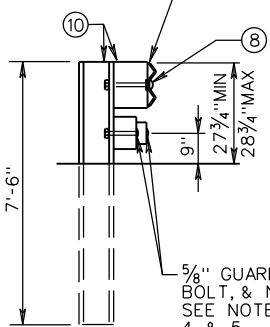
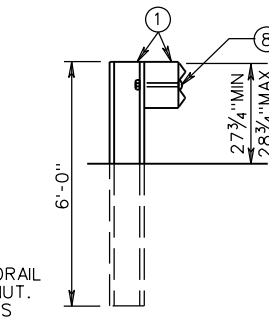


- NOTES:
1. FIXED OBJECTS MAY CONSIST OF SAFETY SHAPED BRIDGE PARAPETS OR CONCRETE BARRIERS.
 2. BRIDGE RAIL ENDS AND BRIDGE PARAPETS MUST BE OF ADEQUATE STRENGTH TO ACCEPT FULL IMPACT LOADING.
 3. GUARDRAIL COMPONENTS SHALL BE IN ACCORDANCE WITH VDOT ROAD AND BRIDGE STANDARDS.
 4. POSTS 1, 2, 3, 4, AND 5 REQUIRE AN ADDITIONAL HOLE TO ATTACH LOWER BLOCKS AND/OR RUBRAIL. RUBRAIL IS NOT BOLTED TO POSTS 2 AND 4.
 5. BOTTOM WOOD BLOCKS LOCATED ON POSTS 1 THROUGH 4 ARE CENTER DRILLED AND SECURED WITH $\frac{5}{8}$ " GUARDRAIL BOLTS. (LENGTH AS REQUIRED).
 6. RUBRAIL MUST BE TWISTED 35° BETWEEN SECTIONS C-C AND D-D. SHOP FABRICATION MAY BE REQUIRED. RIGHT HAND AND LEFT HAND TWISTS WILL BE NECESSARY.
 7. APPROPRIATE LENGTH $\frac{7}{8}$ " ASTM A449 HEX BOLTS WITH WASHERS MUST BE USED WITH THRU DRILLED HOLES AND A $\frac{5}{8}$ " BEARING PLATE ON THE BACK SIDE OF THE BRIDGE PARAPET OR CONCRETE BARRIER.
 8. SEE SHEET 3 OF 3 FOR RUBRAIL BLOCKOUT DETAILS.

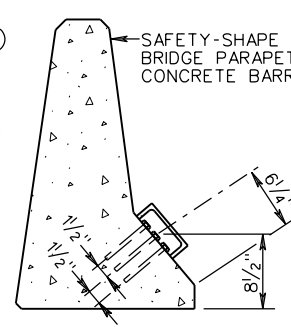
TWO SECTIONS OF W-BEAM ONE SET INSIDE THE OTHER



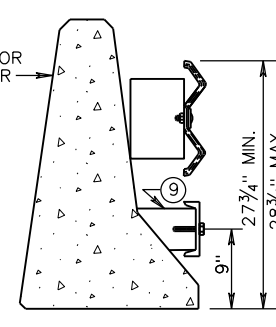
SECTION A-A



SECTION B-B



SECTION C-C
(W BEAM OMITTED)



SECTION D-D

NEW BRIDGE - ATTACHMENTS
 ONE-WAY TRAFFIC-RUN-ON, 2-GR-FOA-2, TYPE I
 -RUN-OFF, 2-GR-FOA-2, TYPE II
 TWO-WAY TRAFFIC-RUN-ON, 4-GR-FOA-2, TYPE I
 EXISTING BRIDGE ATTACHMENTS AS SHOWN ON PLANS.

ITEM	MATERIAL/SPECIFICATIONS/NOTES
①	ST'D. W6 X 8.5 OR W6 X 9 STEEL POST W/ ST'D. 6" X 8" X 14" LG. TREATED PINE BLOCK OR RECYCLED MATERIAL
②	STANDARD W-BEAM TERMINAL CONNECTOR
③	STANDARD W-BEAM RAIL
④	$\frac{5}{8}$ " X 10" LONG GUARDRAIL BOLT AND RECESSED NUT (SEE STANDARD GR-HDW)
⑤	RECTANGULAR PLATE WASHER (SEE STANDARD GR-HDW)
⑥	BENT PLATE RUBRAIL (SEE SHEET 3 OF 3)
⑦	C6 X 8.2 RUBRAIL (SEE SHEET 3 OF 3)
⑧	$\frac{5}{8}$ " X 10" LONG GUARDRAIL BOLT AND RECESSED NUT
⑨	WOOD BLOCKOUT FOR RUBRAIL (SEE SHEET 3 OF 3)
⑩	W8 X 13 X 7'-6" LG. STEEL POST WITH STD. 6" X 8" X 14" LG. TREATED PINE BLOCK OR RECYCLED MATERIAL.

SPECIFICATION REFERENCE

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A COPY OF THE ORIGINAL SEALED AND SIGNED DRAWING IS ON FILE IN THE CENTRAL OFFICE.
W-BEAM GUARDRAIL - FIXED OBJECT ATTACHMENT
 FOR USE WITH SAFETY SHAPE - (STEEL POSTS)

VIRGINIA DEPARTMENT OF TRANSPORTATION

VDOT

ROAD AND BRIDGE STANDARDS

REVISION DATE

01/14

SHEET 2 OF 3

501.29