



DEVELOPMENT SERVICES DEPARTMENT
 ENVIRONMENTAL COORDINATOR
 450 100th Ave NE., P.O. BOX 90012
 BELLEVUE, WA 98009-9012

DETERMINATION OF NON-SIGNIFICANCE

PROPONENT: Geoff Bradley, City of Bellevue Parks Department

LOCATION OF PROPOSAL: 14100 SE 66th Street SE (Generally)

NAME & DESCRIPTION OF PROPOSAL:

Primrose Loop Trail Pedestrian Bridge Replacement and Trail Railing Installation

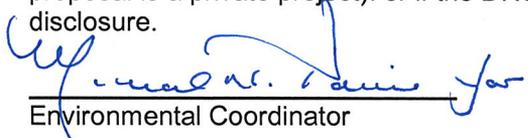
Critical Areas Land Use Permit to replace three existing pedestrian bridges on the Primrose Loop Trail with new pedestrian bridges and the installation of a new trail railing for approximately 90 linear feet of existing trail along the stream. The application includes a plan for stream buffer restoration and enhancement. Bridge footings to be located landward of surveyed OHWM. Allowed use per LUC 20.25H.055. Work is located within the City of Bellevue and City of Newcastle Jurisdictional Limits.

FILE NUMBER: 13-115660-LO

The Environmental Coordinator of the City of Bellevue has determined that this proposal does not have a probable significant adverse impact upon the environment. An Environmental Impact Statement (EIS) is not required under RCW 43.21C.030(2)(C). This decision was made after the Bellevue Environmental Coordinator reviewed the completed environmental checklist and information filed with the Land Use Division of the Development Services Department. This information is available to the public on request.

- There is no comment period for this DNS. There is a 14-day appeal period. Only persons who submitted written comments before the DNS was issued may appeal the decision. A written appeal must be filed in the City Clerk's office by 5:00 p.m. on _____.
- This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period on the DNS. There is a 14-day appeal period. Only persons who submitted written comments before the DNS was issued may appeal the decision. A written appeal must be filed in the City Clerk's Office by 5 p.m. on **August 1, 2013**.
- This DNS is issued under WAC 197-11-340(2) and is subject to a 14-day comment period from the date below. Comments must be submitted by 5 p.m. on _____. This DNS is also subject to appeal. A written appeal must be filed in the City Clerk's Office by 5 p.m. on _____.

This DNS may be withdrawn at any time if the proposal is modified so that it is likely to have significant adverse environmental impacts; if there is significant new information indicating, or on, a proposals probable significant adverse environmental impacts (unless a non-exempt license has been issued if the proposal is a private project); or if the DNS was procured by misrepresentation or lack of material disclosure.


 Environmental Coordinator

July 18, 2013
 Date

OTHERS TO RECEIVE THIS DOCUMENT:
 State Department of Fish and Wildlife
 State Department of Ecology,
 Army Corps of Engineers
 Attorney General
 Muckleshoot Indian Tribe



**City of Bellevue
Development Services Department
Land Use Division Staff Report**

Proposal Name: Primrose Loop Trail Pedestrian Bridge Replacement and Trail Railing Installation

Proposal Address: 14100 SE 66th Street SE

Proposal Description: Critical Areas Land Use Permit to replace three existing pedestrian bridges on the Primrose Loop Trail in Coal Creek Natural Area with new pedestrian bridges and the installation of a new trail railing for approximately 90 linear feet of existing trail along the stream. The application includes a plan for stream buffer restoration and enhancement.. Installation of these facilities is an allowed use per LUC 20.25H.055. Work is located within the City of Bellevue and City of Newcastle Jurisdictional Limits.

File Number: 13-115660-LO

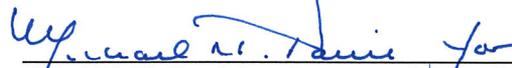
Applicant: **Geoff Bradley**, City of Bellevue Parks Department

Decisions Included: Critical Areas Land Use Permit
(Process II. LUC 20.25H.145)

Planner: David Pyle, Land Use Planner

**State Environmental Policy Act
Threshold Determination:**

Determination of Non-Significance

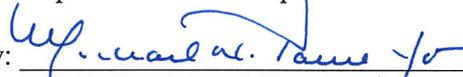


Carol V. Helland, Environmental Coordinator
Development Services Department

Director's Decision:

Approval with Conditions

Michael A. Brennan, Director
Development Services Department

By: 

Carol V. Helland, Land Use Director

Application Date:	<u>05/24/2013</u>
Notice of Application Publication Date:	<u>06/06/2013</u>
Decision Publication Date:	<u>07/18/2013</u>
Project/SEPA Appeal Deadline:	<u>08/01/2013</u>

For information on how to appeal a proposal, visit the Development Services Department at City Hall or call (425) 452-6800. Comments on State Environmental Policy Act (SEPA) Determinations can be made with or without appealing the proposal within the noted comment period for a SEPA Determination. Appeal of the Decision must be received in the City's Clerk's Office by 5 PM on the date noted for appeal of the decision.

I. Background

A. Project Description

This is a proposal to replace three pedestrian bridges that provide a pedestrian crossing for the Primrose Trail within Coal Creek Park and construct approximately 90 linear feet of trail safety railing. The existing bridges are degraded, failing, and unsafe. The edge of the trail where the railing will be installed is adjacent to a steep slope in a narrow section of the trail. The trail is currently closed until bridge replacement and railing safety improvements are complete. The project minimizes disturbance in the critical area or its buffer by placing the bridge footings in the existing trail corridor and outside of the Ordinary High Water Mark of the stream. Additionally, site restoration through supplemental planting of the stream buffer is proposed as part of this project as mitigation for the disturbance caused by the installation of bridge footings and removal of one tree.

The project spans the jurisdictional boundary of Bellevue and Newcastle and one of the bridges proposed for replacement is within Newcastle (Bridge replacement Site 2). Discussion with Newcastle staff has indicated a building permit will be required and the City of Bellevue will serve as Lead Agency for the processing of SEPA. Project plans, including a site plan, bridge designs, and safety railing designs are included as **Attachment 1**.

B. Site Description

The project is located in the Coal Creek Natural Area between Newcastle Golf Club Road and Forest Drive SE, south of the Forest Glen East Neighborhood Park (parcel numbers 2724059005 and 2724059002). The two parcels are approximately 30.4 and 39.2 acres, respectively. However, the four project areas (where construction will occur) total less than 0.2 acre.

The City of Bellevue Parks and Community Services Department currently owns the parcels upon which improvements are proposed. The parcels are used strictly for a natural park. Properties to the north and east are primarily single-family residential. A golf course and some limited commercial (YMCA) and industrial uses are located to the south and southwest. A project narrative describing the bridge locations is included as **Attachment 2**. As described above, the project spans the jurisdictional boundary of Bellevue and Newcastle and one of the bridges proposed for replacement is within the Newcastle City limits (Bridge replacement Site 2).

C. Existing Conditions

A total of four project sites are included in the proposal. Three of the sites include replacement of existing bridge crossings and the fourth site includes installation of a steep slope railing system.

Existing conditions at the first site include a wooden bridge consisting of two logs spanning Coal Creek, overlaid by approximately 2.5 foot-wide planks and a wooden railing on both sides. The support logs are partially rotted, and the planks and railings are not stable. A log extends out of the left bank just below the bankful width and just

upstream of the existing bridge. Vegetation consists of a bigleaf maple overstory, and understory vegetation predominantly consists of vine maple, salmonberry, and sword fern.

The second site includes a wooden bridge consisting of two logs spanning a tributary to Coal Creek. On the left bank of the tributary, the bridge is supported by a large log that extends approximately 30 feet landward of the streambank, where it functions as a nurse log for mature cedar trees. The log also extends approximately 10 feet into the tributary, downstream from the bridge crossing. Bank erosion landward of the support log has caused an approximately 1 foot wide gap to form between the ground and the bridge on the left bank of the tributary. Vegetation consists of a bigleaf maple and western red cedar overstory, and understory vegetation predominantly consists of salmonberry, lady fern, sword fern, and giant horsetail.

The third site includes a wooden bridge consisting of two sections, forming a “V”. The bridge section on the right bank is similar in construction to the bridge at Site 1, with two logs spanning the length of the bridge, and planks lying across the logs. This section of the bridge is unstable, rotting, and in disrepair. The left bank bridge section consists of a single, solid, approximately 36-inch diameter log, with a wooden railing attached to one side. The log is within the bankful channel, and it provides structural habitat diversity to the stream. Vegetation consists of bigleaf maple and western hemlock, and understory vegetation is dominated by red alder, vine maple, salmonberry, devil’s club, sword fern, red elderberry, and young western red cedar. The final site is located on a steep slope, approximately 35 feet above the elevation of Coal Creek. The existing dirt footpath is narrow, and it has eroded in places. Vegetation overstory consists of bigleaf maple and western hemlock, and understory vegetation is dominated by red alder, red elderberry, sword fern, and Solomon’s seal.

The proposed project will replace three existing pedestrian bridges, two across Coal Creek and one across a small tributary to Coal Creek. Approximately 90 linear feet of existing trail that parallels Coal Creek will be upgraded with a steep slope railing system. The proposed project will not include in-water work and it includes measures to minimize potential adverse impacts from bridge/trail improvements in the floodplain and riparian habitat of Coal Creek. A project narrative describing the existing conditions of the bridge locations is included as **Attachment 2**.

D. Project Design

The design includes removal of existing bridges with replacement structures proposed entirely outside of the ordinary high water mark (OHWM). Bridges have been sized to the minimum size necessary to safely span the streams while providing for current and expected demand within the natural area. No direct impacts to the stream will occur and impacts to the stream buffer will be offset with restoration of adjacent areas with native plantings. A total of approximately 864 square feet of plantings are proposed. Species include vine maple, sword fern, snowberry, salal, and wild ginger. The steep slope railing system is the minimum necessary to protect the existing trail and allow for safe passage.

Design at each of the three bridge sites looked at several factors, including existing vegetation (with special consideration to significant trees), channel width and potential for migration/erosion, and existing trail location. The proposed bridges represent the preferred alternative for each site. Design for the steep slope railing system site looked at an on-grade boardwalk. However, the current proposal includes only a welded wire mesh railing system, leaving the existing trail undisturbed and uncovered.

There is no feasible alternative with less impact to the critical area buffer. Existing bridges are undersized and dilapidated. Replacement is essential to allow for safe passage of the stream crossings. Design has utilized the minimum sized bridges to accomplish the project purpose while ensuring that all bridge components are located outside the OHWM. Detailed plans are attached. Project plans, including a site plan, bridge designs, and safety railing designs are included as **Attachment 1**.

II. Site Description and Context

A. Critical Areas:

- i. **Coal Creek-** This section of Coal Creek is rated as a Type F stream under LUC 20.25H.075.B. Under LUC 20.25H.075.C.1.a.i Type F streams are protected by a 100 foot buffer and under LUC 20.25H.075.D.2.a.i an additional 20 foot structure setback applies. This is a proposal to locate a pedestrian trail foot bridge (defined as a structure) within the stream critical area buffer (footings will be located outside of the stream critical area). The proposed bridge project crosses Coal Creek. No work is proposed in water.
- ii. **Areas of Special Flood Hazard-** The proposed replacement pedestrian foot bridges are located within an area designated on the Flood Insurance Rate Maps as a FEMA 100 Year Floodplain. These areas are regulated by the Land Use Code as Areas of Special Flood Hazard under LUC 20.25H. Under LUC 20.25H.175.A.6, this is an area where no Base Flood Elevation (BFE) has been determined (Zone A). Currently, there are no plans to calculate the BFE in this reach of Coal Creek. In Zone A floodplains best professional judgment is recommended. In the case of a pedestrian foot-bridge, the floodplain function (temporary storage of floodwaters) is not likely to be adversely affected by bridge piers or footings. The footbridge will be built sufficiently high to span the creek from the top of the left and right banks and is a permitted structure in the floodplain subject to compliance with the performance standards listed in LUC 20.25H.055.C.3.g.i and LUC 20.25H.180.C. Since the bridge is located above existing grade, does not alter the configuration of the special flood hazard, and is set at an elevation and orientation which maintains the existing vegetation of the area the proposal does not alter the storage capacity of the floodplain. An analysis of floodplain conditions and potential impacts of the proposed bridge replacement is included as

Attachment 3.

III. State Environmental Policy Act (SEPA)

The environmental review indicates no probability of significant adverse environmental impacts occurring as a result of the proposal. The Environmental Checklist submitted with the application adequately discloses expected environmental impacts associated with the project. The City codes and requirements, including the Clear and Grade Code, Utility Code, Land Use Code, Noise Ordinance, Building Code and other construction codes are expected to mitigate potential environmental impacts. The project is also supported by a mitigation and restoration plan meeting the requirements of LUC 20.25H.210 and a net improvement over existing conditions is anticipated. Therefore, issuance of a Determination of Non-Significance (DNS) is the appropriate threshold determination under the State Environmental Policy Act (SEPA) requirements. The project SEPA checklist is included as **Attachment 4**. Project restoration and mitigation plans are included with **Attachment 1**.

IV. Consistency with Land Use Code Requirements:

A. Zoning District Dimensional Requirements:

This is a proposal to construct pedestrian bridges and a trail railing for the Coal Creek Park Primrose Loop Trail across Coal Creek. The project site is a nature area (park) and is not built out with any primary structures. The proposed bridges met the applicable use and dimensional provisions of the Land Use Code.

B. Critical Areas Requirements:

As previously discussed, the project vicinity is within a Type F stream area as well as an Area of Special Flood Hazard, both regulated under the City of Bellevue Land Use Code section 20.25H. Under LUC 20.25H, the modification of a Critical Area is prohibited unless the proposal is identified as an allowed use or a provision for modification exists. This proposed parks facility repair is an allowed activity identified by LUC 20.25H.055.B under the category of “New or expanded City and public parks”. As an allowed activity, the proposed development must meet the requirements identified in LUC 20.25H.055.C.3.g, 20.25H.080.A, and 20.25H.180.C.

LUC 20.25H.055.C.3.g establishes performance standards for expansions of parks facilities, including trails, within critical areas and critical area buffers. LUC 20.25H.080.A and 20.25H.180.C establish performance standards specific to stream critical areas and areas of special flood hazard.

V. Consistency with Land Use Code Critical Areas Performance Standards:

A. Consistency with LUC 20.25H.055.C.3.g

New nonmotorized trails within the critical area or critical area buffer must meet following standards:

1. Trail location and design shall result in the least impacts on the critical area or critical area buffer;

Design of the proposed improvements will result in the least amount of critical area and critical area buffer impacts possible. No direct stream impacts are proposed; permanent impacts will take place only within the stream buffer. Where feasible, bridge abutments are located within the existing trail alignment. Proposed native plantings within the project area are expected to offset any minimal impact to the buffer and may result in a long-term ecological improvement.

2. Trails shall be designed to compliment and enhance the environmental, educational, and social functions and values of the critical area with trail design and construction focused on managing and controlling public access and limiting uncontrolled access;

The proposed bridge and trail improvements have been designed to enhance several aspects of the critical area:

1) Environmentally, the critical area buffer will be restored with native plantings. Overall, ecological function within the critical area will be preserved and may improve as a result of the proposed project.

2) Educational and social values of the critical area will also be improved as a result of the proposed project. In addition to restoring portions of the buffer, the proposed project includes new bridges that will allow for safe travel through the natural area. Therefore, the public would be provided with improved passive access opportunities, all while protecting the critical area and creating further awareness of the ecological sensitivity and uniqueness of the area.

3. Trails shall be designed to avoid disturbance of significant trees and to limit disturbance of native understory vegetation;

One existing significant tree is proposed for removal as part of the proposed project and will be replanted at a minimum ratio of 2:1. Downed woody debris from tree removal will be retained in the stream riparian area. Existing significant trees within proximity to the project will be adequately protected during construction activities. Areas of native shrubs and groundcover that are impacted during construction activities will be restored with native plantings after construction is complete.

4. Trails shall be designed to avoid disturbance of habitat used for salmonid rearing or spawning or by any species of local importance;

The proposed bridges will span the ordinary high water mark of Coal Creek. Therefore, the project will not disturb any habitat potentially used

for salmonid rearing or spawning. No work will be done in water.

5. The trail shall be the minimum width necessary to accommodate the intended function or objective;

The proposed bridges and modified approaches have been designed to have a width of approximately four feet. The proposed width is intended to provide adequate and safe capacity for expected demand while limiting impacts to the natural area.

6. All work shall be consistent with the City of Bellevue's "Environmental Best Management Practices" and all applicable City of Bellevue codes and standards, now or as hereafter amended;

All bridge and trail improvement work shall be consistent with the City of Bellevue Clearing and Grading Code (Chapter 23.76), permit conditions, and all other applicable codes, ordinances, and standards, including "Environmental Best Management Practices."

7. The facility shall not significantly change or diminish overall aquatic area flow peaks, duration or volume or flood storage capacity, or hydroperiod;

All portions of the proposed improvements will be located outside the limits of the on-site stream. Overall, there will be no change in flow peaks or storage capacity within the stream channel.

8. Where feasible and consistent with any accessibility requirements, any trail shall be constructed of pervious materials;

The existing on-site trails are pervious and all modified bridge approaches will also be pervious.

9. Crossings over and penetrations into wetlands and streams shall be generally perpendicular to the critical area, and shall be accomplished by bridging or other technique designed to minimize critical area disturbance considering the entire trail segment and function; and

All proposed bridge crossings are perpendicular to the maximum extent feasible. However, topography and existing vegetation have resulted in one of the crossings (Site 3) oriented in a less than perpendicular fashion.

10. Areas of new permanent disturbance and all areas of temporary disturbance shall be mitigated and/or restored pursuant to a mitigation and restoration plan meeting the requirements of LUC 20.25H.210.

The project includes restoration of temporarily disturbed areas as well as restoration of degraded areas to offset impacts associated within the

expanded bridges. These actions will be implemented in accordance with LUC 20.25H.210.

B. Consistency With LUC 20.25H.080.A

In addition to generally applicable performance standards set forth in LUC 20.25H.055 for parks uses, development within a stream or stream buffer shall incorporate the following additional performance standards in design of the development, as applicable.

1. Lights shall be directed away from the stream.

No lights are proposed as part of the project.

2. Activity that generates noise such as parking lots, generators, and residential uses shall be located away from the stream or any noise shall be minimized through use of design and insulation techniques.

This is a proposal for a pedestrian bridge. Noise will be limited to the noise associated with walkers, hikers, and joggers.

3. Toxic runoff from new impervious area shall be routed away from the stream.

No new areas of pollution generating impervious surface are proposed.

4. Treated water may be allowed to enter the stream critical area buffer.

No new outfalls are proposed.

5. The outer edge of the stream critical area buffer shall be planted with dense vegetation to limit pet or human use.

A restoration plan meeting the requirements of LUC 20.25H.210 has been submitted. The areas adjacent to the bridges will be planted with dense vegetation.

6. Use of pesticides, insecticides and fertilizers within 150 feet of the edge of the stream critical area buffer shall be in accordance with the City of Bellevue's "Environmental Best Management Practices," now or as hereafter amended.

The site will be managed by the Parks Department in accordance with the "Environmental Best Management Practices".

C. Consistency with LUC 20.25H.180.C

Where use or development is allowed pursuant to LUC 20.25H.055, the general performance standards of LUC 20.25H.180.C apply. The proposed pedestrian bridges and safety railing have been designed to meet the required performance standards.

Review of the performance standards indicates the project is in compliance with LUC 20.25H.055 and the proposed bridge support structures will not increase the base flood elevation and will not displace flood waters.

VII. Public Notice and Comment

Application Date:	May 24, 2013
Public Notice (500 feet):	June 6, 2013
Minimum Comment Period:	June 20, 2013

The Notice of Application for this city wide project was published in the City of Bellevue weekly permit bulletin on June 6, 2013. One comment letter was received regarding the proposed bridge replacements from Karen Walter of the Muckleshoot Indian Tribe Habitat Program. Ms. Walter's comments were focused on two issues, tree removal and wood recruitment and bridge design in relation to the Coal Creek floodplain. The comment letter is included as **Attachment 5** to this staff report.

With regard to tree removal, one tree is currently proposed for removal to accommodate bridge installation. This tree will be felled and the downed wood will be placed in the stream riparian area. It is possible that additional trees will be removed during bridge installation, either to accommodate bridge transport and installation, or to abate future hazards surrounding the bridges. Only those trees that must be removed where "no feasible alternative" exists to transport or install the bridge or those trees that are rated as a hazard using the ISA Tree Hazard Rating Form may be removed and must be documented as an approved revision to the bridge construction permit. All trees removed must be replanted at a ratio of no less than 2:1 and all downed wood from felled trees must be retained onsite within the stream riparian area. See related conditions of approval at the end of this staff report.

Regarding bridge design and floodplain clearance, design was verified with the City's floodplain engineer as adequate. The bridge is a pedestrian bridge and the safety risk presented is low. The bridge (plural) designs represent a balance between a concern for safety, impact to the stream channel, cost, and constructability. Correspondence with the City's floodplain engineer indicated that with calculations and professional judgment that the proposed bridges will be 3.5 to 4' above the water surface elevation during a 100-year flood event and the proposed clearance will pass most debris. However, there are some fairly large trees in the area so it's possible that a blockage could occur if a large tree were to fall into the creek. Fortunately, the bridge is a pedestrian bridge and is not seen as a risk as essential infrastructure if dislodged during a severe event. Communication with the City's stormwater engineer is included as **Attachment 5** to this staff report.

VIII. Decision Criteria

The proposal, as conditioned below, meets the applicable regulations and decision criteria for a Critical Areas Land Use Permit pursuant to LUC Section 20.30P.

A. The proposal obtains all other permits required by the Land Use Code;

In addition to a Critical Areas Land Use Permit, the project applicant will apply for a Building Permit (BW) and if needed, a Right-of-Way Use Permit from the City of Bellevue. No other City of Bellevue land use or construction permits will be required of this project.

B. The proposal utilizes to the maximum extent possible the best available construction, design and development techniques which result in the least impact on the critical area and critical area buffer;

The proposed project involves the replacement of three bridges and installation of one steep slope railing system. Bridges have been designed to entirely span the OHWM of the streams, while avoiding as much existing native vegetation as is feasible. The railing system is designed to protect park users along a 90-foot-long section of trail adjacent to a steep slope. The railing utilizes the best available design to limit impacts to habitat and views while simultaneously protecting trail users.

Restoration plantings are proposed in those areas within the project area that are disturbed during construction or are currently devoid of significant native vegetation. A total of approximately 864 square feet of plantings are proposed. Species include vine maple, sword fern, snowberry, salal, and wild ginger. Proposed plantings will improve habitat complexity within the stream buffer.

By avoiding direct stream impacts, minimizing impacts within the buffer, and restoring areas with native plantings, the design and development of the proposed project will not decrease ecological function of the project site, and may improve ecological function over the long-term. Furthermore, the public will have improved access to this area.

C. The proposal incorporates the performance standards of Part 20.25H to the maximum extent applicable, and ;

Performance standards are addressed in Section V of this report.

D. The proposal will be served by adequate public facilities including street, fire protection, and utilities; and;

The proposed project will be served by adequate public facilities. No additional public facilities will be required with implementation of the proposed project.

E. The proposal includes a mitigation or restoration plan consistent with the requirements of LUC Section 20.25H.210; and

A mitigation and restoration plan has been prepared in accordance with the requirements

of LUC 20.25H.210.

