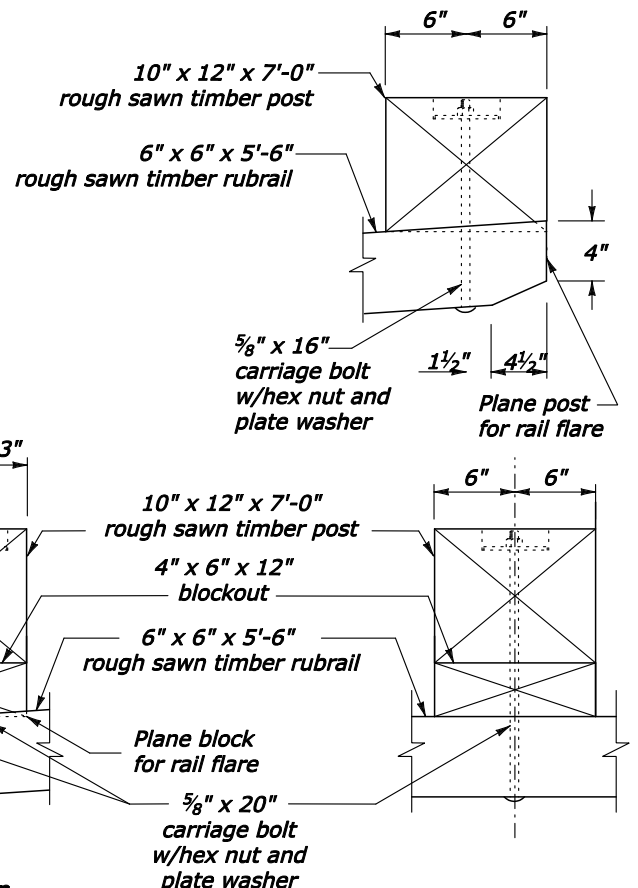
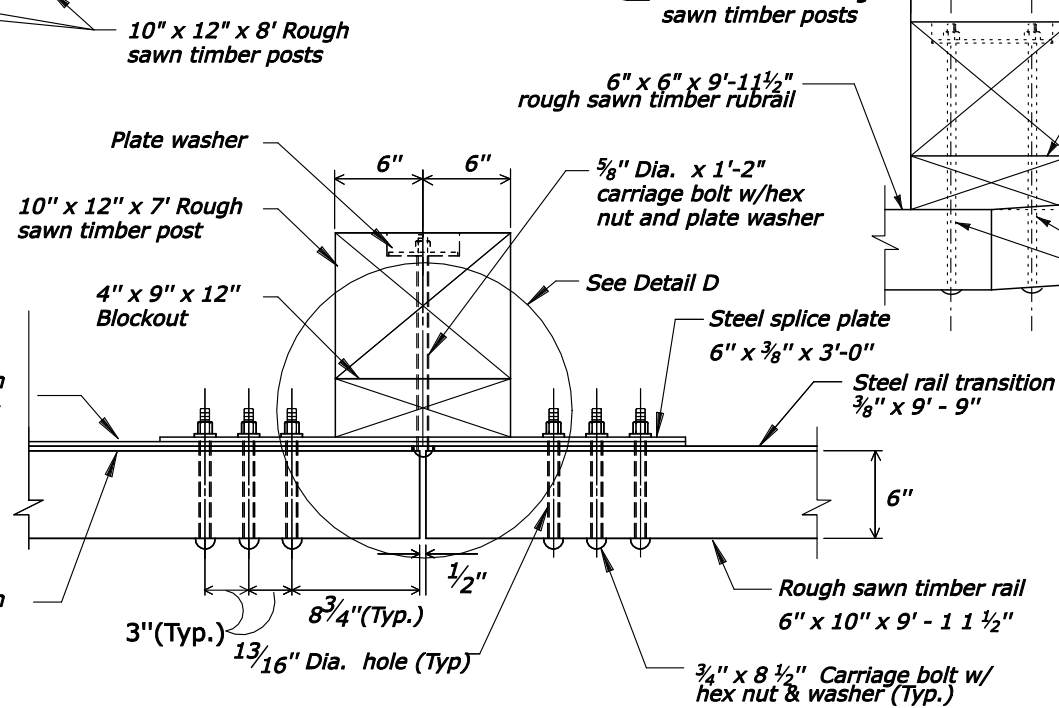
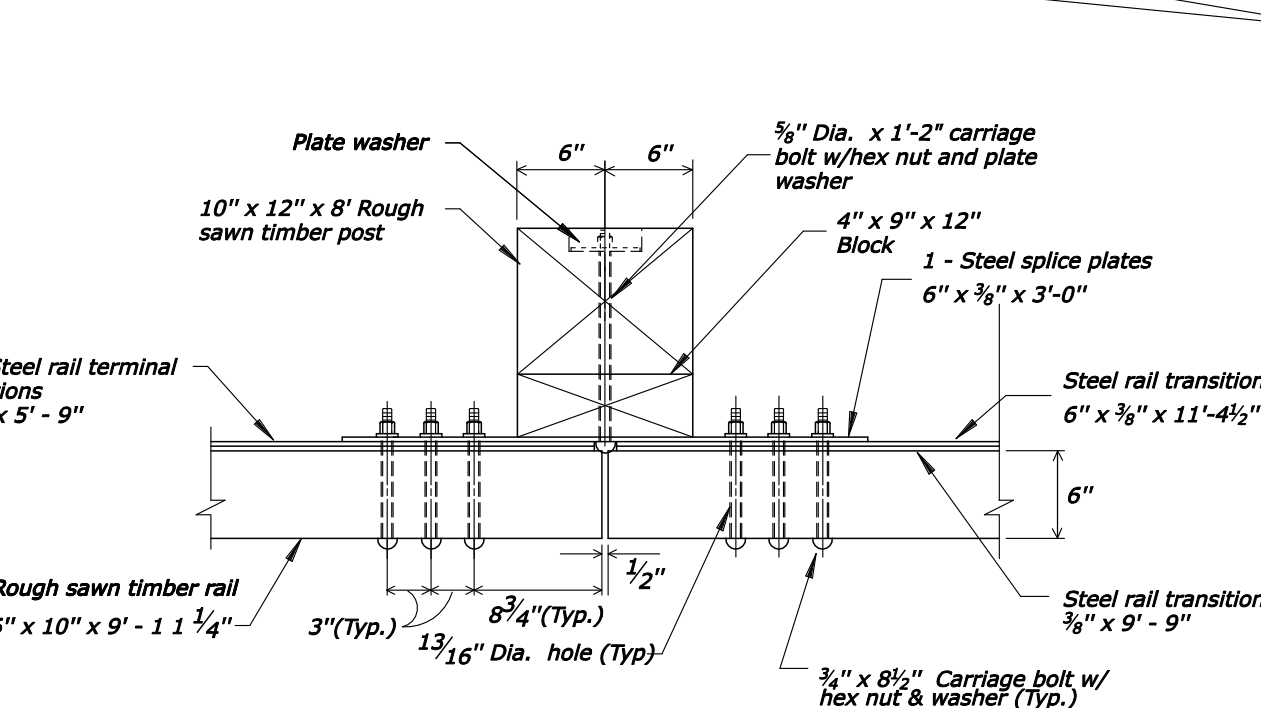
