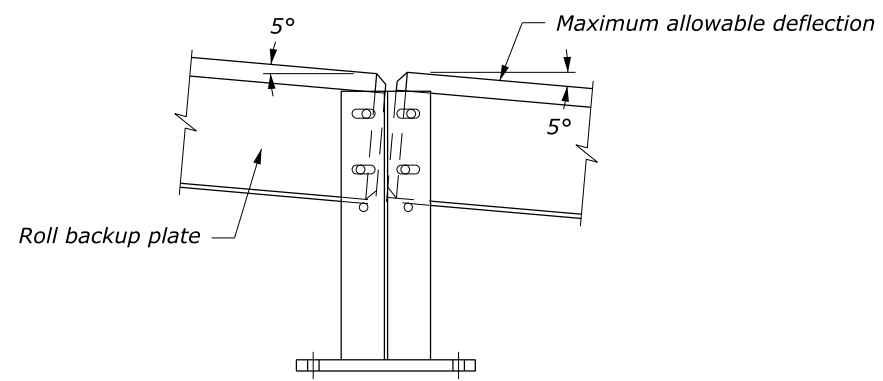
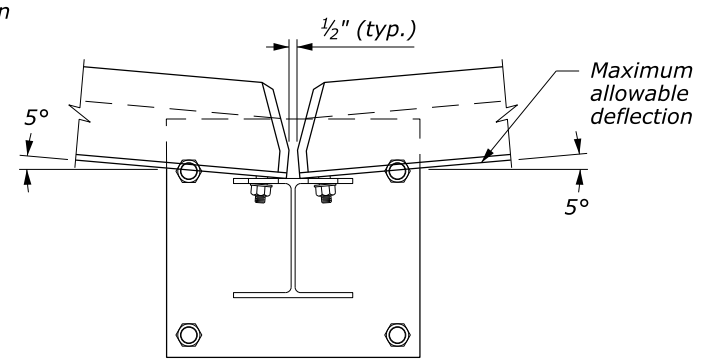


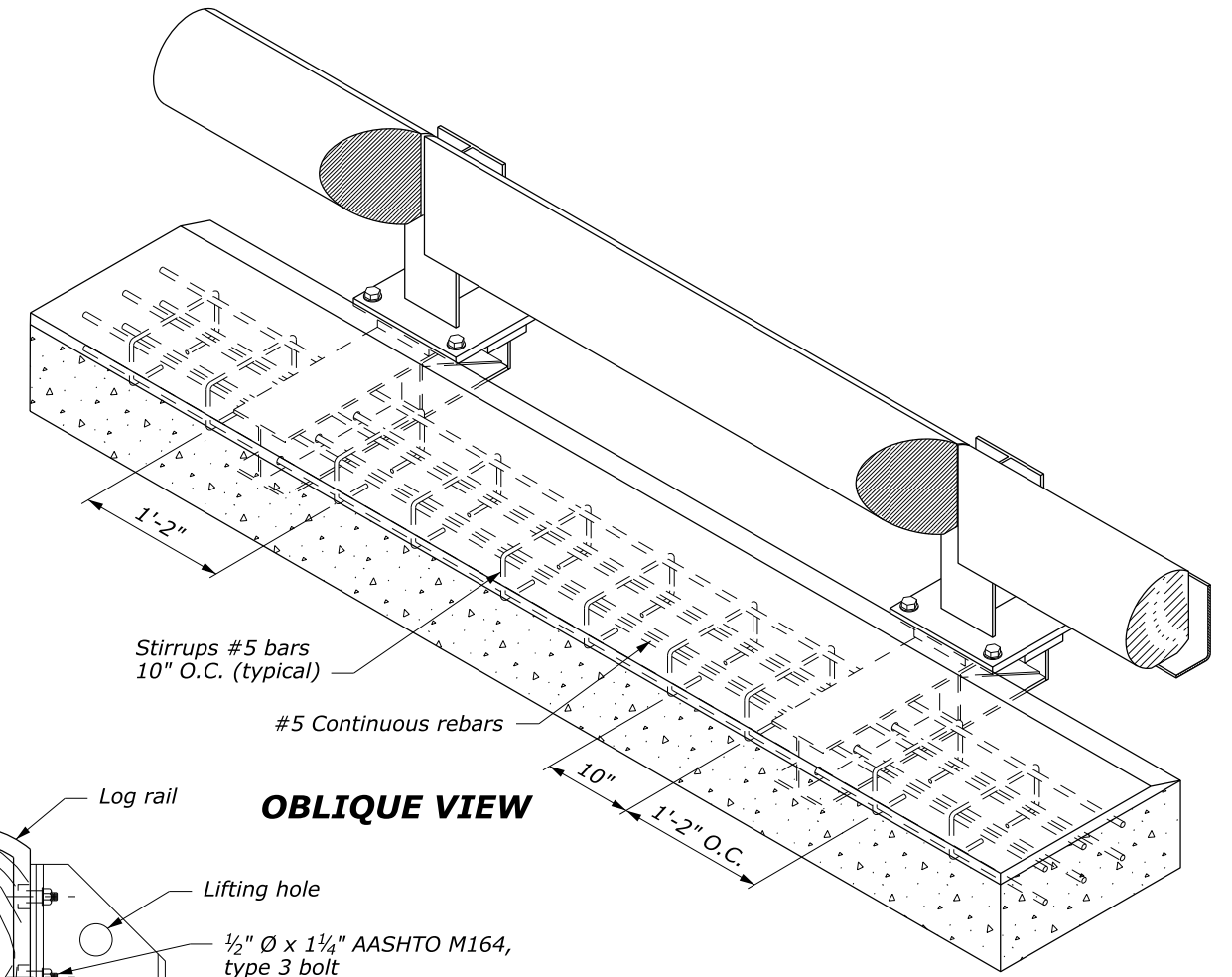
NOTE:
 1. Steel is ASTM A242 or A588, Grade 50.
 2. Concrete: minimum $f_c' = 3500$ psi.



