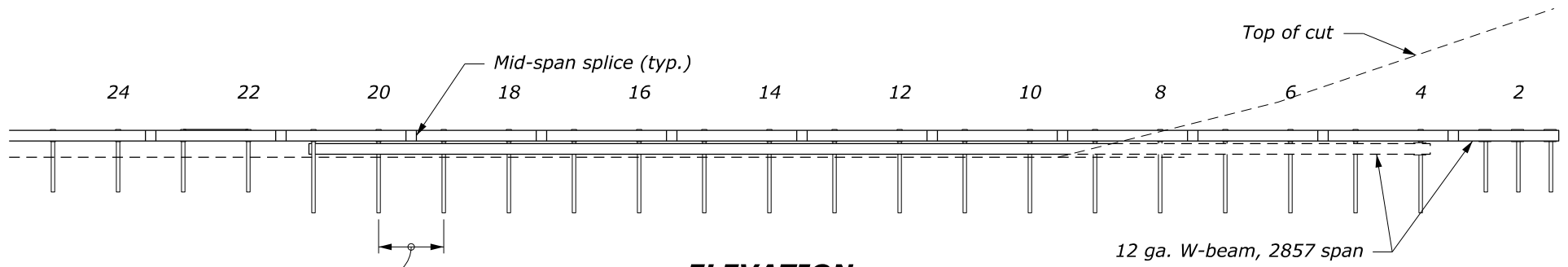


**PLAN**

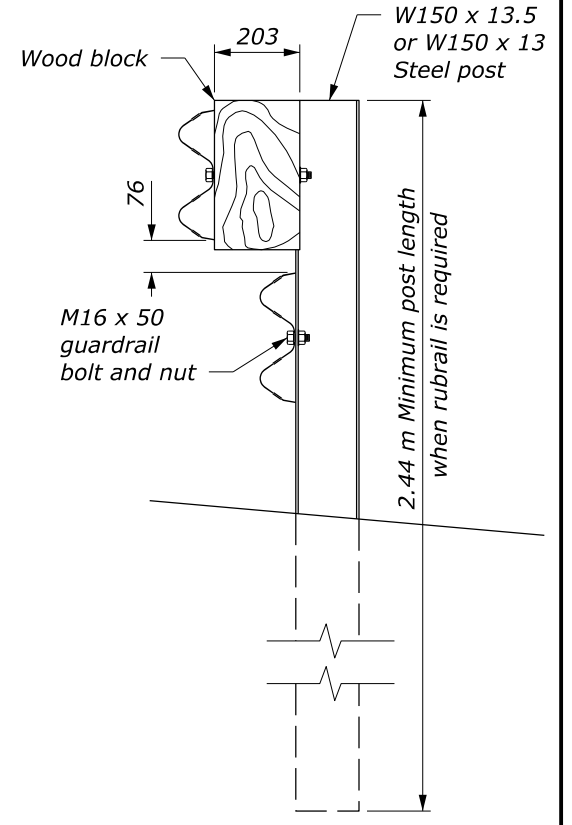


**ELEVATION  
ALONG RAIL**

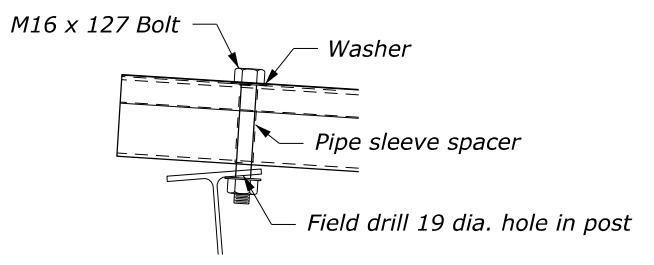
POST OFFSETS FROM EDGE OF SHOULDER	
POST	DISTANCE
1	4.26 m
4	3.33 m
6	2.70 m
10	1.56 m

