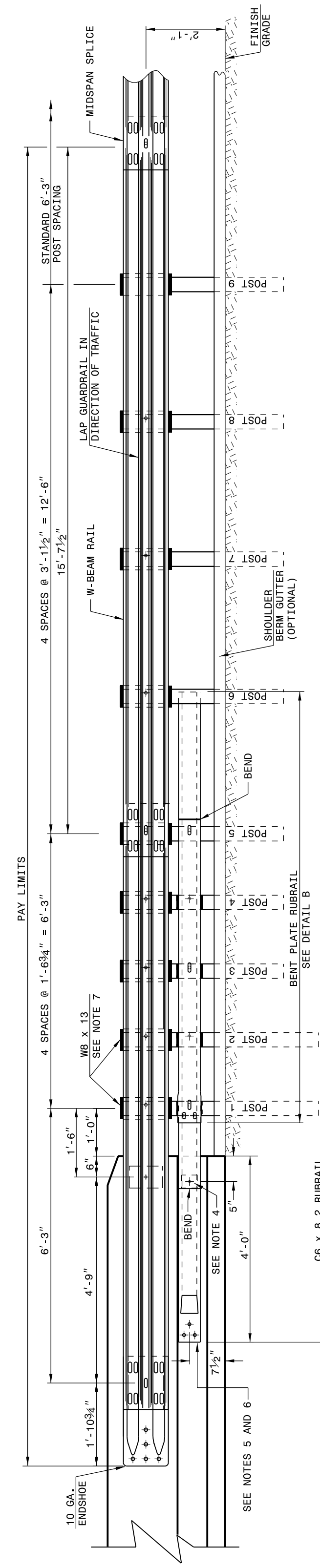


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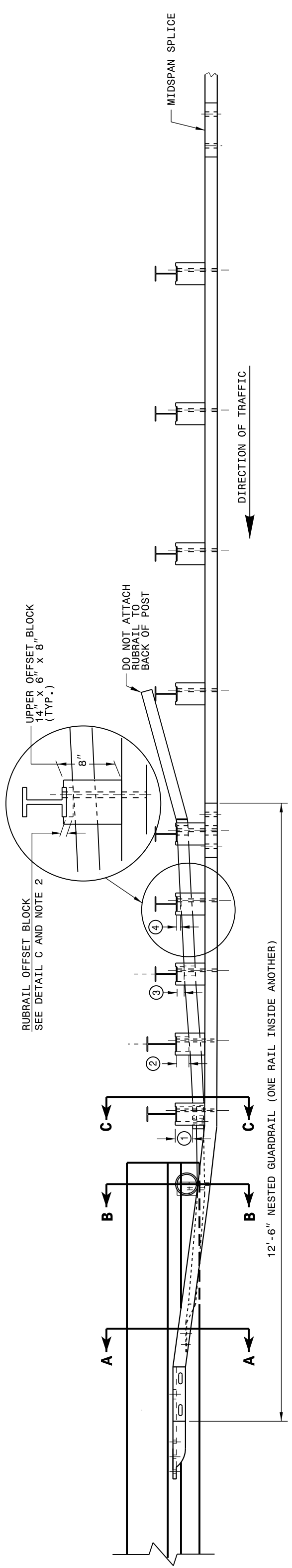
ROADWAY DETAIL DRAWING FOR
STRUCTURE ANCHOR UNIT
FOR F-SHAPE BARRIER

