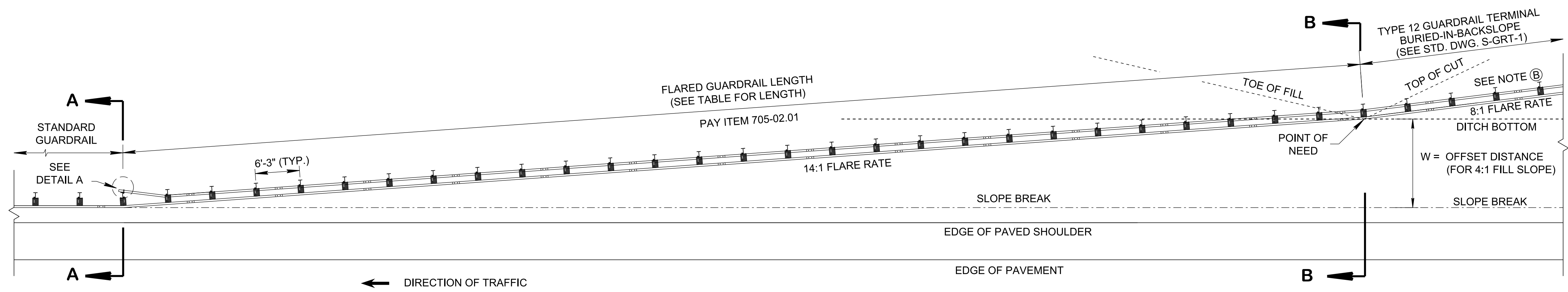
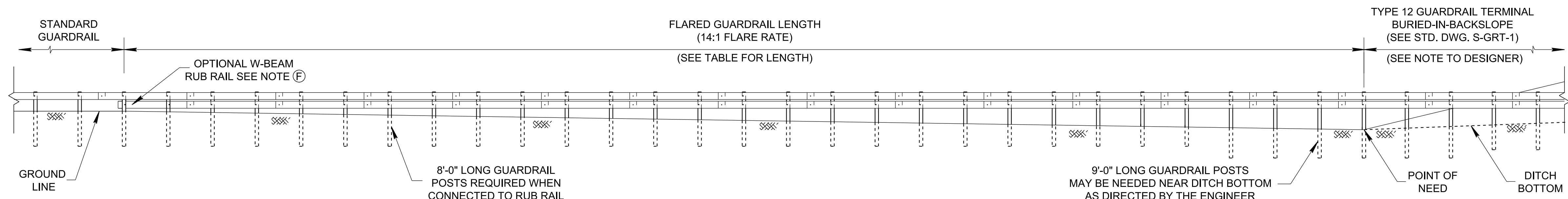


