Union Pacific Railroad

Construct 4.3 Miles Second Main Track Portland Subdivision – Mosier

Input Questions: 404/401 Pre-Application Meeting, December 18, 2013, Portland, Oregon

1. What is the project purpose and need?

The purpose of the project is to improve the efficiency and average velocity of rail freight movements along the Portland Subdivision.

The project is needed because short sidings require trains to come to a complete stop when allowing other trains to pass and shorter sidings limit potential train lengths. It takes a considerable amount of time to bring a train to a complete stop and for it to regain normal traveling speed again once travel resumes. This results in significant delays in transit times along the Portland Subdivision. The existing short siding near the Town of Mosier creates a "pinch point" that affects freight movements throughout the Portland Subdivision.

2. What is the proposed location? (please note or show, via attached map, any known environmental resources)

The project area is located along the Portland Subdivision of the Union Pacific Railroad right-of-way (ROW) in Wasco County, Oregon. It begins at milepost (MP) 66.98 east of the Wasco County boundary line, approximately 2 miles west of Mosier, Oregon and ends at MP 72.35, approximately 3 miles east of Mosier, Oregon. The subdivision roughly parallels the Columbia River for the length of the project, as well as Interstate 84. More specifically, the project ranges from 45°41'27.44"N 121°26'25.13"W to 45°41'49.65"N 121°20'8.17"W, and includes Township 3 North, Range 12 East, Sections 31 and 32; Township 3 North, Range 11 East, Section 36; and Township 2 North, Range 11 East, Sections 1, 2, and 3. See attached figures.

3. Please provide a general project description.

UPRR proposes to construct approximately 4.05 miles of second mainline track along the existing Portland Subdivision between approximately MP 67.0 and 72.43. Between MP 67.0 and approximately MP 69.5, the new track would be constructed to the north of the existing Main Track 1. At MP 69.5, the new track would tie into the existing siding track. Between MP 70.45 (at the overhead interstate bridge) and MP 70.73 (siding end), both the existing siding and the existing main line track would be realigned to the south. From MP 70.73 east, the existing mainline track would become siding, and new track would be constructed south of the existing track. The project includes the construction of two railroad bridges, one over Mosier Creek and the second over Rock Creek.

4. Please provide a general project footprint (narrative or map).

Please see the attached figures. The project is primarily contained within existing railroad right-of-way. Depending on grading limits, limited easement or ROW acquisition may be needed in select areas. The project will also require construction access via private land. In order to accommodate an additional rail line, the railroad embankment would need to be widened slightly in most areas. The project area consists of two approximately two-mile segments (four miles total) at either end of the existing approximately one mile long siding where little to no work would be needed.

5. Please attach any conceptual drawings, maps or other supporting documents you have.

Figures are attached showing project location, preliminary track alignment, waterways, ordinary high water marks, and wetlands.

6. Please describe the general idea or scope of potential impact.

In order to add a second track, the embankment would need to be widened in most locations. The width is dictated by the minimum clearances required between the tracks, but the direction of the widening to the north or south is primarily driven by the location of sensitive resources. Direct impacts to the Columbia River have been avoided. It is possible to avoid many of the wetlands identified along the right-of-way in the project area, but there may still be some unavoidable impacts to wetlands. The design team is evaluating the feasibility of reducing those potential impacts. In addition, the project would include new bridges over Rock Creek and Mosier Creek. At this preliminary design stage, it appears that it may be possible to span these creeks, but there still may be impacts associated with construction. Depending on the results of the feasibility analyses and further design refinements, wetland impacts could range between one and two acres.

7. Please provide a proposed schedule or timing of proposed work.

Construction is currently planned to start in the second or third quarter of 2015 and is expected to take approximately one year to complete.

8. Are there any Endangered Species Act-subject species present? If so, which ones?

Yes, the following ESA-listed salmonids are present in the project area:

- Bull trout (*Salvelinus confluentus*) – threatened
- Chinook salmon (*Oncorhynchus tshawytscha*) – endangered
- Coho salmon (*Oncorhynchus kisutch*) – threatened
- Sockeye salmon (*Oncorhynchus nerka*) – endangered
- Steelhead (*Oncorhynchus mykiss*) - threatened

Mosier Creek, a tributary to the Columbia River, is designated as migration, spawning, and rearing habitat for summer and winter steelhead as well as Coho salmon. The creek has a direct surface water connection to the Columbia River, which is habitat for Chinook and sockeye salmon as well as steelhead and bull trout.

Rock Creek, a tributary to the Columbia River, is designated as migration, spawning, and rearing habitat for winter Steelhead and Coho salmon. Although Rock Creek is an intermittent tributary it still meets the definition of a water of the U.S. and is subject to CWA Section 404 regulations.

The Columbia River, which runs parallel to the project area, is habitat for Chinook and sockeye salmon and steelhead and bull trout. Several of the wetlands that may be affected by the proposed project are connected to the Columbia River via culverts under the existing railroad embankment. Given the generally level topography of the project area, it is assumed that fish may access these culverts when the water in the Columbia River reaches certain levels.

Thompson Lake (Wetland 1) has a direct surface water connection via a culvert under the railroad to the Columbia River.

Wetland 11 is an open water body that has a direct surface water connection via a culvert under the railroad to the Columbia River.

Wetland 16 is an open water body that has a direct surface water connection to Mosier Creek via an open channel.

Wetland 17 is an open water body that may have a connection to Rock Creek; however, that has not been confirmed at this time. There do not appear to be culverts under I-84 at this location that would provide a connection to the Columbia River.

