

# SUMMARY OF QUANTITIES

F.A.P. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119B-3)I	TAZEWELL	31	3
STA.		TO STA.		
EXISTING CONDITIONS:				
CONTRACT NO. 68415				

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT		1000 FED 80% STATE 20%	SFTY-2A FED 80% STATE 20%	SFTY-3N FED 80% STATE 20%			
20300100	CHANNEL EXCAVATION	CU YD	416		416				
25000300	SEEDING, CLASS 3	ACRE	0.03		0.03				
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	3		3				
25000500	PHOSPHOROUS FERTILIZER NUTRIENT	POUND	3		3				
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	3		3				
25100630	EROSION CONTROL BLANKET	SQ YD	138		138				
28100209	STONE RIPRAP, CLASS A5	TON	1685		1685				
28200200	FILTER FABRIC	SQ YD	712		712				
31101900	SUB-BASE GRANULAR MATERIAL, TYPE C	TON	100		100				
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	35	35					
40600300	AGGREGATE (PRIME COAT)	TON	1	1					
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	21	21					
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	53	20	33				
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	160	160					
42001400	BRIDGE APPROACH PAVEMENT (SPECIAL)	SQ YD	164	164					
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	35	35					
44000100	PAVEMENT REMOVAL	SQ YD	92	92					
44000700	APPROACH SLAB REMOVAL	SQ YD	107	107					
48101200	AGGREGATE SHOULDERS, TYPE B	TON	3	3					
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1		1				
50102400	CONCRETE REMOVAL	CU YD	2.4		2.4				
50300225	CONCRETE STRUCTURES	CU YD	3.4		3.4				
52000410	PERFORMED JOINT STRIP SEAL	FOOT	33.0		33.0				
50400105	PRECAST CONCRETE BRIDGE SLAB	SQ FT	299		299				
50400505	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ FT	2,066		2,066				
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	450		450				
50800515	BAR SPLICERS	EACH	8		8				
50901050	STEEL RAILING, TYPE SM	FOOT	207		207				
51500100	NAME PLATES	EACH	1		1				
58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	230		230				
58300100	PC MORTAR FAIRING COURSE	FOOT	626		626				
* 63000000	STEEL PLATE BRIDGE GUARD RAIL, TYPE A	FOOT	100	100					
* 63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4	4					
63200305	STEEL PLATE BEAM GUARD RAIL REMOVAL	FOOT	125	125					
* 63300205	REMOVE AND REINSTALL EXISTING STEEL PLATE BEAM GUARDRAIL, TYPE A	FOOT	50		50				
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4		4				
67100100	MOBILIZATION	L SUM	1		1				
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1		1				
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1					

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT		1000 FED 80% STATE 20%	SFTY-2A FED 80% STATE 20%	SFTY-3N FED 80% STATE 20%			
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1					
70106700	TEMPORARY RUMBLE STRIP	EACH	12	12					
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	144	144					
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	3,107	3,107					
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	1,132	1,132					
70400100	TEMPORARY CONCRETE BARRIER	FOOT	329	329					
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	329	329					
* 78005110	EPOXY PAVEMENT MARKING - LINE 4"	FOOT	1,689	1,689					
* 78100100	RAISED REFLECTIVE PAVEMENT MARKERS	EACH	10	10					
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	4	4					
* 78200510	BARRIER WALL MARKERS, TYPE A	EACH	4	4					
78300100	PAVEMENT MARKING REMOVAL	SQ FT	473	473					
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	10	10					
X0322587	CONSTRUCTION ACCESS	EACH	1		1				
* X7200200	WIDE LOAD SIGNING	L SUM	1	1					
X0325305	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	45.1		45.1				
Z0030255	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	2		2				
Z0030320	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE), TEST LEVEL 2	EACH	2		2				

