



Transportation Project Sponsors

1. Project Sponsor (must be a public agency)–REQUIRED

Organization Name: City of Sherwood	
Contact Person Name: Michelle Miller	Title: Associate Planner
Street Address: 22560 SW Pine Street	Phone: (503) 625-4242
City, State Zip: Sherwood, OR 97140	
E-mail: millerm@sherwoodoregon.gov	

2. Co-Sponsor(s)

List the organization names for any Co-Sponsors of this project:

Transportation Project Information

3. Project Name–REQUIRED

Project Name: Cedar Creek Trail and Wildlife Undercrossing at Highway 99W in Sherwood

4. Project Budget Summary - This table will automatically fill in.

	Project Funds	% of Project Costs
Total Costs	\$8,158,574	
Non-Eligible Costs		
Total Transportation Project Cost	\$8,158,574	100%
Matching Funds	\$837,886	10.27%
Requested Funds	\$7,320,688	89.73%

5. Provide a brief summary of the project (max 800 characters)–REQUIRED:

Design and construct an undercrossing consisting of a conspan structure for multimodal trail, Cedar Creek and wildlife passage at the Cedar Creek and Highway 99W intersection to facilitate a seamless connection between two sections of Sherwood bisected by Highway 99W.

6. Is this project a continuation of a previous Statewide Transportation Improvement Program (STIP) Project?

- Yes No



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If yes, describe the status of the previous STIP project.

7. Does this project complement or enhance an existing or planned STIP project? For example, does it provide a more complete solution for an existing project or is it intended to work with another planned project, including a "Fix-It" STIP project?

- Yes No

If yes, describe the relationship of this proposed project to the other, including planned timing of both projects.

This will be an improvement to the Cedar Creek Trail project, a 2013-2015 RFF funded multi-modal trail that is part of the regional trail network. The undercrossing will provide a direct and safe connection at Highway 99W, rather than the at grade crossing at 99W and SW Meinecke, over 1,000 feet away. The Cedar Creek Trail will be completed in 2015.

8. Project Problem Statement–REQUIRED

Provide a paragraph explaining the problem or transportation need the project will address:

Sherwood is bisected by Highway 99W with four limited intersections and sidewalk gaps along 99W. Pedestrians and bicyclists are greatly hindered by the lack of connections and are unable to easily utilize multi-modal transportation options. The City received a RFF grant to design and construct the Cedar Creek Trail which provides the connection through the center of the City, following Cedar Creek and intersecting with Highway 99W between two intersections. With the RFF grant and local matching funds, the City will construct two trail segments and an at grade crossing at the SW Meinecke intersections, 1,150 ft. south of the intersection, but still an indirect connection. Cedar Creek has a long culvert underneath 99W and as a result a limited fish and wildlife passage barrier.

9. Transportation Project Location–REQUIRED

City: <input style="width: 90%;" type="text" value="Sherwood"/>	County: <input style="width: 90%;" type="text" value="Washington"/>
MPO: <input style="width: 90%;" type="text" value="Portland-Metro"/>	Special District: <input style="width: 90%;" type="text" value="1"/>

Project Location Detail: (include as appropriate: road and milepost range, rail line and milepost range, GPS coordinates, bus route and stops, bike path or multipurpose trail locations, sidewalk locations, or other location detail)

State Highway 99W Station 428+00 to 425+00 in Sherwood

10. Maps and Plans (Project Site and Vicinity Maps are required for all construction projects. Include other applicable maps or drawings, if available.)



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<input checked="" type="radio"/> Attached/Upload <input type="radio"/> Not Applicable	Vicinity Map (8.5x11) (may be inset on site map page)
<input type="radio"/> Attached/Upload <input checked="" type="radio"/> Not Applicable	Site map/air photo (showing existing site) (8.5x11)
<input checked="" type="radio"/> Attached/Upload <input type="radio"/> Not Applicable	Site map (showing proposed construction area clearly marked) (8.5x11)
<input checked="" type="radio"/> Attached/Upload <input type="radio"/> Not Applicable	Typical Cross Section Drawings (showing proposed construction funded by the requested funds clearly marked) (8.5x11)

