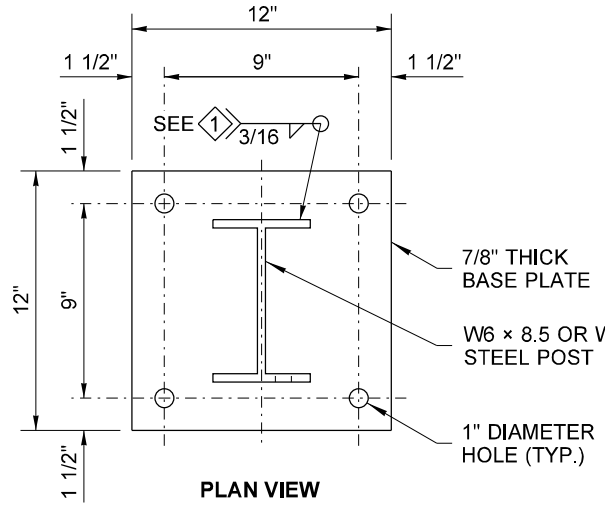
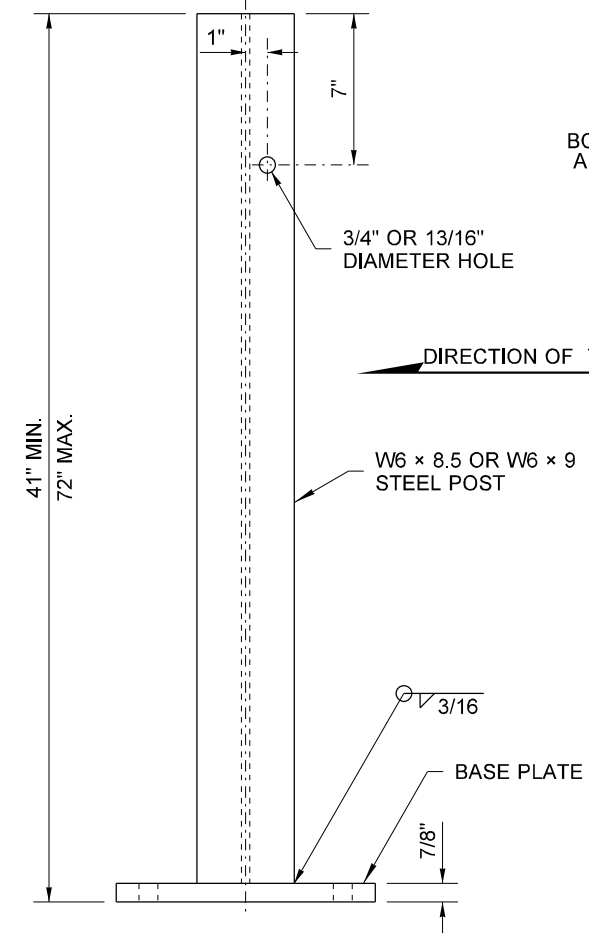
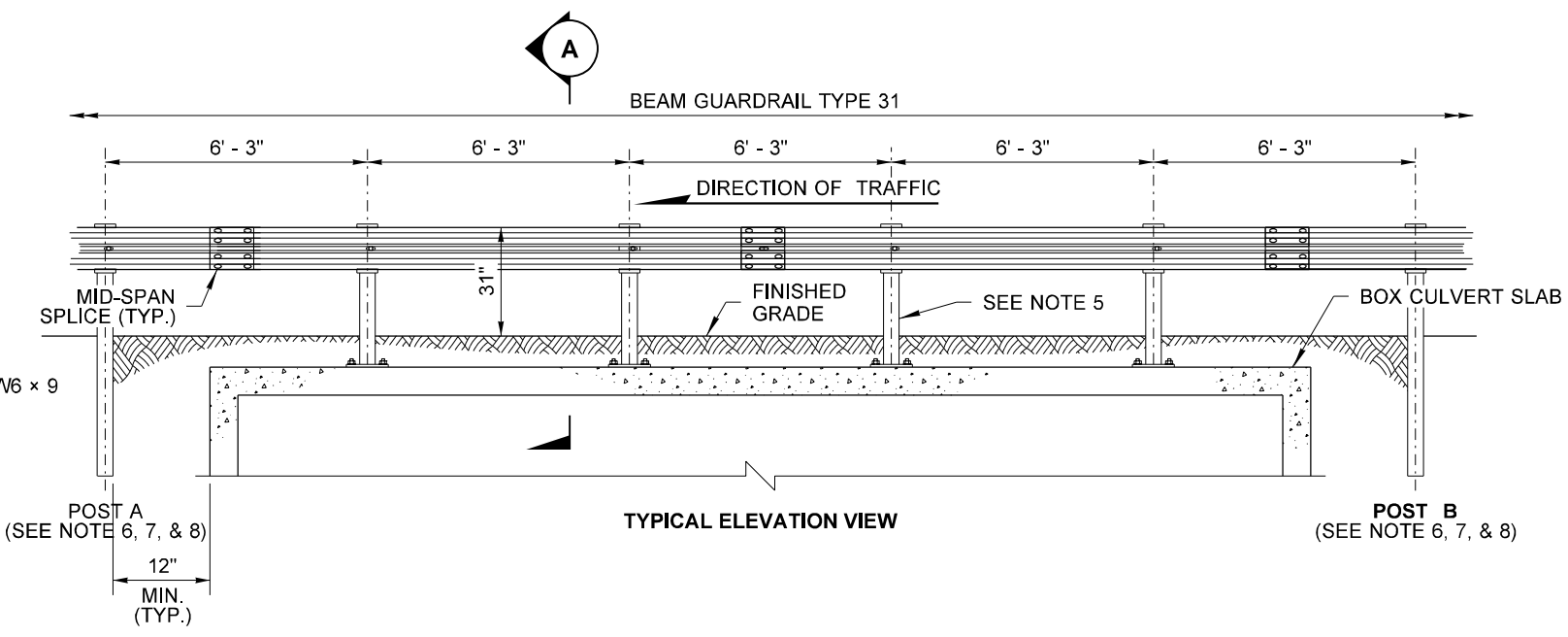


