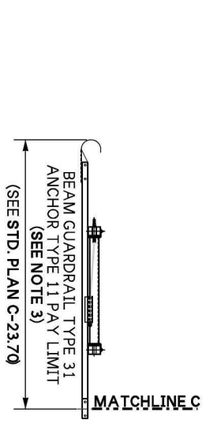
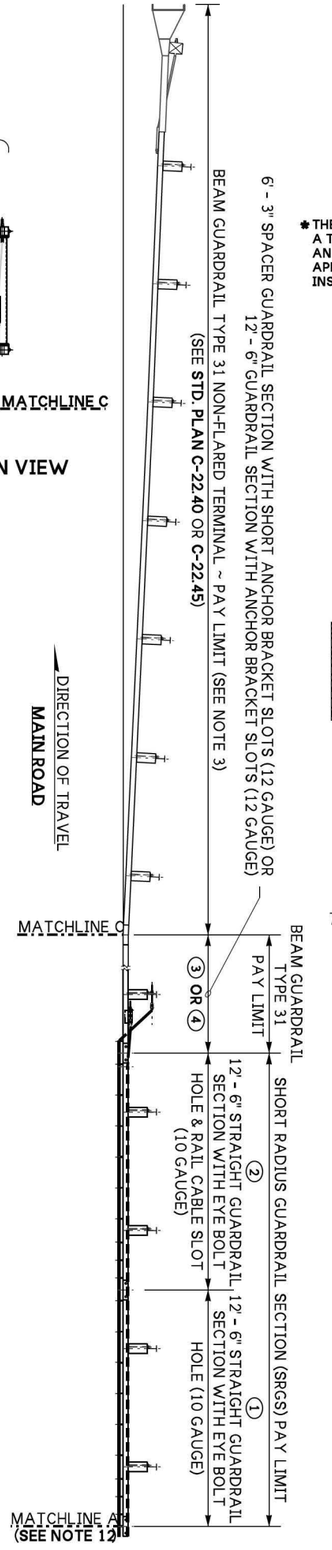
TABLE: NUMBER OF RADIUS POSTS, RADIUS RAILS & CABLE LENGTHS				
SYSTEM RADIUS (FEET)	# OF RADIUS POSTS (QTY.)	# OF RADIUS RAILS (QTY.)	CABLE LENGTH * (FEET)	
			TOP	BOTTOM
8'	5	1	56'	60'
16'	9	2	74'	77'
24'	13	3	87'	90'

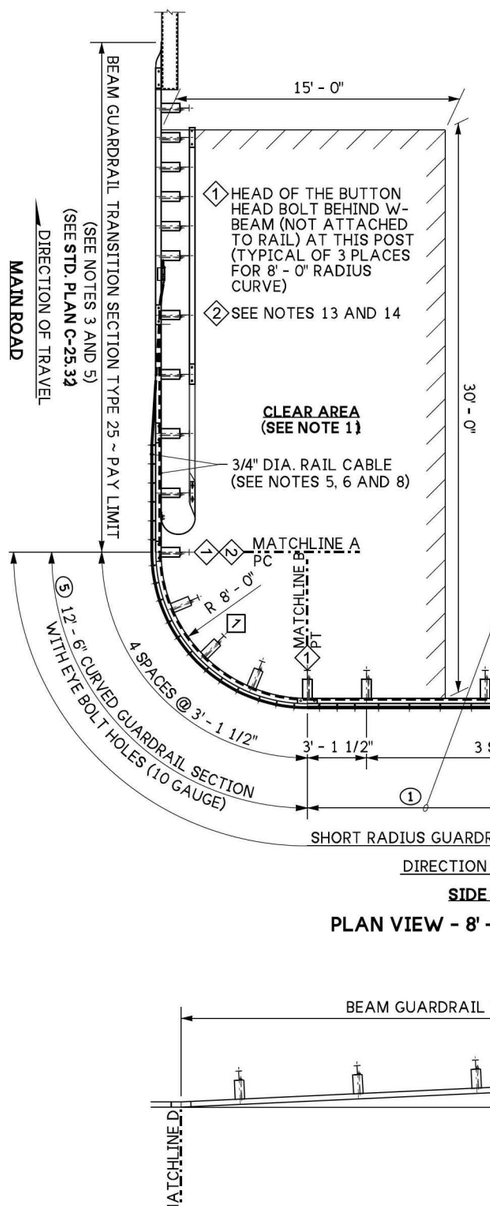
* THE PROVIDED CABLE LENGTHS ARE FOR THE TYPICAL SRGS CONFIGURATION WITH A TRANSITION CONNECTING TO BRIDGE BARRIER/STRUCTURE ON THE MAIN ROAD, AND AN ANCHOR OR TERMINAL ON SIDE ROAD. THE PROVIDED CABLE LENGTHS ARE APPROXIMATE. THE REQUIRED CABLE LENGTHS NEEDED FOR A PARTICULAR SRGS INSTALLATION SHOULD BE VERIFIED PRIOR TO INSTALLATION.



