unbent Length #4 Rebar	ASTM A615 Gr. 60	**Epoxy Coated (ASTM A775 or A934)	–
e5	1	74 3/4" Unbent Length #4 Rebar	ASTM A615 Gr. 60	**Epoxy Coated (ASTM A775 or A934)	–
e6	3	37 1/4" Long #4 Rebar	ASTM A615 Gr. 60	**Epoxy Coated (ASTM A775 or A934)	–
e7	2	80 1/4" Unbent Length #4 Rebar	ASTM A615 Gr. 60	**Epoxy Coated (ASTM A775 or A934)	–
e8	4	85 1/2" Unbent Length #4 Rebar	ASTM A615 Gr. 60	**Epoxy Coated (ASTM A775 or A934)	–

* Component does not need to be galvanized for testing purposes.

** Rebar does not need to be epoxy-coated for testing purposes.

Note: (1) Quantities listed herein are only for 1 system installation.

(2) For testing purposes part b1 used NE Mix 47B1S/1PF4000HW.



Midwest Roadside
Safety Facility

Flared AGT
Buttress
Test Nos. FLAGT-2

Bill of Materials

DWG. NAME.
FLAGT-2_R7

SCALE: None
UNITS: in.

SHEET:
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DATE:
5/24/2022

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W/GHR

REV. BY:
RFB/KAL/S
KR

Item No.	QTY.	Description	Material Specification	Treatment Specification	Hardware Guide
e9	5	80" Long #4 Rebar	ASTM A615 Gr. 60	**Epoxy Coated (ASTM A775 or A934)	—
e10	1	80 1/2" Unbent Length #4 Rebar	ASTM A615 Gr. 60	**Epoxy Coated (ASTM A775 or A934)	—
f1	18	5/8" Dia. UNC, 14" Long Guardrail Bolt	ASTM A307 Gr. A	ASTM A153 or B695 Class 55 or F2329	FBB06
f2	12	5/8" Dia. UNC, 10" Long Guardrail Bolt	ASTM A307 Gr. A	ASTM A153 or B695 Class 55 or F2329	FBB03
f3	24	5/8" Dia. UNC, 2" Long Guardrail Bolt	ASTM A307 Gr. A	ASTM A153 or B695 Class 55 or F2329	FBB02
f4	44	5/8" Dia. UNC, 1 1/4" Long Guardrail Bolt	ASTM A307 Gr. A	ASTM A153 or B695 Class 55 or F2329	FBB01
f5	5	7/8 Dia. UNC, 15 1/2" Long Heavy Hex Head Bolt	ASTM F3125 Gr. 120 (A325) or A354 Gr. BC	ASTM A153 or B695 Class 55 or F1136 Gr. 3 or F2329 or F2833 Gr. 1	FBX22b
f6	2	7/8" Dia. UNC, 8" Long Hex Head Bolt	ASTM A307 Gr. A	ASTM A153 or B695 Class 55 or F2329	FBX22a
f7	2	5/8" Dia. UNC, 10" Long Hex Head Bolt	ASTM A307 Gr. A	ASTM A153 or B695 Class 55 or F2329	FBX16a
f8	8	5/8" Dia. UNC, 1 1/2" Long Hex Head Bolt	ASTM A307 Gr. A	ASTM A153 or B695 Class 55 or F2329	FBX16a
g1	4	7/8" Dia. Plain Round Washer	ASTM F844	ASTM A123 or A153 or F2329	FWC20a
g2	46	5/8" Dia. Plain Round Washer	ASTM F844	ASTM A123 or A153 or F2329	FWC16a
g3	5	3"x3"x1/4" or 3 1/2"x3 1/2"x1/4" Square Washer Plate	ASTM A572 Gr. 50	*ASTM A123	—
g4	2	1" Dia. Plain Round Washer	ASTM F844	ASTM A153 (AASHTO M232) for Class D or ASTM B695 (AASHTO M298) for Class 50	FWC24a
h1	100	5/8" Dia. Heavy Hex Nut	ASTM A563A	ASTM A153 (AASHTO M232) for Class C or ASTM B695 (AASHTO M298) for Class 50	FNX16b
h2	8	5/8" Dia. Hex Nut	ASTM A563A	ASTM A153 (AASHTO M232) for Class C or ASTM B695 (AASHTO M298) for Class 50	FNX16a
h3	5	7/8" Dia. UNC Heavy Hex Nut	ASTM A563DH or A194 Gr. 2H	—	FNX22b
h4	2	7/8" Dia. Hex Nut	ASTM A307	ASTM A153 (AASHTO M232) for Class C or ASTM B695 (AASHTO M298) for Class 50	—
h5	2	1"—8 UNC Heavy Hex Nut	ASTM A563DH or equivalent	ASTM A153 or B695 Class 55 or F2329	FNX24b
i1	1	AGT Connector Face Plate	ASTM A36	See Assembly	—
i2	4	Horizontal Gusset	ASTM A36	See Assembly	—
i3	1	Vertical Gusset 1	ASTM A36	See Assembly	—
i4	2	Vertical Gusset 2	ASTM A36	See Assembly	—
i5	1	Vertical Gusset 3	ASTM A36	See Assembly	—
i6	2	Vertical Gusset 4	ASTM A36	See Assembly	—
i7	1	Vertical Gusset 5	ASTM A36	See Assembly	—