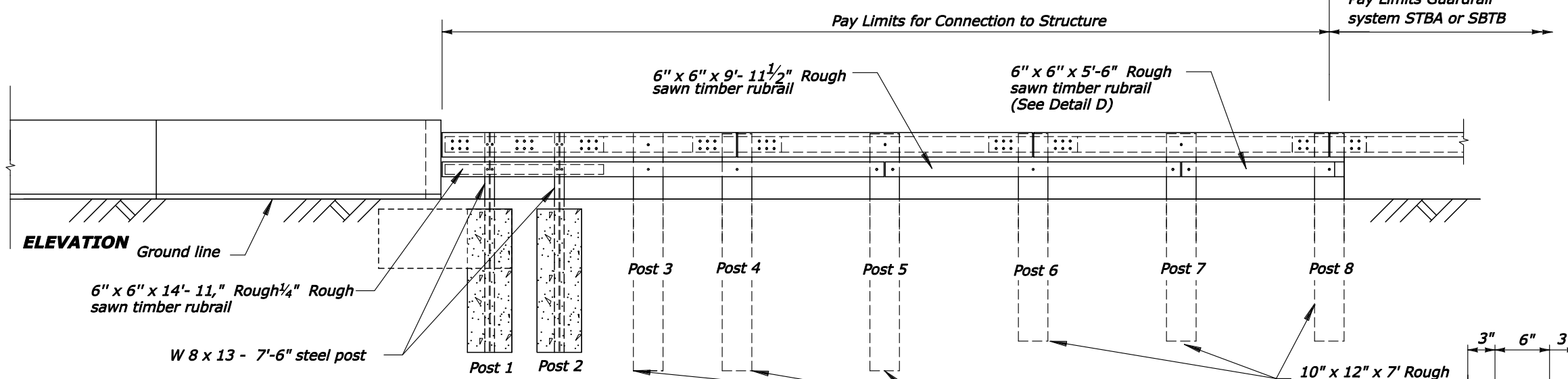
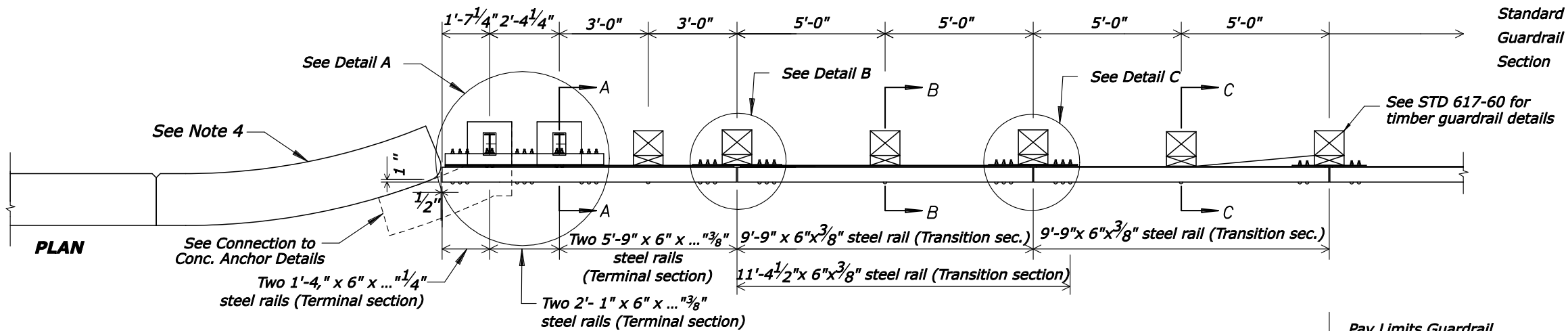