F. The proposal complies with other applicable requirements of this code.

The proposed project complies with all other applicable City of Bellevue Land Use Codes, including 20.25H and 20.25E.

IX. Conclusion and Decision

After conducting the various administrative reviews associated with this proposal, including Land Use Code consistency, SEPA, City Code and Standard compliance reviews, the Development Services Department Land Use Director does hereby **approve with conditions** the proposal to construct replacement pedestrian bridges and a trail railing system for the Coal Creek Park Primrose Loop Trail.

Note- Expiration of Approval: In accordance with LUC 20.30P.150 a Critical Areas Land Use Permit automatically expires and is void if the applicant fails to file for a Clearing and Grading Permit, Building Permit, or other necessary development permits within one year of the effective date of the approval.

X. Conditions of Approval

The applicant shall comply with all applicable Bellevue City Codes and Ordinances including but not limited to:

<u>Applicable Ordinances</u>	<u>Contact Person</u>
Clearing and Grading Code- BCC 23.76	Tom McFarlane, 425-452-5207
Land Use Code- BCC 20.25H	David Pyle, 425-452-2973
Noise Control- BCC 9.18	David Pyle, 425-452-2973

The following conditions are imposed under the Bellevue City Code or SEPA authority referenced:

- 1. Restoration and Mitigation:** A restoration and mitigation plan is required to be submitted for review and approval by the City of Bellevue prior to the issuance of the Clearing and Grading or Building Permit. The plan shall include appropriate restoration measures meeting LUC 20.25H.220. Plant selection should be based on an acceptable reference area along the stream.

Authority: Land Use Code 20.25H.220
Reviewer: David Pyle, Development Services Department

- 2. Rainy Season restrictions:** Due to the proximity to a Type F Stream, no clearing and grading activity may occur during the rainy season, which is defined as October 1 through April 30 without written authorization of the Development Services Department. Should approval be granted for work during the rainy

season, increased erosion and sedimentation measures, representing the best available technology must be implemented prior to beginning or resuming site work.

Authority: Bellevue City Code 23.76.093.A,
Reviewer: David Pyle, Development Services Department

- 3. Monitoring Required:** The applicant must submit as part of the required Clearing and Grading Permit application or Building Permit application a monitoring plan that identifies how all areas of temporary disturbance and areas of restoration will be monitored for a period of five years following the installation of mitigation measures. In order to ensure long-term survival of restoration plantings, the plan must monitor plant survival, percent cover of planted vegetation, diversity, and coverage by invasive or non-native species.

Authority: Land Use Code 20.25H.220
Reviewer: David Pyle, Development Services Department

- 4. Noise Control:** The proposal will be subject to normal construction hours of 7 am to 6 pm Monday through Friday and 9 am to 6 pm on Saturdays, except for Federal holidays and as further defined by the Bellevue City Code. Upon written request to DSD, work hours may be extended to 10 pm if the criteria for extension of work hours as stated in BCC 9.18 can be met.

Authority: Bellevue City Code 9.18
Reviewer: David Pyle, Development Services Department

- 5. Bridge Design and Construction:** The proposed bridge shall be designed so as not to interfere with the floodplain. The bridge design may not raise the base flood elevation or reduce the storage capacity of the floodplain.

Authority: Land Use Code 20.25H.180.C
Reviewer: David Pyle, Development Services Department

- 6. Tree Removal Restrictions:** Only those trees that must be removed where “no feasible alternative” exists to transport or install the bridge or those trees that are rated as a hazard using the ISA Tree Hazard Rating Form may be removed as part of this project. All proposed tree removal must be documented as an approved revision to the bridge construction permit. All trees removed must be replanted at a ratio of no less than 2:1 with approved replanting stock and all downed wood from felled trees must be retained onsite within the stream riparian area.

Authority: Land Use Code 20.25H.220
Reviewer: David Pyle, Development Services Department

XI. Attachments:

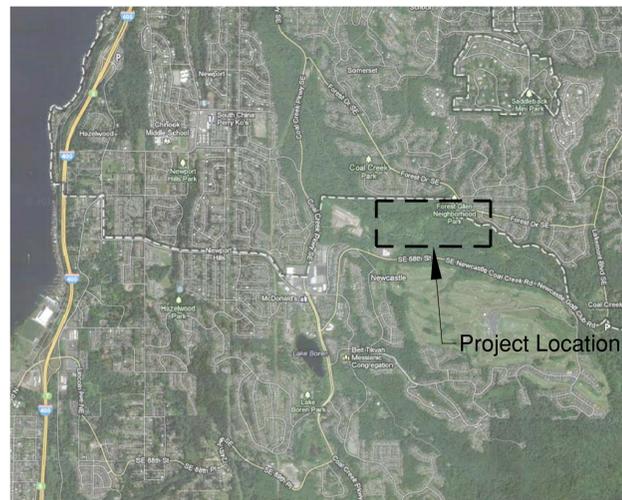
1. Site and Project Plans- In File
2. Project Narrative- In File
3. Floodplain Analysis- In File
4. Buffer Restoration/Enhancement Plans- In File
5. Public Comment Letter – In File

Primrose Loop Trail

City of Bellevue, WA



EXISTING CONDITIONS



CONTEXT MAP
NTS

PROJECT DESCRIPTION:

Contracted work includes: site preparation, environmental protection, minor earthwork, (3) bridges, a steep slope railing system, trail construction and removal, and site restoration. Project is to be implemented under Critical Areas Land Use Permit # _____-LO. For technical questions, call Barker Landscape Architects, (Nicolas) 206-783-2870.

CONTACTS:

Client:

Bellevue Parks and
Community Services
Geoff Bradley, Project Manager
450 110th Ave. NE,
P.O. Box 90012
Bellevue, WA 98009
tel: 425-452-6885

Landscape Architect:

Barker Landscape Architects
Contact: Nic Morin
3002 NW 68th Street
Seattle, WA 98117
phone 206-783-2870
fax 206-783-8312
nicolas@barkerla.com

Structural Engineer (Sites 1-3):

Western Wood Structures, Inc.
Contact: Jaime Agidius
20675 SW 105th Avenue
Tualatin, OR 97062
503-692-6900 (p)
503-692-6434 (f)

Geotechnical Engineer:

Stantec
Contact: Phil Haberman, PG, PEG
12034 134th Court NE
Redmond, WA 98052
425-298-1000 (p)
425-298-1019 (f)

Structural Engineer (Site 4 only):

Reid Middleton
Contact: Paul Crocker, PE, SE
728 134th Street SW
Suite 200
Everett, WA 98204
425-741-3800 (p)
425-741-3900 (f)

GENERAL NOTES:

- All construction must be in accordance with the City of Bellevue's Development Standards; the City of Bellevue's Engineering and Utility Standards; the Bellevue City Code; the Uniform Building Codes; permit conditions; and all other applicable codes, ordinances, standards and policies. Applicable installation details are incorporated by reference to Bellevue's Engineering and Utilities published Standards. All applicable erosion control measures must be taken.
- A copy of the approved plans must be on-site whenever construction is in progress.
- The Contractor is responsible for obtaining any mechanical, electrical or other required permits prior to beginning construction.
- All locations of existing utilities have been established by field survey or obtained from available records and should, therefore, be considered approximate only and not necessarily complete. It is the sole responsibility of the contractor (1) to independently verify the accuracy of all utility locations and (2) to discover and avoid any other utilities not shown which may be affected by the implementation of this plan. Note that no existing utilities have been researched or verified in any areas between proposed work limits up to, and including, the staging area.
- Site shall be restored to better or equal condition in any areas affected by this work.
- Scheduling: All work shall be coordinated with Owner to achieve minimal disturbance to roadway operation.
- Contractor shall have proven experience in similar projects and be thoroughly familiar with City of Bellevue applicable standards and codes prior to commencement of work.
- This layout is diagrammatic. Contractor shall coordinate exact location of points of connection to existing systems with Owner prior to beginning any work.
- Prior to commencing work, the Contractor, the City's Inspectors and the Owner's Representatives shall meet on the site to review existing site conditions. Logistical items will be determined at the pre-construction meeting and subsequent construction meetings, including the specific locations and methods to be used for staging, trail closure locations and timing, fencing materials, and coordination of boardwalk and trail work with Western Wood Structure Bridge work (NIC). The Contractor is to coordinate with Owner's representative on all construction logistical items not explicitly described in the drawings and specifications.

LEGAL DESCRIPTION:

PORTION OF THE NORTHEAST QUARTER OF SECTION 4, TOWNSHIP 24 NORTH,
RANGE 5 EAST, W.M., IN KING COUNTY, WASHINGTON.

CLEARING AND GRADING STANDARD NOTES:

- All clearing & grading construction must be in accordance with City of Bellevue (COB) Clearing & Grading Code; Clearing & Grading Erosion Control Standard Details (EC-1 through EC-23); Development Standards; Land Use Code; Uniform Building Code; permit conditions; and all other applicable codes, ordinances, and standards. The design elements within these plans have been reviewed according to these requirements. Any variance from adopted erosion control standards is not allowed unless specifically approved by the City of Bellevue Development Services Department (DSD) prior to construction.
- A copy of the approved plans must be on-site during construction. The applicant is responsible for obtaining any other required or related permits prior to beginning construction.
- All locations of existing utilities have been established by field survey or obtained from available records and should, therefore, be considered only approximate and not necessarily complete. It is the sole responsibility of the contractor to independently verify the accuracy of all utility locations and to discover and avoid any other utilities not shown which may be affected by the implementation of this plan.
- The area to be cleared and graded must be flagged by the contractor and approved by the clearing & grading inspector prior to beginning any work on the site.
- Clearing will be limited to the areas within the approved disturbance limits. Exposed soils must be covered at the end of each working day when working from October 1st through April 30th. From May 1st through September 30th, exposed soils must be covered at the end of each construction week and also at the threat of rain.
- Any excavated material removed from the construction site and deposited on property within the City limits must be done in compliance with a valid clearing & grading permit. Locations for the mobilization area and stockpiled material must be approved by the clearing & grading inspector at least 24 hours in advance of any stockpiling.
- To reduce the potential for erosion of exposed soils, or when rainy season construction is permitted, the following Best Management Practices (BMPs) are required: Preserve natural vegetation for as long as possible or as required by the clearing & grading inspector. Protect exposed soil using plastic (EC-14), erosion control blankets, straw or mulch (COB Guide to Mulch Materials, Rates, and Use Chart), or as directed by the clearing & grading inspector. Install catch basin inserts as required by the clearing & grading inspector or permit conditions of approval. Install a temporary sediment pond, a series of sedimentation tanks, temporary filter vaults, or other sediment control facilities. Installation of exposed aggregate surfaces requires a separate effluent collection pond on-site.
- Final site grading must direct drainage away from all building structures at a minimum 2% slope, per the Uniform Building Code, if applicable.
- The contractor must maintain a sweeper on-site during earthwork and immediately remove soil that has been tracked onto paved areas as result of construction.
- A public information sign listing 24-hour emergency phone numbers for the city and the contractor may be provided to the applicant at the time the clearing & grading permit is issued. The applicant must post the sign at the project site in full view of the public and the contractors, and it must remain posted until final sign-off by the clearing & grading inspector.
- Turbidity monitoring may be required as a condition of clearing & grading permit approval. If required, turbidity monitoring must be performed in accordance with the approved turbidity monitoring plan and as directed by the clearing & grading inspector. Monitoring must continue during site (earthwork) construction until the final sign-off by the clearing & grading inspector.
- Any project that is subject to Rainy Season Restrictions will not be allowed to perform clearing & grading activities without written approval from the DSD director. The rainy season extends from November 1st through April 30th, as defined in section 23.76.093A of the Clearing & Grading Code.

CALCULATIONS:

PROJECT AREA: 3,028,726 square feet
(PARCELS 2724059005 & 2724059002)

TOTAL PROPOSED IMPERVIOUS AREA: 0 square feet

EXISTING IMPERVIOUS AREA: 0 square feet

EXISTING IMPERVIOUS COVERAGE: 0 %

NEW IMPERVIOUS AREA: 0 square feet

REPLACED IMPERVIOUS AREA: + 0 square feet

NEW + REPLACED IMPERVIOUS AREA: 0 square feet

CONVERTED PERVIOUS: 0 square feet
(native vegetation converted to landscape and/or pasture)

TOTAL AREA OF LAND DISTURBING ACTIVITY: 864 square feet

MATERIAL EXPORT/IMPORT:
Estimated Cut: 13.6 cubic yards
Estimated Fill: 0 cubic yards

DRAWING INDEX

- L1 COVER
- L2 LOCATION PLAN
- L3 SITE 1: EXG CONDS, TESC / DEMO
- L4 SITE 1: LAYOUT / GRADING
- L5 SITE 2: EXG CONDS, TESC / DEMO
- L6 SITE 2: LAYOUT / GRADING
- L7 SITE 3: EXG CONDS, TESC / DEMO
- L8 SITE 3: LAYOUT / GRADING
- L9 SITE 4: EXG CONDS, TESC / DEMO
- L10 SITE 4: LAYOUT / GRADING
- L11 SITE 1: PLANTING / RESTORATION PLAN
- L12 SITE 2: PLANTING / RESTORATION PLAN
- L13 SITE 3: PLANTING / RESTORATION PLAN
- L14 DETAILS
- S1 --
- S2 --
- S3 --
- S4 --



Approved By

TRANSPORTATION DESIGN MANAGER DATE
PROJECT MANAGER DATE

NM, JB DESIGNED BY 05/20/13 DATE
NM, SW DRAWN BY 05/20/13 DATE
JB CHECKED BY 05/20/13 DATE



City of
Bellevue



BARKER
LANDSCAPE
ARCHITECTS
3002 NW 68th St.
Seattle, WA 98117
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fax: 206.783.3212

Primrose Loop Trail

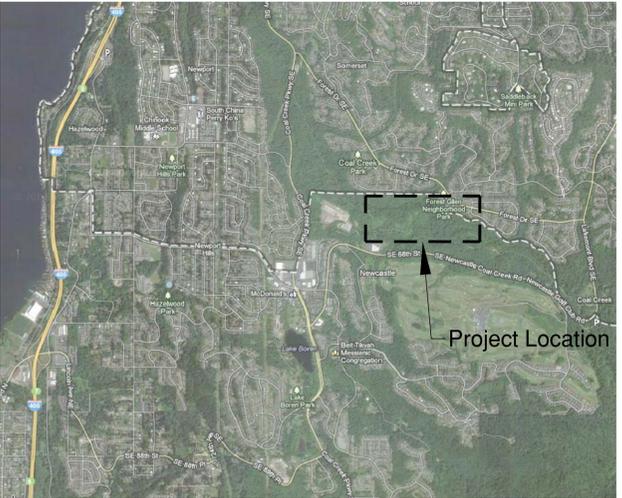
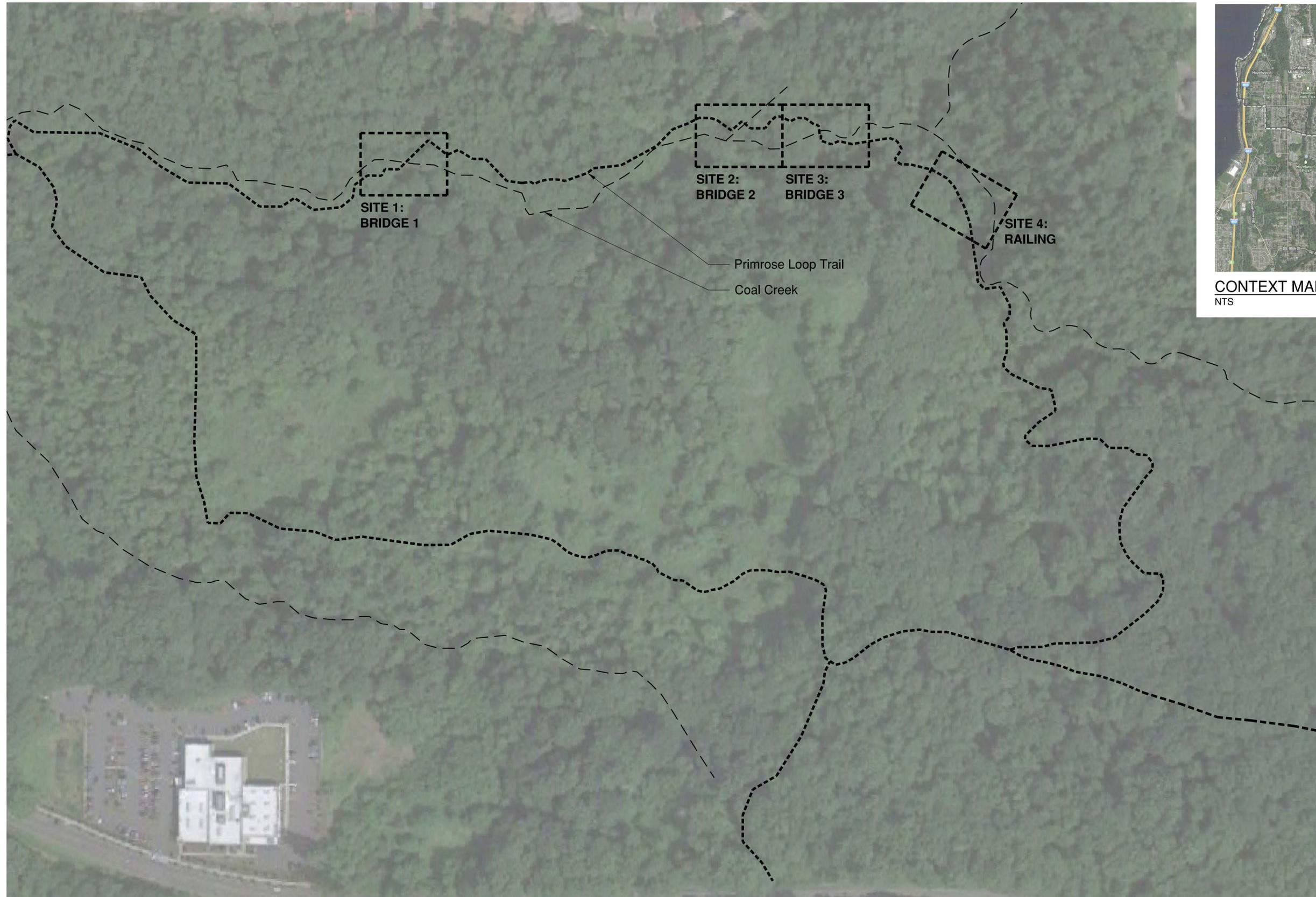
LO / SEPA
PERMIT SET

COVERSHEET

L1

SHEET 1 OF 18

NO.	DATE	BY	APPR.	REVISIONS
1	02-25-13			30% DRAFT SCHEMATIC DESIGN
2	03-11-13			75% COORDINATION SET
3	04-24-13			90% COORDINATION SET
4	05-20-13			LO / SEPA PERMIT SET



CONTEXT MAP
NTS



NOTE: INFORMATION DEPICTED IN THIS EXISTING CONDITIONS MAP IS NOT EXACT, AND DOES NOT CONSTITUTE A SURVEY BY A LICENSED SURVEYOR. IT IS MEANT TO CONVEY GENERAL SITE CONDITIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS ON SITE AND MAKING FIELD ADJUSTMENTS AS NECESSARY TO FIT ACTUAL SITE CONDITIONS.

NO COAL MINE HAZARD AREAS EXIST WITHIN THE PROJECT AREA. SOURCE: BELLEVUE ENVIRONMENTAL/CRITICAL AREA GIS MAP

CERTAIN IMPROVEMENTS ARE WITHIN FEMA 100-YEAR FLOODPLAIN. SOURCE: BELLEVUE ENVIRONMENTAL/CRITICAL AREA GIS MAP

PROJECT AREA IS DESIGNATED AN EROSION HAZARD AREA. SOURCE: BELLEVUE ENVIRONMENTAL/CRITICAL AREA GIS MAP



PROJECT LOCATION PLAN

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Approved By	
TRANSPORTATION DESIGN MANAGER	DATE
PROJECT MANAGER	DATE
	DATE

NM, JB	05/20/13
DESIGNED BY	DATE
NM, SW	05/20/13
DRAWN BY	DATE
JB	05/20/13
CHECKED BY	DATE



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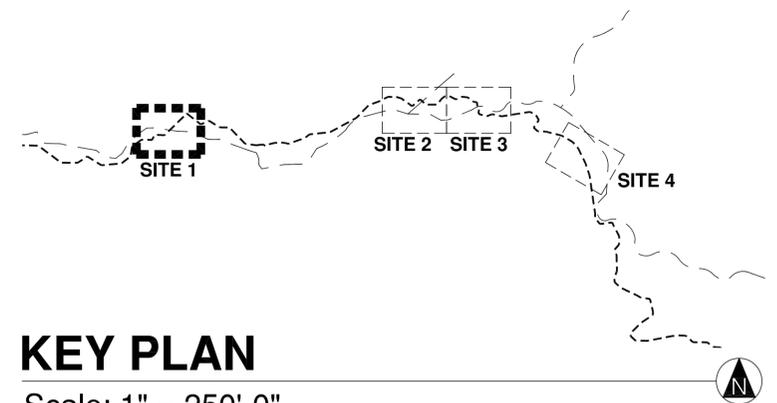
Primrose Loop Trail

**LO / SEPA
PERMIT SET**

PROJECT LOCATION PLAN

L2

SHEET 2 OF 18



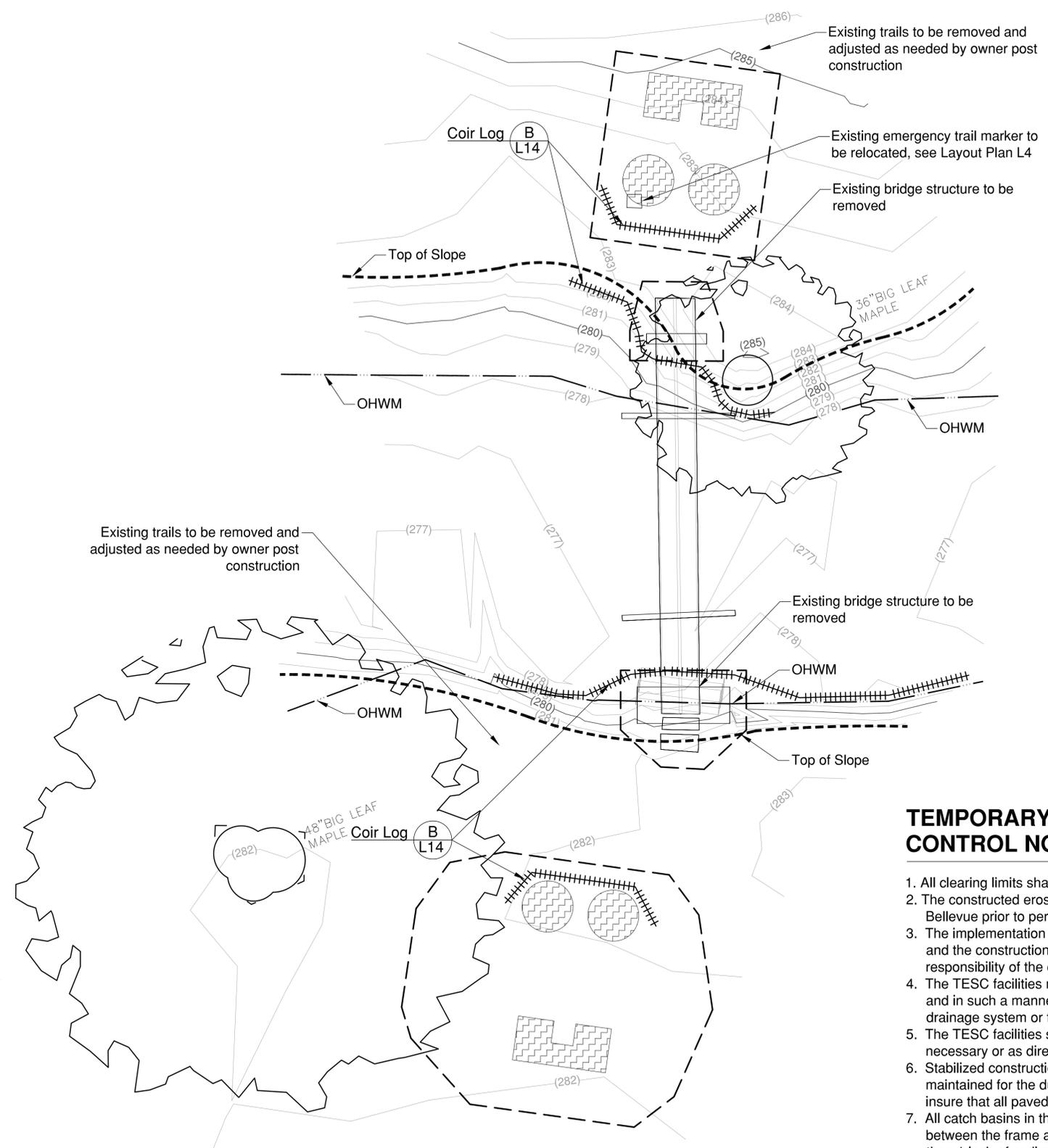
KEY PLAN

Scale: 1" = 250'-0"

TRAIL REMOVAL NOTES:

- Existing trail to be removed varies in width. See Existing Conditions this set.
- Limit negative impacts such as soil compaction, erosion, and sedimentation as required in the Western Washington Stormwater Manual.
- Existing Trail Removal and Site Enhancement: Scarify trail soil to a 2" depth before placing cut soil, and plants. Do not scarify where tree roots greater than 1/2" diameter occur. Where mechanized equipment cannot access areas to scarify existing trails the Contractor shall employ other means and methods such as hand tools (forks, hoe-dads, and pulaski) to scarify soil.
- Scarification shall begin at the point where the user foot path departs the edge of the proposed trail shoulder, thence 50 horizontal feet along the user foot path, where scarification ends. Other trail removal and site enhancement activities extend past this point.
- Plants that are being relocated in this project shall be heeled in and roots and rhizomes protected from drying out. Maintain an even moisture content in root masses and root balls.
- Install all plants transplanted at the same depth they were dug.
- All logs 6" DBH and larger shall be kept on site and used for trail removal and enhancement. Logs smaller than 6" DBH may be either disposed of off site or chipped on to areas identified to receive wood chips on site, as directed by the Owner.
- Remove or chip branches 3" diameter and greater, as measured from the branch collar, from logs used in the removal of existing user paths.
- Plant shrubs as directed in the field by the Owner.
- New plants will be planted within the work limits will be maintained for a period of 3 years. See Planting Plan this set for species, quantities, and locations.

