

Technical Memorandum

February 9, 2024

Project# 27003.011

To: Deanna Schafer and Kim Clardy, *City of Reedsport*
Thomas Guevara, *Oregon Department of Transportation*

From: Matt Bell, Jon Gerlach, PE, and Marc Butorac, PE, PTOE, Brian Bauman (HDR) and Mikal Mitchell, PE (HDR)

Project: City of Reedsport Rail Crossing Study and Refinement Plan

RE: Tech Memorandum #7: Preferred Improvements

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INTRODUCTION

This memorandum addresses outstanding questions and summarizes the feedback received on the two most promising improvement packages identified in Technical Memorandum #6, provides a high-level environmental review of the packages (see Table 1), and refines and recommends a preferred set of projects. These projects will address the needs identified with the development of the Port of Coos Bay Pacific Coast Intermodal Port and associated increase in train activity through the community of Reedsport. The memorandum includes draft project sheets for the refined and preferred alternative improvement package, the project team's opinion regarding the anticipated National Environmental Policy Act (NEPA) classification, and a draft environmental prospectus for the preferred improvement package.

OUTSTANDING ISSUES AND FEEDBACK ON THE MOST PROMISING IMPROVEMENT PACKAGES

Based on the Project Management Team (PMT), Project Advisory Committee (PAC), City of Reedsport Planning Commission and City Council, and community review of Technical Memorandum #6, the following outstanding issues were identified. Each identified issue, shown in *italics*, has a response in standard text.

- **Issue:** Visual impacts associated with the vertical elements of the overpass structures and considering a viaduct-type design with columns versus retaining walls to provide the ability to see through the structure.

Response: The project team reviewed similar viaduct-type designs in Oregon and prepared initial cost opinions for the two most promising improvement packages. Exhibit 1 below shows a potential similar rail viaduct structure for Alternative 4A in Oregon City, Oregon.

Exhibit 1. 14th Street Rail Crossing, Oregon City, Oregon (Photo via Google Earth)



The project team estimated that converting Alternative 4A (Elevated Rail Line) to a viaduct would increase the construction cost from \$27M to over \$60M. Alternative 2A1 (OR 38 Rail Overcrossing with Retaining Walls) includes three bridge crossings between West and East Railroad Avenues that could potentially be converted to a viaduct, which would increase the cost opinion from approximately \$18.1M to \$22.2M.

- **Issue:** Identifying needed local roadway and driveway tie-ins to modified roadways.

Response: The Preferred Alternative Package section in this memorandum addresses the local tie-ins to the modified roadways.

- **Issue:** Necessary localized pedestrian, bicycle, and transit enhancements throughout the study area to support the improvements (e.g., local roadway connections, pedestrian bicycle connections to the City's trail system, potential pedestrian/bicycle enhancements at Port Dock Road and the northerly OR 38 undercrossing, etc.)

Response: The Preferred Alternative Package section in this memorandum addresses the pedestrian, bicycle, and transit enhancements to support the preferred improvement package roadways.

- **Issue:** Addressing stormwater impacts.

Response: The Preferred Alternative Package section in this memorandum addresses the potential storm impacts associated with the preferred improvement package.

- **Issue:** Evaluating potential Title VI impacts.

Response: The Environmental Review section in this memorandum addresses the potential Title VI impacts associated with the most promising improvement packages.

- **Issue:** Potential NEPA 4F (park and recreational lands, wildlife and waterfowl refuges, and historic sites) and 6F (park land) impacts.

Response: The Environmental Review of the Most Promising Improvement Packages section in this memorandum addresses the potential NEPA 4F (park and recreational lands, wildlife and waterfowl refuges, and historic sites) and 6F (recreational land) impacts associated with the most promising improvement packages.

- **Issue:** *Considering westbound dual left-turn lanes at the US 101/OR 38-Port Dock Road intersection.*

Response: After further review and discussions with ODOT and City staff, it was recommended that the US 101/OR 38-Port Dock Road intersection continue to be monitored and a project (Alternative 5B) be added to the Transportation System Plan (TSP) to conduct a refinement plan for US 101 from the Umpqua River to Scholfield Creek and along OR 38 from Laurel Avenue to US 101. The study should include, at a minimum, an evaluation of potential modifications to the US 101/OR 38-Port Dock Road intersection, including additional eastbound and westbound left-turn lanes at the intersection to provide additional capacity and future signal timing and phasing flexibility (e.g., protect-left-turn phasing, split phase).

- **Issue:** *Developing refined cost estimates, including potential right-of-way and property impacts and verifying structure cost needs based on additional geotechnical information.*

Response: The cost opinions provided below in Table 1 incorporate the additional geotechnical information. The comparative cost opinions for the preferred Refined Investment Package in the Preferred Alternative Package section of this memorandum includes potential right-of-way and property impacts and verifies the structure costs based on the additional geotechnical information.

- **Issue:** *Operational and safety impacts that would occur at the US 101/OR 38-Port Dock Road intersection with trains greater than 4,100 feet at 10 mph under a no-build condition.*

Response: Trains greater than 4,100 feet at 10 mph during the 30th Highest Hour will lead to vehicular spillbacks into the southbound left-turn and northbound right-turn lanes along US 101. These spillbacks eventually would lead to vehicles blocking the inside southbound and outside northbound through lanes, creating the potential for rear-end related conflicts.

- **Issue:** *Understanding whether a mural budget could be added for the retaining walls proposed under the improvement packages.*

Response: Depending on the specific grant funding and negotiations between the Port of Coos Bay, ODOT, and the City of Reedsport, mural budgets could be potentially allocated as part of the future construction budget or through an independent secondary project.

- **Issue:** *Alternatives non-split phase left-turn phasing at the US 101/OR 38-Port Dock Road intersection.*

Response: To provide long-term mobility flexibility and extend the three-lane cross-section on OR 38 developed for the westbound left-turn lane at Laurel Avenue, the eastbound and westbound approaches to the US 101/OR 38-Port Dock Road intersection should ultimately be widened to include left-turn lanes.

Based on feedback from the PMT, PAC, City of Reedsport Planning Commission and City Council, and community to date, Improvement Package I was generally supported over Improvement Package II based on the key differences shown in Table 1. *Attachment A provides the cost opinion worksheets for each package.*

Table 1. Key Performance Differentiators between the Top Two Most Promising Improvement Packages

Key Differentiators	Improvement Package I	Improvement Package II
	Project Elements: – Alternative 1C – Four-Quadrant Gated Rail Crossing on Winchester Avenue – Alternative 2A1 – OR 38 Rail Overcrossing with Retaining Walls	Project Elements: – Alternative 4A - Elevated Rail Line
OR 38 Vertical Clearance	No vertical constraints.	Introduces the only vertical constraint between I-5 and US 101 (via OR 38 and OR 138)
Community Barrier Effect	The elevated OR 38 overpass creates an approximately 800-foot partial north-south visual barrier for homes along OR 38 to the west of the rail line.	The elevated rail line introduces an east-west visual barrier throughout the entire community, extending from the Scholfield Creek to Umpqua River.
Winchester Rail Crossing Queuing and Potential Cut-Through Traffic	The upgraded at-grade crossing would still create vehicular queues and potentially cut through traffic during train events.	The grade-separated rail overcrossing would eliminate vehicular queues and potentially cut through traffic.
Design and Construction Cost Opinions ¹	\$18.1M (Assumes retaining walls, embankment support, and bridges) \$22.2M (Assumes viaduct between east and west Railroad Avenue)	\$27M (Assumes retaining walls, embankment support, and bridges) \$61M (Assumes viaduct between Winchester and OR 38)

1. The design and construction cost opinions will be refined with escalators and contingencies as part of the final plan.

2. Alternative 5A – OR 38/US 101 East-West Split Phasing was removed from the improvement packages in lieu of a future US 101 refinement plan.

To further address the remaining concerns associated with Improvement Package I, the following new project elements were added to further refine the package:

- **Alternative 1C1** – US 101 NB Dynamic Train Activity Warning Sign for Train Crossings at Winchester Avenue. To address the queuing and potential cut-through traffic at the upgraded at-grade Winchester Avenue rail crossing, a dynamic warning sign is proposed to be installed south of the Winchester Avenue/US 101 intersection to warn northbound travelers of train-related gate crossing closures and to utilize OR 38 as an alternative route while trains are approaching and traveling through the community.

In addition, to address the long-term operational needs, access, and safety, the City and ODOT should consider preparing a US 101 refinement plan between the Umpqua River and Scholfield Creek. The refinement plan should consider reconfiguration of the US 101/OR 38-Port Dock Road intersection and/or modification of the traffic control to address long-term operational needs.

- **Alternative 5B** – US 101 Refinement Plan. The City and ODOT should conduct a refinement plan for US 101 from the Umpqua River to Scholfield Creek and along OR 38 from Laurel Avenue to US 101. The study should include, at a minimum, an evaluation of potential modifications to the US 101/OR 38-Port Dock Road intersection, including additional eastbound and westbound left-turn lanes at the intersection to provide additional capacity and future signal timing and phasing flexibility (e.g., protect-left-turn phasing, split phase).

