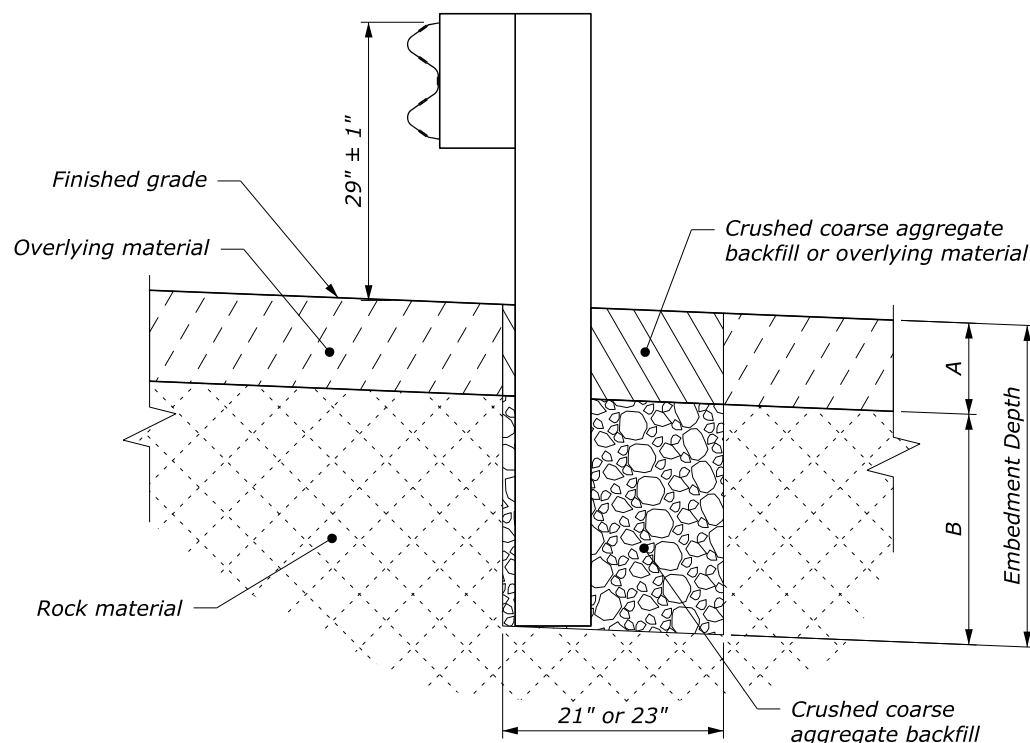


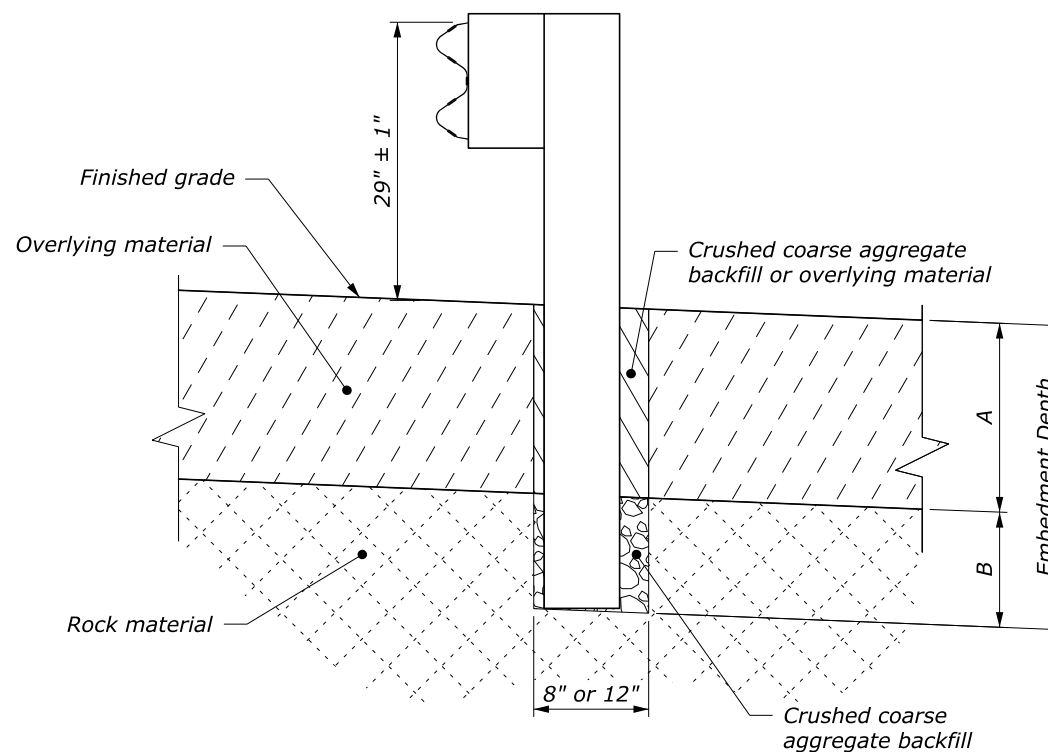
**NOTE:**

1. Use this standard when posts cannot be embedded to the minimum depth shown on ET Details 617-10 or 617-11.
2. Unless otherwise specified use either the circular or the oblong hole configuration for Case 1 conditions.
3. Crushed coarse aggregate backfill conforms to "coarse aggregate for concrete" or "granular backfill for underdrain pipe with geotextile" in Section 703.
4. Place crushed coarse aggregate according to the post requirements in Section 617.
5. Treat field cut galvanized steel post surfaces that expose the base metal with two coats of zinc-oxide paint.



Case 1: Overlying material depth (A) is 18" or less.

POST EMBEDMENT DIMENSIONS			
HOLE TYPE	EMBEDMENT DEPTH	OVERLYING MATERIAL (A)	DRILLING DEPTH (B)
Case 1	24" to 42"	0 to 18"	24"
Case 2	30" to 42"	> 18" to 30"	12"
	42"	> 30"	42" - A



Case 2: Overlying material depth (A) is greater than 18".

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION EASTERN FEDERAL LANDS HIGHWAY DIVISION	
U.S. CUSTOMARY DETAIL	
<b>G4 W-BEAM GUARDRAIL INSTALLATION IN ROCK</b>	
REVISD: 6/2014 5/2016	DETAIL ET 617-13