**NOTE:**

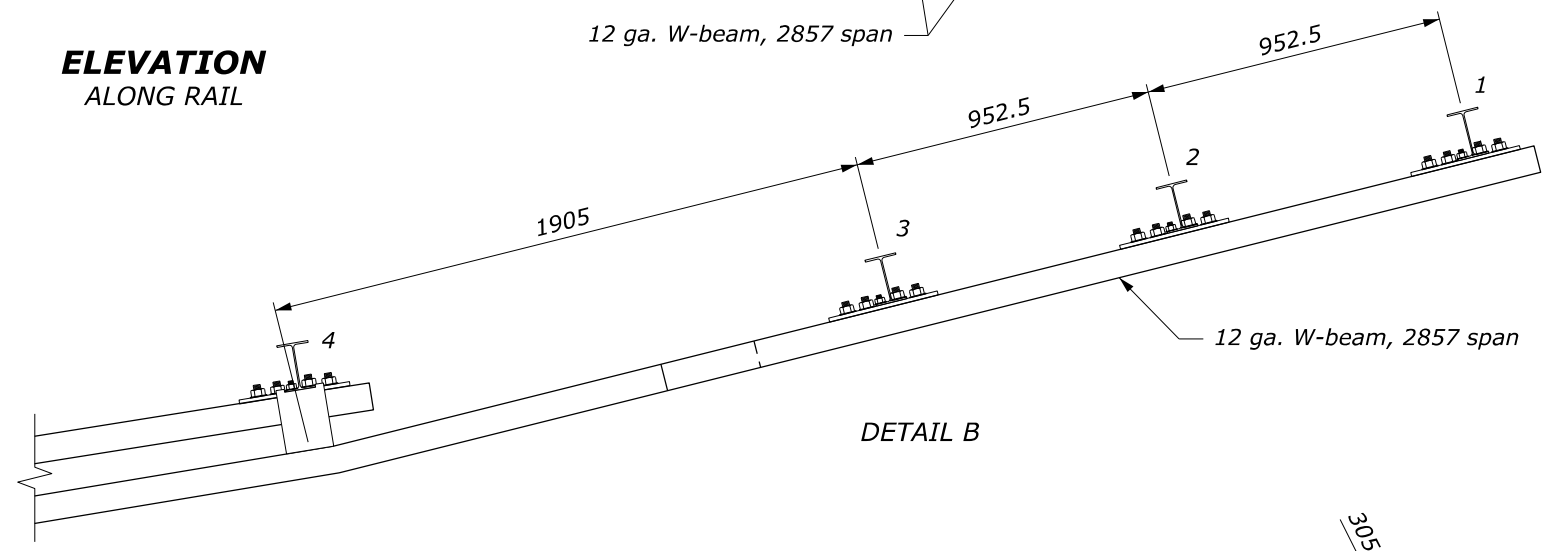
1. Steel posts shown. Wood posts may be used as an alternate, except that steel posts are required for Posts 1 - 3.
2. See Standard M617-31 (wood posts) and M617-32 (steel posts) for other details.
3. Typical post spacing is 1.905 m unless otherwise noted.
4. Dimensions without units are millimeters.



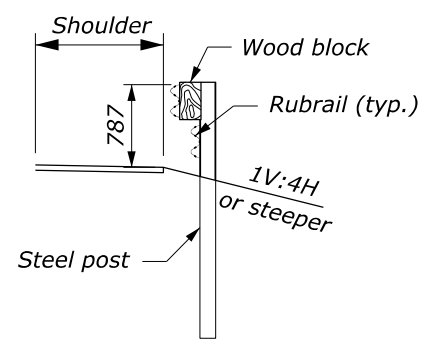
**ELEVATION  
STEEL POST  
AND BLOCK DETAIL**