ENVIRONMENTAL REVIEW OF THE MOST PROMISING IMPROVEMENT PACKAGES

A desktop review of existing environmental resources was completed for the study areas of Improvement Package I and Improvement Package II. Existing resources within both study areas include Hahn Park, a Section 4(f) resource, Triangle/Roy Henderson Park, a Section 4(f) resource and a Section 6(f) resource, and several buildings previously evaluated for eligibility for the National Register of Historic Places (e.g., "historic resources"). The historic resources that are listed in the Oregon State Historic Preservation Office (SHPO) database are located on both sides of OR 38 east of E Railroad Avenue. Any building more than 45 years in age would need to be evaluated for National Register of Historic Places eligibility, as would the railroad.

The study areas consist of one census block group (#41090100002). According to census data from the U.S. Environmental Protection Agency, there are no environmental justice populations (e.g., minority, low income, elderly populations) in the study areas (i.e., population values exceeding 150% of Douglas County population values). However, census data does indicate there is a service gap in transportation access (same for Douglas County).

It is assumed that either improvement package could avoid impacts to Triangle/Roy Henderson Park. Hahn Park would likely be impacted by Alternative 2A1 in Improvement Package I due to construction access, staging, or right-of-way impacts. It is also assumed that minor amounts of right-of-way would be required from properties along OR 38/Fir Avenue to facilitate the construction of improvements in either package, which could affect historic resources.

Table 2. Potential Impacts for Each Alternative

Improvement Package	Alternative	Section 4(f)	Section 6(f)	Historic Resources	Title VI
I	1C	None	None	Likely	Likely none
	1C1	None	None	None	Likely none
	2A1	Hahn Park	None	Likely	Likely none
II	4A	None	None	Likely	Likely none

1. Alternative 5A – OR 38/US 101 East-West Split Phasing was removed from the improvement packages in lieu of a future US 101 refinement plan.

Areas to Explore Further during the NEPA Phase

Additional environmental resources need to be evaluated in the study area, including the following:

- Wetlands and waterbodies
Threatened and endangered species and critical habitat listed under the Endangered Species Act
- Noise impacts
- Air quality impacts
- Archaeological resources
- Construction staging
- Hazardous materials

Field studies and additional reporting would be required for most, if not all, of these resources.

Anticipated NEPA Classification

Both Improvement Packages would likely be classified as a Documented Categorical Exclusion under CFR771.117(c)(28), which includes construction of grade separation to replace existing at-grade railroad crossings if the project: 1) does not result in more than a minor amount of right-of-way or does not result in any residential or non-residential displacements; 2) does not need a U.S. Coast Guard bridge permit; 3) does not result in finding of adverse effect to historic properties, does not result in Section 4(f) impacts (except *de minimis*), does not result in "may affect, likely to adversely affect" threatened and endangered species or critical habitat under the Endangered Species Act; 4) does not require construction of temporary access or the closure of existing road, bridge, or ramps that would result in major traffic disruptions; 5) does not result in access control changes; 6) does not result in floodplain encroachment. While the construction of the Preferred Improvement Package would require detour routes, those routes are expected to result in minor out of direction travel and access to properties would be maintained during construction.

PREFERRED ALTERNATIVE RECOMMENDATION

Based on the evaluation conducted in Technical Memorandum #6, feedback from the PMT, PAC, City of Reedsport Planning Commission and City Council, and community to date, and the further assessment and refinements and environmental review documented herein, the project team recommends Refined Improvement Package I as the preferred alternative. This alternative may be carried forward for adoption by the City of Reedsport into the TSP. The Refined Improvement Package I includes:

- Alternative 1C – Four-Quadrant Gated Rail Crossing on Winchester Avenue
- Alternative 1C1 – US 101 NB Train Activity Warning for Train Crossings at Winchester Avenue
- Alternative 2A1 – OR 38 Rail Overcrossing with Retaining Walls

Figure 1 provides a 3D perspective overview of the preferred improvement package. Figure 2 provides a plan view of the OR 38 related improvements, including the near-term Project 2A1.

Figure 1. Preferred Improvement Package Overview

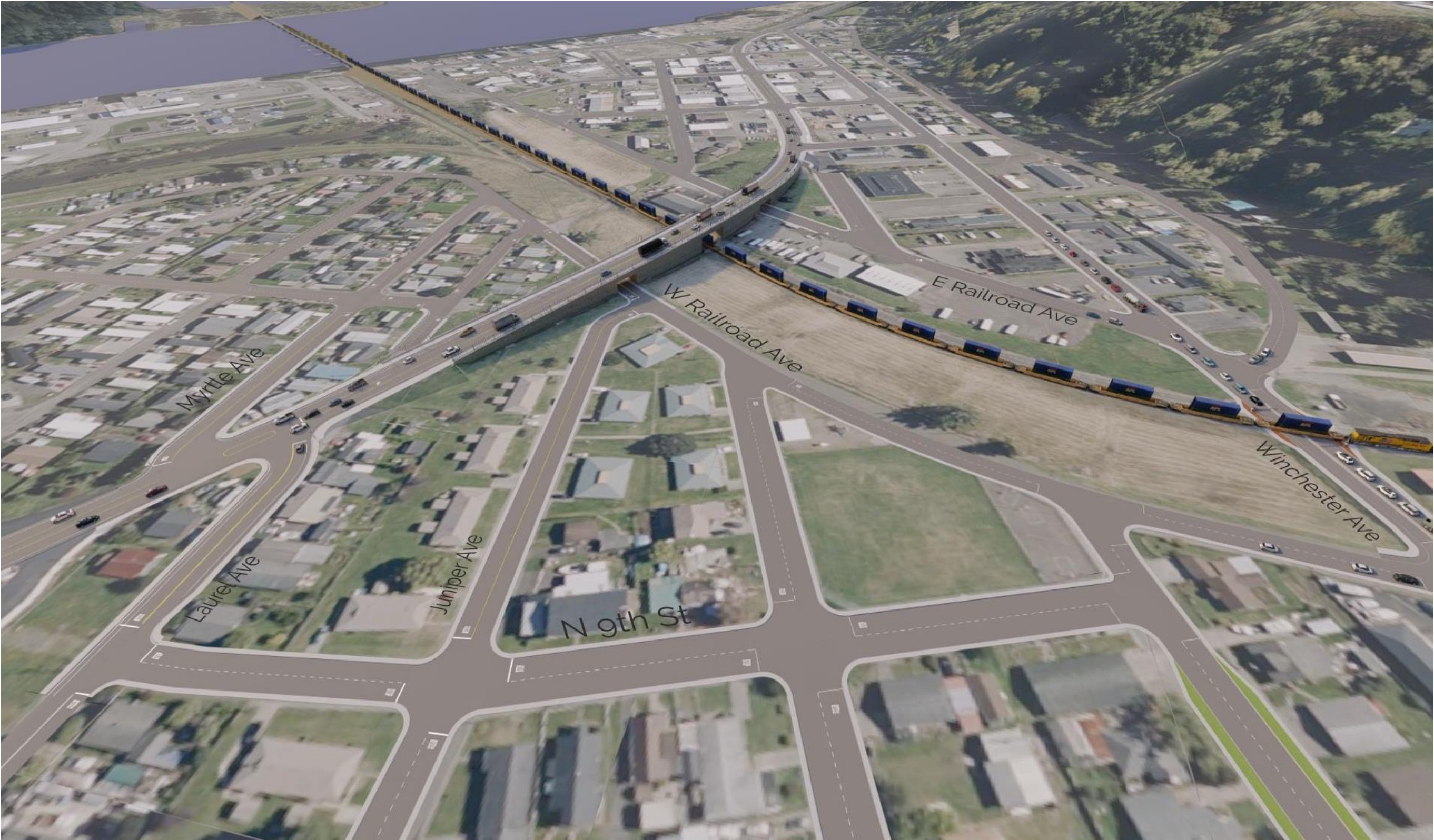


Figure 2. OR 38 Related Improvements and Proposed Roadway, Bicycle, and Pedestrian Tie-ins



The project sheets for each element of the Railroad Crossing Study (RRCS) are provided in Attachment B.

The project team recommends that ODOT and the Federal Highway Administration consider a Documented Categorical Exclusion NEPA Classification when the project proceeds to environmental review/permitting and design. A preliminary environmental prospectus form is provided in Attachment C.

Based on the evaluation and conceptual development work prepared to date as part of the Facility Plan, the project team suggests that the following items be examined and addressed during the future Environmental review and Plans, Specification, and Estimate preparation stage of Improvement Package I:

- 1) Consider purchasing access control and/or consolidating private access approaches between East Railroad Avenue and North 5th Street.
- 2) Consider purchasing access control and/or consolidating public access approaches between West Railroad Avenue and US 101.

PEDESTRIAN AND BICYCLE REFINEMENTS TO SUPPORT IMPROVEMENT PACKAGE I

In developing the refined concept plans shown in Figure 2, the project team provided connections to the existing and/or planned pedestrian and bicycle network as outlined in Table 3.

