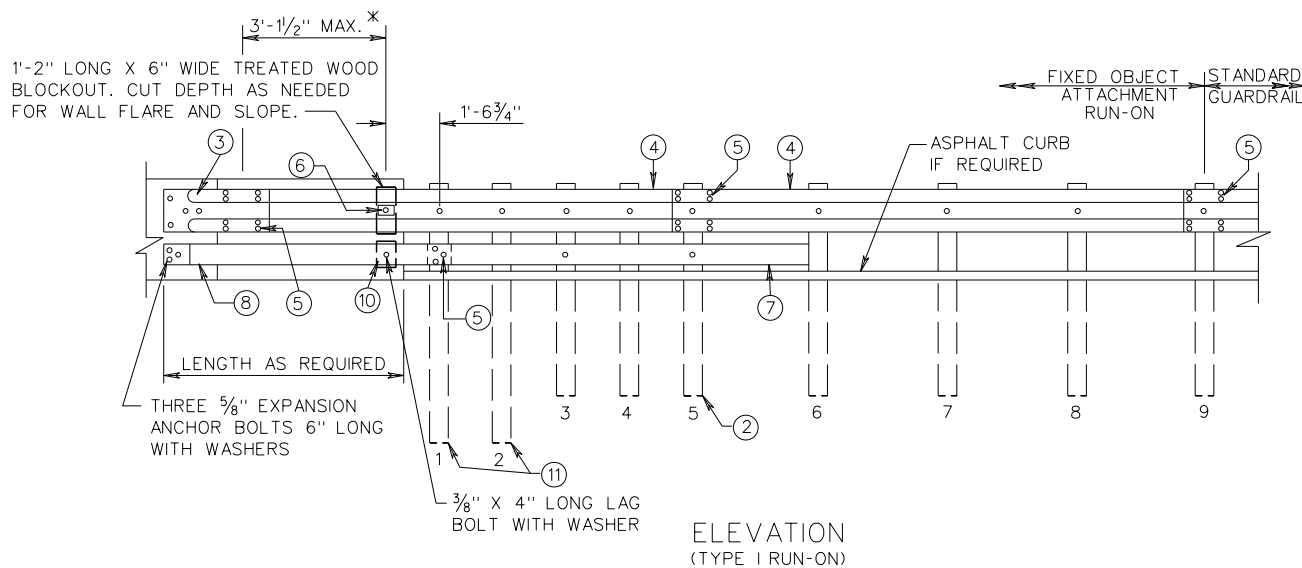


NOTES:

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 5/8" CARRIAGE BOLTS. (LENGTH AS REQUIRED).
6. APPROPRIATE LENGTH 7/8" ASTM A449 HEX BOLTS WITH WASHERS MUST BE USED WITH THRU DRILLED HOLES WITH A 5/8" BEARING PLATE ON THE BACK SIDE OF THE BRIDGE PARAPET OR CONCRETE BARRIER.



ITEM	MATERIAL/SPECIFICATIONS/NOTES
①	WASHER FOR 5/8" BOLT
②	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
③	STANDARD W-BEAM TERMINAL CONNECTOR
④	STANDARD W-BEAM RAIL
⑤	5/8" X 2" LONG GUARDRAIL BOLT & RECESSED NUT. (SEE STANDARD GR-HDW)
⑥	RECTANGULAR PLATE RUBRAIL WASHER (SEE STANDARD GR-HDW)
⑦	BENT PLATE RUBRAIL. CAN BE FIELD CUT AND BENT USING HEAT.
⑧	C6 X 8.2 RUBRAIL. CAN BE FIELD CUT AND BENT USING HEAT.
⑨	5/8" X 10" LG. GUARDRAIL BOLT & RECESSED NUT
⑩	WOOD BLOCKOUT FOR RUBRAIL SIZE AS REQUIRED
⑪	W8 X 13 X 7'-6" LG. STEEL POST WITH STD. 6" X 8" X 14" LG. TREATED PINE OR RECYCLED MATERIAL BLOCK.

GR-FOA-3 W-BEAM GUARDRAIL INSTALLATION CRITERIA  
FIXED OBJECT ATTACHMENT METHODS WITH RUBRAIL AND HARDWARE DETAILS

A COPY OF THE SEALED AND SIGNED DRAWING IS ON FILE IN THE CENTRAL OFFICE.



REVISION DATE	SPECIAL DESIGN SECTION DRAWING NO.	SHEET 1 OF 3
01/14	IISA47	