



State of Washington

Department of Fish and Wildlife

*South Central Region – Ellensburg District Office, 201 North Pearl, Ellensburg, WA 98926
Phone: (509) 925-1013, Fax (509) 925-4702*

April 20, 2010

Katie Cote, Contract Planner
Kittitas County Community Development Services
411 N. Ruby Street, Suite 2
Ellensburg, WA 98926

Subject: Yellowstone Trail Estates (LP-09-00006) Plat revision and amended Critical Areas Report – Comments related to revisions.

Dear Ms. Cote:

I have reviewed the revised site plan, revised conceptual mitigation plan and the addendum to the Critical Areas Report you provided for the Yellowstone Trail Estates plat. These revisions address the recommendations and concerns we provided and are consistent with the discussions at our February 5th conference call with the proponent. The revised site plan has eliminated some lots and reconfigured others to improve wetland buffers and the Coal Creek stream buffer. The mitigation plan reflects the revised site plan and includes additional notes and more details on the wetland creation prescription. We are pleased to note that the creeks, wetlands and buffer areas are interconnected in a functional fashion.

I have a few comments and suggestions regarding the Critical Areas Report Addendum and the preparation of the Final Mitigation Plan as follows:

1. Critical Areas Report

- a. **Ten-foot building setback from lot line does not function as a wetland buffer.** In the discussion of proposed buffer widths and buffer averaging, the report addendum notes on page three that *“a 10-ft building setback in the rear of the lots..... left in native vegetation as additional protection to the wetlands.”* In practice, the 10-ft area around a building is substantially disturbed and re-graded during construction by the maneuvering of equipment around the building, excavating and backfilling foundations, and accessing the exterior of the building to install siding, position ladders and scaffolding, etc.. If, as suggested in the report, this area is to be counted as native vegetation that provides additional protection to the wetlands, the CCRs should

include a specific restoration prescription and/or landscaping standards for this setback area.

- b. **Recommend designation of buildable area on select lots.** In the discussion of the rationale for buffer averaging on page four, the report suggests that for a number of lots, the houses will be constructed further away from the wetland than the minimum setback because of topography and lot orientation. (The implication is that the location and orientation of the house on the lot will further distance construction from wetlands or the creek.) This is not at all certain. Kittitas County does not have a clearing/grading/fill ordinance and each lot could be substantially altered, filled and re-graded with the house placed anywhere, subject only to the minimum lot line setback. Defining the desired buildable area on these select lots would eliminate this uncertainty.

2. Final Mitigation Plan.

- a. **Use of salvage material.** Clearing for road construction will likely yield some coarse woody material (logs, trees with rootwads, stumps) that would be useful as habitat features in the created wetland and stream crossings. We recommend that following staking of the road but prior to clearing and grading, a few large trees and logs be marked for salvage and use in stream and wetland work. Also, as noted in the wetland plan, areas of wetland soil within the road alignment should be flagged and these topsoils (with their seed banks of native wetland plant seeds) be stockpiled separately for use in the wetland creation work.
- b. **Plant list for the created wetland.** The plant list on plan sheet W-1 of the Conceptual Mitigation Plan does not include any herbaceous plants for the created wetland. Presumably this is because salvaged wetland soils will be placed on the new constructed wetland site and this salvaged soil should have a seed bank that includes herbaceous native wetland plants. However, some temporary cover of the site will be needed for short term soil protection and erosion control. The excavation to create the wetland will likely be done during the late summer dry season, so there will be little time between the wetland construction and the onset of fall rains. A seed mix of suitable temporary erosion control grasses and/or sedges should be considered to help stabilize the site for the first couple years. (Additional erosion control BMPs may be needed prior to fall rains.)
- c. **Use of local transplants.** The Conceptual Mitigation Plan suggests that local transplants of native sedges could be used to maintain species composition. We concur. This is a prudent measure and should be part of the final plan. This work should be directed by someone with expertise in wetland plant identification and wetland restoration.
- d. **Crossing structure for Wetland C.** As noted in the Critical Areas Report Addendum, the road crossing of Wetland C should be designed to provide passage for

amphibians and small mammals as well as water. I have enclosed some conceptual design information for discussion. The crossing will need to have sufficient hydraulic capacity to pass expected snowmelt runoff and stormwater, a natural substrate, and some additional width to allow for some “shoreline edge” along the margins of the crossing. The crossing structure should be a box culvert or pipe-arch, with a span of not less than 42-inches and a rise of not less than 29-inches (this is hydraulically equivalent to a 36-inch round pipe). WDFW can provide more specific guidance once the site is staked and accessible for field inspection.

In summary, the proponent has been responsive to our concerns and has incorporated our requests in the submitted documents. Please consider my comments above regarding preparation of submittals for final plat approval.

