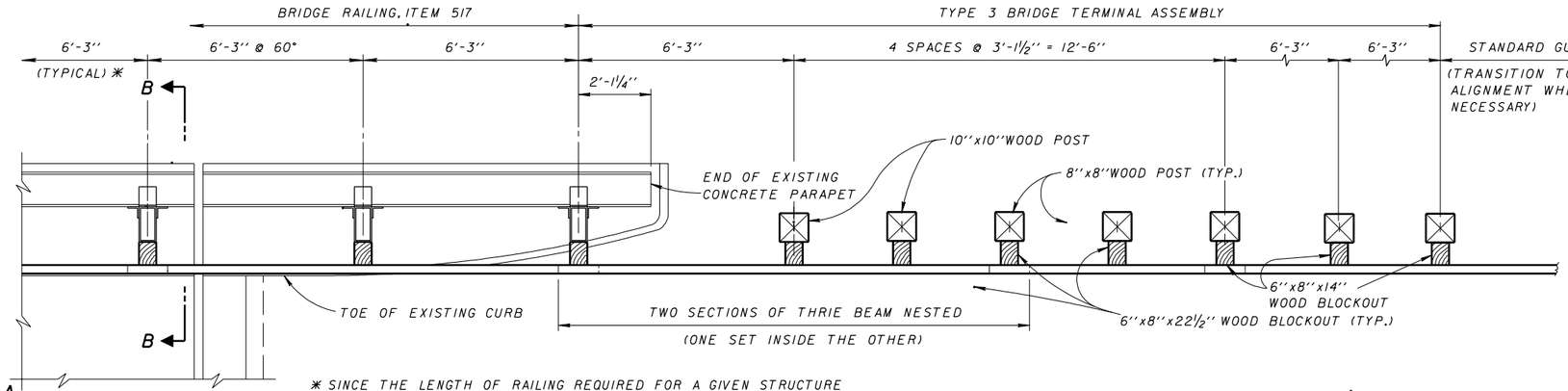
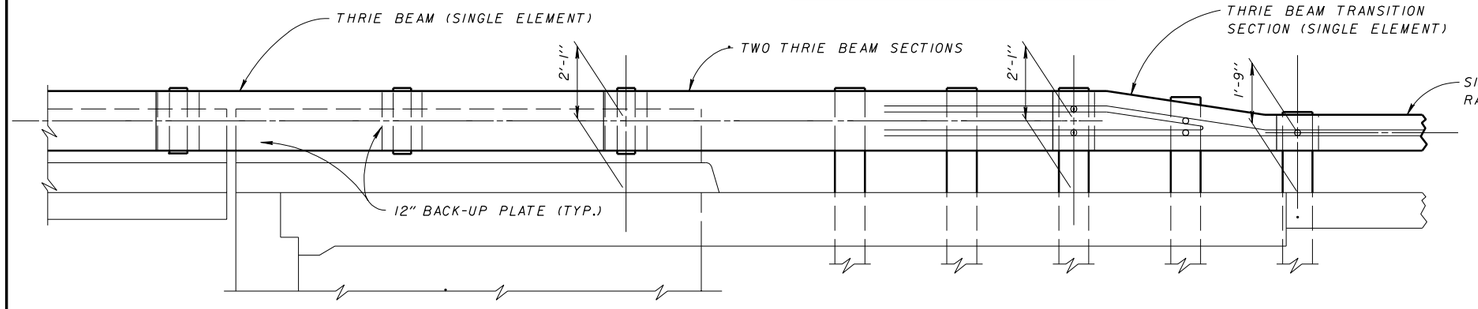
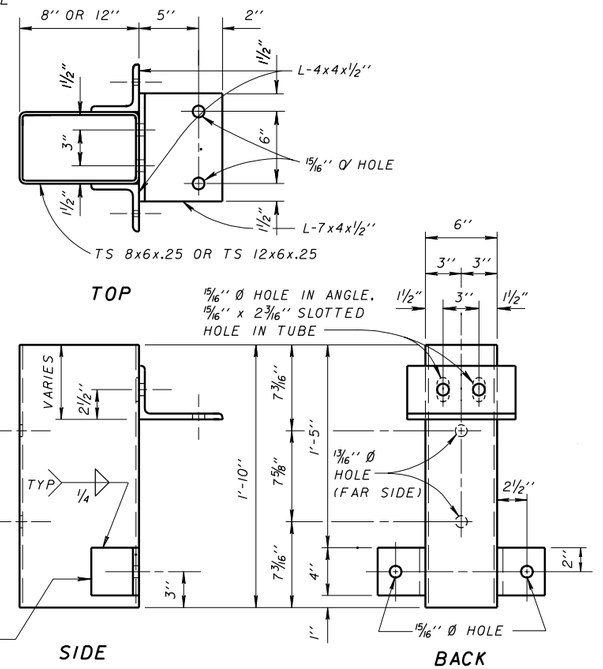


* SINCE THE LENGTH OF RAILING REQUIRED FOR A GIVEN STRUCTURE WILL NOT BE DIVISIBLE BY 6'-3", ODD PANEL LENGTHS SHALL BE PROVIDED NEAR THE CENTER OF BRIDGE. THE PANEL LENGTHS MAY VARY FROM THE TYPICAL BY PLUS ONE FOOT OR MINUS TWO FEET MAXIMUM.