Table 3. Pedestrian and Bicycle Refinements

Roadway	Description	Part of Package I	Addition to TSP
Myrtle Avenue	– Construct northerly sidewalk to fill existing gap east of OR 38. – Construct southerly sidewalk from OR 38 to N 8th Street.	Yes	Yes
Laurel Avenue (south)	– Reconstruct northerly and southerly sidewalks from 9th Street to OR 38.	Yes	Yes
Laurel Avenue (north)	– Construct northerly and southerly sidewalks from OR 38 to N 8th Street.	Yes	Yes
Juniper Avenue	– Construct northerly sidewalks to connect existing sidewalk to W Railroad Avenue.	Yes	Yes
W Railroad Avenue	– Construct westerly and easterly sidewalks between Juniper Avenue and Laurel Avenue.	Yes	Yes
East Railroad Avenue	– Construct westerly multi-use path and easterly sidewalk between Fir Avenue and Greenwood Avenue.	Yes	Yes
East Railroad Avenue	– Add multi-use path along west side of roadway between Winchester Avenue and Riverfront Way.	No	Yes
Fir Avenue	– Reconstruct sidewalk only connections to OR 38 from existing sidewalk.	Yes	NA
North 6th Street	– Construct and extend westerly and easterly sidewalks to new OR 38 intersection.	Yes	NA
OR 38 (5th to Myrtle)	– Construct northerly and southerly sidewalks and bike lanes.	Yes	NA
OR 38 (Myrtle to US101)	– Maintain sidewalk and bike lanes per the TSP.	Yes	No
Winchester Avenue	– Construct northerly sidewalks between West Railroad Avenue and East Railroad Avenue.	Yes	Yes

Parallel Northerly OR 38 Multi-use Path	– Add multi-use path between East and West Railroad Avenue utilizing the undercrossing on the north side of OR 38.	No	Yes
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Attachment D provides mark-ups to the existing TSP pedestrian and bicycle master plans.

TRANSIT ENHANCEMENTS TO SUPPORT IMPROVEMENT PACKAGE I

Local transit service is provided in the area by Coos County Area Transit (CCAT). CCAT's Florence Express provides intercity service between Coos Bay and Florence Monday through Saturday with one morning and one evening trip. The closest stops are located at the US 101/13th Street intersection and will not be impacted by preferred Improvement Package I.

POTENTIAL STORMWATER IMPACTS OF REFINED IMPROVEMENT PACKAGE I

The refined improvements package must comply with stormwater treatment regulations set by ODOT and local/governmental agencies. Refined Improvement Package I necessitates water quality treatment due to significant changes, including increased impervious areas, conveyance system alterations, and pavement replacement. This ensures stormwater runoff from the Contributing Impervious Area (CIA) is treated before entering the stormwater system. Evaluating the existing conveyance system's capacity and its ability to accommodate increased runoff is key given the flood-prone nature of the community. If the existing system is found not to be adequate in the design phase, detention facilities will need to be added. Additionally, low impact development (LID) practices will be explored to minimize hydrologic impacts.

As for flood control, the project's location behind a dike, with no adverse effects to the Umpqua River floodplain, means flow control measures or Federal Emergency Management Agency permitting should not be required.

The envisioned grade-separated rail crossing with retaining walls will affect existing stormwater infrastructure, leading to increased impervious surfaces. Thus, water quality treatment, capacity of the existing system, and additional need for detention facilities will be evaluated during the design phase.

Based on a review of the refined improvement package, the project team does not foresee any fatal flaws with the design from a stormwater perspective and each identified item above can be effectively mitigated through the design phase of the project.

COST OPINION FOR REFINED IMPROVEMENT PACKAGE I

The project team developed refined cost opinions for each project within the package, including potential right-of-way needs and a 40 percent contingency. Based on these estimates and the potential to accommodate different bridge, retaining wall, and/or viaduct solutions between West Railroad Avenue and East Railroad Avenue, the conceptual cost opinion is \$18.1M to \$22.2M.

See Attachment A for detailed cost opinion worksheets.

NEXT STEPS

The information and preferred Refined Improvement Package I will be presented to the PMT, PAC, City Planning Commission, and City Council for review and feedback. Based on this feedback, the project team will prepare the draft Reedsport Rail Crossing Study and Refinement Plan to be presented to the public at an open house. An adoption hearing by the City of Reedsport Planning Commission and City Council will follow.

ATTACHMENTS

- A. Cost Opinion Worksheets
- B. Project Sheets
- C. Draft Environmental Prospectus Sheet
- D. TSP Pedestrian and Bicycle Master Plan Mark-ups

Attachment A: Cost Opinions

Improvement Package I – Bridge Option 1 (Triple Span)

Alternative 2A: OR 38 Rail Overcrossing with Retaining Walls

Item Category	Quantity	Unit	Unit Cost	Subtotal
Bridge Deck (Triple Span)	9,350	SF	\$530 /SF	\$4,955,500
Retaining Wall	40,000	SF	\$100 /SF	\$4,000,000
Structural Backfill	41,000	CY	\$65/CY	\$2,665,000
Asphalt Roadway	24,000	SF	\$15/SF	\$360,000
Curb and 6-Foot Sidewalk	2,500	LF	\$100/LF	\$250,000
Mobilization and Staging	1	LS	\$400,000/EA	\$400,000
Storm Improvements	1	LS	\$200,000/EA	\$200,000
Right-of-Way Impacts	1	LS	\$100,000/EA	\$100,000
Subtotal:				\$12,930,500
Total (with 40% contingency*):				\$18,100,000

Cost Opinions will be updated to incorporate additional improvements, right-of-way needs, environmental mitigation, and construction staging as part of the draft refinement plan.

Improvement Package I – Bridge Option 2 (Single Span)

Alternative 2A: OR 38 Rail Overcrossing with Retaining Walls

Item Category	Quantity	Unit	Unit Cost	Subtotal
Bridge Deck (Single Span)	20,900	SF	\$470 /SF	\$9,823,000
Retaining Wall	28,000	SF	\$100 /SF	\$2,800,000
Structural Backfill	29,000	CY	\$65/CY	\$1,885,000
Asphalt Roadway	24,000	SF	\$15/SF	\$360,000
Curb and 6-Foot Sidewalk	2,500	LF	\$100/LF	\$250,000
Mobilization and Staging	1	LS	\$500,000/EA	\$500,000
Storm Improvements	1	LS	\$200,000/EA	\$200,000
Right-of-Way Impacts	1	LS	\$100,000/EA	\$100,000
Subtotal:				\$15,818,000
Total (with 40% contingency*):				\$22,200,000

*Contingency accounts for additional costs for design and construction engineering, additional permitting, unit cost escalation, and potential impacts yet to be identified.

Cost Opinions will be updated to incorporate additional improvements, right-of-way needs, environmental mitigation, and construction staging as part of the draft refinement plan.

Improvement Package II

Alternative 4A – Option 1: Elevated Railroad on Fill

Item Category	Quantity	Unit	Unit Cost	Subtotal
Structural Fill	64,000	CY	\$65 /CY	\$4,160,000
Retaining Wall	115,000	SF	\$50 /SF	\$5,750,000
Undercrossing Structure	5,200	SF	\$1,200 /SF	\$6,240,000
Temporary Railroad Crossings	2	EA	\$350,000 /EA	\$700,000
Railroad Signaling	1	LS	\$250,000 /EA	\$250,000
Railroad Track Construction	8,600	TF	\$250 /TF	\$2,150,000
Subtotal:				\$19,250,000
Total (with 40% contingency*):				\$27,000,000

Alternative 4A – Option 2: Elevated Railroad on Viaduct

Item Category	Quantity	Unit	Unit Cost	Subtotal
Structural Fill	8,628	CY	\$65 /CY	\$565,500
Retaining Wall	15,530	SF	\$50 /SF	\$775,000
Viaduct Structure	2,747	LF	\$12,000 /LF	\$33,600,000
Undercrossing Structure	5,200	SF	\$1,200 /SF	\$6,240,000
Temporary Railroad Crossings	2	EA	\$350,000 /EA	\$700,000
Railroad Signaling	1	LS	\$250,000 /EA	\$250,000
Railroad Track Construction	8,600	TF	\$250 /TF	\$2,150,000
Subtotal:				\$43,715,000
Total (with 40% contingency*):				\$61,000,000

*Contingency accounts for additional costs for design and construction engineering, additional permitting, unit cost escalation, and potential impacts yet to be identified.

