

40 Mile Loop Extention:

Feasibility Study

Prepared by:

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I. General Description

The 40 Mile Loop Trail system currently consists of hiking and biking trails that connect parks and recreational areas along the Columbia, Sandy, and Willamette rivers. One portion of the trail scheduled for construction in the future will run along the north side of the Columbia Slough. Another portion provides access to Kelly Point Park from North Portland Road. This report studies the feasibility of adding a path crossing the Slough that would join these two portions of the 40 Mile Loop Trail. A pathway following North Portland Road, running north/south along the west side of the Columbia Boulevard Wastewater Treatment Plant, and continuing through to Willamette Boulevard would give North Portland residents a recreational trail through the community and would provide commuter access to industrial areas north of Columbia Boulevard as far as Marine Drive. Through Willamette Boulevard, citizens traveling along the north side of the Willamette River, such as faculty and students of the University of Portland, would be able to use the path. Finally, the path would provide access to the 40 Mile Loop trail, the Smith-Bybee Lakes trail system (also scheduled for completion in the future), and public areas within the wastewater treatment plant.

The proposed trail spans a heavy industrial area north of Columbia Boulevard and a residential area south of Columbia Boulevard. The trail could therefore be used by industrial employees for commuting, relaxation, and exercise during breaks while providing a safe trail for neighborhood use away from major roads.

II. General Route

The route for the proposed pathway follows the natural geography and land use of the area as closely as possible. Between Willamette Boulevard and Columbia Boulevard, the path follows Carey Boulevard, an unimproved roadway owned by the City of Portland. Carey borders a Spokane Portland and Seattle Railway line on the east and residential areas on the west. Heavy vegetation provides both a visual and a noise barrier between the proposed pathway and the railroad line.

Where the north end of Carey terminates at Columbia Boulevard, it is necessary for the path to follow Columbia Boulevard for several blocks to Portsmouth Avenue. From Portsmouth, the path parallels the west border of the Columbia Boulevard Wastewater Treatment Plant through to the Columbia Slough. While there is not room inside the plant for a bike path, there is a strip of property just west of the treatment plant fenceline that is wide enough for a path. One or more points of entrance to the plant could be included so that path users could access the public facilities being constructed as part of the current headworks replacement project.

Upon reaching the Columbia Slough, the path crosses the North Portland Road bridge and then follows North Portland Road to Marine Drive. Once the 40 Mile Loop trail system is complete, the path along North Portland Road would terminate at a point where

pedestrians or bicyclists could follow sections of the 40 Mile Loop trail west to Kelly Point Park or east along Marine Drive. Future additions to the path could provide access to the Smith-Bybee Lakes trail system.

III. Technical Issues

There are several technical issues that would need to be addressed in the path design.

A. Fencing: Because of the close proximity to residential areas, medium duty roads, and railway lines, fencing is required on one side of the path in the section north of Columbia Boulevard, and on both sides for the section along Carey Boulevard. A five-foot chain link fence would provide adequate protection while minimizing the disruption to the natural environment.

B. Slough Crossing: Although the North Portland Road bridge is suitable for car traffic, it is not currently wide enough to handle pedestrian or bike traffic. There are no other suitable crossing points in the vicinity of the proposed path, so modifying the existing bridge is the most logical action. According to a preliminary design engineer in the bridge section of the Oregon Department of Transportation (ODOT), the existing bridge is not structurally sound enough to allow a pathway to be added. Given this, two options would be to negotiate with ODOT to replace the existing bridge with a new road bridge that is wide enough to accommodate a pathway, or to build a separate pedestrian bridge next to the road bridge. The second option would allow the pedestrian bridge to be constructed independently of any renovation or repair to the existing road bridge, but it might require a separate work bridge to also be built to support construction equipment and materials. If the path were built as part of a new Portland Road bridge, some or all of the costs of supporting the equipment and structure during construction would be paid by ODOT as part of the bridge construction costs.

C. Road Crossings:

1. Marine Drive: A lighted signal and crosswalk is currently in place, allowing pedestrians to cross both North Portland Road and Marine Drive.
2. Portsmouth Avenue: A lighted signal and crosswalk is currently in place, allowing pedestrians to cross Columbia Boulevard at Portsmouth.
3. Fessenden Street: Provisions are needed to allow the path along Carey to cross Fessenden. Since it is not a major thoroughfare, crosswalk signs and pavement markings should be sufficient.

4. Lombard Street: Provisions need to be made to allow the path along Carey to cross Lombard. This is a major thoroughfare, so a lighted signal and crosswalk may be desirable.

5. Willamette Boulevard: If the path should continue to the south side of Willamette Boulevard, a lighted signal and crosswalk may be desirable.

D. Sidewalk Use: Section II identified a length of the proposed path that runs along Columbia Boulevard. This sidewalk would require paving improvements and possibly widening in order to make it accessible to bike traffic without inhibiting its normal use by residents. The existing sidewalk ends roughly 150 feet east of the intersection of Carey Boulevard and Columbia Boulevard, so complete construction of 150 LF of sidewalk is necessary.

