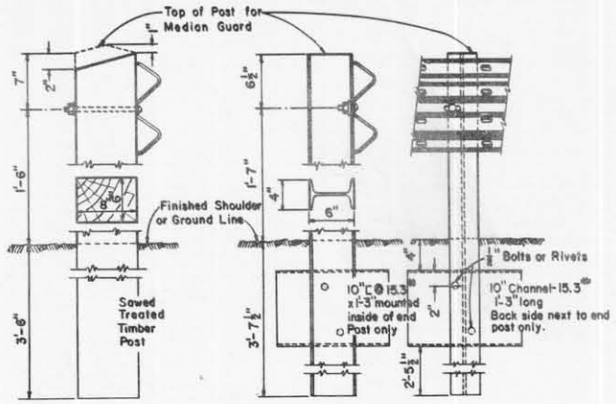
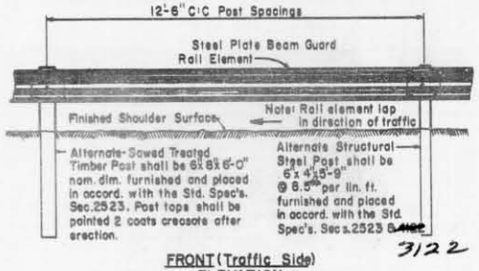


Side ELEVATION TIMBER POST

Side ELEVATION STEEL POST

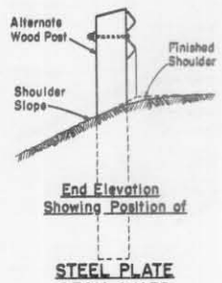
Front ELEVATION

ALTERNATE TYPE POSTS FOR STEEL PLATE BEAM GUARD AND STEEL PLATE BEAM (MEDIAN) GUARD



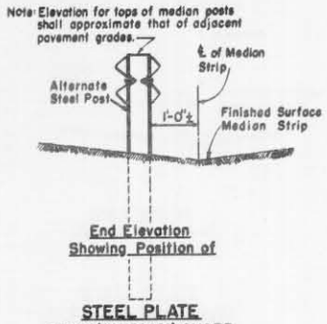
FRONT (Traffic Side) ELEVATION

STEEL PLATE BEAM GUARD OR STEEL PLATE BEAM (MEDIAN) GUARD



End Elevation Showing Position of

STEEL PLATE BEAM GUARD



End Elevation Showing Position of

STEEL PLATE BEAM (MEDIAN) GUARD

GENERAL NOTES

Details of construction not shown on this drawing shall conform to the pertinent requirements of the Standard Specifications and the applicable Special Provisions.

The Steel Plate Beam Guard or (Median) Guard shall consist of steel plate made of open hearth or electric furnace steel.

Plates shall be blanked to proper shape, fabricated and ready for assembly when received in the field. The plates shall be true to plan dimensions and of uniform section. Warped or deformed plates will be rejected. The edges of the plates shall be rolled or rounded so that they present no sharp edges. All connections and splices shall be formed with flat round headed bolts, or similar detail so that no appreciable projection will be presented on the road side of the guard. The rail element shall be spliced by lapping in the direction of traffic or by butt joint with splice plate. Plate ends in lap splices or plate ends and splice plate in butt splices shall make contact throughout the entire area of the splice.

TESTS

The elongation of a 2 inch specimen of the steel plate used in the rail element shall be not less than 12 percent tested in tension. The minimum tensile strength of the rail element shall, when tested in conjuntion with splices and end connections, be 50,000 lbs. The rail element when loaded as a simple beam, freely supported at each end on 12'-0" centers shall support a concentrated load of 1,500 lbs., applied at the center point, with a maximum deflection of 2¾ inches and shall support a concentrated load of 2,000 lbs. when tested in like manner with a maximum deflection of 5½ inches.

PAINTING

SHOP COAT - Promptly following fabrication, the plates for steel rail element and steel posts shall be thoroughly cleaned and painted with red lead primer or, upon the Engineer's approval, an alternate of rust inhibitive primer may be used. All parts, hardware and appurtenant fittings for the complete beam guard assembly shall likewise be painted when not furnished galvanized.

FIELD COAT - Following erection the steel rail elements, parts, hardware, appurtenant fittings and steel posts shall be painted in accordance with the Standard Specifications for and with aluminum paint as provided in Section 3125.

Any damaged areas occuring to the shop coat during transportation or erection shall be cleaned and painted with red lead or an approved rust inhibitive primer prior to any field coat painting.

Where the steel plate elements make contact with the post mountings ect all such areas which are inaccessible to paint after erection shall be painted prior to erection.

All threaded portions of fittings, fasteners and cut ends of bolts shall be painted as specified immediately following erection.

CIRCULAR STEEL PLATE ELEMENT

Steel plate beam elements for beam guard or (median) guard for radii of 20 ft to 150 ft shall be shop-curved prior to shop coat painting. Steel plate beam elements shall be bent to true circular curvature, void of kinks. Kinks shall be cause for rejection.

