

F. & S. STA.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR. 2005-027 GRR	VAR.	VAR.	19	2
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT 62961

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19A-19D. REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL DETAILS
19E. TRAFFIC BARRIER TERMINAL, TYPE 2 DETAIL

STATE STANDARDS

630001-07	701006-02	701411-03
630301-04	701011-01	701501-03
631006-03	701101-01	701606-04
631011-03	701201-02	701701-03
631026-03	701301-02	701801-03
631031-06	701400-02	702001-06
631036-04	701401-03	720011
635006-02	701406-04	BLR-23-1
635011-01		

GENERAL NOTES

ALL WORK IS TO BE REPLACED IN KIND OR AS INDICATED ON THE CONTRACT QUANTITY SHEET.

GUARDRAIL WORK WILL INCLUDE ALIGNMENT AS NECESSARY TO RESTORE THE RAIL TO THE ORIGINAL CONDITIONS.

REMOVAL OF DAMAGED MATERIALS WILL INCLUDE DISMANTLING, LOADING, HAULING AND DISPOSAL. THE WORK SITE WILL BE LEFT IN A SAFE AND ORDERLY CONDITION.

NO MATERIAL SHOULD BE LEFT ON OR NEAR THE ROADWAY DURING NON-WORKING HOURS.

ANY NECESSARY TRAFFIC CONTROL WILL BE PROVIDED BY THE CONTRACTOR; APPROPRIATE STANDARDS ARE HEREWITH ATTACHED (SEE COVER SHEET).

THE LIMITS OF THE DAMAGED GUARDRAIL WILL BE MARKED WITH PAINT. THE REPLACEMENT PARTS AND THE QUANTITIES INDICATED ARE WITHIN THESE LIMITS AS MARKED.

REMOVED GUARDRAIL THAT IS NOT REPLACED ON THE SAME DAY MUST BE DELINEATED WITH LIGHTED BARRICADES. NO LOCATIONS WILL BE LEFT WITHOUT EITHER LIGHTED BARRICADES OR RESTORED GUARDRAIL AT ANY TIME.

GUARDRAIL MARKERS SHALL NOT BE ATTACHED TO TERMINAL SECTIONS.

ILLINOIS DEPARTMENT OF TRANSPORTATION

**INDEX OF SHEETS, PLAN SHEETS
AND STATE STANDARDS**

SCALE: NONE
DATE: 10-31-88

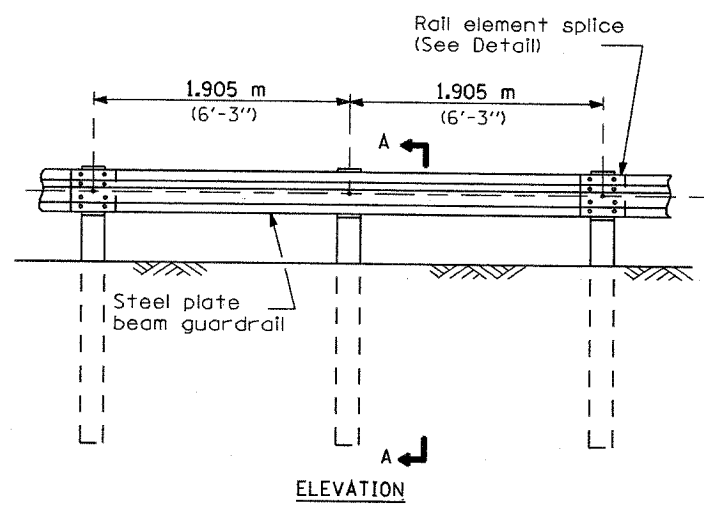
DRAWN BY R.F.L.
CHECKED BY

REVISIONS	
NAME	DATE
CREATED	10-31-88

Rev. 1-9-07

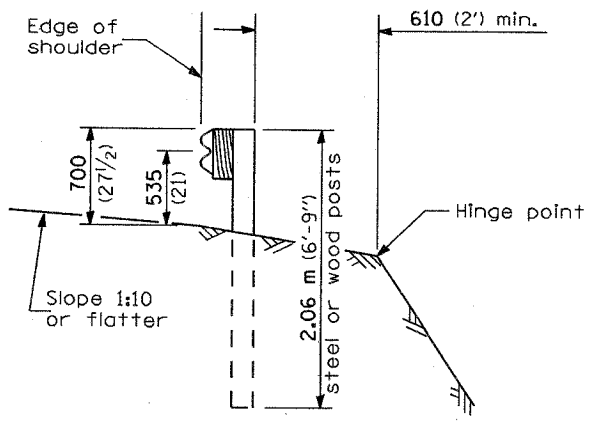
Rev.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR 2005-027008		VAR	19	19A
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