EXG CONDS, TESC / DEMO PLAN LEGEND	
	Top of Slope
	Spot Elevations
	Stream OHWM
	Existing Tree
	Limit of Work Line
	Limit of Clearing and Grading Area
	Coir Log
	Large Woody Debris

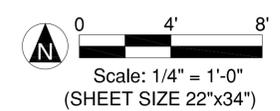


TEMPORARY EROSION & SEDIMENTATION CONTROL NOTES:

- All clearing limits shall be visibly marked prior to clearing.
- The constructed erosion control and sedimentation plan shall be approved by the City of Bellevue prior to performing any site grading or clearing.
- The implementation of temporary erosion and sedimentation control (TESC) measures and the construction, maintenance, and replacement of these facilities is the responsibility of the contractor.
- The TESC facilities must be constructed in conjunction with all construction activities and in such a manner as to ensure that sediment laden water does not enter the public drainage system or flow off site.
- The TESC facilities shall be inspected daily by the contractor and maintained as necessary or as directed by the engineer to ensure continuous functioning.
- Stabilized construction entrances shall be installed at the beginning of construction and maintained for the duration of the project. Additional measures may be required to insure that all paved areas are kept clean for the duration of the project.
- All catch basins in the vicinity of construction shall be protected with filter fabric placed between the frame and grate or as directed by the engineer. Clean regularly: no more than 1 inch of sediment will be allowed to accumulate over filter fabric.
- Any area stripped of vegetation where no further work is anticipated for a period of 15 days shall be immediately stabilized with approved TESC methods such as mulching, erosion blankets, plastic sheeting or as directed by the engineer.
- All steep slope excavations greater than 2:1 shall be covered at the end of each working day.
- All disturbed areas shall be covered with 7" depth woodchip mulch.
- Any vegetation not in the construction area shall be left undisturbed.
- Field verify location of existing trees & boulders.
- The TESC facilities are the minimum requirements for anticipated site conditions. During the construction period, these TESC facilities shall be upgraded by contractor as directed by the engineer for unexpected storm events.
- All storm drain facilities within the project boundary are to be cleared of sediment and debris prior to final acceptance of the project.
- All significant existing trees to be protected and preserved. Tree protection fencing for all trees is not feasible due to site terrain / vegetation density.

SITE 1: EXISTING CONDITIONS, TESC / DEMO PLAN

Scale: 1/4" = 1'-0"



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4	05-20-13			LO / SEPA PERMIT SET

Approved By	
TRANSPORTATION DESIGN MANAGER	DATE
PROJECT MANAGER	DATE
	DATE



City of Bellevue

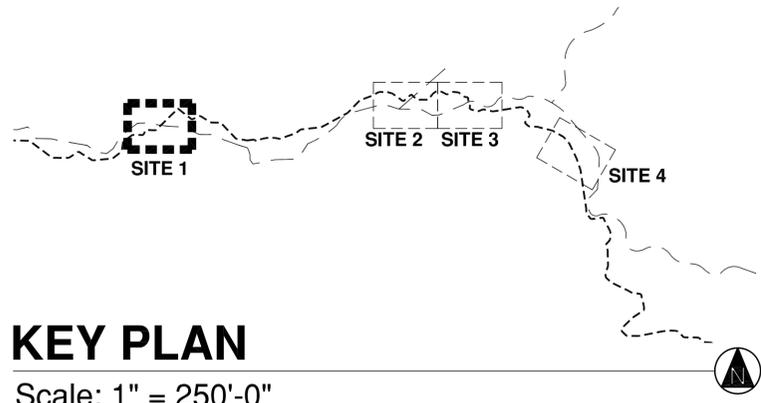
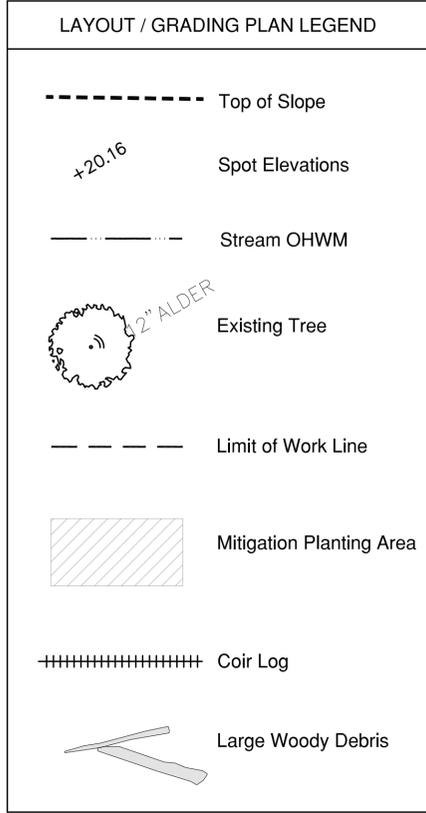
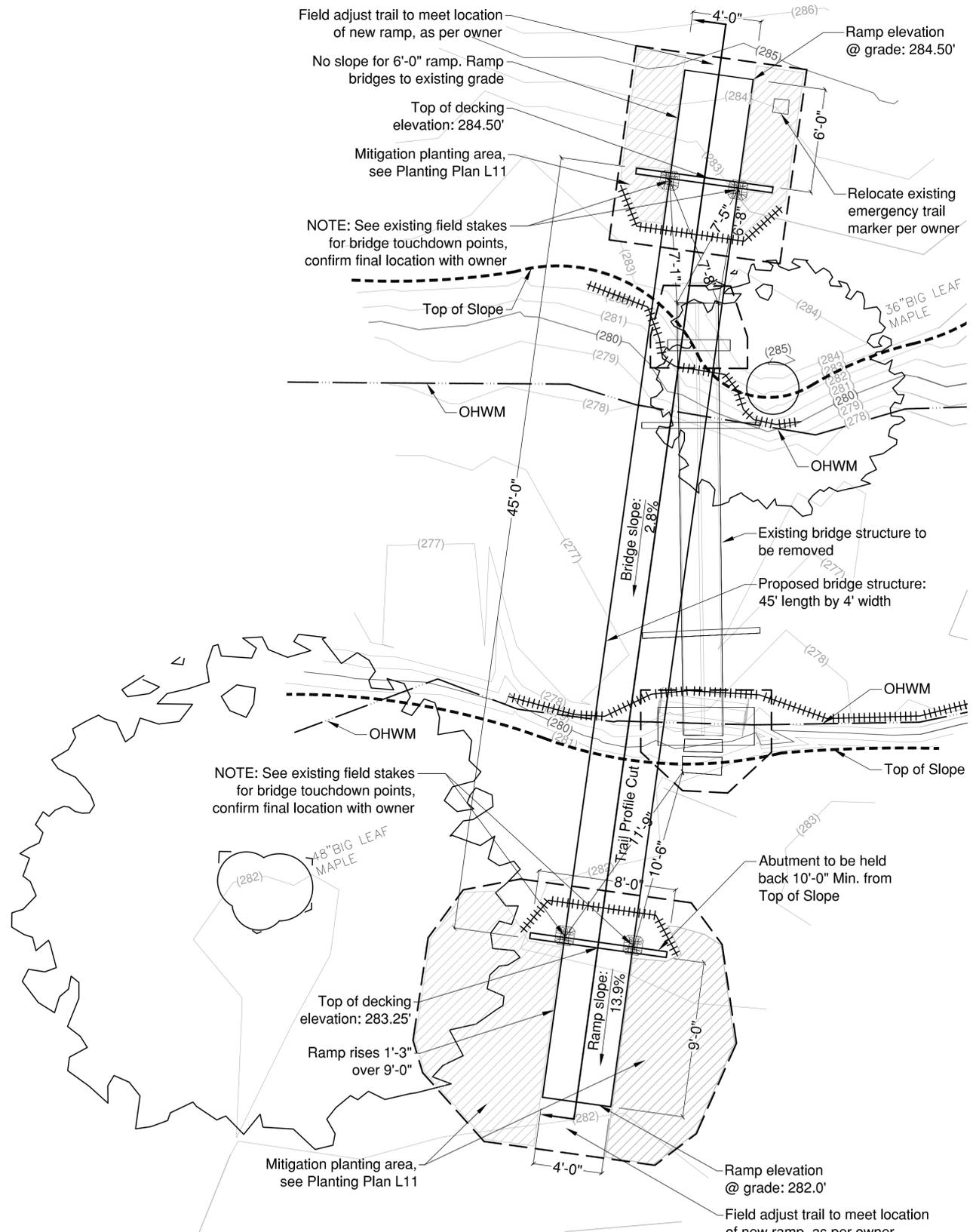


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Primrose Loop Trail

LO / SEPA PERMIT SET

SITE 1 : EXISTING CONDITIONS
TESC / DEMO PLAN
L3
SHEET 3 OF 18

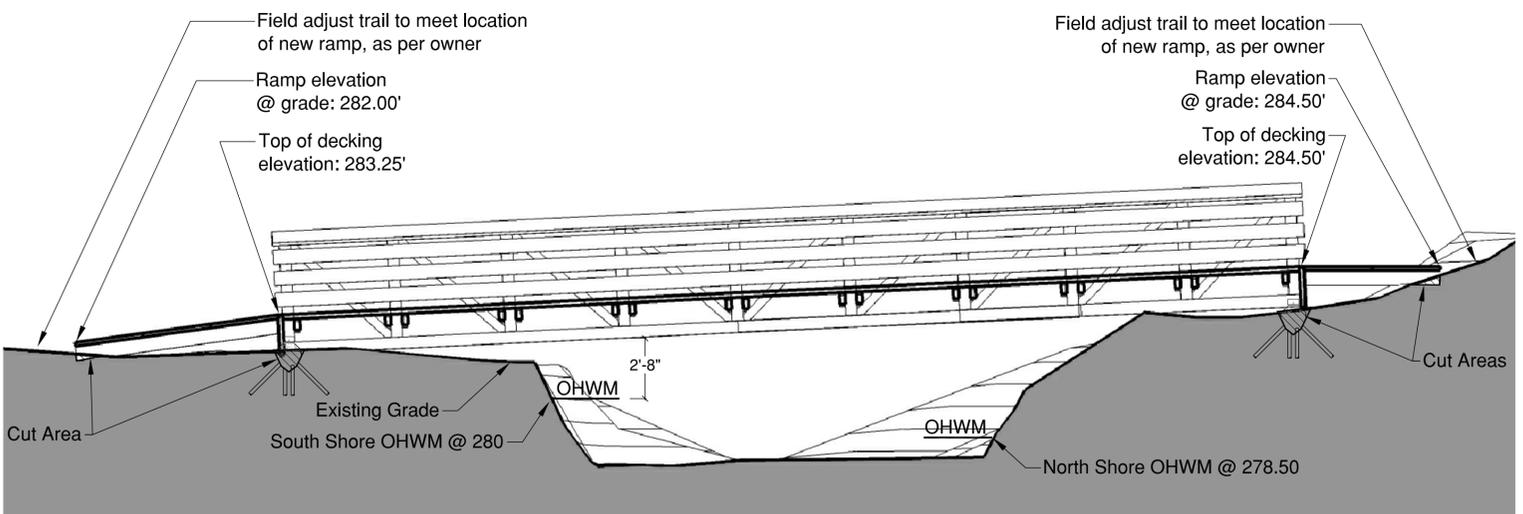


KEY PLAN

Scale: 1" = 250'-0"

GENERAL NOTES:

1. Depicted Coal Creek alignment is approximate, and is based on best available information. Coal Creek's actual alignment is in flux and may differ slightly from that on plans.
2. Orientation of trail on overall map may not correspond exactly to orientation of trail on site, due to level of accuracy of informal survey data received from City of Bellevue GIS.
3. Proposed trail alignment is to be field verified and adjusted as necessary to preserve all significant trees. Notify Landscape Architect and owner if proposed trail alignment conflicts with any significant trees.
4. Locations, grades and alignments of existing and proposed trail depicted on plans are not exact and are based on an informal survey conducted by Barker Landscape Architects, and are intended to convey the general design intent of traversing the steep topography, routing the trail around previous slide locations, and conforming to the existing topography. All grades and proposed trail alignments are to be field verified by contractor. Field adjustment of proposed trail alignment and boardwalk locations may be necessary to avoid removal of existing trees. Contractor to coordinate all field adjustments with Owner.
5. For Clearing and Grading Notes see Cover Sheet L1.

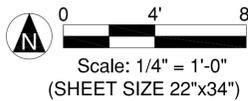


TRAIL PROFILE

Scale: 1/4" = 1'-0"

SITE 1: LAYOUT / GRADING PLAN

Scale: 1/4" = 1'-0"



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4	05-20-13			LO / SEPA PERMIT SET

Approved By		DATE
TRANSPORTATION DESIGN MANAGER		
PROJECT MANAGER		



City of Bellevue

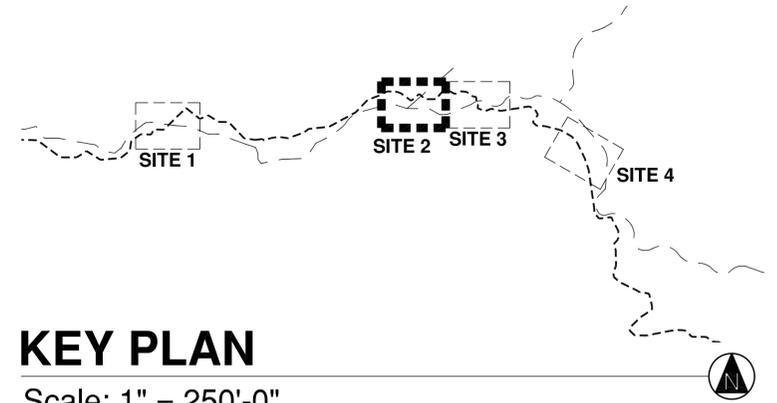
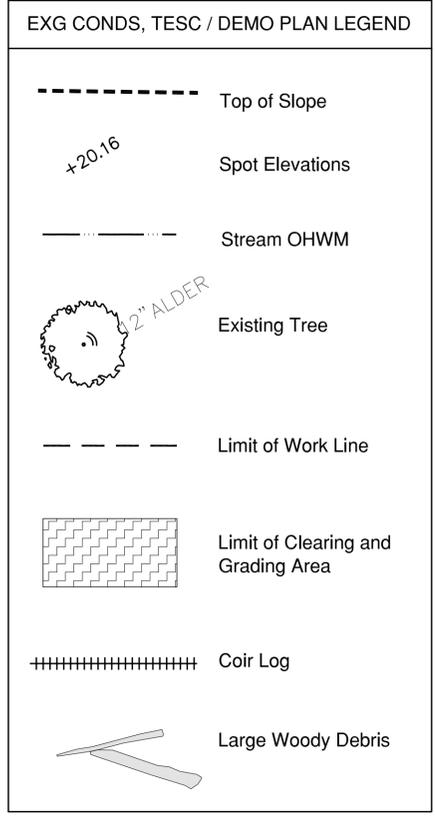
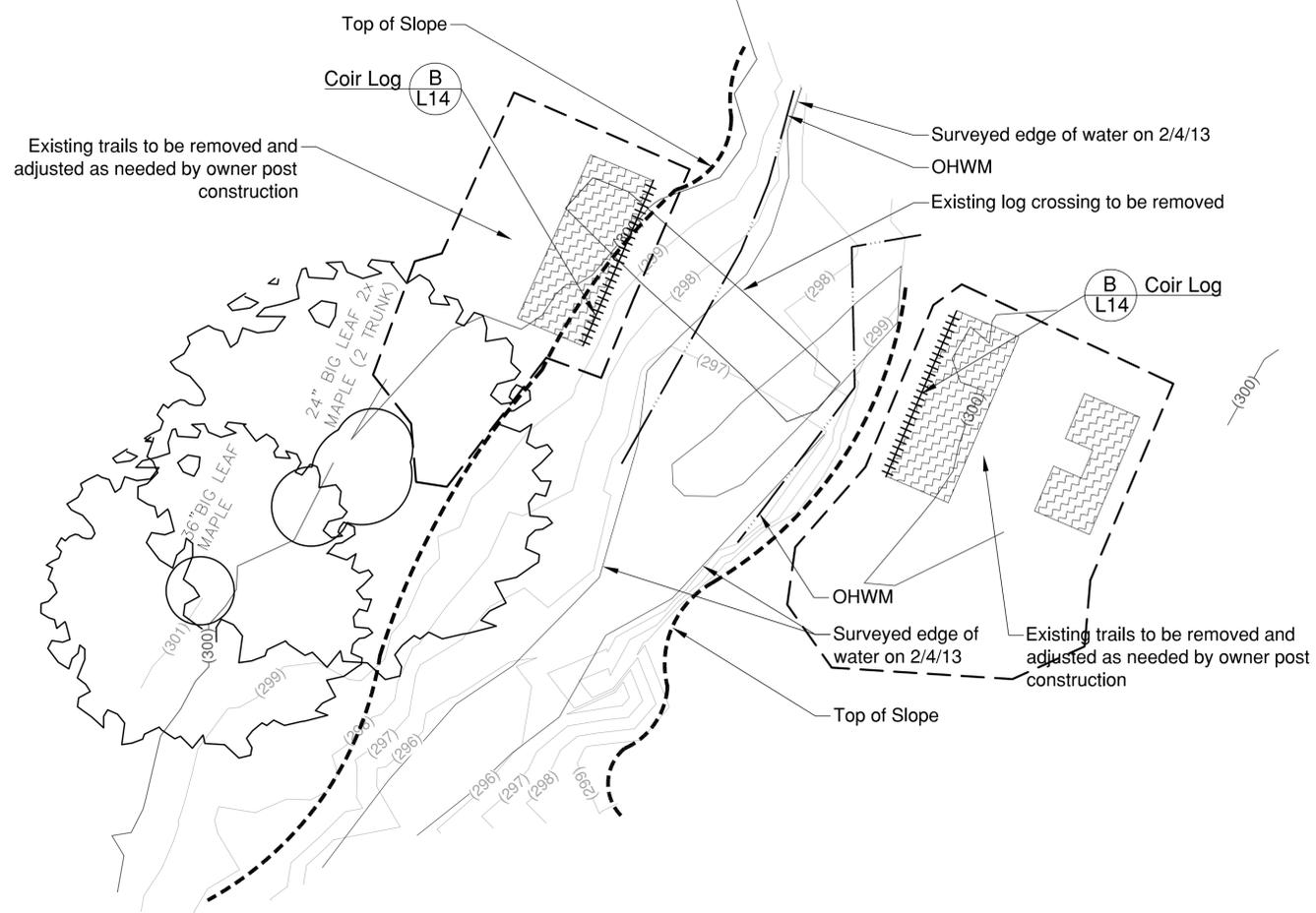


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Primrose Loop Trail

LO / SEPA PERMIT SET

SITE 1: LAYOUT / GRADING PLAN
L4
SHEET 4 OF 18



KEY PLAN

Scale: 1" = 250'-0"

NOTES:

1. For Temporary Erosion & Sedimentation Control Notes see sheet L3.
2. For Trail Removal Notes see sheet L3.

SITE 2: EXISTING CONDITIONS, TESC / DEMO

Scale: 1/4" = 1'-0"

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1	02-25-13			30% DRAFT SCHEMATIC DESIGN
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4	05-20-13			LO / SEPA PERMIT SET

Approved By

TRANSPORTATION DESIGN MANAGER DATE

PROJECT MANAGER DATE

NM, JB DESIGNED BY 05/20/13 DATE

NM, SW DRAWN BY 05/20/13 DATE

JB CHECKED BY 05/20/13 DATE



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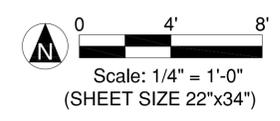
Primrose Loop Trail

