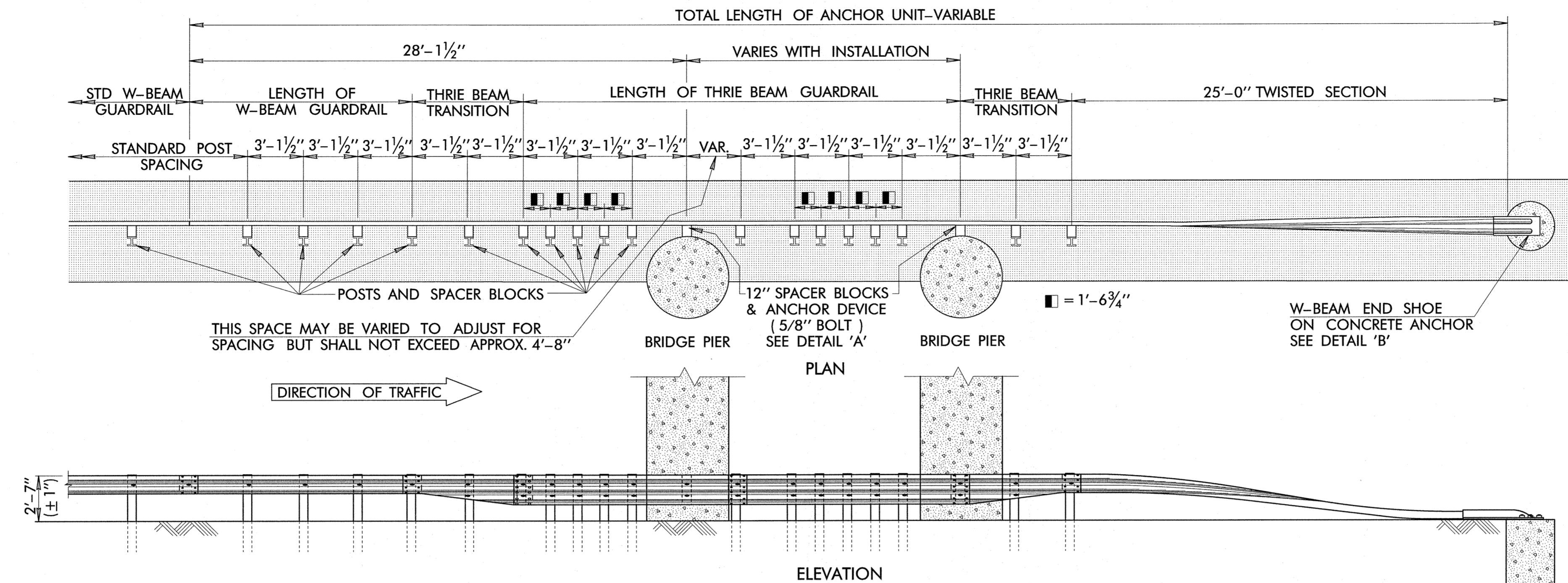
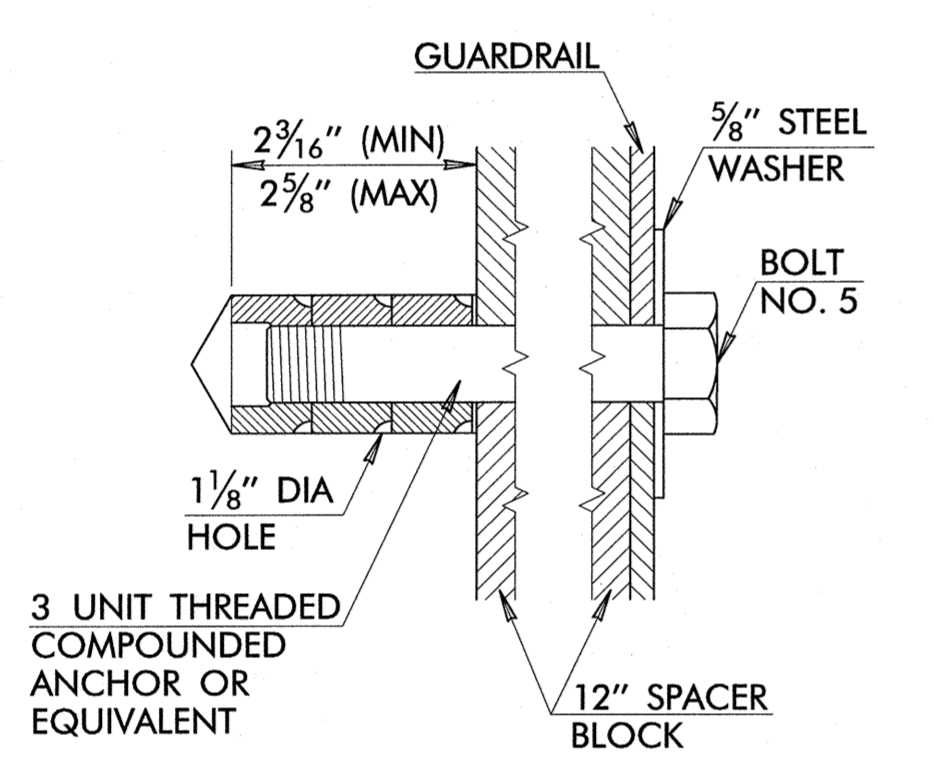