Attachment B: Project Sheets



Purpose	This project is intended to address the transportation-related impacts associated with the Port of Coos Bay's Pacific Coast Intermodal Port project and the anticipated increases in rail activity along the Coos Bay Rail Line and in downtown Reedsport.	
Description	This project will involve installation of a grade-separated rail crossing (overcrossing) with retaining walls on OR 38, reconfiguration of the US 101/OR 38 intersection, as well as other intersections on OR 38 from US 101 to N 6th Street, and installation of pedestrian and bicycle facilities on OR 38 and the surrounding local street network as necessary to maintain connectivity for people walking and biking.	
Location	OR 38 from north of Laurel Street to east of N 6th Street.	
Roadway Characteristics	<ul style="list-style-type: none"> – Jurisdiction: ODOT – Functional Classification: Other Principal Arterial (Federal), Statewide Highway (State), Arterial (City) – Freight Route Designation: OHP Freight Route; Reduction Review Route – Existing AADT: 4,886 (Source: ODOT) – Forecast AADT: 5,600 (Source: ODOT) 	<ul style="list-style-type: none"> – Posted Speed: 25 mph – Pavement Width: 34' – Travel Lanes: 2 (12' each way) – Pedestrian Facilities: Sidewalks (6' both sides) – Bike Facilities: Bike lanes (5' both sides) – Transit Facilities: None – On-Street Parking: None
How Improvement Addresses Deficiencies	Existing/Future Need: <ul style="list-style-type: none"> – The existing at-grade rail crossing on OR 38 is controlled by a two-quadrant gate system with flashing lights and cross buck "rail crossing" warning signs. – The Port project is expected to increase rail activity along the CBRL, including the frequency, length, and speed of trains. – The increase in rail activity will increase delays at the at-grade crossing as well as motor vehicle queues on OR 38 that block side streets and create access/circulation issues in downtown Reedsport. 	With Improvement: <ul style="list-style-type: none"> – Addresses delays and access/circulation issues. – Addresses increased train activity issues. – Addresses queuing-related impacts to upstream and downstream cross-streets on OR 38. – Partially addresses queuing-related impacts to upstream and downstream cross-streets on Winchester Avenue. – Addresses noise-related issues with increased train activity at OR 38 by eliminating the need for train horn warnings at the crossing.
Additional Considerations	Further refinements are needed to minimize potential right-of-way and/or environmental impacts, address visual impacts associated with the vertical elements of the overcrossing structures, and identify local roadway and driveway tie-ins to the modified roadway. ODOT should also consider installing a multi-use path on the south side of OR 38 from Laurel Avenue to Juniper Avenue.	
Cost Opinions	\$34,215,000 (assumes retaining walls, embankment support, and bridges; 39,415,000 (assumes viaduct between east and west Railroad Avenue)	
Implementation	Implementation of this project will require closing OR 38 and re-routing traffic along Winchester Avenue during construction. Winchester Avenue will likely need to be upgraded before construction to accommodate the increase in traffic, including heavy vehicles.	

AADT = annual average daily traffic; CBRL = Coos Bay Rail Line; ODOT = Oregon Department of Transportation.

Reedsport Railroad Crossing Study (RRCS-1)
Four-Quadrant Gated Rail Crossing on Winchester Avenue

City of Reedsport
Transportation System Plan



Purpose	This project will improve the safety of the existing at-grade rail crossing on Winchester Avenue as well as support implementation of a quiet zone through downtown Reedsport.	
Description	This project will provide a four-quadrant gated rail crossing on Winchester Avenue. The crossing would include two gate arms and flashers on both sides of the rail line and in both directions. The crossing would also include gate arms and flashers across the pedestrian facilities (sidewalks). This type of crossing prevents motorists from driving around the lowered gates. With this type of crossing, the entry gates will close before the exit gates to allow motorists to clear the rail line. The gates also lower long before the train arrives.	
Location	Winchester Avenue at-grade rail crossing.	
Roadway Characteristics	<ul style="list-style-type: none"> – Jurisdiction: City of Reedsport – Functional Classification: Rural Major Collector (Federal), Arterial (City) – Freight Route Designation: None – Existing AADT: 2,111 (Source: ODOT) – Forecast AADT: NA 	<ul style="list-style-type: none"> – Posted Speed: 25 mph – Pavement Width: 40' – Travel Lanes: 2 (12' each way) – Pedestrian Facilities: Sidewalks (5' both sides) – Bike Facilities: None – Transit Facilities: None – On-Street Parking: (8' both sides)
How Improvement Addresses Deficiencies	Existing/Future Need: <ul style="list-style-type: none"> – The existing at-grade rail crossing on Winchester Avenue is controlled by a two-quadrant gate system with flashing lights and cross buck "rail crossing" warning signs. – The Port project is expected to increase rail activity along the CBRL, including the frequency, length, and speed of trains. – The increase in rail activity will increase delays at the at-grade crossing (OR 38 and Winchester Avenue). 	With Improvement: <ul style="list-style-type: none"> – Addresses noise-related Issues with train activity at Winchester Avenue by eliminating the need for train horn warnings at the crossing. – Feasible to construct with minimal to potential zero right-of-way or environmental impacts. – Economically feasible at a magnitude cost of \$285,000. – Requires grade-separated improvements on OR 38 to meet all identified needs.
Additional Considerations	The City should work with ODOT to install a dynamic train activity warning sign on US 101, south of Winchester Avenue, to alert northbound motorists that a train is approaching or present at the at-grade rail crossing on Winchester Avenue allowing them to re-route to OR 38.	
Cost Opinions	\$335,000	
Implementation	This project may be implemented in tandem with Railroad Crossing Study-1: OR 38 Overcrossing with Retaining Walls.	

AADT = annual average daily traffic; CBRL = Coos Bay Rail Line; ODOT = Oregon Department of Transportation.



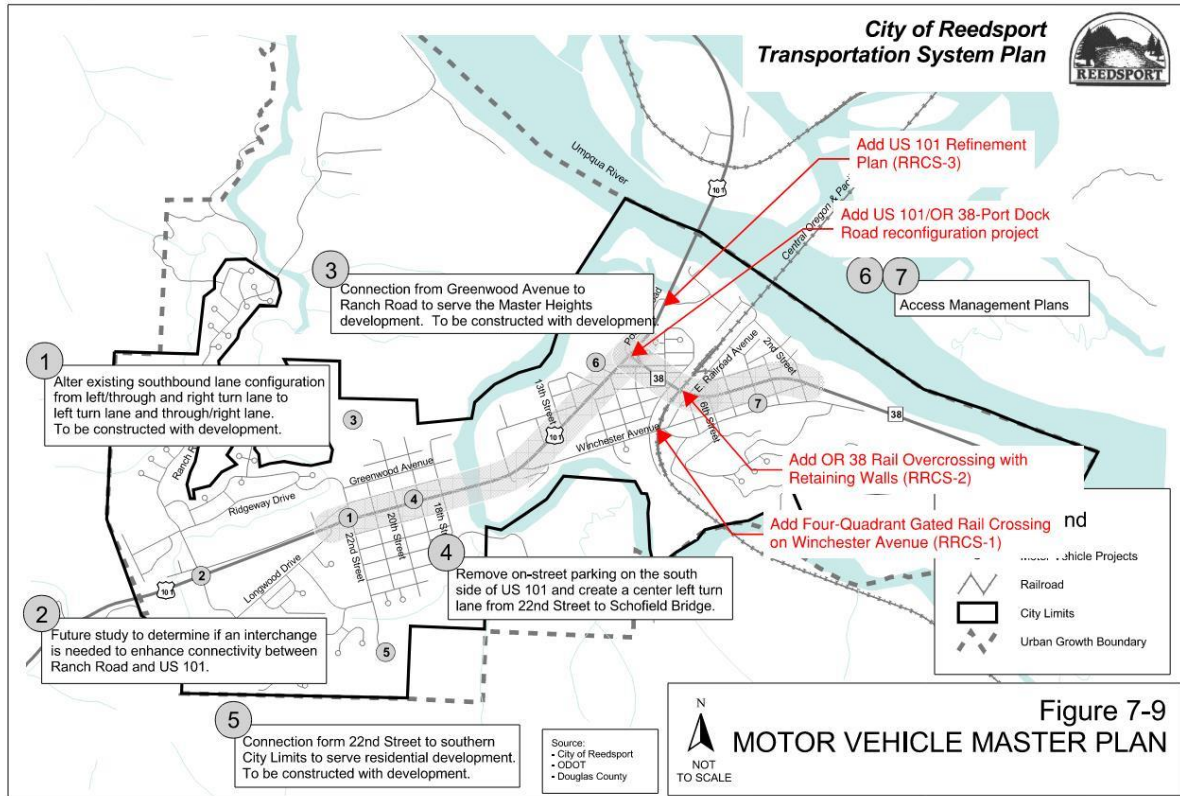
Purpose	This project will provide further evaluation of intersection improvements along US 101 from the Umpqua River to Scholfield Creek and access management improvements along OR 38 from Laurel Avenue to US 101.	
Description	The project will involve a refinement plan for US 101 from the Umpqua River to Scholfield Creek. The study should include, at a minimum, an evaluation of potential modifications to the US 101/OR 38-Port Dock Road intersection, including additional lanes at the intersection to provide additional capacity and future signal timing and phasing flexibility.	
Location	US 101 from Umpqua River to Scholfield Creek and OR 38 from Laurel Avenue to US 101	
Roadway Characteristics	<ul style="list-style-type: none"> – Jurisdiction: ODOT – Functional Classification: Other Principal Arterial (Federal), Statewide Highway (State), Arterial (City) – Freight Route Designation: OHP Freight Route; Reduction Review Route – Existing AADT: 13,926 (Source: ODOT) – Forecast AADT: 13,000 (Source: ODOT) 	<ul style="list-style-type: none"> – Posted Speed: 25 mph – Pavement Width: 71' – Travel Lanes: 5 (12' travel lane, 12' median) – Ped Facilities: Sidewalks (5' east side, 6' west) – Bike Facilities: Bike lanes (5' east side, 6' west) – Transit Facilities: Yes – On-Street Parking: None
How Improvement Addresses Deficiencies	Existing/Future Need: <ul style="list-style-type: none"> – The US 101/OR 38-Port Dock Road intersection currently experiences congestion during the summer peak weekend and is anticipated to worsen over time. – The westbound left/through queue on OR 38 is also projected to extend past the right-turn slip lane at the west approach. – There are multiple access points along OR 38 from Laurel Avenue to US 101 	With Project: <ul style="list-style-type: none"> – Further evaluation of intersection operations and safety at the US 101/OR 38-Port Dock Road intersection and identification of preferred improvements for implementation. – Further evaluation of access management opportunities along OR 38 and identification of a preferred strategy for implementation.
Additional Considerations	None	
Cost Opinions	\$150,000	
Implementation	This project may be implemented at any time.	

