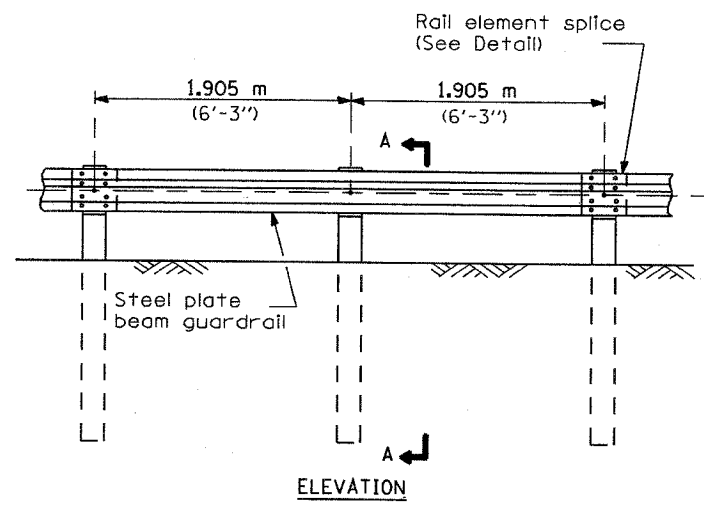
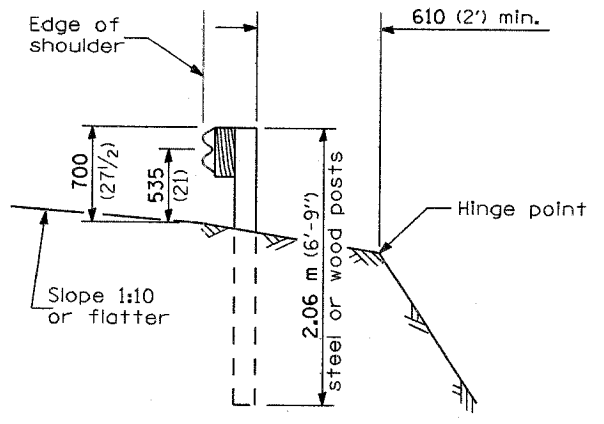


F.A. RITE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
				12A
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
		66647		