REG	STATE	PROJECT	SHEET NO.
SE	LA	RRP-LOP 10(2)	

Notes:

- See DET 617-68, sheet 2 of 3 for Sections A-A through C-C, and post connection Detail A. See DET 617-68, sheet 3 of 3, for steel rail details.
- Use weathering steel for all structural steel and fastener hardware.
- Test Level 2 Steel - Backed Timber transition connections are to be paid for under a separate pay item, Connection to Structure, item 61706 in the bid schedule.
- Transition shown for curved end structure. For transition to a straight parapet end, install the timber rail so that the face of the timber rail is offset 1-inch towards the roadway.



DETAIL D
RUBRAIL CONNECTION PLAN

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

U.S. CUSTOMARY DETAIL

**STEEL-BACKED TIMBER GUARDRAIL
TEST LEVEL 2 TRANSITION
TO STRAIGHT OR CURVED-END STRUCTURE**

Sheet 1 of 3

DETAIL APPROVED FOR USE

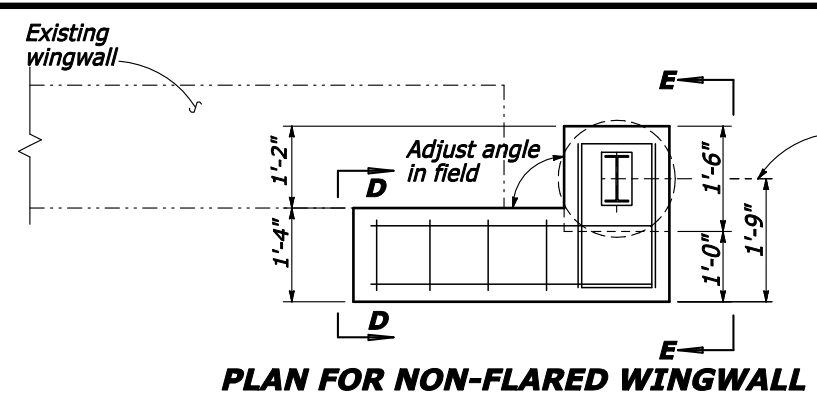
REVIS: 5/05 5/06 3/08

DETAIL
E617-68

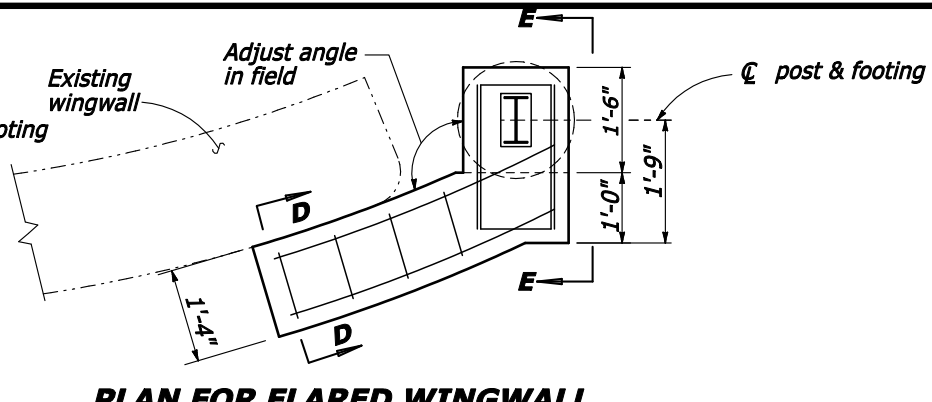
4/2/2008 9:46:24 AM Z:\Standards\temp\61768_detail.dgn

