

NOTES

3.81 METER SPAN: The post to be eliminated must be at a rail splice location, as shown at Post Location 3. If conditions are such that the post to be eliminated would occur at a non-splice location, then the 5.715 m span design should be used, eliminating the post at Location 4.

5.715 METER SPAN: The posts to be eliminated may be at Post Locations 4 and 5 (as shown) or at Post Locations 3 and 4.

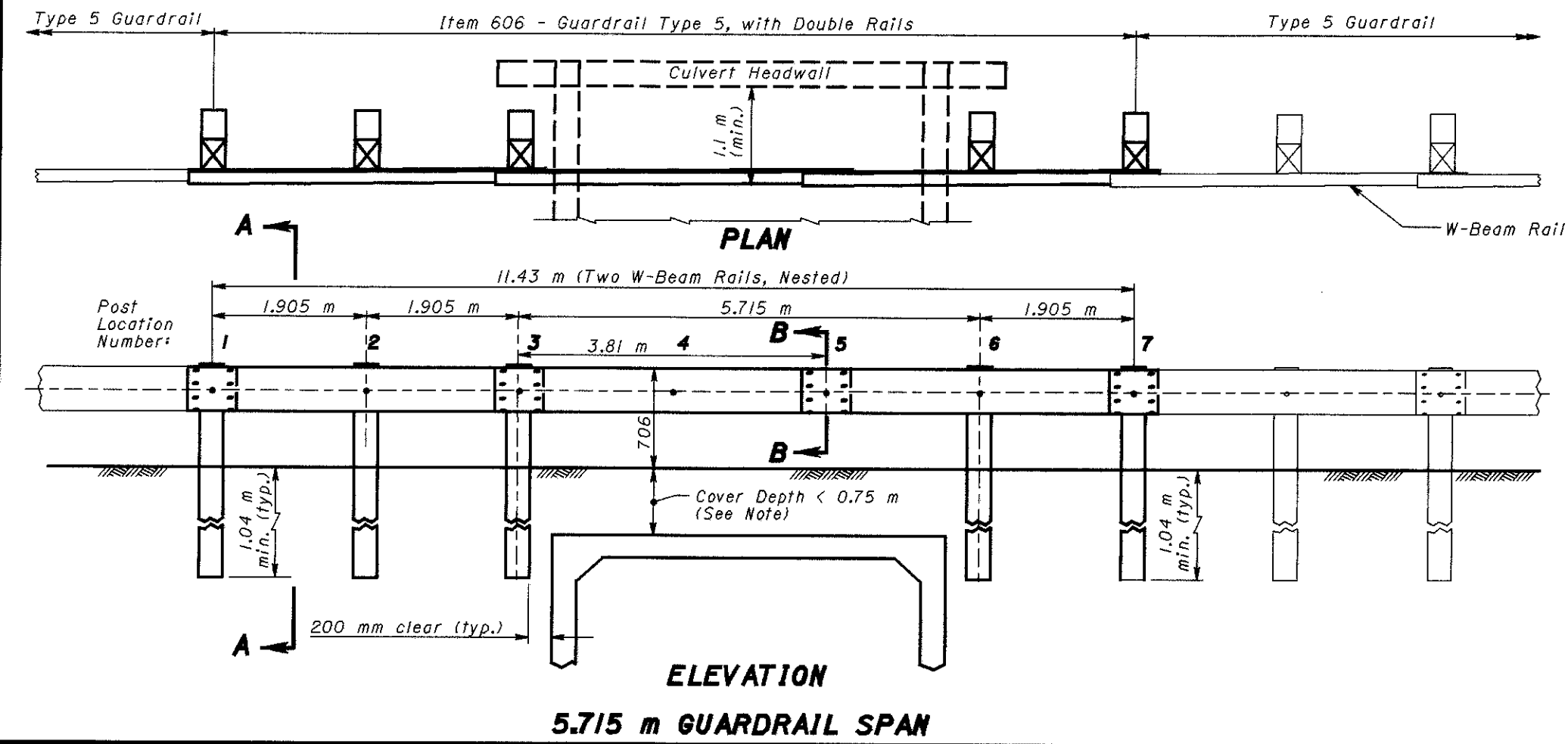
COVER DEPTH: This depth is measured at the locations of the missing posts. For cover depths greater than or equal to 0.75 m, see SCD GR-1.2M.