11. Project Description–REQUIRED

Clearly describe the work to be funded and describe what will be built, any services that will be provided, what equipment will be purchased, or project planning or environmental document efforts that will be paid for with Requested Funds. Include whether [Practical Design](#) considerations have been applied to the proposed project. Identify if the project can be completed in phases, and whether the project or phase will provide a complete, useful product or service. (Maximum 4000 characters)

This project will provide preliminary engineering design and construction of a "conspan" structure that will replace the existing culvert located at the Cedar Creek and Highway 99W crossing in Sherwood. A conspan is a prefabricated concrete arch units with two-hinged vertical legs and variable thickness haunches placed on reinforced concrete strip footings. The 48 foot wide x 12 foot high conspan will be placed in multiple sections under the four lanes and median of Highway 99W. The conspan cross section will be designed to include a wildlife passage area at least four feet wide, a Cedar Creek passage and buffer, and a paved trail passage of at least 10 feet wide that will be compliant with ADA accessibility standards. This undercrossing will connect the planned Cedar Creek Trail, a multimodal regional trail through the center of Sherwood. This project will take approximately six months to design, six months to construct and be completed in one phase. The conspan segments will be put in place in with a crane that will be rented for approximately 160 days. The habitat passage areas will require careful design and plantings. Metro has agreed to provide scientific expertise for the suitable design of the habitat and fish passage for the conspan. Environmental work will be needed. Mitigation will be required through DSL and Army Corp. of Engineers permits.

12. Primary Project Mode(s)

<input type="checkbox"/> Passenger Rail	<input type="checkbox"/> Light Rail	<input type="checkbox"/> Bus/Transit
<input checked="" type="checkbox"/> Pedestrian	<input checked="" type="checkbox"/> Bike	<input type="checkbox"/> Highway/Road
<input type="checkbox"/> Other:		



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13. Project Activities

<input checked="" type="checkbox"/> Infrastructure Engineering, Design, or Construction	<input checked="" type="checkbox"/> Project Planning and Development	<input type="checkbox"/> Operations/Service Delivery
<input type="checkbox"/> Capital Equipment Purchases	<input type="checkbox"/> Transportation Demand Management	<input type="checkbox"/> Other

Timetable and Readiness Information

14. Indicate anticipated timing for the following activities, as applicable. Provide a date, if known, or year–REQUIRED.

Anticipated Dates	Activity
2016	Requested STIP Funding Year (e.g. 2016, 2017, 2018) - REQUIRED
December 2016	Bid Let Date
January 2017	Construction Contract Award
October 2017	Construction Complete
n/a	Capital Equipment Purchase
October 2017	Operations/Service Begin
	Other Major Milestone:
Jan 2018	Project Completion/End of Activities funded through this request - REQUIRED

15. Is the proposed project consistent with adopted plans? (Plans may include, for example, transportation plans, mode plans such as bike/ped or transit plans, economic development plans, comprehensive plans, corridor plans or facility plans.)–REQUIRED

- Yes No

Describe how the proposed project is consistent with adopted plans. List plans that include the project (with page numbers if possible) or describe how the project meets plan intent. If the project is not consistent, explain how and when plans will be amended to include the project.

Sherwood Transportation System Plan (2005); Tonquin Trail Master Plan (2012); Cedar Creek Feasibility Study (2009).

16. Is the proposed Transportation Project consistent with Major Improvement Policies including [OTP Strategy 1.1.4](#) and [OHP Action 1G.1](#)?–REQUIRED

- Yes No

Describe how the proposed investment is consistent with OTP Strategy 1.1 and for highway projects, OHP Action 1G.1. If the project corresponds to a later priority in these strategies, describe how higher priority solutions have already been tried or why they are not applicable or not appropriate to the location.

This project will preserve and protect the existing system by creating a multimodal option for bikes and pedestrians rather than stopping traffic at the intersections of 99W/SW Meinecke. The direct connection is centrally located within the City as well as along Highway 99W. The number of lanes are maintained and the traffic flow speed will remain at 45 mph.