* Component does not need to be galvanized for testing purposes.
** Rebar does not need to be epoxy-coated for testing purposes.



Midwest Roadside
Safety Facility

Flared AGT
Buttress
Test Nos. FLAGT-2

Bill of Materials

DWG. NAME.
FLAGT-2_R7

SCALE: None
UNITS: in.

SHEET:
28 of 28

DATE:
5/24/2022

DRAWN BY:
LJP/JRF/SB
W/GHR

REV. BY:
RFB/KAL/S
KR

REV.	DATE OF ISSUE	Page	NATURE OF CHANGES	REVIEWER	REVISED BY
0	7/27/2021	–	Created based on FLAGT-1 drawing set, with post nos. 16–21 lengthened to 7'–6" and increased in size from w6x9 to w6x15.	–	GHR
1	7/28/2021	ALL	Drawing set renamed to FLAGT-2-5.	KAL	GHR
2	7/29/2021	ALL	Moved all post bolts to upstream side of flange.	SR	GHR
		2	Removed note about possible discrepancies in post distances.		
		3	Moved post-buttress dimension to centerline of post.		
		4	Corrected part balloons in Section D.		
		16	Updated post model to correct W6x15 size.		
		22	Replaced dimensions with a chamfer note.		
3	8/4/2021	–	Replaced part d2 with part d1 in all instances. Updated notes/part balloons to match.	KAL	GHR
		5	Added "nested" to a1 part balloon.		
		14	Updated post dimensions to match d1.		
		16	Corrected post views to show post oriented correctly.		
		25	Added inch symbol to thread callouts.		
		BOM	Updated all "d" part numbers to remove gap left by replacement of d2.		
4	8/19/2021	5,6	Added note to sandwich the W-beam to Thrie-Beam Transition with the Nested W-Beam.	KAL	GHR
		BOM	Corrected spelling of Part a3 description.		
5	11/16/2021	1	Updated Tarmac edge to show cut-out for post 20. Added note.	KAL	GHR
6	11/29/2021	1	Increased size of Detail A.	KAL	GHR
		2	Updated note.		
		3	Added sheet. Moved Detail A to new sheet.		
		4	Corrected nested guardrail part balloon to match standard.		
		17	Updated part d5 label to match current numbers.		
		BOM	Updated BOM HWG callouts		
7	5/25/2022	–	Renamed documents FLAGT-2.	KAL	CSS
		1	Removed notes and impact locations for FLAGT-3 through 5		