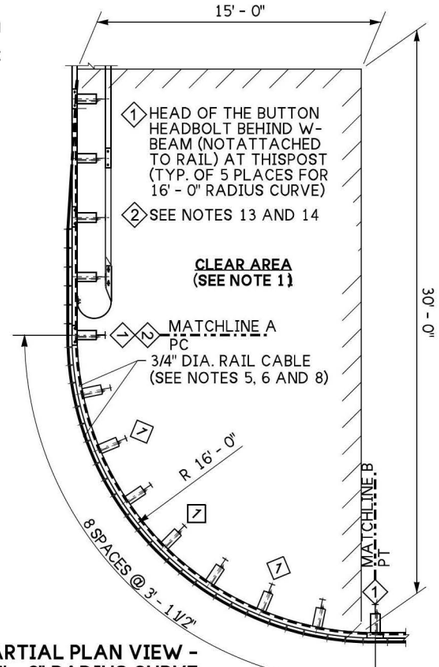
PLAN VIEW



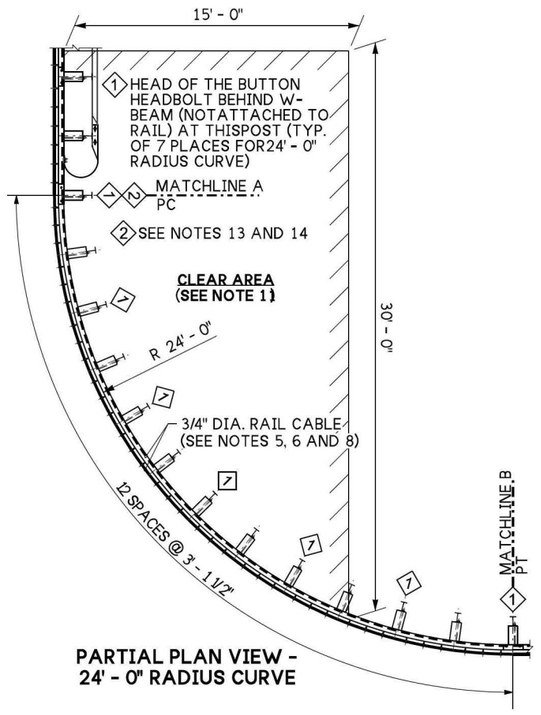
PLAN VIEW



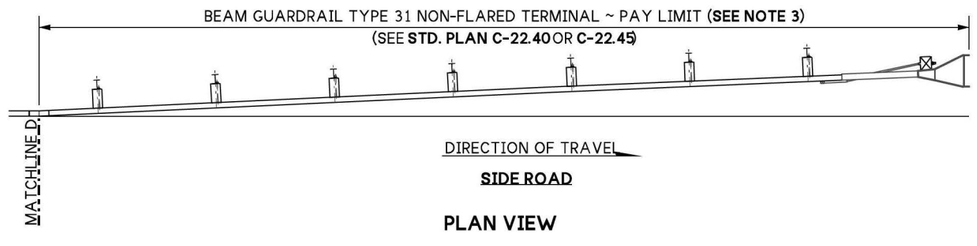
PLAN VIEW - 8' - 0" RADIUS CURVE



PARTIAL PLAN VIEW - 16' - 0" RADIUS CURVE



PARTIAL PLAN VIEW - 24' - 0" RADIUS CURVE



PLAN VIEW

NOTES

1. This system is offered with 8', 16', or 24' (ft) radii. Do not use other radii.
2. See contract documents for transition or end anchor types.
3. For additional installation and requirements, See:
   - **Standard Plan C-20.10 Beam Guardrail Type 31**
   - **Standard Plan C-22.40 or C-22.45 Beam Guardrail Type 31 Non-Flared Terminal**
   - **Standard Plan C-23.70 Beam Guardrail (Type 31) Anchor Type 11**
   - **Standard Plan C-25.32 Beam Guardrail (Type 31) Transition Section Type 25**
4. For Details of typical components not shown, See:
   - **C-1b Beam Guardrail Posts and Blocks**
   - **C-7 Beam Guardrail End Sections**
   - **C-20.10 Beam Guardrail Type 31**
5. The top and bottom Rail Cable assemblies begin and end withn the Beam Guardrail (Type 31) Transition Section Type 25 or withn the Beam Guardrail Type 31 section. The rail cable assemblies, including connections, are paid under the **Short Radius Guardrail System (SRGS)** bid item.
6. Tension the finished top & bottom rail cable assemblies until all rail cable slack is removed.
7. It is permissible to fabricate the anchor plate from 1/4" (in) thick plates welded to equal strength and dimensions shown.