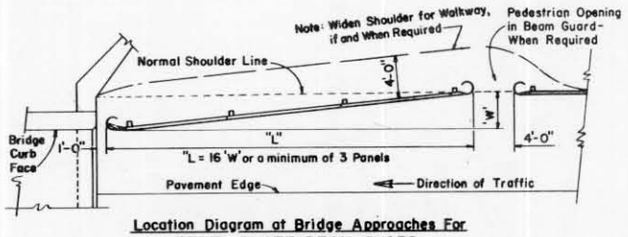
Steel plate beam elements shall have a minimum bending radius of 20 feet.

ALTERNATE POSTS

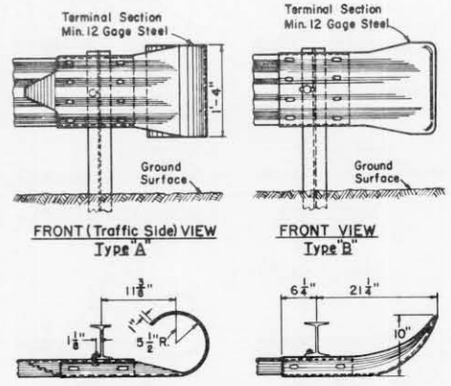
One type of post shall be used for Steel Plate Beam Guard and/or Steel Plate Beam (Median) Guard throughout the length of each project unless specific authorization is obtained from the Engineer to use alternate types.

MEASUREMENT & PAYMENT

The items of Class 'B' Steel Plate Beam Guard and Class 'B' Steel Plate Beam (Median) Guard shall be measured and paid for at the contract unit price per linear foot, measured in place by length in linear feet from end to end-out to out of steel plate terminal sections, which price shall be full compensation for furnishing and placing all materials and performing all work to completion in accordance with the plans and the Standard Specifications Section 2523 and the applicable Special Provisions.



Location Diagram at Bridge Approaches For STEEL PLATE BEAM GUARD



FRONT (Traffic Side) VIEW Type "A"

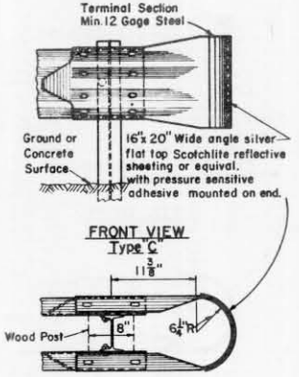
FRONT VIEW Type "B"

PLAN VIEW

PLAN VIEW

Alternate Types

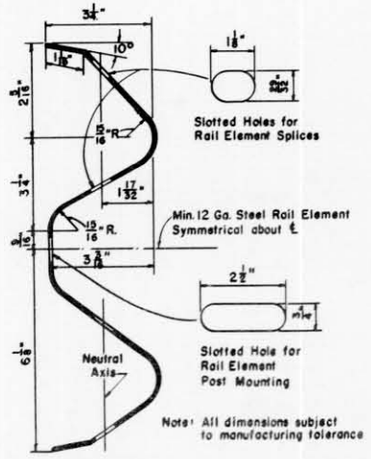
TERMINAL SECTION DETAILS FOR STEEL PLATE BEAM GUARD



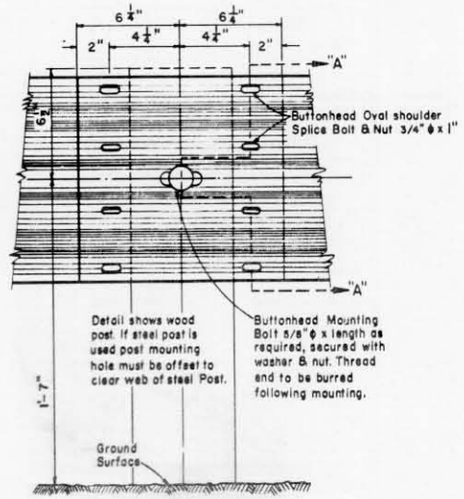
FRONT VIEW Type "C"

PLAN VIEW

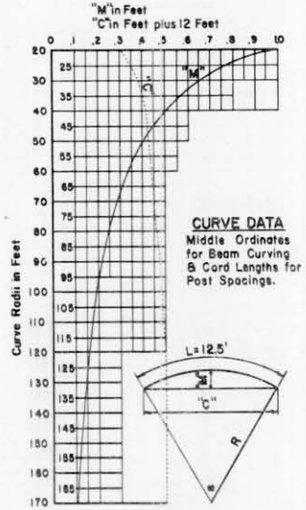
TERMINAL SECTION DETAILS FOR STEEL PLATE BEAM (MEDIAN) GUARD



SECTION "AA" RAIL ELEMENT SECTION (Min. 12 GAGE STEEL)



RAIL ELEMENT SPLICING & POST MOUNTING DETAILS



CURVE DATA

Middle Ordinates for Beam Curving & Cord Lengths for Post Spacings.

BID ITEMS

No. 2523-3 Steel Plate Beam Guard..... Lin. Ft.

No. 2523-4 Steel Plate Beam (Median) Guard..... Lin. Ft.

STEEL PLATE BEAM GUARD & STEEL PLATE BEAM (MEDIAN) GUARD

STATE HIGHWAY COMMISSION OF WISCONSIN

RECOMMENDED FOR APPROVAL:

DATE: 3-28-57 — J. S. Pitt, ENGINEER OF DESIGN

APPROVED:

DATE: 3/28/57 — E. C. Rottiers, STATE HIGHWAY ENGINEER

PLATE NO. 7-2.4.2