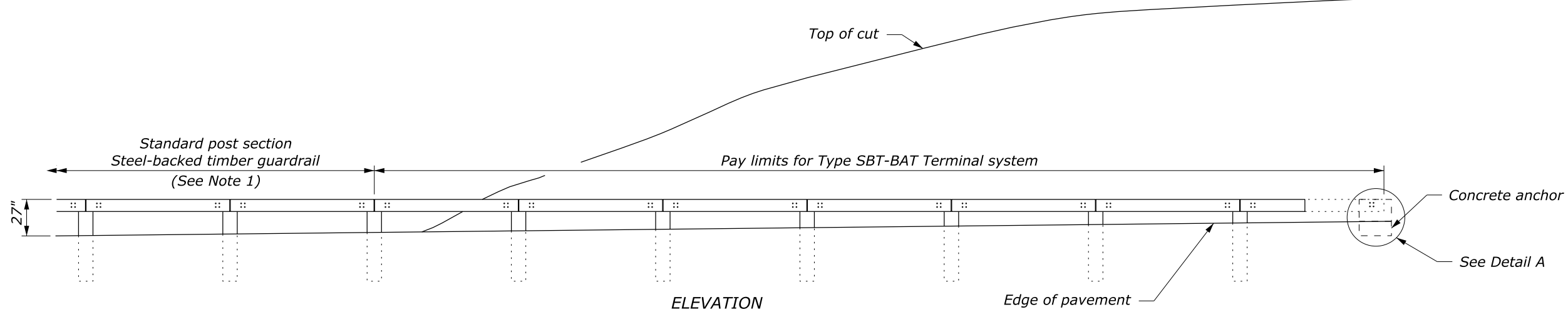
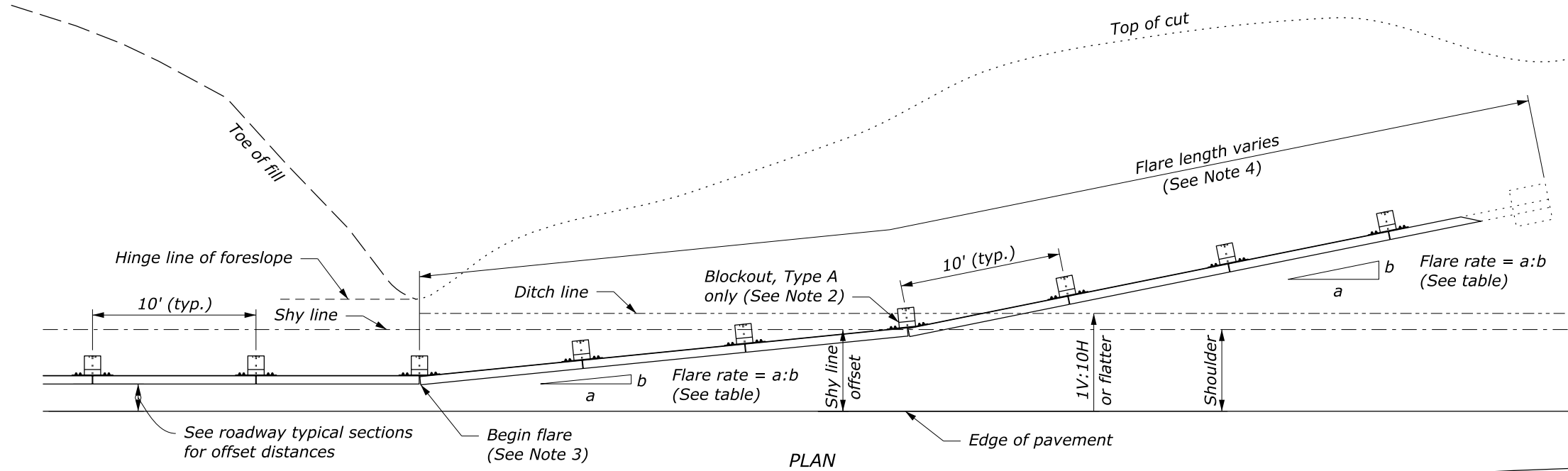