MATERIALS: All posts, blockouts, rails, and hardware shall comply with Item 606, Guardrail Type 5 as detailed on SCD GR-2.1M.

DETAILS: For other details not shown, see SCD's GR-1.1M, GR-1.2M and GR-2.1M.

PAYMENT: Item 606, Guardrail, Type 5 with Double Rails shall be in meters for the length specified in the plans and shall include the double rail elements, posts, and the other hardware, materials and labor required to construct the guardrail as shown.

All dimensions are in millimeters unless otherwise noted.



OHIO DEPARTMENT OF TRANSPORTATION	
LONG SPAN GUARDRAIL ACROSS CULVERT	DATE 4-8-97 10-21-97
STANDARD CONSTRUCTION DRAWING	GR-2.4M
APPROVED	<i>[Signature]</i>

NOTES

APPLICATION: This drawing covers two span lengths, 12'-6" [3.81 m] to 18'-9" [5.715 m]. **Do not use on the NHS.** (See **SCD GR-2.3** for NCHRP 350 Test Level 3 design.)

12'-6" [3.81 m] SPAN: The post to be eliminated must be at a rail splice location, as shown at Post No. 3. If conditions are such that the post to be eliminated would occur at a non-splice location, then the 18'-9" [5.715 m] span design should be used, eliminating Post No. 4.

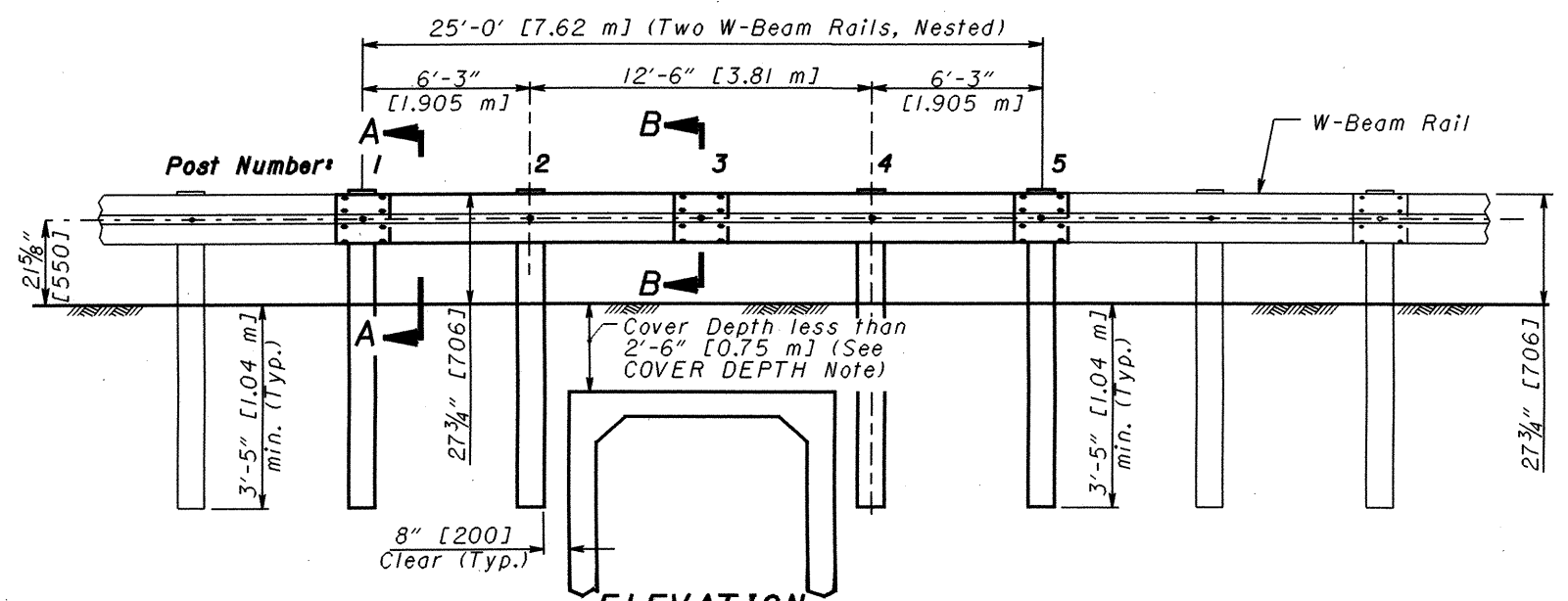
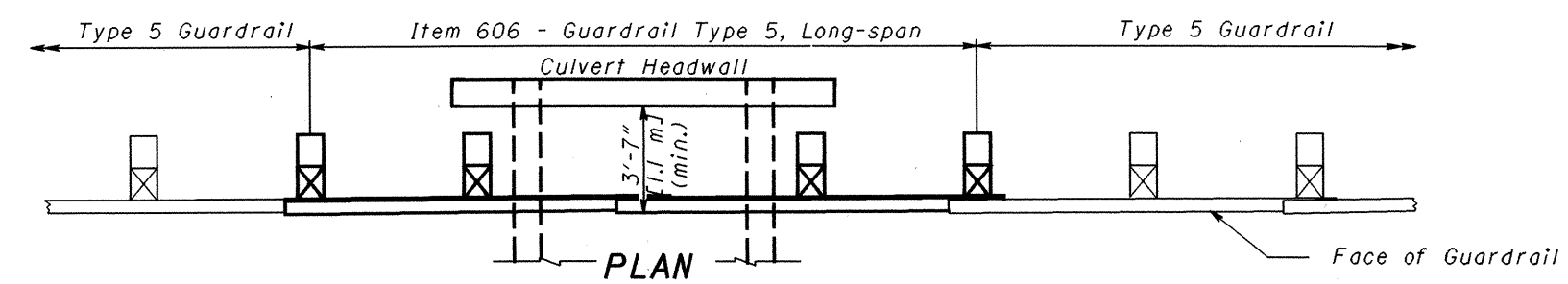
18'-9" [5.715 m] SPAN: The posts to be eliminated may be at Post No. 4 and No. 5 (as shown) or at Post No. 3 and No. 4.