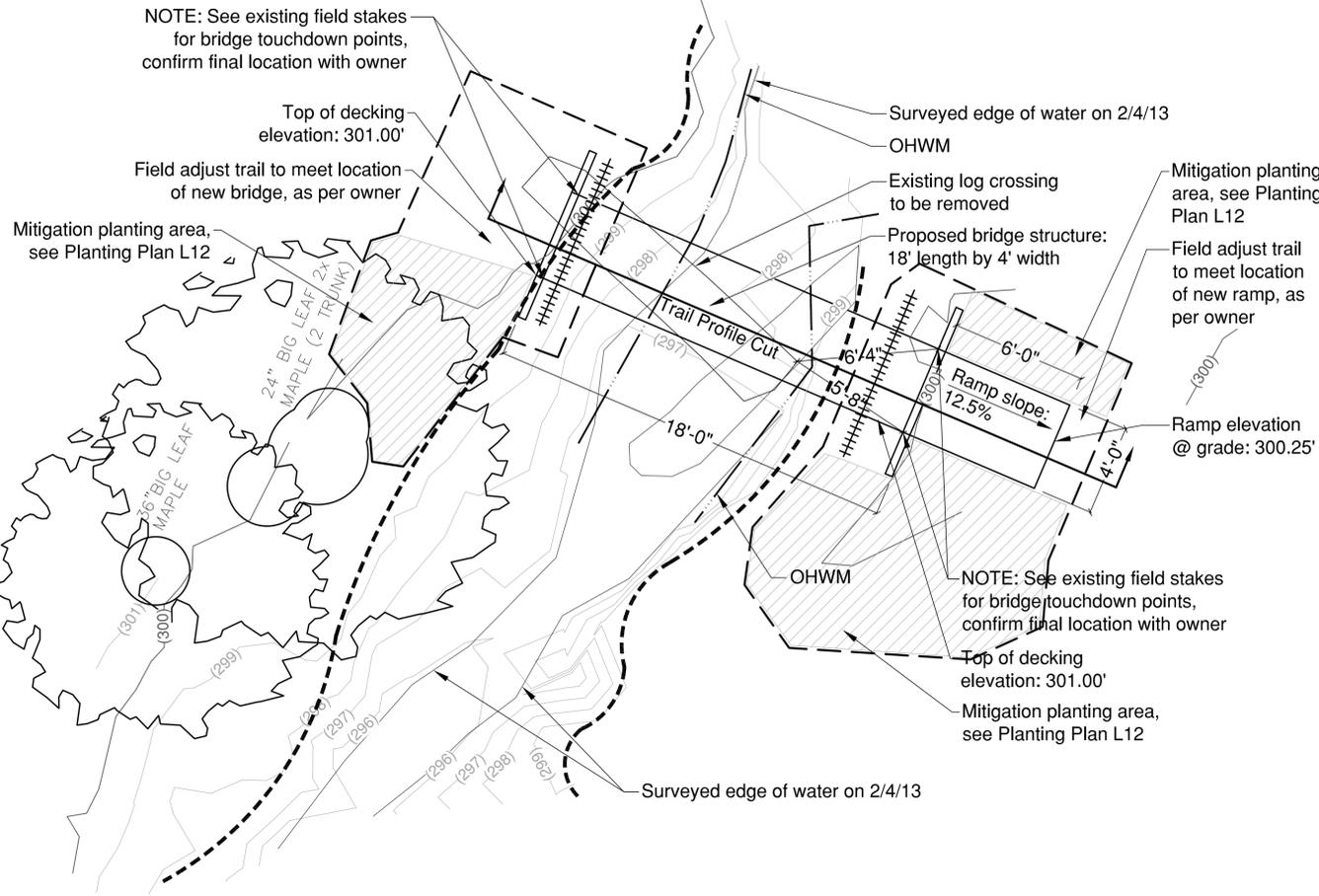
LO / SEPA PERMIT SET

SITE 2: EXISTING CONDITIONS
TESC / DEMO PLAN

L5

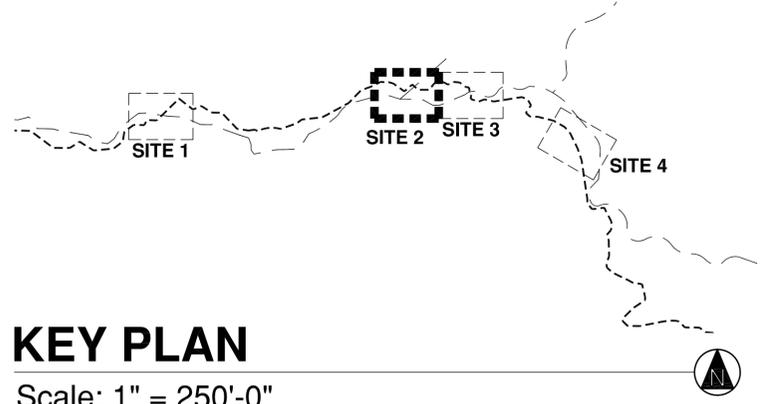
SHEET 5 OF 18





LAYOUT / GRADING PLAN LEGEND

- Top of Slope
- +20.16 Spot Elevations
- Stream OHWM
- Existing Tree
- Limit of Work Line
- Mitigation Planting Area
- ++++ Coir Log
- Large Woody Debris



KEY PLAN

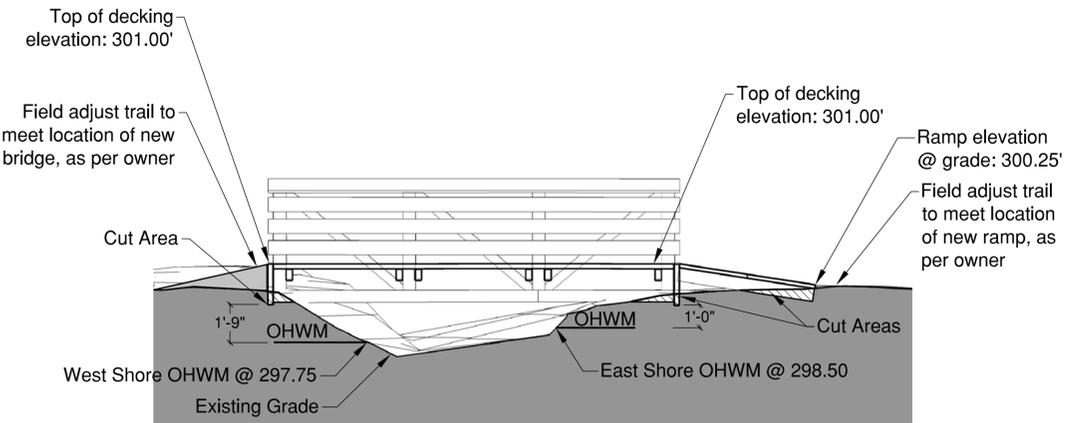
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NOTES:

1. For Clearing and Grading Notes see Cover Sheet.

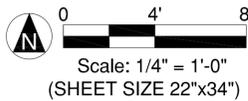
SITE 2: LAYOUT / GRADING PLAN

Scale: 1/4" = 1'-0"



TRAIL PROFILE

Scale: 1/4" = 1'-0"



NO.	DATE	BY	APPR.	REVISIONS
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NM, JB DESIGNED BY DATE 05/20/13

NM, SW DRAWN BY DATE 05/20/13

JB CHECKED BY DATE 05/20/13



City of Bellevue

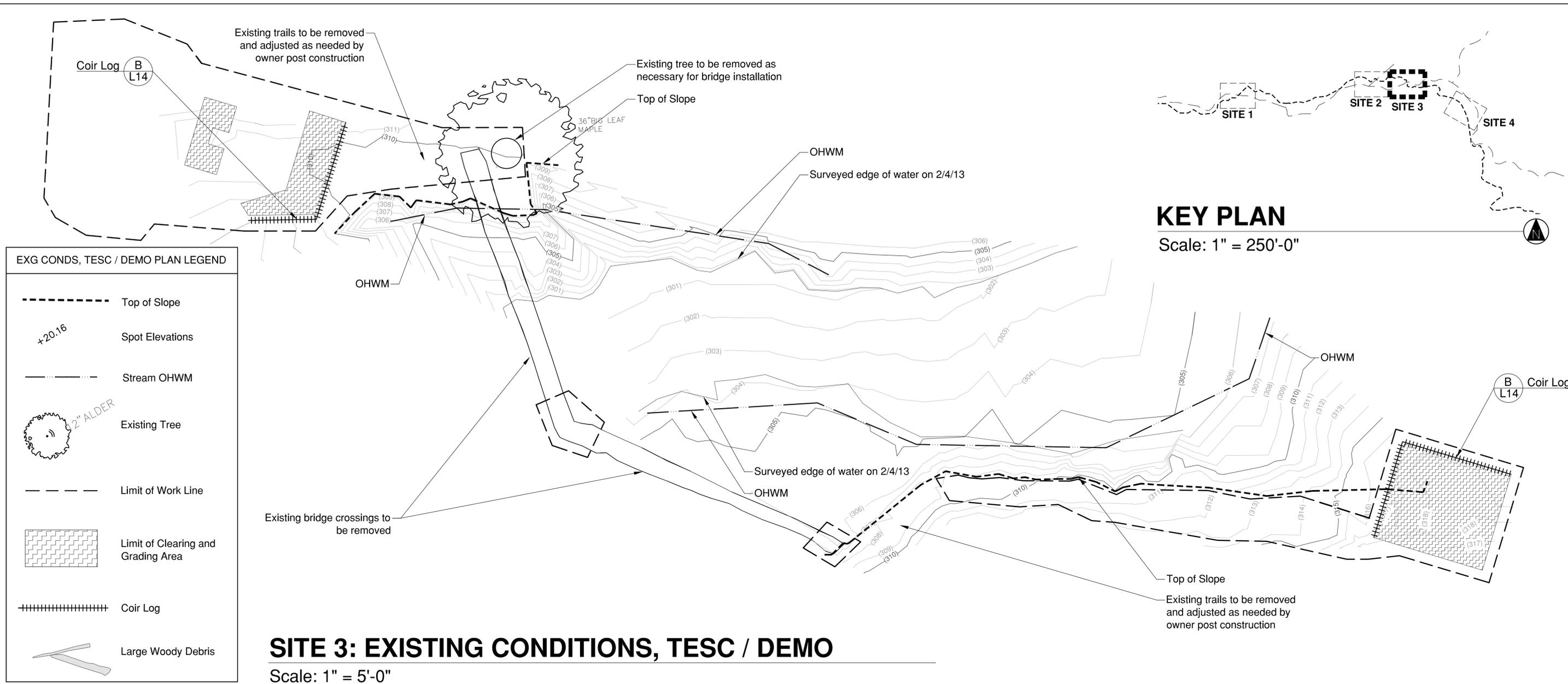


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Primrose Loop Trail

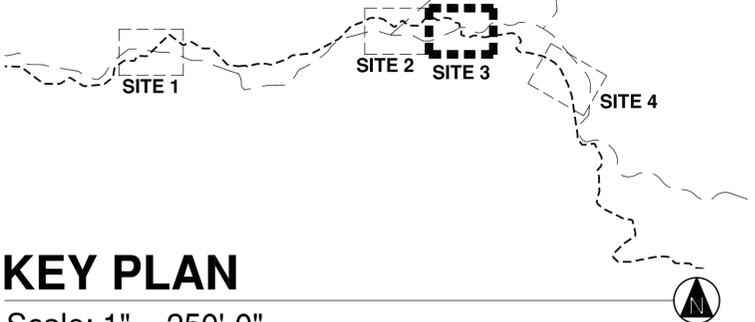
LO / SEPA PERMIT SET

SITE 2: LAYOUT / GRADING PLAN
L6



KEY PLAN

Scale: 1" = 250'-0"



EXG CONDS, TESC / DEMO PLAN LEGEND

- Top of Slope
- Spot Elevations
- Stream OHWM
- Existing Tree
- Limit of Work Line
- Limit of Clearing and Grading Area
- Coir Log
- Large Woody Debris

SITE 3: EXISTING CONDITIONS, TESC / DEMO

Scale: 1" = 5'-0"

NOTES:

1. For Temporary Erosion & Sedimentation Control Notes see sheet L3.
2. For Trail Removal Notes see sheet L3.



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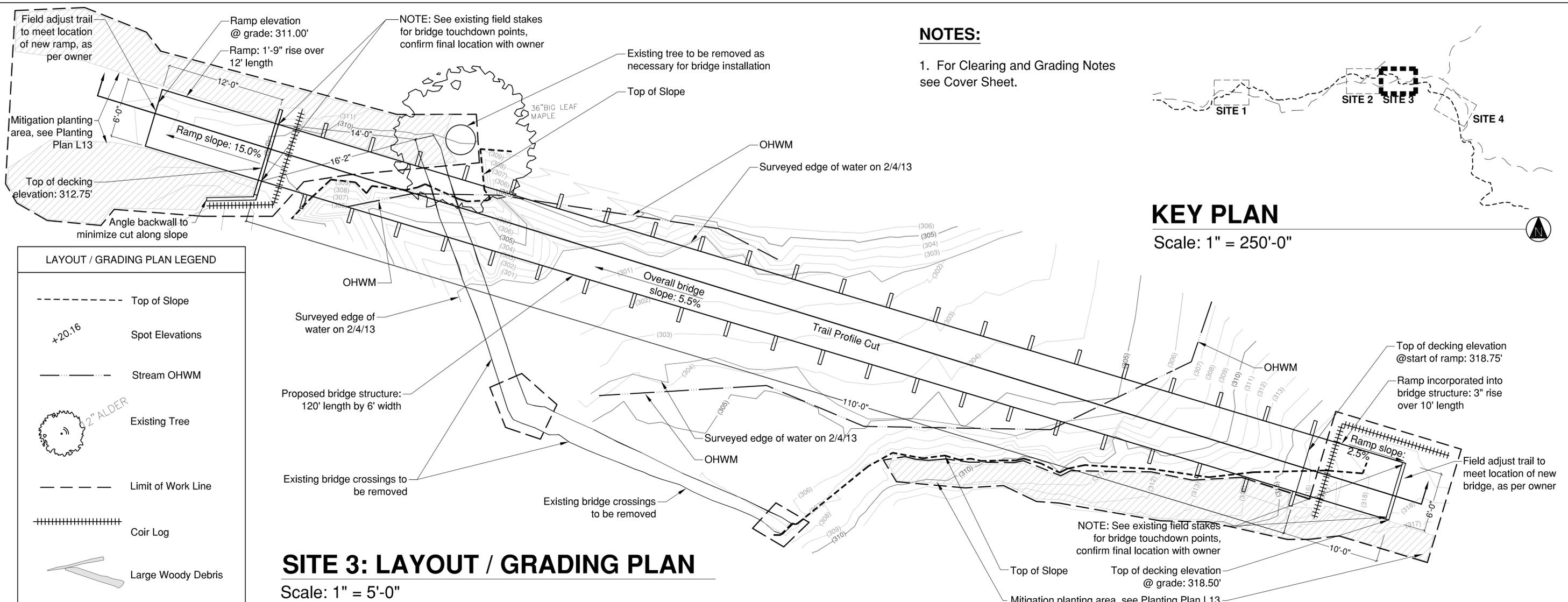
NM, JB	05/20/13
DESIGNED BY	DATE
NM, SW	05/20/13
DRAWN BY	DATE
JB	05/20/13
CHECKED BY	DATE



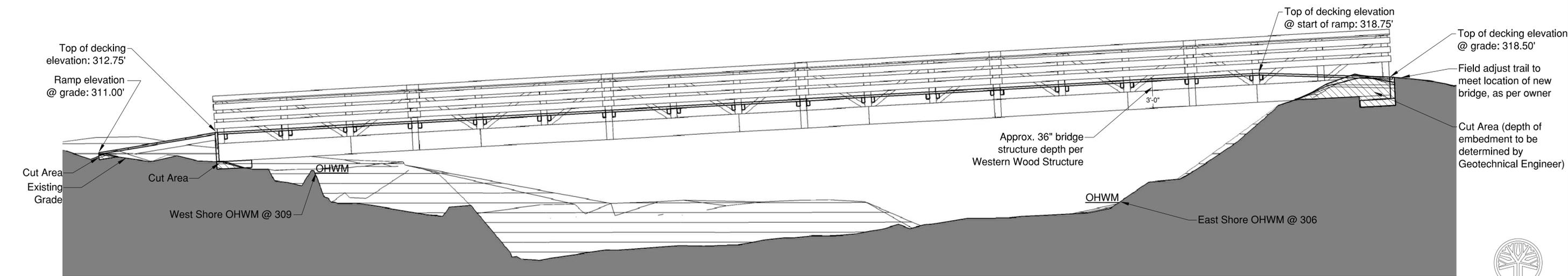
Primrose Loop Trail

LO / SEPA PERMIT SET

SITE 3: EXISTING CONDITIONS
TESC / DEMO PLAN
L7
SHEET 7 OF 18



SITE 3: LAYOUT / GRADING PLAN
Scale: 1" = 5'-0"



TRAIL PROFILE
Scale: 1" = 5'-0"

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Approved By		DATE
TRANSPORTATION DESIGN MANAGER		
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City of Bellevue
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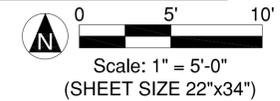
Primrose Loop Trail

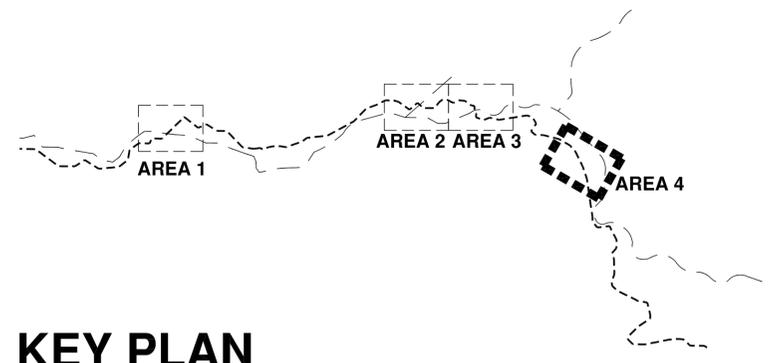
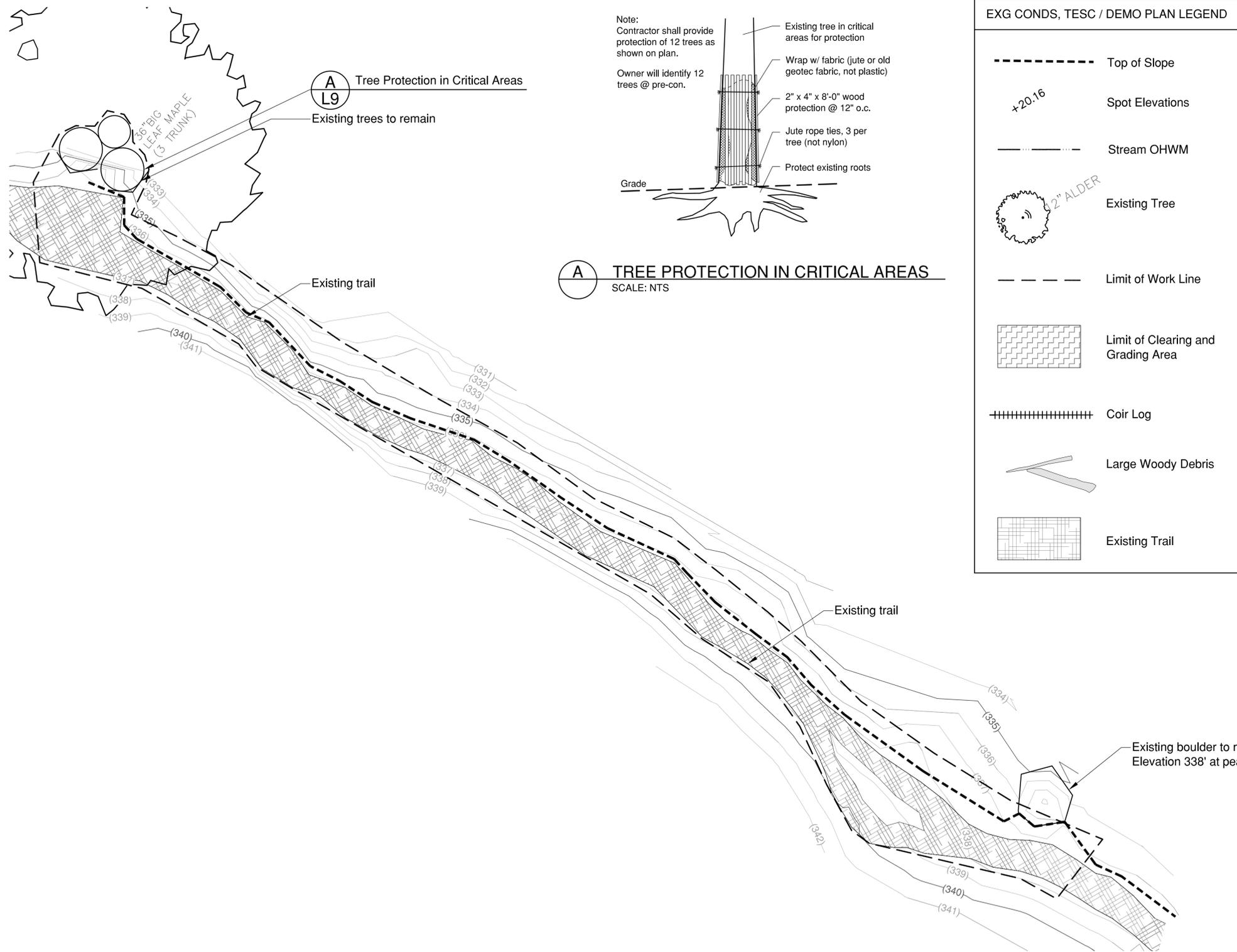
LO / SEPA PERMIT SET

SITE 3: LAYOUT / GRADING PLAN
L8
 SHEET 8 OF 18

NOTES:
1. For Clearing and Grading Notes see Cover Sheet.

KEY PLAN
Scale: 1" = 250'-0"

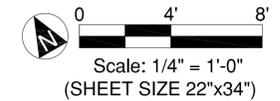




- NOTES:**
- For Temporary Erosion & Sedimentation Control Notes see sheet L3.
 - For Trail Removal Notes see sheet L3.