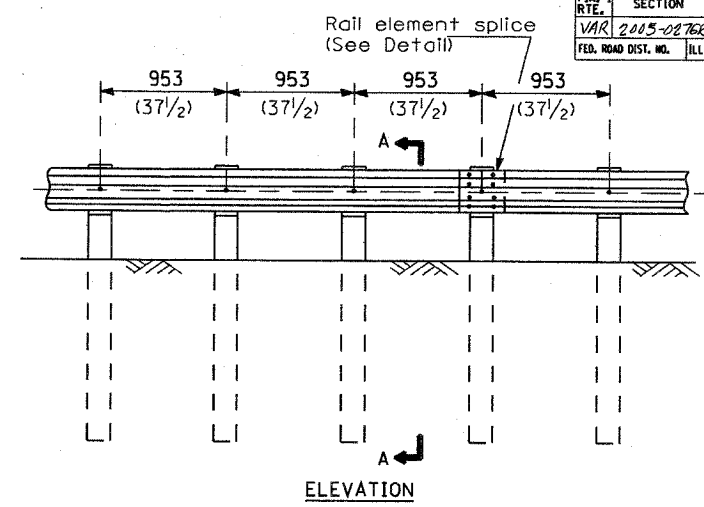


TYPE A

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

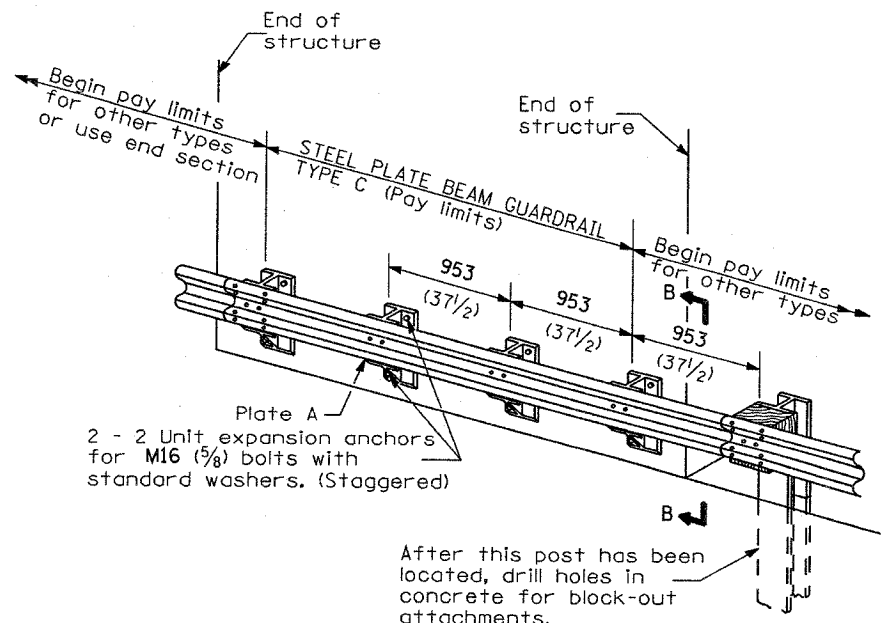


SECTION A-A



TYPE B

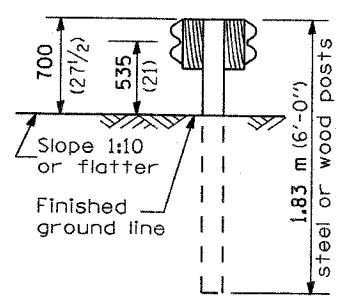
953 (37 1/2) Closed post spacing



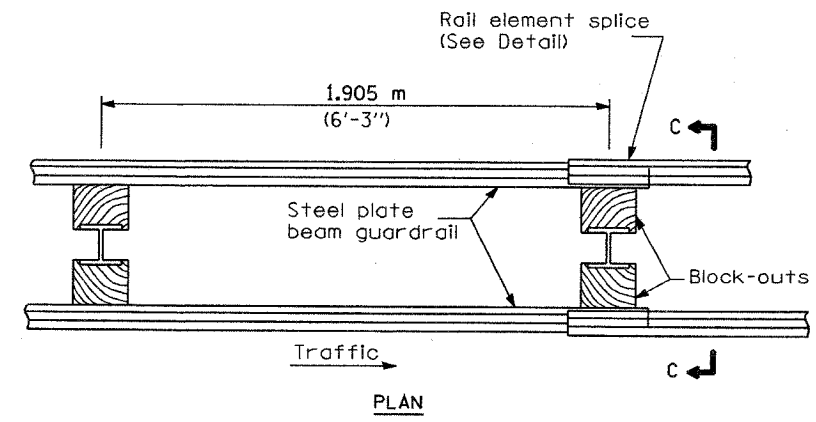
TYPE C

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

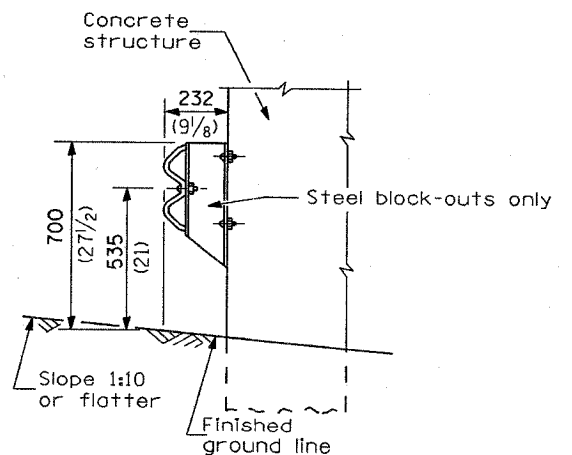
Double steel plate beam guardrail
1.905 m (6'-3") typical post spacing

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.



