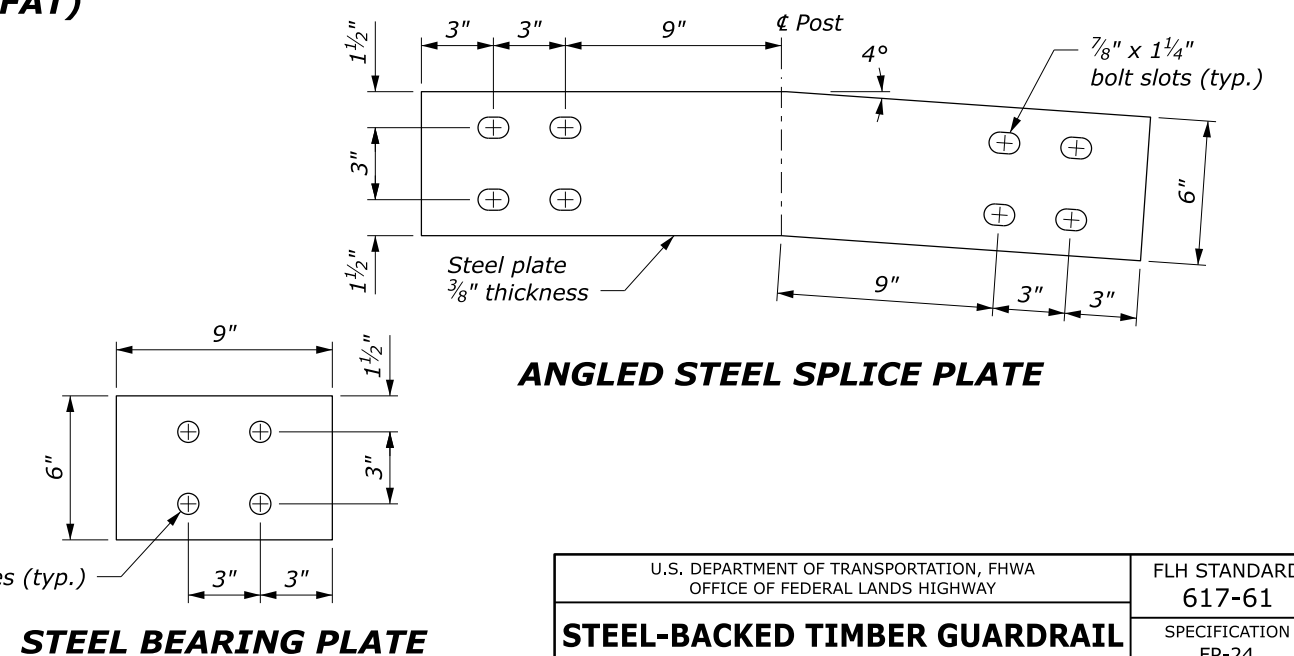
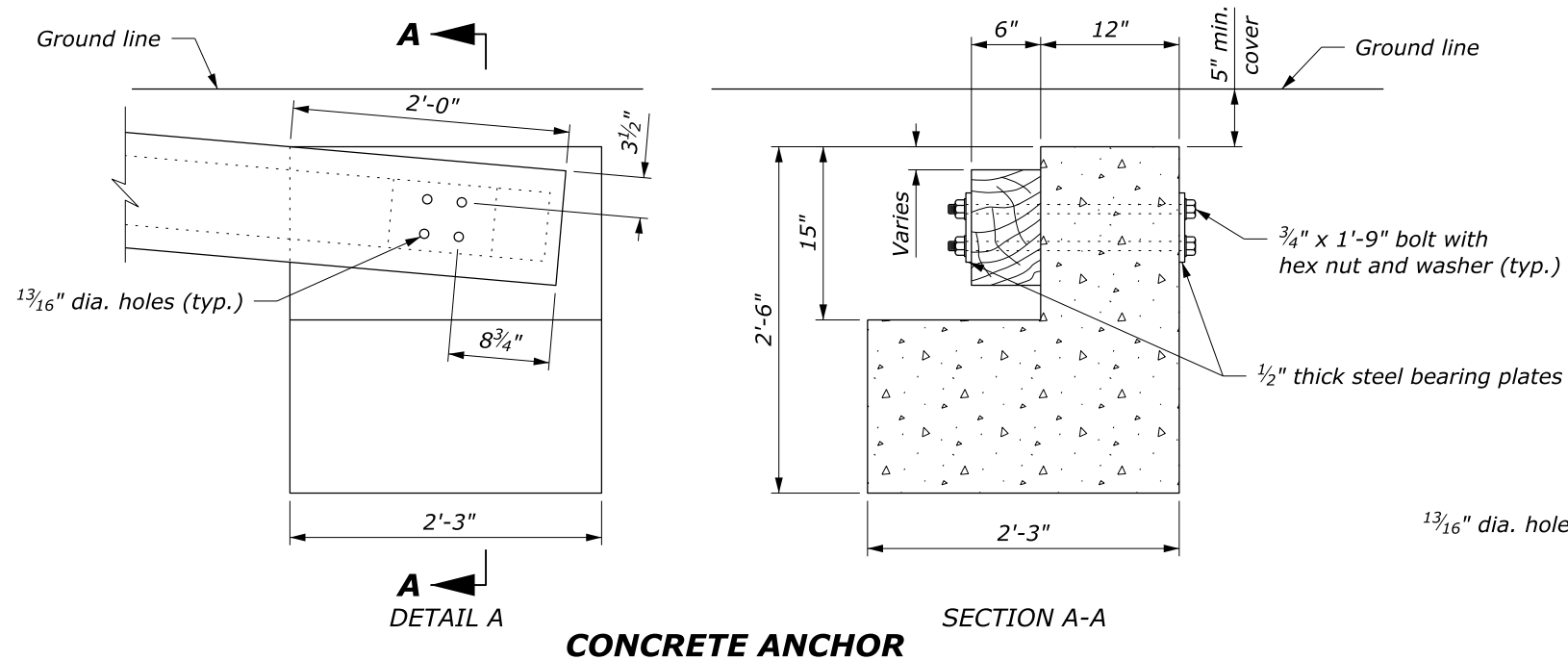