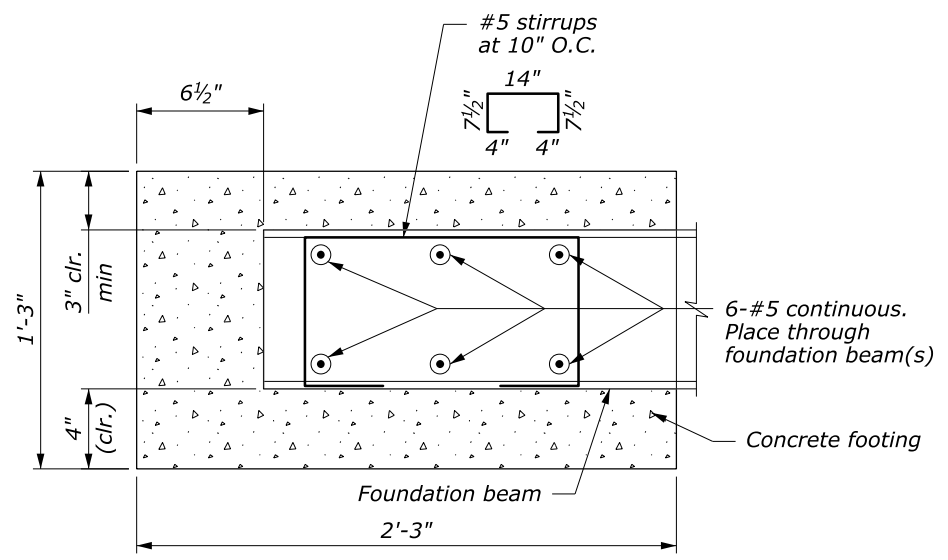
**ENDS OF RAILS AT POST:
 MAXIMUM VERTICAL
 DEFLECTION ALLOWABLE
 ELEVATION**



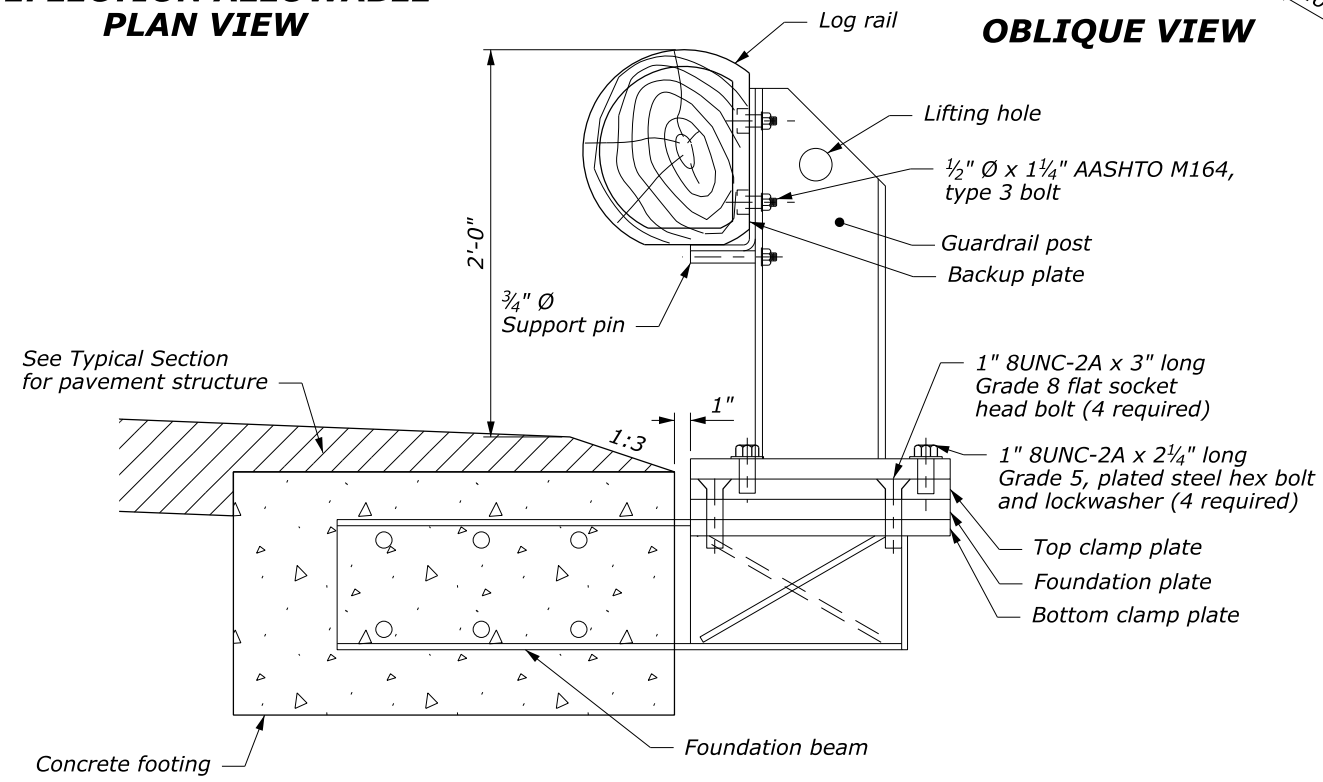
**MAXIMUM HORIZONTAL
 DEFLECTION ALLOWABLE
 PLAN VIEW**



OBLIQUE VIEW



**FOOTING DETAIL
 TYPICAL SECTION**

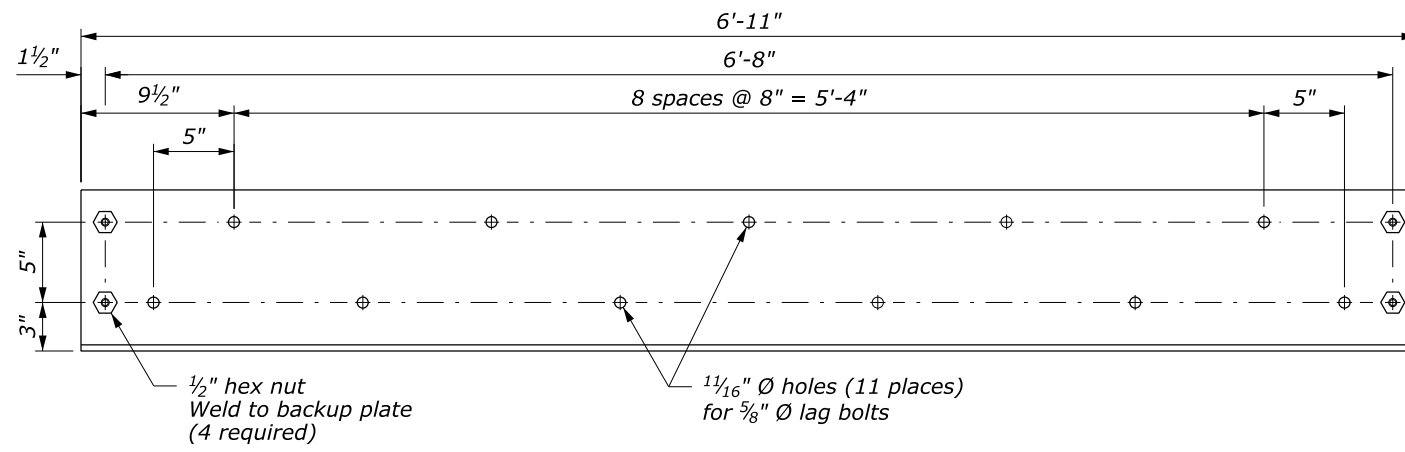


TYPICAL SECTION

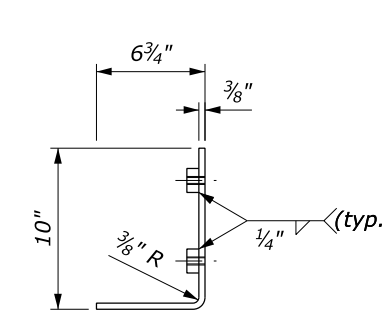
NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION WESTERN FEDERAL LANDS HIGHWAY DIVISION	
U.S. CUSTOMARY DETAIL REMOVABLE STEEL-BACKED LOG RAIL Sheet 1 of 3	
DETAIL APPROVED FOR USE 3/2009	DETAIL
REVISED:	W617-83

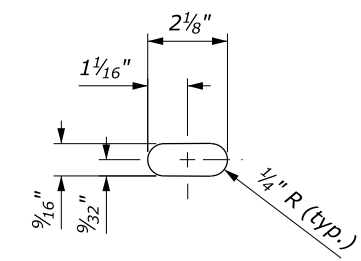
18 November 2014 8:42 AM c:\myfiles\pw_production\dms43646\Det.W617-83.dgn [USC]



