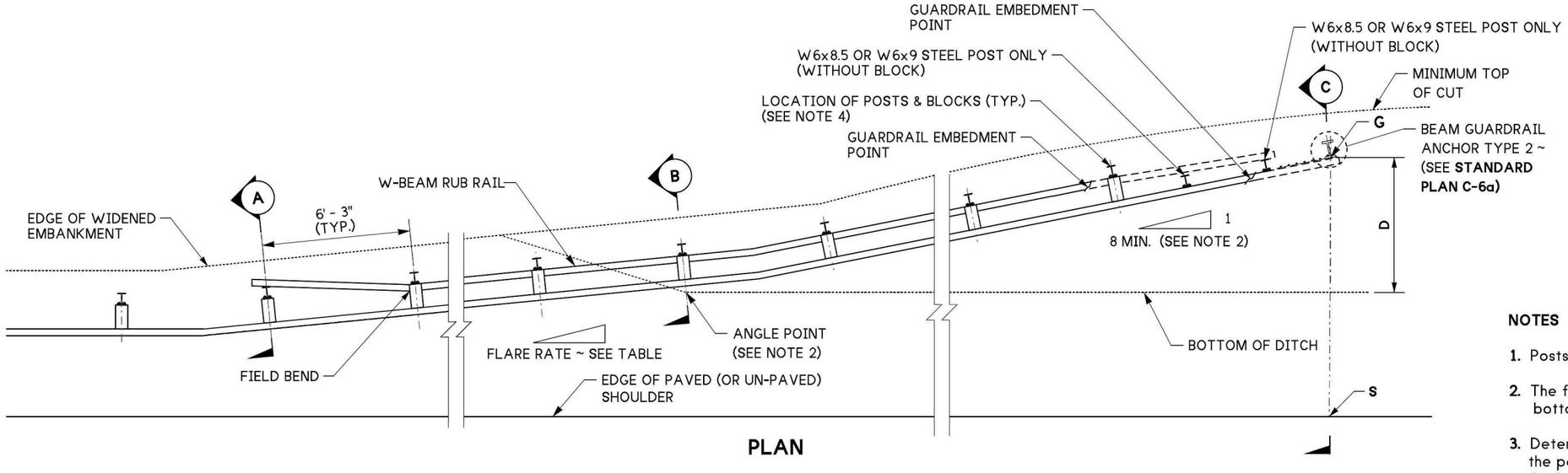
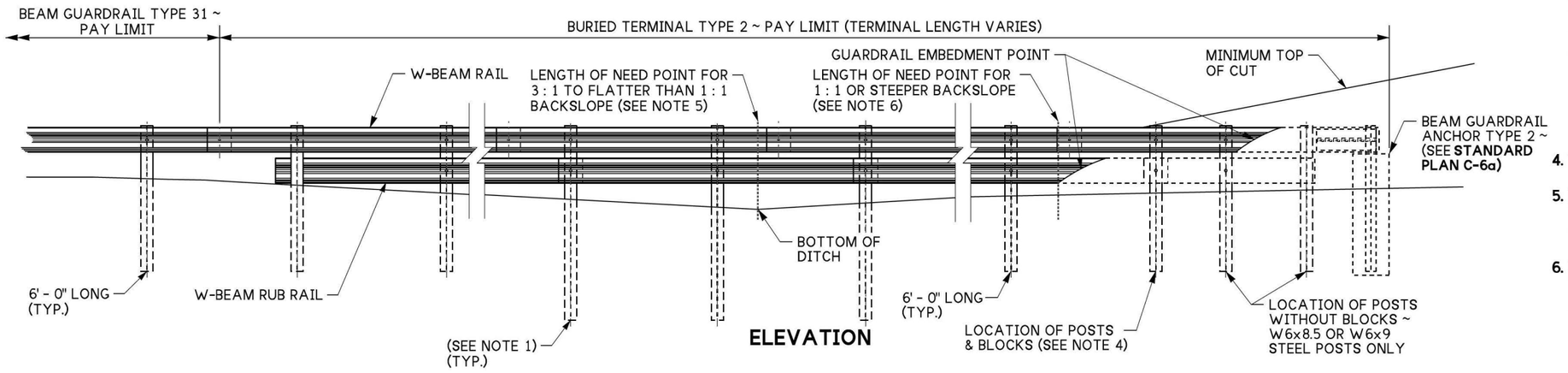
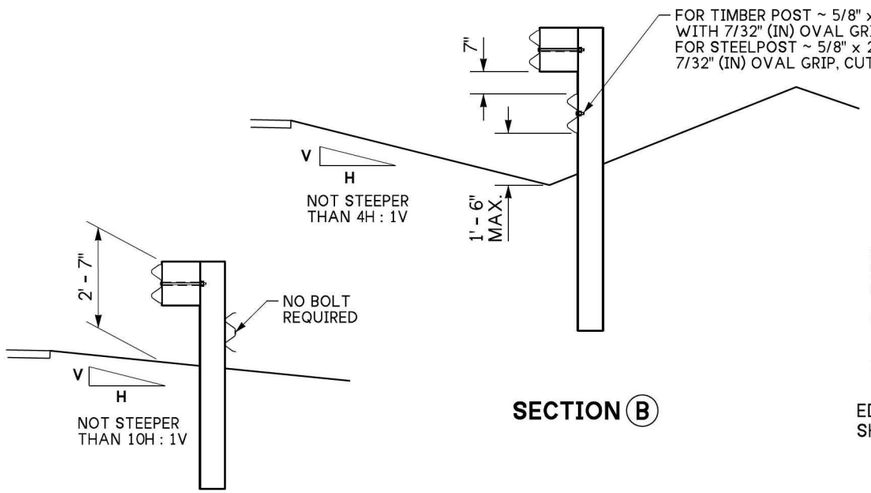



