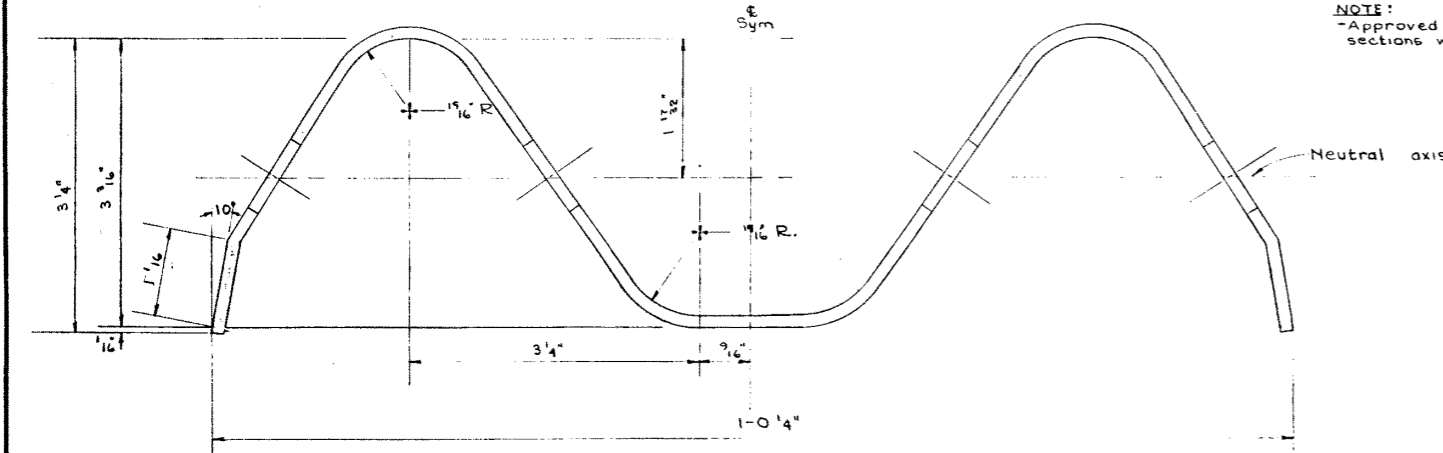


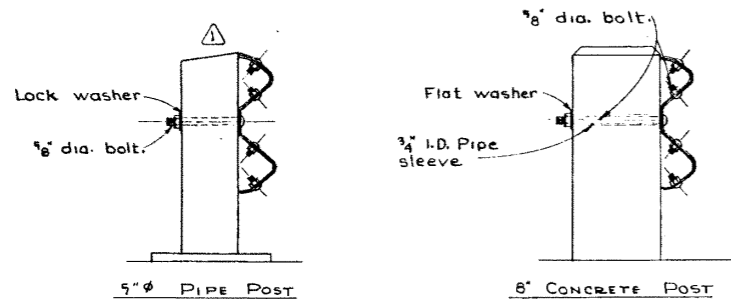
**INSTALLATION**

Scale 1" = 1'-0"



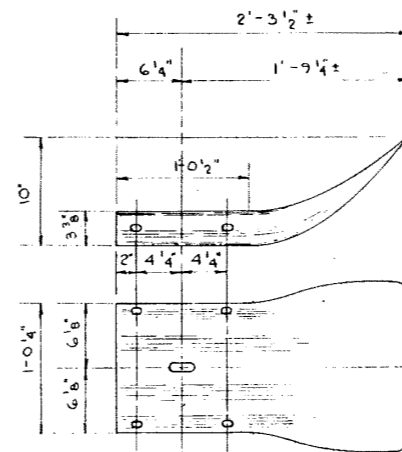
**SECTION A-A**

Full size



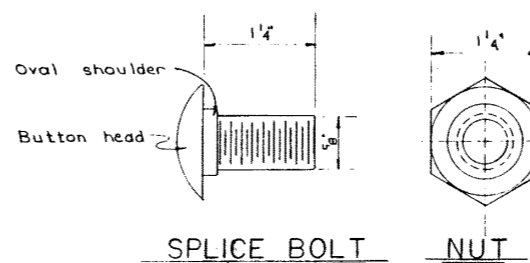
**ARRANGEMENT AT POST**

Scale 1 1/2" = 1'-0"



