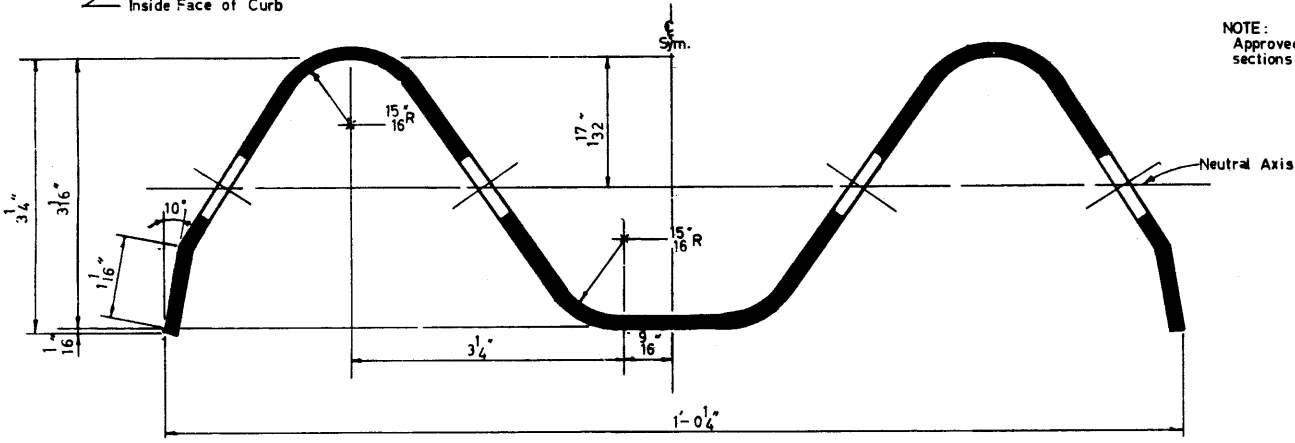


INSTALLATION

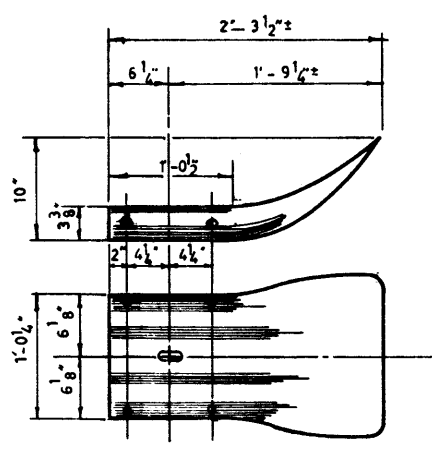
Scale: 1" = 1'-0"



SECTION A-A

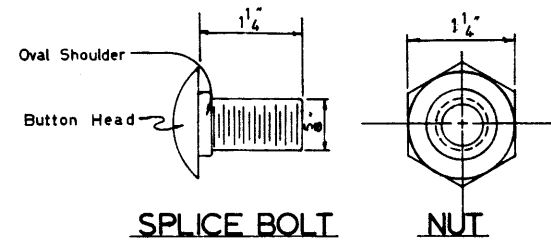
Full Size

NOTE: Approved alternate terminal sections will be accepted.



TERMINAL SECTION

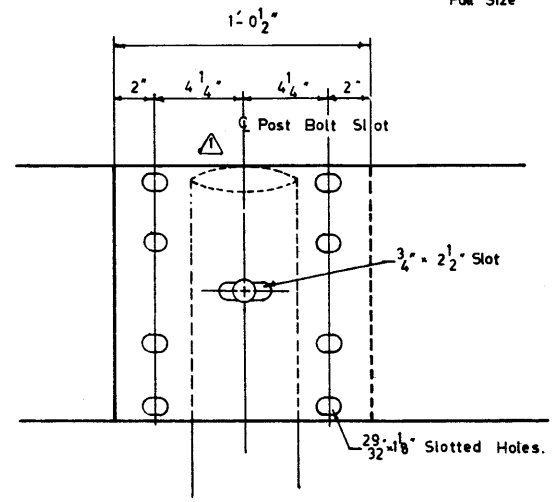
Scale: 1/2" = 1'-0"



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. E8. 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 | | | |
|---------------|------------------|-----------------|--------------------|-------------------|--------------------|
| | | Traffic Face Up | | Traffic Face Down | |
| | | Load | Maximum Deflection | Load | Maximum Deflection |
| 12 | Pounds 89,000 | Pounds 1,500 | Inches 2 3/4 | Pounds 1,200 | Inches 2 3/4 |
| 12 | Pounds 80,000 | Pounds 2,000 | Inches 5 1/2 | Pounds 1,600 | Inches 5 1/2 |
| 10 | Pounds 100,000 | Pounds 2,000 | Inches 2 3/4 | Pounds 1,600 | Inches 2 3/4 |
| 10 | Pounds 100,000 | Pounds 3,000 | Inches 5 1/2 | Pounds 2,400 | Inches 5 1/2 |

- (1) With the rail element freely supported on a 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 be elongate not less than 12 percent in a 2 inch gauge length when tested in accordance with A.S.T.M. E8.
- (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 5,000 pound side pull in either direction.

Paint:

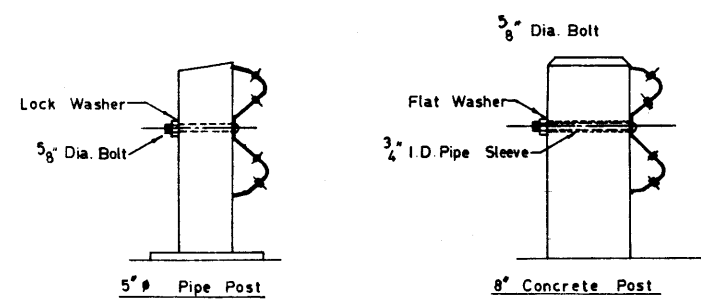
Paint shall conform to the requirements of the indicated specifications as follows:

Red lead ready-mixed paint - - - AASHO M72

DESIGNED BY _____ DATE _____
 CHECKED BY _____ DATE _____
 DETAILED BY E.D., J.S., & D.A. DATE _____
 SCALE: 1/2" = 1'-0"

ARRANGEMENT AT POST

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



APPROVED _____ CHIEF BRIDGE ENGINEER

STANDARD DEEP BEAM GUARD RAIL

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

FILE NO. _____ HWY. NO. _____
 LOCATION _____ SCALE _____
 SHEET _____ OF _____

30 Sept 59 Rail Height. bp of Post J.W.
 NO. DATE DESCRIPTION BY

| NO. | DATE | DESCRIPTION | BY |
|-----|------|-------------|----|
| | | | |
| | | | |

5-675-69