\* SPECIALTY ITEM

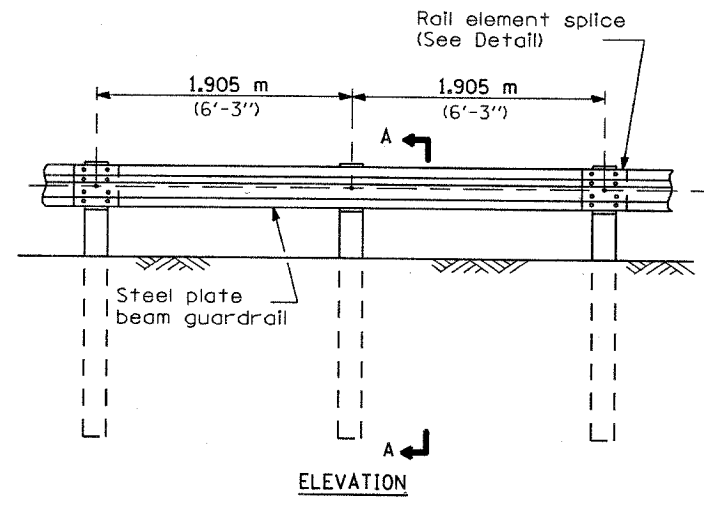
△ REVISED 1/4/07

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
SUMMARY OF QUANTITIES  
F.A.P. RTE. 693  
SECTION (119B-3)I  
TAZEWELL COUNTY

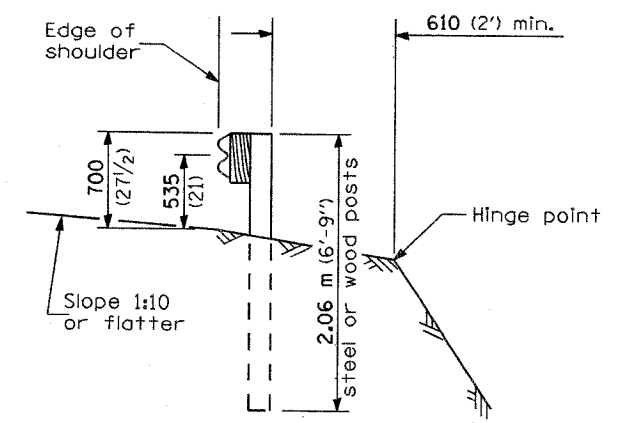
SCALE: NONE  
DATE: 03/24/2006  
DRAWN BY: KBF  
CHECKED BY: AJE

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			6A	6A
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	68415	