COVER DEPTH: This depth is measured at the locations of the missing posts. For cover depths greater than or equal to 2'-6" [0.75 m], see **SCD GR-2.2**.

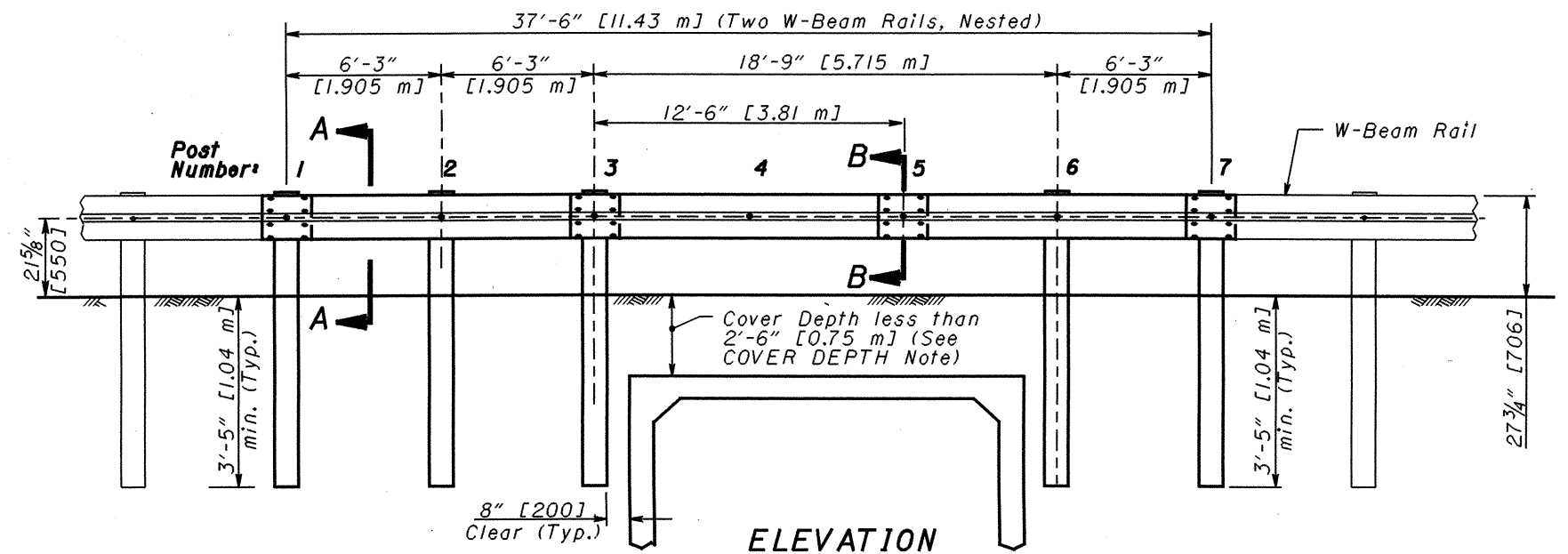
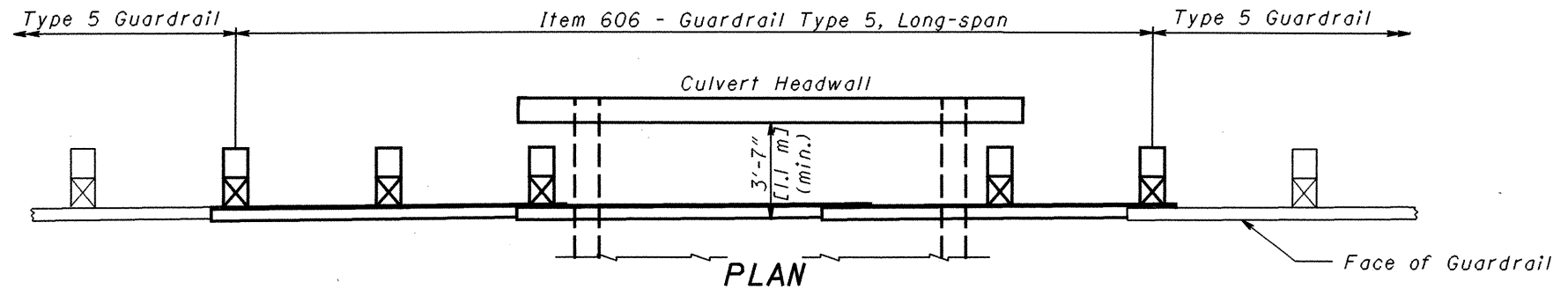
FLARED ENDS: Install these systems with either one or both ends flared away from the traveled way. For locations where a guardrail flare will be used, the minimum recommended length of tangent section adjacent to the unsupported length is 25' [7.62 m]. Taper rates should be as shown on **SCD GR-5.1**.