## PLAN

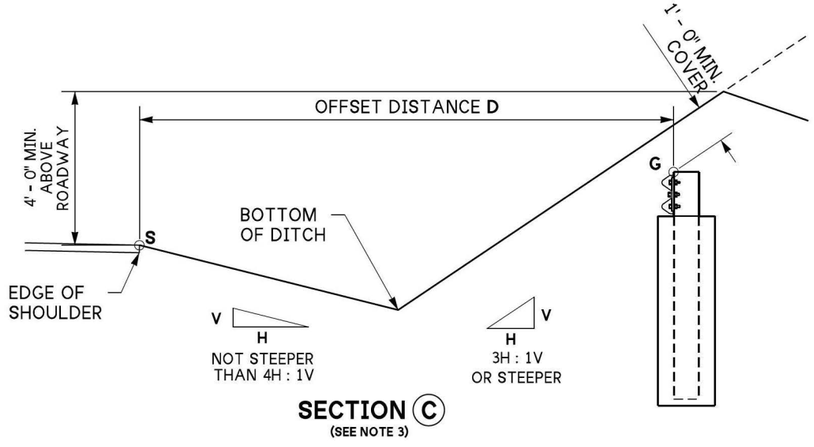



## ELEVATION

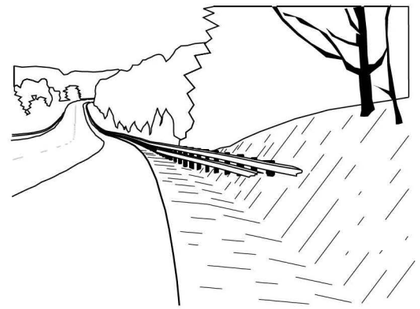



## SECTION (B)

## SECTION (A)




## SECTION (C)
(SEE NOTE 3)



## PERSPECTIVE

**NOTES**

1. Posts installed on shoulder slopes steeper than 10H : 1V shall be 8' (ft) long.
2. The flare rate of the guardrail may be steepened after crossing the ditch bottom to shorten the length of the terminal.
3. Determine the height of the W-Beam at the Anchor (G) by first calculating the perpendicular offset distance (D) from the edge of shoulder (S) to the Anchor (on station). Multiply that distance by 0.1, then subtract the product from the elevation of the same point (S) on the edge of shoulder used to obtain the offset distance (at the same station). Add Beam Guardrail design height (31" (in)) to that remainder for a sum that equals the elevation of the top of the W-Beam at the Anchor.

   Refer to Section "C" :

   $$Elevation_G = [(Elevation_S - (D \times 0.1)) + (31"/12)]$$

4. Timber or steel post. Steel posts shown.
5. For terminals buried in 3 : 1 to flatter than 1 : 1 backslopes, the length of need point is the point where the w-beam rail is at full height in relation to the roadway shoulder where the terminal barrier crosses the ditch line.
6. For terminals buried in 1 : 1 or steeper backslopes, the length of need point is where the barrier remains at full height in relation to the roadway shoulder, up to the point where the barrier enters the backslope.

| FLARE RATE TABLE | |
|---|---|
| RATE (FT) | POSTED SPEED (MPH) |
| 15 : 1 OR FLATTER | 65 - 70 |
| 14 : 1 OR FLATTER | 60 |
| 12 : 1 OR FLATTER | 55 |
| 11 : 1 OR FLATTER | 50 |
| 10 : 1 OR FLATTER | 45 |
| 9 : 1 OR FLATTER | 40 OR LESS |

TIMOTHY J MOECKEL
STATE OF WASHINGTON
56294
REGISTERED
PROFESSIONAL ENGINEER

Aug 10, 2026

# BEAM GUARDRAIL TYPE 31 ~ BURIED TERMINAL TYPE 2

## STANDARD PLAN C-22.16-09

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

Mark A Gaines — Aug 10, 2026

STATE DESIGN ENGINEER

Washington State Department of Transportation