NO SCALE

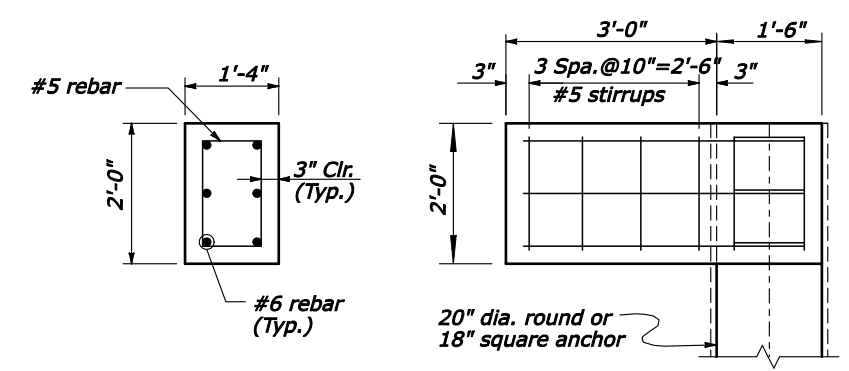
REG	STATE	PROJECT	SHEET NO.
SE	LA	RRP-LOP 10(2)	



PLAN FOR NON-FLARED WINGWALL

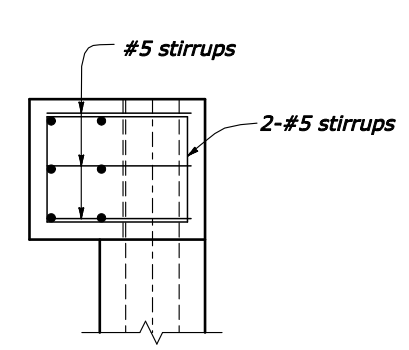


PLAN FOR FLARED WINGWALL

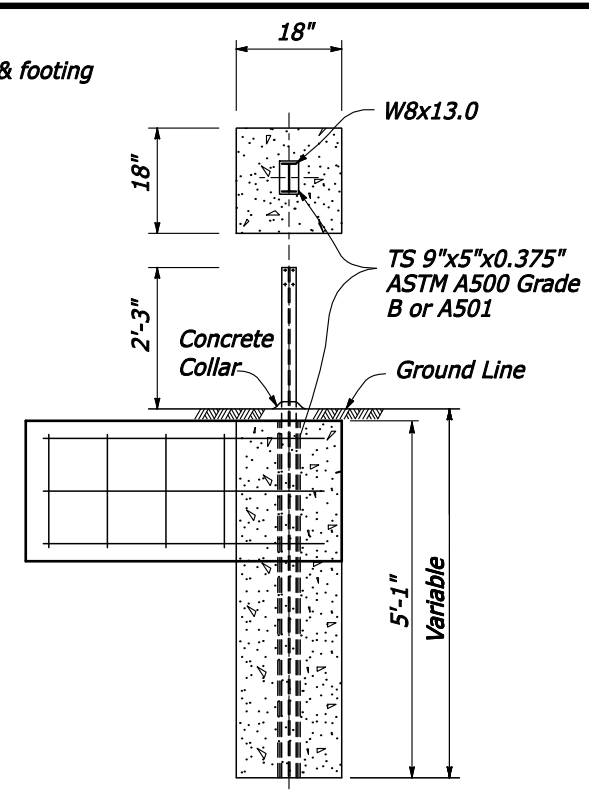


SECTION D-D
(Wingwall not shown)

ELEVATION
(Wingwall not shown)