Project Benefit Information

Questions 17 through 26: Describe how the proposed solution will help achieve the outcomes listed below. Describe the benefits that the proposed solution is expected to achieve and provide documentation of those benefits where available, such as summaries of data analysis or modeling results, or letters of commitment from participants or employers. Where appropriate, also include in the description whether the proposal will mitigate or prevent a negative impact to the desired outcome.

This information and information throughout the application will be used as input to the STIP decision process. It is not expected that every solution will help achieve every benefit. Different types of solutions are likely to have different kinds of benefits and no type of solution or benefit is assumed to be more important than others. Please provide a realistic description of expected benefits of the proposed solution and feel free to use N/A where the benefit or outcome listed does not apply to the proposal.

17. Benefits to State-Owned Facilities

Outcome sought: preserve public investment by maintaining efficient operation of state-owned highways and other facilities through operational improvements, local connectivity, congestion-reducing projects and activities, etc.

For example, will the solution:

- Provide an alternative to travel on state owned facilities?
- Cost less than a state facility improvement with equal benefits?
- Include local efforts to protect the investment such as an Interchange Area Management Plan?
- Plan for or contribute to development of a seamless multimodal transportation system?
- Complete or extend a critical system or modal link?

The project will provide a direct connection that will assist the trail user across Highway 99W. This direct connection will provide a safer and often quicker option than driving across 99W, reducing trips on the highway and the interference an at grade crossing will cause to the vehicle flow at intersections. It serves to connect the community with the services on either side of 99W more directly. This will likely lead to fewer short vehicle trips across congested intersections, reducing vehicle miles traveled.

18. Mobility

Outcome sought: provide mobility for all transportation system users and a balanced, efficient, cost-effective and integrated multimodal transportation system.

For example, will the solution:

- Improve or better integrate passenger or freight facilities and connections, including multimodal connections, to expedite travel and provide travel options?
- Improve or provide a critical link in the transportation system or connection between modes for travelers or goods?

The undercrossing provides critical link to connect the multimodal trail user. It also provides an integrated approach to better move the freight traffic on the roadway so as to not be hindered by pedestrians and bicyclists trying to cross at the intersections thereby disrupting traffic movement on 99W at 45 mph. The undercrossing will improve a critical trail link that will get bikes and pedestrians to cross the roadway safely and quickly. This will improve mobility for pedestrians and bicyclist using the regional trail to move through the City creating a preferred travel option.

19. Accessibility

Outcome sought: ensure appropriate access to all areas with connectivity among modes and places and enable travelers and shippers to reach and use various modes with ease.

For example, will the solution:

- Improve connections within residential areas and/or to schools, services, transit stops, activity centers and open spaces, such as by filling a gap in bicycle, pedestrian, or transit facilities?
- Improve or expand access to employers, businesses, labor sources, goods or services?
- Plan for or contribute to expanding transportation choices for all Oregonians?

Highway 99W bisects the community. There are only four intersections that provide limited at grade crossings at this time. Many of the local services are found on the southern part of the City including Sherwood High School, City Hall and Library, multiple parks and the transit routes and stops. The Tualatin River National Wildlife Refuge is located on the northern side of the highway and this access will provide a more direct way to enjoy the trail at the western entrance of the Refuge near Roy Rogers Road. An undercrossing will provide the only direct multi-modal connection to the plethora of services across this portion of the highway. The Cedar Creek Trail will be part of the regional trail and thus will serve to expand transportation choices for all Oregonians.

20. Economic Vitality

Outcome sought: expand and diversify Oregon's economy by efficiently transporting people, goods, services and information.

For example, will the solution:

- Support, preserve, or create long-term jobs and capital investment? Will it do so in an economically distressed area?
- Enhance opportunities for tourism and recreation?
- Plan for or contribute to linking workers to jobs?

The Cedar Creek Trail itself will greatly enhance recreational and health opportunities and link the entire community with a multimodal travel option through the center of the community. By creating an undercrossing, this travel corridor will be a direct route that will likely become the preferred travel option for those seeking to recreate at our local parks and get to services within Old Town and our new employment area, the Tonquin Employment Area, future home to well over 1200 jobs.

