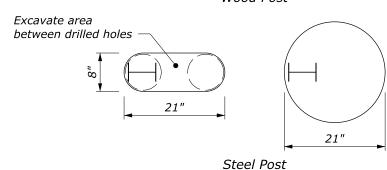
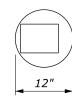


Wood Post



**PLAN VIEW** 



Wood Post

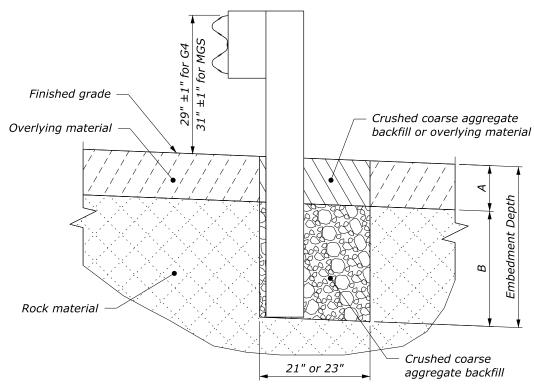


Steel Post

# PLAN VIEW

#### NOTE:

- 1. Use this standard when posts cannot be embedded to the minimum depth shown on Standard 617-10, 617-11, 617-31 or 617-32.
- 2. Unless otherwise specified, use either the circular or the oblong hole configuration for Case 1 conditions.
- 3. Use crushed coarse aggregate conforming to Section 703 "Coarse aggregate for concrete" or granular backfill for "Underdrain pipe with geotextile".
- 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.



# **ELEVATION**

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

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

Finished grade
Overlying material

Crushed coarse aggregate backfill or overlying material

Rock material

Rock material

Rock material

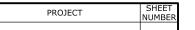
Rock material

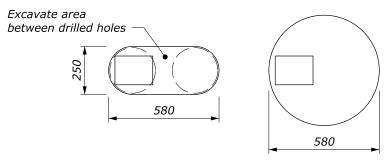
#### **ELEVATION**

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

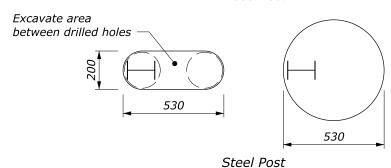
U.S. DEPARTMENT OF TRANSPORTATION, FHWA OFFICE OF FEDERAL LANDS HIGHWAY	FLH STANDARD 617-13
MGS AND G4	SPECIFICATION FP-24, FP-14
W-BEAM GUARDRAIL INSTALLATION IN ROCK	APPROVED FOR USI 1/2024

NO SCALE

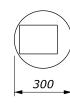




Wood Post



**PLAN VIEW** 



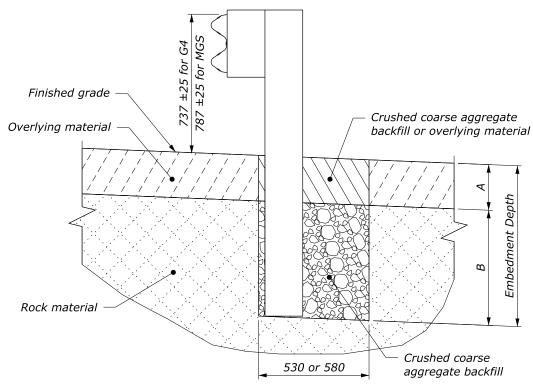
Wood Post



Steel Post
PLAN VIEW

### NOTE:

- 1. Use this standard when posts cannot be embedded to the minimum depth shown on Standard M617-10, M617-11, M617-31 or M617-32.
- 2. Unless otherwise specified, use either the circular or the oblong hole configuration for Case 1 conditions.
- 3. Use crushed coarse aggregate conforming to Section 703 "Coarse aggregate for concrete" or granular backfill for "Underdrain pipe with geotextile".
- 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.



## **ELEVATION**

Case 1: Overlying material depth (A) is 460 or less

P	POST EMBEDMENT DIMENSIONS				
HOLE	EMBEDMENT	OVERLYING	DRILLING		
TYPE	DEPTH	MATERIAL (A)	DEPTH (B)		
Case 1	610 to 1070	0 to 460	610		
Case 2	760 to 1070	> 460 to 760	300		
Case 2	1070	> 760	1070 - A		

Finished grade

Overlying material

Rock material

Crushed coarse aggregate backfill or overlying material

Crushed coarse aggregate backfill or overlying material

Crushed coarse aggregate backfill

**ELEVATION** 

Case 2: Overlying material depth (A) is greater than 460

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

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

MGS AND G4
W-BEAM GUARDRAIL
INSTALLATION IN ROCK

M617-13

SPECIFICATION
FP-24, FP-14

APPROVED FOR USE
1/2024

FLH STANDARD

NO SCALE