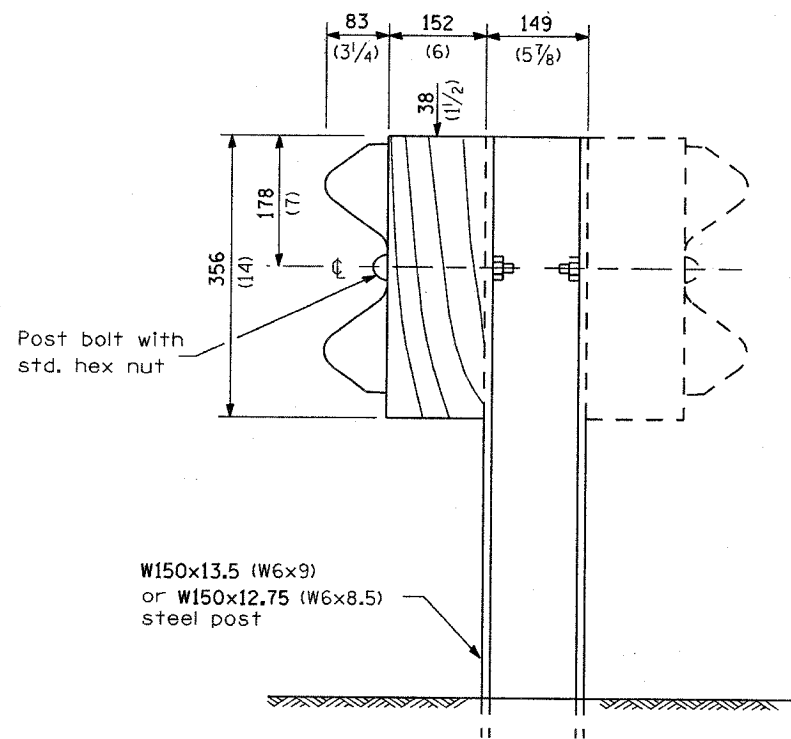
SECTION B-B

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

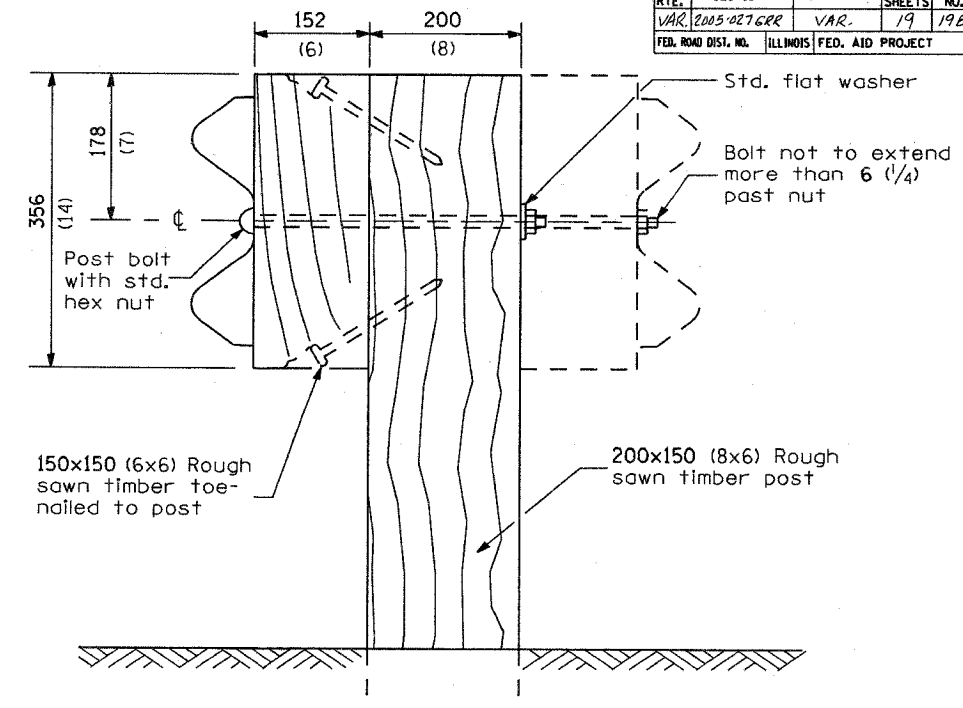
DETAIL

Added Sheet 1-9-07

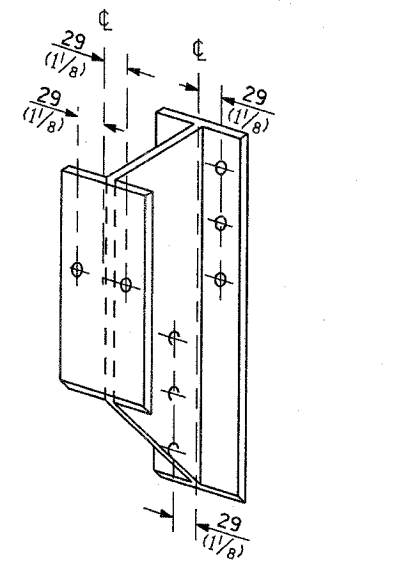
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2005-027 GRR	VAR.	19	19B.
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



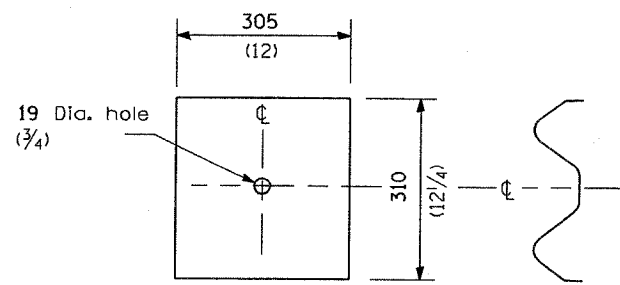
STEEL POST CONSTRUCTION