Wetland 18 is an open water body that has a culvert connection to Wetland 17, which may have surface water connections to Rock Creek.

In addition to the ESA-subject species discussed above, the project area may also provide habitat to other protected species, such as those associated with the Bald and Golden Eagle Act and the Migratory Bird Treaty Act.

9. Are there any known tribal government resource concerns or issues?

The Columbia River Gorge is an area that is rich in prehistoric archaeological resources. No contact with tribes has yet been undertaken for this project, thus there are no currently known specific tribal concerns or issues.

10. Are there any known cultural or historical resource concerns or issues?

A cultural resources literature review was conducted at the Oregon State Historic Preservation Office (SHPO) and identified two previously recorded sites near the proposed route. The first site is located along the west bank of Mosier Creek, south of the existing UPRR rail line, and the second site is located east of the existing track near the intersection of the Portland Subdivision and Interstate 84 at approximately MP 70.4. Construction would not be precluded based on the presence of these sites, but mitigation (e.g. preservation in place) may be required. Field investigations will be required to determine whether actual impacts will or will not occur to the sites previously identified. When field investigations are conducted for this project, additional sites may be discovered.

11. Have you done a wetland delineation determination? If so, what were the results?

Yes. A wetland delineation was conducted along the full extent of the project area in October 2013. The delineation covered both sides (north/south) of the tracks for a distance of approximately 100 feet from track centerline. Nineteen wetlands were identified within the project area. Some of these are small lacustrine features that were formed when the interstate and the railroad were extended across portions of the adjacent reservoir. Some of these "lakes" are connected to the Columbia River via culvert and others are not connected. Most of them appear to be relatively shallow with largely unvegetated edges formed from rock placed during construction of the interstate or the railroad. Some of the wetland areas in the project area may be considered isolated after further evaluation by USACE. Other wetlands include palustrine emergent, palustrine scrub-shrub, and palustrine forested wetland types. Most of the wetland areas appear to have been formed when drainage patterns were altered by the construction of the interstate or the railroad. The preliminary design appears to partially affect about ten of the wetland areas; the others could be avoided. As the design is further developed, it may be possible to make additional reductions in the area of potential impact.

12. Will more than 5000 cubic yards of material be removed from the site?

Material is anticipated to be removed from upland locations along the project length, which will result in greater than 5000 cubic yards of material removed. Limited to no material removal is anticipated at waterways or wetlands. There is a potential for material to be placed in wetlands.

13. Are there issues or provisions related to water rights or use at your proposed location?

No.

14. Are there fish passage barriers or changes to current passage expected?

Yes. Placement of fill material in Wetlands 1 and 11 at the locations of the culverts connecting the wetlands to the Columbia River will require extending the existing culverts through the newly placed fill

material. If the existing culverts provide fish passage, the extended culvert would be designed to maintain fish passage between the wetlands and the Columbia River.

Placement of fill material in Wetland 17 in the location of the culvert connection to Wetland 18 will require extending the existing culvert through the newly placed fill material. If Wetland 17 has a surface water connection to either Rock Creek or the Columbia River, then the culvert would be designed to maintain fish passage to Wetland 18. Fish passage to Wetland 17 from Rock Creek or the Columbia River will not be affected.

Placement of fill material in Wetland 16 would not affect fish passage between the wetland and Mosier Creek or the Columbia River.

Proposed bridges over Rock Creek and Mosier Creek would be designed to span the creeks and are not expected to impact fish passage.

15. Do you have preliminary mitigation plans? If so, please provide the draft plans.

Biological Resources Mitigation Options

A location for wetland mitigation has yet to be developed. The project is within the Middle Columbia/Hood hydrologic unit code (HUC). The preferred choice will be to identify mitigation opportunities within the local HUC. The project will coordinate with the ODFW, USFWS, and NMFS to identify potential mitigation opportunities. There may be opportunities for wetland mitigation farther down river that could replace functional impacts. For example, the Community Restoration Network is proposing a conservation bank on Deer Island at approximately Columbia River mile 80.

Cultural Resource Mitigation Options

If impacts to cultural resources cannot be avoided, then a mitigation strategy will be developed depending on the nature of those resources and the impact. Preferred mitigation for archaeological sites is preservation in place, if this can be done without risking the site integrity. Typical non-preservation mitigation for an archaeological site is data recovery excavation done in consultation with the Oregon State Historic Preservation Office (SHPO) and local tribes. Excavation of a site in Oregon requires acquisition of a state archaeological excavation permit from Oregon SHPO, which generally takes 30-60 days from submission to obtain. The permit would detail research design, methodology, and a plan for curation of recovered artifacts. If the site has other cultural value to tribes or other parties, then off-site mitigation is sometimes conducted, which would be designed to foster preservation of traditional culture and practices.

	Preliminary Impacted Acerage		
	2:1 on 1.5:1		
Wetlands / Waters	**Permanent**	**Temporary***	**Total**
W1 (Lake)	0.344	0.420	0.764
W3			
W4			
W5			
W6			
W7	0.167		0.167
W8			
W9			
W10	0.008		0.008
W11 (Lake)	0.469	0.678	1.147
W12	0.034	0.083	0.117
W12b	0.043		0.043
W13			
W14			
W14b	0.011		0.011
W15	0.002		0.002
W16 (Lake)	0.064	0.546	0.609
W17 (Lake)	0.603	0.634	1.237
W18			
W19			
W20	0.030		0.030
Total	**1.776**	**2.359**	**4.135**

Date: 12/3/2013

*assuming 25' additional temporary fill width in order to construct permanent fill section

Note: These impacts and quantities are preliminary and subject to change.