SITE 4: RAILING EXG. CONDS / TESC / DEMO PLAN

Scale: 1/4" = 1'-0"



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PROJECT MANAGER	DATE
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JB	05/20/13	CHECKED BY	DATE



City of Bellevue

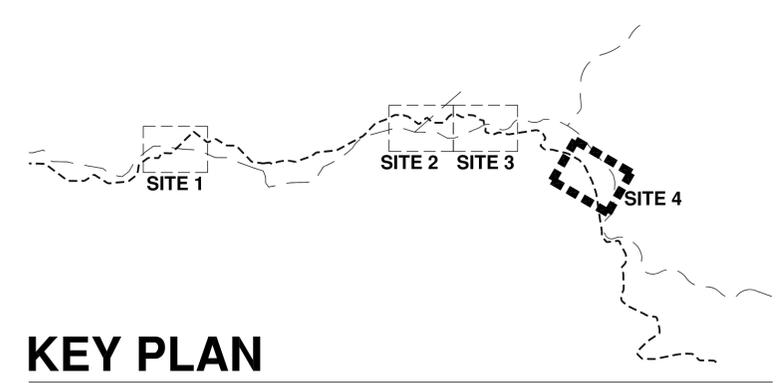
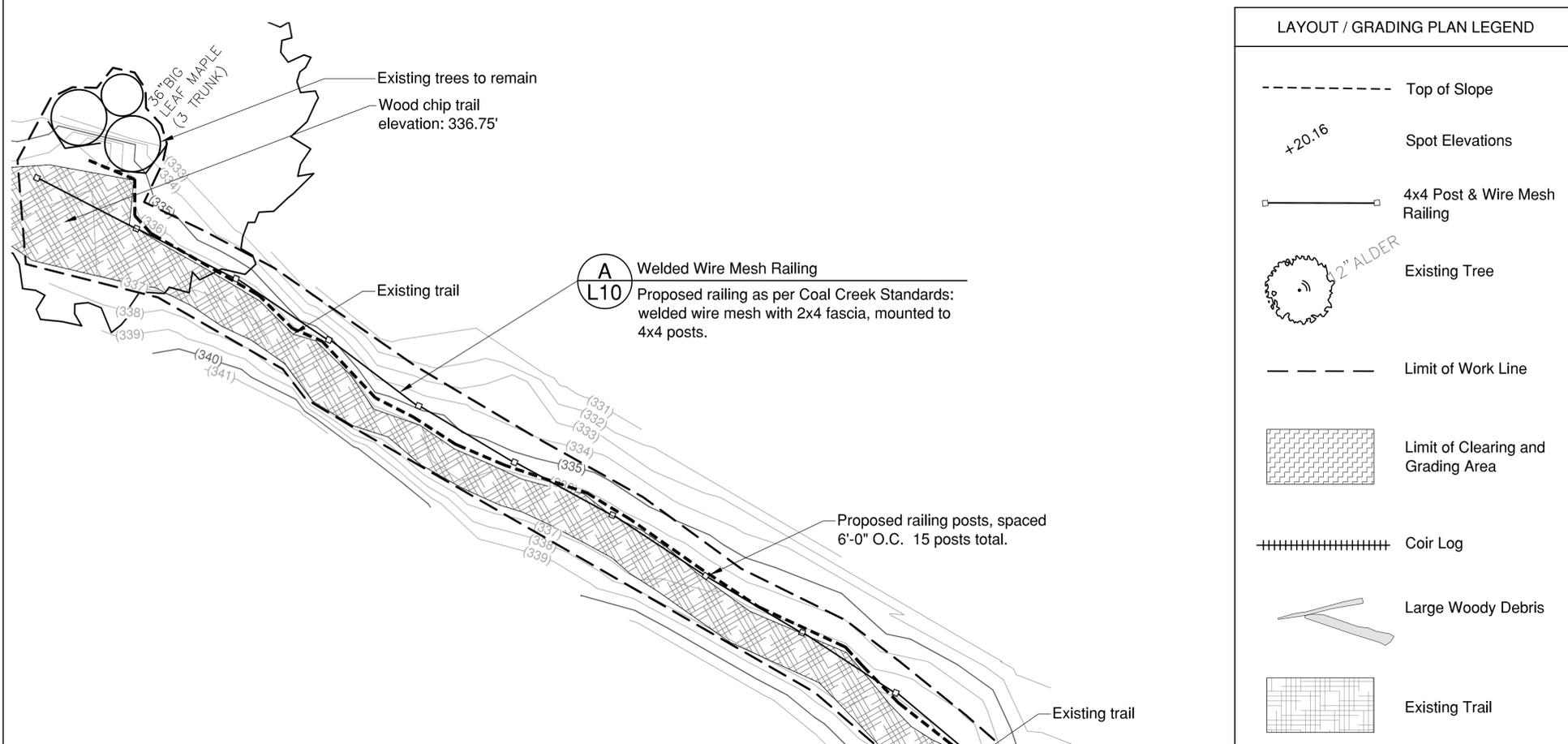


BARKER LANDSCAPE ARCHITECTS
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 Seattle, WA 98117
 tel: 206.783.2870
 fax: 206.783.3212

Primrose Loop Trail

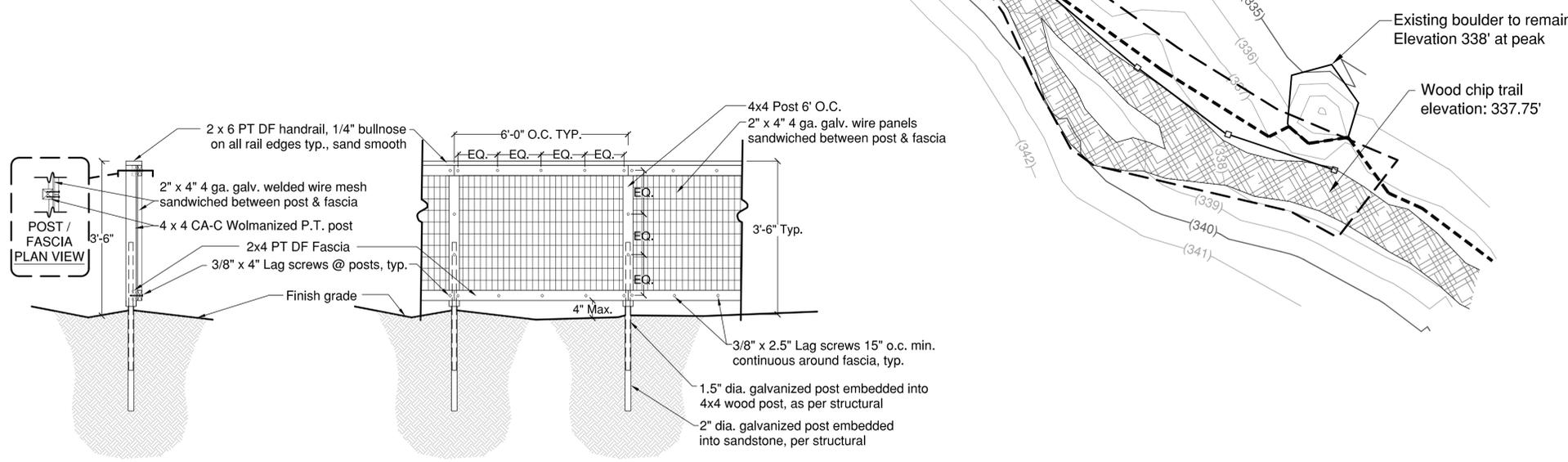
LO / SEPA PERMIT SET

SITE 4: EXISTING CONDITIONS
 TESC / DEMO PLAN
L9
 SHEET 9 OF 18

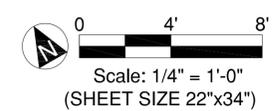


SITE 4: RAILING LAYOUT / GRADING

Scale: 1/4" = 1'-0"



A WELDED WIRE MESH RAILING SECTION & ELEVATION
SCALE: NTS



NO.	DATE	BY	APPR.	REVISIONS
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4	05-20-13			LO / SEPA PERMIT SET

Approved By

TRANSPORTATION DESIGN MANAGER DATE

PROJECT MANAGER DATE

NM, JB DESIGNED BY DATE 05/20/13

NM, SW DRAWN BY DATE 05/20/13

JB CHECKED BY DATE 05/20/13

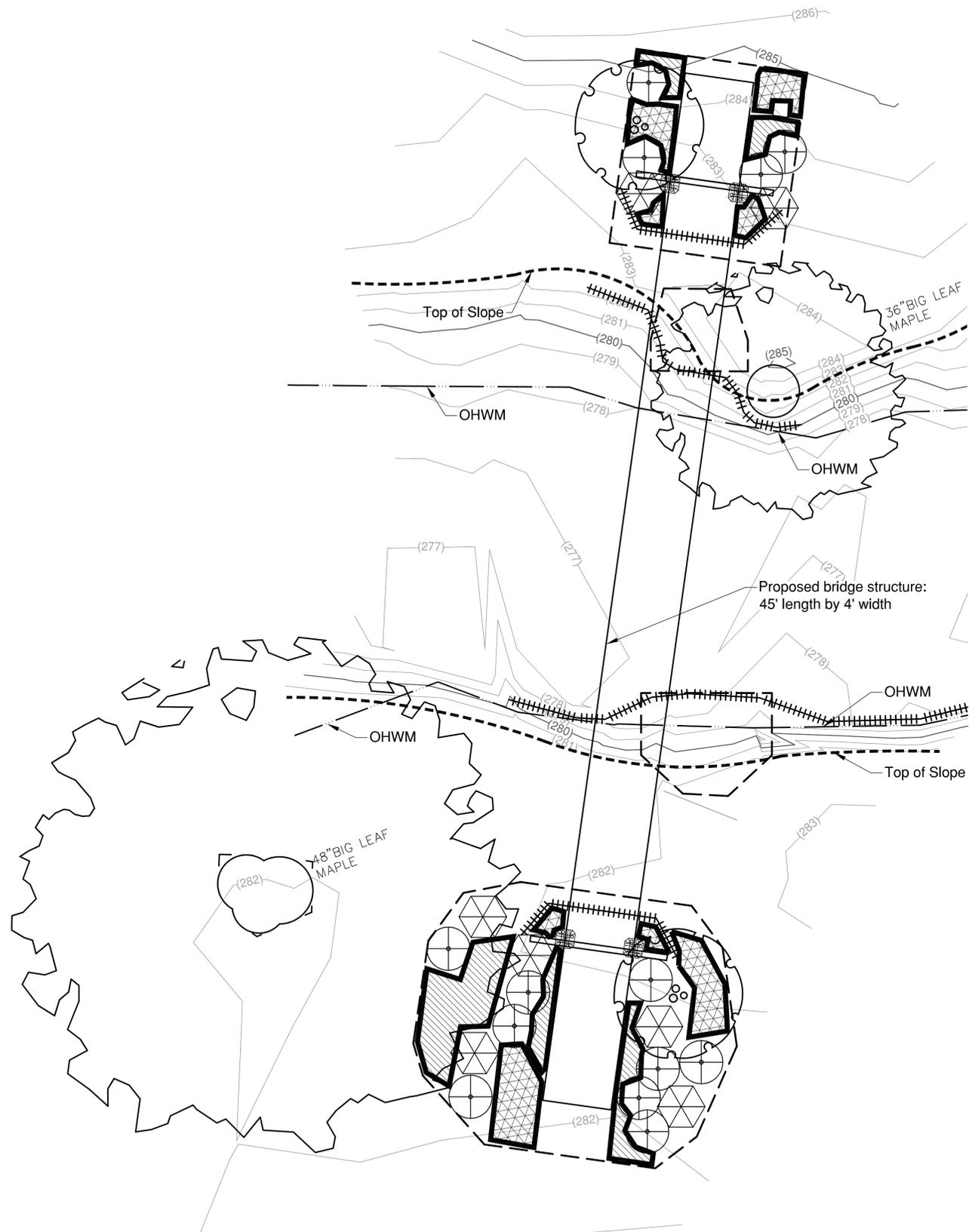


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SITE 4: LAYOUT / GRADING PLAN
L10
SHEET 10 OF 18



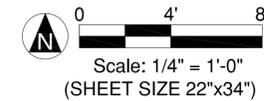
GENERAL PLANTING NOTES:

1. Plant selection shall be consistent with the Bellevue Land Use Code, Section 20.20.520, Landscape Development.
2. Plants shall be selected and sited to produce a hardy and drought-resistant landscape area. Selection shall consider soil type and depth, the amount of maintenance required, spacing, exposure to sun and wind, the slope and contours of the site, and compatibility with existing native vegetation preserved on the site. Preservation of existing vegetation is strongly encouraged.
3. Prohibited materials. Plants listed as prohibited in the Bellevue Land Use Code are prohibited in required landscape areas. Additionally, there are other plants that may not be used if identified in Bellevue Land Use Code as potentially damaging to sidewalks, roads, underground utilities, drainage improvements, foundations, or when not provided with enough growing space.
4. All plants shall conform to American Association of Nurserymen (AAN) grades and standards as published in the "American Standard for Nursery Stock" manual.
5. Plants shall meet the minimum size standards established in other sections of Bellevue Land use Code, Section 20.20.520 Landscape Development.
6. Multiple-stemmed trees may be permitted as an option to single-stemmed trees for required landscaping provided that such multiple-stemmed trees are at least ten (10) feet in height and that they are approved by the Planning Official prior to installation.
7. Soils in planting areas shall have adequate porosity to allow root growth. Soils which have been compacted to a density greater than one and three-tenths (1.3) grams per cubic centimeters shall be loosened to increase aeration to a minimum depth of twenty-four (24) inches or to the depth of the largest plant root ball, whichever is greater. Imported topsoils shall be tilled into existing soils to prevent a distinct soil interface from forming After soil preparation is completed, motorized vehicles shall be kept off to prevent excessive compaction and underground pipe damage. The organic content of soils in any landscape area shall be as necessary to provide adequate nutrient and moisture-retention levels for the establishment of plantings. See Bellevue Clearing and Grading Development Standards for mulch requirements.
8. Required plantings, except turf or areas of established ground cover, shall be covered with two inches or more of organic mulch to minimize evaporation and runoff. Mulch shall consist of materials such as yard waste, sawdust, and/or manure that are fully composted.
9. All mulches used in planter beds shall be kept at least six (6) inches away from the trunks of shrubs and trees.
10. All required landscaped areas, particularly trees and shrubs, must be protected from potential damage by adjacent uses and development, including parking and storage areas. Protective devices such as bollards, wheel stops, trunk guards, root guards, etc., may be required in some situations.

PLANT SCHEDULE (FOR SITE 1 ONLY)						
SMALL TREES						
SYMBOL	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING	REMARKS	TOTAL QUANT.
	Acer circinatum	Vine Maple	-	As shown	Min. (3) 1" r stems, B&B, ball dia. 24" min.	2
SHRUBS						
SYMBOL	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING	REMARKS	TOTAL QUANT.
	Polystichum munitum	Sword Fern	1 Gallon	As shown	container	13
	Symphoricarpos albus	Snowberry	-	As shown	-	7
GROUNDCOVERS & PERENNIALS						
SYMBOL	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING	REMARKS	TOTAL QUANT.
	Gaultheria shallon	Salal	1 Gallon	18" o.c.	tri-spacing, container	20
	Asarum caudatum	Wild Ginger	1 Gallon	18" o.c.	tri-spacing, container	18

SITE 1: PLANTING / RESTORATION PLAN

Scale: 1/4" = 1'-0"



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3	04-24-13			90% COORDINATION SET
4	05-20-13			LO / SEPA PERMIT SET

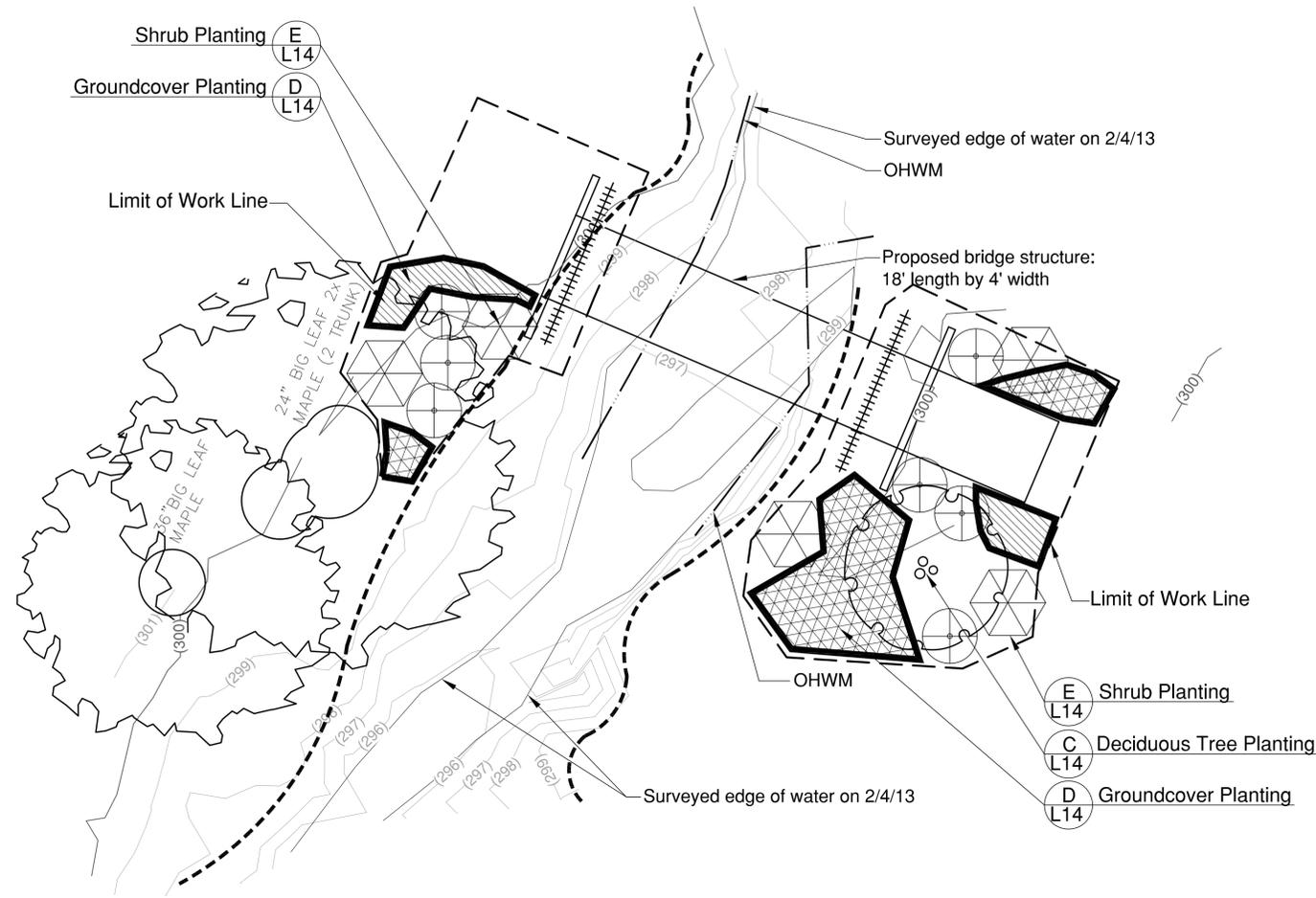
Approved By		
TRANSPORTATION DESIGN MANAGER	DATE	NM, JB DESIGNED BY 05/20/13 DATE
PROJECT MANAGER	DATE	NM, SW DRAWN BY 05/20/13 DATE
	DATE	JB CHECKED BY 05/20/13 DATE



Primrose Loop Trail

LO / SEPA PERMIT SET

SITE 1 : PLANTING / RESTORATION PLAN
L11
SHEET 11 OF 18



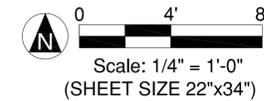
NOTES:

1. For Planting Notes see Site 1: Planting/Restoration Plan, sheet L11.

PLANT SCHEDULE (FOR SITE 2 ONLY)						
SMALL TREES						
SYMBOL	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING	REMARKS	TOTAL QUANT.
	<i>Acer circinatum</i>	Vine Maple	-	As shown	Min. (3) 1" r stems, B&B, ball dia. 24" min.	1
SHRUBS						
SYMBOL	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING	REMARKS	TOTAL QUANT.
	<i>Polystichum munitum</i>	Sword Fern	1 Gallon	As shown	container	7
	<i>Symphoricarpos albus</i>	Snowberry	-	As shown	-	5
GROUNDCOVERS & PERENNIALS						
SYMBOL	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING	REMARKS	TOTAL QUANT.
	<i>Gaultheria shallon</i>	Salal	1 Gallon	18" o.c.	tri-spacing, container	18
	<i>Asarum caudatum</i>	Wild Ginger	1 Gallon	18" o.c.	tri-spacing, container	9

SITE 2: PLANTING / RESTORATION PLAN

Scale: 1/4" = 1'-0"



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Approved By

TRANSPORTATION DESIGN MANAGER DATE

PROJECT MANAGER DATE

NM, JB DESIGNED BY 05/20/13 DATE

NM, SW DRAWN BY 05/20/13 DATE

JB CHECKED BY 05/20/13 DATE



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Primrose Loop Trail

LO / SEPA PERMIT SET

SITE 2: PLANTING / RESTORATION PLAN
L12
SHEET 12 OF 18

PLANT SCHEDULE (FOR SITE 3 ONLY)

SMALL TREES

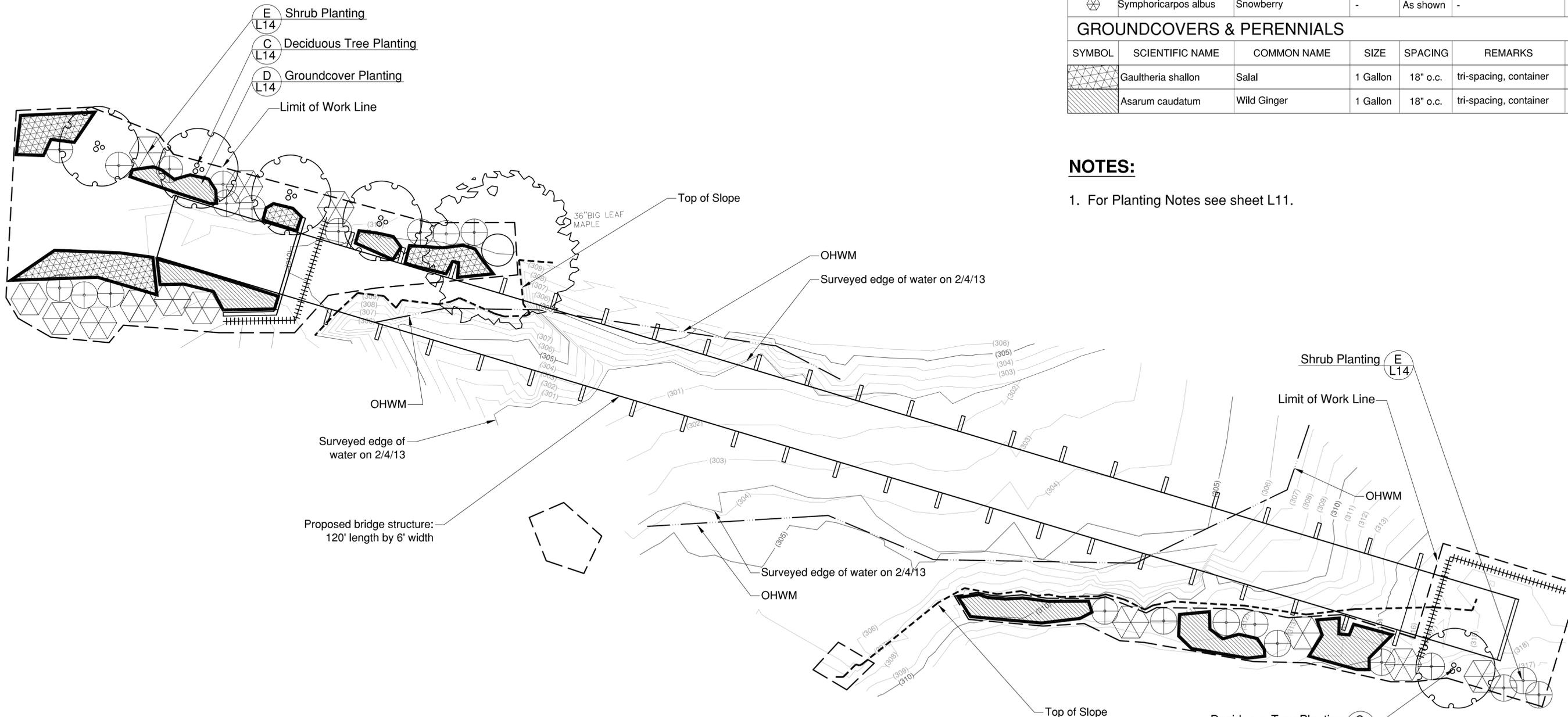
SYMBOL	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING	REMARKS	TOTAL QUANT.
⊙	<i>Acer circinatum</i>	Vine Maple	-	As shown	Min. (3) 1" r stems, B&B, ball dia. 24" min.	5