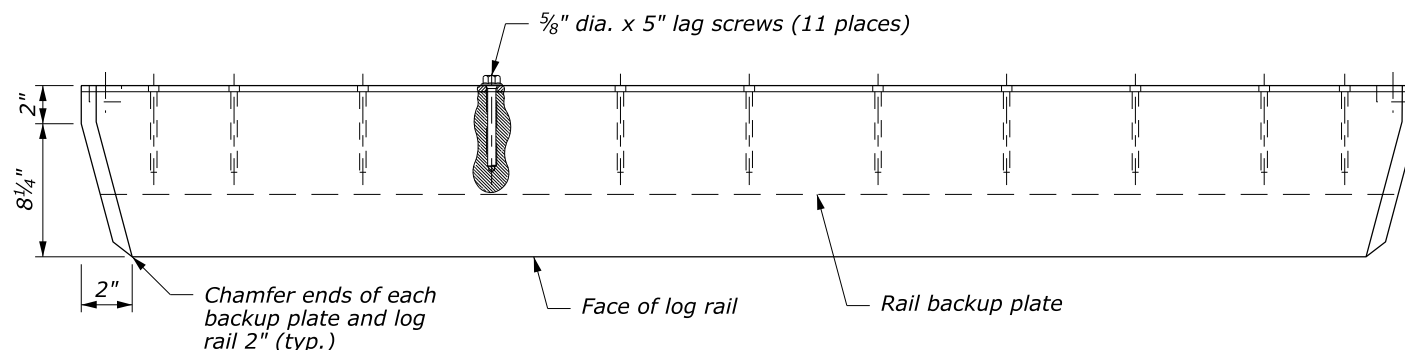
**RAIL BACKUP PLATE
ELEVATION VIEW**



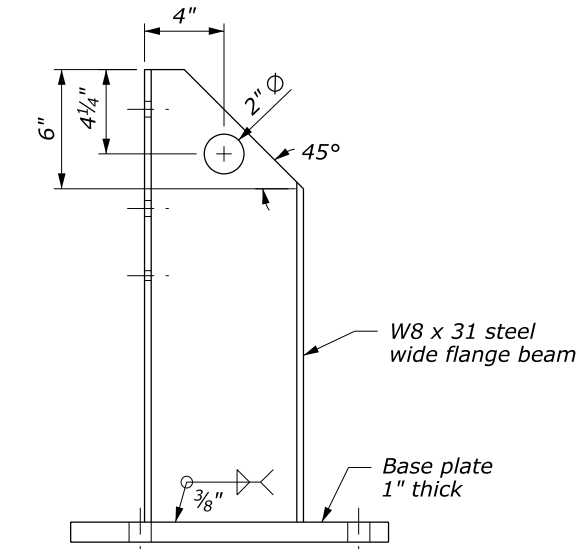
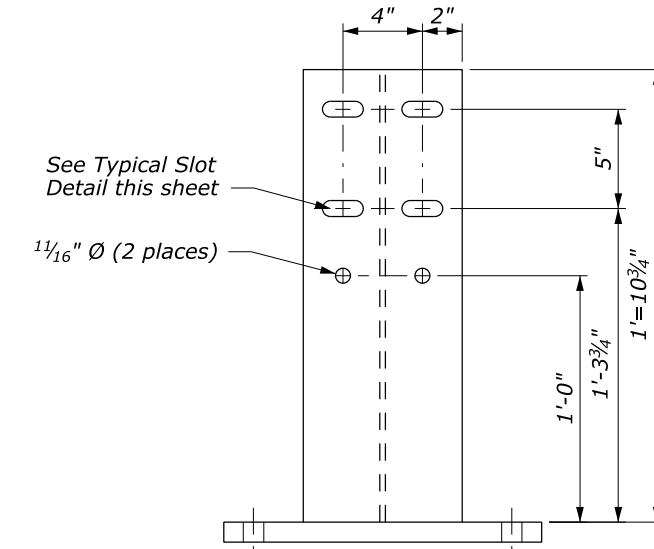
**RAIL BACKUP PLATE
SECTION VIEW**



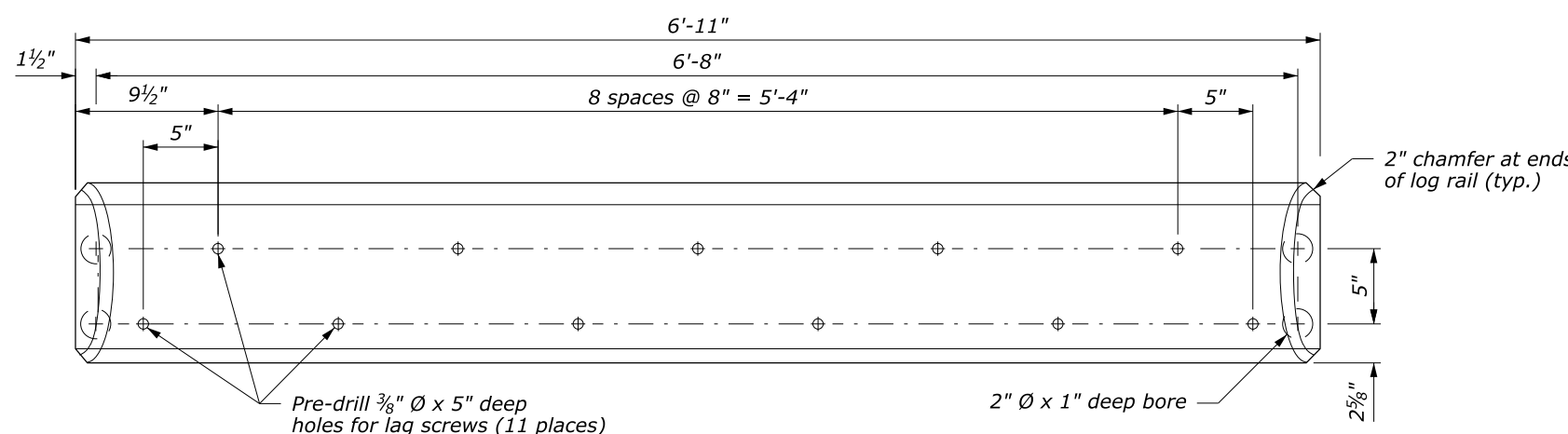
TYPICAL SLOT DETAIL



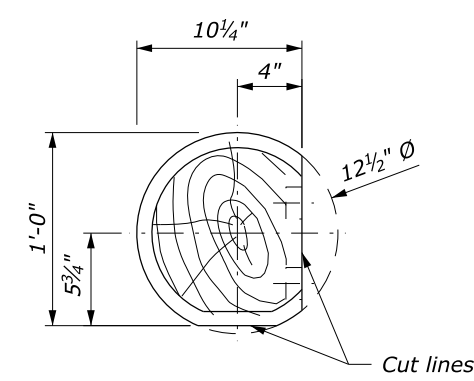
**LOG RAIL & RAIL BACKUP PLATE
PLAN VIEW**



GUARDRAIL POST



**LOG RAIL
ELEVATION VIEW**

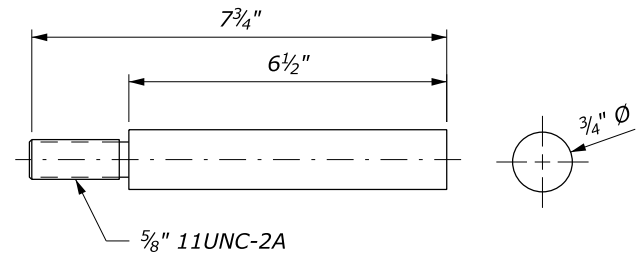


**LOG RAIL
SECTION VIEW**

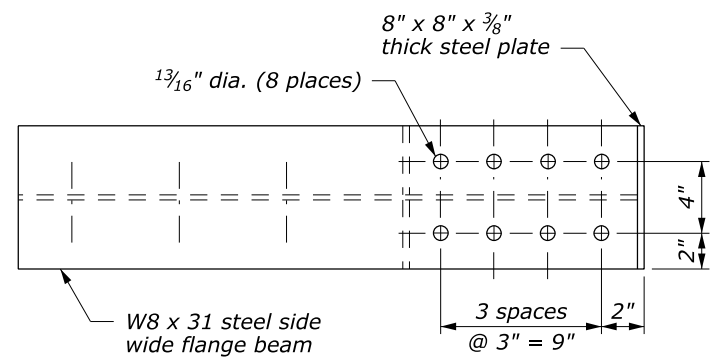
NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION WESTERN FEDERAL LANDS HIGHWAY DIVISION	
U.S. CUSTOMARY DETAIL REMOVABLE STEEL-BACKED LOG RAIL Sheet 2 of 3	
DETAIL APPROVED FOR USE 3/2009	DETAIL
REVISED:	W617-83