E. Easements/Property Acquisition

The existing easement along Carey Boulevard is 50 feet in most places, with easements of 60 feet in several small areas. This width should be adequate for the permanent easement along the pathway, but temporary easement may need to be obtained from the apartment and home owners for construction access.

The boundary of the City's property north of Columbia Boulevard lies 100 feet southeast of the S.P.& S. Railroad line, except along the southernmost 950 feet of the boundary, where the property line is 250 feet southeast of the railroad line. Land may need to be leased from the railroad for construction along this section of the path.

With the path running along the southeast side of North Portland Road, some permanent easement and/or temporary easement may need to be obtained from the railroad in this area as well. However, the path could be designed such that most or all of it lies within the shoulder of the road so that only temporary easements would be needed from the railroad.

IV. Cost Estimate

Excluding the road and Columbia Slough crossings, the length of the path is 10,500 lineal feet (LF). The cost of constructing a 12 foot wide asphalt concrete path with a drainage swale, 0.5 foot gravel shoulder on each side, and fencing as required is as follows:

Cost Estimate

Item	Total Cost	Unit Cost
Pathway Construction	\$354,480	\$33.76/LF
Fencing	\$135,358	\$8.34/LF
Non-Signalized Crossing (signs and striping)	\$2,260	\$1,130/Crossing
Signalized Crossing	\$19,500	\$19,500/Crossing
Construct 150 LF of sidewalk along Columbia Boulevard	\$1,568	\$2.09/SF
Construct Pedestrian/ Bicycle Bridge across Columbia Slough	\$405,600	\$100/SF
	SUBTOTAL	\$918,766
Engineering and Administration (20%)		\$183,753
Contingency (30%)		\$275,630
	TOTAL	\$1,378,149

V. Procedural Issues

The following need to be determined before the path can be designed or constructed.

- A. Determining which permits are required for path construction
- B. Assigning responsibility for path maintenance
- C. Coordinating agencies involved

VI. Who Takes The Lead

Although several groups and agencies will be involved in path design and construction, one group must have the responsibility of leading and administering the project. Two key areas requiring leadership are listed below.

A. Funding: It seems reasonable that the 40 Mile Loop Land Trust would take the lead in acquiring funding for the project, but other organizations may be involved as well.

B. Long term operation: This task would most likely fall under the jurisdiction of Portland Parks and Recreation, with the possibility of local community and industry groups providing volunteer assistance.

VII. Implementation

Final implementation of the pathway project will involve several phases.

- A. Preliminary and final path design
- B. Acquisition of required permits
- C. Bidding
- D. Construction

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WORK PRODUCTS

1. Background and Feasibility Report.

- A BASE MAP of the North Portland Area Study Area defined as I-5 west to Kelley Point Park and south to the Willamette River (includes St. Johns, Portsmouth, Kenton, and Overlook Park neighborhoods). Map should indicate existing parks, existing pedestrian and bicycle paths and recreational trails. Also indicate location of schools, residential, commercial, and industrial areas.
 - An OVERLAY MAP for the same area indicating segments of 40 Mile Loop and other bicycle path, pedestrian, and trail projects which may be completed within a 5 year period. Map should indicate length and designed use (pedestrian, road bicycle, mountain bicycle, canoe) for each segment. Overlay map should correspond to the written report (described below) on the status of future trail projects in the Study Area.
 - A STATUS REPORT covering all trail, pedestrian and bicycle path projects within the Study Area including:
 - Project description (location, route, length, width, surface, and support facilities such as trailheads, canoe/boat launch sites, parking, kiosks);
 - Project management (party responsible, construction timeline, cost, funding source);
 - Conformance with plans (adopted plans, agreements, or other documents which apply to the project such as the City's Comprehensive Plan, Natural Resource Management Plans, or Recreation Master Plans);
 - Other (any other significant information for each project).
- (Information should be secured from responsible parties collected in the form of documented interviews or written correspondence.)*
- An OVERLAY MAP showing a proposed Peninsula Crossing Trail which follows the alignment of N. Carey Blvd. and N. Portland Road and which connects the 40 Mile Loop at Smith and Bybee Lakes to the Willamette Greenway and includes a bridge over the Columbia Slough.
 - FEASIBILITY REPORT for the Peninsula Crossing Trail which includes:
 - Design and safety issues, alternatives, opportunities, potential problems;
 - Description and estimated cost of major elements;

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- Complete listing of permits and easements required;
- Description of community support.

(Information should be collected from qualified and responsible sources and must be fully documented. Community support should be determined by interviewing known stakeholders and user groups, and by publicized presentations at neighborhood association meetings at St. Johns, Portsmouth, Kenton, and Overlook Park neighborhoods.)