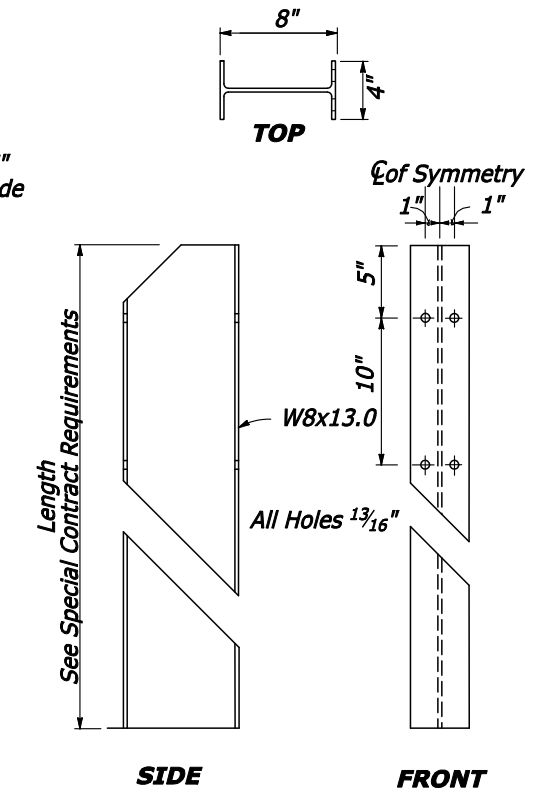


SECTION E-E

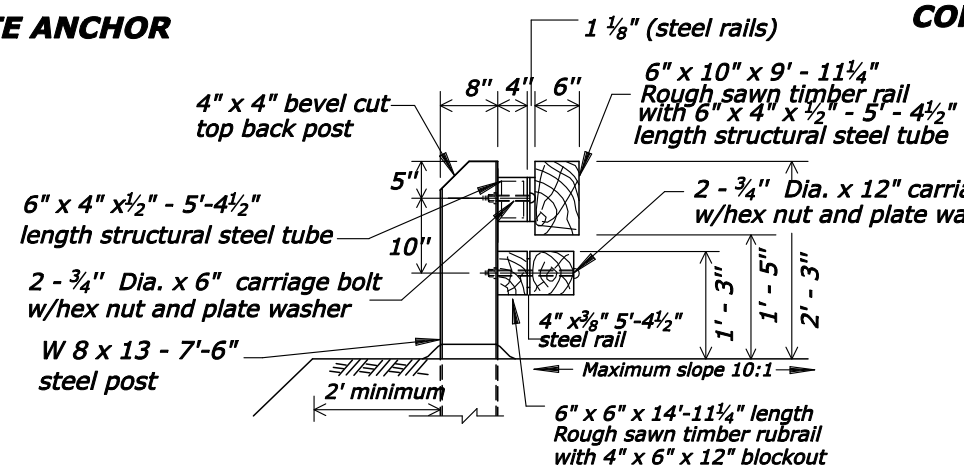


CONCRETE ANCHOR FOR GUARDRAIL POST

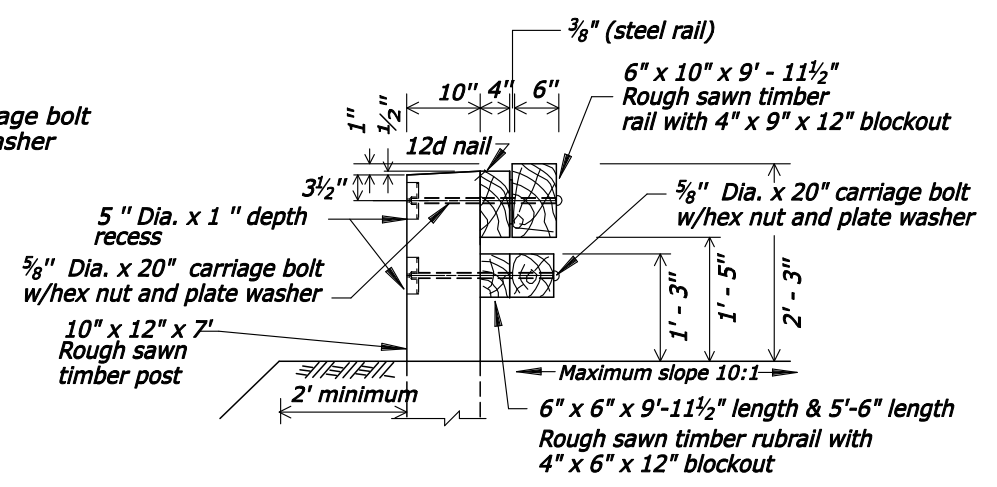
Use 20" diameter round anchor or 18" square anchor. Reduced sized acceptable in solid rock.