8. See contract for required length.
9. Fasten the Rail Cable Assembly using a single 3/4" (in) nut and washer at both ends of the cable.
10. Lap rails in same direction as adjacent traffic.
11. Keep the designated "Clear Area" behind the SRGS free of objects or obstructions (ie: signs, poles, cabinets, wingwalls, etc.)
12. If the SRGS is not connecting to bridge or concrete barrier with a transition, the SRGS main road section should be a symmetrical mirror image to the SRGS side road section. The two straight sections of the SRGS are required off both ends of the curved radius section.
13. The radius dimension shall be etched into the plate as shown in the example on the Identification Plate Detail (see Sheet 2). Numerals shall be 1 1/2" (in) high minimum, and 3/4" (in) wide maximum. Plate shall be galvanized after etching and letter shall remain permanently legible.
14. The guardrail Identification Plate shall be mounted at the lower splice bolt on the back side of the rail element at the **PC** of the guardrail radius.

LEGEND

(#) RAIL ELEMENT - SEE SHEET 3 FOR DETAILS

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Aug 7, 2026

SHORT RADIUS GUARDRAIL SYSTEM (SRGS)

STANDARD PLAN C-20.44-01

SHEET 1 OF 3 SHEETS

APPROVED FOR PUBLICATION

Mark A Gaines Aug 10, 2026

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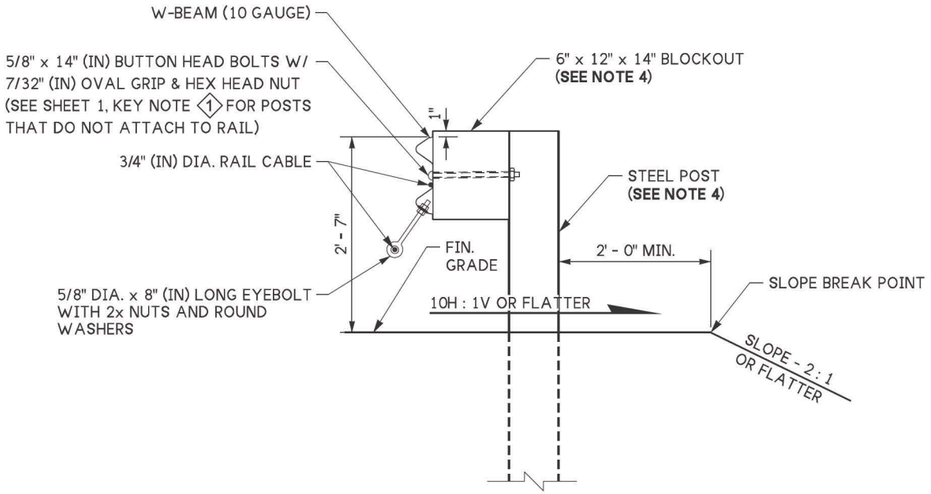
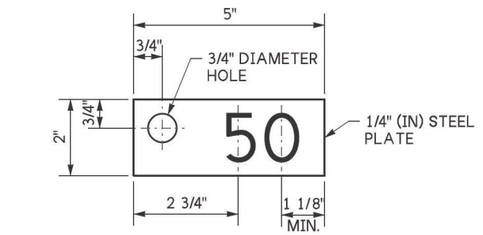
Washington State Department of Transportation