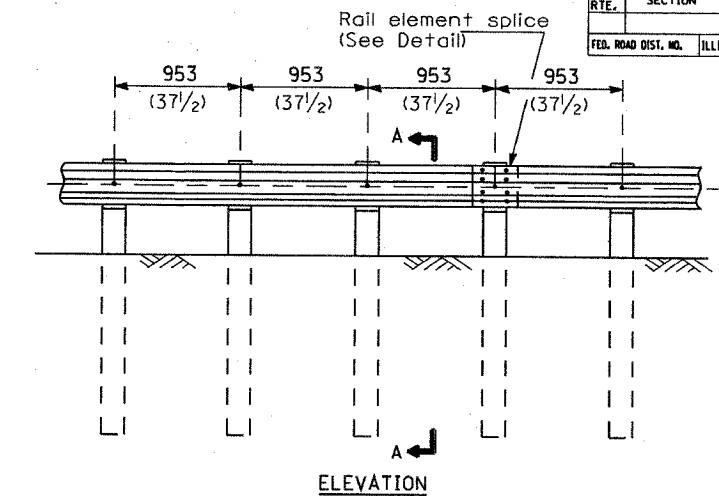


**TYPE A**

1.905 m (6'-3") Typical post spacing

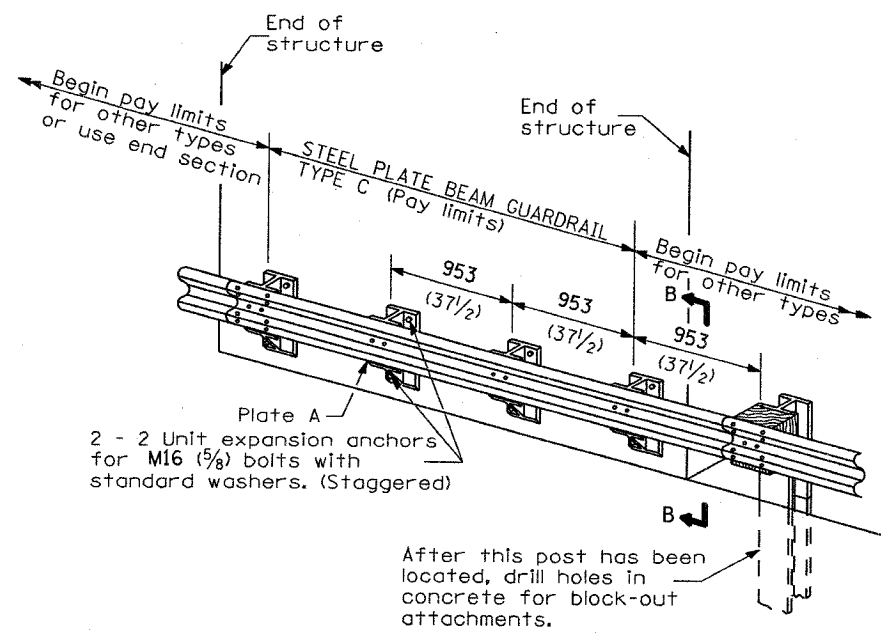


**SECTION A-A**



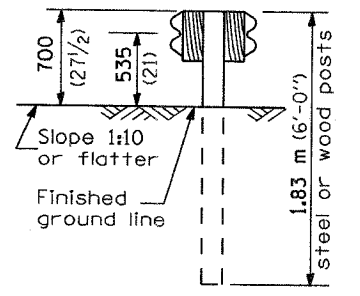
**TYPE B**

953 (37 1/2) Closed post spacing

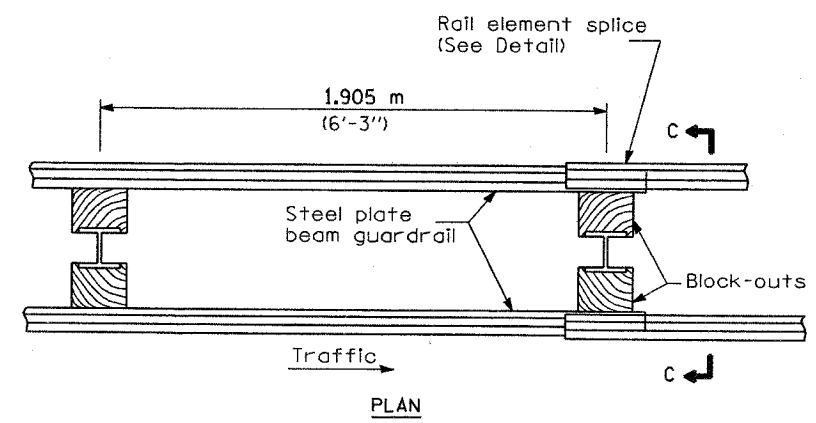


**TYPE C**

953 (37 1/2) Block-out spacing



**SECTION C-C**



**TYPE D**

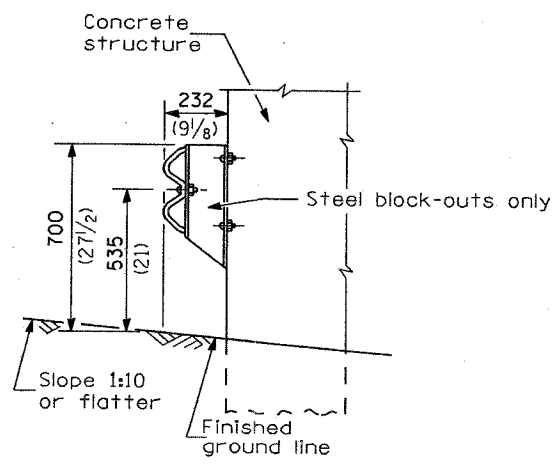
Double steel plate beam guardrail  
1.905 m (6'-3") typical post spacing

**GENERAL NOTES**

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in millimeters (inches) unless otherwise shown.

The existing steel posts may be drilled to match the bolt pattern shown herein for the wood block-out, or a new steel post shall be provided.