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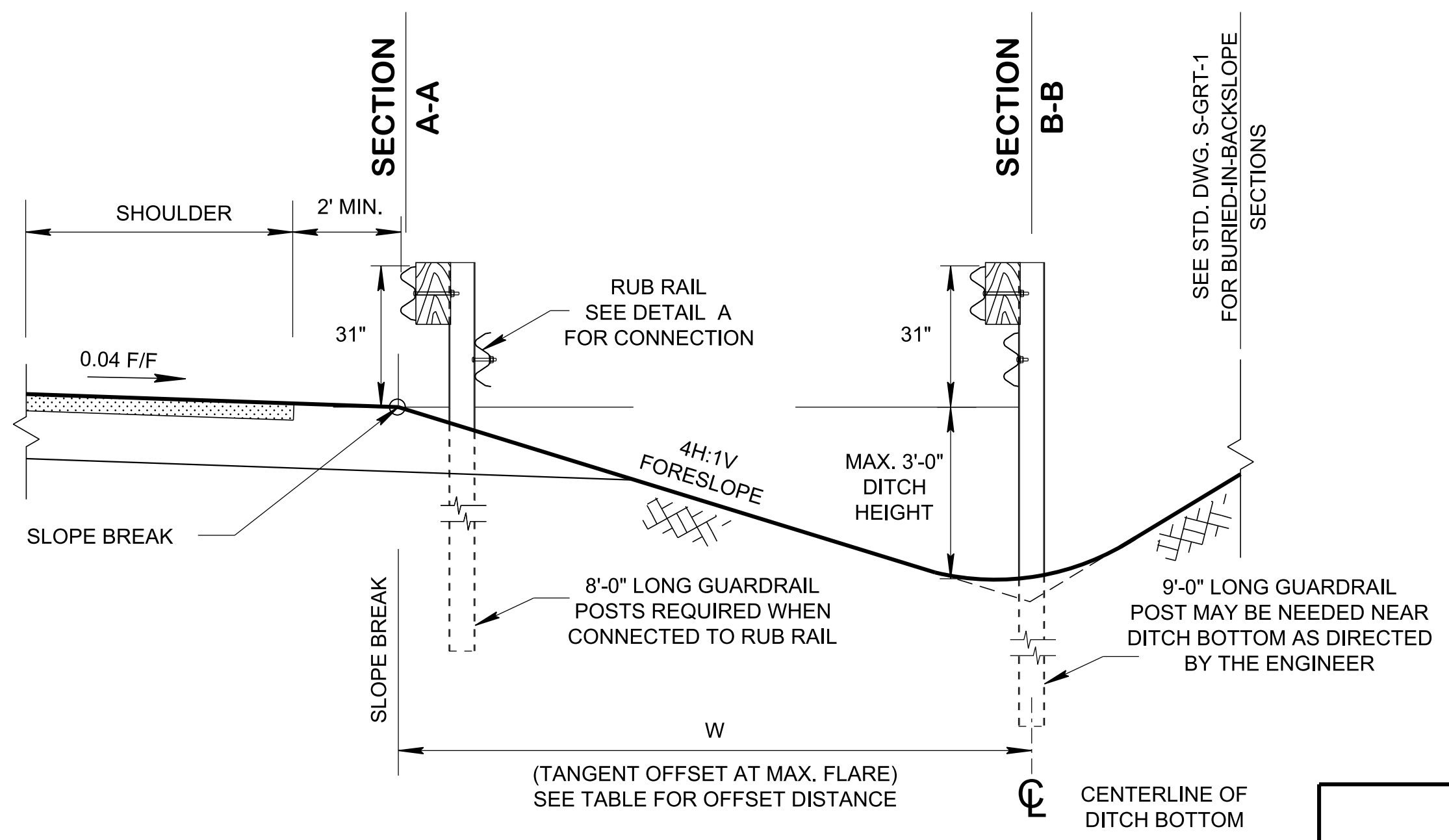


PLAN VIEW

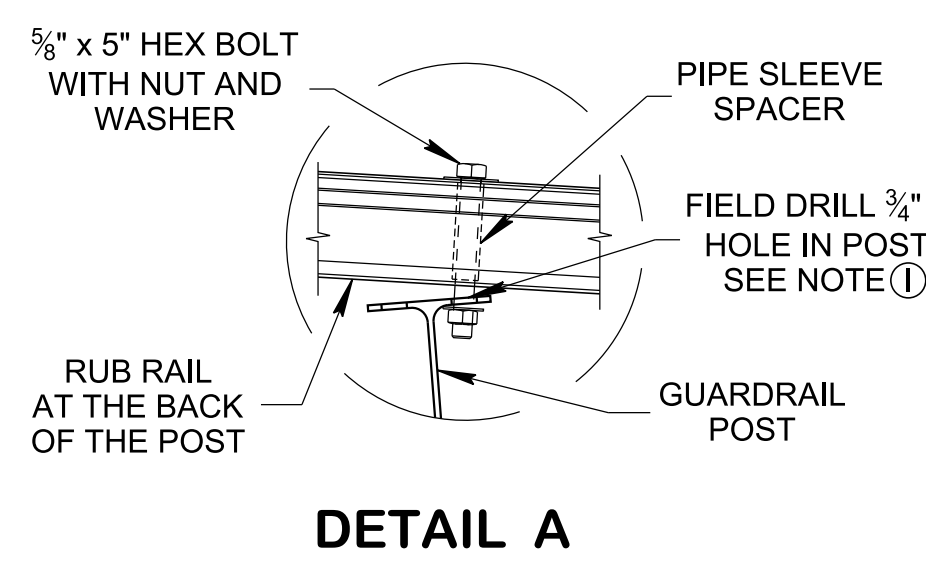


ELEVATION VIEW

FLARED GUARDRAIL INSTALLATION (NON-TRAVERSABLE MASH TL-3)



