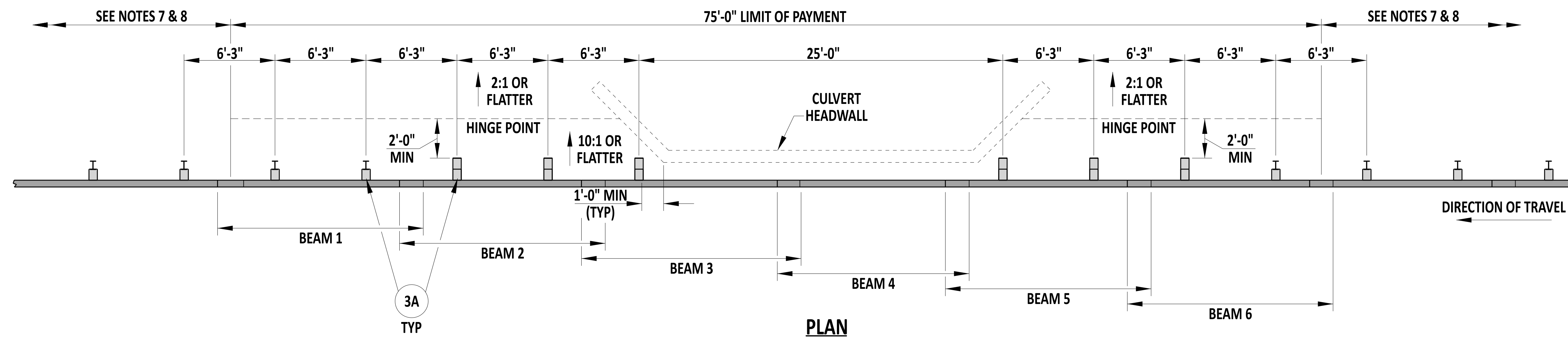
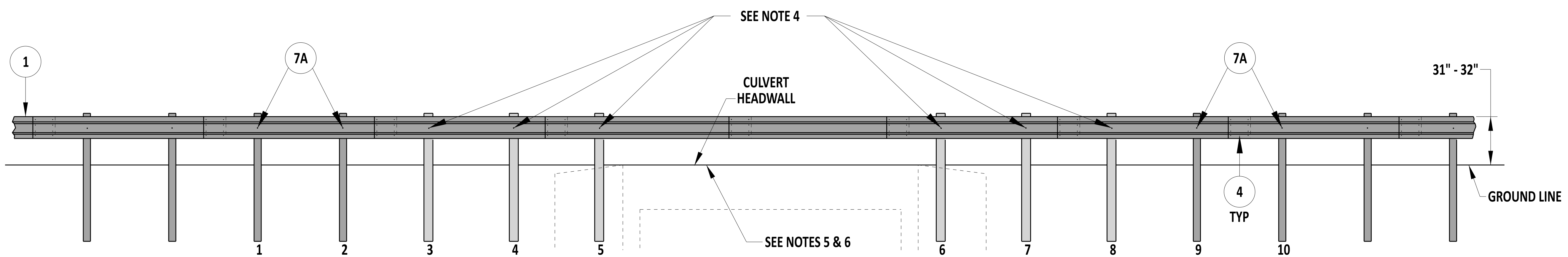


SCALE : NTS



PLAN



ELEVATION

- NOTES:**
- 1). FOR OMITTING ONE POST, SEE DETAIL B-1, SHEET 4.
 - 2). PLACE GUARDRAIL DELINEATORS IN ACCORDANCE WITH DETAIL B-13, SHEET 9.
 - 3). POSTS 1, 2, 9, & 10 ARE TO BE W6x9, 6'-0" STEEL POSTS. POSTS 3 THROUGH 8 ARE TO BE TYPE 31 LONG, WOOD BREAKAWAY POSTS.
 - 4). ATTACH THE RAIL AT POSTS 3 THROUGH 8 WITH A 5/8" x 22" GUARDRAIL BOLT, STEEL WASHER, AND RECESS NUT.
 - 5). WHERE THE HEADWALL PROJECTION IS LESS THAN 2" ABOVE GRADE, THE BACK OF THE CRT POST MAY BE ALIGNED WITH THE NEAR SIDE OF THE HEADWALL.
 - 6). WHERE THE STRUCTURE PROJECTION IS GREATER THAN 2" ABOVE GRADE, THE INSIDE FACE OF THE HEADWALL SHALL BE A MINIMUM OF 8'-0" FROM THE FACE OF THE W-BEAM.
 - 7). PROVIDE AT LEAST 50'-0" OF TYPE 1-31 GUARDRAIL, INCLUDING END ANCHORAGE, TO ENSURE INTENDED FUNCTION.
 - 8). PROVIDE AT LEAST 37'-6" OF TANGENT 1-31 GUARDRAIL BEFORE INTRODUCING GUARDRAIL FLARES IN ACCORDANCE WITH THE RATES SHOWN IN STANDARD DETAIL B-1, SHEET 1 TO ENSURE INTENDED FUNCTION.
 - 9). IF CURB IS USED, IT SHALL BE A MAX 2" HEIGHT WITHIN THE LIMIT OF PAYMENT OF THE GUARDRAIL OVER CULVERT.
 - 10). MASH COMPLIANT SYSTEM - FHWA ELIGIBILITY LETTER B-189.



Andrew Short
 ENGINEERING SUPPORT 12/22/2023
 DATE
RECOMMENDED

GUARDRAIL OVER CULVERTS, TYPE 3-31

STANDARD NO.	B-3 (2024)	SHT.	2	OF	2
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REVIEWED *[Signature]* 22 December 2023
 DEPUTY DIRECTOR - DESIGN DATE

APPROVED *[Signature]* 01/11/2024
 CHIEF ENGINEER DATE