SHEET 4 OF 7
862D03



ELEVATION

- GENERAL NOTES:
- POSTS 1 THROUGH 5 REQUIRE AN ADDITIONAL HOLE TO ATTACH LOWER BLOCKOUTS AND/OR RUBRAIL. RUBRAIL BLOCKOUTS LOCATED ON POSTS 1 THROUGH 4 ARE OFFSET DRILLED AND SECURED WITH 3/8" BUTTONHEAD BOLTS (SEE CHART FOR BOLT LENGTHS). SECURE RUBRAIL BLOCKOUTS TO POSTS 1 AND 4, SECURE RUBRAIL AND BLOCKOUTS TO POSTS 2 AND 3. RUBRAIL IS SECURED TO POST 5 WITH 3/8" BUTTONHEAD BOLTS. RUBRAIL IS NOT TO BE ATTACHED TO POST 6.
 - SECURE RUBRAIL AND BLOCKOUTS TO POSTS 1 AND 4 WITH 3/8" BUTTONHEAD BOLTS. RUBRAIL IS NOT TO BE ATTACHED TO POST 5.
 - STEEL SPACER TUBE IS A SCHEDULE 40 GALVANIZED PIPE 6" INSIDE DIAMETER X 9" LONG. ATTACH TUBE TO GUARDRAIL ONLY WITH 5/8" X 1 1/4" LONG BUTTONHEAD BOLT AND RECTANGULAR PLATE WASHER.
 - SEE DETAIL D FOR SLOPED RUBRAIL BLOCKOUT. BLOCKOUT IS ATTACHED TO RAIL ELEMENT ONLY. USE 3/8" X 3" LAG BOLT WITH FLAT WASHER. 5) SHOP FABRICATE THE C6 X 8.2 RUBRAIL END TO BE CONSISTENT WITH THE SLOPE OF THE F SHAPE AND ATTACH FLUSH WITH THE SLOPED RUBRAIL OR BRIDGE RAIL.
 - ANCHORAGE THE BARRIER OR BRIDGE RAIL.
 - (a) AT EXISTING BRIDGE RAIL AND NEW OR EXISTING BARRIERS, ANCHOR RUBRAIL USING THREE 5/8" X 6" CHEMICALLY ANCHORED BOLTS WITH WASHERS. MAXIMUM PROJECTION FOR BOLTS IS 1/2".
(b) AT EXISTING BRIDGE RAIL AND NEW OR EXISTING BARRIERS, ANCHOR THE W-BEAM END SHOE USING A 4 BOLT HOLD DOWN PLATE (SEE STD. DWG. 862.04). A 4 BOLT INSERT ASSEMBLY IS ALLOWED ON PRECAST REINFORCED CONCRETE BARRIER (SEE STD. DWG. 857.01).
 - ANCHORAGE THE W-BEAM END SHOE AND RUBRAIL AS DETAILED ON THE STRUCTURE PLANS.
(c) AT NEW BRIDGE RAIL AND NEW OR EXISTING BARRIERS, ANCHOR THE W-BEAM END SHOE AND RUBRAIL AS DETAILED ON THE STRUCTURE PLANS.
 - POSTS 1 AND 2 ARE W8 X 13, 7'-6" LONG. ALL OTHER POSTS IN THE ANCHOR UNIT ARE W6 X 8.5.



PLAN

GUARDRAIL ANCHOR UNIT TYPE B-77

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862D03

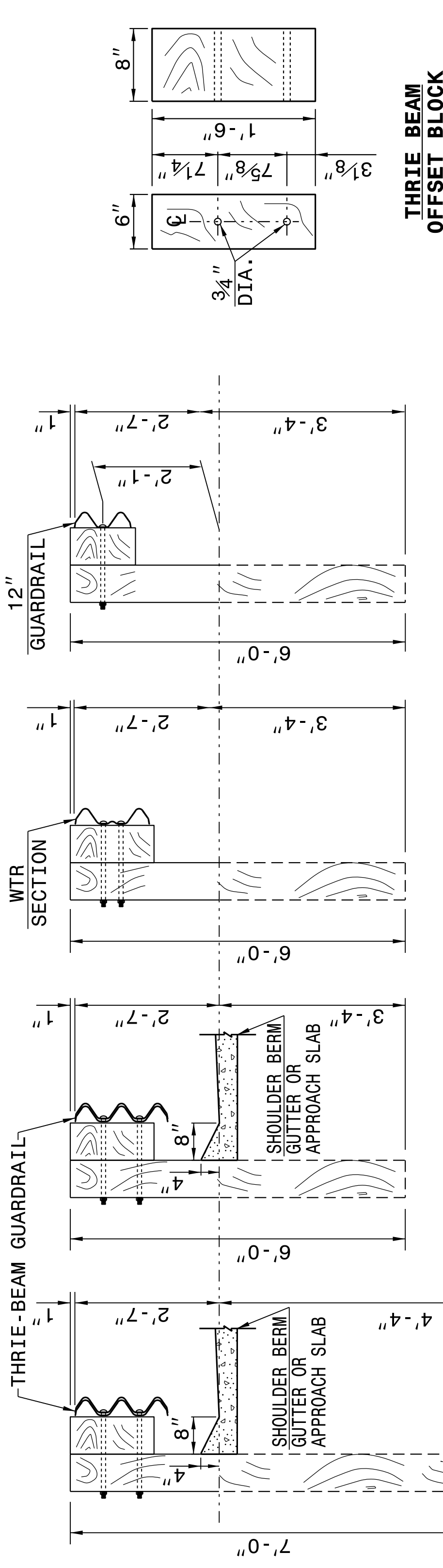
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ROADWAY DETAIL DRAWING FOR
GUARDRAIL ANCHOR UNIT
GUARDRAIL ANCHOR UNIT TYPE B-77
FOR F-SHAPE BARRIER