MATERIALS: All posts, blockouts, rails, and hardware shall comply with Item 606, Guardrail Type 5 as detailed on **SCD GR-2.1**. For other details not shown, see **SCD GR-1.1**.

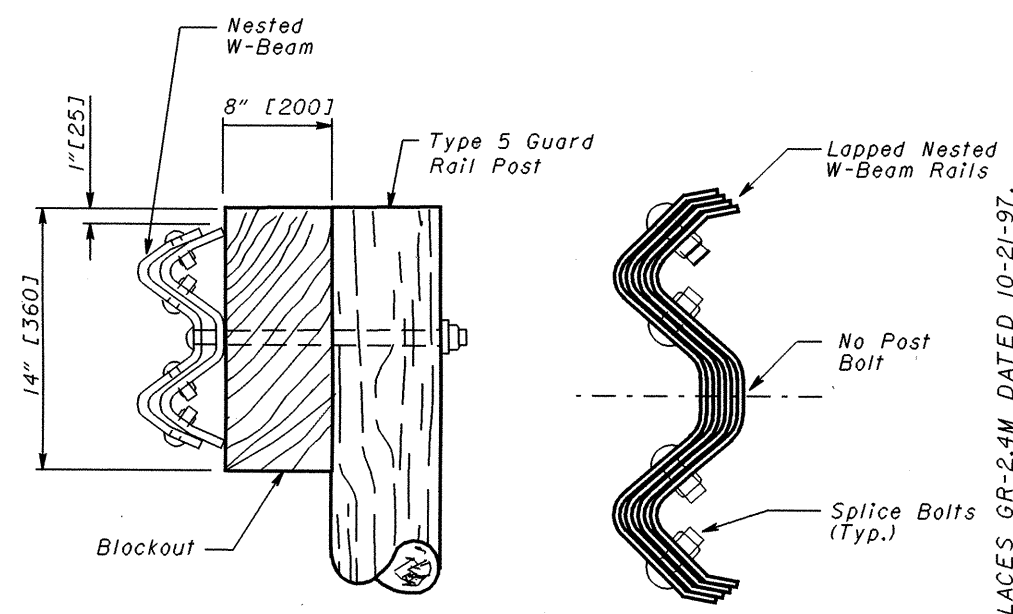
PAYMENT: Item 606 - Guardrail, Type 5, Long-span is paid for in Feet [Meters] for the length specified in the plans and includes the double rail elements, blockouts, posts, and the other hardware, materials and labor required to construct the guardrail as shown.