AADT = annual average daily traffic; ODOT = Oregon Department of Transportation.



Purpose	This project is needed to maintain pedestrian and bicycle connectivity between areas north and south of the Coos Bay Rail Line with implementation of the OR 38 rail overcrossing.	
Description	This project will involve installation of a multi-use path north of OR 38 and between E and W Railroad Avenues. The multi-use path will follow the former Greenwood Avenue right-of-way and utilize the existing northerly OR 38 rail undercrossing.	
Location	The multi-use path will be located north of OR 38 and between E and W Railroad Avenues.	
Roadway Characteristics	<ul style="list-style-type: none"> – Jurisdiction: N/A – Functional Classification: N/A – Freight Route Designation: N/A – Existing AADT: 0 – Forecast AADT: 0 	<ul style="list-style-type: none"> – Posted Speed: N/A – Pavement Width: 0' – Travel Lanes: 0 – Ped Facilities: None – Bike Facilities: None – Transit Facilities: None – On-Street Parking: None
How Improvement Addresses Deficiencies	Existing/Future Need: <ul style="list-style-type: none"> – Currently, pedestrians and bicyclists may use OR 38 to travel between E and W Railroad Avenues and between areas north and south of the Coos Bay Rail Line – Implementation of the OR 38 rail overcrossing will grade-separate OR 38 and require pedestrians and bicyclists traveling between areas north and south to travel up and over the overcrossing. 	With Project: <ul style="list-style-type: none"> – The Multi-use path will maintain pedestrian and bicycle connectivity between E and W Railroad Avenue and between areas north and south of the Coos Bay Rail Line.
Additional Considerations	The former Greenwood Avenue right-of way was abandoned by the City and the rail crossing was closed. Implementation of the project would require acquiring the right-of-way and gaining approval from the rail line to install the crossing.	
Cost Opinions	\$85,000	
Implementation	This project may be implemented at any time.	

AADT = annual average daily traffic; ODOT = Oregon Department of Transportation.



The motor vehicle projects shown in Figure 7-9 (above) should be adopted along with the rail crossing refinement plan and incorporated into the next TSP update. In addition, cost estimates for all motor vehicle projects should be developed along with the future TSP update.

Attachment C: Draft Environmental Prospectus Sheets



SHOW SUMMARY

PRELIM. NEPA CLASS

CE

ODOT ENVIRONMENTAL PROSPECTUS

PROJECT NAME Reedsport Rail Crossing Study and Refinement Plan		REGION 3	KEY NUMBER	FEDERAL AID NUMBER	
CITY Reedsport	COUNTY Douglas	FHWA NEXUS		PROJECT SPONSOR ODOT	
HIGHWAY NAME OR38				BEGIN MP 0.21	END MP 0.21
LATITUDE 43.701811	LONGITUDE -124.101076	TOWNSHIP 21S	RANGE 12W	SECTION 34, 35	
PROJECT DESCRIPTION (FIELD WILL EXPAND AS YOU TYPE. CLICK TAB TO SEE TEXT IN EXPANDED FIELD.) The development of the Port of Coos Bay Pacific Coast Intermodal Port has led to increased train activity through the City of Reedsport. To address the City's transportation system needs, several alternatives have been identified to mitigate impacts associated with increased rail activity. This Environmental Prospectus addresses the "Refined Improvement Package I," which consists of four elements: Alternative 1C (four-quadrant gated rail crossing on Winchester Avenue), Alternative 1C1 (US101 northbound variable message sign [VMS] for train crossings at Winchester Avenue), Alternative 2A1 (OR38 rail overcrossing with retaining walls), and Alternative 5B (OR38/US101 east-west left turn lanes).					

Checklist questions marked with an asterisk (*) indicate that the question is related to the qualifying thresholds ("kickouts") identified in the 2015 PCE Agreement.

Estimated Right of Way Impacts

Right of Way

1. * Will the project involve temporary or permanent acquisition of right-of-way?	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown
2. * Will the project result in the temporary or permanent displacement of persons or businesses?	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Unknown

Railroads

3. Will the project involve work on or adjacent to railroad-owned property?	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown
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Utilities

4. Will the project involve substantial impact to or relocation of existing reimbursable utilities that could create a disruption to service or additional environmental impacts??	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Unknown
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RIGHT OF WAY IMPACTS COMMENTS (FIELD WILL EXPAND AS YOU TYPE. CLICK TAB TO SEE TEXT IN EXPANDED FIELD.)

The Project is on and immediately adjacent to the Coos Bay Rail Line. Temporary construction easements and permanent acquisition of right-of-way is anticipated.

Estimated Traffic/Transportation Impacts

5. What are the current and future ADT volumes for the project?	CURRENT ADT see below	FUTURE ADT see below	<input type="radio"/> Unknown <input type="radio"/> N/A
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TRAFFIC/TRANSPORTATION COMMENTS (FIELD WILL EXPAND AS YOU TYPE. CLICK TAB TO SEE TEXT IN EXPANDED FIELD.)

OR38 - current: 4,973; future: 5,600
Winchester Ave - current: 2,231; future: unknown

Estimated Land Use Impacts

6. Is the project outside of an Urban Growth Boundary?	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> Partially
7. If the project is outside the UGB, is it expected to require new right-of-way?	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> N/A
8. If the project is outside the UGB, is the project allowed, or conditionally allowed, by the rules for Transportation Planning on Rural Lands (OAR 660-012-0065)?	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> N/A
9. Region Planner's opinion that the project conforms with:	
a. Transportation Planning Rule	<input checked="" type="radio"/> Yes <input type="radio"/> No
b. * Statewide Planning Goals	<input checked="" type="radio"/> Yes <input type="radio"/> No
c. Comprehensive Plan and/or Transportation System Improvement Plan (city, county or both)	<input checked="" type="radio"/> Yes <input type="radio"/> No
10. Is the project located within the Oregon Coastal Zone?	<input checked="" type="radio"/> Yes <input type="radio"/> No
11. Will areas of Forest or Exclusive Farm Use (EFU), or Open Space Reserve zoning be impacted by the project?	<input type="radio"/> Yes <input checked="" type="radio"/> No

12. Will the project result in the conversion of prime farmland, unique farmland, or land of statewide or local importance by the Farmland Protection Policy Act?	<input type="radio"/> Yes <input checked="" type="radio"/> No
13. What are the general uses of land adjacent to the project area?	<input checked="" type="checkbox"/> Residential <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Farm/Forest <input checked="" type="checkbox"/> Public <input checked="" type="checkbox"/> Other (explain below)
LAND USE IMPACTS COMMENTS (FIELD WILL EXPAND AS YOU TYPE. CLICK TAB TO SEE TEXT IN EXPANDED FIELD.) Land uses adjacent to the project area include commercial, residential, public, and industrial uses. No EFU or Open Space Reserve zoning would be impacted. The project is within the UGB of Reedsport and is within the Oregon Coastal Zone.	