21. Environmental Stewardship

Outcome sought: provide an environmentally responsible transportation system that does not compromise the ability of future generations to meet their needs and encourage conservation of natural resources.

For example, will the solution:

- Use design, materials or techniques that will more than meet minimum environmental requirements or mitigate an existing environmental problem in the area?
- Help meet air or water quality, energy or natural resource conservation, greenhouse gas reduction or similar goals?
- Plan for or contribute to the use of sustainable energy sources for transportation?

The Cedar Creek stream corridor connects important regional habitat areas including Parret Mountain to the south and the Tualatin River National Wildlife Refuge to the north. The existing culvert at Highway 99W is a barrier to direct passage of fish and wildlife hindering the overall functionality of the Cedar Creek watershed. Removing the culvert barrier will improve the watershed functionality dramatically. According to StreamNet on-line, there are wintering and migration habitat for winter steelhead existing in the stream corridor and are listed as threatened under the ESA. ODFW indicates that steelhead, juvenile coho, and cutthroat trout have been identified in downstream reaches of Cedar Creek. With the Cedar Creek Trail construction, mitigation efforts will also improve the functionality of the wildlife habitat within the Cedar Creek corridor, thus amplifying the need for safe wildlife passage at 99W. Getting residents to use the trail as multi-modal travel option will reduce vehicle miles traveled and create a sustainable option for years to come.

22. Land Use and Growth Management

Outcome sought: support existing land use plans and encourage development of compact communities and neighborhoods that integrate land uses to help make short trips, transit, walking and biking feasible.

For example, will the solution plan for or contribute to:

- Efficient development and use of land as designated by comprehensive or other land use plans?
- Community revitalization including downtowns, economic centers and main streets?
- Compact urban development and mixed land uses?

By providing a seamless trail through the City, the undercrossing will provide that last critical link to connect with all sectors of the community and other trails within our neighborhoods. It also provides a regional travel option. It will provide a steady stream of bikers and walkers into our downtown main streets and reduce the need for parking and increase the vitality of our Old Town area, home to much of our City investment and urban renewal areas. This will revitalize our downtown area with shops and also a new 90 unit apartment complex adjacent to our newly constructed Sherwood Cannery Plaza, Library and City Hall.

23. Livability

Outcome sought: promote solutions that fit the community and physical setting, enable healthy communities and serve and respond to the scenic, aesthetic, historic, cultural and environmental resources.

For example, will the solution:

- Enhance or serve unique characteristics of the community?
- Use context sensitive principles in design and minimize impacts on the built and natural environment?
- Encourage a healthy lifestyle and enable active transportation by enhancing biking and walking networks and connections to community destinations or public transit stops or stations?
- Include elements that will make the facility or service more attractive, enjoyable, comfortable or convenient for potential users?

The undercrossing will provide a critical link between two sections of Sherwood. The entire trail segment will provide an essential safe, healthy alternative for residents throughout Sherwood, but especially those services that are deficient on the northern portion of the highway including parks and open space. The Old Town area is home to the Cannery Square Plaza, City Hall and Library, historic Stella Olsen Park where multiple city gatherings are held including outdoor music concerts, plays and festivals. With the direct safe link, the community will be more apt to use the trail rather than circumvent the highway by car.

24. Safety and Security

Outcome sought: Investment improves the safety and security of the transportation system and takes into account the needs of potential users.

For example, will the solution:

- Improve safety by using designs or techniques that exceed minimum requirements for safety and are likely to reduce the frequency or severity of crashes?
- Help reduce crashes involving vulnerable road users such as bicyclists and pedestrians?
- Improve the ability to respond to an emergency and quickly recover use of the facility or service?

The off road multimodal trail undercrossing will separate highway traffic from the trail user and the conflicts that will be prevented as pedestrians and bicyclists try and navigate a five to six lane freight corridor at speeds of 45 mph. Several bicycle and pedestrian crashes have already occurred along this busy stretch of roadway and as our trail is complete, it is anticipated that there will be more trail users and as a result the probability that crashes will increase without a separated grade crossing for pedestrians and bicyclists.

25. Equity

Outcome sought: promote a transportation system with multiple travel choices for potential users and fairly share benefits and burdens among Oregonians.