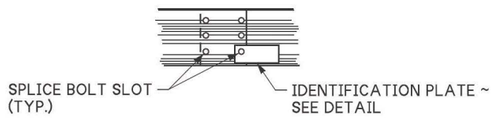


SECTION (A)

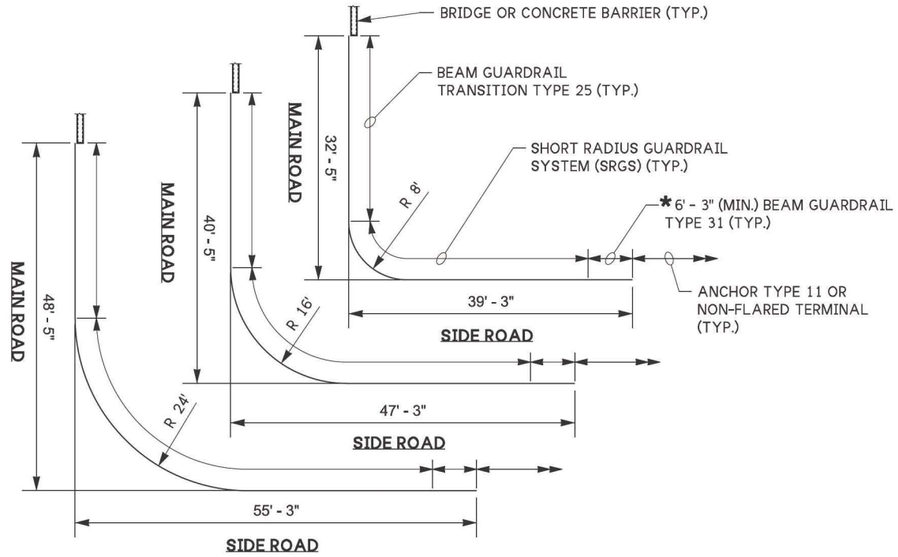
TYPICAL SRGS POST
(SEE SHEET 1)



IDENTIFICATION PLATE DETAIL
(SEE NOTE 13)