SHRUBS

SYMBOL	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING	REMARKS	TOTAL QUANT.
⊕	<i>Polystichum munitum</i>	Sword Fern	1 Gallon	As shown	container	23
⊗	<i>Symphoricarpos albus</i>	Snowberry	-	As shown	-	13

GROUNDCOVERS & PERENNIALS

SYMBOL	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING	REMARKS	TOTAL QUANT.
▨	<i>Gaultheria shallon</i>	Salal	1 Gallon	18" o.c.	tri-spacing, container	33
▩	<i>Asarum caudatum</i>	Wild Ginger	1 Gallon	18" o.c.	tri-spacing, container	47



NOTES:

1. For Planting Notes see sheet L11.

SITE 3: PLANTING / RESTORATION PLAN

Scale: 1" = 5'-0"



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Approved By

TRANSPORTATION DESIGN MANAGER	DATE
PROJECT MANAGER	DATE
	DATE

NM, JB	DESIGNED BY	05/20/13	DATE
NM, SW	DRAWN BY	05/20/13	DATE
JB	CHECKED BY	05/20/13	DATE



City of Bellevue



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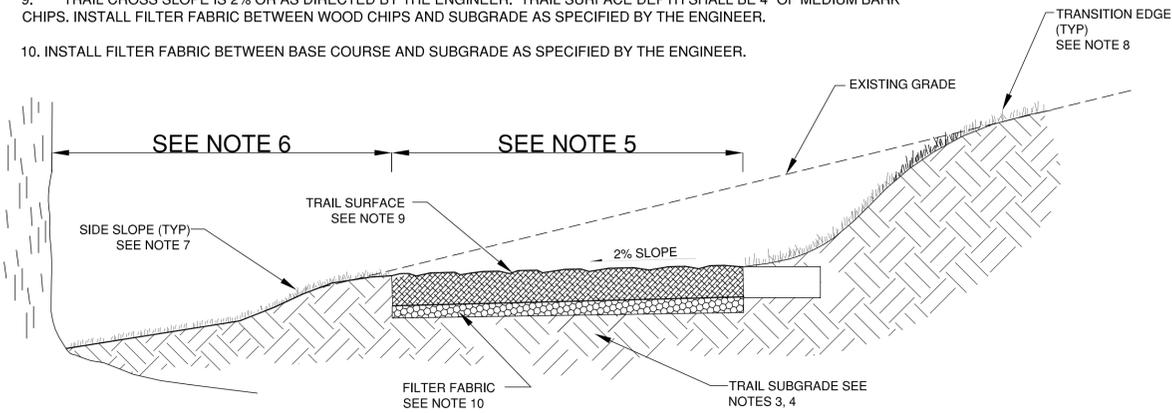
Primrose Loop Trail

LO / SEPA PERMIT SET

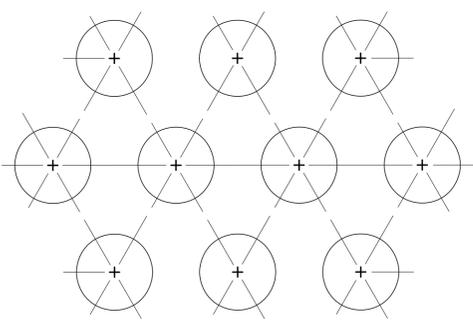
SITE 3: PLANTING / RESTORATION PLAN
L13
SHEET 13 OF 18

NOTES

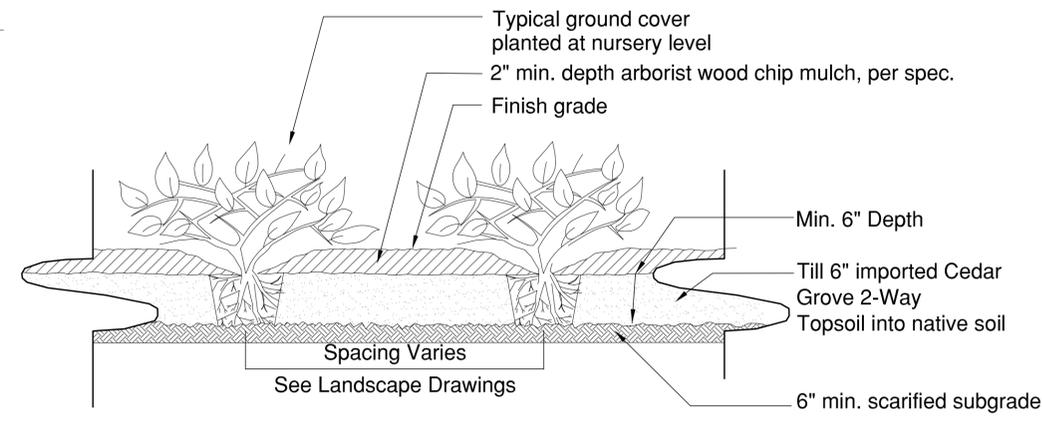
1. APPROPRIATE DRAINAGE SHALL BE PROVIDED PER CITY OF BELLEVUE REQUIREMENTS.
2. TRAIL ALIGNMENTS SUBJECT TO REVIEW AND APPROVAL BY THE ENGINEER PRIOR TO START OF CONSTRUCTION OF TRAIL.
3. TRAIL SUBGRADE TO BE COMPACTED TO 95% DENSITY. SUBGRADE SHALL CONSIST OF UNDISTURBED NATIVE SOIL.
4. TRAIL SUBGRADE TO BE TREATED WITH APPROVED HERBICIDE PRIOR TO FINAL INSTALLATION OF WOOD CHIP SURFACE.
5. TRAIL WIDTH TO BE SPECIFIED BY THE ENGINEER. GENERAL WIDTHS RANGE BETWEEN 4' TO 6'.
6. TRAIL SHALL HAVE A 2' MINIMUM HORIZONTAL CLEARANCE TO ANY OBSTRUCTION AND A 7' MINIMUM VERTICAL (BRANCH) CLEARANCE FROM TRAIL SURFACE. OBSTRUCTION CLEARANCE REQUIRED BOTH SIDES OF TRAIL.
7. TRAIL SIDESLOPE SHALL BE GRADED WITH TOPSOIL BACKFILL AT A 3:1 SLOPE. GRADING SHALL BE DONE SO THAT ACCUMULATION OF RUN-OFF DOES NOT COLLECT AT BOTTOM OF SLOPE. COMPACT AS REQUIRED.
8. MINIMUM 2' WIDE TRANSITION EDGE REQUIRED PRIOR TO START OF SIDE SLOPE. COVER WITH TOPSOIL AND SEED AS REQUIRED BY THE ENGINEER.
9. TRAIL CROSS SLOPE IS 2% OR AS DIRECTED BY THE ENGINEER. TRAIL SURFACE DEPTH SHALL BE 4" OF MEDIUM BARK CHIPS. INSTALL FILTER FABRIC BETWEEN WOOD CHIPS AND SUBGRADE AS SPECIFIED BY THE ENGINEER.
10. INSTALL FILTER FABRIC BETWEEN BASE COURSE AND SUBGRADE AS SPECIFIED BY THE ENGINEER.



A WOOD CHIP PATH
SCALE: NTS

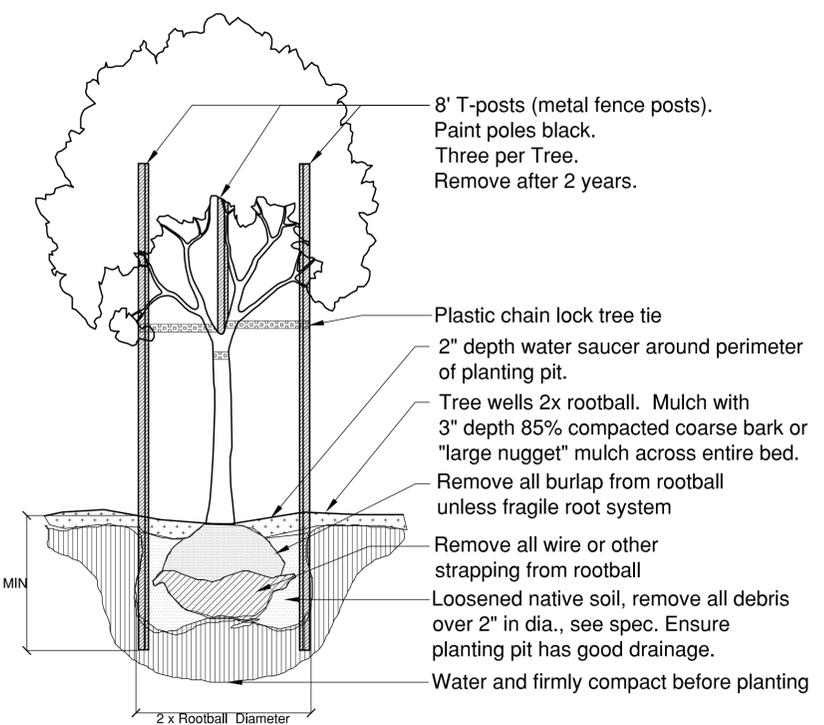
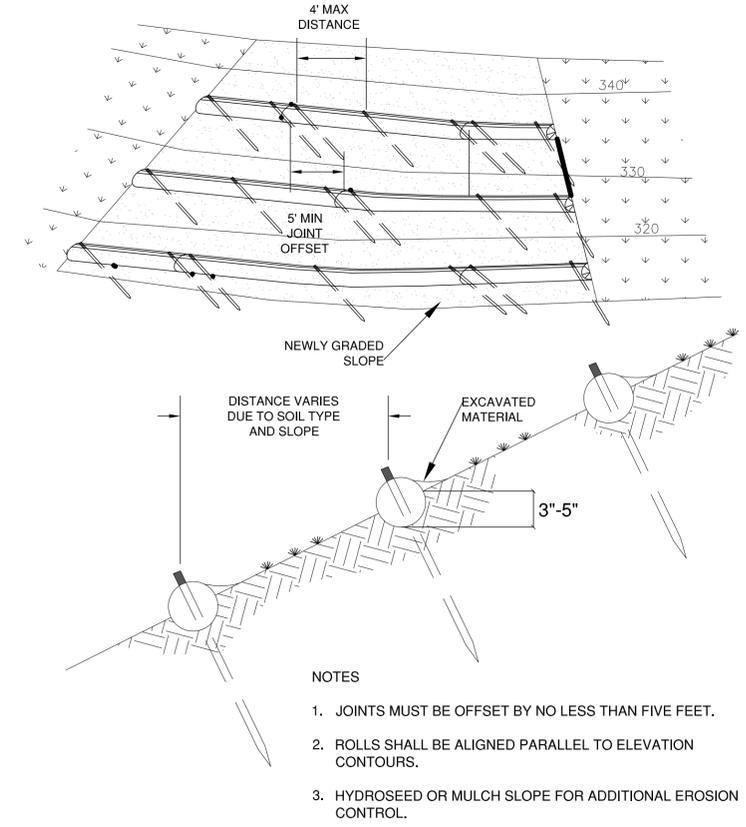


- (1) All groundcover shall be planted at equal triangular spacing or on center spacing as specified on planting plan
- (2) Locate groundcover one half of specified spacing distance from any curb, sidewalk, or other hard surface, unless otherwise specified

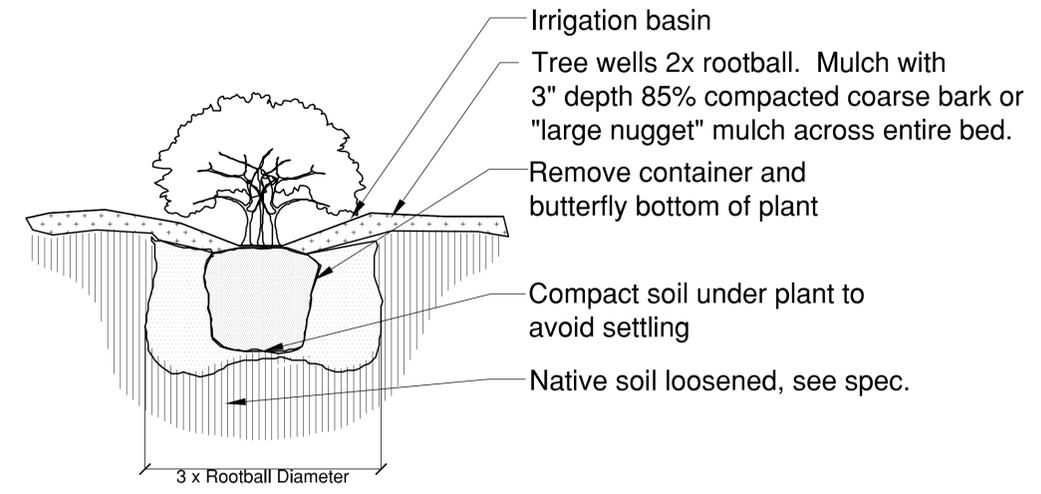


D GROUNDCOVER PLANTING
SCALE: NTS

B COIR LOG
SCALE: NTS



C DECIDUOUS TREE PLANTING
SCALE: NTS



E SHRUB PLANTING
SCALE: NTS

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Approved By	
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Primrose Loop Trail

LO / SEPA PERMIT SET

STATE OF WASHINGTON
 REGISTERED LANDSCAPE ARCHITECT

 JOHN FORREST BARKER
 CERTIFICATE NO. 486

DETAILS
L14
 SHEET 14 OF 18

**Primrose Loop Trail
Critical Areas Land Use Permit
Narrative Description
May 21, 2013**

Description of the project site, including landscape features, existing development, and site history as applicable.

Response: The project is located in the Coal Creek Natural Area between Newcastle Golf Club Road and Forest Drive SE, south of the Forest Glen East Neighborhood Park (parcel numbers 2724059005 and 2724059002). The two parcels are approximately 30.4 and 39.2 acres, respectively. However, the four project areas (where construction will occur) total less than 0.2 acre.

The City of Bellevue Parks and Community Services Department currently owns the parcels upon which improvements are proposed. The parcels are used strictly for a natural park. Properties to the north and east are primarily single-family residential. A golf course and some limited commercial (YMCA) and industrial uses are located to the south and southwest.

A total of four project sites are included in the proposal. Three of the sites include replacement of existing bridge crossings and the fourth site includes installation of a steep slope railing system.

Existing conditions at the first site include a wooden bridge consisting of two logs spanning Coal Creek, overlaid by approximately 2.5 foot-wide planks and a wooden railing on both sides. The support logs are partially rotted, and the planks and railings are not stable. A log extends out of the left bank just below the bankful width and just upstream of the existing bridge. Vegetation consists of a bigleaf maple overstory, and understory vegetation predominantly consists of vine maple, salmonberry, and sword fern.

The second site includes a wooden bridge consisting of two logs spanning a tributary to Coal Creek. On the left bank of the tributary, the bridge is supported by a large log that extends approximately 30 feet landward of the streambank, where it functions as a nurse log for mature cedar trees. The log also extends approximately 10 feet into the tributary, downstream from the bridge crossing. Bank erosion landward of the support log has caused an approximately 1 foot wide gap to form between the ground and the bridge on the left bank of the

tributary. Vegetation consists of a bigleaf maple and western red cedar overstory, and understory vegetation predominantly consists of salmonberry, lady fern, sword fern, and giant horsetail.

The third site includes a wooden bridge consisting of two sections, forming a “V”. The bridge section on the right bank is similar in construction to the bridge at Site 1, with two logs spanning the length of the bridge, and planks lying across the logs. This section of the bridge is unstable, rotting, and in disrepair. The left bank bridge section consists of a single, solid, approximately 36-inch diameter log, with a wooden railing attached to one side. The log is within the bankful channel, and it provides structural habitat diversity to the stream. Vegetation consists of bigleaf maple and western hemlock, and understory vegetation is dominated by red alder, vine maple, salmonberry, devil’s club, sword fern, red elderberry, and young western red cedar.

The final site is located on a steep slope, approximately 35 feet above the elevation of Coal Creek. The existing dirt footpath is narrow, and it has eroded in places. Vegetation overstory consists of bigleaf maple and western hemlock, and understory vegetation is dominated by red alder, red elderberry, sword fern, and Solomon’s seal.

The proposed project will replace three existing pedestrian bridges, two across Coal Creek and one across a small tributary to Coal Creek. Approximately 90 linear feet of existing trail that parallels Coal Creek will be upgraded with a steep slope railing system. The proposed project will not include in-water work and it includes measures to minimize potential adverse impacts from bridge/trail improvements in the floodplain and riparian habitat of Coal Creek. Detailed plans are attached.

A description of how the design constitutes the minimum necessary impact to the critical area.

Response: The design includes removal of existing bridges with replacement structures proposed entirely outside of the ordinary high water mark (OHWM). Bridges have been sized to the minimum size necessary to safely span the streams while providing for current and expected demand within the natural area. No direct impacts to the stream will occur and impacts to the stream buffer will be offset with restoration of adjacent areas with native plantings. A total of approximately 864 square feet of plantings are proposed. Species include vine maple, sword fern, snowberry, salal, and wild ginger. The steep slope railing system is the minimum necessary to protect the existing trail and allow for safe passage.

A description of why there is no feasible alternative with less impact to the critical area, critical area buffer, or critical area structure setback.

Response: There is no feasible alternative with less impact to the critical area buffer. Existing bridges are undersized and dilapidated. Replacement is essential to allow for safe passage of the stream crossings. Design has utilized the minimum sized bridges to accomplish the project purpose while ensuring that all bridge components are located outside the OHWM. Earlier design iterations for the steep slope railing system site included an on-grade boardwalk. However, the current proposal includes only a welded wire mesh railing system, leaving the existing trail undisturbed and uncovered.

A description of alternatives considered and why the alternative selected is preferred.

Response: Design at each of the three bridge sites looked at several factors, including existing vegetation (with special consideration to significant trees), channel width and potential for migration/erosion, and existing trail location. The proposed bridges represent the preferred alternative for each site. Design for the steep slope railing system site looked at an on-grade boardwalk. However, the current proposal includes only a welded wire mesh railing system, leaving the existing trail undisturbed and uncovered.

A summary of how the proposal meets each of the decision criteria contained in Land Use Code Section 20.30P.

The Director may approve or approve with modifications an application for a Critical Areas Land Use Permit if:

A. The proposal obtains all other permits required by the Land Use Code.

Response: In addition to a Critical Areas Land Use Permit, the project applicant will apply for a Building Permit (BW) and if needed, a Right-of-Way Use Permit from the City of Bellevue. No other City of Bellevue land use or construction permits will be required of this project.

B. The proposal utilizes to the maximum extent possible the best available construction, design and development techniques which result in the least impact on the critical area and critical area buffer.

Response: The proposed project involves the replacement of three bridges and installation of one steep slope railing system. Bridges have

been designed to entirely span the OHWM of the streams, while avoiding as much existing native vegetation as is feasible. The railing system is designed to protect park users along a 90-foot-long section of trail adjacent to a steep slope. The railing utilizes the best available design to limit impacts to habitat and views while simultaneously protecting trail users.

Restoration plantings are proposed in those areas within the project area that are disturbed during construction or are currently devoid of significant native vegetation. A total of approximately 864 square feet of plantings are proposed. Species include vine maple, sword fern, snowberry, salal, and wild ginger. Proposed plantings will improve habitat complexity within the stream buffer.

By avoiding direct stream impacts, minimizing impacts within the buffer, and restoring areas with native plantings, the design and development of the proposed project will not decrease ecological function of the project site, and may improve ecological function over the long-term. Furthermore, the public will have improved access to this area.

C. The proposal incorporates the performance standards of Part 20.25H LUC to the maximum extent applicable.

20.25H.055.C.3.g New and Expanded City and Public Parks

i. Trails. New nonmotorized trails within the critical area or critical area buffer must meet the following standards:

(A) Trail location and design shall result in the least impacts on the critical area or critical area buffer.

Response: Design of the proposed improvements will result in the least amount of critical area and critical area buffer impacts possible. No direct stream impacts are proposed; permanent impacts will take place only within the stream buffer. Where feasible, bridge abutments are located within the existing trail alignment. Proposed native plantings within the project area are expected to offset any minimal impact to the buffer and may result in a long-term ecological improvement.

(B) Trails shall be designed to compliment and enhance the environmental, educational, and social functions and values of the critical area with trail design and construction focused on managing and controlling public access and limiting uncontrolled access.

Response: The proposed bridge and trail improvements have been designed to enhance several aspects of the critical area:

1) Environmentally, the critical area buffer will be restored with native plantings. Overall, ecological function within the critical area will be preserved and may improve as a result of the proposed project.

2) Educational and social values of the critical area will also be improved as a result of the proposed project. In addition to restoring portions of the buffer, the proposed project includes new bridges that will allow for safe travel through the natural area. Therefore, the public would be provided with improved passive access opportunities, all while protecting the critical area and creating further awareness of the ecological sensitivity and uniqueness of the area.

(C) Trails shall be designed to avoid disturbance of significant trees and to limit disturbance of native understory vegetation.

Response: No existing significant trees are proposed for removal as part of the proposed project. Existing significant trees within the project corridor will be adequately protected during construction activities. Areas of native shrubs and groundcover that are impacted during construction activities will be restored with native plantings after construction is complete.

(D) Trails shall be designed to avoid disturbance of habitat used for salmonid rearing or spawning or by any species of local importance.

Response: According to WDFW's Salmonscape maps and WRIA 8's Known Freshwater Distribution of Salmon and Trout maps, listed salmonids have not been observed within the project area, but federally threatened Chinook salmon and steelhead, as well as coho salmon, a federal species of concern, have been observed in Coal Creek downstream from the project area. Within the project area, coast resident cutthroat trout are present. According to Washington Department of Fish and Wildlife's PHS on the Web, no priority species or habitats are located in the immediate project area. Project improvements are not expected to impact any species of local importance.

(E) The trail shall be the minimum width necessary to accommodate the intended function or objective.

Response: The proposed bridges and modified approaches have been designed to have a width of approximately four feet. The proposed width is intended to provide adequate and safe capacity for expected demand while limiting impacts to the natural area.

(F) All work shall be consistent with the City of Bellevue's "Environmental Best Management Practices" and all applicable City of Bellevue codes and standards, now or as hereafter amended.

Response: All bridge and trail improvement work shall be consistent with the City of Bellevue Clearing and Grading Code (Chapter 23.76), permit conditions, and all other applicable codes, ordinances, and standards, including "Environmental Best Management Practices."

(G) The facility shall not significantly change or diminish overall aquatic area flow peaks, duration or volume or flood storage capacity, or hydroperiod.

Response: All portions of the proposed improvements will be located outside the limits of the on-site stream. Overall, there will be no change in flow peaks or storage capacity within the stream channel.

(H) Where feasible and consistent with any accessibility requirements, any trail shall be constructed of pervious materials.

Response: The existing on-site trails are pervious and all modified bridge approaches will also be pervious.

(I) Crossings over and penetrations into wetlands and streams shall be generally perpendicular to the critical area, and shall be accomplished by bridging or other technique designed to minimize critical area disturbance considering the entire trail segment and function.

Response: All proposed bridge crossings are perpendicular to the maximum extent feasible. However, topography and existing vegetation have resulted in one of the crossings (Site 3) oriented in a less than perpendicular fashion.

(J) Areas of new permanent disturbance and all areas of temporary disturbance shall be mitigated and/or restored pursuant to a mitigation and restoration plan meeting the requirements of LUC 20.25H.210.