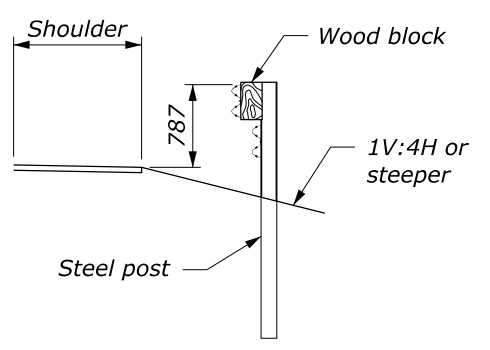
**DETAIL A**



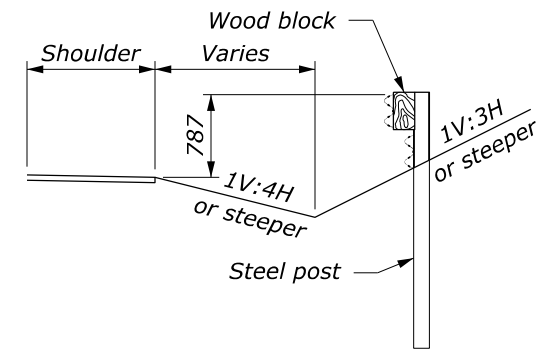
**DETAIL B**



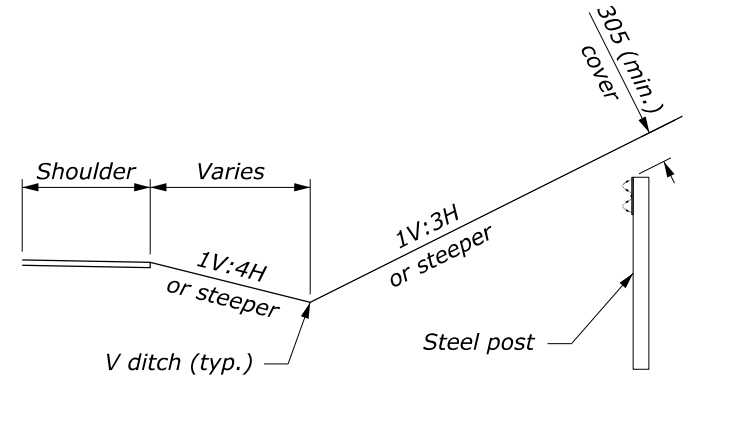
**SECTION A-A**



**SECTION B-B**



**SECTION C-C**



**SECTION D-D**

NO SCALE

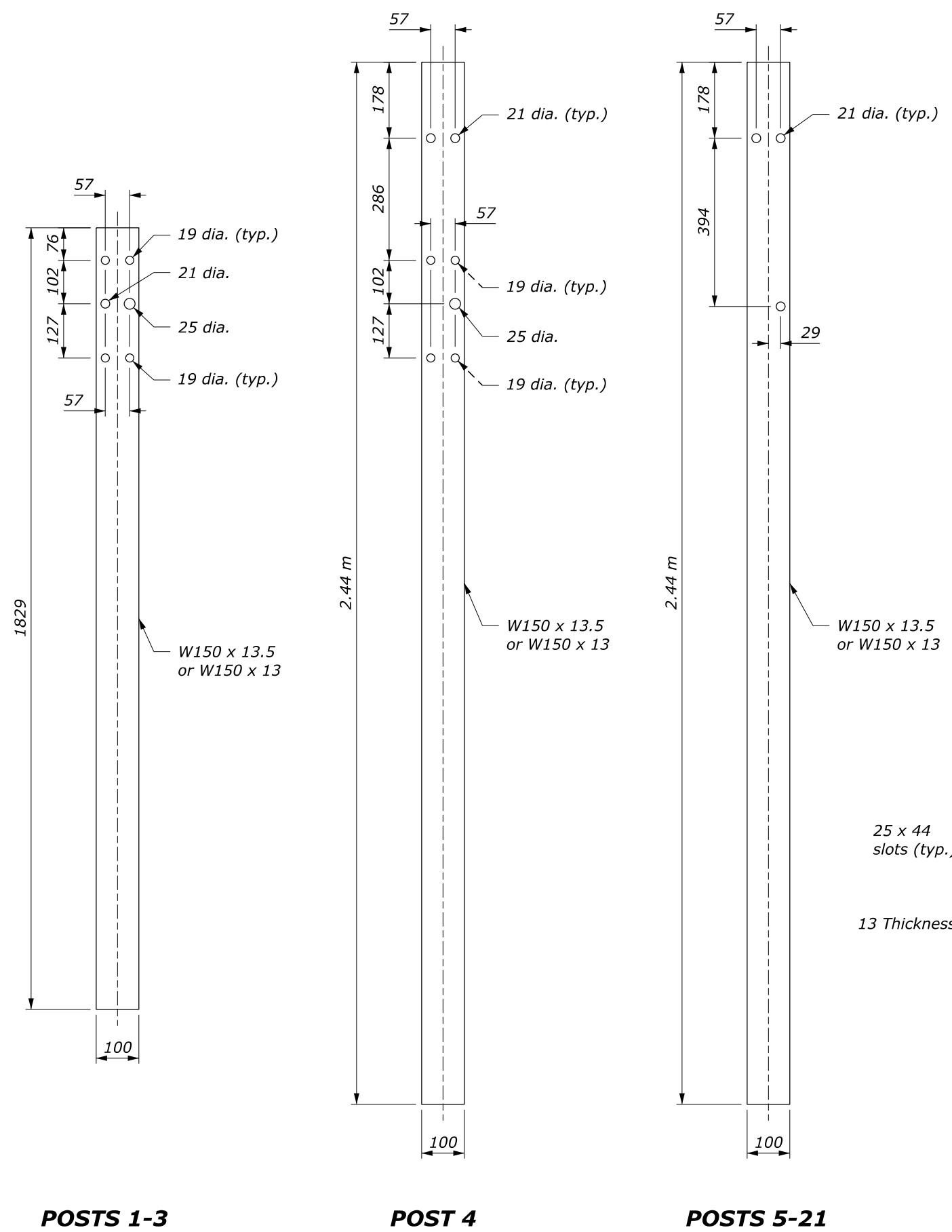
U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
OFFICE OF FEDERAL LANDS HIGHWAY