**SECTION B-B**

NEW 11/107

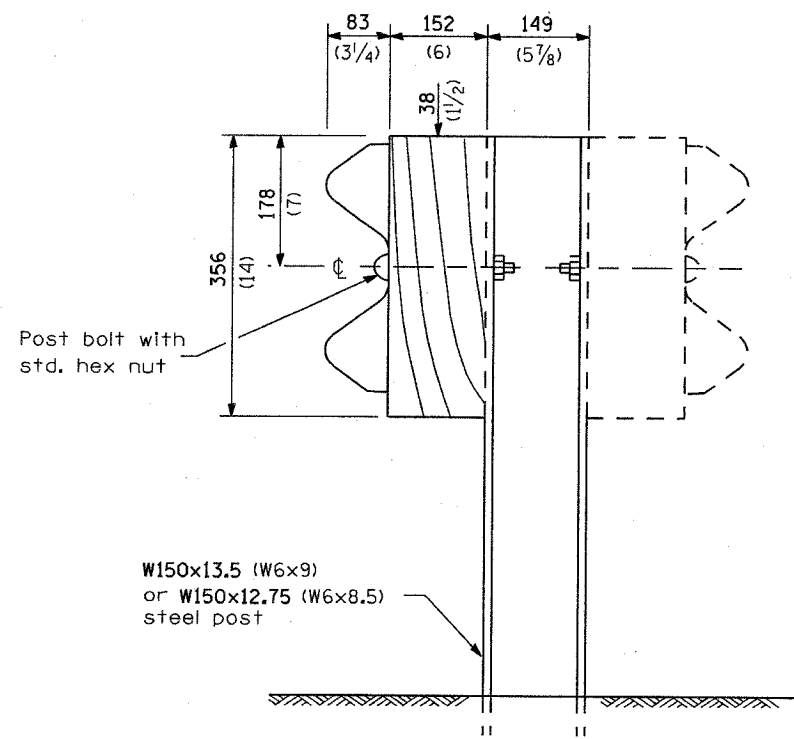
**REMOVE AND REERECT  
STEEL PLATE BEAM GUARDRAIL**

(Sheet 1 of 4)

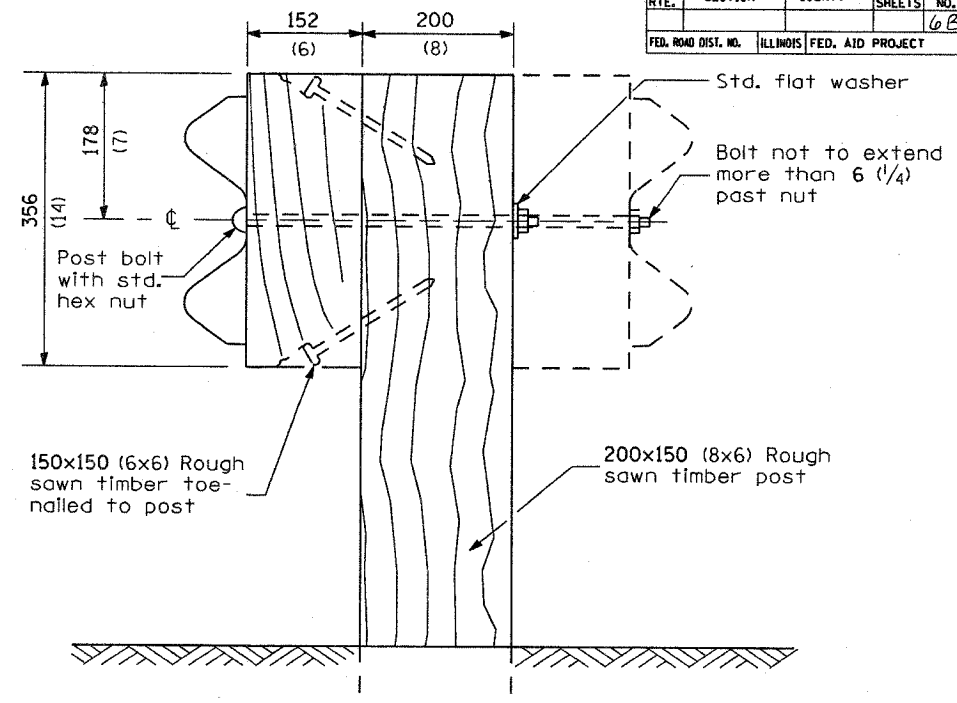
**DETAIL**

68415

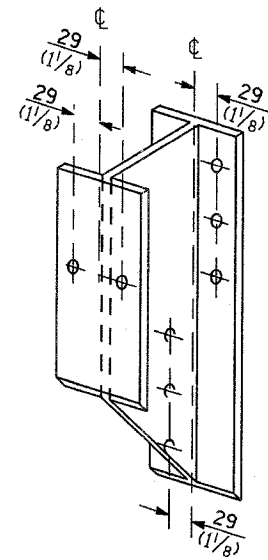
F.A. RY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			63	63
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