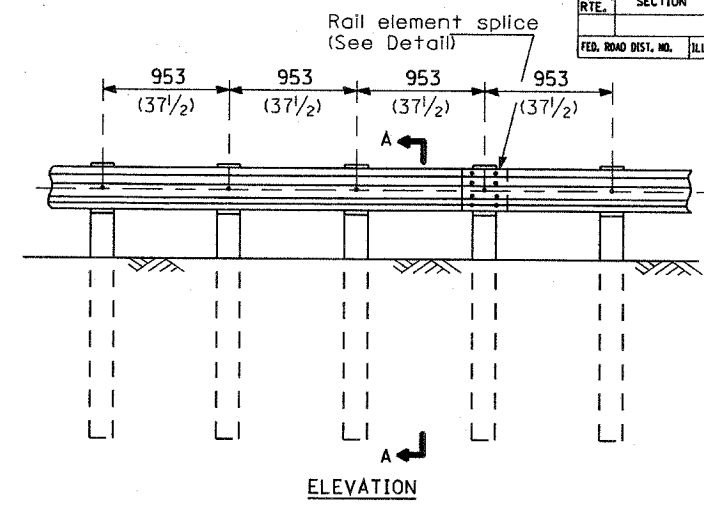


TYPE A

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

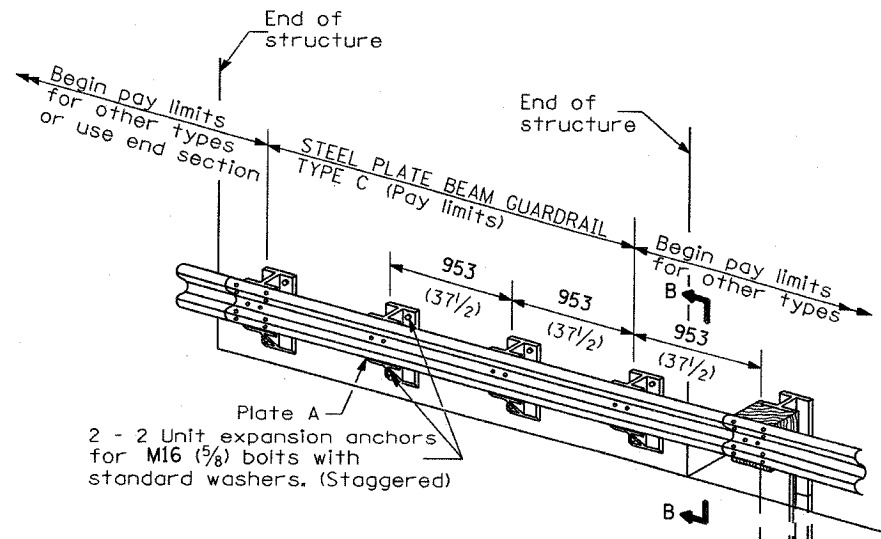


SECTION A-A



TYPE B

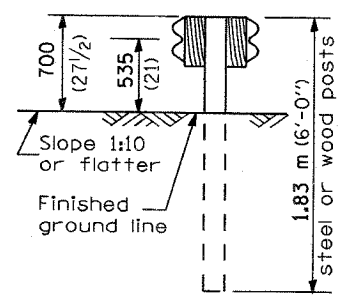
953 (37 1/2) Closed post spacing



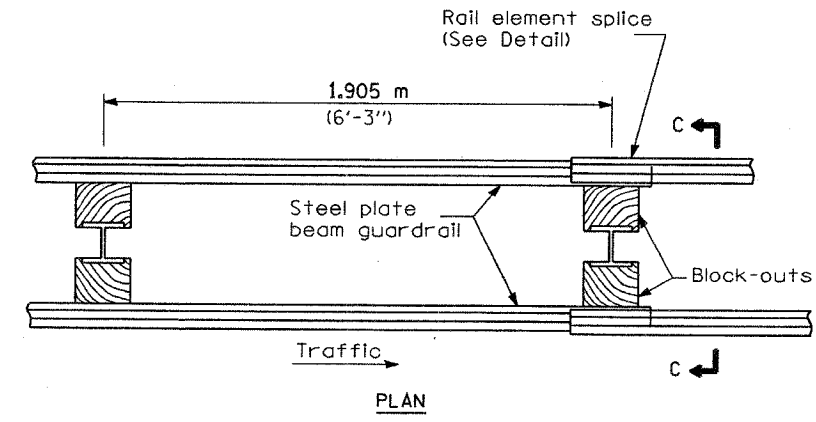
TYPE C

953 (37 1/2) Block-out spacing

After this post has been located, drill holes in concrete for block-out attachments.

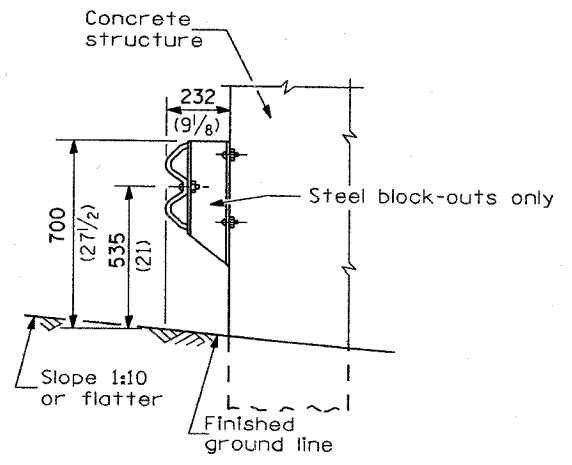


SECTION C-C



TYPE D

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



SECTION B-B

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.

