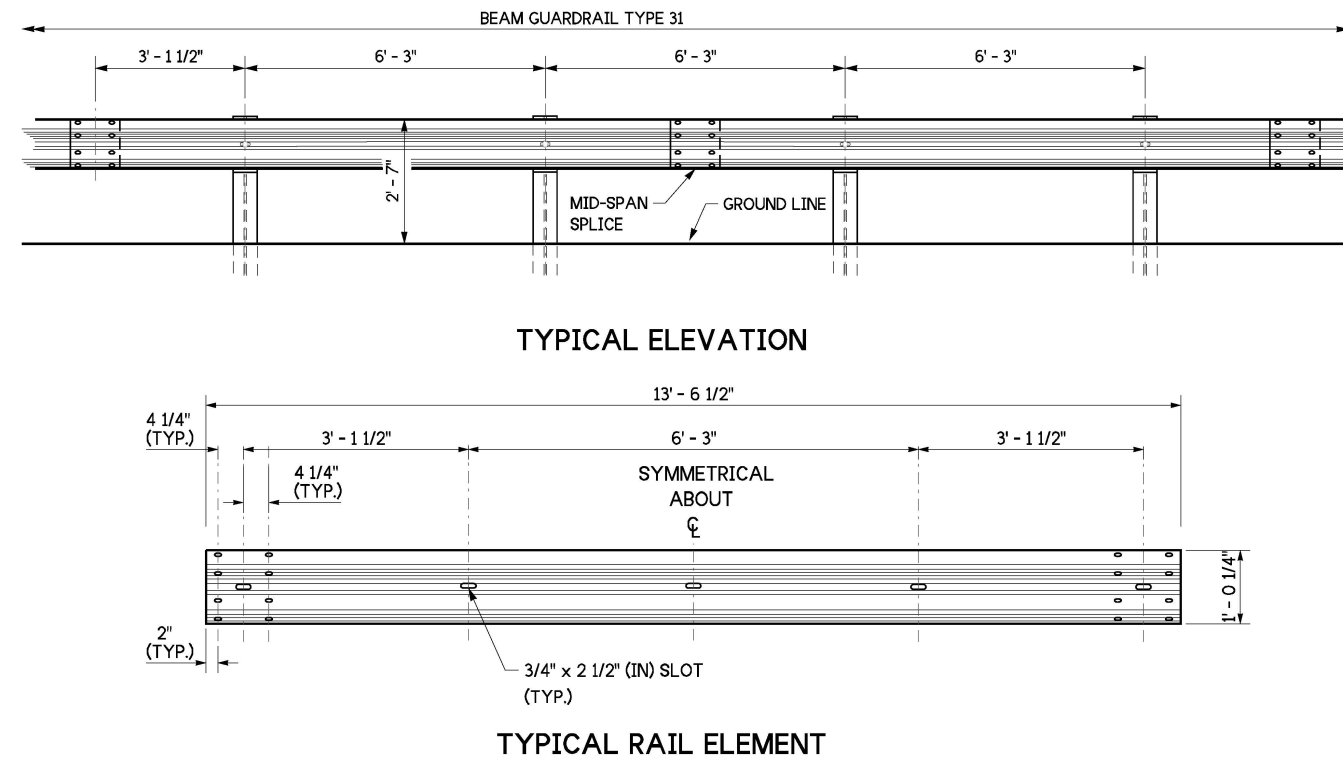
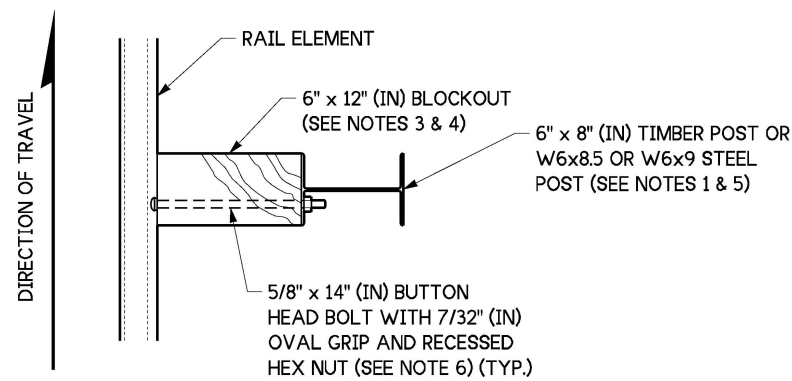