WOOD POST CONSTRUCTION



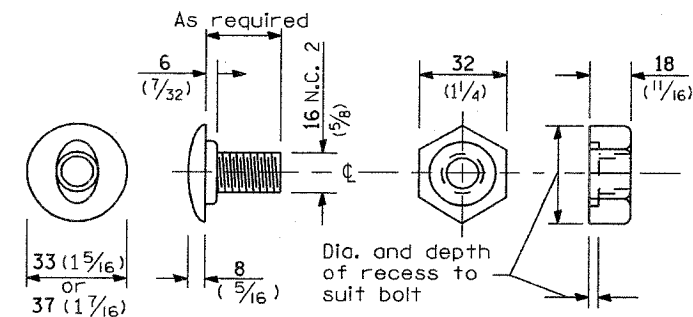
STEEL BLOCK-OUT DETAIL



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**

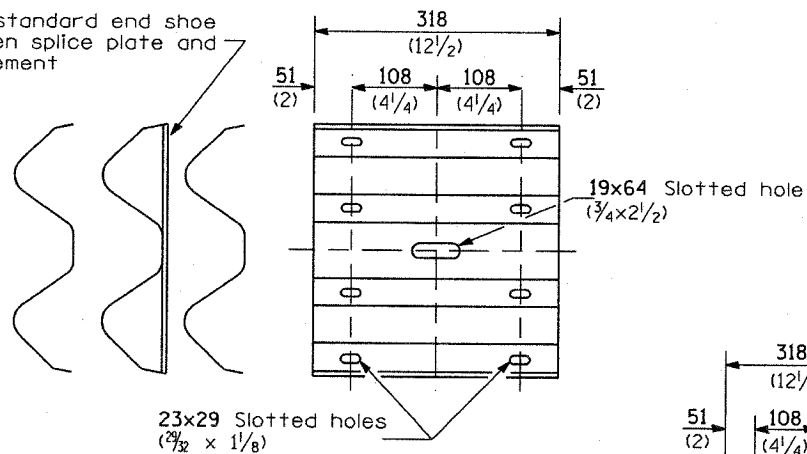
(Sheet 2 of 4)

DETAIL

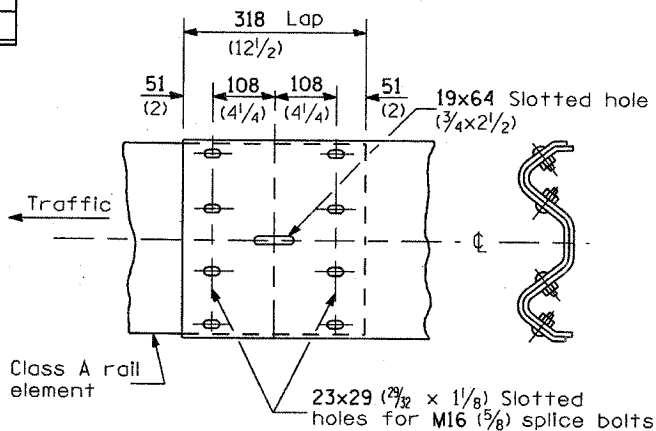
Added Sheet 1-9-07

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2005-027GRE	VAR.	19	19C.
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