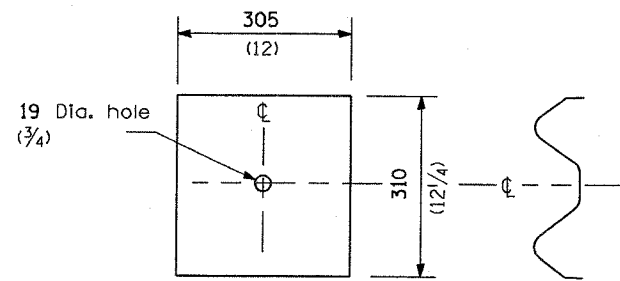
**STEEL POST CONSTRUCTION**



**WOOD POST CONSTRUCTION**



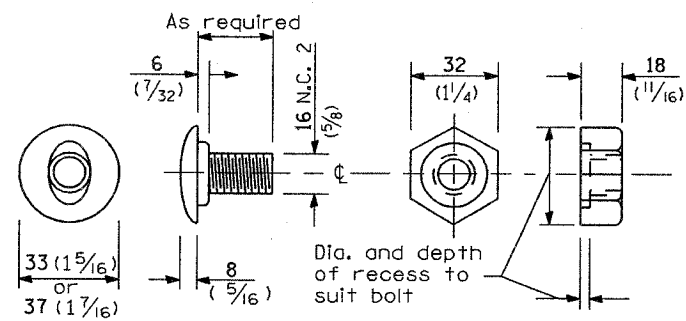
**STEEL BLOCK-OUT DETAIL**



NOTE

Plate A shall be placed between rail element and block-out at non-splice mounting points only when steel block-outs are used.

**PLATE A**



**POST OR SPLICE BOLT & NUT**

**REMOVE AND REERECT  
STEEL PLATE BEAM GUARDRAIL**

(Sheet 2 of 4)

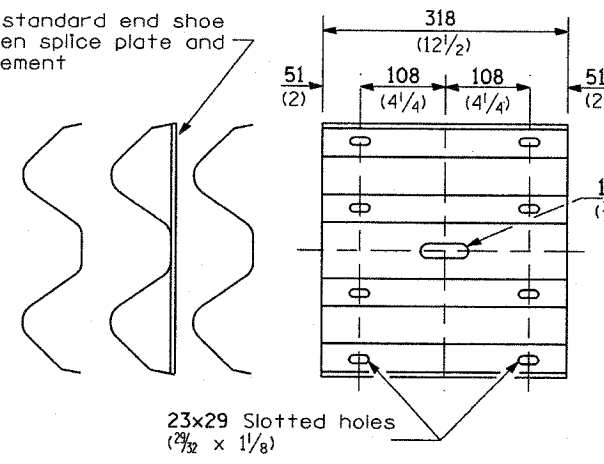
**DETAIL**

NEW 1/4/07

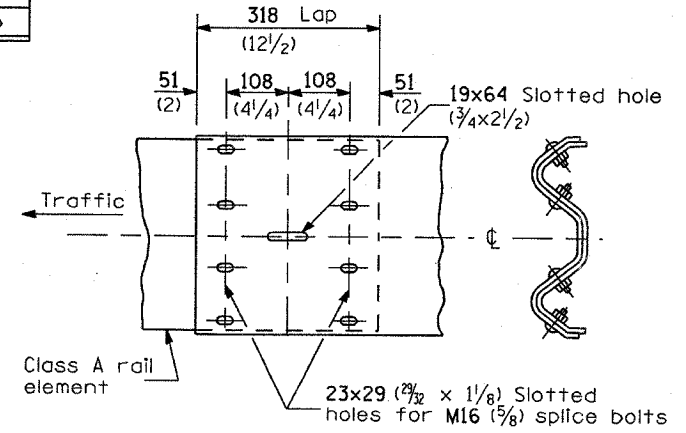
68415

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
				60
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