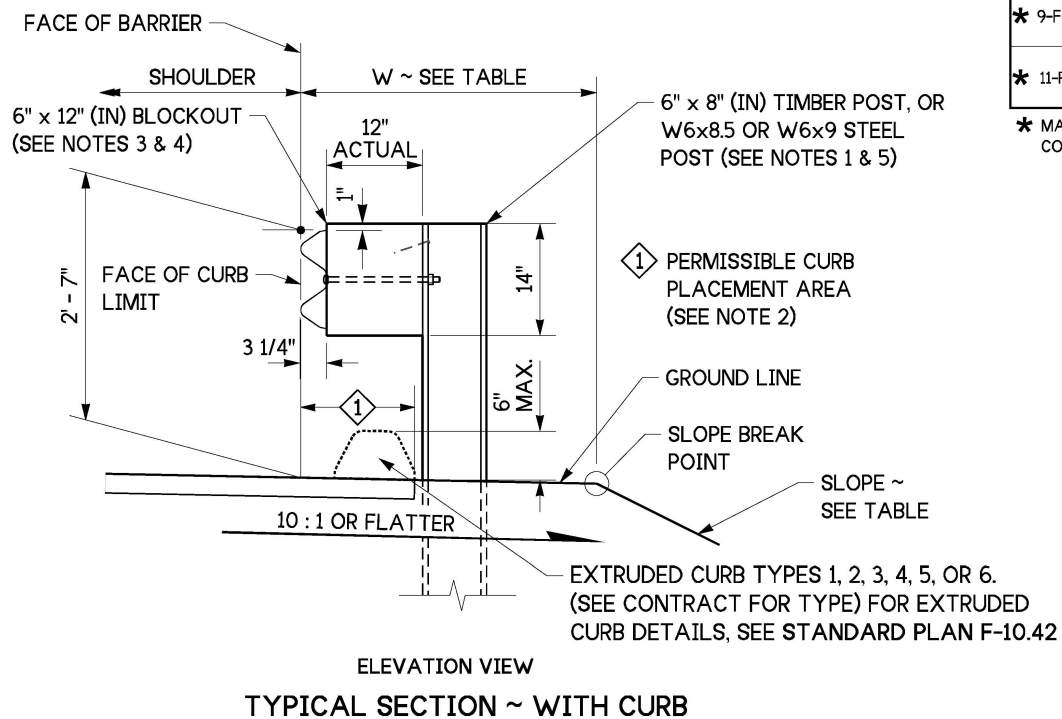
TYPICAL ELEVATION ~ WITHOUT CURB



TYPICAL RAIL ELEMENT



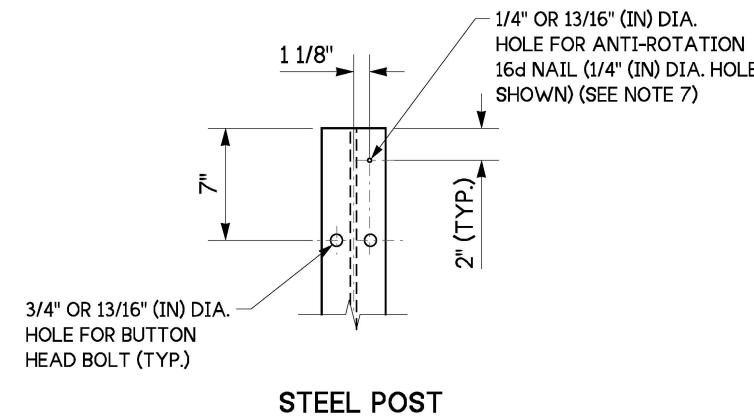
PLAN VIEW



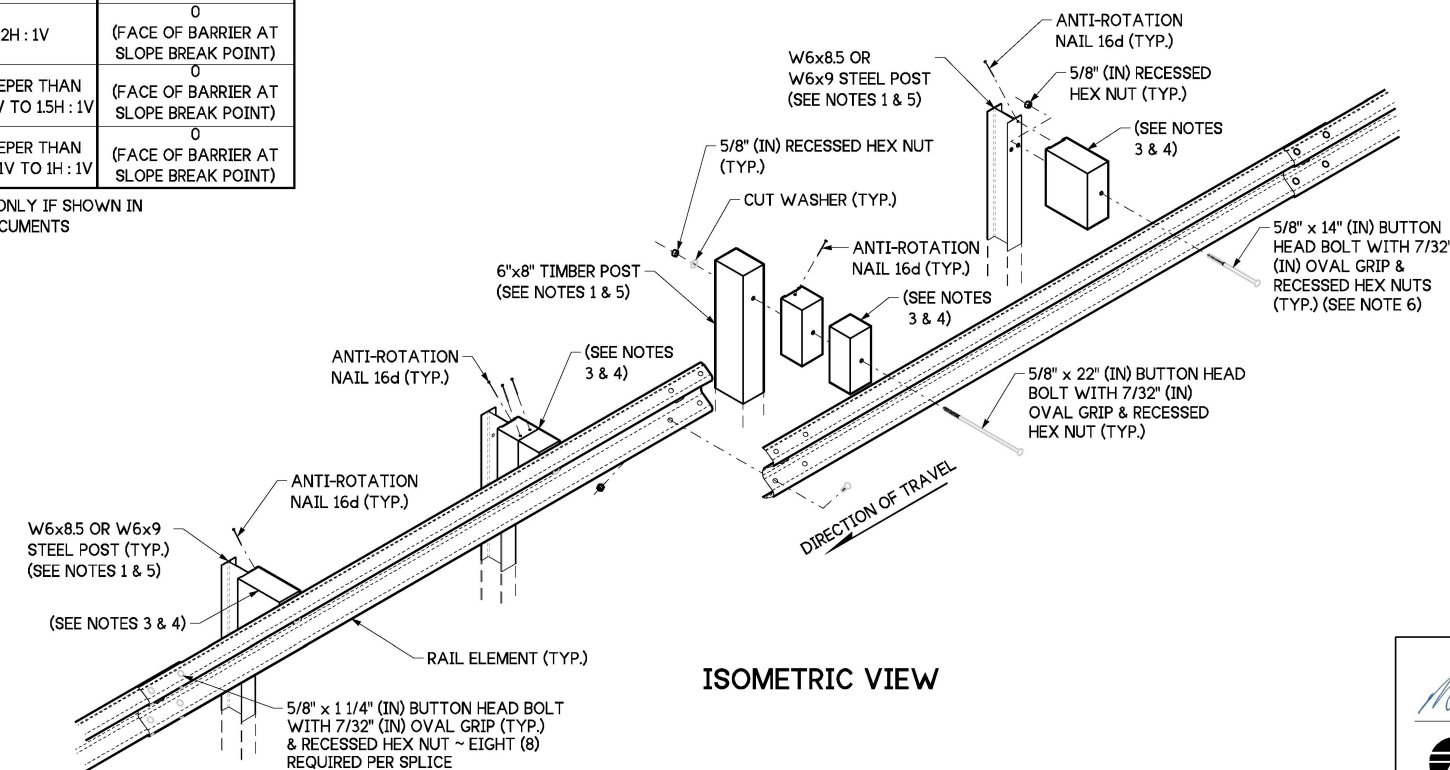
TYPICAL SECTION ~ WITH CURB

SLOPE/EMBANKMENT TABLE FOR 6', 8', 9', AND 11' LONG POSTS		
POST LENGTH	SLOPE	W (FT)
6-FOOT	2H:1V OR FLATTER	2.5 MIN.
6-FOOT	1H:1V OR FLATTER	4.0 MIN.
8-FOOT	STEEPER THAN 2H:1V TO 1H:1V	2.5 MIN.
8-FOOT	2H:1V	(FACE OF BARRIER AT SLOPE BREAK POINT)
* 9-FOOT	STEEPER THAN 2H:1V TO 1.5H:1V	(FACE OF BARRIER AT SLOPE BREAK POINT)
* 11-FOOT	STEEPER THAN 1.5H:1V TO 1H:1V	(FACE OF BARRIER AT SLOPE BREAK POINT)

* MAY BE USED ONLY IF SHOWN IN CONTRACT DOCUMENTS



STEEL POST



ISOMETRIC VIEW

NOTES

1. Refer to Standard Plan C-1b for additional details not shown on this plan.
2. Extend shoulder pavement to provide a base for the extruded curb. See Contract Plans for exceptions to distances shown.
3. Use a single block or combination of blocks (no more than two (2) to achieve the actual 12" (in) offset. See Standard Specification Section 9-16.3(2). Wood blocks shall be secured to the posts with anti-rotation nails. If combination blocks are used, the adjacent blocks shall be toenailed with two 16d galvanized nails to prevent block rotation.
4. Wood blocks are shown. Blocks of an approved alternative material may be used. See Standard Specification Section 9-16.3(2).
5. All posts for any standard barrier run shall be of the same type; timber or steel.
6. Attach blockouts to steel posts using bolt holes on approaching traffic side of post web.
7. Anti-rotation holes in steel posts are not required when using blocks with anti-rotation features (e.g., routed blocks).



Oct 12, 2023

BEAM GUARDRAIL TYPE 31

STANDARD PLAN C-20.10-09

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

Mark A. Davis

Oct 12, 2023

STATE DESIGN ENGINEER