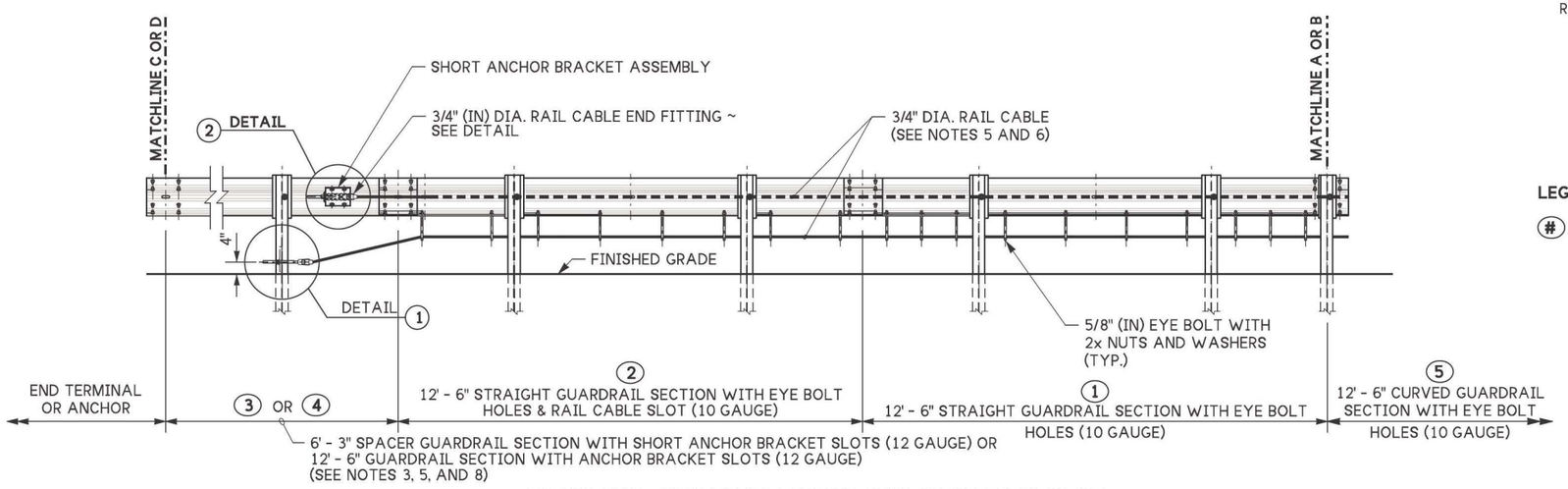


IDENTIFICATION PLATE MOUNTING DETAIL
(SEE NOTE 14)



*LENGTH SHOWN IS 6' - 3" FOR TYPE 31 GUARDRAIL. SEE CONTRACT FOR ACTUAL LENGTH OF TYPE 31 GUARDRAIL USED. RE-CALCULATE SIDE ROAD SRGS LENGTH AS REQUIRED.

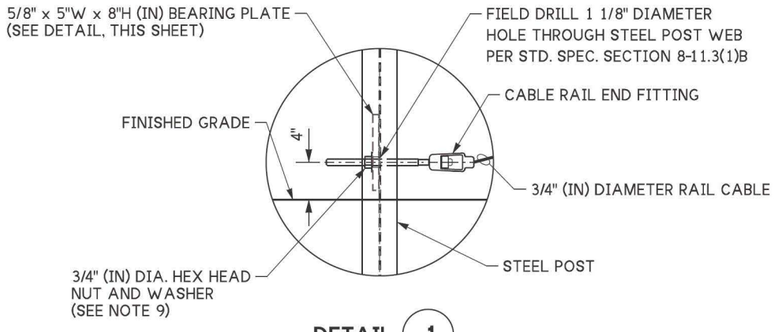
SHORT RADIUS SYSTEM (SRGS) - SYSTEM LEG LENGTHS



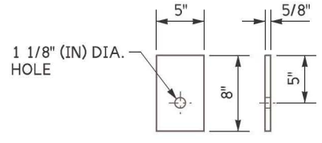
ELEVATION - GUARDRAIL TRANSITION TO END TREATMENT (FIELD SIDE VIEW)

LEGEND

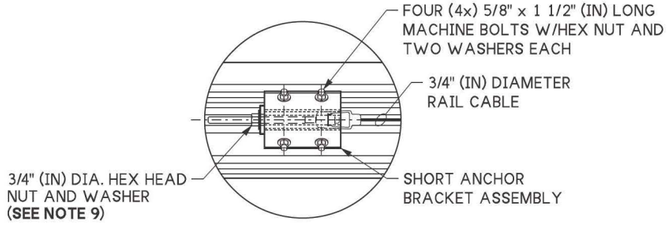
(#) RAIL ELEMENT - SEE SHEET 3 FOR DETAILS



DETAIL (1)
(SEE NOTES 5 AND 6)



BEARING PLATE DETAIL
(ASTM A36)



DETAIL (2)
(SEE NOTES 5 AND 6)

Aug 7, 2026

SHORT RADIUS GUARDRAIL SYSTEM (SRGS)

