



MARQUAM NATURE PARK SOFT SURFACE TRAILS
Project Update, July 2011

TRAILS ASSESSMENT PHASE OF WORK COMPLETE:
OVERVIEW OF OUTCOMES

The recommendations outlined below are affordable and well-supported. They strike a balance between varying priorities among the various community stakeholders, PP&R and regulatory agencies. The new trails at the Marquam will:

- Provide a direct southern connection between the Fairmount neighborhood and Terwilliger, and between it and the Homestead neighborhood/OHSU.
- Create an internal loop within the Nature Park, maximizing recreational possibilities.
- Improve water quality along Trail 1 until the formal trail can be constructed. In the meantime, users on the existing logging road between the Marquam Gulch will be able to reach the Marquam Trail without walking along SW Marquam Hill Road and the Homestead/OHSU neighborhood via SW 12th and Gaines.
- Relocate the crossing on the North Segment of Trail 5 to bring walkers quickly into the interior of the Nature Park, acknowledging the importance of this entry point.
- Retain the existing and well-tended section of the Marquam Trail adjacent to the Homestead neighborhood, while fixing the bridge in that section that is dangerous at present; and
- Allow a more thoughtful consideration of the Marquam Trail outlet location vis a vis a safe place to cross Terwilliger.

THE PROCESS

Identify Budget Challenge

As outlined at the May 25 Open House, development of all trails identified in the 2007 Master Plan exceeds the available project budget:

Project Budget -	\$740,000
<u>Estimated cost to develop all segments -</u>	<u>\$971,500</u>
Cost Reduction Needed -	(\$231,500)

Review Design Objectives

The installed trails will be high-challenge hiking trails with a soil surface between 18” and 30” wide. The trails will meet the following prioritized objectives:

1. Low impact to hydrology and habitat values;
2. Safe, with a low maintenance burden;

3. Low impact on scenic values; high connective value between the neighborhoods and urban destinations;
4. High recreational value; and
5. Potential to accommodate users with varying abilities given the challenging terrain.

Consider Evaluation Data

Portland Parks & Recreation Capital Projects staff evaluated each of the proposed trail segments based on the consultants' feasibility assessment, cost estimates, degree of support by the community and consistency with the Design Objectives.

The results of these evaluations are summarized in the attached Evaluation Matrix and described below.

1. Consultants' Feasibility Assessment

An outline of the technical requirements for building and permitting each trail segment; an assessment of each versus the Design Objectives; and an estimate of the direct construction costs (which do not including staff time, permits, contingencies etc.).

2. Total Project Cost

Construction cost estimates plus contingency (30%), expected bidding add-ons (contractor bonding and insurance costs), project overhead, profit and inflation factors, survey, engineering and design fees; permitting expenses; staff time; and miscellaneous project management costs. The result is an estimated Total Project Cost (TPC) for each segment. A cost per lineal foot was also calculated to create a relative measure for comparison among the very different segments.

3. Community Priorities

Opportunities to weigh in on which trails to prioritize included: an Open House in May, a comment form available in hard copy and online for two weeks, conversations and presentations at other community meetings. See the Summary of Survey Results.

4. Rating based on Design Objectives

Each segment was rated at to how well it met each Design Objective. A rating was also created called "Community Agreement on Priority" to quantify public sentiment regarding the trail segments.

RECOMMENDATIONS

After considering each Trail's cost, benefits and level of support, PP&R staff recommends the following:

- **Reconfigure Trail 5 North Crossing / 12th Avenue Entrance:** The alignment as it is currently drawn reflects the 2007 conceptual plan, but that is problematic: after walkers enter the park, and can see their destination directly across the stream, the trail takes them in a circuitous switchback route away from their destination that involves a high crossing and a long retaining wall. By itself, this segment received a very low rating. But several stakeholders suggested a redesign to route the trail and crossing directly across the stream to its meeting with Trail 4 and the Middle Segment of Trail 5 (see map). PP&R agrees that this is more efficient and will prevent desire line trails from cropping up. The extra steps and long bridge required by this change add an estimated \$37,000 to the Total Project Cost.
- **Develop 5 Middle**
- **Develop 5 South**
- **Develop 4**
- **Add an allowance for signage:** Naming and wayfinding signage is needed. Add \$5,000.
- **Add an allowance for a memorial bench:** A previous project commitment. Add \$2,500.
- **Cut Segment 8:** The proposal to move a portion of the existing Marquam Trail resulted from misinformation and was both the least supported trail by the community and the most objected-to. But keeping the existing alignment means that the existing bridge must be repaired. The net effect of both changes on project cost is to add \$3,500.
- **Delay Segment 6:** This short segment along the Terwilliger Parkway is intended to make the crossing of Terwilliger safer for walkers on the existing Marquam Trail. But preliminary Bureau of Transportation review indicates that an engineering study is necessary, particularly of sight lines and the road profile, to determine a truly effective relocation of the crossing. In addition, this segment received the next to lowest priority ranking from the community, some of whom suggested that a more comprehensive look at location of the Marquam Trail outlet on Terwilliger vis a vis the safest crossing location. PP&R will work with PBOT engineers to fill in the information needed and better define the right crossing. Cut \$53,100 from the TPC.
- **Delay Segment 9:** This segment connects the interior of the Nature Park with OHSU parking lots on SW 6th Avenue Drive. This segment is very expensive, with (4) engineered water body crossings of steep, wet terrain that is infested with blackberries. The community ranked it third from last, citing questionable

demand for the connection. PP&R believes, however, that there could be significant demand for this trail from users unlikely to participate in the Open House or the survey: OHSU students, renters and employees. Moreover, the City's Marquam Hill Plan calls for a pedestrian connection between the neighborhoods, OHSU and the VA at some point. But given the high cost and tepid support at present, this segment ranks comparatively low. PP&R will seek to clarify the demand and try to identify a funding partner to help build this segment in the future. Cut \$146,700.

- **Delay Segment 3:** The low habitat impact and high connectivity rankings of this segment are degraded by the maintenance burden of its steps and its middling contribution to the recreation network. Cut \$34,200.
- **Delay portions of Segment 1:** This segment currently exists as an informal trail on an old logging road, connecting the Upper Marquam Hill Trail with the current project site. But it lacks drainage and water body crossing features, and as a result walkers are creating water quality problems that must be corrected. PP&R will delay the trail improvements and correct drainage and water quality issues now. Cut \$63,000.

Net Cost Changes: Cut \$249,000.

NEXT STEPS

- With this scope in mind, PP&R will engage surveyors, wetland and geotechnical consultants, bridge engineers and trail designers with a goal of submitting for environmental permits in the winter. The goal is still to build the recommended trails in the summer of 2012.
- PP&R planning staff will seek a partnership with PBOT to study the Terwilliger Parkway crossing, and possible funding mechanisms for a marked crossing.
- PP&R planning staff will open a conversation with OHSU, the VA and the community concerning Trail 9 and comprehensive questions of pedestrian flow through the Nature Park to and from OHSU and the VA.
- PP&R will post an update to the project website at least quarterly, where we will also post design information as soon as it is available.