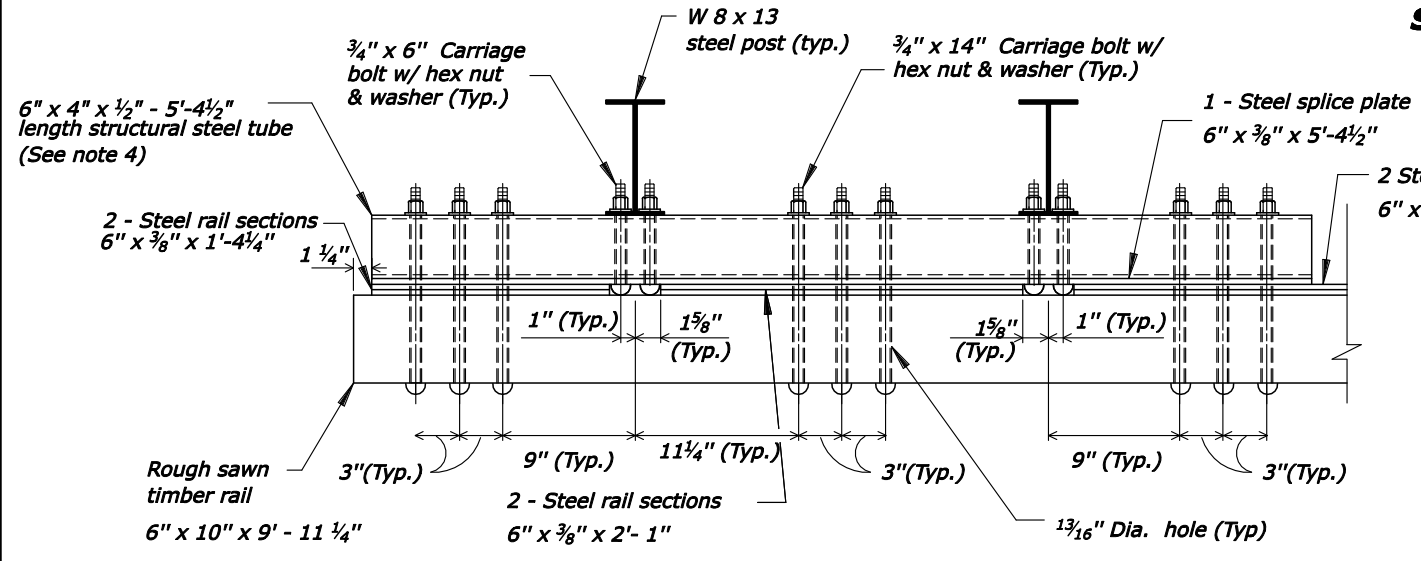
CONNECTION TO CONCRETE ANCHOR
(Post not shown)



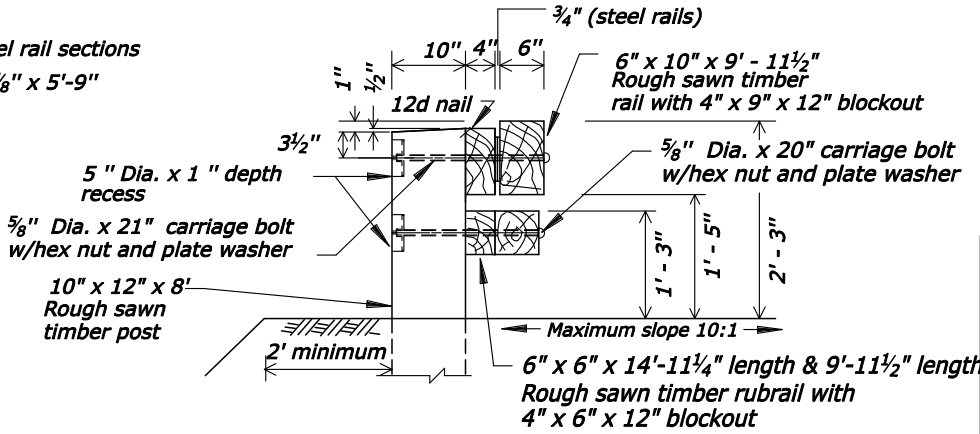
SECTION A-A



SECTION C-C



DETAIL A POST CONNECTION PLAN



SECTION B-B

NO SCALE

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

U.S. CUSTOMARY DETAIL

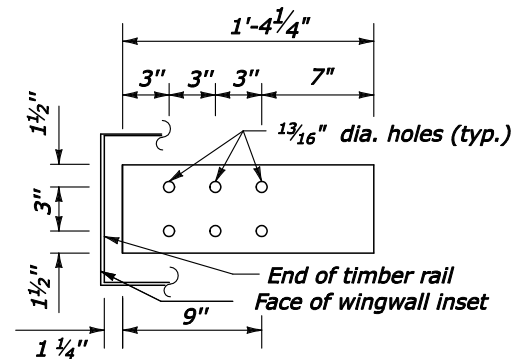
**STEEL-BACKED TIMBER GUARDRAIL
TEST LEVEL 2 TRANSITION
TO STRAIGHT OR CURVED-END STRUCTURE**