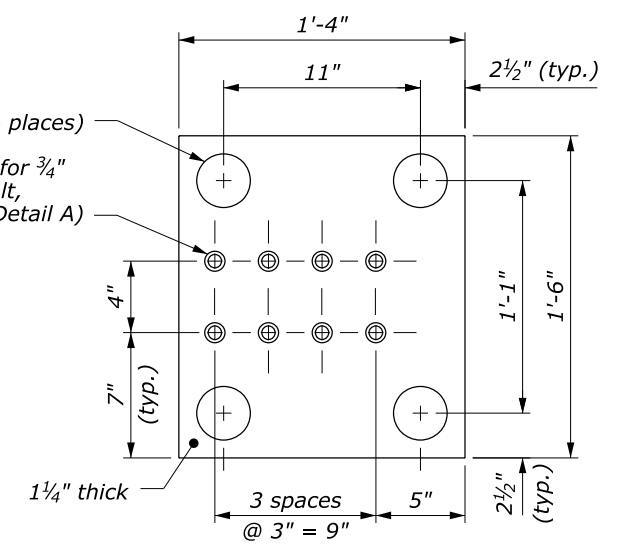
18 November 2014 8:42 AM c:\myfiles\pw_production\dms43646\Det.W617-83.dgn [USC]



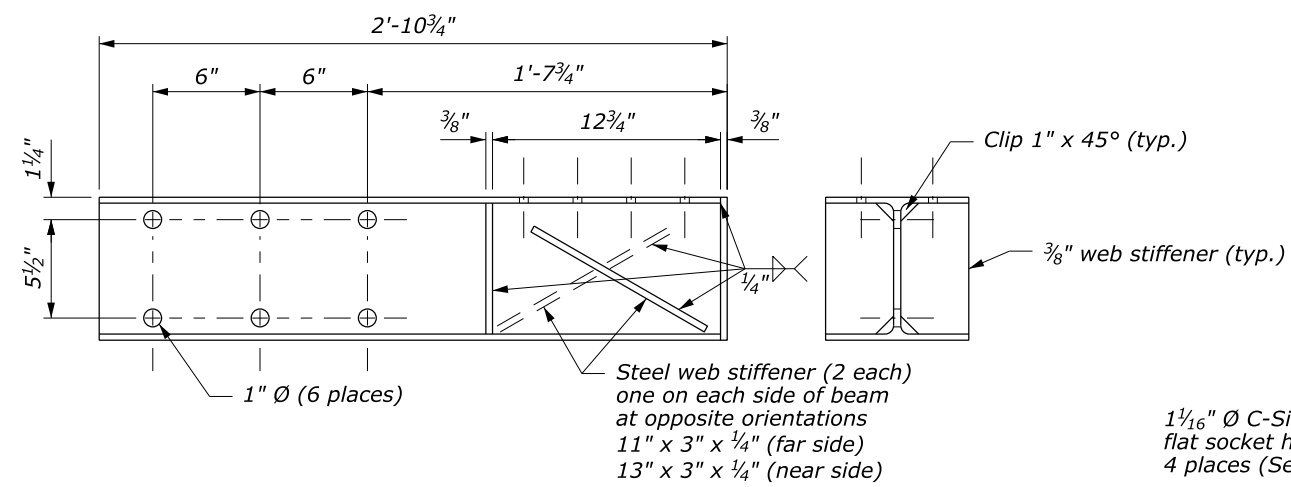
SUPPORT PIN



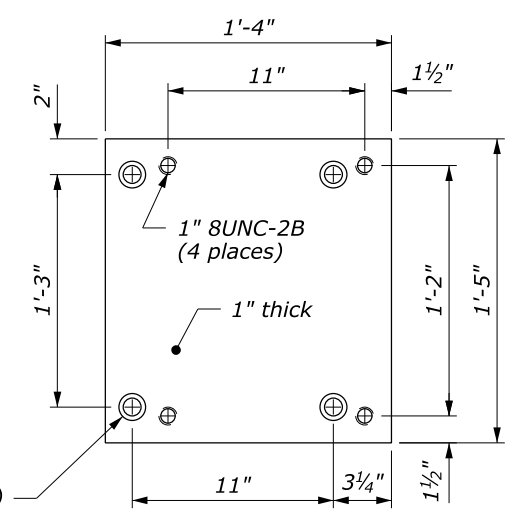
RAIL POST BASE PLATE



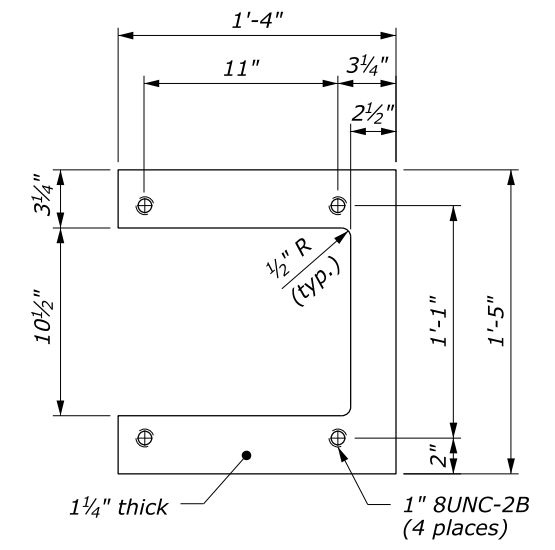
FOUNDATION PLATE



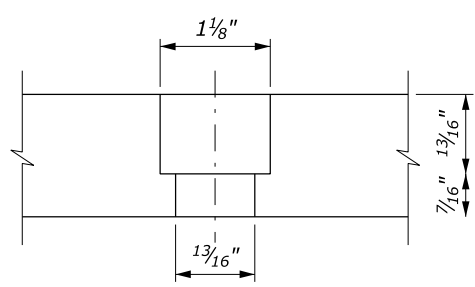
FOUNDATION BEAM



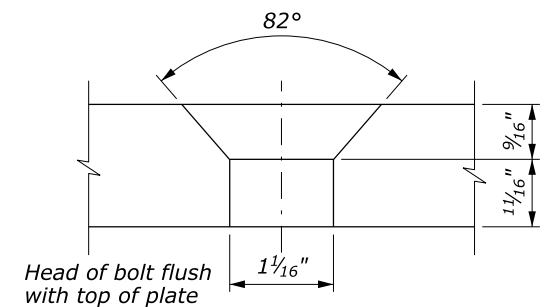
TOP CLAMP PLATE



BOTTOM CLAMP PLATE



DETAIL A



DETAIL B

U.S. DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION
 WESTERN FEDERAL LANDS HIGHWAY DIVISION

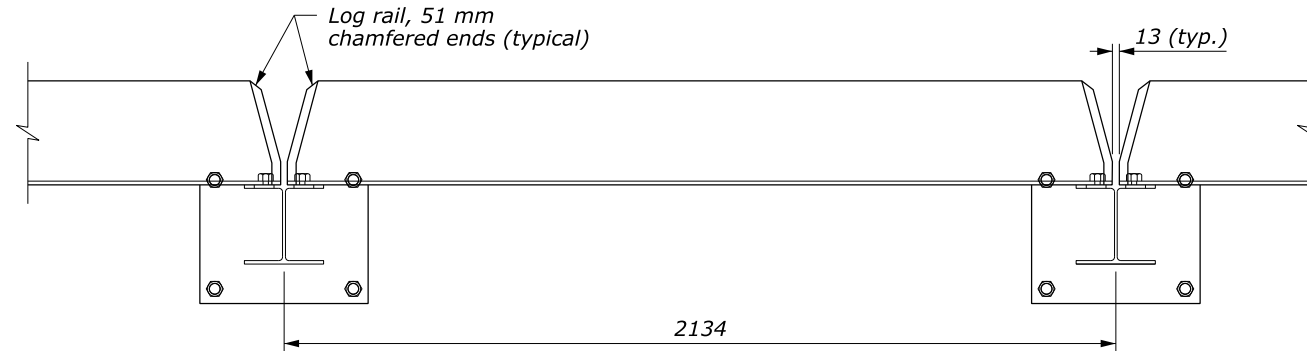
U.S. CUSTOMARY DETAIL
**REMOVABLE
 STEEL-BACKED LOG RAIL**
 Sheet 3 of 3