DESCRIPTION	REVISIONS	DATE

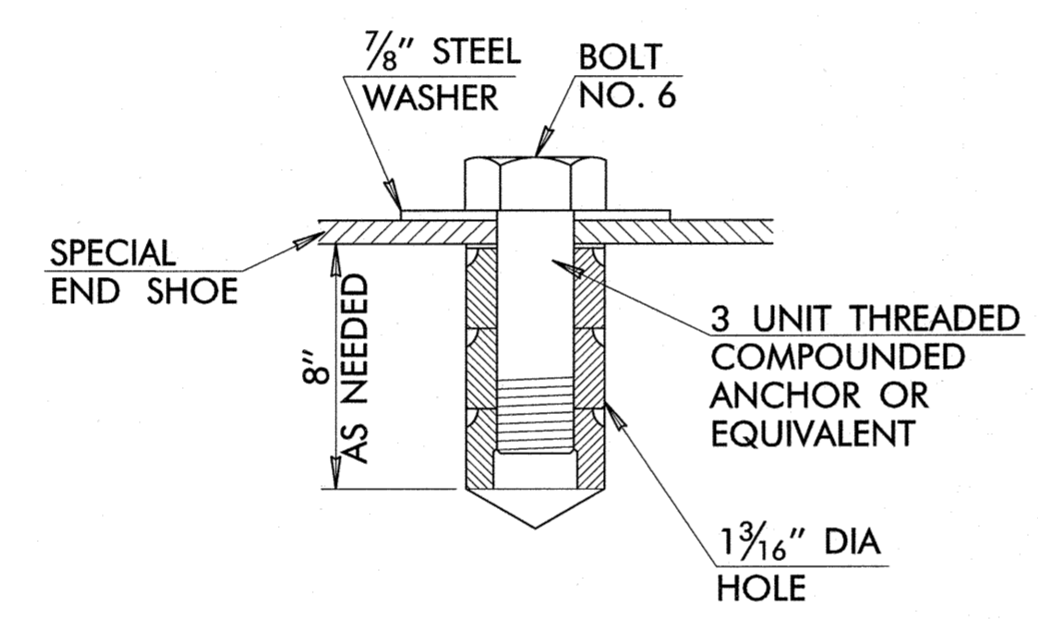


GUARDRAIL SYSTEM - PIER PROTECTION



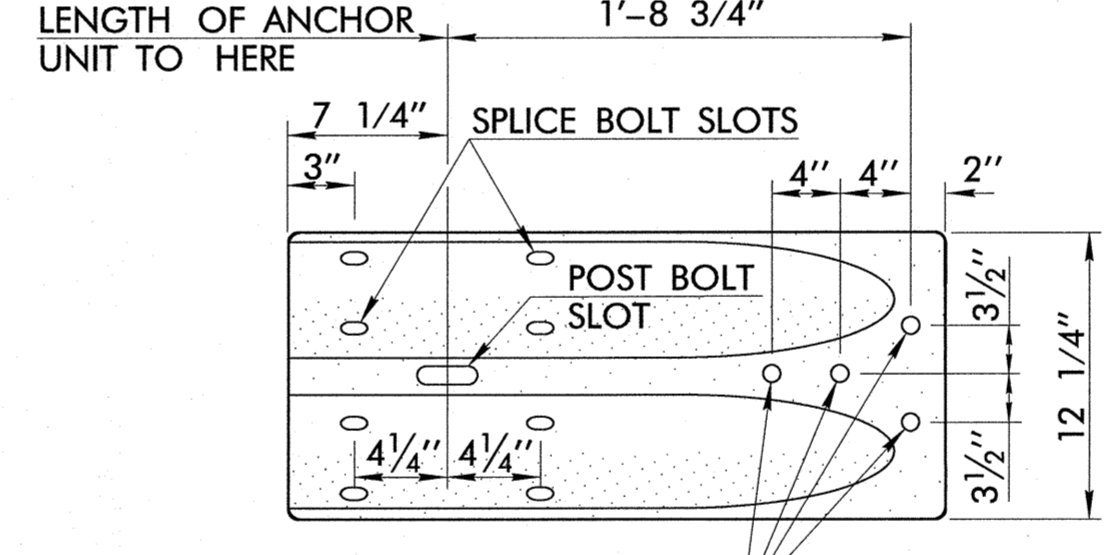