Estimated Socioeconomic Impacts

14. * Will the project involve displacements of key businesses, business districts, commercial/industrial areas, or public facilities?	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> Unknown												
15. * Will the project involve temporary or permanent changes to travel patterns, access to goods/services, or parking that appear important to business, business districts, commercial/industrial areas, community events, or neighborhoods? (Explain below)	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> Unknown												
16. Will the project divide or disrupt an established community, or affect neighborhood character or stability?	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> Unknown												
17. Will the project temporarily or permanently affect emergency and/or public services?	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Unknown												
18. Does visual inspection and/or information sources such as census data indicate the presence of low-income or minority populations within or near the project area?	<input type="radio"/> Yes <input checked="" type="radio"/> No												
19. Does visual inspection and/or other information sources indicate the presence of elderly, handicapped, or transit-dependent populations?	<input type="radio"/> Yes <input checked="" type="radio"/> No												
SOCIOECONOMIC IMPACTS COMMENTS (FIELD WILL EXPAND AS YOU TYPE. CLICK TAB TO SEE TEXT IN EXPANDED FIELD.) The study areas consist of one census blockgroup. According to census data from the EPA, there are no environmental justice populations (e.g., minority, low income, elderly populations) in the study area (i.e., population values exceeding 150% of Douglas County population values). However, census data does indicate there is a service gap in transportation access for the blockgroup and in Douglas County. <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;">Blockgroup 410190100002</td> <td style="width: 70%;">Douglas County</td> </tr> <tr> <td>People of color: 15%</td> <td>14%</td> </tr> <tr> <td>Low income: 51%</td> <td>35%</td> </tr> <tr> <td>Over age 64: 35%</td> <td>25%</td> </tr> <tr> <td>Persons with disabilities: 19.2%</td> <td>20.6%</td> </tr> <tr> <td>Transportation access service gap: Yes</td> <td>Yes</td> </tr> </table> It is unknown at this time how construction would occur; therefore impacts to travel patterns, access to goods/services, emergency and public services are unknown. The project will likely not have any disproportionate adverse effects on minority populations.		Blockgroup 410190100002	Douglas County	People of color: 15%	14%	Low income: 51%	35%	Over age 64: 35%	25%	Persons with disabilities: 19.2%	20.6%	Transportation access service gap: Yes	Yes
Blockgroup 410190100002	Douglas County												
People of color: 15%	14%												
Low income: 51%	35%												
Over age 64: 35%	25%												
Persons with disabilities: 19.2%	20.6%												
Transportation access service gap: Yes	Yes												

Estimated Water Resources and Wetlands Impacts

Stormwater

20. Will the project trigger the need for stormwater treatment?	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown
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Waters of the U.S./State

21. Are there waters of the U.S. or State within the project area? (If no, skip to Question 30)	<input checked="" type="radio"/> Yes <input type="radio"/> No
22. * Is the project within a FEMA 100-year flood plain?	<input checked="" type="radio"/> Yes <input type="radio"/> No
23. * Is the project within a FEMA regulated floodway?	<input type="radio"/> Yes <input checked="" type="radio"/> No
24. Will the project occur in or over publically owned submerged or submersible lands?	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> Unknown
25. * Will the project require a new USCG Bridge Permit?	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> Unknown
26. Will the project require modification to an existing USCG Bridge Permit or Temporary Rule Change?	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> Unknown
27. Will there be any fill or removal from waters of the U.S. or state?	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Unknown
28. Will fill or removal take place in waters of the State listed by DSL as Essential Salmonid Habitat?	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A

29. Will fill or removal take place in waters of the State that are Aquatic Resources of Special Concern?	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A
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Water Supply Wells

30. Will any active wells be impacted by the project?	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Unknown
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Wetlands

31. Are wetlands potentially present in the project area?	<input checked="" type="radio"/> Yes <input type="radio"/> No
32. Do soil surveys indicate hydric soils in the project area?	<input checked="" type="radio"/> Yes <input type="radio"/> No
33. Is wetland vegetation evident from visual inspection?	<input checked="" type="radio"/> Yes <input type="radio"/> No
34. Will the project fill or remove material from wetlands?	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Unknown
35. * Will the project require an Individual Permit, Nationwide Permit, General Authorization or General Permit?	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown

WATER RESOURCES AND WETLANDS IMPACTS COMMENTS (FIELD WILL EXPAND AS YOU TYPE. CLICK TAB TO SEE TEXT IN EXPANDED FIELD.)
 Several wetlands are mapped parallel to the railroad near Winchester Avenue and OR38. A wetlands and waters delineation would be required to verify the presence of wetlands and delineate the boundaries. It is likely that wetlands would be impacted with the construction of Improvements Package I, which would require permits from USACE and/or DSL. No streams or other water bodies appear to be present in the project area. The project area is within a FEMA Flood Hazard Zone of Area with Reduced Flood Risk due to Levee.

Estimated Biological Resources Impacts

Threatened, Endangered and/or Sensitive Species

36. Does the project have the potential to affect migratory birds and/or bats?	<input checked="" type="radio"/> Yes <input type="radio"/> No
37. Are there USFWS T&E species, Proposed species, or critical habitat in the project's area of potential impact?	<input type="radio"/> Yes <input checked="" type="radio"/> No
38. Are there NMFS T&E species, Proposed species, or critical habitat in the project's area of potential impact?	<input type="radio"/> Yes <input checked="" type="radio"/> No
39. Are there State T&E or Proposed species present that are not federally listed?	<input type="radio"/> Yes <input checked="" type="radio"/> No
40. Is the project located on or adjacent to BLM or USFS land?	<input type="radio"/> Yes <input checked="" type="radio"/> No
41. * Will the project require an individual project-level formal consultation under Section 7 of the Endangered Species Act?	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> Unknown

In-Water Work

42. Are any streams or water bodies potentially impacted by the project?	<input type="radio"/> Yes <input checked="" type="radio"/> No
43. Will the project require in-water work?	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> Unknown

Fish Passage

44. Will the project trigger the Oregon State Fish Passage Statute (ORS 509.585)?	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> Unknown
45. Are there any culverts within the project limits that are on the ODFW priority list for replacement/retrofit?	<input type="radio"/> Yes <input checked="" type="radio"/> No

Wildlife Passage

46. Is the project within a wildlife collision hot spot, priority wildlife linkage area, or an area otherwise known to be a barrier to wildlife passage?	<input checked="" type="radio"/> Yes <input type="radio"/> No
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Noxious Weeds

47. Are there known noxious weed populations in the project area?	<input type="radio"/> Yes <input checked="" type="radio"/> No
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BIOLOGICAL RESOURCES IMPACTS COMMENTS (FIELD WILL EXPAND AS YOU TYPE. CLICK TAB TO SEE TEXT IN EXPANDED FIELD.)
 A review of the Information for Planning and Consultation resulted in the following listed species with the potential to occur in Douglas County: pacific marten (*Martes caurina*; threatened), marbled murrelet (*Brachyramphus marmoratus*; threatened), northern spotted owl (*Strix occidentalis caurina*; threatened), western snowy plover (*Charadrius nivosus nivosus*; threatened), monarch butterfly (*Danaus plexippus*; candidate). A field survey would be required to determine presence/absence of listed species or their suitable habitat. There is no critical habitat within the project area, but there is critical habitat for marbled murrelet and northern spotted owl approximately 4 miles east of the project area. It is likely that the project would result in no effect to terrestrial ESA-listed species. Downstream stormwater impacts may affect threatened and endangered fish species protected under the National Marine Fisheries Service. Impacts to aquatic ESA-listed species would likely be addressed with the Federal Aid Highway Program (FAHP) Programmatic.
 The project area is within an area with an average of 2-4 wildlife collisions per mile per year; however, the project would not

Estimated Cultural Resources Impacts

Archaeological Resources

48.	Are there known archaeological sites in the project area?	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Unknown
49.	Will the project entail disturbance of previously undisturbed ground?	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Unknown
50.	Will archaeologically sensitive areas (confluence of rivers, headlands, coves, overlooks, etc.) be affected?	<input checked="" type="radio"/> Yes <input type="radio"/> No
51.	If the project is on or adjacent to BLM or USFS land, does contact with BLM or USFS archaeologist indicate any issues?	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> N/A

Historic resources (Built)

52.	Does the SHPO historic database list any resources in the project area?	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown
53.	Will there be any impacts to known historic resources (either listed or determined eligible for listing in the National Register of Historic Places)?	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Unknown
54.	Does any city/county comprehensive plan list any buildings/items in the project area as Goal 5 resources?	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> Unknown
55.	Are any buildings in the project area thought to be 50 years old or older?	<input checked="" type="radio"/> Yes <input type="radio"/> No
56.	Are there any apparent/unique structures of potential historical interest?	<input checked="" type="radio"/> Yes <input type="radio"/> No

Section 4(f)

57.	* Could the project impact any archaeological or historic resources eligible for protection under Section 4(f) of the Department of Transportation Act?	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Unknown
<small>CULTURAL RESOURCES IMPACTS COMMENTS (FIELD WILL EXPAND AS YOU TYPE. CLICK TAB TO SEE TEXT IN EXPANDED FIELD.)</small> It is unknown if archaeological sites are within the project area. An archaeological survey and baseline report would be required for compliance with Section 106. The SHPO historic database shows several potential historic resources east of the railroad along Fir Avenue. Any structure over 45 years in age (including the railroad itself) would need to be evaluated for eligibility for listing in the National Register of Historic Places. A historic survey and baseline report would be required for Section 106 compliance.		