DETAIL APPROVED FOR USE 3/2009
 REVISIONS: _____

DETAIL
 W617-83

NO SCALE

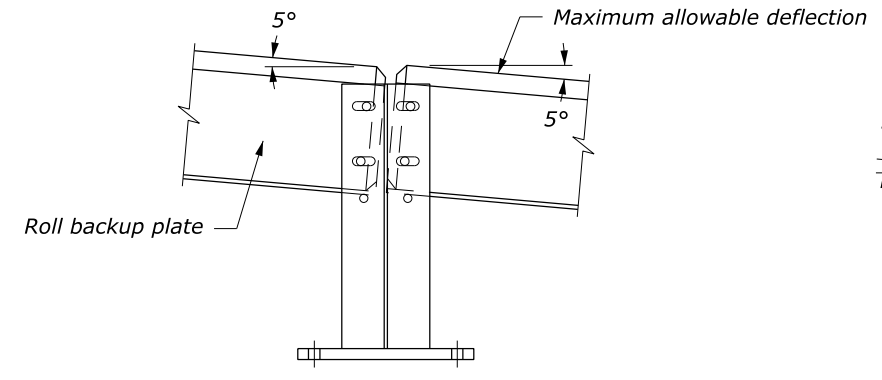
18 November 2014 8:42 AM c:\myfiles\pw_production\dms43646\Det-W617-83.dgn [USC]



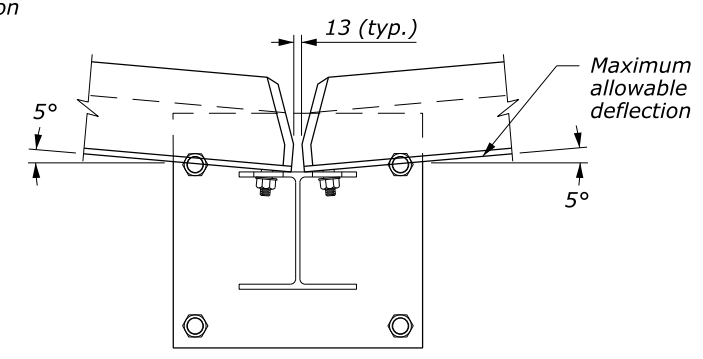
PLAN VIEW

NOTE:

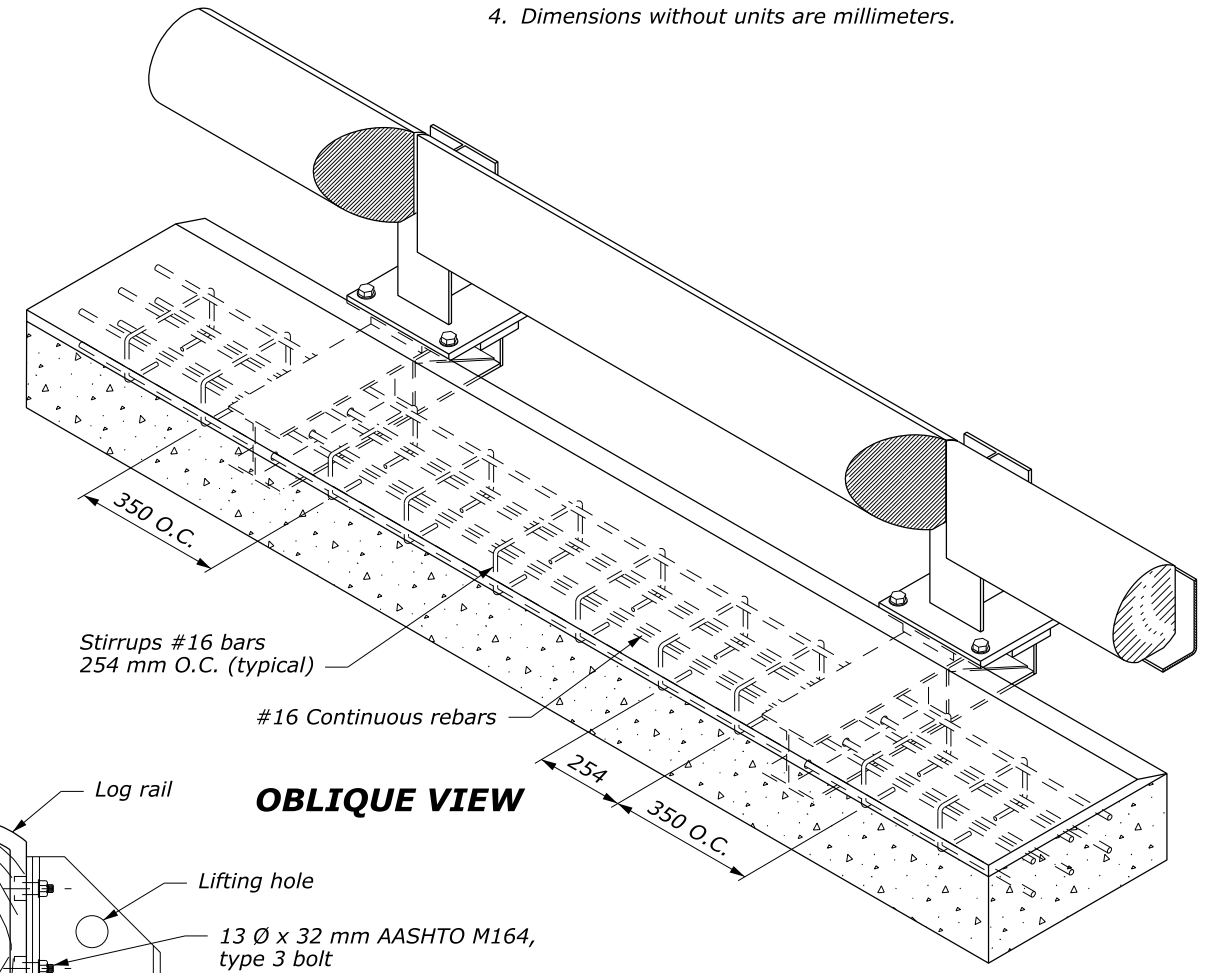
1. Steel is ASTM A242 or A588, Grade 50.
2. Concrete: minimum $f'_c = 24$ MPa.
3. Furnish hardware in equivalent U.S. Customary sizes.
4. Dimensions without units are millimeters.