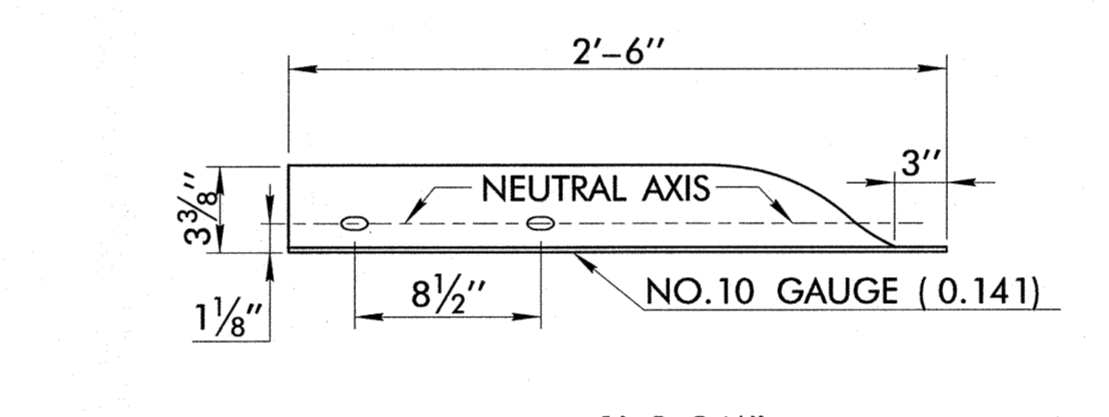
DETAIL 'A' ANCHOR DEVICE (5/8" BOLT)

USE WHEN CONNECTION IS MADE TO ROUND PIERS.