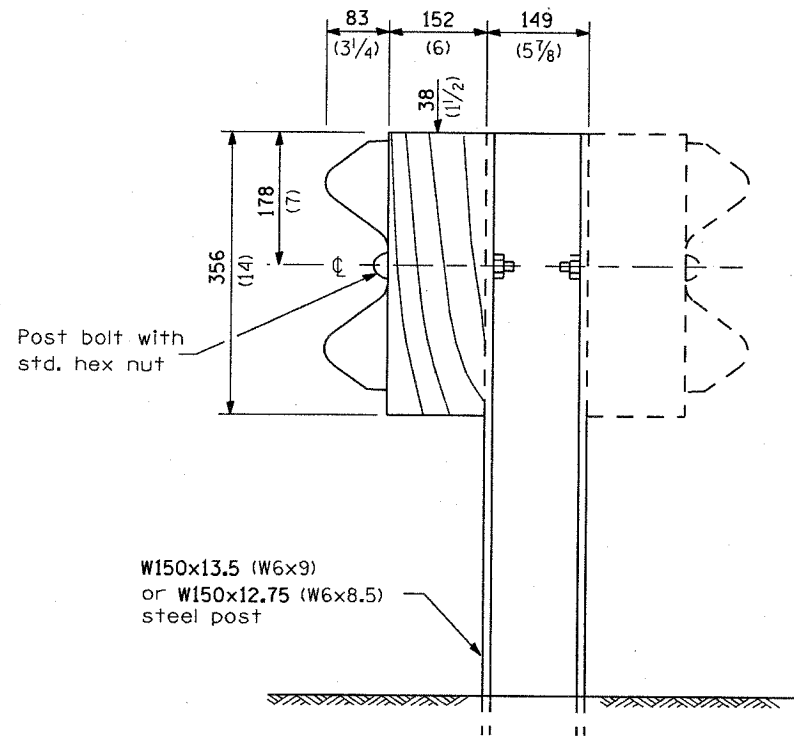
**REMOVE AND REERECT
STEEL PLATE BEAM GUARDRAIL**
(Sheet 1 of 4)

