

Designers Meeting Notes

December 11, 2024

1. Project Lessons Learned/Reflections

- Colson Bridge, Prospect: Tall bridge in a sag curve using a temporary bridge, existing speed limit of 50 mph.
 - Takeaway: While not recommended as a first option, going to Commissioner Approval to reduce the speed limit more than 15 mph can be done for projects where it matters.
- Puddle Dock Bridge, Albion: Several vertical and horizontal alignment constraints (property impacts, intersection, etc.)
 - Takeaway: Design should start by meeting standards, but there are often good reasons on low traffic roads like this for pursuing design exceptions.

2. Updated Standard Details and Special Provisions

- Several updates to galvanizing specification numbers, no real change in application.
- Standard Detail 606(22) needs permission to be used on Corridor Priorities 1-4. Culvert Mounted Guardrail should be used instead in most cases (possible changes to standard design pending).

January 8, 2025

3. Hydraulic Modeling

- Strong, McLeary Bridge: Project is an unusual combination of stacked stone and steel circular culverts, with the downstream boundary condition controlled by the Sandy River.
- Takeaways:
 - LiDAR data is pretty easy to get now and should be used to extend model limits and get better results whenever it makes sense.
 - When dealing with multiple waterbodies of varying watersheds, use the Joint Probability Analysis found in the VTrans Hydraulics Manual.