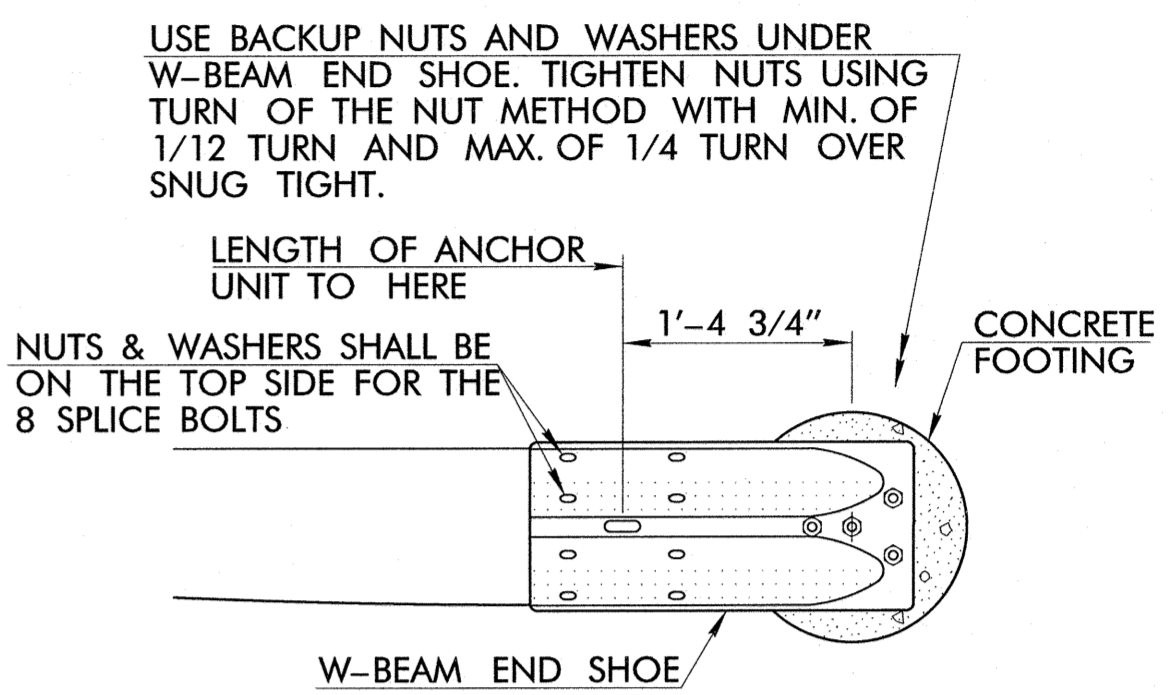


DETAIL 'B' ANCHOR DEVICE (7/8" BOLT)

USE TO ANCHOR SPECIAL END SHOE TO THE BRIDGE PIER, BRIDGE CURB, OR TO CONCRETE PARAPET IN LIEU OF BOLTS THROUGH THE PARAPET.



W-BEAM TERMINAL CONNECTION (END SHOE)



FOUR 7/8" DIA. x 18" LONG HIGH STRENGTH HEX-HEAD BOLTS WITH WASHER AND NUT. BOLTS SHALL PROTRUDE 1/2" FROM TOP SURFACE OF FOOTING.

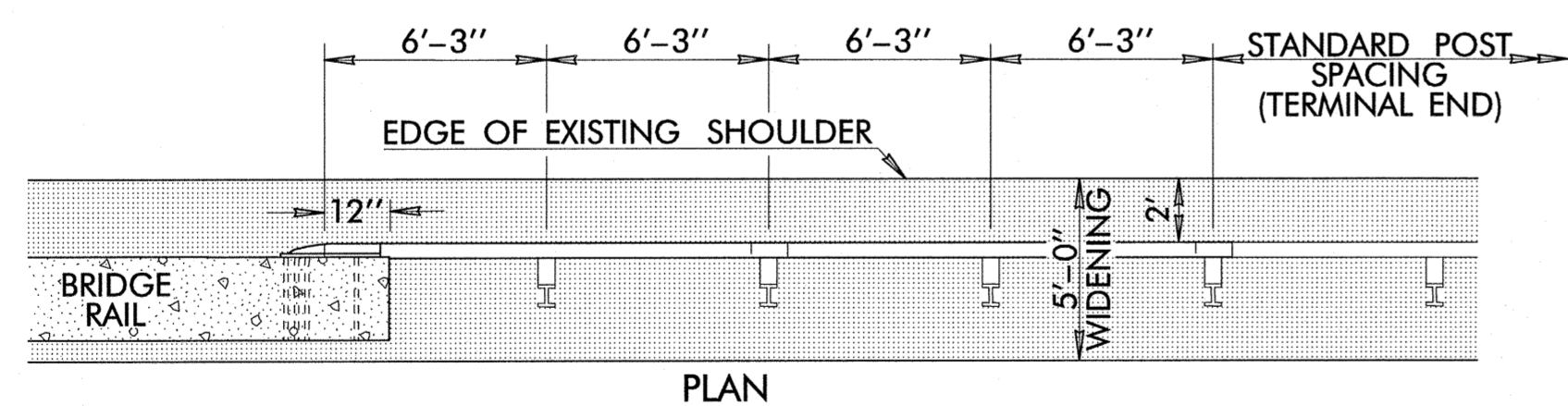
6" x 6" W1.5 x W1.5 WELDED WIRE FABRIC REINFORCEMENT, 48" x 12" DIA. WITH 6" OVERLAP

CLASS A CONCRETE FOOTING 18" DIA. X 4'-6" DEEP. SHAPE TOP TO MATCH GRADE.