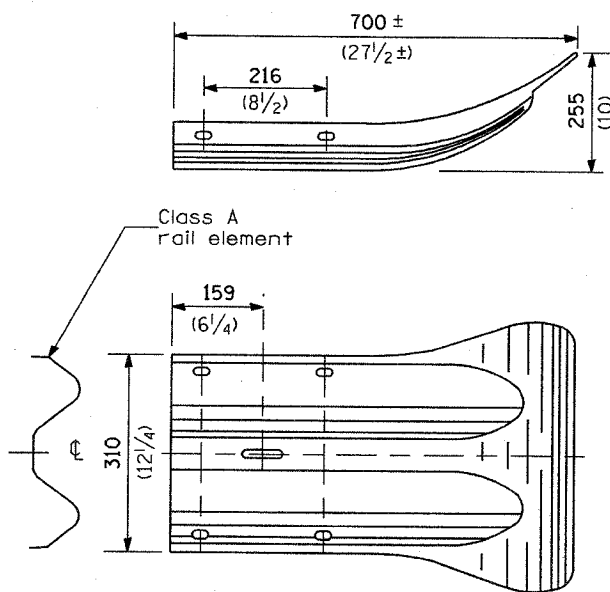
Place standard end shoe between splice plate and rail element



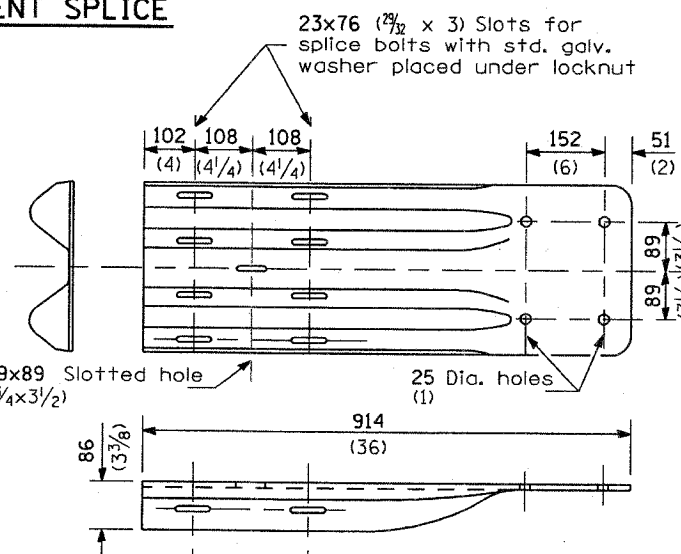
SPLICE PLATE



RAIL ELEMENT SPLICE



END SECTION



NOTE

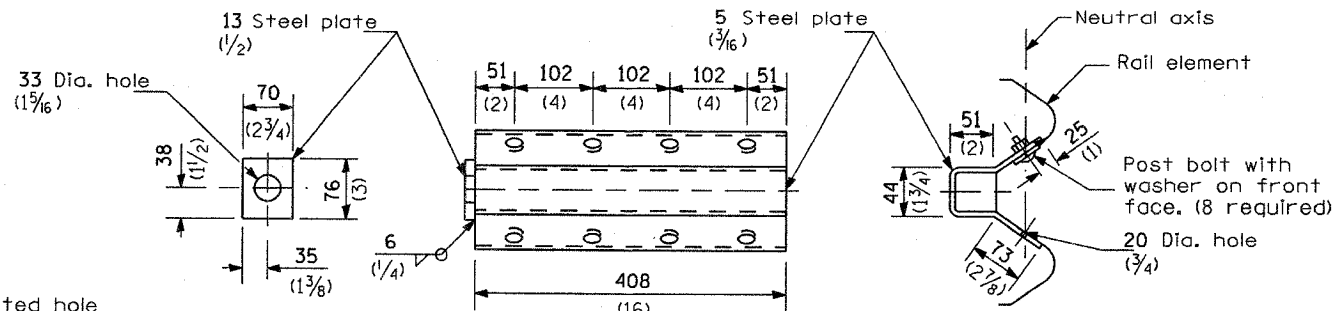
When end shoe is attached to a bridge parapet which has an expansion joint, the bolts shall be provided with a locknut or double nut and shall be tightened only to a point that will allow guardrail movement.