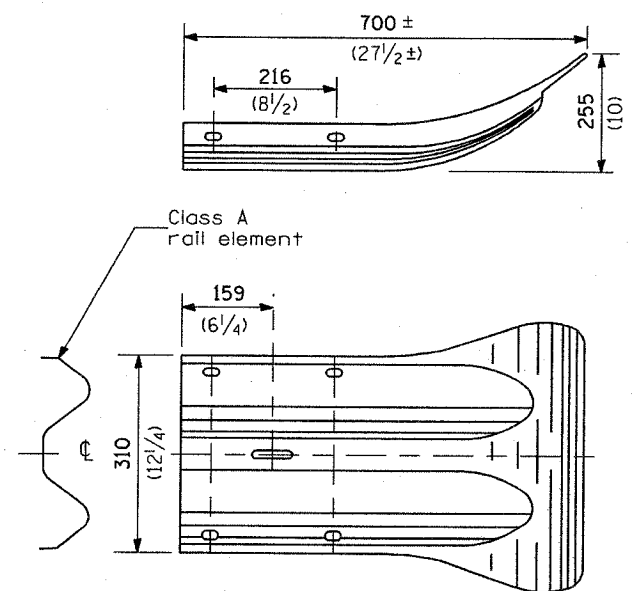
Place standard end shoe between splice plate and rail element



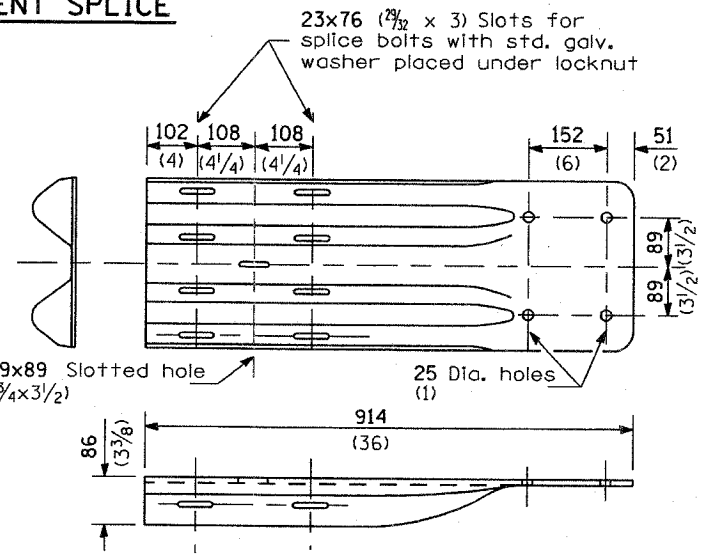
**SPLICE PLATE**



**RAIL ELEMENT SPLICE**



**END SECTION**



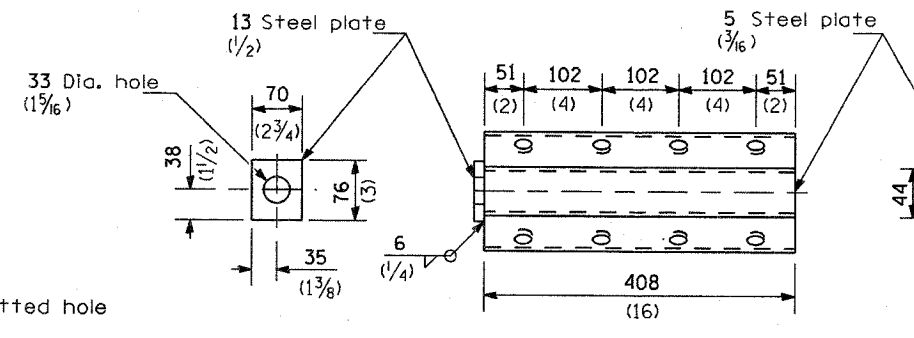
NOTE

When end shoe is attached to a bridge parapet which has an expansion joint, the bolts shall be provided with a locknut or double nut and shall be tightened only to a point that will allow guardrail movement.