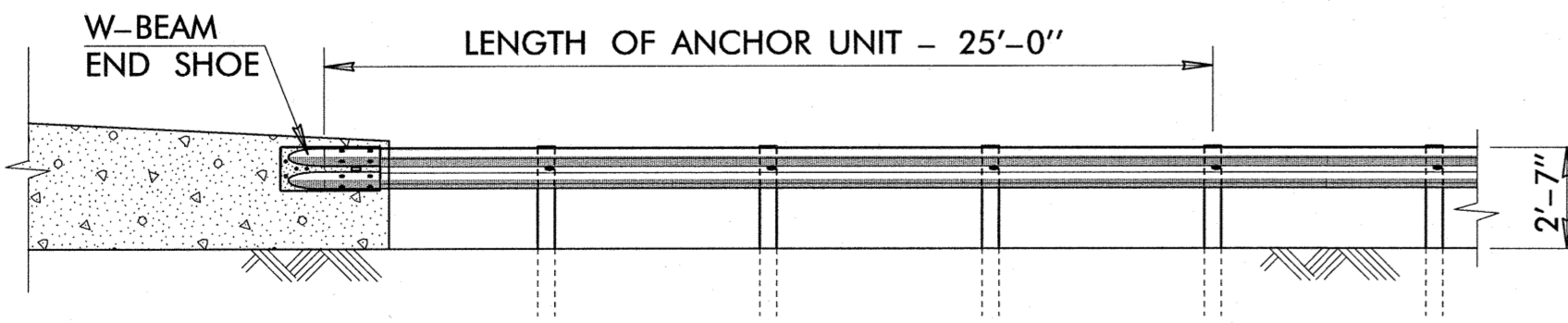
GROUND ANCHOR FOOTING DETAIL

GENERAL NOTES

- ALL CONSTRUCTION AND MATERIAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE 2009 ENGLISH STANDARD SPECIFICATIONS.
- GUARDRAIL POST HOLES DRILLED THROUGH THE APPROACH SLAB, CURB, OR DRAIN SHALL BE RESTORED TO THE ORIGINAL SHAPE OF THE SLAB, CURB, OR DRAIN WITH CONCRETE IN A MANNER APPROVED BY THE ENGINEER WITH COST TO BE INCLUDED IN OTHER ITEMS OF WORK.
- EXTRA LENGTH POSTS OR ADDITIONAL COMPACTED EARTH MAY BE REQUIRED NEAR BRIDGE AS DIRECTED BY THE ENGINEER. SPECIAL BLOCKOUT MAY BE REQUIRED.
- GUARDRAIL COMPONENTS SHALL MEET NCHRP 350 THE APPLICABLE STANDARDS OF 'A' GUIDE TO STANDARDIZED HIGHWAY BARRIER RAIL HARDWARE PREPARED AND APPROVED BY THE AASHTO-ARTBA-AGC JOINT COOPERATIVE COMMITTEE, TECHNICAL BULLETIN NUMBER 268 B.
- ALL ANCHOR UNITS SHALL INCLUDE GUARDRAIL ALL HARDWARE AND OTHER APPURTENANCES NECESSARY TO CONSTRUCT UNIT.