Sheet 2 of 3

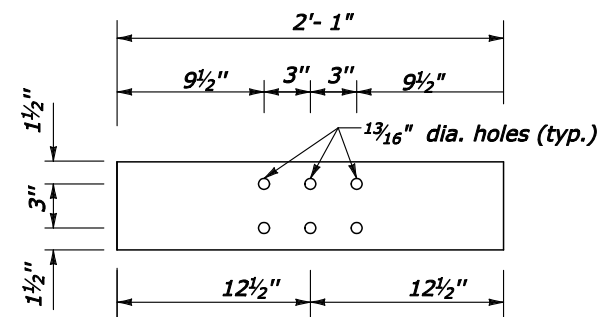
DETAIL APPROVED FOR USE
REVISED: 5/05 5/06 3/08

DETAIL
E617-68

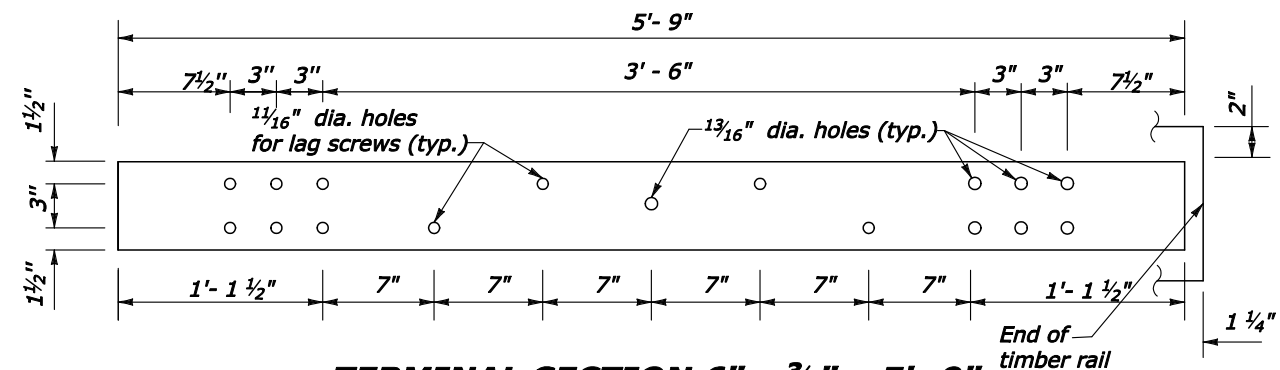
4/2/2008 9:45:51 AM Z:\Standard\temp\sf61768_detail.dgn



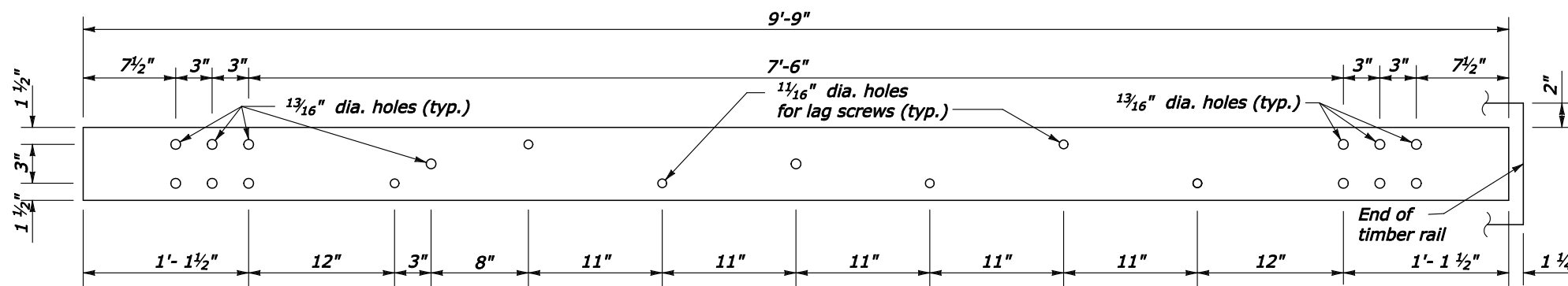
TERMINAL SECTION 6" x 3/8" x 1'-4 1/4"



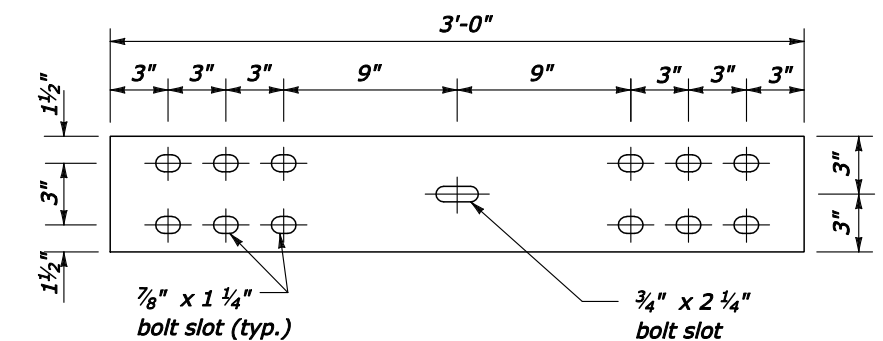
TERMINAL SECTION 6" x 3/8" x 2'- 1 "