For example, will the solution:

- Benefit a large segment of the community?
- Benefit one or more transportation disadvantaged populations?
- Improve environmental justice or economic equity of the community or region?

The undercrossing will be located between two of the four highway intersections in the City and be a benefit to the entire community. Many essential government services, such as the Senior Center, City Hall, Sherwood High School and all Tri-Met bus routes and stops are located on the south side of the highway only. However, much of our multifamily developments are on the northern portion of the City. The direct and safe route that includes the undercrossing will provide all citizens with a direct connection to these services. The northern portion of the City lacks many of these essential services and this direct route will encourage and facilitate these connections.

26. Funding and Finance

Outcome sought: investment uses funding structures that will support a viable transportation system and are fair and fiscally responsible.

For example, will the solution:

- Have ongoing funding available for operations and maintenance?
- Support the continued use of prior investments or reduce the need for future investments?

The undercrossing solution will reduce an aging culvert system that does not provide a mechanism for adequate and safe habitat crossing and fish passage. The construction of the conspan is a cost effective means for the multitude of benefits it provides to the community, wildlife and habitat as a whole. When considering the option of a bridge, or an overcrossing, this alternative is the most cost effect means for a direct route. It solves the fish and habitat crossing dilemma as well. The Cedar Creek Trail project is funded and this separated grade crossing will be a continuation of that investment by the community and region.



Budget Information

27. Estimated Project Costs–REQUIRED

List estimated costs for the various activities listed below, as applicable to proposed project. Shaded fields are automatically calculated.

	Enter Values in this Column	Total Column
Project Administration	\$177,362	
Staff Costs (for Service/Educational Projects)	\$106,417	
Project development and PE	\$567,558	
Environmental Work	\$177,362	
Coordination and Outreach	\$35,413	
Leased Space		
Building purchase and/or Right of Way		
Capital Equipment		
Non-Construction Project Costs Total		\$1,064,112
Utility Relocation	\$36,350	
Construction	\$7,058,112	
Construction Project Costs Total		\$7,094,462
Total Eligible Project Cost		\$8,158,574
Non-Eligible Costs (other project non-transportation expenditures, e.g. un-reimbursable utilities)		

28. Project Participants and Contributions–REQUIRED

List expected project participants and their contributions in the table below. Begin with the amount contributed by the Sponsor and include contributions from Project Co-Sponsor and other participants, if applicable. Sponsor and participant contributions must add to at least 10.27% of Total Transportation Project Costs. This is the amount of matching funds typically required for most federal funding programs. The specific amount of matching funds required for the proposed project may be more or less than 10.27%, depending on its funding eligibility. Specific match requirements will be determined during application review.



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Participant Role	Participant Name	Project Funds Contribution	Percent of Transportation Project Total Cost
Sponsor	City of Sherwood	\$837,886	10%
Co-Sponsor			0%
Participant	Metro Regional Government		0%
Participant			0%
Total		\$837,886	10%

If you have more co-sponsors and participants than lines in the table above, list their names and contribution amounts in the box below and enter the totals of Co-Sponsor and Participant contributions in the appropriate spaces in the table above.



Submittal Approval

29. Project Sponsor Signature Authority Information–REQUIRED

The Authorizing Authority identified below approved the submittal of this application on behalf of the Project Sponsor. Project sponsors other than the Oregon Department of Transportation will be required to sign an Intergovernmental Agreement (IGA) with ODOT prior to receiving any project funds. The IGA with the state will detail the requirements for the use and management of requested funds.

Authorizing Authority Name:

Authorizing Authority Title:

Electronic submittal was approved by the identified authorizing individual. No signature needed if checked.