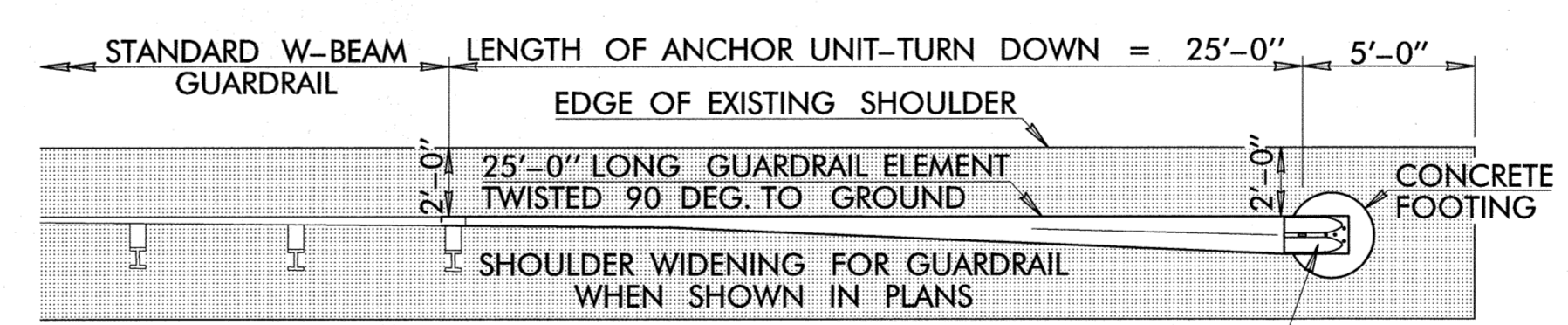
PLAN



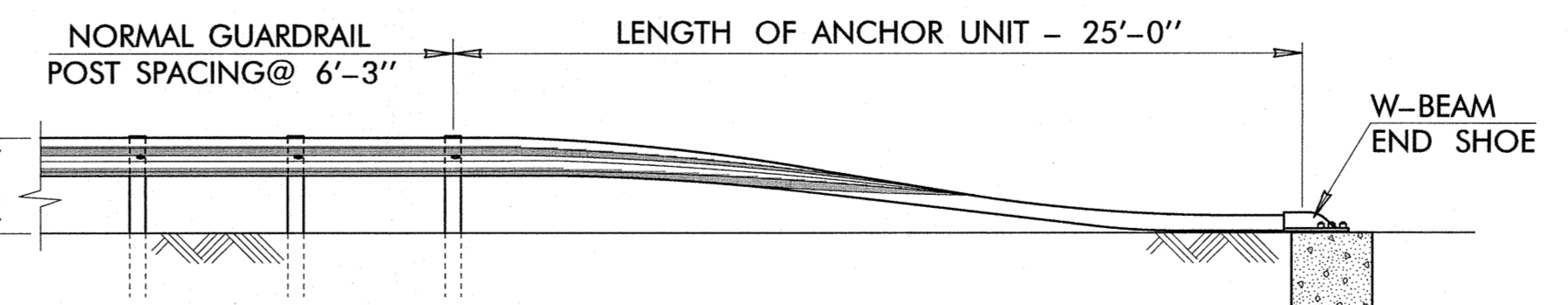
ELEVATION

GUARDRAIL BRIDGE CONN - TRAIL END

NOTE: GUARDRAIL ANCHOR UNIT-BRIDGE LEAVE END, SHOULD ONLY BE USED AT EXITING ENDS OF ONE WAY BRIDGES ALONG ONE WAY ROADS.



ONE WAY TRAFFIC

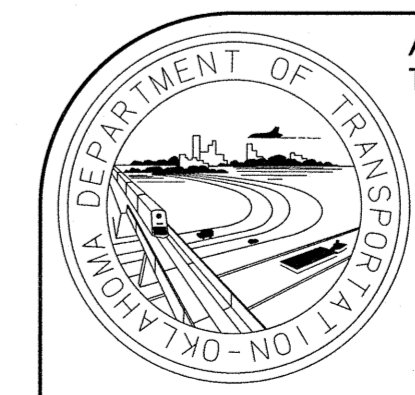


ELEVATION

GUARDRAIL TRAIL END TURNDOWN

NOTE: GUARDRAIL ANCHOR UNIT-TURN DOWN, SHOULD ONLY BE USED AT EXITING ENDS OF GUARDRAIL ALONG ONE WAY ROADS.

BASIS OF PAYMENT		
ITEM NO.	ITEM	UNIT
623 (F)	GUARDRAIL BRIDGE CONN-TRAIL END (31')	EA.
623 (F)	GUARDRAIL TRAIL END TURNDOWN (31')	EA.
623 (J)	GUARDRAIL SYSTEM-PIER PROTECTION (31')	EA.



APPROVED BY TRAFFIC ENGINEER: *David Smith* DATE: 4/9/12

TRAFFIC STANDARD

GUARDRAIL ANCHOR UNITS (31" SYSTEM)

2009 SPECIFICATIONS

GA31-1	00
T-604	