- A STATEMENT OF BENEFITS describing the anticipated types and levels of use of the trail system and other benefits:
 - Projected use levels for various types of use (e.g., recreation bicycling, commuter bicycling, canoeing, pedestrian commuting, walking for pleasure, running);
 - Difference in projected levels of use for a trail system in the Study Area without the Peninsula Crossing Trail;
 - Other anticipated benefits identified and quantified (e.g., reduced auto trips, increased visitation to Smith & Bybee Lakes, reduced risk).
- PRESENTATION OF FINDINGS. Present background and feasibility reports to the 40 Mile Loop Land Trust and Portland Parks and Recreation to resolve all issues and to finalize the Peninsula Crossing Trail project.

2. **Concept Plan, Project Budget, and Summary of Potential Funding Sources.**

- Assisted by design and engineering professionals develop the following:
 - **CONCEPT PLANS** in the form of architectural drawings suitable for grant applications and other requests for funding;
 - **PROJECT BUDGET AND TIMELINE** suitable for submission.
- Provide a **SUMMARY OF POTENTIAL FUNDING SOURCES** including:
 - Name of funding program and source of funds;
 - Amount of funding available and funding cycle;
 - Rating criteria and matching requirements;
 - Difficulty of application and competitiveness of Peninsula Crossing Trail project;
 - Other advantages & disadvantages of funding source.

3. **Complete and submit grant application or funding request at the direction of the 40 Mile Loop Land Trust and Portland Parks and Recreation.**

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**COST ESTIMATE
for
PRE-CONSTRUCTION WORK PROGRAM**

Maps, Reports, Presentations, Concept Plans, Budget and Timeline, Summary, Application (6-7 weeks @ \$75/hour)	\$20,000
Engineering	\$10,000
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TOTAL	\$30,000

PORTLAND

Community
news and
features

Pathway project due near wastewater plant

■ Several groups endorse a plan for a bicycle bridge across the Columbia Slough and connect the route with a stretch of the 40-Mile Loop Trail

By JOE FITZGIBBON
Special writer, The Oregonian

Sewage treatment plants don't always make good neighbors, but plans to construct a pedestrian and bicycle pathway across the grounds of the Columbia Boulevard Wastewater Treatment Plant are meant to change that.

When a North Portland citizens group began looking for a way to link Smith and Bybee lakes with the 40-Mile Loop Trail several months ago, they found the wastewater plant on North Columbia Boulevard in the way.

Company officials offered a solution.

"The plant is a working facility, but there is enough land to build a path that skirts the buildings," said Joan Saroka of the city's Bureau of Environmental Services. "We've launched our 'good neighbor' policy in March, and it will be the catalyst that brings all parties together to make this happen."

That includes Metro, Oregon Department of Transportation, Portland Department of Transportation, Bureau of Parks and Recreation, Friends of Smith and Bybee Lakes, the 40-Mile Loop Land Trust and two adjoining neighborhood associations.

The group endorsed a plan last week that called for the pathway as well as the construction of a bicycle bridge across the Columbia Slough, which would allow pedestrians and bicyclists to cross the waterway safely.

Residents and transportation officials consider the narrow bridge on North Portland Road near the sewage facility too dangerous for bicycles.

"I've ridden across it with a group of eighth-graders and I can tell you that it was a pretty scary proposition," said Pam Arden, chairwoman of the Kenton Neighborhood Association.

Once completed, the new bridge would connect several miles of the North Portland route with a stretch of

the 40-Mile Loop Trail that runs from Kelley Point Park along the Columbia River.

Committee members said that they were worried about bridge construction costs, which could run into hundreds of thousands of dollars.

Lee Poe, a member of the citizens' advisory committee to the wastewater facility, said that the pedestrian and bicycle pathway idea developed in December after she organized a neighborhood cleanup of a transient camp and illegal dumpsite at a railroad spur along North Carey Boulevard.

"We worked for hours with an Inverness Jail crew to clean out blackberry bushes, mattresses and clear signs of prostitution and drug activities," Poe said. "Now we want to keep the area open and see the bike and pedestrian pathway as a way to enhance the area and lessen criminal activities."

Barbara Walker, co-chairwoman of the 40-Mile Loop Land Trust, praised

Poe's idea and said that her group would work with government officials and local residents to seek out funding for both projects.

"The lakes and slough make this area one of the premiere sites in North Portland," Walker said. "The benefit of this to the city is so great that we can't let it go."

Pathway construction will parallel the \$24 million Headworks Project to remodel the Columbia Boulevard Wastewater Treatment Plant. When completed in 1996, company officials said the facility would meet new efficiency standards and handle increased volume of waste.

City officials said that remodeling the 42-year-old sewage facility would not affect the bike and pedestrian access plan.

No reconstruction money is earmarked for the pathway or pedestrian bridge. Committee members said that they would seek funding through grants and community donations.

LEGEND:

- COMPLETED 40 MILE LOOP TRAIL
- PROPOSED 40 MILE LOOP TRAIL
- PROPOSED PATHWAY