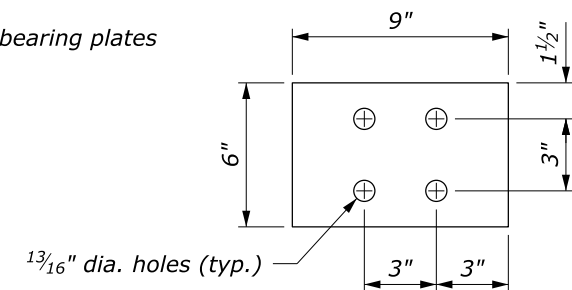
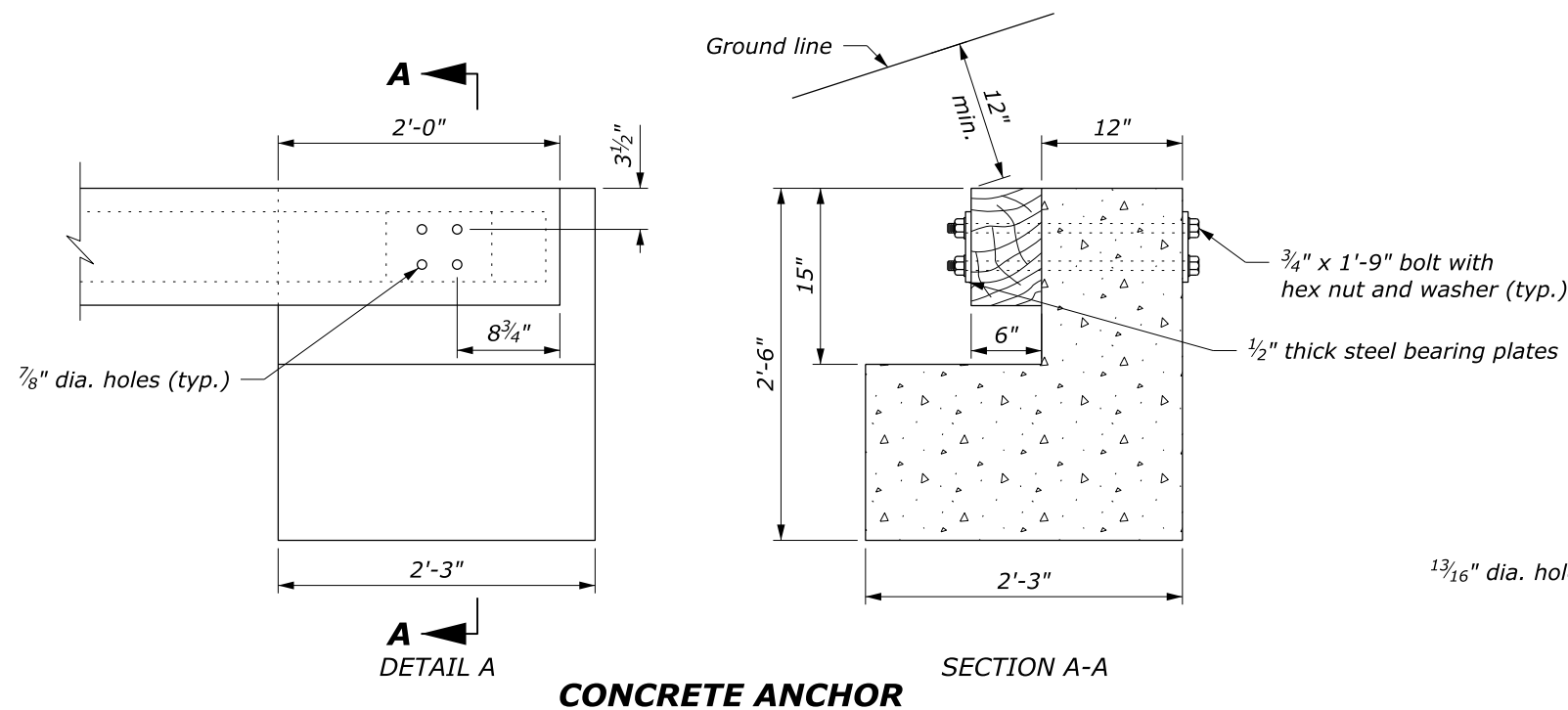