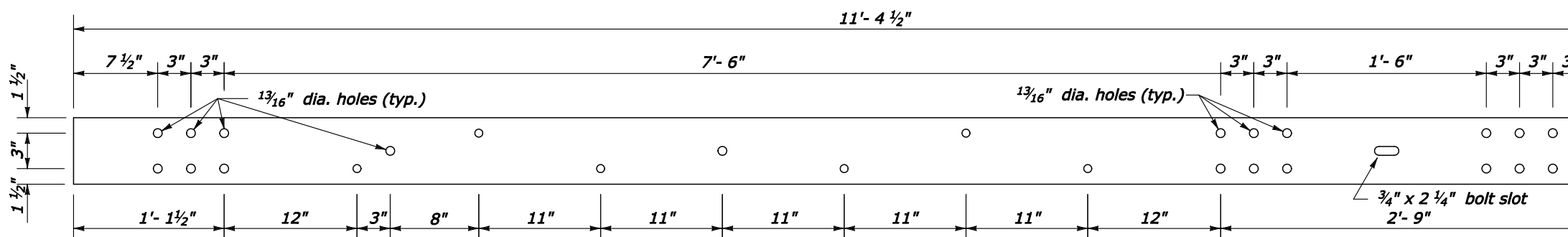
TERMINAL SECTION 6" x 3/8" x 5'- 9"



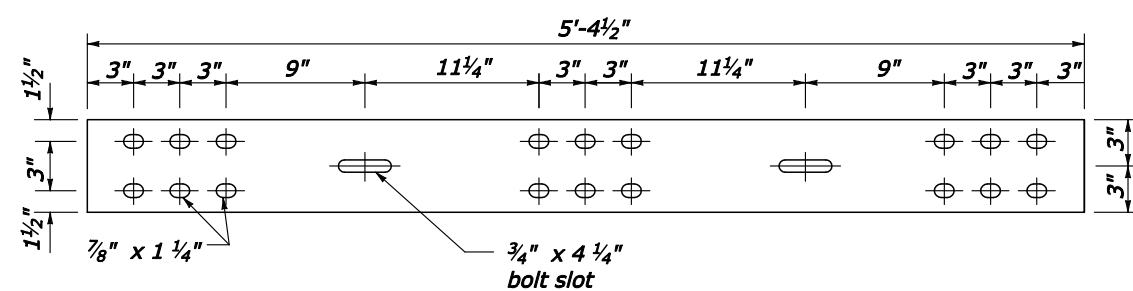
TRANSITION SECTION 6" x 3/8" x 9'-9"



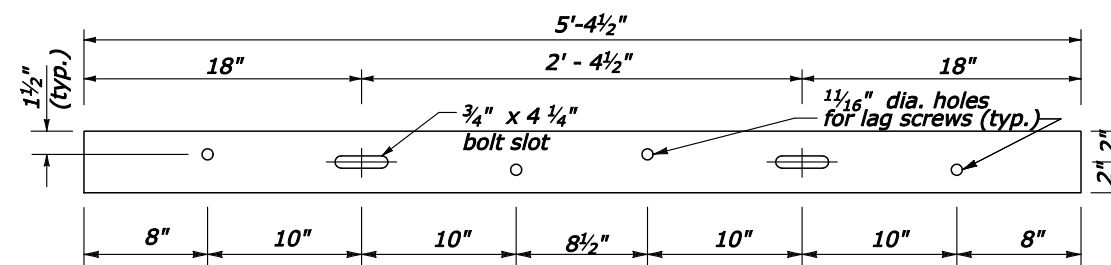
**STEEL SPLICE PLATE
6" x 3/8" x 3'-0"**



TRANSITION SECTION 6" x 3/8" x 11'-4 1/2"



**STEEL SPLICE PLATE
6" x 3/8" x 5'-4 1/2"**



**TERMINAL SECTION (rubrail)
4" x 3/8" x 5'-4 1/2"**

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION EASTERN FEDERAL LANDS HIGHWAY DIVISION	
U.S. CUSTOMARY DETAIL	
STEEL-BACKED TIMBER GUARDRAIL TEST LEVEL 2 TRANSITION TO STRAIGHT OR CURVED-END STRUCTURE	
Sheet 3 of 3	
DETAIL APPROVED FOR USE	DETAIL
REVISED: 5/05 5/06 3/08	E617-68