DETAIL

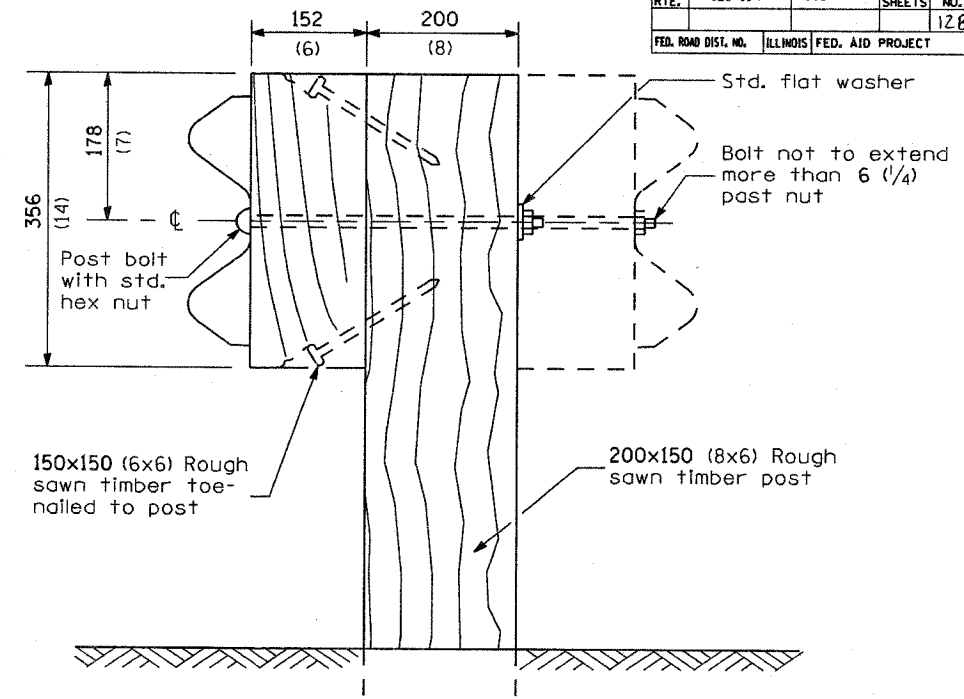
NEW 1/4/07

66647

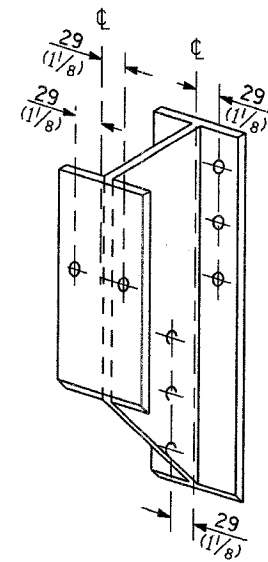
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			128	128
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



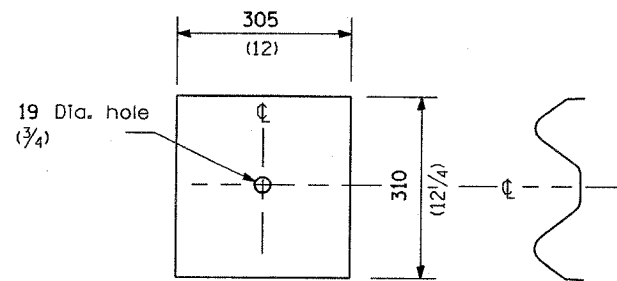
STEEL POST CONSTRUCTION



WOOD POST CONSTRUCTION



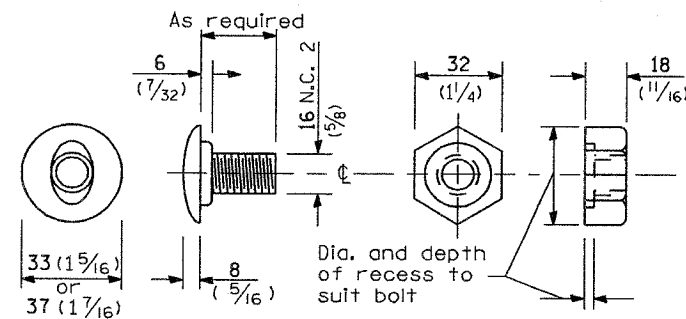
STEEL BLOCK-OUT DETAIL



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)