**APPROACH & DEPARTURE FLARE WITH FLARED ANCHOR TERMINAL (FAT)**



**NOTE:**

1. Extend the fill widening a minimum of 5 feet behind the guardrail, unless otherwise directed.
2. The guardrail flare shown in the plan view is the minimum length and rate required. As directed flare the guardrail so that the terminal system is outside the clear zone. If the terminal system cannot be located outside the clear zone, it should be flared as far as practical from the road at the maximum rate indicated on the Guardrail Flare Rate table.
3. See Standard 617-60, Steel-Backed Timber Guardrail, Type SBTA and SBTB, for timber, structural steel, and hardware details.
4. On the Type A, blocked-out guardrail, include the blockouts in terminal system, except on the concrete anchor. For the Type B, non-blocked-out guardrail, no blockouts are included.

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

**ANGLED STEEL SPLICE PLATE**

**STEEL BEARING PLATE**

NO SCALE

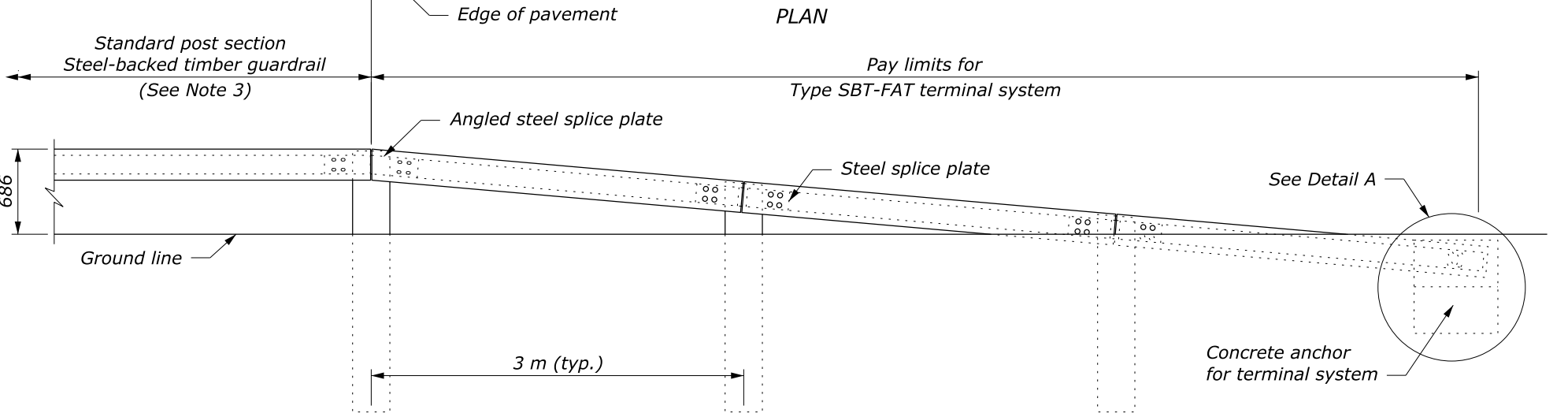
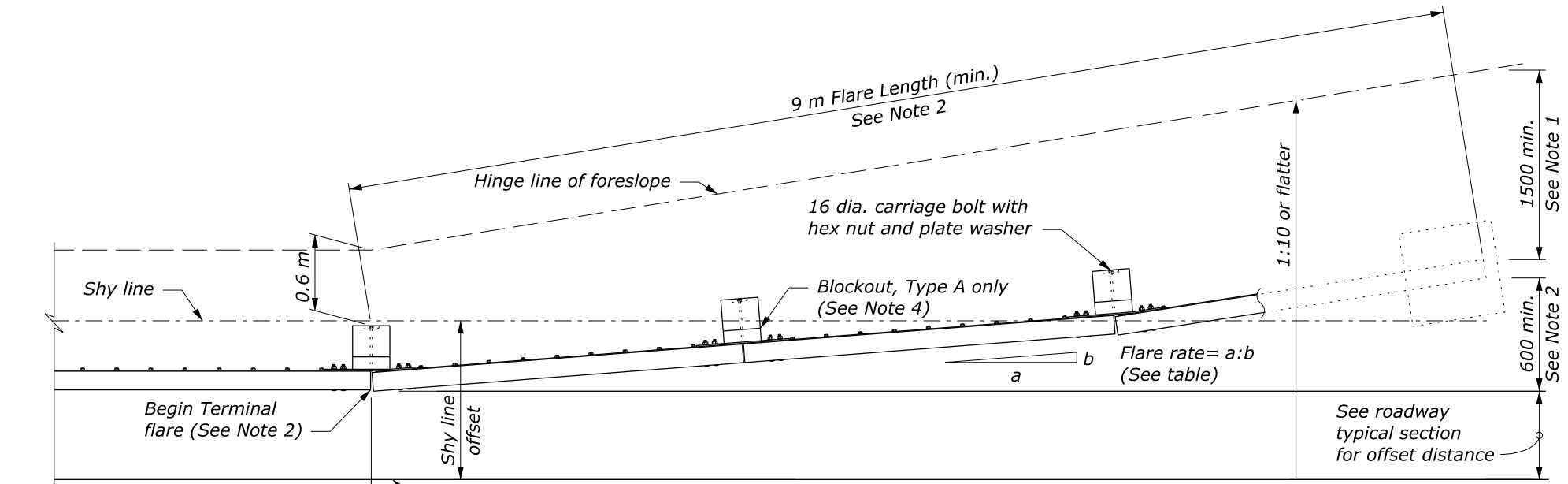
U.S. DEPARTMENT OF TRANSPORTATION, FHWA  
OFFICE OF FEDERAL LANDS HIGHWAY