Signature: Date:

30. Co-Sponsor Signature Authority Information

The signature below demonstrates support of this application on behalf of the Co-Sponsor:

Authorizing Authority Name:

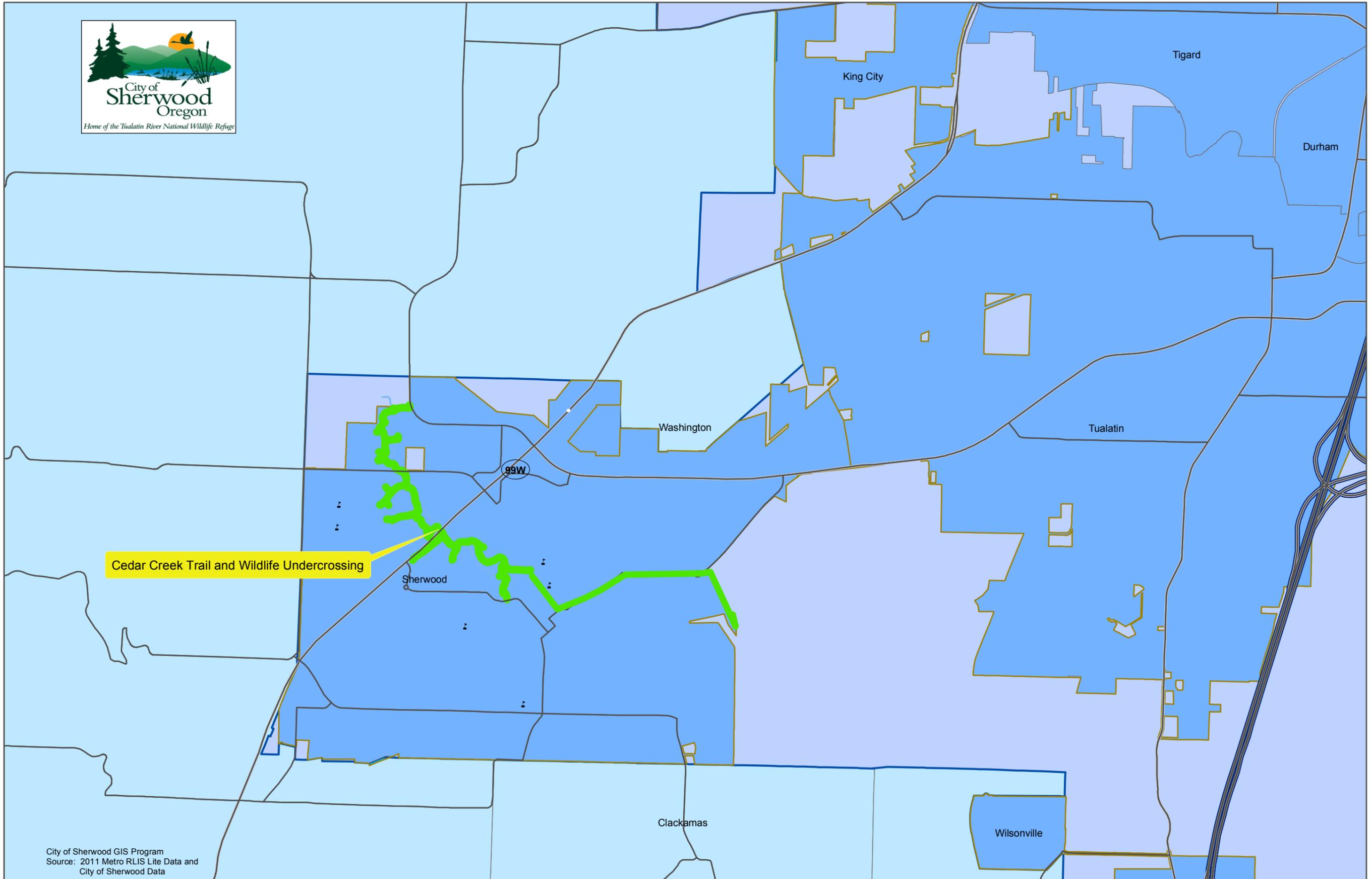
Authorizing Authority Title:

Signature: Date:

If you have more than one Co-Sponsor, list further Co-Sponsors' submittal authority names and titles in the box below and ask those named to provide their signatures and the date signed by their names.

Electronic submittal was approved by the identified authorizing individuals. No signatures needed if checked.