METRIC FLH STANDARD  
**MGS W-BEAM GUARDRAIL  
BACK SLOPE ANCHOR TERMINAL  
TYPE MGS-BAT**  
Sheet 1 of 2

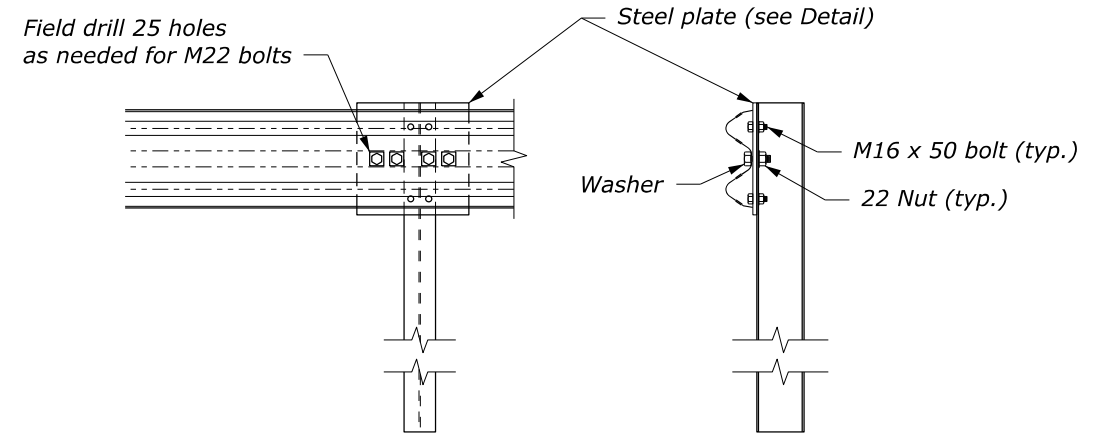
STANDARD APPROVED FOR USE 6/2022  
REVISED:

