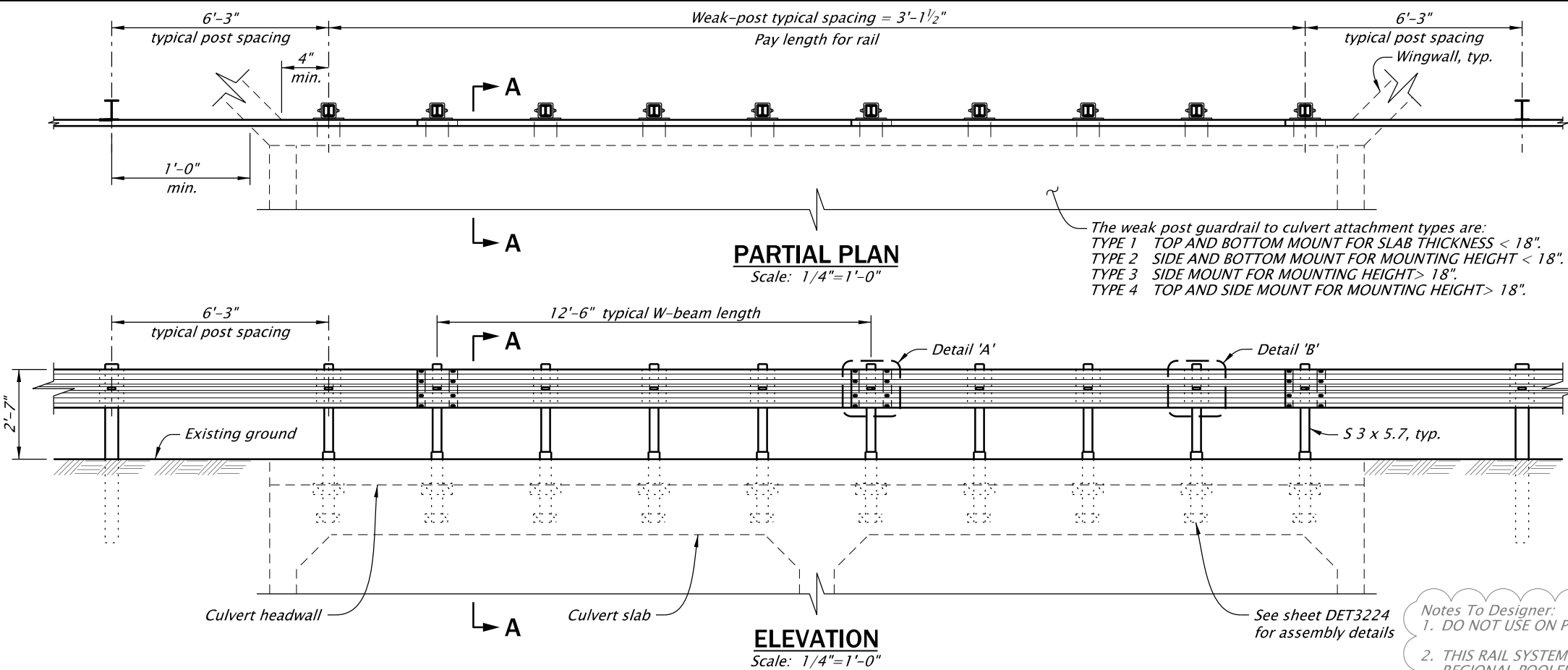




GENERAL NOTES

This drawing to be used for connecting guardrail to the outside face of culvert headwall and slab.

Rail designed and crash tested to meet MASH TL-3 requirements. Guardrail transition not required.

See DET3221 to DET3224 for mounting details and types.

Provide steel weak posts conforming to ASTM A992 Grade 50.

Provide square tube steel socket assemblies conforming to ASTM A500 Grade B.

Provide post standoff plates and socket assembly guardrail back-up plates conforming to ASTM A36.

Provide top, bottom, and side mounting plates, gusset plates, and back plates conforming to ASTM A572 Grade 50.

Provide heavy hex bolts conforming to AASHTO M 164 (ASTM A325) with heavy hex nuts and standard washers.