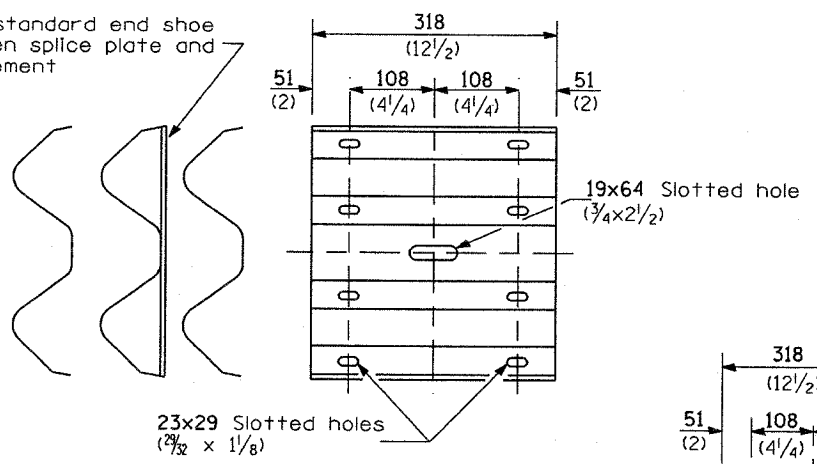
DETAIL

NEW 11/4/07

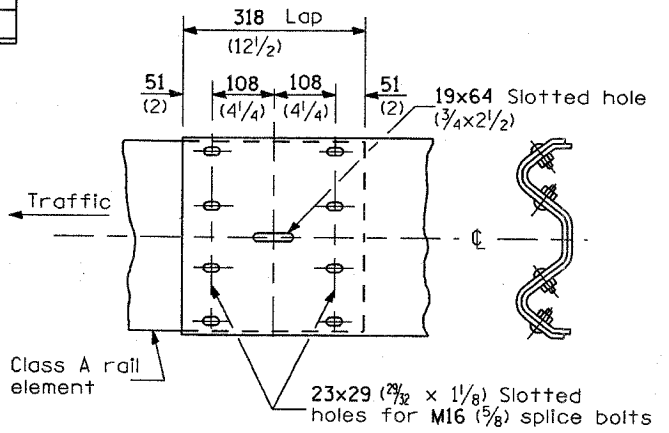
66647

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
				12C
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	

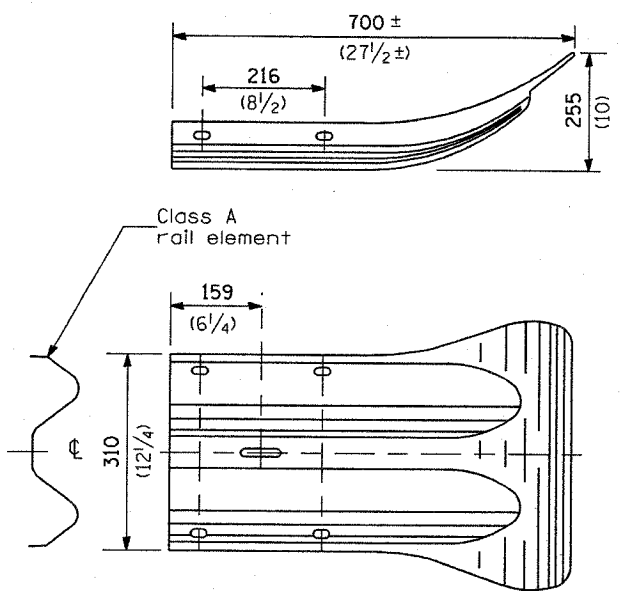
Place standard end shoe between splice plate and rail element