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

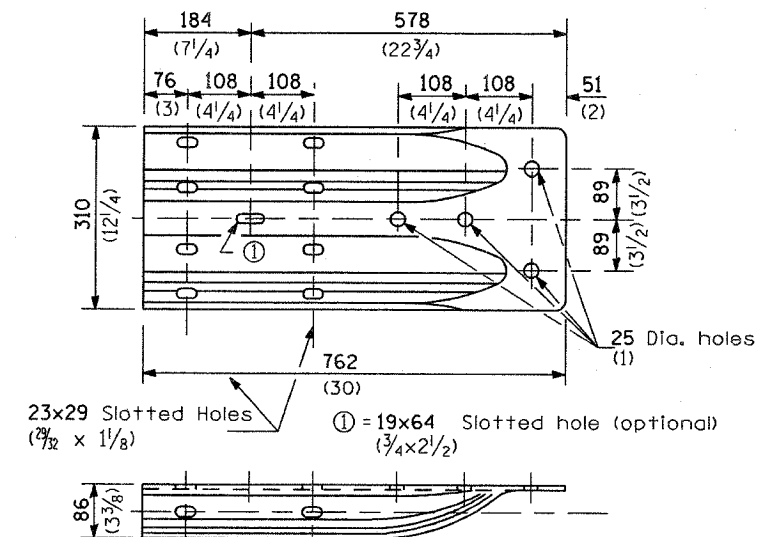
Added Sheet 1-9-07



NOTE

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

ANCHOR PLATE T DETAILS

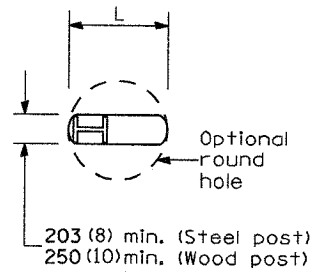


ALTERNATE END SHOE

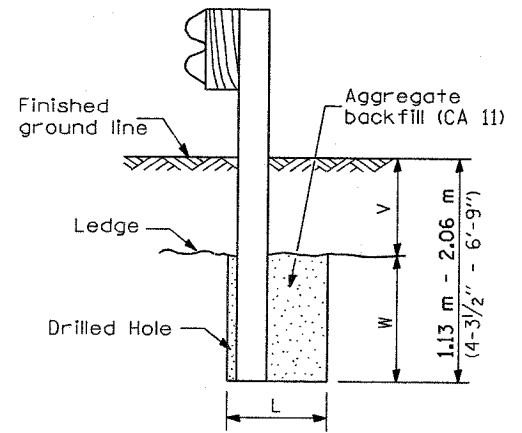
**REMOVE AND REERECT
STEEL PLATE BEAM GUARDRAIL**

(Sheet 3 of 4)

DETAIL



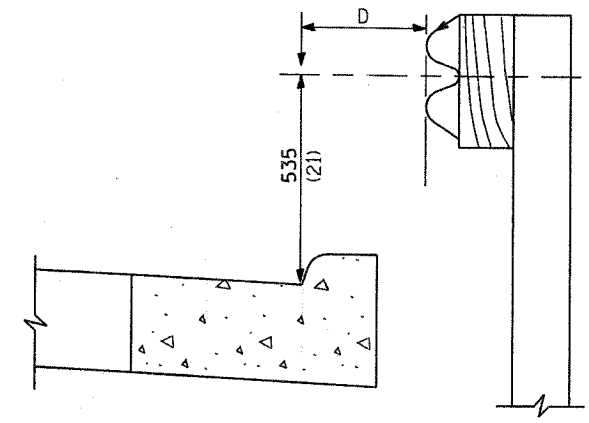
PLAN



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

ELEVATION

FOOTING FOR POST WHEN IMPERVIOUS MATERIAL IS ENCOUNTERED

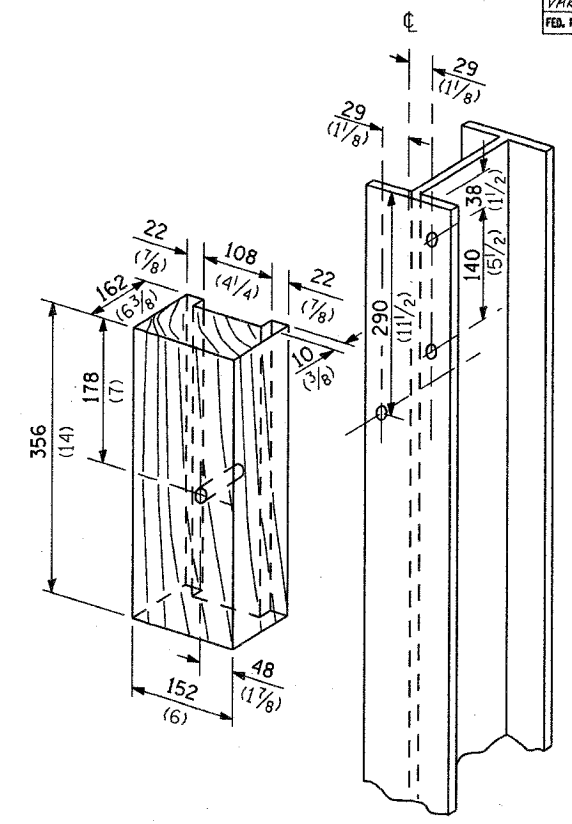


Note:
If it is necessary for D to be more than 300 (12) and less than 3.0 m (10'-0") type M-5 (M-2) curb and gutter (Std. 606001) shall be used in front of and in advance of the guardrail.