Response: The project includes restoration of temporarily disturbed areas as well as restoration of degraded areas to offset impacts associated within the expanded bridges. These actions will be implemented in accordance with LUC 20.25H.210.

D. The proposal will be served by adequate public facilities including streets, fire protection, and utilities.

Response: The proposed project will be served by adequate public facilities. No additional public facilities will be required with implementation of the proposed project.

E. The proposal includes a mitigation or restoration plan consistent with the requirements of LUC 20.25H.210; except that a proposal to modify or remove vegetation pursuant to an approved Vegetation Management Plan under LUC 20.25H.055.C.3.i shall not require a mitigation or restoration plan.

Response: A restoration plan, prepared in accordance with the requirements of LUC 20.25H.210, is included in the plan set. The plan details areas of buffer restoration with native plantings. A total of approximately 864 square feet of plantings are proposed. Species include vine maple, sword fern, snowberry, salal, and wild ginger.

F. The proposal complies with other applicable requirements of this code.

Response: The proposed project complies with all other applicable City of Bellevue Land Use Codes, including 20.25H and 23.76.

A summary of how the proposal meets each of the criteria and performance standards contained in Land Use Code Section 20.25H associated with the critical area you are modifying.

Development on sites with a Type S or F stream or associated critical area buffer shall incorporate the following performance standards in design of the development, as applicable:

1. *Lights shall be directed away from the stream.*

Response: No lights are proposed as part of the bridge/trail improvement project.

2. *Activity that generates noise such as parking lots, generators, and residential uses, shall be located away from the stream, or any noise shall be minimized through use of design and insulation techniques.*

Response: The proposed project will not generate any significant amounts of noise. The only noise generated within the project area would be passing pedestrians.

3. *Toxic runoff from new impervious area shall be routed away from the stream.*

Response: No new impervious surfaces are proposed.

4. *Treated water may be allowed to enter the stream critical area buffer.*

Response: As indicated in the prior response, no impervious surfaces are proposed.

5. *The outer edge of the stream critical area buffer shall be planted with dense vegetation to limit pet or human use.*

Response: Degraded areas within the stream buffer will be restored with native vegetation.

6. *Use of pesticides, insecticides and fertilizers within 150 feet of the edge of the stream buffer shall be in accordance with the City of Bellevue's "Environmental Best Management Practices," now or as hereafter amended. (Ord. 5680, 6-26-06, § 3)*

Response: All enhancement and restoration activities associated with the trail improvement project, including pesticide, insecticide and fertilizer usage, will be in compliance with the City of Bellevue's "Environmental Best Management Practices."

In addition to generally applicable performance standards set forth in LUC [20.25H.055](#) and [20.25H.065](#), development within a landslide hazard or steep slope critical area or the critical area buffers of such hazards shall incorporate the following additional performance standards in design of the development, as applicable. The requirement for long-term slope stability shall exclude designs that require regular and periodic maintenance to maintain their level of function.

A. *Structures and improvements shall minimize alterations to the natural contour of the slope, and foundations shall be tiered where possible to conform to existing topography;*

Response: The proposed railing system involves the placement of 2-inch-diameter galvanized posts every six feet. The posts will be installed along the edge of the trail near the top of the adjacent steep slope. The installation of the posts is the only ground disturbed proposed. This technique will result in the least impact and will preserve all portions of the steep slope and existing vegetation.

B. Structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation;

Response: See prior response.

C. The proposed development shall not result in greater risk or a need for increased buffers on neighboring properties;

Response: The proposed railing system is located in excess of 200 feet from the nearest parcel and therefore will not result in an increased risk on neighboring parcels.

D. The use of retaining walls that allow the maintenance of existing natural slope area is preferred over graded artificial slopes where graded slopes would result in increased disturbance as compared to use of retaining wall;

Response: No retaining walls or the grading of slopes are proposed.

E. Development shall be designed to minimize impervious surfaces within the critical area and critical area buffer;

Response: No new impervious surfaces are proposed.

F. Where change in grade outside the building footprint is necessary, the site retention system should be stepped and regrading should be designed to minimize topographic modification. On slopes in excess of 40 percent, grading for yard area may be disallowed where inconsistent with this criteria;

Response: No buildings are proposed as part of the project.

G. Building foundation walls shall be utilized as retaining walls rather than rockeries or retaining structures built separately and away from the building wherever feasible. Freestanding retaining devices are only permitted when they cannot be designed as structural elements of the building foundation;

Response: No building foundation walls or retaining structures are planned as part of the proposed project.

H. On slopes in excess of 40 percent, use of pole-type construction which conforms to the existing topography is required where feasible. If pole-type construction is not technically feasible, the structure must be tiered to conform to the existing topography and to minimize topographic modification;

Response: No structures are proposed on slopes in excess of 40 percent.

I. On slopes in excess of 40 percent, piled deck support structures are required where technically feasible for parking or garages over fill-based construction types; and

Response: No structures are proposed on slopes in excess of 40 percent.

J. Areas of new permanent disturbance and all areas of temporary disturbance shall be mitigated and/or restored pursuant to a mitigation and restoration plan meeting the requirements of LUC [20.25H.210](#).

Response: Restoration will occur in accordance with the requirements of LUC 20.25H.210.

May 21, 2013

Geoff Bradley
City of Bellevue, Parks and Community Services Department
450 110th Ave SE
Bellevue, WA 98004
Via email: gbradley@bellevuewa.gov

Re: Primrose Loop Trail – Stream Study / Habitat Assessment

The Watershed Company Reference Number: 130213

Dear Geoff:

The purpose of our review is to assess the effects of proposed bridge and trail improvements on Primrose Loop Trail in the Coal Creek Natural Area. This report focuses on the effects to listed salmonids via changes to stream buffers and floodplain areas. In 2008, the National Marine Fisheries Service (NMFS) issued a Biological Opinion, which found that the implementation of the National Flood Insurance Program (NFIP) in the Puget Sound region jeopardizes the continued existence of federally threatened salmonids and resident killer whales. As a result, NMFS established Reasonable and Prudent Alternatives to ensure that development within the Special Flood Hazard Area (100 year floodplain), floodway, Channel Migration Zone (CMZ), and riparian buffer zone (RBZ) does not adversely affect water quality, water quantity, flood volumes, flood velocities, spawning substrate, or floodplain refugia for listed salmonids. Because the NFIP is implemented by FEMA through participation by local jurisdictions that adopt and enforce floodplain management ordinances, FEMA has delegated responsibility to the local jurisdictions to ensure that development does not adversely affect listed species. The following discussion evaluates the likely effects of the proposed bridge replacement and suspended railing project, described below, and finds that the project is not likely to adversely affect threatened salmonids.

Project Area

The project is located in Coal Creek Natural Area in the City of Bellevue, King County, Washington, between Newcastle Golf Club Road and Forest Drive SE, south of the Forest Glen East Neighborhood Park (parcel numbers 2724059005 and 2724059002, Figure 1).

The project area is within the mapped 100-year floodplain of Coal Creek, based on the adopted 1995 FEMA Flood Insurance Rate Map, as amended (Figure 1). However,

based on a hydraulic evaluation completed by the City of Bellevue Utilities staff, the 100-year-flood flows would be contained within the channel, below the proposed bridge footings (B. Ward 2013). The channel migration zone is not mapped for Coal Creek, and significant channel migration is not anticipated given the small size of the creek.



Figure 1. Site map with parcels outlined in purple and approximate work locations identified. Mapped FEMA floodplain shaded blue.

Species Identification and Site Use

According to WDFW's Salmonscape maps and WRIA 8's Known Freshwater Distribution of Salmon and Trout maps, listed salmonids have not been observed within the project area, but federally threatened Chinook salmon (*O. tshawytscha*) and steelhead (*O. mykiss*), as well as coho salmon (*O. kisutch*), a federal species of concern with designated Essential Fish Habitat, have been observed in Coal Creek downstream from the project area. Within the project area, coast resident cutthroat trout (*Oncorhynchus clarki*) are present (WRIA 8 2005).

Critical habitat has been designated for Chinook salmon and bull trout, and critical habitat has been proposed for steelhead trout. Designated critical habitat for Chinook salmon and bull trout includes the Lake Washington watershed, but does not specifically include Coal Creek. Proposed habitat for Puget Sound steelhead excludes the Lake Washington watershed and Coal Creek.

Site Conditions

Site 1:

An existing wooden bridge consists of two logs spanning Coal Creek, overlaid by approximately 2.5-foot-wide planks and a wooden railing on both sides (Figure 2). The support logs are partially rotted, and the planks and railings are not stable. A log extends out of the left bank just below the bankful width and just upstream of the existing bridge.

Vegetation at Site 1 consists of a bigleaf maple overstory, and understory vegetation predominantly consists of vine maple, salmonberry, and sword fern (Figure 3).

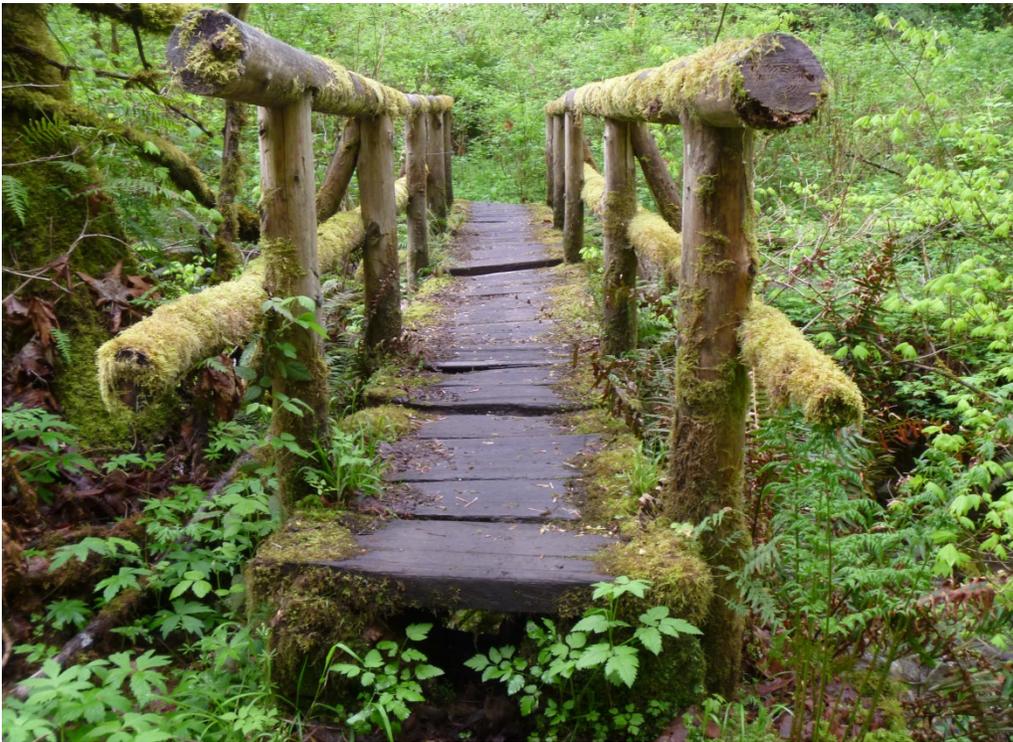


Figure 2. Bridge at Site 1, photo taken from the right bank (looking downstream) of Coal Creek.

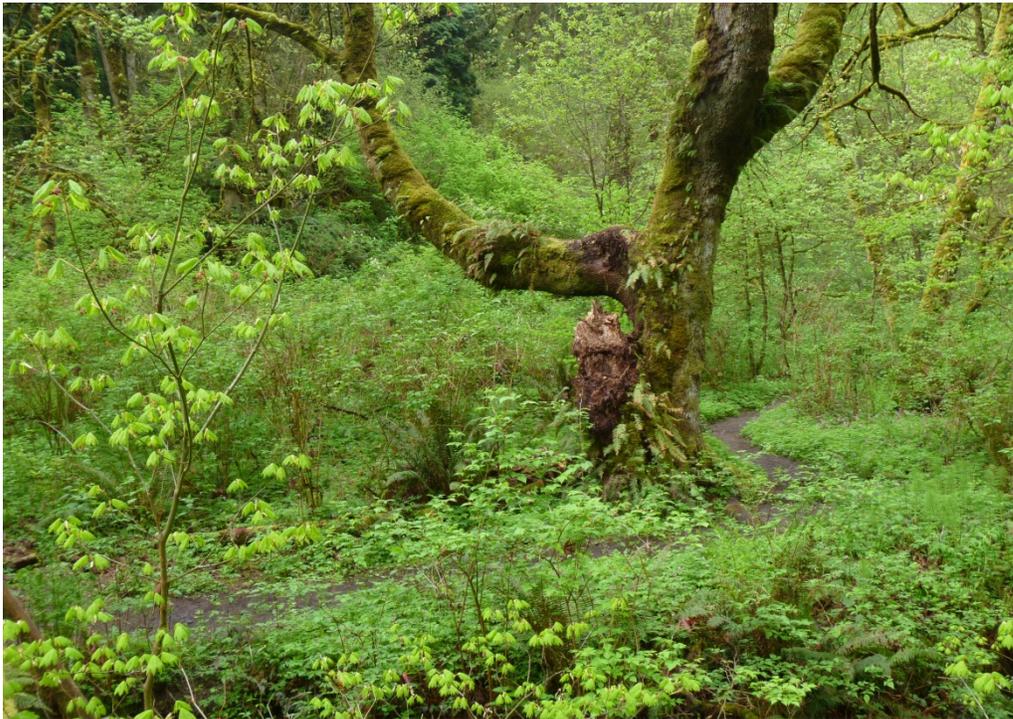


Figure 3. Vegetation at Site 1 on left bank of Coal Creek

Site 2:

An existing wooden bridge consists of two logs spanning a tributary to Coal Creek (Figure 4). On the left bank of the tributary, the bridge is supported by a large log that extends approximately 30 feet landward of the streambank, where it functions as a nurse log for mature cedar trees (Figure 5). The log also extends approximately 10 feet into the tributary, downstream from the bridge crossing. Bank erosion landward of the support log has caused an approximately one-foot-wide gap to form between the ground and the bridge on the left bank of the tributary (Figure 4).

Vegetation at Site 2 consists of a bigleaf maple and western red cedar overstory, and understory vegetation predominantly consists of salmonberry, lady fern, sword fern, and giant horsetail.



Figure 4. Bridge 2 with gap shown between ground and bridge on left bank of tributary. Support log is also visible under bridge.



Figure 5. Upland end of log supporting bridge on the left bank at Site 2, note base of cedars growing out of the log.

Site 3:

An existing wooden bridge consists of two sections, forming a “V”. The bridge section on the right bank is similar in construction to the bridge at Site 1, with two logs spanning the length of the bridge, and planks lying across the logs (Figure 6). This section of the bridge is unstable, rotting, and in disrepair. The left bank bridge section consists of a single, solid, approximately 36-inch diameter log, with a wooden railing attached to one side (see upper photo on front page of plan set). The log is within the bankful channel, and it provides structural habitat diversity to the stream.

Vegetation overstory at Site 3 consists of bigleaf maple and western hemlock, and understory vegetation is dominated by red alder, vine maple, salmonberry, devil’s club, sword fern, red elderberry, and young western red cedar.



Figure 6. Right bank section of bridge at Site 3.

Site 4:

Site 4 is located on a steep slope, approximately 35 feet above the elevation of Coal Creek. Although this site is within the mapped floodplain of the Creek, given its elevation, it is highly unlikely that the site would ever be affected by floodwaters. The existing dirt footpath is narrow, and it has eroded in places.

Vegetation overstory at Site 4 consists of bigleaf maple and western hemlock, and understory vegetation is dominated by red alder, red elderberry, sword fern, and Solomon's seal.



Figure 7. Footpath at Site 4. Note Coal Creek at base of slope.

Project Description

The proposed project will replace three existing pedestrian bridges, two across Coal Creek (Site 1 and 3) and one across a small tributary to Coal Creek (Site 2). Approximately 90 linear feet of existing trail that parallels Coal Creek will be upgraded to include a railing at Site 4. Detailed plans are attached.

The proposed project will not include in-water work, and it includes measures to minimize potential adverse impacts from trail improvements in the riparian habitat of Coal Creek. Specific minimization measures include stabilization of soils and replanting of disturbed areas.

Species Impacts

Because listed species have not been identified as using the site, and because the projects will not involve work within the bankful channel, the proposed project will not have direct effects on listed salmonids. Indirect effects include the effects resulting from the activity that are later in time or caused by interrelated and interdependent activities. Interdependent activities that are likely related to the proposed project include increased

foot traffic on the established trails. Potential indirect effects of the proposed project are discussed in Table 1, below.

The proposed project could potentially affect chinook and coho salmon, bull trout and steelhead in generally similar manners. Unless otherwise noted, there will be no distinction between these species within the following discussion.

Table 1. Indirect effects of the proposed project and how project will avoid and minimize effects.

Topic	Potential Indirect Effect	Minimization Measure	Effect on Listed Salmonids
Flood storage	Reduction in floodplain storage could intensify flood levels and velocities downstream, resulting in redd scour and/or flushing juvenile salmon out of rearing habitats.	<ul style="list-style-type: none"> • If any new floodplain fill is required, it will be offset by a cut within the floodplain. 	Not likely to adversely affect
Floodplain Habitat	Since listed salmonids are not expected to be present in the project area, the effect of changes to floodplain habitat structure on listed salmonids would be insignificant.	<ul style="list-style-type: none"> • Large woody debris within the bankful channel width will not be removed. • All wood and plant material that is removed will remain in the area for ecological enhancement. 	Not likely to adversely affect
Riparian Vegetation	Removal of riparian vegetation would reduce allochthonous inputs to the stream.	<ul style="list-style-type: none"> • Disturbed areas will be revegetated immediately upon project completion. • No significant trees will be removed. 	Not likely to adversely affect
Water Quality	Construction and sediment disturbance could increase turbidity and stream sedimentation.	<ul style="list-style-type: none"> • No in-water work will be conducted. • The area of disturbance will be minimized. • All work will be conducted using hand-tools, and no heavy equipment will be used. • Disturbed areas will be stabilized and revegetated immediately upon project completion. 	Not likely to adversely affect

Determination of Effect

In summary, the project may affect, but is not likely to adversely affect listed salmonids, and the project is not likely to jeopardize Puget Sound-Strait of Georgia coho salmon. Given the direct, indirect, interrelated, and interdependent effects from the proposed action, the proposed project would have no effect on critical habitat of Puget Sound

Chinook salmon or Coastal-Puget Sound bull trout or proposed critical habitat for Puget Sound steelhead. The collective impact of the proposed project is also not likely to adversely affect Pacific salmon essential fish habitat (EFH), which includes coho and Chinook salmon. Please call if you have any questions or if we can provide you with any additional information.

Sincerely,

A handwritten signature in blue ink that reads "Sarah Sandstrom". The signature is written in a cursive, flowing style.

Sarah Sandstrom, M.S.
Fisheries Biologist

References:

Ward, B. 2013. Email to G. Bradley re: Primrose Trail Bridges-Floodplains. March 29, 2013.

WRIA 8. 2005. Known Freshwater Distribution of Salmon and Trout for Water Resource Inventory Area (WRIA) 8.
<http://www.govlink.org/watersheds/8/reports/fish-maps/default.aspx> [Accessed May 21, 2013]

Pyle, David

From: Ward, Brian
Sent: Friday, March 29, 2013 2:17 PM
To: Bradley, Geoff
Cc: Ward, Brian
Subject: Primerose Trail Bridges- Floodplains
Attachments: Bridge1_footing.jpg; Bridge1_span.jpg; Bridge3_east.jpg; Bridge3_span.jpg; Bridge3_streambank.jpg

To whom it may concern:

The following information pertains to the City of Bellevue Parks and Community Services Department's plan to replace 3 bridges on the Primerose trail in the Coal Creek Regional Park. The FEMA mapped 100-year floodplain in the vicinity of the 3 separate bridge projects in Coal Creek warrants an analysis of the proposed project's impact on the floodplain per city code. The following assessment is hereby presented.

The FEMA mapped floodplain is mapped as Zone A which means the base flood elevation is not defined. The plan-view map shown on FIRM panels 666 and 667 do not accurately reflect the floodplain. This floodplain assessment is based on observations made during a site visit on March 25, 2013 with Brian Ward, Geoff Bradley and Kevin LeClair and calculations for normal depth.

Field observations:

Bridge 1: channel bottom width 20-25 feet, side-slope 1.5 to 2 feet vertical per 1-foot horizontal, gravel/cobble substrate, depth to top of bank: 4-5 feet, channel slope 0.0286 ft/ft (determined in the office using the City's contour data), 100-year flow rate: 334-cfs (Table 5-4, Coal Creek Stabilization Program EIS, November 2005).

The Manning's equation was used to calculate normal depth for the open channel. The results are shown below in the table.

Normal Depth, Coal Creek lower Cinder Mines reach

	Vary Bottom Width		Vary Side Slope	Vary roughness
bottom width, b :	20	25	20	20
side slope, z :	2	2	1.5	1.5
Roughness, n :	0.035	0.035	0.035	0.045
Slope, S :	0.0286	0.0286	0.0286	0.0286
Discharge, Q :	334	334	334	334
Normal depth, ft:	1.6	1.4	1.6	1.9

Based on calculations normal depth is between 1.4 and 1.9 feet. The channel depth is between 4 and 4.5 feet, so it stands to reason that the 100-year flow rate is fully contained within the channel and therefore the bridge footings will not be placed the floodplain.

Bridge 2: Bridge 2 crosses a tributary channel to the main stem of Coal Creek. Both bridge footing are placed on the right bank of the main stem spanning a small ditch/tributary channel entering Coal Creek from the north. There was no evidence of stream instability and given that the main channel geometry near bridge 2 is similar to that at Bridge 1, with a steeper channel slope, it stands to reason the 100-year flow is similarly contained within the channel bank.

Bridge 3: spans the channel well above each side of the channel. Based on professional judgment and the calculation of normal depth at Bridge 1, the bridge footings are not located in the 100-year floodplain.

Questions can be directed to Brian Ward.

Brian Ward P.E.
City of Bellevue
Utilities Department
425-452-5206
bward@bellevuewa.gov

City of Bellevue Submittal Requirements
ENVIRONMENTAL

Thank you in advance for your cooperation and adherence to these procedures. If you need assistance in completing the checklist or have any questions regarding the environmental review process, please visit or call the Permit Center (425-452-6864) between 8 a.m. and 4 p.m., Monday through Friday (Wednesday, 10 to 4). Our TTY number is 425-452-4636.

INTRODUCTION

Purpose of the Checklist:

The State Environmental Policy Act (SEPA), chapter 43.21c RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the City of Bellevue identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the City decide whether an EIS is required.

Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Answer the questions briefly, with the most precise information known, or give the best description you can. You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the Planner in the Permit Center can assist you. The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. Include references to any reports or studies that you are aware of which are relevant to the answers you provide. The City may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impacts.

Use of a Checklist for Nonproject Proposals: *A nonproject proposal includes plans, policies, and programs where actions are different or broader than a single site-specific proposal.*

For nonproject proposals, complete the Environmental Checklist even though you may answer "does not apply" to most questions. In addition, complete the Supplemental Sheet for Nonproject Actions available from Permit Processing.

For nonproject actions, the references in the checklist to the words *project*, *applicant*, and *property* or *site* should be read as *proposal*, *proposer*, and *affected geographic area*, respectively.