**ELEVATION
12'-6" [3.81 m] GUARDRAIL SPAN**

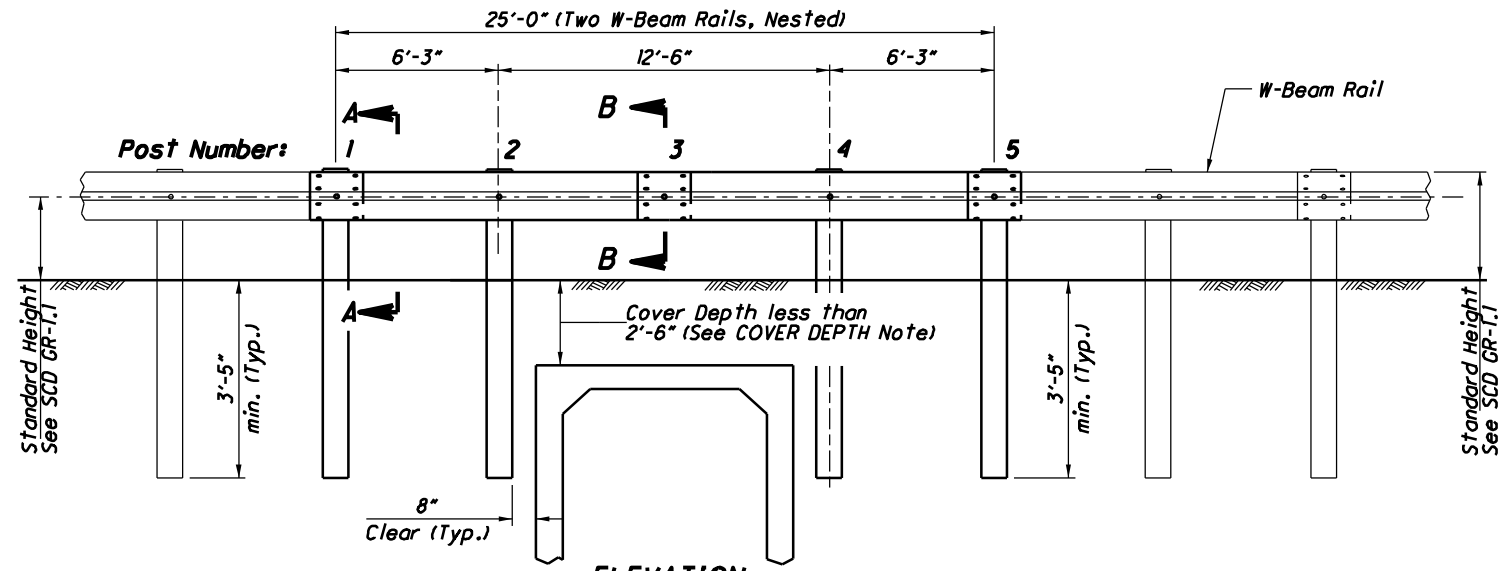
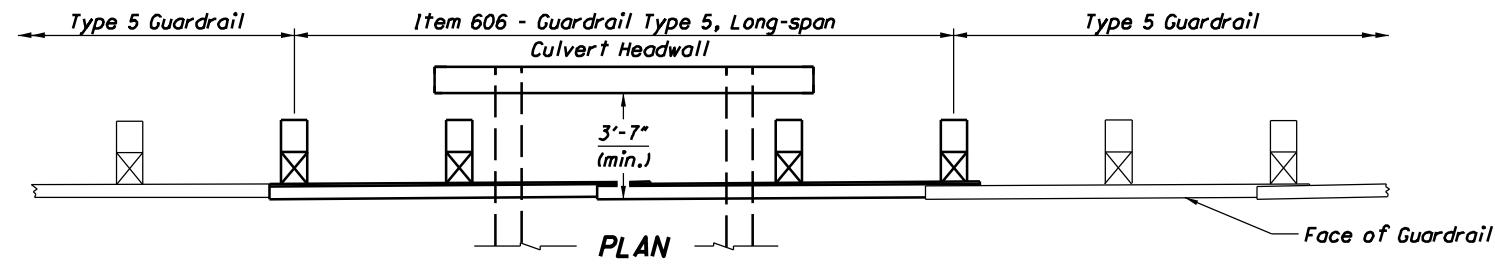