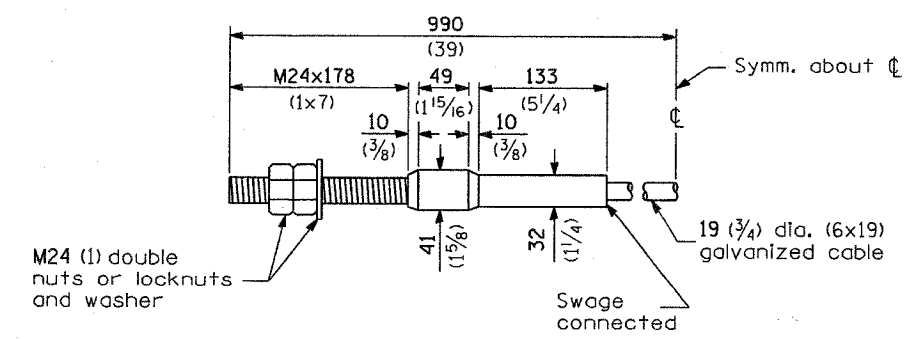
GUARDRAIL PLACED BEHIND CURB

(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.

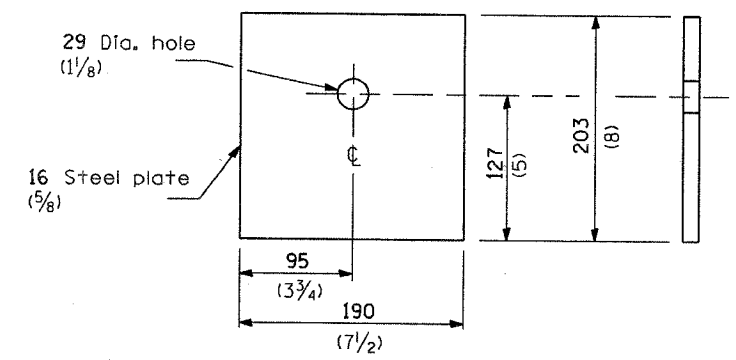
REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL

(Sheet 4 of 4)

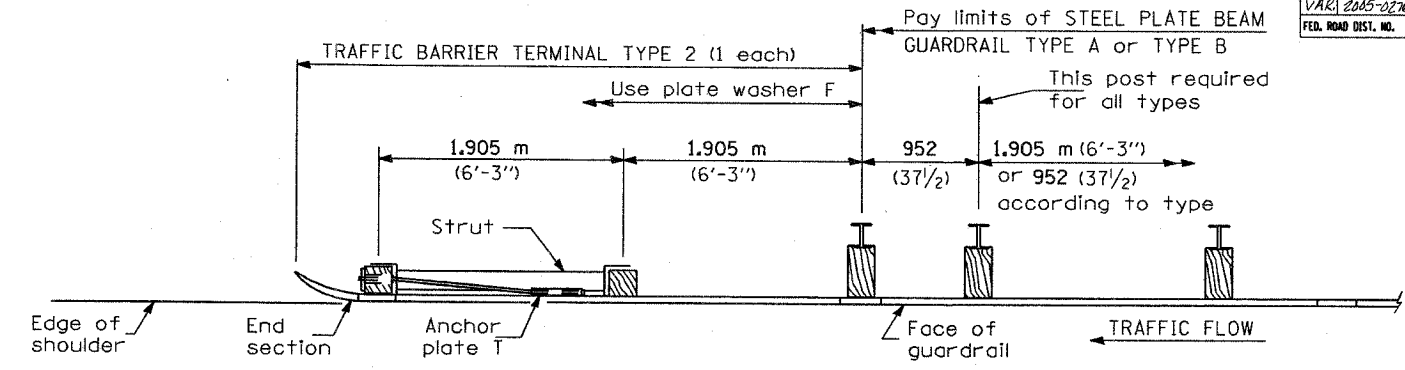
DETAIL

Added Sheet 1-9-07

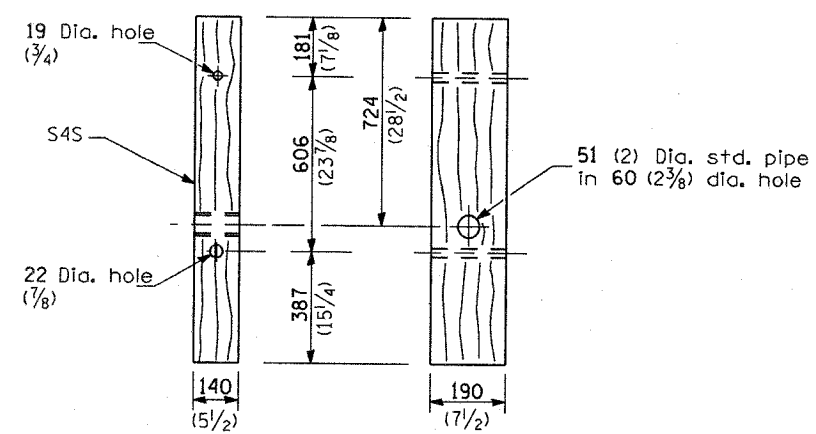
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAK	2005-0276R	VAK	19	19E
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