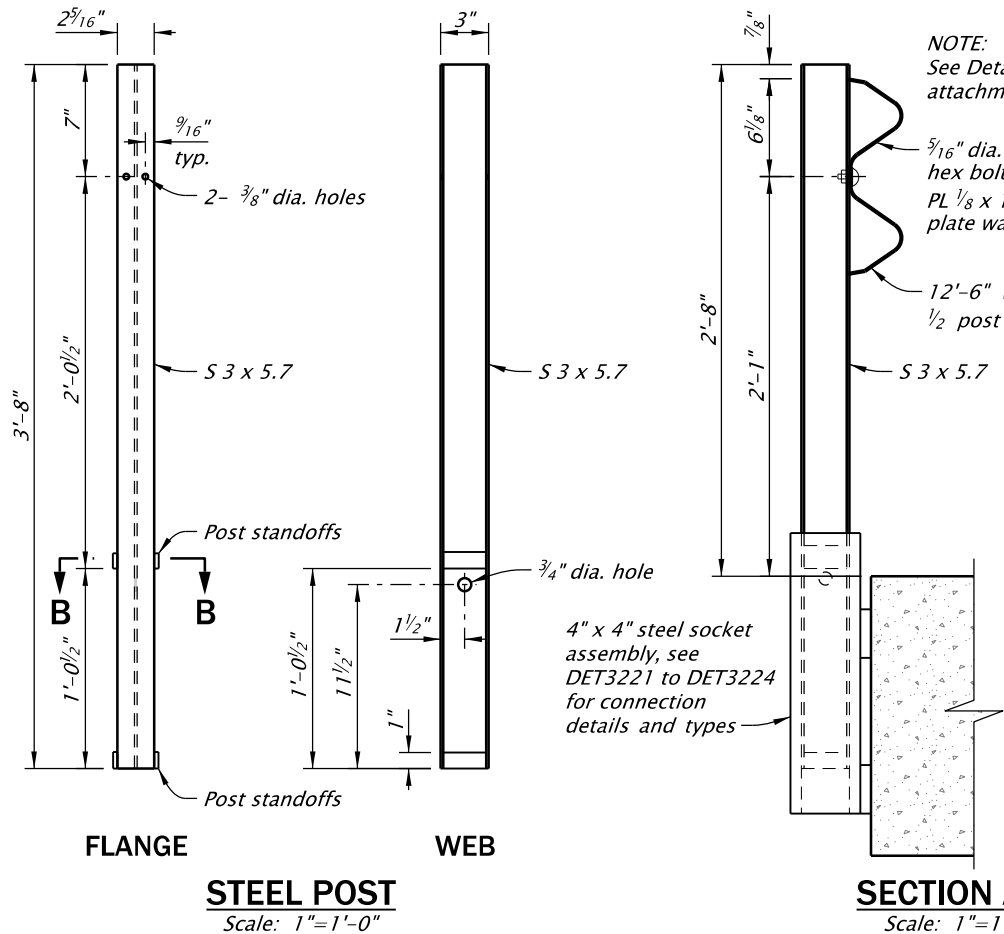
Provide threaded rod conforming to ASTM A307 / ASTM F1554 Grade 36 with heavy hex nuts and standard washers.

Provide heavy hex nuts conforming to ASTM A563, Grade A.

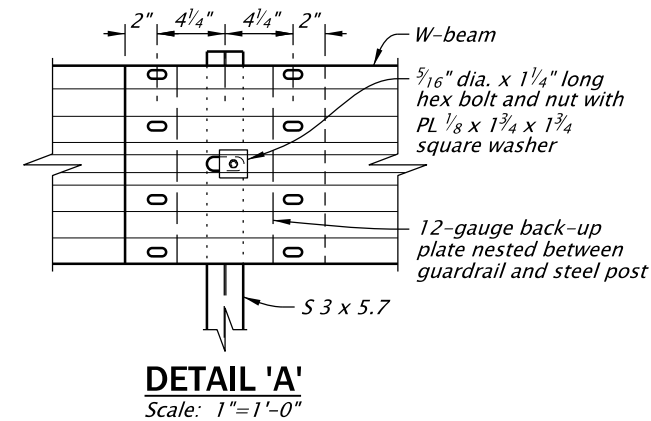
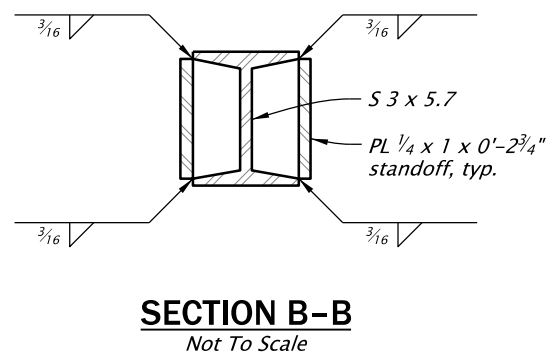
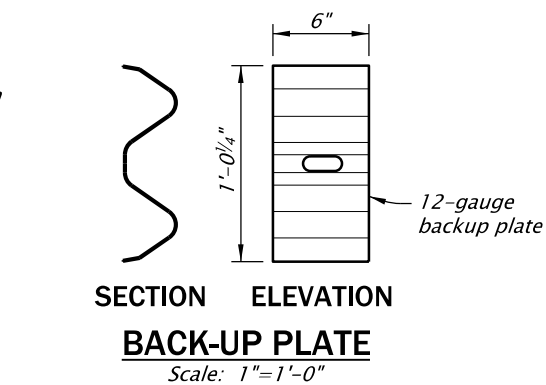
Produce welds according to the latest edition of AWS D1.1 Structural Welding Code for Steel

Hot-dip galvanize all structural steel, including fasteners, after fabrication, except as noted. Provide galvanize-control silicon as specified.

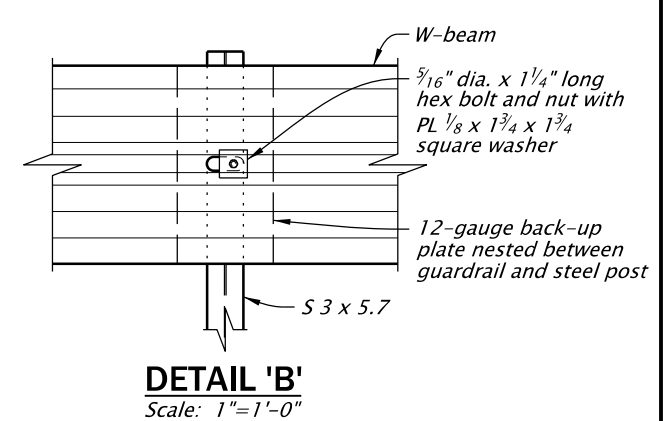
Install threaded rod using epoxy adhesive from the ODOT QPL.



SECTION A-A
Scale: 1"=1'-0"



Accompanied by sheets [DET3221-DET3224]



The selection and use of this detail, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

OREGON DEPARTMENT OF TRANSPORTATION



ENGINEERING AND
TECHNICAL SERVICES BRANCH

**WEAK POST GUARDRAIL
ATTACHMENT TO CULVERT**

DETAIL NO.
DET3220