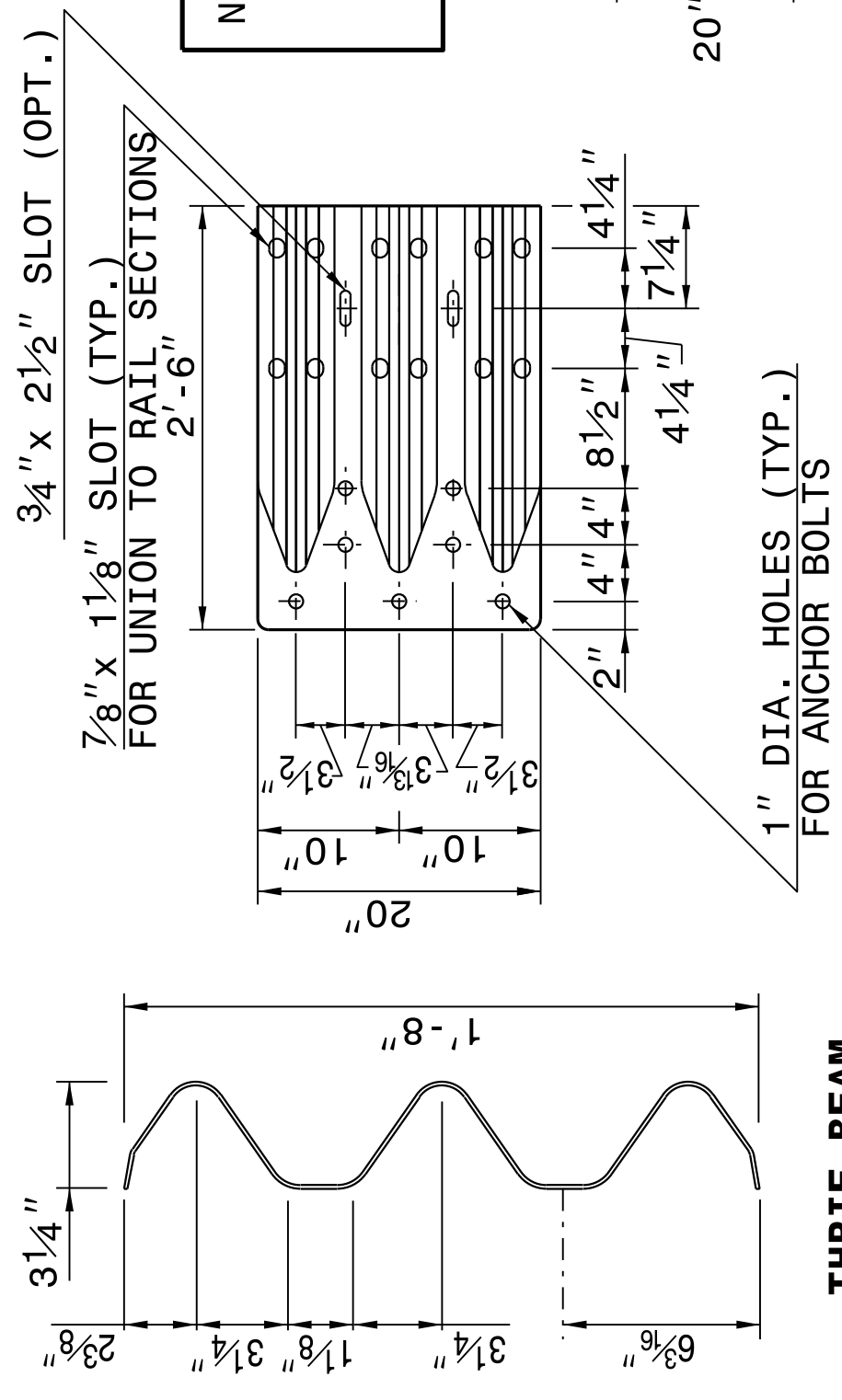
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ROADWAY DETAIL DRAWING FOR
STRUCTURE ANCHOR UNITS
GUARDRAIL ANCHOR UNIT, TYPE III

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THRIE-BEAM SECTION



NOTE: THE MID POST AND OFFSET BLOCK OF THE WTR SECTION WILL REQUIRE SPECIAL BOLT HOLE DRILLING IN THE THRIE BEAM OFFSET BLOCK AND LINE POST.

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ROADWAY DETAIL DRAWING FOR
STRUCTURE ANCHOR UNITS
GUARDRAIL ANCHOR UNIT, TYPE III

SHEET 3 OF 7
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**CONTRACT STANDARDS
AND DEVELOPMENT UNIT**
Office 919-707-6950 FAX 919-250-4119

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