**NOTE:**

1. See Standard 617-60, SBTA and SBTB for timber, structural steel, and hardware details.
2. On the Type A, blocked-out guardrail, include the blockouts in the terminal system, except on the concrete anchor. For the Type B, non-blocked-out guardrail, no blockouts are included.
3. Begin the cut flares at the nearest post to a transition point between fill and cut as directed.
4. Extend the flare into the cut until a minimum 1-foot cover is obtained over the guardrail end.



**APPROACH & DEPARTURE FLARE WITH BACK SLOPE ANCHOR TERMINAL (BAT)**



GUARDRAIL FLARE RATE			
DESIGN SPEED mph	SHY LINE OFFSET ft	FLARE RATE INSIDE SHY LINE (a:b)	FLARE RATE OUTSIDE SHY LINE (a:b)
60	8.0	26:1	14:1
50	6.5	21:1	11:1
40	5.0	16:1	8:1
30 and less	4.0	13:1	7:1

U.S. DEPARTMENT OF TRANSPORTATION, FHWA  
OFFICE OF FEDERAL LANDS HIGHWAY

**STEEL-BACKED TIMBER GUARDRAIL  
TERMINAL SYSTEM  
TYPE SBT-BAT**

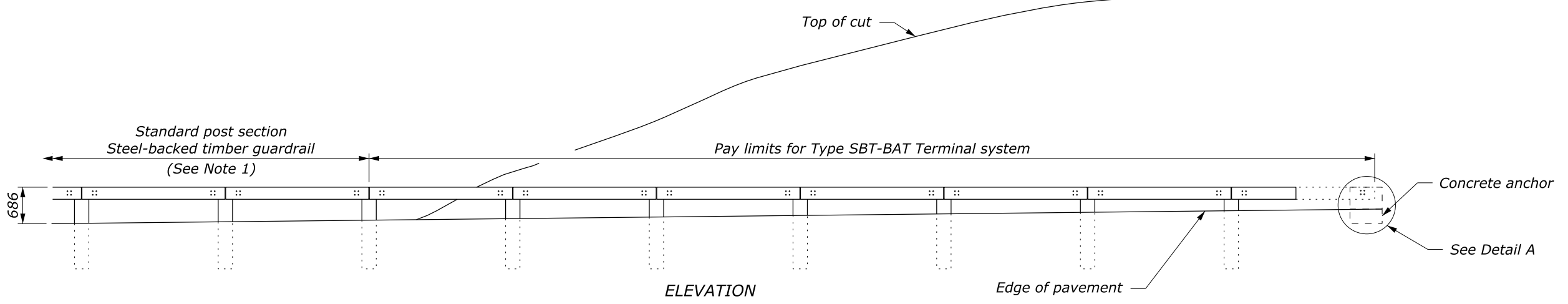
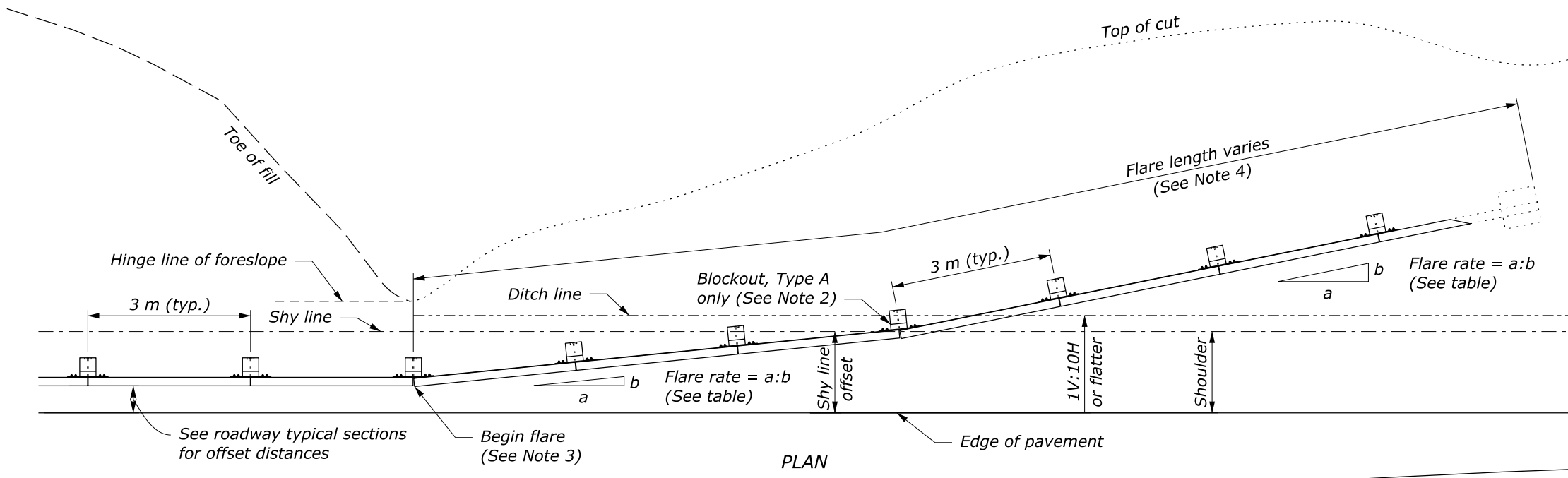
FLH STANDARD  
617-62