The standard end shoe shall be attached to the concrete with pre-drilled or self-drilling anchor bolts. The anchor cone shall be set flush with the surface of the concrete.

Externally threaded studs protruding from the surface of the concrete will not be permitted.

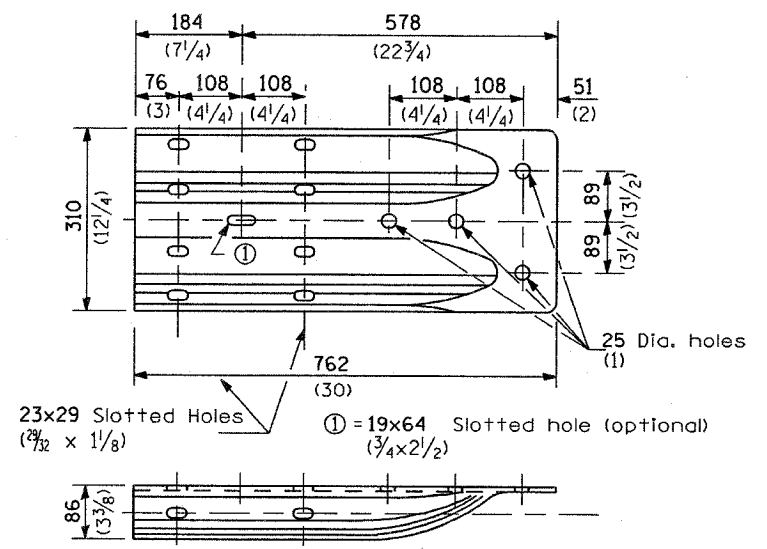
**END SHOE**



NOTE

Anchor plate T shall be used to attach cable assembly to guardrail when required on traffic barrier terminals.

**ANCHOR PLATE T DETAILS**



**ALTERNATE END SHOE**

**REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL**

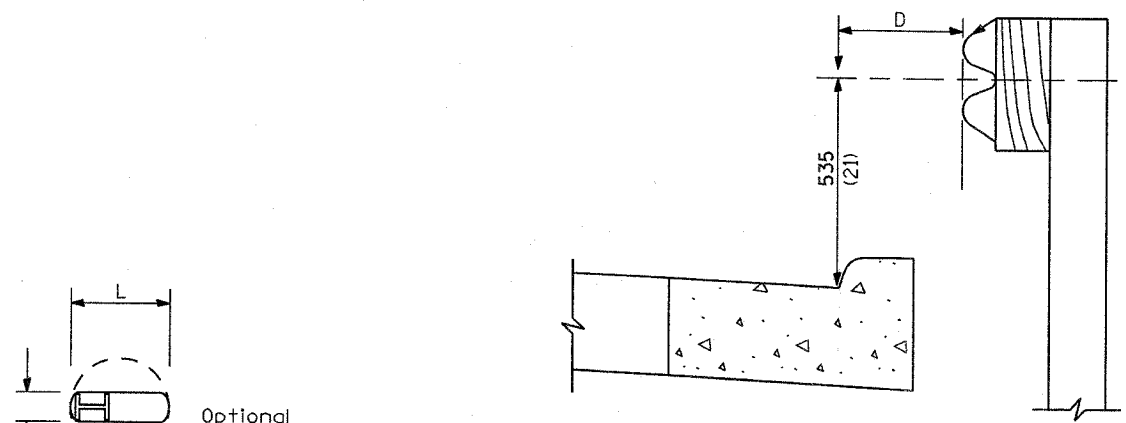
(Sheet 3 of 4)

**DETAIL**

NEW 11/4/07

68415

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			60	60
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