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

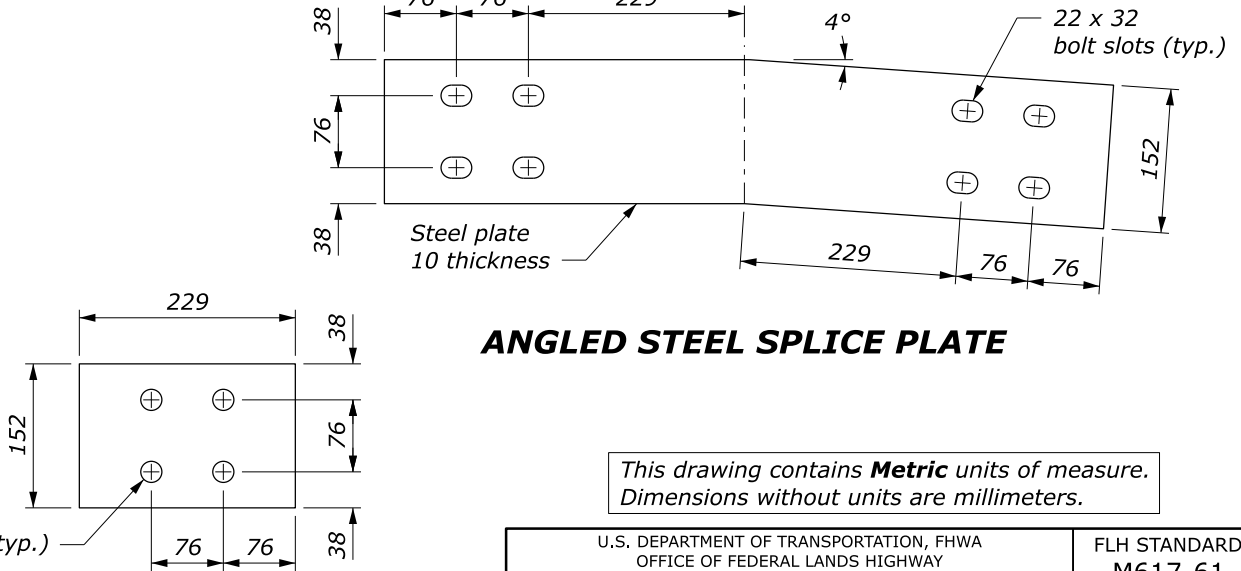
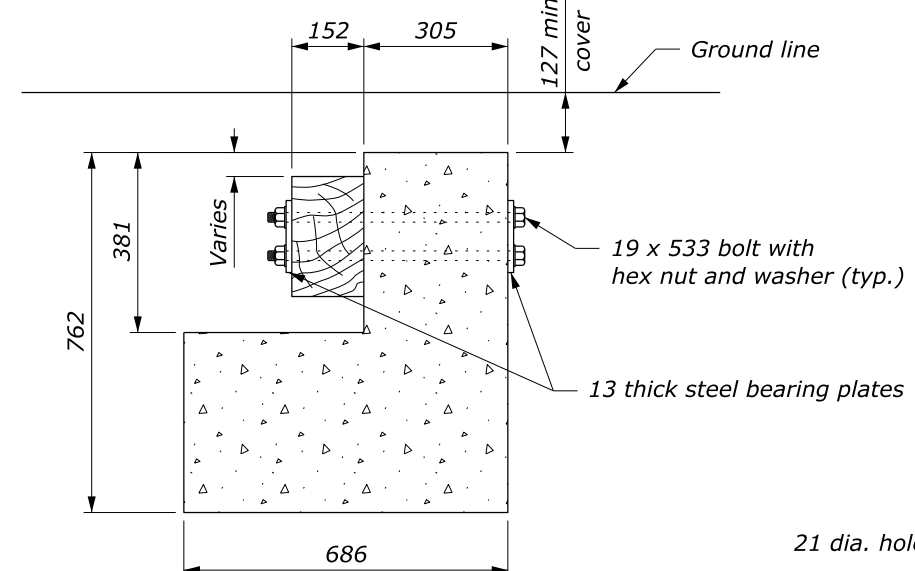
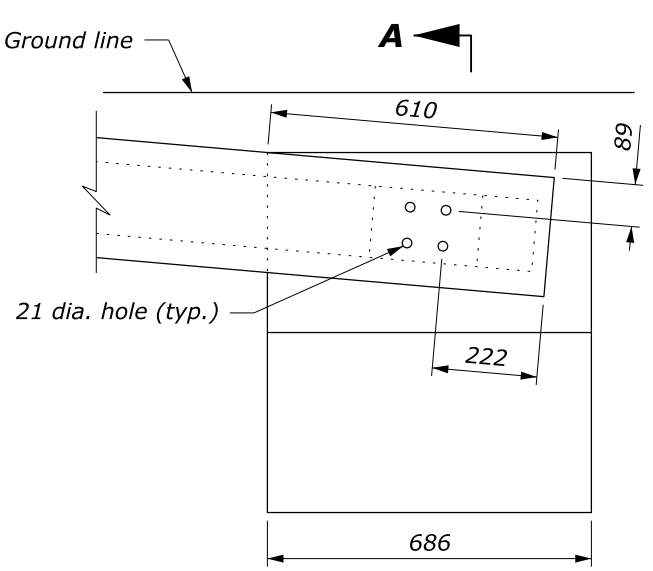
FLH STANDARD  
617-61

SPECIFICATION  
FP-24

APPROVED FOR USE  
1/2024



**APPROACH & DEPARTURE FLARE WITH FLARED ANCHOR TERMINAL (FAT)**



**ANGLED STEEL SPLICE PLATE**

**STEEL BEARING PLATE**

NO SCALE

**NOTE:**

1. Extend the fill widening a minimum of 1.5 m behind the guardrail, unless otherwise directed.
2. The guardrail flare shown in the plan view is the minimum length and rate required. As directed flare the guardrail so that the terminal system is outside the clear zone. If the terminal system cannot be located outside the clear zone, it should be flared as far as practical from the road at the maximum rate indicated on the Guardrail Flare Rate table.
3. See Standard M617-60, Steel-Backed Timber Guardrail, Type SBTA and SBTB, for timber, structural steel, and hardware details.
4. On the Type A, blocked-out guardrail, include the blockouts in terminal system, except on the concrete anchor. For the Type B, non-blocked-out guardrail, no blockouts are included.
5. Provide hardware in the metric sizes shown. Equivalent US Customary sizes may be used when metric sizes are unavailable.

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 M617-61
<b>STEEL-BACKED TIMBER GUARDRAIL TERMINAL SYSTEM TYPE SBT-FAT</b>	SPECIFICATION FP-24
	APPROVED FOR USE 1/2024

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