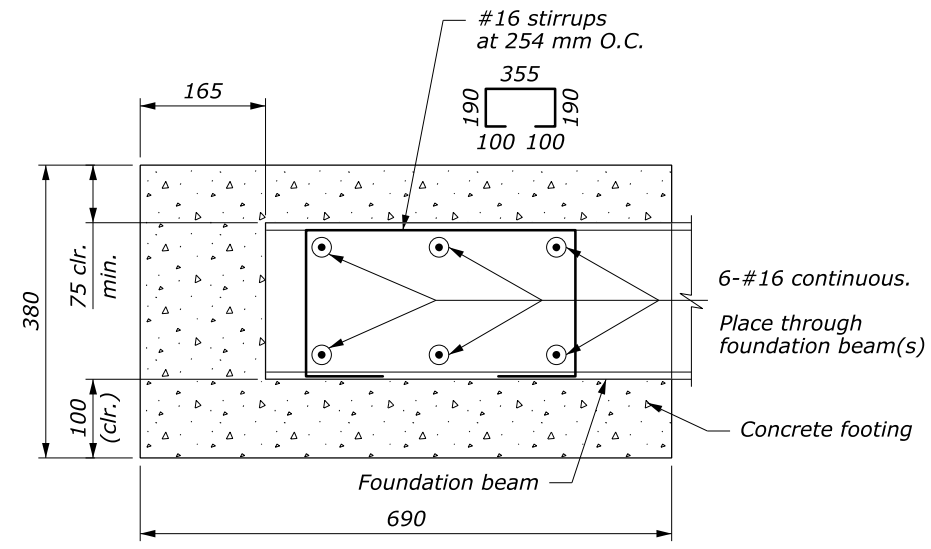
**ENDS OF RAILS AT POST:
MAXIMUM VERTICAL
DEFLECTION ALLOWABLE
ELEVATION**



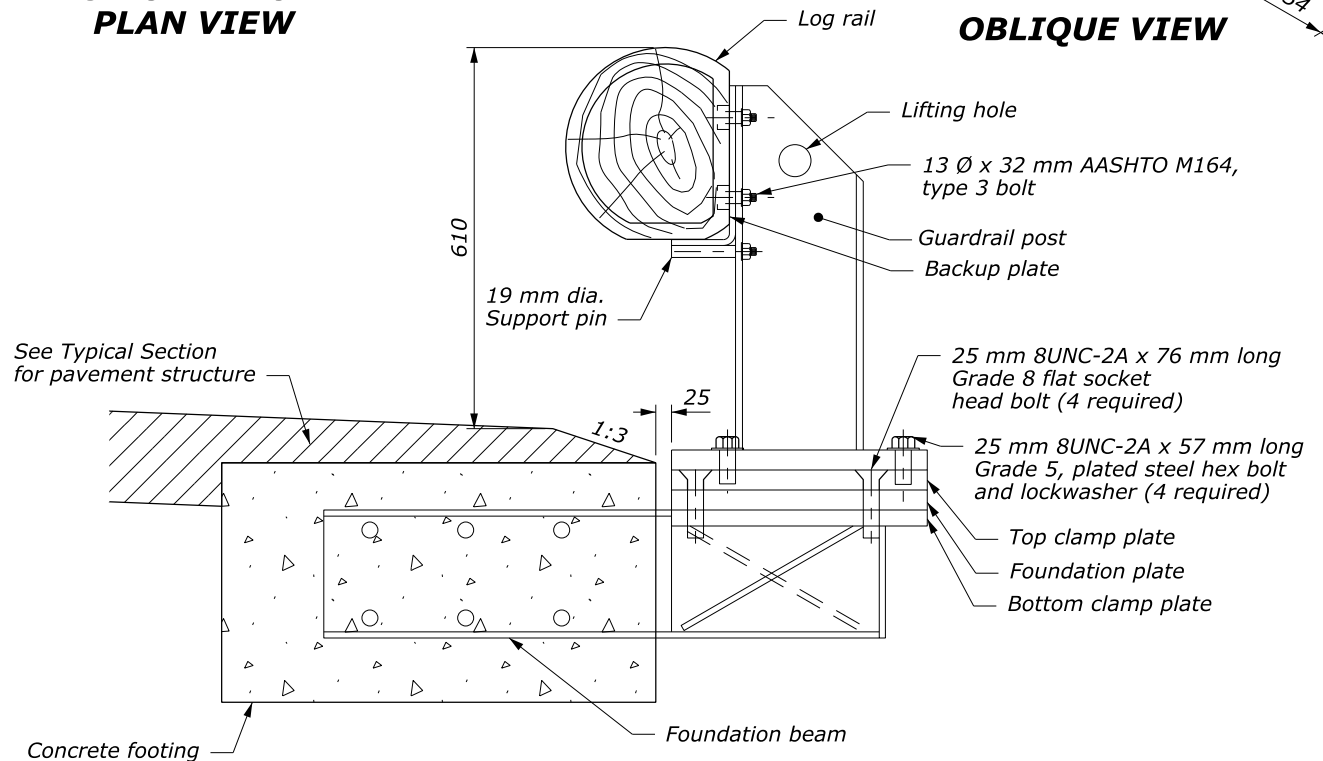
**MAXIMUM HORIZONTAL
DEFLECTION ALLOWABLE
PLAN VIEW**



OBLIQUE VIEW



**FOOTING DETAIL
TYPICAL SECTION**

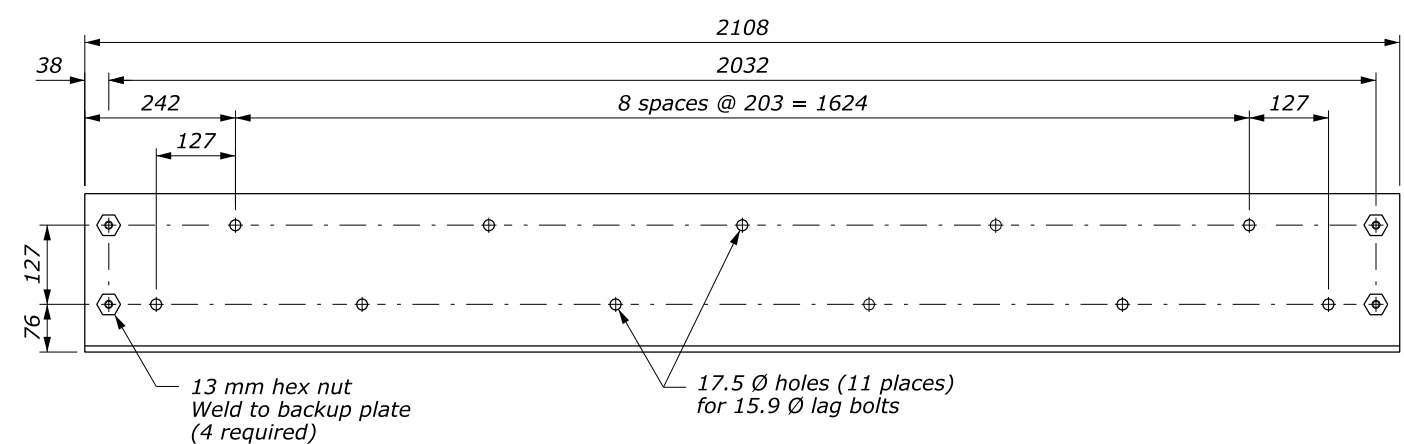


TYPICAL SECTION

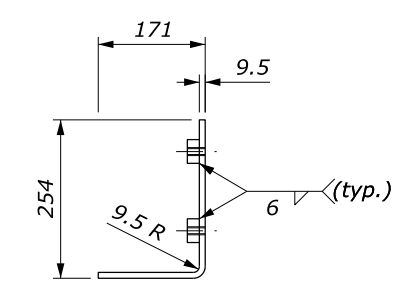
U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION WESTERN FEDERAL LANDS HIGHWAY DIVISION	
METRIC DETAIL REMOVABLE STEEL-BACKED LOG RAIL	
Sheet 1 of 3	
DETAIL APPROVED FOR USE 3/2009	DETAIL
REVISED:	WM617-83

NO SCALE

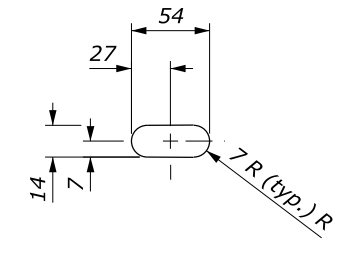
18 November 2014 8:43 AM c:\myfiles\pw_production\dms43646\Det.W617-83.dgn [Metric]