STANDARD PLAN C-20.44-01

SHEET 2 OF 3 SHEETS

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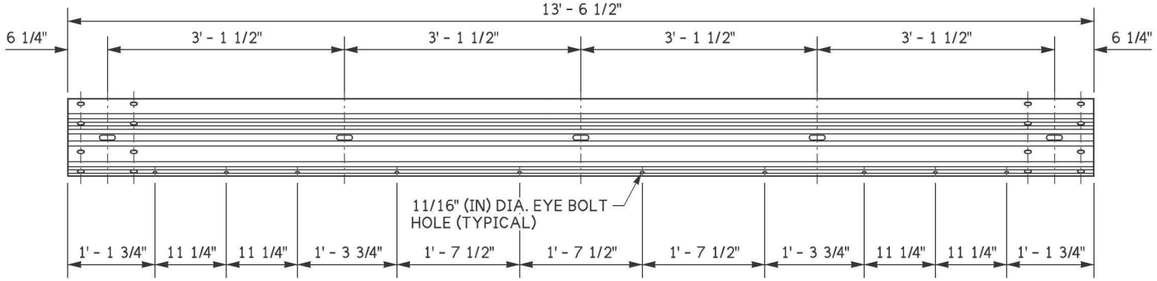
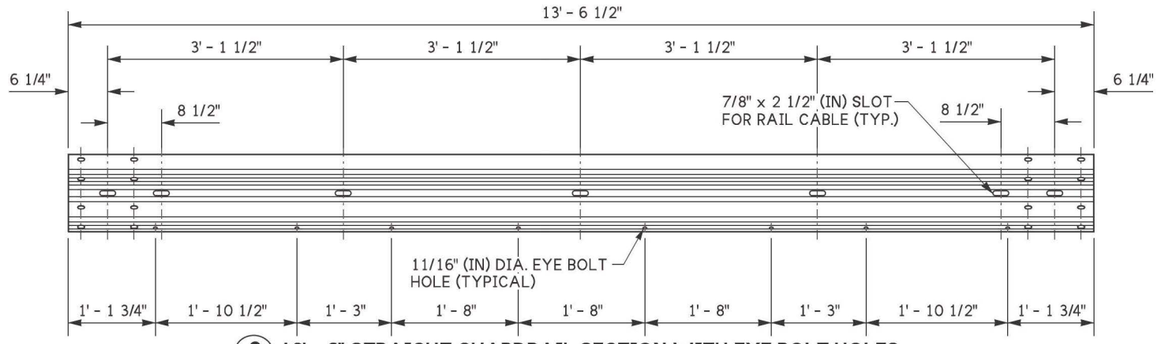
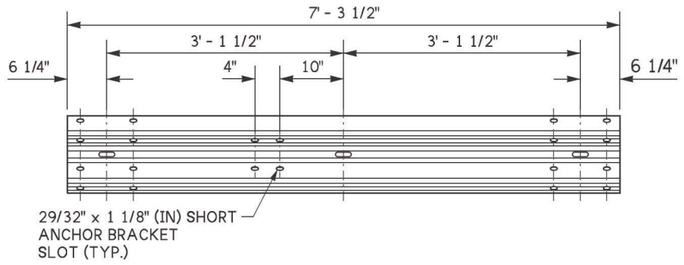


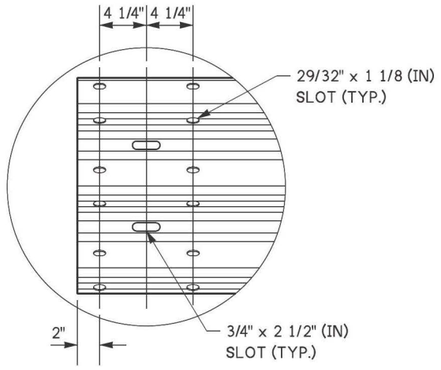
1 12' - 6" STRAIGHT GUARDRAIL SECTION WITH EYE BOLT HOLES (10 GAUGE)



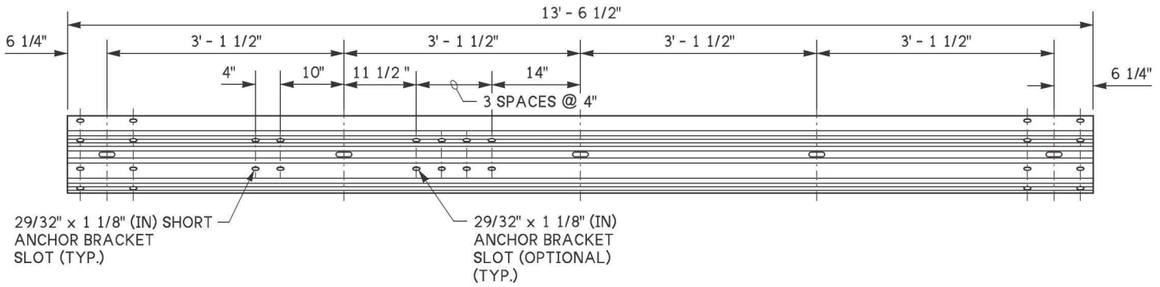
2 12' - 6" STRAIGHT GUARDRAIL SECTION WITH EYE BOLT HOLES & RAIL CABLE SLOT (10 GAUGE)