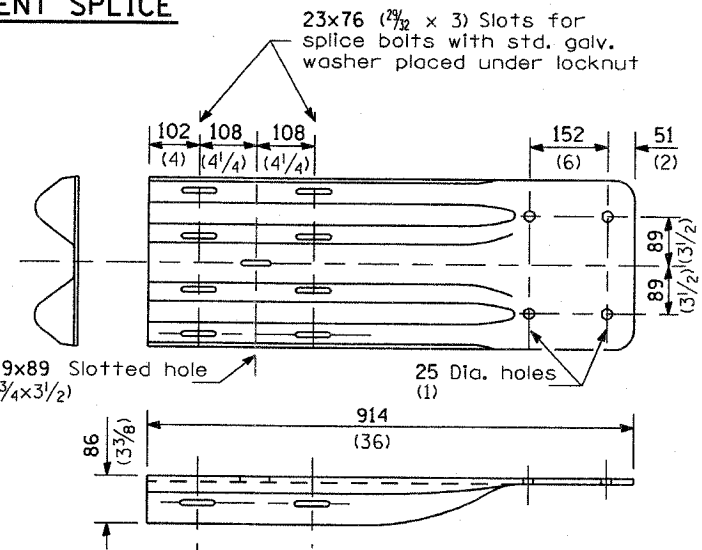
SPLICE PLATE



RAIL ELEMENT SPLICE



END SECTION



NOTE

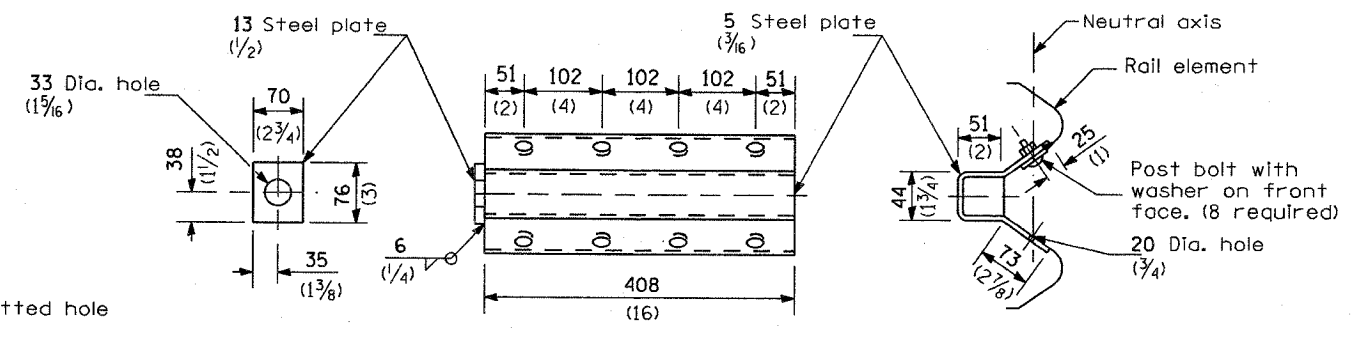
When end shoe is attached to a bridge parapet which has an expansion joint, the bolts shall be provided with a locknut or double nut and shall be tightened only to a point that will allow guardrail movement.

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

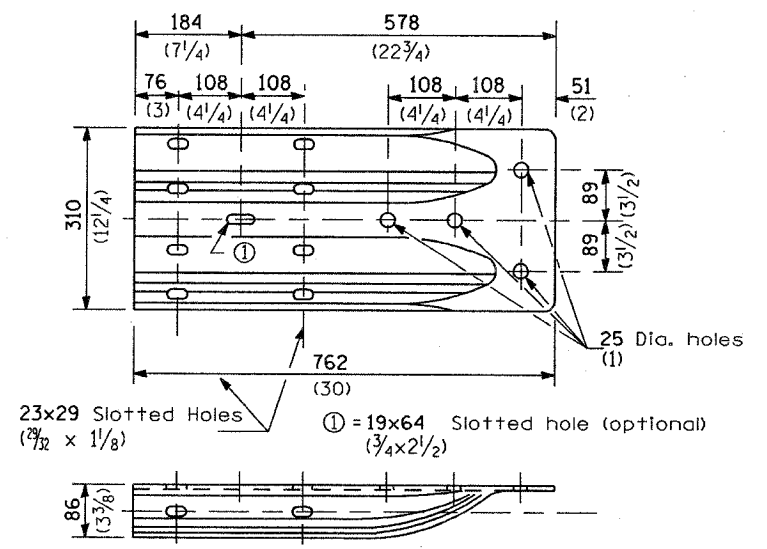
NEW 11/4/07



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

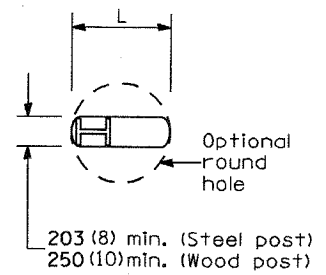
REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL

(Sheet 3 of 4)