Estimated Parks / Recreation and Visual Impacts

Parks/Recreation Areas

58.	* Could the project impact any parks, recreation areas, or wildlife/waterfowl refuges eligible for protection under Section 4(f) of the Department of Transportation Act?	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown
59.	Could the project cause a Section 6(f) conversion or temporary occupancy of park or recreation area property encumbered by Land and Water Conservation funds?	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Unknown

Wild and Scenic Rivers

60.	Is the project area within ¼ mile of the bank of an Oregon Scenic Waterway?	<input type="radio"/> Yes <input checked="" type="radio"/> No
61.	* Will the project affect waterways designated as National Wild and Scenic Rivers?	<input type="radio"/> Yes <input checked="" type="radio"/> No

Visual

62.	Will the project involve any potential triggers for visual impact analysis?	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Unknown
<small>PARKS / RECREATION AND VISUAL IMPACTS COMMENTS (FIELD WILL EXPAND AS YOU TYPE. CLICK TAB TO SEE TEXT IN EXPANDED FIELD.)</small> There are two Section 4(f) resources near the project area: Hahn Park and Triangle Park (also known as Roy Henderson Park). Triangle/Roy Henderson Park is also a Section 6(f) resource. If impacts to either park cannot be avoided, Section 4(f)/Section 6(f) documentation and coordination would be required.		

Estimated Air Quality and Noise Impacts

Air Quality

63.	Is the project in an air quality nonattainment or maintenance area?	<input type="radio"/> Yes <input checked="" type="radio"/> No
64.	Is the project type exempt from conformity or Mobile Source Air Toxic analysis (MSAT)? (If yes, skip to Question 69)	<input checked="" type="radio"/> Yes <input type="radio"/> No

Noise

70.	Are noise-sensitive land-uses present within 500 feet of the project roadway?	<input checked="" type="radio"/> Yes <input type="radio"/> No
71.	Does the project require a noise analysis?	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown

72.	Does the project qualify for a screening analysis?	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Unknown <input type="radio"/> N/A
<small>AIR QUALITY AND NOISE IMPACTS COMMENTS (FIELD WILL EXPAND AS YOU TYPE. CLICK TAB TO SEE TEXT IN EXPANDED FIELD.)</small> The project area is not within an air quality maintenance or nonattainment area. The project type is exempt from conformity/MSAT analysis (railroad/highway crossing). Noise-sensitive land uses are within 500 feet of the project roadway, and the project would require a noise analysis as a railroad overcrossing would result in substantial vertical alteration (and is therefore a Type I project).		

Estimated Hazardous Materials / Waste Impacts

73.	Does the project involve right-of-way acquisition or subsurface disturbance (e.g., excavation or drilling)? (If no, skip to Question 76)	<input checked="" type="radio"/> Yes <input type="radio"/> No
74.	Does a search of DEQ databases (LUST, UST or ECSI) indicate the presence of any potentially contaminated sites within or adjacent to the project area?	<input checked="" type="radio"/> Yes <input type="radio"/> No
75.	Does a search of the Oregon Fire Marshal's Hazardous Materials Incident database indicate any hazardous materials releases within the project area?	<input checked="" type="radio"/> Yes <input type="radio"/> No
76.	Are there known current or historical land uses within or adjacent to the project area that could possibly have involved the use or storage of hazardous materials?	<input checked="" type="radio"/> Yes <input type="radio"/> No
77.	Will the project include any structure (including buildings or bridges) demolition, repair, or removal of potentially hazardous materials (e.g., lighting or electrical equipment, hydraulic equipment, bridge mechanics, striping paint, bridge/barrier paint, treated timbers, etc.)?	<input checked="" type="radio"/> Yes <input type="radio"/> No
<small>HAZARDOUS MATERIALS / WASTE IMPACTS COMMENTS (FIELD WILL EXPAND AS YOU TYPE. CLICK TAB TO SEE TEXT IN EXPANDED FIELD.)</small> There are LUSTs on both sides of Fir Avenue. There is also a LUST and an UST near Laurel Avenue, west of US101. The fire marshal database indicates one spill of propane in October of 1996 at the intersection of US101 and OR38. The railroad itself may have transported hazardous materials. A hazardous materials corridor study would be required.		

Estimated Geological / Geotechnical Impacts

Geological Resources/Geotechnical

78.	Will an ODOT owned/permitted material source be offered for this project?	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Unknown
79.	Will ODOT owned/permitted disposal sites be offered for this project?	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Unknown
80.	If an ODOT owned/permitted disposal or material source site is being offered, has it been previously cleared to federal environmental standards?	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> N/A
81.	Is drilling/subsurface exploration anticipated?	<input checked="" type="radio"/> Yes <input type="radio"/> No
<small>GEOLOGICAL / GEOTECHNICAL IMPACTS COMMENTS (FIELD WILL EXPAND AS YOU TYPE. CLICK TAB TO SEE TEXT IN EXPANDED FIELD.)</small> Drilling would likely occur to inform the design of the retaining walls for the overcrossing.		

Stakeholder Concerns / Public Involvement

<small>STAKEHOLDER CONCERNS / PUBLIC INVOLVEMENT COMMENTS (FIELD WILL EXPAND AS YOU TYPE. CLICK TAB TO SEE TEXT IN EXPANDED FIELD.)</small>

Key Environmental Issues and Requirements

<small>KEY ENVIRONMENTAL ISSUES AND REQUIREMENTS COMMENTS (FIELD WILL EXPAND AS YOU TYPE. CLICK TAB TO SEE TEXT IN EXPANDED FIELD.)</small>
Potential impacts to cultural resources, parks, and wetlands.

Potentially Required Permits / Approvals / Clearances

82. Local Land Use	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown
83. Local Agency Floodplain Permit	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown
84. U.S. Corps of Engineers Section 404 and DEQ Section 401 Cert	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Unknown
85. U.S. Corps of Engineers Section 10	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> Unknown
86. DSL Removal/Fill	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Unknown
87. U.S. Corps of Engineers Section 408 (federal facilities)	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> Unknown
88. NPDES 1200-CA permit (or 1200-C permit for local agencies)	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown
89. U.S. Coast Guard New Bridge Permit	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> Unknown
90. U.S. Coast Guard Permit Modification	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> Unknown
91. U.S. Coast Guard Construction Plan Approval	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> Unknown
92. FAHP Programmatic BO	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown

93. SLOPES Programmatic BO ☐ Yes ☒ No ☐ Unknown
94. Individual Biological Opinion ☐ Yes ☒ No ☐ Unknown
95. Marine Mammal Protection Act IHA ☐ Yes ☒ No ☐ Unknown
96. ODFW Fish Passage Plan Approval ☐ Yes ☒ No ☐ Unknown
97. State Endangered Species Act ☐ Yes ☐ No ☒ Unknown
98. No Effect Memo ☒ Yes ☐ No ☐ Unknown
99. Archaeological Excavation Permit ☒ Yes ☐ No ☐ Unknown
100. Section 106 – State Historic Preservation Officer (Historic–Built) ☒ Yes ☐ No ☐ Unknown
101. Section 106 – State Historic Preservation Officer (Archaeological) ☒ Yes ☐ No ☐ Unknown
102. Section 4(f) temporary occupancy ☐ Yes ☐ No ☒ Unknown
103. Section 4(f) *de minimis* ☐ Yes ☐ No ☒ Unknown
104. Section 4(f) Programmatic ☐ Yes ☐ No ☒ Unknown
105. Section 4(f) Evaluation – Individual ☐ Yes ☐ No ☒ Unknown
106. Section 6(f) Temporary Occupancy or Conversion ☐ Yes ☐ No ☒ Unknown
107. Wild and Scenic River Section 7 Determination ☐ Yes ☒ No ☐ Unknown
108. Oregon Scenic Waterways ☐ Yes ☒ No ☐ Unknown
109. FHWA Noise ☒ Yes ☐ No ☐ Unknown
110. * Air Conformity ☐ Yes ☒ No ☐ Unknown
111. Hazardous Materials Study ☒ Yes ☐ No ☐ Unknown
112. DOGAMI Permit ☐ Yes ☒ No ☐ Unknown
113. Other (specify):

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114. Other (specify):

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115. Other (specify):

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116. Other (specify):

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117. Other (specify):

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118. Other (specify):

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Preliminary NEPA Classification

Based upon the answers and content above, please answer the following questions:

23 CFR 771.117(a) – Would the project involve any of the following effects:

119. Induce significant impacts to planned growth or land use for an area? ☐ Yes ☒ No ☐ Unknown
120. Require relocation of significant numbers of people? ☐ Yes ☒ No ☐ Unknown
121. Have a significant impact on any natural, cultural, recreational, historic or other resources? ☐ Yes ☒ No ☐ Unknown
122. Involve significant air, noise, or water quality impacts? ☐ Yes ☒ No ☐ Unknown
123. Have significant impacts on travel patterns? ☐ Yes ☒ No ☐ Unknown

23 CFR 771.117(b) – Would the project involve unusual circumstances such as:

124. Significant environmental impacts? ☐ Yes ☒ No ☐ Unknown
125. Substantial controversy on environmental grounds? ☐ Yes ☒ No ☐ Unknown
126. Significant impacts to properties protected by Section 4(f) of the DOT Act or Section 106 of the National Historic Preservation Act? ☐ Yes ☒ No ☐ Unknown
127. Inconsistencies with any federal, state, or local law, requirements or administrative determination relating to the environmental aspects of the project? ☐ Yes ☒ No ☐ Unknown

Based upon questions 119-127 and the Environmental Prospectus responses, identify the project's preliminary NEPA class of action:

- ☐ Programmatic Categorical Exclusion (PCE)
- ☒ Documented Categorical Exclusion (CE)
- ☐ Environmental Assessment (EA)
- ☐ Environmental Impact Statement (EIS)

For preliminary PCEs and CEs, identify the up to three category(ies) of project work from the activities listed in CFR 771.117(c) and CFR771.117(d):

Show Categories

APPLICABLE CATEGORY
(c)(28)

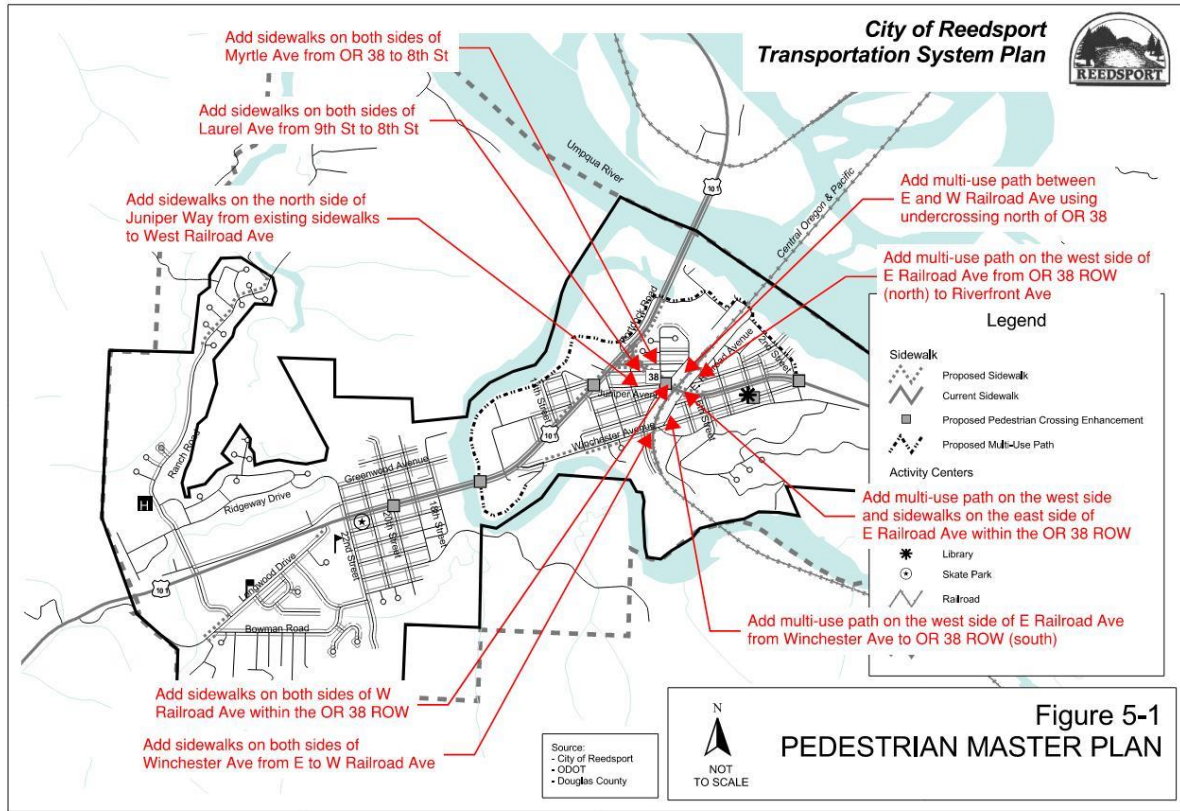
APPLICABLE CATEGORY

APPLICABLE CATEGORY

Signatures
Digital signature/date are required from the preparer and/or ODOT REC.

PREPARER NAME AND TITLE	ODOT REC NAME AND TITLE
PREPARER DIGITAL SIGNATURE AND DATE	ODOT REC DIGITAL SIGNATURE AND DATE

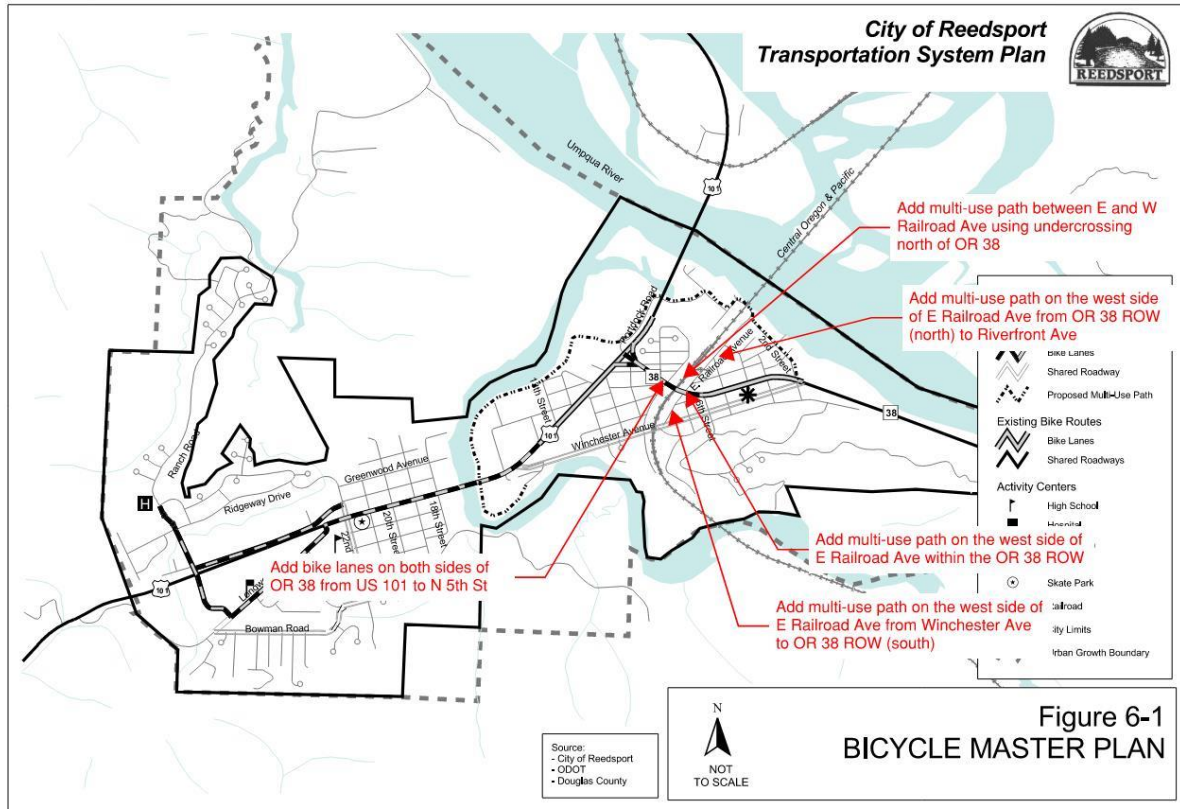
Attachment D: TSP Pedestrian and Bicycle Master Plan Mark-ups



The pedestrian projects shown in Figure 5-1 (above) should be adopted along with the rail crossing refinement plan and incorporated into the next TSP update. In addition, cost estimates for all pedestrian projects should be developed along with the future TSP update. Table D1 summarizes the projects to be incorporated into the pedestrian master plan.

Table D1. Pedestrian Master Plan Projects

Location	Side	From	To	Estimated Cost (\$1,000)
Complete Sidewalks				
Myrtle Avenue	Both	OR 38	8 th Street	\$120,000
Laurel Avenue	Both	9 th Street	8 th Street	\$155,000
Juniper Way from to	North	Existing Sidewalks	W Railroad Avenue	\$15,000
W Railroad Avenue	Both	Juniper Avenue	Laurel Avenue	\$120,000
E Railroad Avenue	East	Fir Avenue	Greenwood Avenue	\$80,000
Multi-Use Path				
E Railroad Avenue	West	Winchester Ave	Fir Avenue	\$110,000
E Railroad Avenue	West	Fir Avenue	Greenwood Avenue	\$110,000
E Railroad Avenue	West	Greenwood Avenue	Riverfront Way	\$395,000
Greenwood Avenue	N/A	E Railroad Avenue	W Railroad Avenue	\$85,000



The bicycle projects shown in Figure 6-1 (above) should be adopted along with the rail plan and incorporated into the next TSP update. In addition, cost estimates for all bicycle projects should be developed along with the future TSP update. Table D2 summarizes the projects to be incorporated into the bicycle master plan.

Table D2. Bicycle Master Plan Projects

Location	Side	From	To	Estimated Cost (\$1,000)
Multi-Use Path				
E Railroad Avenue	West	Winchester Ave	Fir Avenue	Cost accounted for in Pedestrian Master Plan
E Railroad Avenue	West	Fir Avenue	Greenwood Avenue	Cost accounted for in Pedestrian Master Plan
E Railroad Avenue	West	Greenwood Avenue	Riverfront Way	Cost accounted for in Pedestrian Master Plan
Greenwood Avenue	N/A	E Railroad Avenue	W Railroad Avenue	Cost accounted for in Pedestrian Master Plan