**ELEVATION
18'-9" [5.715 m] GUARDRAIL SPAN**

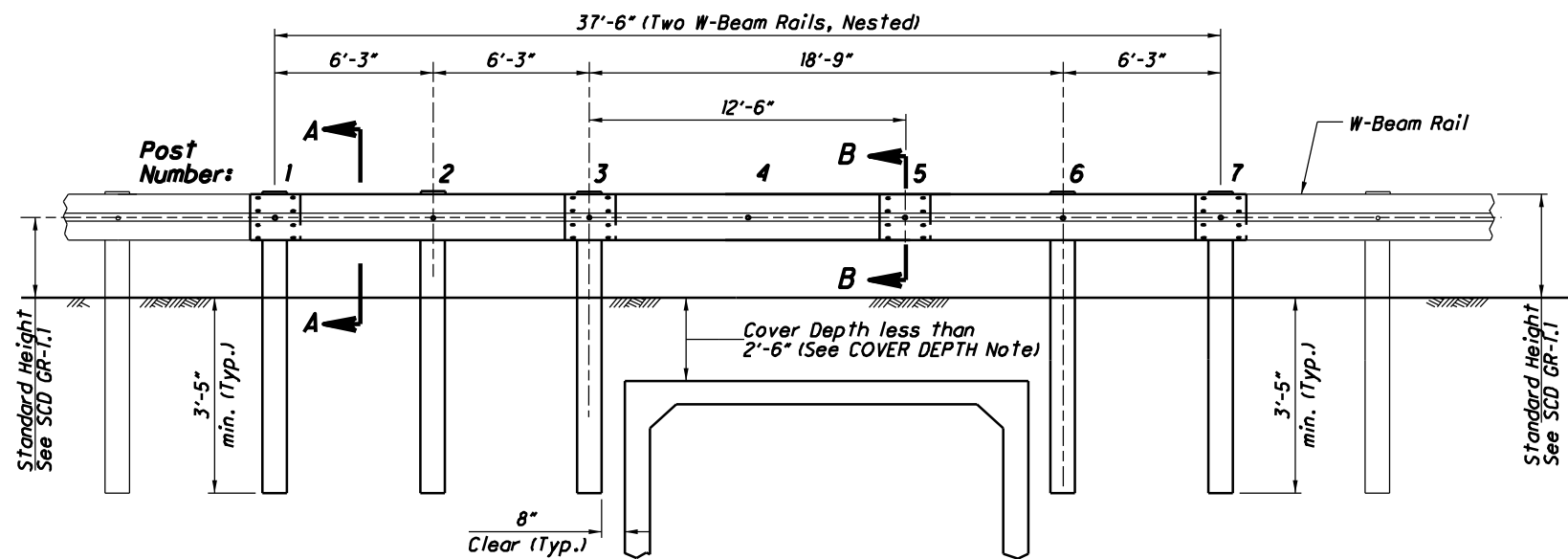
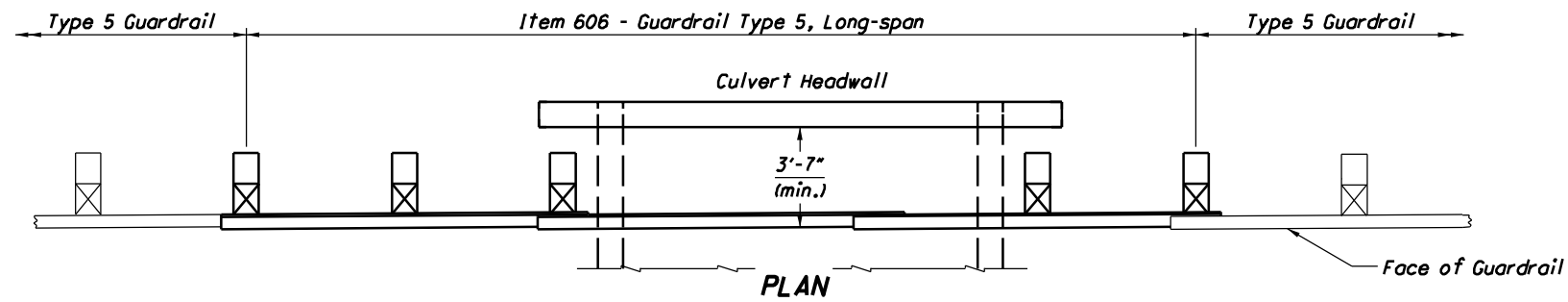