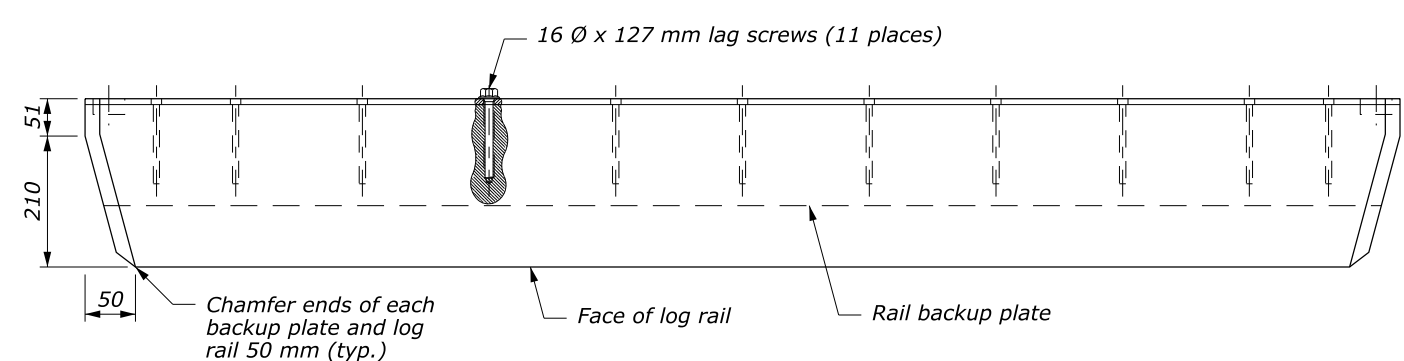
**RAIL BACKUP PLATE
ELEVATION VIEW**



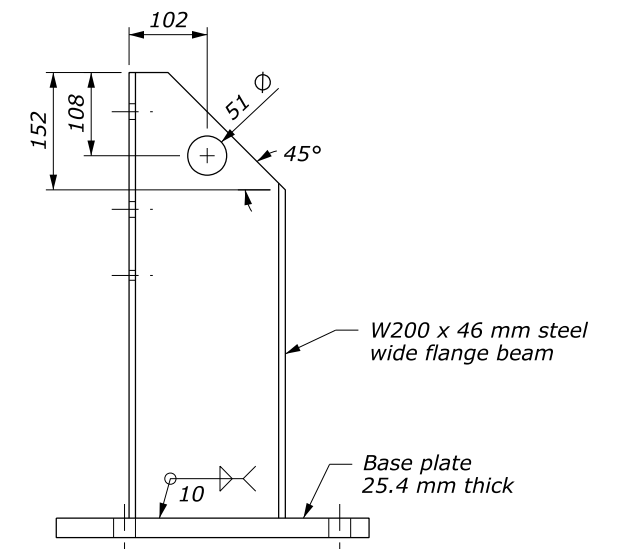
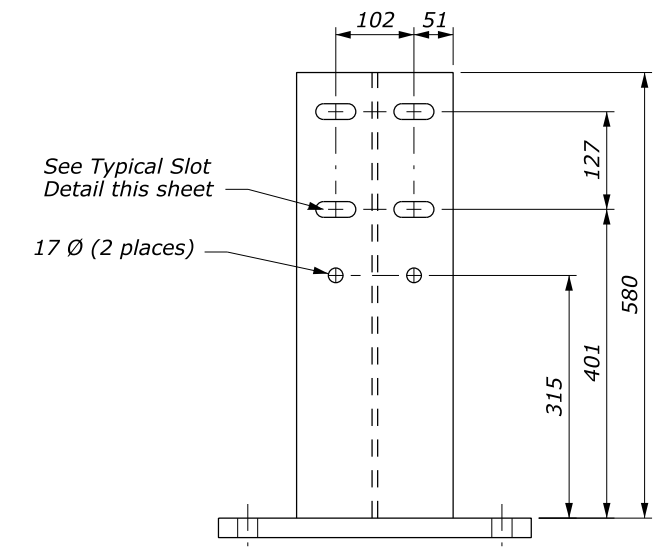
**RAIL BACKUP PLATE
SECTION VIEW**



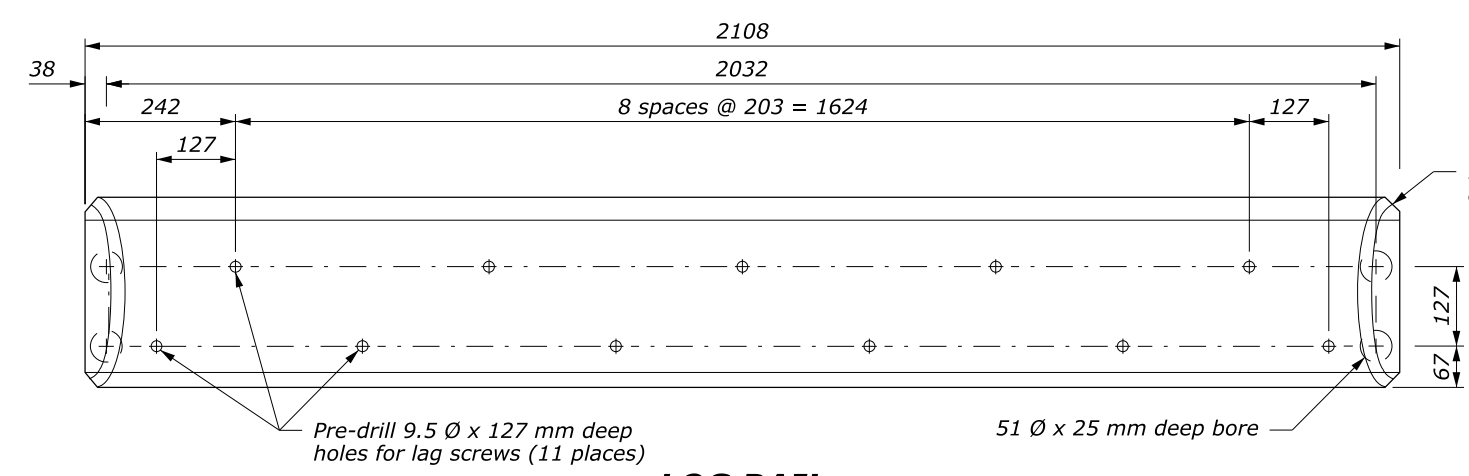
TYPICAL SLOT DETAIL



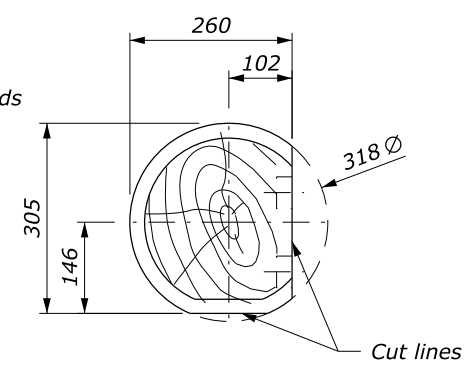
**LOG RAIL & RAIL BACKUP PLATE
PLAN VIEW**