We recommend the conditions for Final Plat approval include the following:

1. The Final Mitigation Plan shall be prepared from the conceptual mitigation plan, and shall be submitted for review and approval by Kittitas County Community Development Service (KCCDS) in consultation with WDOE and WDFW.
2. The road crossing design for Wetland C shall be submitted for review and approval by KCCDS in consultation with WDFW. The crossing shall be a box culvert or pipe-arch, with not less than 42-inch span by 29-inch rise, sized to convey snowmelt runoff and stormwater and accommodate passage of small mammals and amphibians.
3. The proponent shall obtain a Hydraulic Project Approval (HPA) from WDFW for the two road crossings of streams and any other in-channel work. A copy of the JARPA and HPA shall be provided to KCCDS.
4. A Stormwater management plan shall be prepared and submitted to KCCDS for review and approval in consultation with WDOE.
5. A snow removal and storage plan shall be submitted to KCCDS for review and approval in consultation with WDOE and WDFW.
6. Proposed Conditions, Covenants and Restrictions shall be submitted to KCCDS for review and approval in consultation with WDOE and WDFW.

Katie Cote
April 20, 2010
Page 4 of 5

Thank you for the opportunity to review the revised proposal. Please call me at (509 925-1013 if you have questions or need additional information.

Sincerely,

A handwritten signature in black ink on a light yellow background. The signature is cursive and appears to read 'Brent D. Renfrow'.

Brent D. Renfrow
District Habitat Biologist

Cc: Perry Harvester, WDFW
Wayne Nelsen, Encompass Engineering & Surveying
Dan Valoff, KCCDS
Cathy Reed, WDOE

Enclosure: Conceptual drawing of wetland crossing structure for Wetland C.

Conceptual Crossing Structure for Wetland C – hydrological connectivity and wildlife passage for low gradient wetland

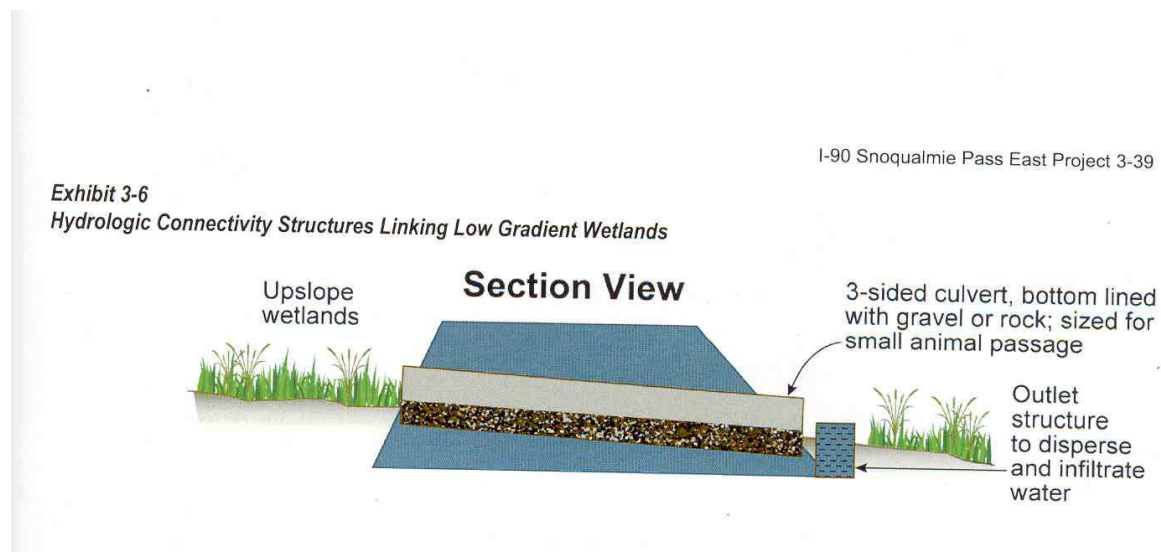


Figure 1. Conceptual wetland crossing structure taken from I-90 Snoqualmie Pass East Project. The depicted outlet structure would not likely be needed at Wetland C because of the low gradient. Substrate in the culvert would include some large cobbles and small boulders to provide channel roughness and protective cover for amphibians and small mammals. If predicted water volumes and velocities allow, some woody debris could be included along one of the culvert walls.

The crossing structure should be a box culvert or pipe-arch, with a span of not less than 42-inches and a rise of not less than 29-inches (this is hydraulically equivalent to a 36-inch round pipe). The structure should be designed to have sufficient hydraulic capacity to pass expected snowmelt and stormwater runoff, with enough additional capacity/width to allow for some "shoreline edge" to be created along the margins of the culvert walls.