SECTION A-A

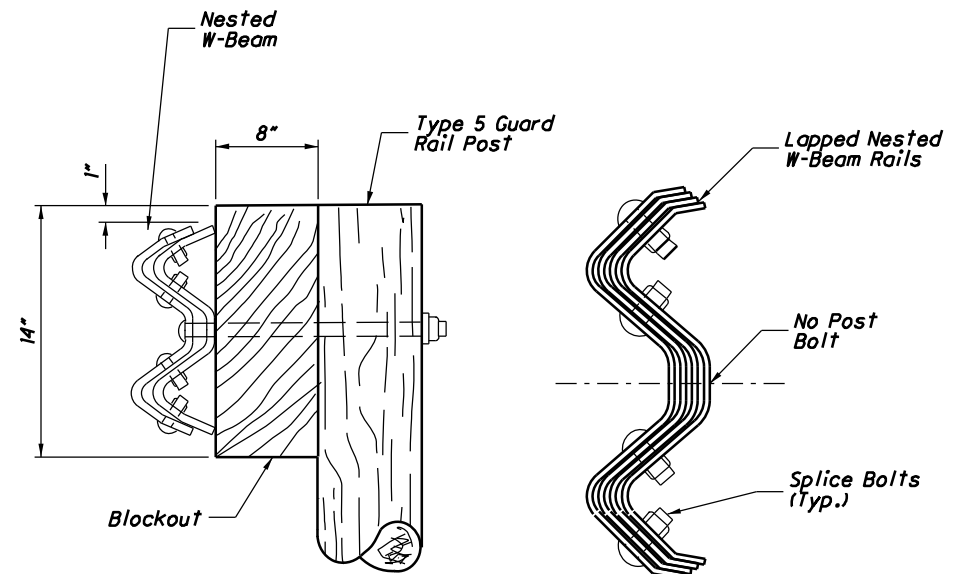
RAIL SPLICE SECTION B-B



ELEVATION
12'-6" GUARDRAIL SPAN



ELEVATION
18'-9" GUARDRAIL SPAN



SECTION A-A

RAIL SPLICE
SECTION B-B

NOTES

APPLICATION: This drawing covers two span lengths, 12'-6" to 18'-9". Do not use on the NHS. (See SCD GR-2.3 for NCHRP 350 Test Level 3 design.)

12'-6" SPAN: The post to be eliminated must be at a rail splice location, as shown at Post No. 3. If conditions are such that the post to be eliminated would occur at a non-splice location, then the 18'-9" span design should be used, eliminating Post No. 4.

18'-9" SPAN: The posts to be eliminated may be at Post No. 4 and No. 5 (as shown) or at Post No. 3 and No. 4.

COVER DEPTH: This depth is measured at the locations of the missing posts. For cover depths greater than or equal to 2'-6", see SCD GR-2.2.

FLARED ENDS: Install these systems with either one or both ends flared away from the traveled way. For locations where a guardrail flare will be used, the minimum recommended length of tangent section adjacent to the unsupported length is 25'. Taper rates should be as shown on SCD GR-5.1.

MATERIALS: All posts, blockouts, rails, and hardware shall comply with Item 606, Guardrail Type 5 as detailed on SCD GR-2.1. For other details not shown, see SCD GR-1.1.

PAYMENT: Item 606 - Guardrail, Type 5, Long-span is paid for in Feet for the length specified in the plans and includes the double rail elements, blockouts, posts, and the other hardware, materials and labor required to construct the guardrail as shown.