**TERMINAL SECTION**

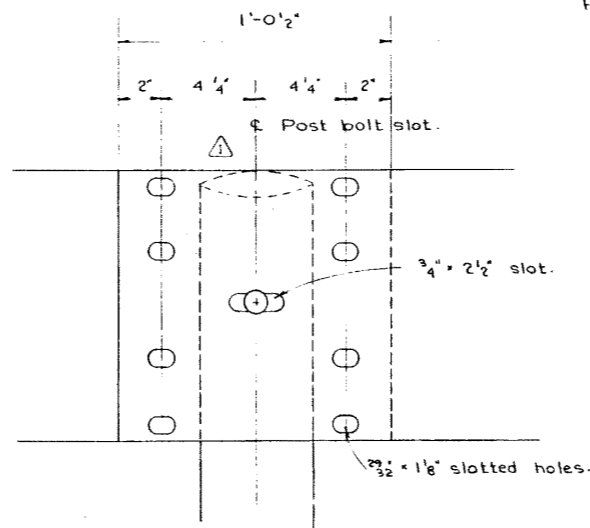
Scale 1 1/2" = 1'-0"



**SPLICE BOLT**

**NUT**

**POST BOLT** = similar except in length Full size



**RAIL SPLICE**

Scale 3" = 1'-0"

**SPECIFICATIONS**

Materials:

(a) Rail element - Rail elements shall be formed from open-hearth or electric-furnace steel of the gauge shown on plans or in the bid schedule. A test specimen of the rail material shall elongate not less than 12 percent in a 2-inch gauge length when tested in accordance with A.S.T.M. E 8. Rail elements shall meet the strength requirements of table -1

Table -1 - Strength requirements for rail and joints for beam-type guardrail:

Minimum gauge	Tensile Strength	Beam strength <sup>(1)</sup>			
		Traffic face up		Traffic face down	
		Load	Maximum deflection	Load	Maximum deflection
12	80,000	Pounds	inches	Pounds	inches
12	80,000	1,500	2 3/4	1,200	2 3/4
		2,000	5 1/2	1,600	5 1/2
10	100,000	2,000	2 3/4	1,600	2 3/4
10	100,000	3,000	5 1/2	2,400	5 1/2

(1) With the rail element freely supported on 12 foot 0-inch clear span and the load applied through a 3 inch flat surface at the center of the span. When the joint is tested it shall be at the center of the span.

(b) Terminal sections - Terminal sections shall be formed from open-hearth or electric-furnace steel of not less than 12 gauge. A test specimen of the material shall elongate not less than 12 percent in a 2 inch gauge length when tested in accordance with A.S.T.M. E 8.

(c) Bolts and nuts - Bolts and nuts shall be galvanized in accordance with the requirements of A.S.T.M. A153. The post bolt and connection shall develop a 5000 pound side pull in either direction.

Paint:

Paint shall conform to the requirements of the indicated specifications as follows:

Red lead ready-mixed paint - AASHO M72.

**SUPERSEDED**  
BY S-675-69  
SEPT. 1969

**STANDARD DEEP BEAM  
GUARD RAIL**



GOVERNMENT OF THE PROVINCE OF ALBERTA  
DEPARTMENT OF HIGHWAYS  
BRIDGE BRANCH, EDMONTON

NO.	DATE	DESCRIPTION	BY
1	30 Sept. 59	Rail height, top of post.	J.L.W.

FILE NO. \_\_\_\_\_ HWY. NO. \_\_\_\_\_ DWG. NO. \_\_\_\_\_  
LOCATION \_\_\_\_\_ SCALE As Shown \_\_\_\_\_  
STREAM \_\_\_\_\_ SHEET \_\_\_\_\_ OF \_\_\_\_\_

DESIGNED BY \_\_\_\_\_ DATE \_\_\_\_\_  
DETAILED BY \_\_\_\_\_ DATE \_\_\_\_\_  
CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_