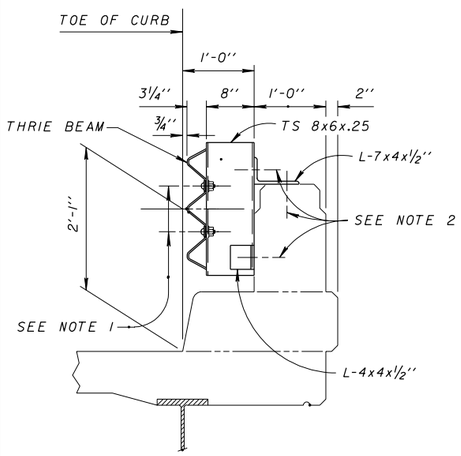
PART PLAN AT ABUTMENT



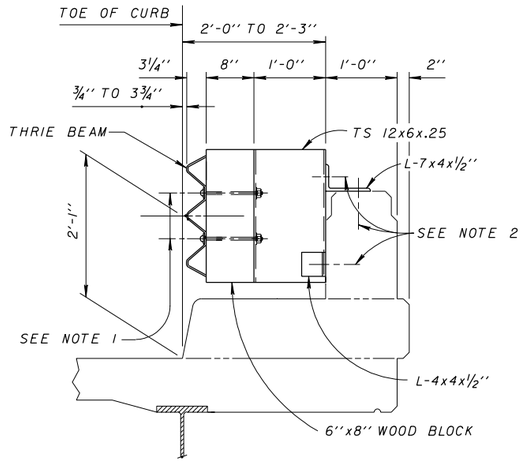


RAILING SUPPORT BRACKET ASSEMBLY

SECTION A-A



(1'-0" SAFETY CURB) (EXISTING)



(2'-0" AND 2'-3" SAFETY CURB) (EXISTING)

SECTION B-B

GENERAL NOTES:

DESIGN SPECIFICATIONS: "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY AASHTO, 1989, INCLUDING THE 1990 AND 1991 INTERIM SPECIFICATIONS AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

THRIE BEAM BRIDGE RAILING: FURNISH MATERIAL ACCORDING TO THE PROVISIONS OF 710.06 WITH THE FOLLOWING EXCEPTION: THE MATERIAL SHALL BE AASHTO M180, TYPE II, CLASS B.

FOR BRIDGE TERMINAL ASSEMBLY DETAILS, REFER TO STANDARD CONSTRUCTION DRAWING GR-3.3.

STRUCTURAL STEEL ANGLES SHALL CONFORM TO ASTM A709 GRADE 36 OR 50.

STRUCTURAL TUBING SHALL CONFORM TO THE PROVISIONS OF 707.10.

NOTE 1: ⅝" DIA. BUTTON HEAD BOLT (ASTM A307) WITH PLATE WASHER UNDER HEAD AND STANDARD WASHER UNDER THE NUT.

NOTE 2: ¾" DIA. HIGH STRENGTH THREADED ANCHORS, BOLTS, NUTS AND WASHERS SHALL CONFORM TO 711.09 (ASTM A325). INSTALL ANCHORS ACCORDING TO ITEM 510 USING NON-SHRINK GROUT, 705.20. ANCHORS SHALL BE EMBEDDED A MINIMUM OF 7" INTO THE EXISTING CONCRETE PARAPET.

GALVANIZING: ALL RAILING SUPPORT BRACKET ASSEMBLIES, HARDWARE AND ACCESSORIES SHALL BE GALVANIZED IN ACCORDANCE WITH 711.02.

THRIE BEAM EXPANSION: TIGHTEN ALL BOLTS IN THE OFF STRUCTURE END OF THE APPROACH PANEL THRIE BEAM RAIL SECTION THAT SPANS THE ABUTMENT AS SPECIFIED FOR EXPANSION JOINTS IN 606.04.

REMOVALS: REMOVE EXISTING ALUMINUM RAILING AND POSTS ACCORDING TO ITEM 202.

METHOD OF MEASUREMENT: THE DEPARTMENT WILL MEASURE RETROFIT RAILING BY THE NUMBER OF FEET. THE MEASURED LENGTH WILL BE BETWEEN THE CENTER OF THE FIRST POST BLOCKOUT ON THE BRIDGE TO THE CENTER OF THE LAST POST BLOCKOUT ON THE BRIDGE.

BASIS OF PAYMENT: THE DEPARTMENT WILL INCLUDE ALL COSTS ASSOCIATED WITH REMOVALS OF EXISTING RAILING AND POSTS WITH THE RETROFIT RAILING FOR PAYMENT. THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 517, RAILING (THRIE BEAM RETROFIT).

DESIGN AGENCY
OFFICE OF STRUCTURAL ENGINEERING

STATE OF OHIO DEPARTMENT OF TRANSPORTATION
4-24-92 DATE
ENGINEER OF BRIDGES

REVIEWED LMW
CHECKED MRG
DESIGNED AJM
DRAWN GFJ

TBR-91

REVISIONS
07-19-02

STANDARD
BRIDGE RETROFIT RAILING
THRIE BEAM BRIDGE RAILING
FOR BRIDGES WITH SAFETY CURBS

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