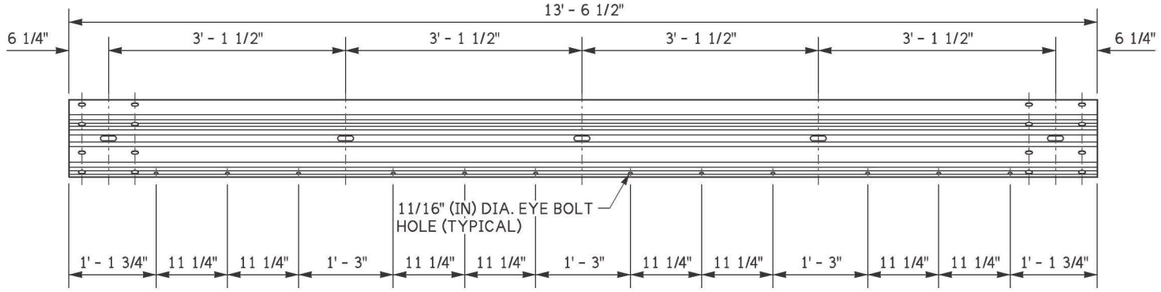
3 6' - 3" SPACER GUARDRAIL SECTION WITH SHORT ANCHOR BRACKET SLOTS (12 GAUGE)



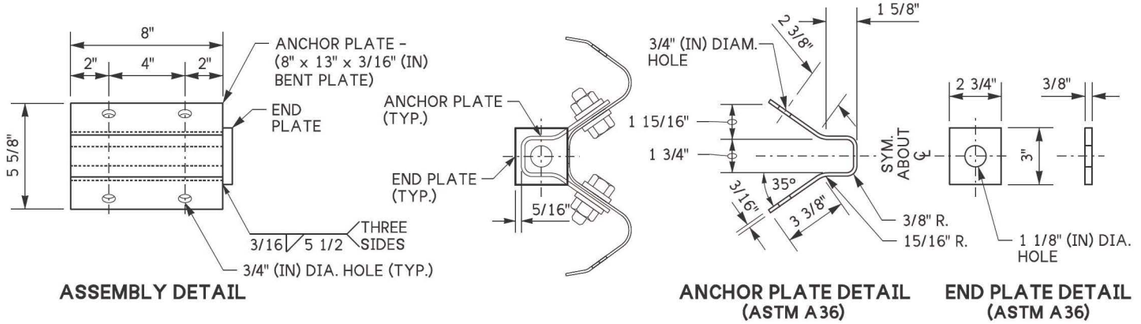
TYPICAL W-BEAM END DETAIL



4 12' - 6" GUARDRAIL SECTION WITH ANCHOR BRACKET SLOTS (12 GAUGE)

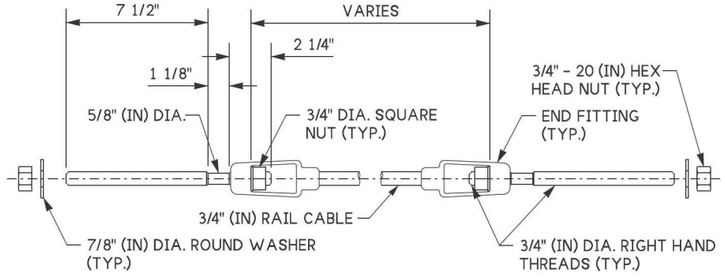


5 12' - 6" CURVED GUARDRAIL SECTION WITH EYE BOLT HOLES (10 GAUGE)
(SECTION SHOWN BEFORE BEING BENT)

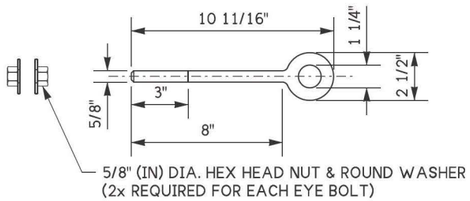


ASSEMBLY DETAIL | **ANCHOR PLATE DETAIL (ASTM A36)** | **END PLATE DETAIL (ASTM A36)**

SHORT BRACKET ASSEMBLY DETAIL
(SEE NOTE 7)



RAIL CABLE ASSEMBLY DETAIL



EYE BOLT DETAIL

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Aug 7, 2026

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SHEET 3 OF 3 SHEETS

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