SECTION VIEWS FOR FILL SLOPE



DETAIL A

TABLE FLARED GUARDRAIL LENGTH (FT)		
DITCH HEIGHT	TANGENT OFFSET AT MAX. FLARE (W) (FOR 4:1 FORESLOPE)	LENGTH OF FLARED GUARDRAIL (14:1 FLARE RATE)
3'-0"	12'-0"	175'-0"
2'-0"	8'-0"	112'-6"
1'-0"	4'-0"	62'-6"

NOTE TO DESIGNER

THIS STANDARD DRAWING SHOWS FLARED GUARDRAIL INSTALLATION IN FILL SLOPE THAT APPROACHING TO THE DITCH BOTTOM. USE THIS DRAWING WITH REFERENCING STANDARD DRAWING S-GRT-1 TYPE 12 GUARDRAIL TERMINAL BURIED-IN -BACKSLOPE.

- GENERAL NOTES**
- (A) THE FILL SLOPE MUST NOT BE ALLOWED TO SPILL UNDER THE RAIL THROUGHOUT THE LENGTH OF NEED BECAUSE THIS EFFECTIVELY DECREASES THE RAIL HEIGHT AND ALLOWS VEHICLE OVERRIDE RATHER THAN CONTAINMENT AND REDIRECTION.
 - (B) THE FLARE RATE OF THE GUARDRAIL IS STEEPENED TO 8:1 AFTER CROSSING THE BOTTOM OF DITCH.
 - (C) REFER TO STANDARD DRAWINGS S-GRT-1 FOR TYPE 12 GUARDRAIL TERMINAL BURIED-IN-BACKSLOPE INSTALLATION, S-GR SERIES FOR ADDITIONAL GUARDRAIL DETAILS, RD11-S-11 FOR ROADSIDE SLOPE DEVELOPMENT AND RD11-S-11A FOR ROADSIDE DITCH DETAILS.
 - (D) THE CONTRACTOR SHALL CONSTRUCT FORESLOPES AS PART OF THE INITIAL GRADING OPERATIONS AS SHOWN ON THIS STANDARD DRAWING AFTER FIELD VERIFICATION OF HAZARD LOCATION AND ENGINEER'S APPROVAL.
 - (E) ONLY USE TYPE 38 OR TYPE 21 (WHERE APPROPRIATE) IF SUITABLE BACKSLOPE IS NOT AVAILABLE.
 - (F) ADD W-BEAM RUB RAIL WHENEVER THE CLEARANCE FROM THE BOTTOM OF THE W-BEAM TO THE GROUND LINE EXCEEDS 18 INCHES.
 - (G) FOR THE RUB RAIL SECTION USE 8 FEET LONG POST UNLESS OTHERWISE NOTED. AND 9 FEET LONG POST MAY BE NEEDED NEAR DITCH BOTTOM AS DIRECTED BY THE ENGINEER.
 - (H) THE DESIGNER SHALL INCORPORATE THE DETAILS SHOWN ON THIS DRAWING IN THE RIGHT-OF-WAY AND CONSTRUCTION PLANS AS WELL AS THE ROADWAY CROSS-SECTION SHEETS.
 - (I) FIELD DRILLED STEEL POSTS ARE ALLOWED FOR BOTTOM ELEMENT. USE ZINC RICH PAINT TO COAT FIELD DRILLED HOLES IN POSTS OR RAIL ELEMENTS. GALVANIZING REQUIRED FOR PLATE AND HARDWARE.
 - (J) PAYMENT FOR FURNISHING AND INSTALLING FLARED GUARDRAIL WITH RUB-RAIL WILL BE MADE UNDER PAY ITEM NUMBER:
- 705-02.01, SINGLE GUARDRAIL WITH RUB-RAIL (TYPE 2) PER L.F.

STATE OF TENNESSEE
 STANDARD DRAWING
 DEPARTMENT OF TRANSPORTATION

**LAYOUT OF
FLARED GUARDRAIL
(TL-3)**

06-03-2021 S-GRT-1A