STANDARD  
M617-18

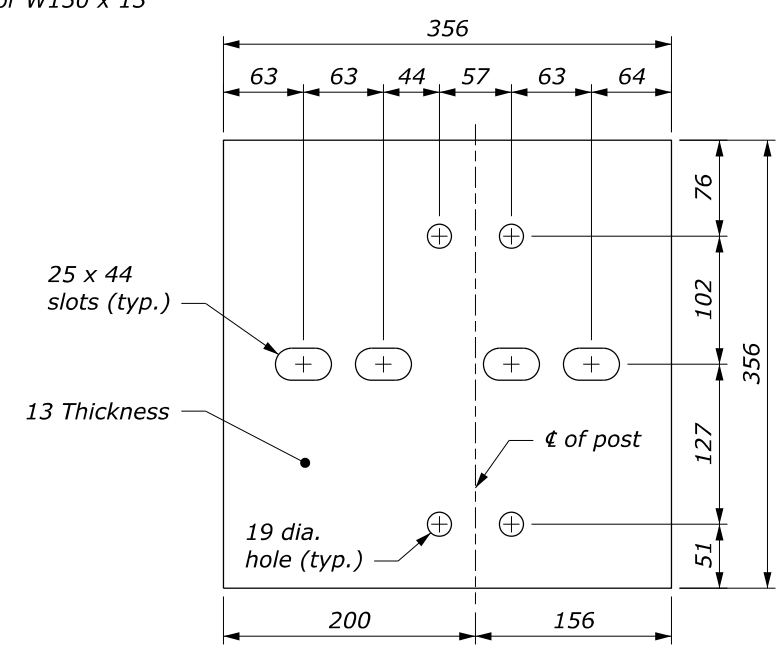
c:\pwwork\work\0419223\Std617-18.dgn [Std M617-18a] 10 August 2022 1:27 PM



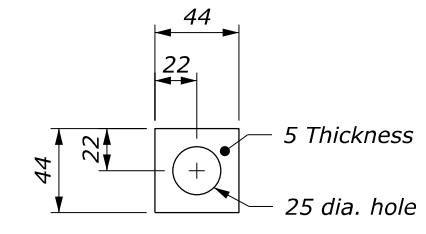
- NOTE:**
1. See Sheet 1 of 2 for terminal layout.
  2. Use zinc rich paint to coat field drilled holes.
  3. Anchor plate and hardware are typical on top rail of Posts 1 -3 and rub rail at Post 4.



**SPECIAL RAIL TO POST CONNECTION  
AT POSTS 1, 2, AND 3**



GALVANIZED STEEL PLATE



GALVANIZED SQUARE WASHER

**STEEL PLATE AND WASHER**  
See Note 3

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
OFFICE OF FEDERAL LANDS HIGHWAY

METRIC FLH STANDARD  
**MGS W-BEAM GUARDRAIL  
BACK SLOPE ANCHOR TERMINAL  
TYPE MGS-BAT**  
Sheet 2 of 2

STANDARD APPROVED FOR USE 6/2022  
REVISED:

STANDARD  
M617-18

c:\pwwork\0419223\Std617-18.dgn [Std: M617-18B] 10 August 2022 1:27 PM

**Designer Notes: FLH Standard Drawing 617-18**  
**Last Updated: August 2021**

## MGS W-Beam Guardrail, Back Slope Anchor Terminal Type MGS-BAT

---

### General Information

***Appropriate Applications.***

- In areas of cut sections, or where the road is transitioning from cut to fill, the back slope anchor terminates a W-beam guardrail installation by burying the end into a slope.

<b><i>Crash Test Criteria</i></b>	MASH
<b><i>Test Level</i></b>	TL-3
<b><i>FHWA Eligibility Letter</i></b>	None available
<b><i>TF 13 Designator</i></b>	Not posted
<b><i>Crash Test Report</i></b>	TTI report 608431-01-1&2

***Limitations.*** Need a steep, natural backslope to bury the terminal into (1V:3H or steeper). Need a 1V:4H or flatter foreslope.

***Layout Guidance.***

- See AASHTO *Roadside Design Guide*, Section 8.3.6.1
- Carefully review the site, especially the foreslope, backslope, and ditch configuration. Verify onsite drainage needs can be met.

---

### Typical Pay Item Used

- 61702-1700 Terminal section, type MGS-BAT [EA]

---

### Updates

February 2019

- New Detail drawing

April 2020

- Revised LON point, note 2, added rail height callouts, revised steel post callouts

August 2021

- Converted from CFL Detail to FLH Standard, updated notes, and plate detail