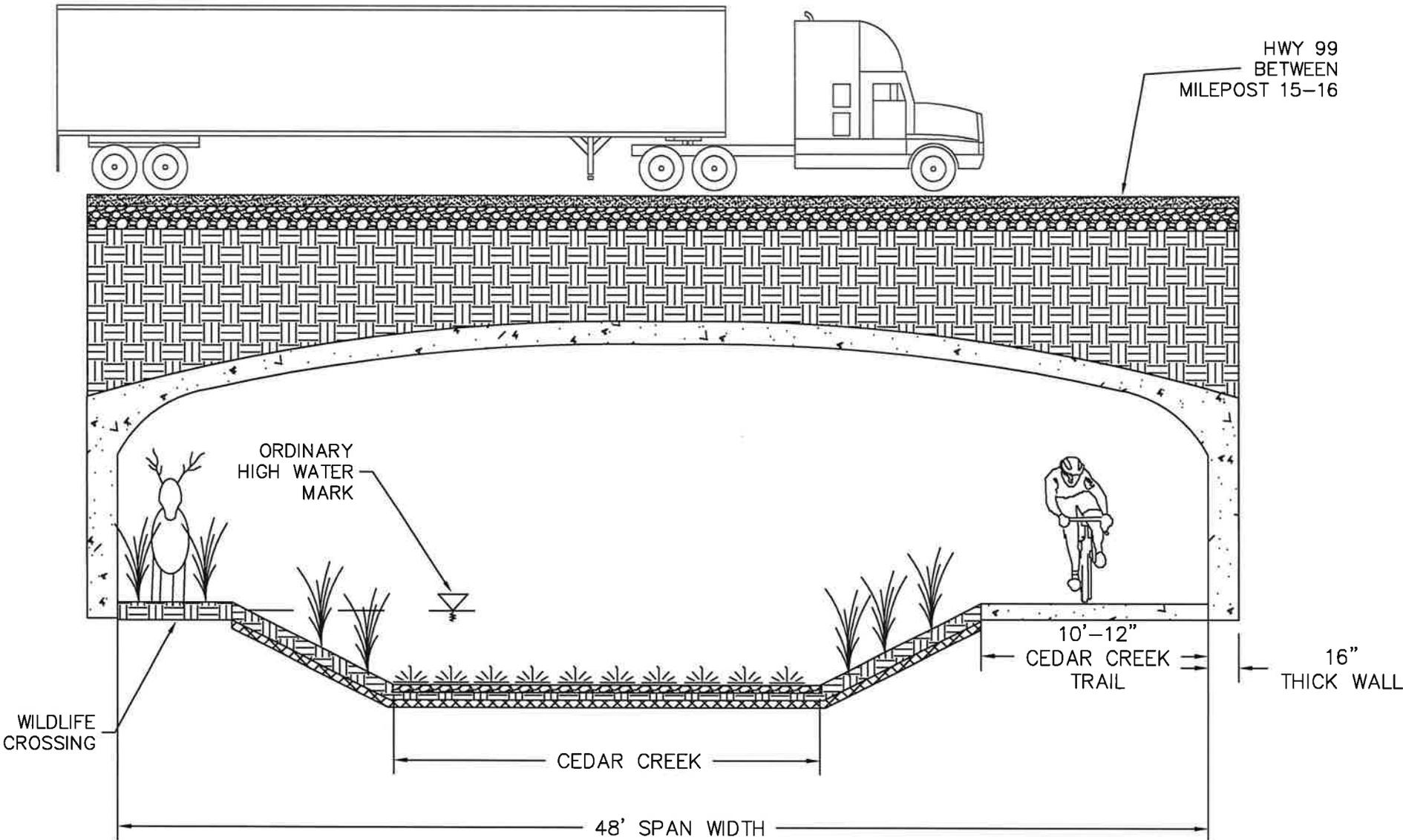
Vicinity Map of Sherwood





CEDAR CREEK TRAIL AND WILDLIFE UNDERCROSSING AT HISHWAY 99W IN SHERWOOD SITE MAP

HWY 99
BETWEEN
MILEPOST 15-16



48' WIDTH CONSPAN STRUCTURE
NTS

SCALE:
1"=10' VERTICAL
1"=60' HORIZONTAL

CONSPAN PROFILE