SPECIFICATION  
FP-24

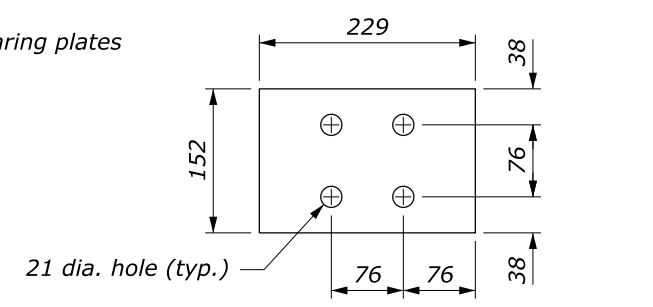
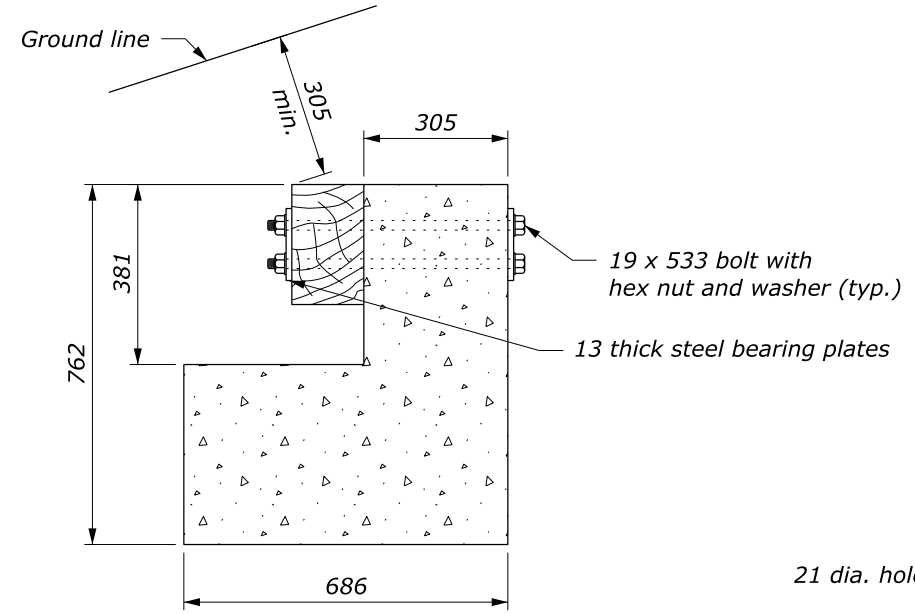
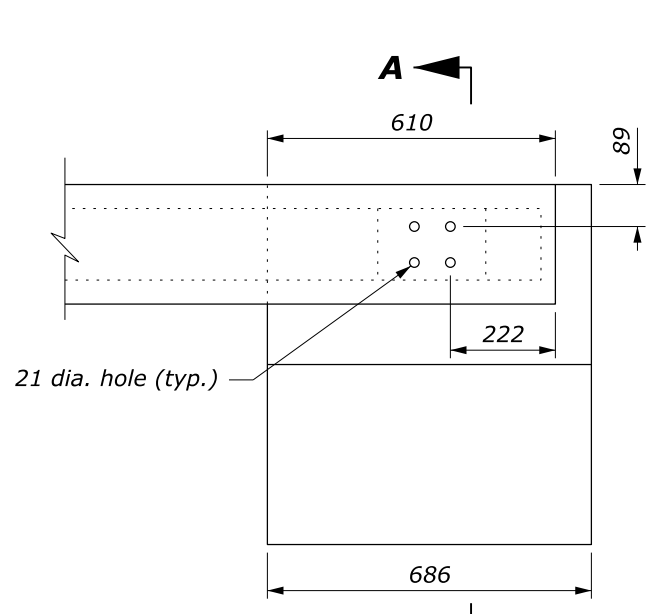
APPROVED FOR USE  
1/2024

**NOTE:**

1. See Standard M617-60, SBTA and SBTB for timber, structural steel, and hardware details.
2. On the Type A, blocked-out guardrail, include the blockouts in the terminal system, except on the concrete anchor. For the Type B, non-blocked-out guardrail, no blockouts are included.
3. Begin the cut flares at the nearest post to a transition point between fill and cut as directed.
4. Extend the flare into the cut until a minimum 305 mm cover is obtained over the guardrail end.
5. Provide hardware in the metric sizes shown. Equivalent US Customary sizes may be used when metric sizes are unavailable.



**APPROACH & DEPARTURE FLARE WITH BACK SLOPE ANCHOR TERMINAL (BAT)**



GUARDRAIL FLARE RATE			
DESIGN SPEED km/h	SHY LINE OFFSET m	FLARE RATE INSIDE SHY LINE (a:b)	FLARE RATE OUTSIDE SHY LINE (a:b)
100	2.5	26:1	14:1
80	2.0	21:1	11:1
60	1.5	16:1	8:1
50 and less	1.2	13:1	7:1

This drawing contains **Metric** units of measure. Dimensions without units are millimeters.

U.S. DEPARTMENT OF TRANSPORTATION, FHWA OFFICE OF FEDERAL LANDS HIGHWAY	FLH STANDARD M617-62
<b>STEEL-BACKED TIMBER GUARDRAIL TERMINAL SYSTEM TYPE SBT-BAT</b>	SPECIFICATION FP-24
	APPROVED FOR USE 1/2024

NO SCALE