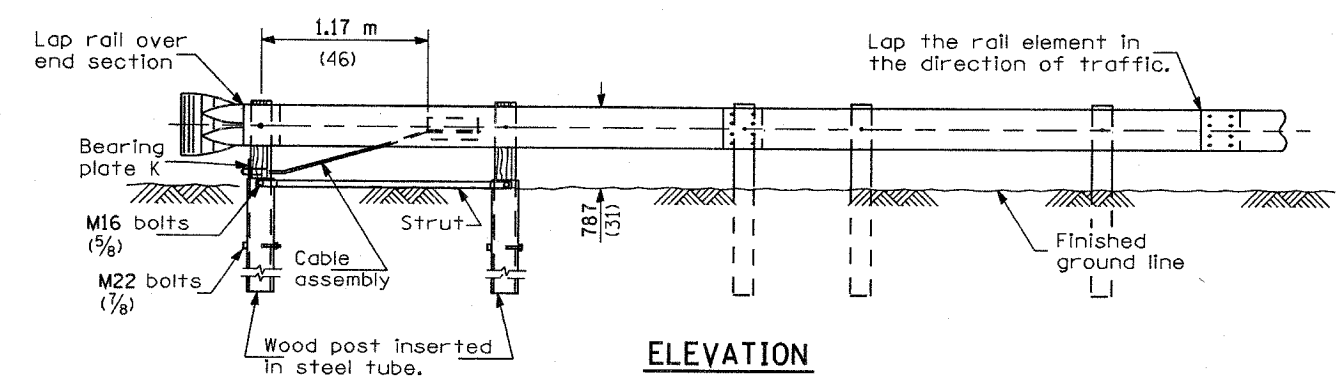
BEARING PLATE K



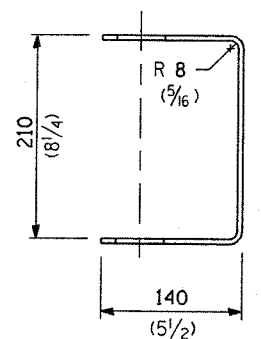
PLAN



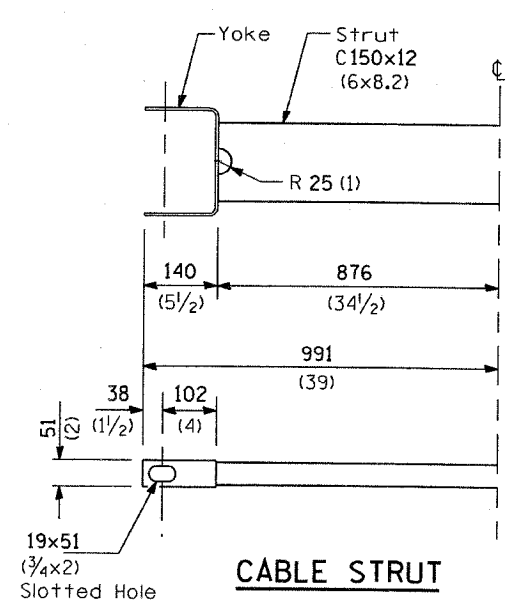
WOOD POST



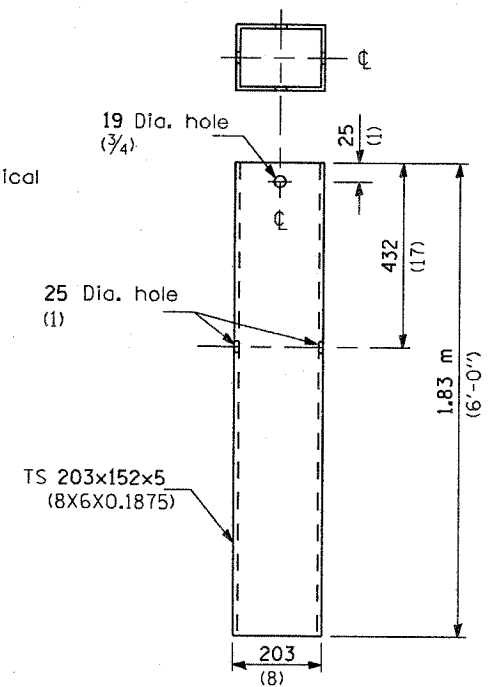
ELEVATION



YOKE



CABLE STRUT



STEEL TUBE

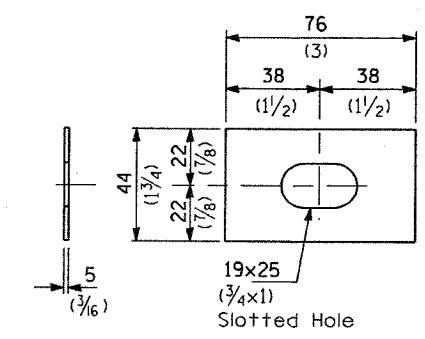


PLATE WASHER F

GENERAL NOTES

See Standard 630001 for details of guardrail not shown.

The bearing plate K shall be held in position by (2) two eight penny nails driven into the post and bent over the top of the plate.

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

TRAFFIC BARRIER TERMINAL, TYPE 2

DETAIL

Added Sheet 1-9-07