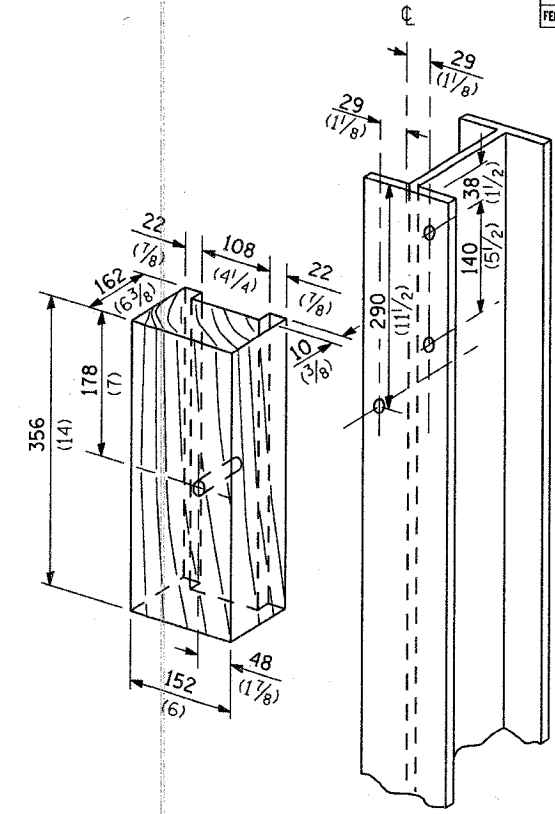
Optional round hole  
 203 (8) min. (Steel post)  
 250 (10) min. (Wood post)

**PLAN**

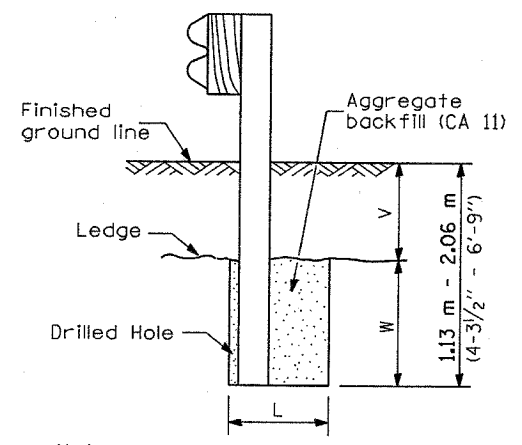
Note:  
 If it is necessary for D to be more than 300 (12) and less than 3.0 m (10'-0") type M-5 (M-2) curb and gutter (Std. 606001) shall be used in front of and in advance of the guardrail.

**GUARDRAIL PLACED BEHIND CURB**

(D = 0 desirable to 300 (12) maximum)



**WOOD BLOCK-OUT AND STEEL POST DETAILS**

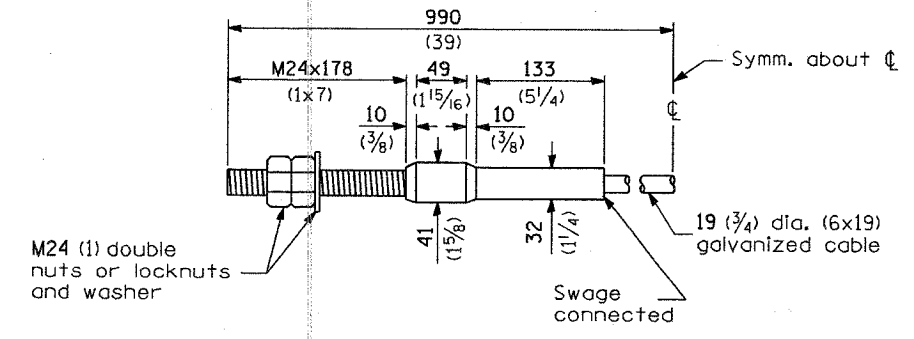


Note:  
 Ledge line is top of rock ledge or hard slag fill.

**ELEVATION**

**FOOTING FOR POST WHEN IMPERVIOUS MATERIAL IS ENCOUNTERED**

V	W	L	
		Steel Post	Wood Post
0 - 460 (0 - 18)	610 (24)	530 (21)	580 (23)
>460 - 825 (>18 - 41.5)	305 (12)	203 (8)	250 (10)
>825 - 1.13 m (>41.5 - 53.5)	305 - 0 (12 - 0)	203 (8)	250 (10)



**CABLE ASSEMBLY**

(18,100 kg (40,000 lbs.) min. breaking strength)  
 Tighten to taut tension.

**REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL**  
 (Sheet 4 of 4)

**DETAIL**

NEW 11/4/07