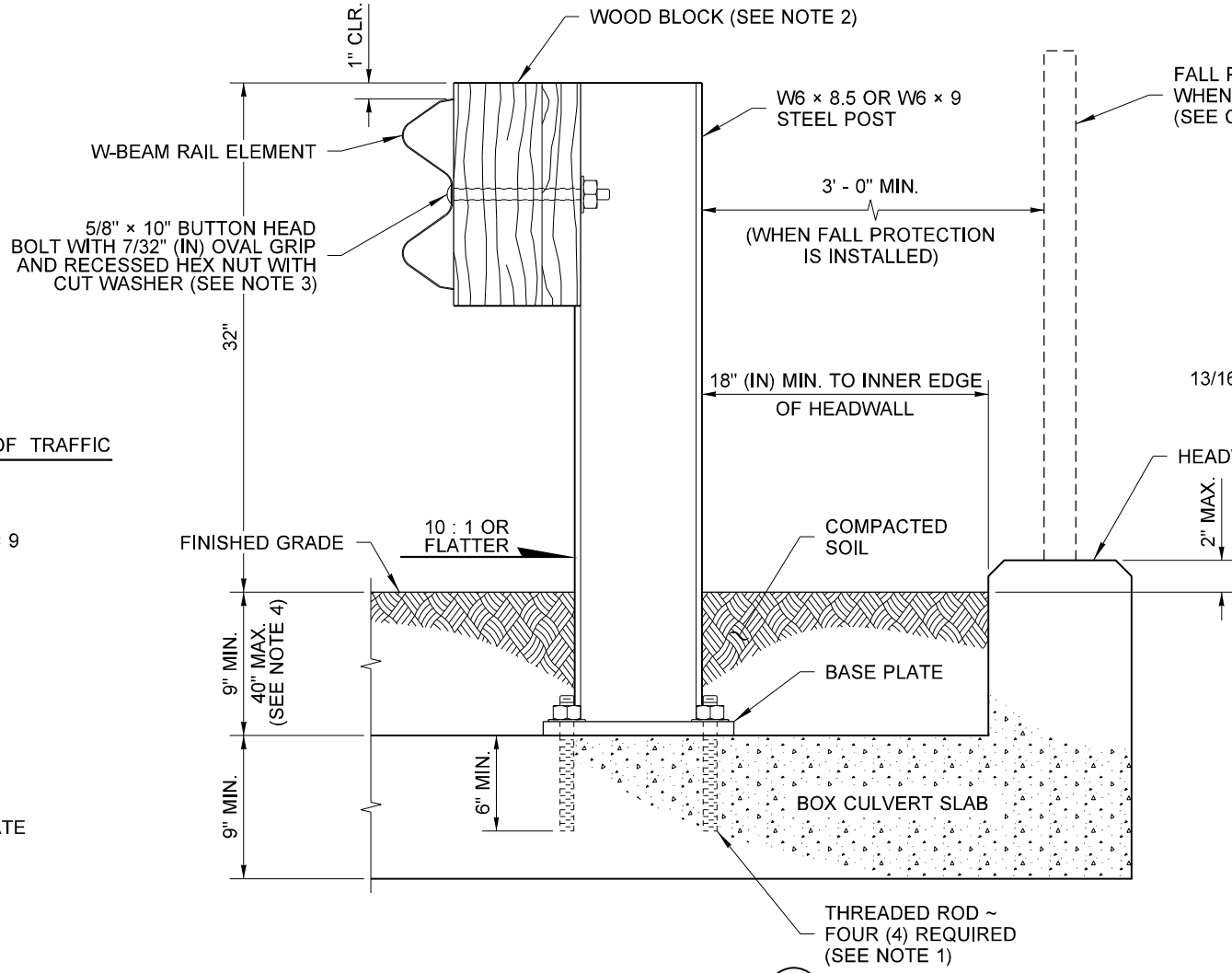
DRAWN BY: FERN LIDDELL



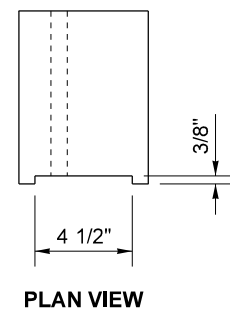
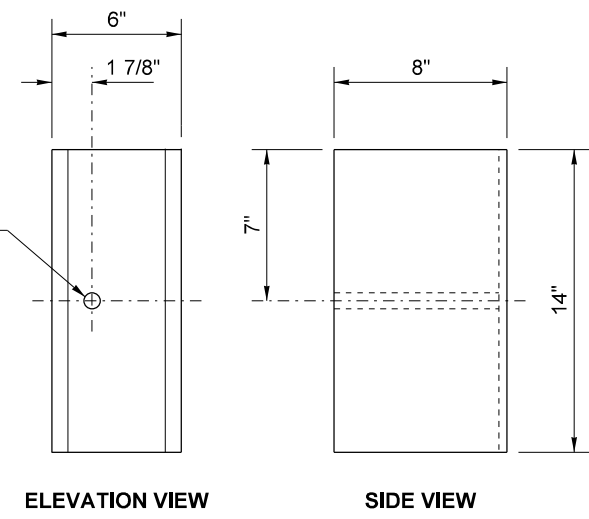
**KEY NOTE**  
 1 WELDING SHALL CONFORM TO  
 STD. SPEC. SECTION 6-03.3(25)



**BOX CULVERT POST ASSEMBLY  
 ELEVATION VIEW**



**SECTION A  
 BOX CULVERT GUARDRAIL  
 STEEL POST TYPE 31**



**WOOD BLOCKOUT  
 (SEE NOTE 2)**

**NOTES**

1. Attach Guardrail Post to Box Culvert with 7/8" (in) diameter high-strength threaded rods 8 1/2" (in) in length with resin-bonded anchors. See **Standard Specification, Section 9-06.5(4)**.
2. Wood blocks are shown. Blocks of an approved alternative may be used. See **Standard Specification, Section 9-16.3(2)**.
3. Attach blockouts to steel posts using bolt holes on approaching traffic side of post web.
4. Box culvert guardrail steel posts are not needed for fill depths greater than 40 inches. Drive standard 6-foot length guardrail posts into compacted soil and install guardrail per **Standard Plan C-20.10**.
5. Plan shows 4 box culvert posts installed on culvert lid. It is acceptable to use a greater or lesser number of box culvert guardrail posts to increase or decrease the length of system as needed.
6. Install at least 62.5-feet of Type 31 guardrail upstream and downstream from posts **A** and **B** (Terminals and Anchors included in length).
7. Install at least 12.5-feet of Type 31 Guardrail from guardrail posts **A** and **B** before installing terminals and anchors.
8. Install at least 37.5-feet of Type 31 guardrail upstream and downstream from guardrail posts **A** and **B** before starting a taper or radius rail guardrail system.



Aug 22, 2022

**BOX CULVERT EMBEDDED  
 ANCHOR GUARDRAIL  
 STEEL POST ~ TYPE 31  
 STANDARD PLAN C-20.41-04**

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION  
 Mark Gaines  
 Mark Gaines (Aug 22, 2022 14:11 PDT)  
 Aug 22, 2022  
 STATE DESIGN ENGINEER  
 Washington State Department of Transportation