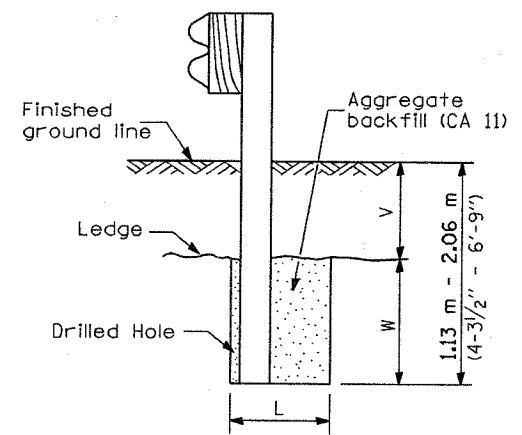
DETAIL

666A7

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



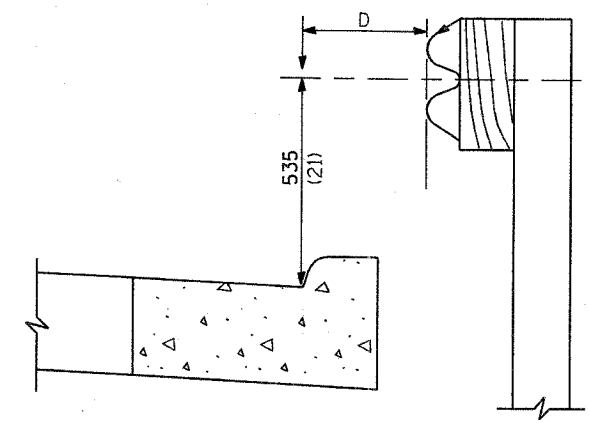
PLAN



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

ELEVATION

FOOTING FOR POST WHEN IMPERVIOUS MATERIAL IS ENCOUNTERED

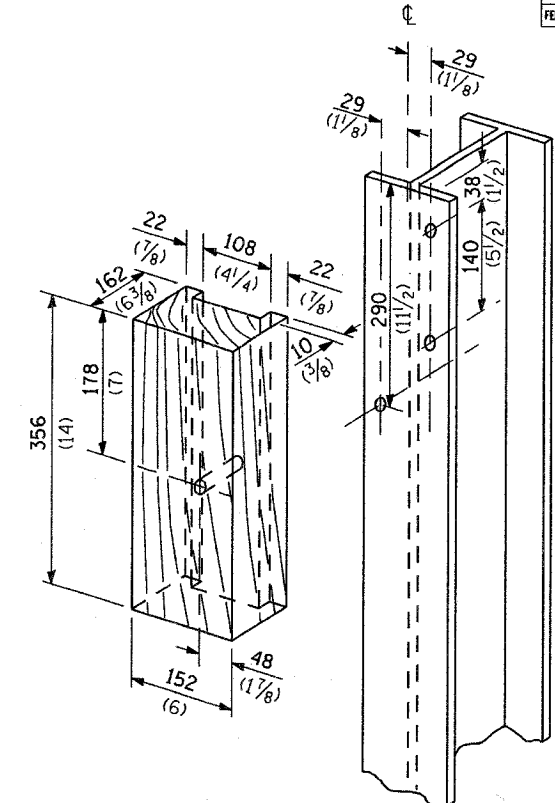


Note:
If it is necessary for D to be more than 300 (12) and less than 3.0 m (10'-0") type M-5 (M-2) curb and gutter (Std. 606001) shall be used in front of and in advance of the guardrail.

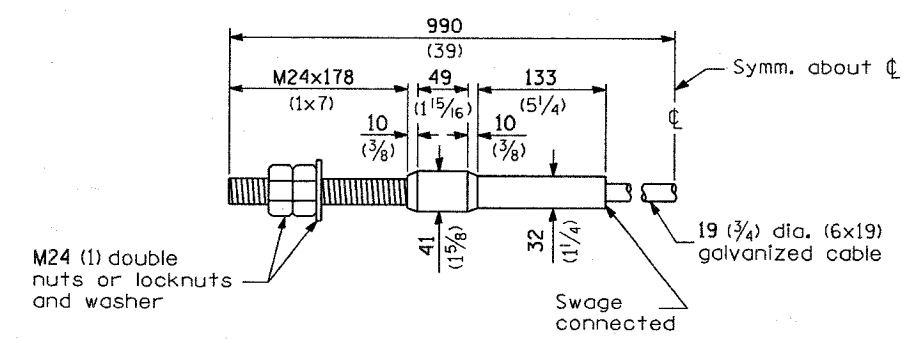
GUARDRAIL PLACED BEHIND CURB

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

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)



WOOD BLOCK-OUT AND STEEL POST DETAILS



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