GUARDRAIL POST



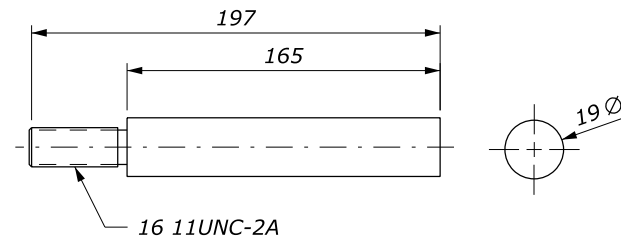
**LOG RAIL
ELEVATION VIEW**



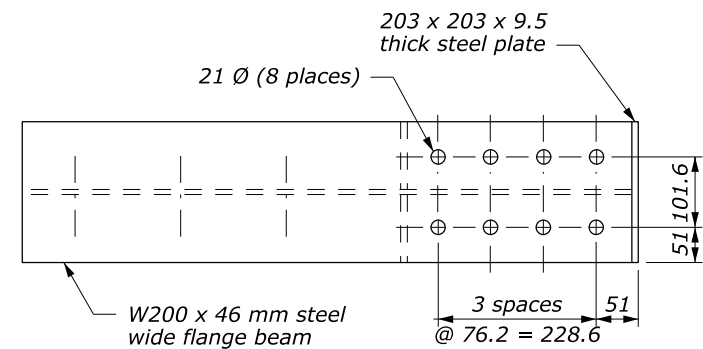
**LOG RAIL
SECTION VIEW**

NO SCALE

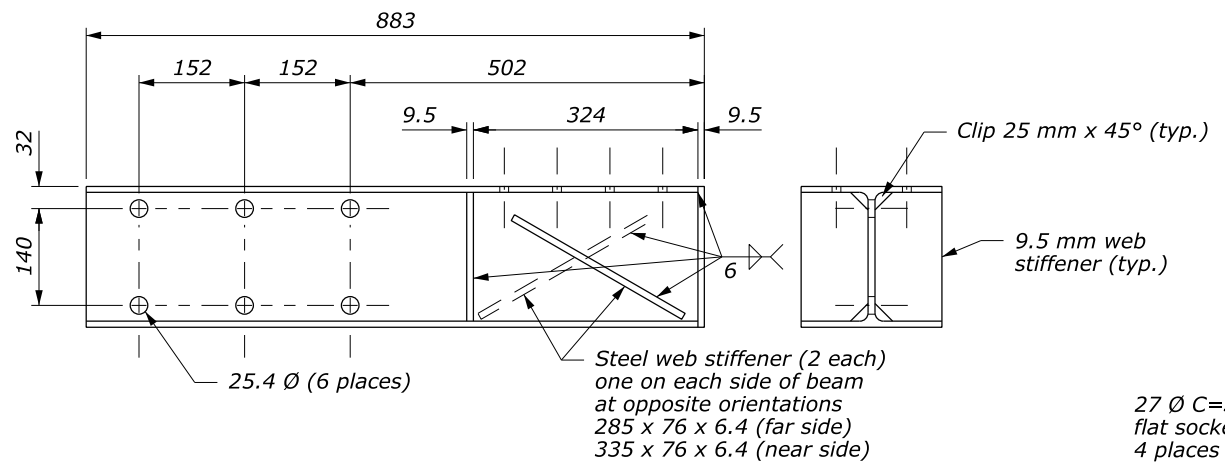
U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION WESTERN FEDERAL LANDS HIGHWAY DIVISION	
METRIC DETAIL	
REMOVABLE STEEL-BACKED LOG RAIL	
Sheet 2 of 3	
DETAIL APPROVED FOR USE 3/2009	DETAIL
REVISED:	WM617-83



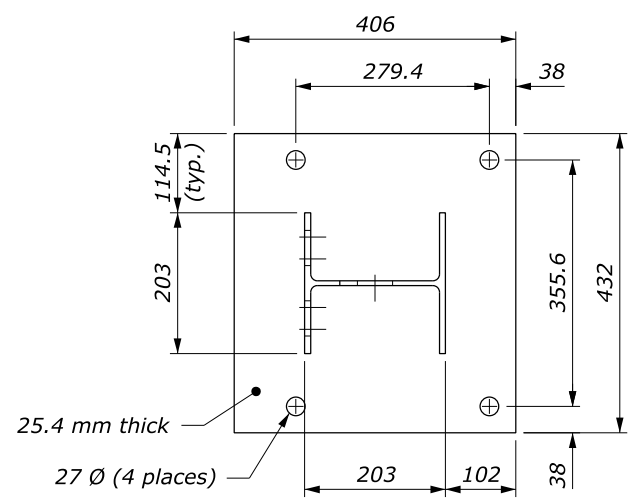
SUPPORT PIN



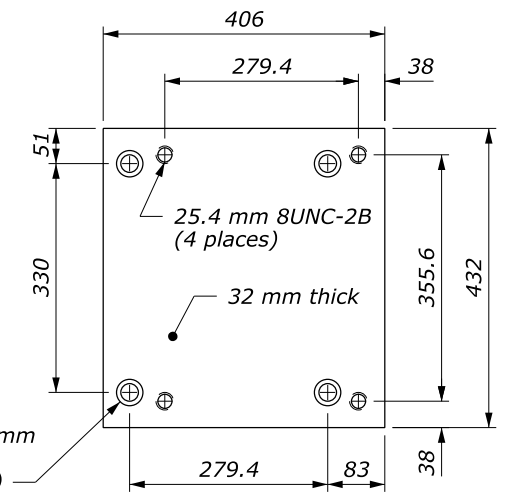
FOUNDATION BEAM



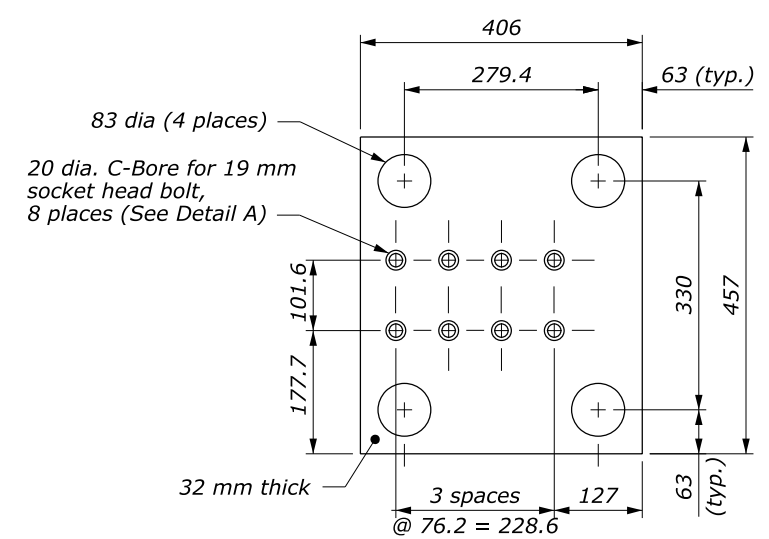
27 Ø C=Sink for 25.4 mm flat socket head bolt, 4 places (See Detail B)



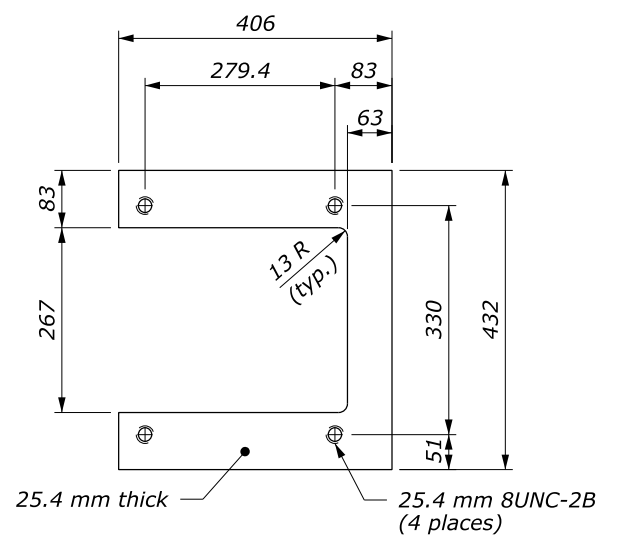
RAIL POST BASE PLATE



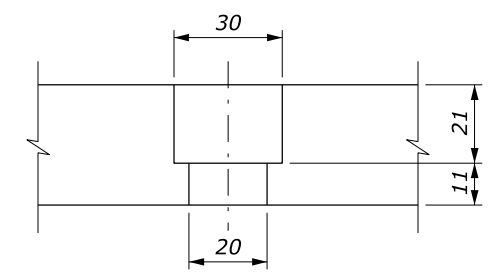
TOP CLAMP PLATE



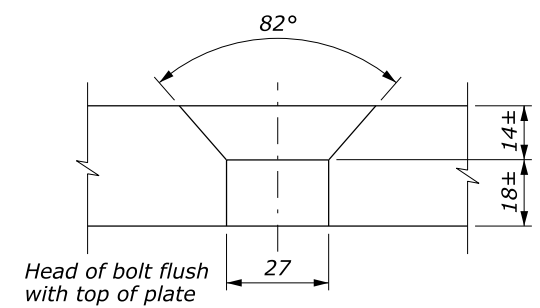
FOUNDATION PLATE



BOTTOM CLAMP PLATE



DETAIL A



DETAIL B

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION WESTERN FEDERAL LANDS HIGHWAY DIVISION	
METRIC DETAIL	
REMOVABLE STEEL-BACKED LOG RAIL	
Sheet 3 of 3	
DETAIL APPROVED FOR USE 3/2009	DETAIL
REVISED:	WM617-83