Attach an 8½" x 11" vicinity map which accurately locates the proposed site.

City of Bellevue Submittal Requirements	27a
ENVIRONMENTAL CHECKLIST	
12/21/00	
<p>If you need assistance in completing the checklist or have any questions regarding the environmental review process, please visit or call the Permit Center (425-452-6864) between 8 a.m. and 4 p.m., Monday through Friday (Wednesday, 10 to 4). Our TTY number is 425-452-4636.</p>	
BACKGROUND INFORMATION	
<p>Property Owner: City of Bellevue</p>	
<p>Proponent: City of Bellevue – Parks and Community Services Department, Attn: Geoff Bradley 450 110th Ave NE Bellevue, WA 98004 (425) 452-2740</p>	
<p>Contact Person: The Watershed Company, Attn: Kenny Booth (If different from the owner. All questions and correspondence will be directed to the individual listed.)</p>	
<p>Address: 750 Sixth Street South, Kirkland, WA 98033</p>	
<p>Phone: (425) 822-5242</p>	
<p>Proposal Title: Primrose Loop Trail</p>	
<p>Proposal Location (Street address and nearest cross street or intersection) Provide a legal description if available:</p>	
<p>Project is located in Coal Creek Park, between Newcastle Golf Club Road and Forest Drive SE, south of the Forest Glen East Neighborhood Park, King County.</p>	
<p>No address, 1) tax parcel 2724059005, legal description: POR OF NE 1/4 OF NW 1/4 LESS SW 1/4 THOF and 2) tax parcel 2724059002, legal description: POR OF NW 1/4 OF NE 1/4 LESS BEG W 1/4 COR SD SEC TH S 67-55-48 E 647.55 FT TH N 06-03-02 E 1593.01 FT TH S 67-00-58 E 1459.70 FT TH N 88-19-02 E 1218.60 FT TH N 15-14-02 E 170.38 FT TH N 06-41-34 W 322.77 FT TH N 03-34-06 E 443.73 FT TO TPOB TH S 86-25-54 E 45 FT TH N 03-34-06 E 125 FT TH N 86-25-54 W 345 FT TH S 03-34-06 W 125 FT TH S 86-25-54 E 300 FT TO TPOB,</p>	
<p>Please attach an 8½" X 11" vicinity map that accurately locates the proposal site.</p>	
<p>Give an accurate, brief description of the proposal's scope and nature:</p> <p>1. General description:</p> <p>The four project sites are located within the existing Coal Creek Park, on the Primrose Loop Trail that follows Coal Creek. Three existing pedestrian bridges, two across the mainstem and one across a small tributary, need to be replaced. Approximately 90 linear feet of existing trail that parallels Coal Creek will be upgraded with a welded wire mesh railing against the adjacent steep slope. Restoration plantings are also proposed. Detailed plans are attached.</p> <p>2. Acreage of site: Tax parcels 2724059005 and 2724059002 are approximately 30.4 and 39.2 acres, respectively. However, the four project areas (where construction will occur) total less than 0.2 acre.</p>	

- 3. Number of dwelling units/buildings to be demolished: **None**
- 4. Number of dwelling units/buildings to be constructed: **None**
- 5. Square footage of buildings to be demolished: **N/A**
- 6. Square footage of buildings to be constructed: **N/A**
- 7. Quantity of earth movement (in cubic yards): **Cut: 13.6 cubic yards / Fill: 0 cubic yards**
- 8. Proposed land use: **The project area is located within Coal Creek Park, and will upgrade existing pedestrian bridges and a trail. There are no changes proposed to the existing land use.**
- 9. Design features, including building height, number of stories, and proposed exterior materials: **The replacement bridges and new boardwalk will have safety railings approximately 36" high. All materials will be wood and/or wire mesh.**
- 10. Other

Estimated date of completion of the proposal or timing of phasing:

Once started, bridge replacements and boardwalk construction should take approximately four to six weeks. It is anticipated that construction would occur sometime in summer 2013.

Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

None at this time.

List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

Primrose Loop Trail – Habitat Assessment. The Watershed Company. May 21, 2013.

Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. List dates applied for and file numbers, if known.

No such applications are pending.

List any government approvals or permits that will be needed for your proposal, if known. If permits have been applied for, list application date and file numbers, if known.

**Critical Areas Land Use Permit – submitted concurrently with this SEPA Checklist (City of Bellevue)
Building Permit – (City of Bellevue)
Hydraulic Project Approval – Washington Department of Fish and Wildlife**

Please provide one or more of the following exhibits, if applicable to your proposal. (Please check appropriate box(es) for exhibits submitted with your proposal):

- Land Use Reclassification (rezone)
Map of existing and proposed zoning

Primrose Trail Improvements
COB File # 13-115660-LO

- Preliminary Plat or Planned Unit Development
Preliminary plat map
- Clearing & Grading Permit
Plan of existing and proposed grading
Development plans
- Building Permit (or Design Review)
Site plan
Clearing & grading plan
- Shoreline Management Permit
Site plan

A. ENVIRONMENTAL ELEMENTS

1. EARTH

- a. General description of the site (circle one): Flat Rolling Hilly **Steep slopes** Mountains Other:

Steep slopes exist adjacent to the trail proposed for a safety railing. Slopes along the banks of Coal Creek are also steep in places.

- b. What is the steepest slope on the site (approximate percent slope)?

The steepest slopes on-site are nearly vertical streambanks in several locations.

- c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

According to the King County Soil Survey, the site is mapped as Beausite gravelly sandy loam, 15 to 30 percent slopes (BeD) and Alderwood and Kitsap soils, very steep (AkF). City critical areas mapping shows that the project sites are within an erosion hazard area.

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

Minor erosion has occurred along sections of Coal Creek streambanks.

- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

Cut: 13.6 CY

Fill: 0 CY

- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Erosion could occur if exposed soils are mobilized by rainfall. Short-term erosion may occur during trail and bridge modifications and in small areas cleared of vegetation. However, any impacts would be short-term and the measures described below would help minimize erosion.

- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

No new impervious surfaces are proposed; nor are any surfaces currently located within the project area. Bridge sections located over soil are made of wood decking and will allow stormwater to infiltrate beneath the bridge.

- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

All clearing and grading construction would be in accordance with City of Bellevue Clearing and Grading Code (Chapter 23.76), permit conditions, and all other applicable codes, ordinances, and standards. To ensure that no impact to the streams occurs, the applicant proposes to use temporary erosion and sedimentation control measures such as coir logs, mulching, erosion blankets, and plastic sheeting.

2. AIR

- a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Any air quality impacts from construction-related vehicle trips would be temporary. After project completion, no further impacts to air would occur.

- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

There are no off-site sources of emissions that will affect the project.

- c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Standard methods of reducing impacts to air would be utilized, and include keeping all hand-held power equipment in good operating condition and managing disturbed soils as described above under 1h.

3. WATER

- a. Surface:

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

The project site includes Coal Creek and a small tributary, both Type F waters per the City's critical areas overlay district regulations. Coal Creek flows into Lake Washington.

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

The entirety of proposed work will occur over or within 200 feet of Coal Creek or a small tributary. Detailed plans are attached.

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

No cuts or fills below the ordinary high water mark of the streams is proposed.

- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No.

- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

Yes.

- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No intentional discharges of waste materials would occur during project construction.

b. Ground

1. Will ground water be withdrawn, or will water be discharged to ground water? Give a general description, purpose, and approximate quantities if known.

There will be no withdrawal of or discharge to ground water associated with this project.

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

There will be no waste material from septic tanks or other sources discharged into the ground as part of this project.

c. Water runoff (including stormwater):

1. Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

The bridge sections over land will drain to adjacent vegetated areas for infiltration, and then into Coal Creek or the tributary of Coal Creek.

- 2) Could waste materials enter ground or surface waters? If so, generally describe.

It is not expected that waste materials will enter the on-site stream channels.

- d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

The erosion control measures described under question 1h would help control impacts to surface and runoff water. In addition, all hand-held power equipment would be in good working order.

4. PLANTS

- a. Check or circle types of vegetation found on the site:

- deciduous tree: **alder, maple**, aspen, other:
 evergreen tree: **fir, cedar**, pine, other:
 shrubs: **salmonberry, sword fern, red elderberry, lady fern, Solomon's seal, devil's club, vine maple**
 pasture
 crop or grain
 wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other:
 water plants: water lily, eelgrass, milfoil, other:
 other types of vegetation:

- b. What kind and amount of vegetation will be removed or altered?

Minor clearing of vegetation will occur in areas of new bridge abutments. Vegetation to be impacted includes native shrubs and groundcover. No significant trees are to be impacted.

- c. List threatened or endangered species known to be on or near the site.

No threatened or endangered plant species are known to be on or near the site.

- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Restoration plantings will occur in areas disturbed during construction and areas devoid of existing native vegetation. A total of approximately 864 square feet of plantings are proposed. Species include vine maple, sword fern, snowberry, salal, and wild ginger.

5. ANIMALS

- a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

birds: **hawk**, heron, **eagle**, **songbirds**, other: **woodpeckers**

mammals: **deer**, **bear**, elk, beaver, other: **raccoon**, **opossum**, **other small mammals**

fish: bass, **salmon**, **trout**, herring, shellfish, other:

- b. List any threatened or endangered species known to be on or near the site.

No federally listed fish or wildlife species are known to be present in the upper Coal Creek basin. Coho salmon (federal candidate) presence is mapped by WDFW to a point just downstream of the downstream work area, and cutthroat trout (no special federal or state status) are also mapped by WDFW through the work areas.

- c. Is the site part of a migration route? If so, explain.

No.

- d. Proposed measures to preserve or enhance wildlife, if any:

Measures that will preserve and may enhance wildlife usage include restoration of disturbed and degraded areas.

6. ENERGY AND NATURAL RESOURCES

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Hand-held power equipment will be used for vegetation removal and bridge removal/installation. However, no energy will be necessary after the project is completed.

- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

No forms of energy are necessary for the completed project.

7. ENVIRONMENTAL HEALTH

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

Typical hazards related to electrical and gasoline-powered hand tools are associated with construction of the proposed project.

- 1) Describe special emergency services that might be required.

Emergency services are not anticipated at the site. In the unlikely event that an accident (spill, fire, other exposure) occurs involving toxic chemicals or hazardous wastes, the local Fire Department's Hazardous Materials Team would respond. If necessary, local medical services might also be required. Safety and accident response supplies would be on-site to treat emergencies during construction.

- 2) Proposed measures to reduce or control environmental health hazards, if any:

Standard precautions would be taken to ensure the safety of the work crew. The construction manager would be contacted by a crew member immediately upon discovery of a spill. The construction manager would then ensure that the spill is cleaned up in the manner dictated by the chemical use instructions and would contact the appropriate authorities.

- b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

There are no noise sources affecting the immediate project area.

- 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Noise associated with the proposed project would include hand-operated power tools during the construction phase. Construction noise would be limited to normal daytime working hours as dictated by the City of Bellevue's noise policy. The only noise generated by the proposed project would be that of trail users (pedestrians, etc.). There would be no significant long-term noise associated with the proposed project.

- 3) Proposed measures to reduce or control noise impacts, if any:

As mentioned above, construction noise would be limited to normal daytime working hours. No other noise-control measures are necessary.

8. LAND AND SHORELINE USE

- a. What is the current use of the site and adjacent properties?

The City of Bellevue Parks and Community Services Department currently owns the parcels upon which improvements are proposed. The parcels are used strictly for a natural park. Properties to the north and east are primarily single-family residential. A golf course and some limited commercial (YMCA) and industrial uses are located to the south and southwest.

- b. Has the site been used for agriculture? If so, describe.

No.

- c. Describe any structures on the site.

The only structures on the site consist of the three bridges being replaced.

- d. Will any structures be demolished? If so, what?

The three existing bridges will be demolished and removed from the site. The exception is a portion of the bridge at Site 3 (see plans) that includes a natural log as part of the crossing. Railings and planks will be removed from the log and the log will be preserved in its current location.

- e. What is the current zoning classification of the site?

The project site is zoned Single-Family Residential (R-1).

- f. What is the current comprehensive plan designation of the site?

The project site is designated as Parks/Single-Family Residential – Low Density (P/SF-L).

- g. If applicable, what is the current shoreline master program designation of the site?

N/A

- h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

The project site includes Coal Creek and a small tributary, both Type F waters. The streams are considered an "environmentally sensitive" area. The project areas are also mapped in an erosion hazard area and a FEMA 100-year floodplain. An application for a Critical Areas Land Use Permit to allow for disturbances within the sensitive area and buffers is being submitted concurrently with this checklist.

- i. Approximately how many people would reside or work in the completed project?

No person will reside or work in the completed project.

- j. Approximately how many people would the completed project displace?

No person will be displaced as a result of this project.

- k. Proposed measures to avoid or reduce displacement impacts, if any:

Does not apply.

- I. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The proposed project is in accordance with the City's long-term goal of making open and natural spaces accessible to citizens for passive recreation.

9. HOUSING

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None.

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None.

- c. Proposed measures to reduce or control housing impacts, if any:

Does not apply.

10. AESTHETICS

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

The proposed wire mesh railing as well as the railings on the replacement bridges will be approximately 36 - 42" in height. All building materials will be wood and/or wire mesh.

- b. What views in the immediate vicinity would be altered or obstructed?

None of the proposed improvements will be visible to others outside the park. Bridge improvements and related restoration plantings will be visible to trail users within the park, only in close proximity to the improvements due to local vegetation and terrain.

- c. Proposed measures to reduce or control aesthetic impacts, if any:

No measures are necessary.

11. LIGHT AND GLARE

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

No light or glare will be produced by the proposed project.

- b. Could light or glare from the finished project be a safety hazard or interfere with views?

No.

- c. What existing off-site sources of light or glare may affect your proposal?

None.

- d. Proposed measures to reduce or control light and glare impacts, if any:

No measures are necessary.

12. RECREATION

- a. What designated and informal recreational opportunities are in the immediate vicinity?

The proposed trail improvements are located within Coal Creek Park. The park is a natural area that offers only passive recreation – mainly hiking on the 4.5-mile trail system.

- b. Would the proposed project displace any existing recreational uses? If so, describe.

No. The proposed project will enhance passive recreational use within the area.

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

No measures are necessary.

13. HISTORIC AND CULTURAL PRESERVATION

- a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

No places or objects of this type are known to exist in the immediate vicinity.

- b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

There is no known evidence of historic or cultural importance on the project site.

- c. Proposed measures to reduce or control impacts, if any:

Should historic, archeological, scientific or cultural significant items be encountered during implementation of this project, work would be temporarily stopped while the appropriate agencies and Tribes are notified.

14. TRANSPORTATION

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

The proposed project will improve four sections of the Primrose Loop Trail within Coal Creek Park. There is no existing or proposed formal street or highway access to the site.

- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

The nearest King County Metro transit stop is located approximately 1 mile to the southwest of the work area on Newcastle Way, just west of Coal Creek Parkway SE.

- c. How many parking spaces would the completed project have? How many would the project eliminate?

The project does not include new or eliminated parking.

- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

No impacts/improvements to roads or streets will occur.

- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

Water, rail, or air transportation would not be utilized by the completed project.

- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

The completed project is not expected to alter the number of vehicular trips per day generated by the existing park.

- g. Proposed measures to reduce or control transportation impacts, if any:

None.

15. PUBLIC SERVICES

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

No increase in public service needs will result from this project.

- b. Proposed measures to reduce or control direct impacts on public services, if any.

None.

16. UTILITIES

- a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

No utilities are currently available at the site.

- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

No new utilities are proposed as part of the project.

Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

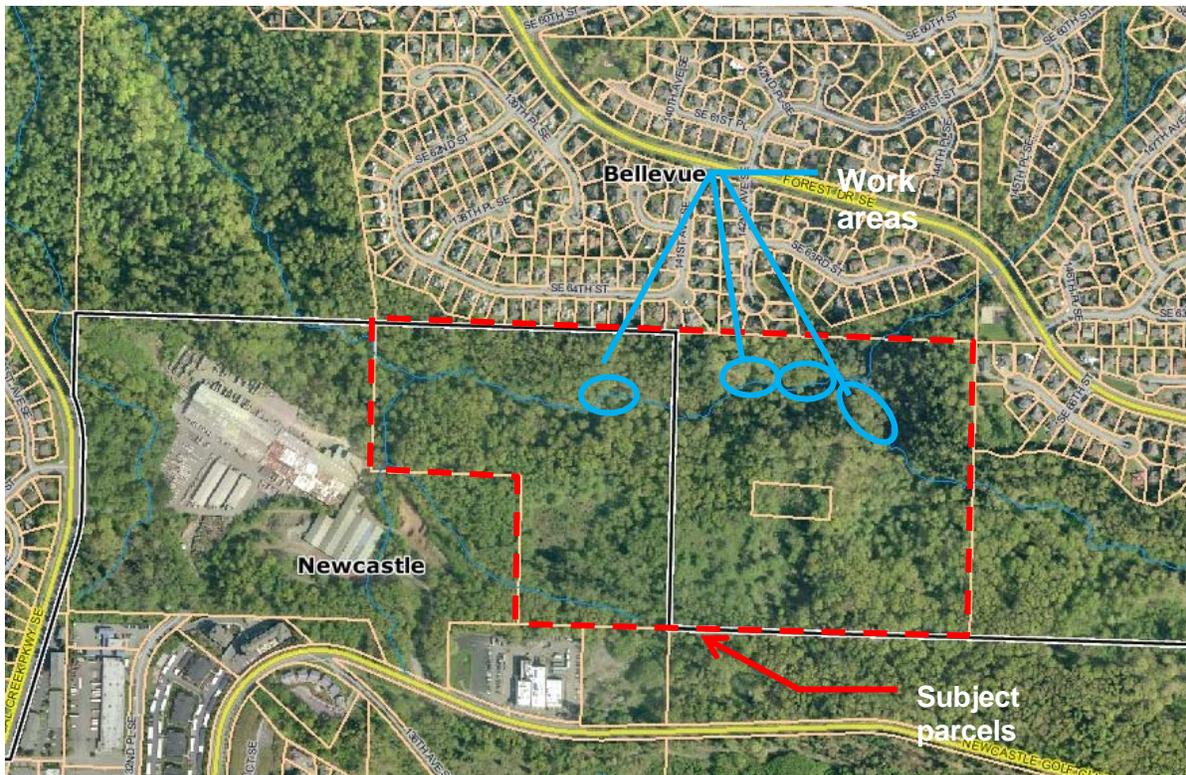
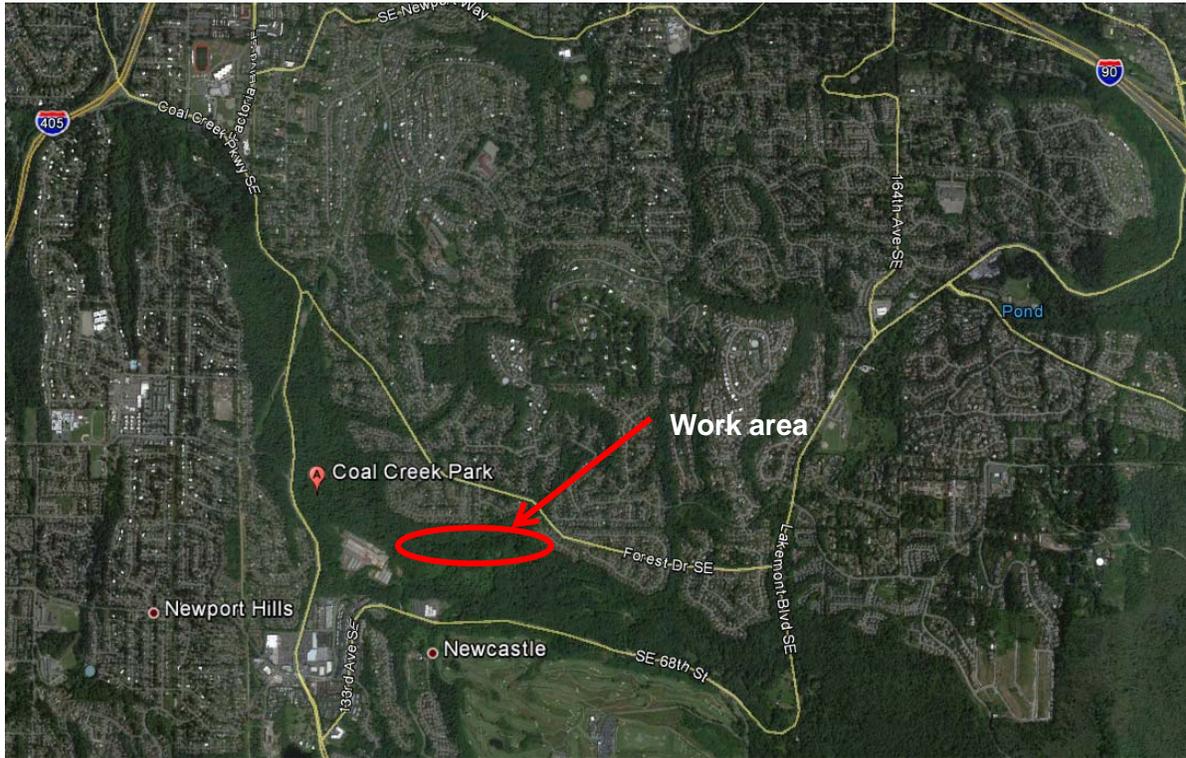
Signature



Kenny Booth, AICP

Date Submitted: _____

Vicinity Map from Google Earth (top) and iMAP (bottom)



Pyle, David

From: Karen Walter <KWalter@muckleshoot.nsn.us>
Sent: Tuesday, July 02, 2013 1:16 PM
To: Pyle, David
Subject: RE: Primrose loop trail and bridge replacement , 13-115560-LO, Optional Determination of Non-Significance Notice Materials

David,

Thank you for getting back to us on this and for checking further into this issue. Hopefully, a large tree with a rootwad can pass underneath them as needed without interference...

Karen Walter
Watersheds and Land Use Team Leader

*Muckleshoot Indian Tribe Fisheries Division
Habitat Program
39015 172nd Ave SE
Auburn, WA 98092
253-876-3116*

From: DPyle@bellevuewa.gov [mailto:DPyle@bellevuewa.gov]
Sent: Tuesday, July 02, 2013 12:31 PM
To: Karen Walter
Subject: FW: Primrose loop trail and bridge replacement , 13-115560-LO, Optional Determination of Non-Significance Notice Materials

Karen,

The City's Floodplain Engineer & Administrator, Brian Ward, has indicated that he is satisfied with the clearance provided by the project. See email string below.

As Mr. Ward points out, the bridge is a pedestrian bridge and the safety risk presented is low. The bridge (plural) designs represent a balance between a concern for safety, impact to the stream channel, cost, and constructability. I hope this addresses your concern!

Have a good afternoon,

David Pyle
Senior Land Use Planner
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(425)452-2973 (Office)
(425)452-5225 (Fax)
www.bellevuewa.gov

From: Ward, Brian
Sent: Tuesday, July 02, 2013 11:07 AM
To: Pyle, David
Cc: Bradley, Geoff

Subject: RE: Primrose loop trail and bridge replacement , 13-115560-LO, Optional Determination of Non-Significance Notice Materials

From: Pyle, David

Sent: Tuesday, July 02, 2013 10:47 AM

To: Ward, Brian

Cc: Bradley, Geoff

Subject: FW: Primrose loop trail and bridge replacement , 13-115560-LO, Optional Determination of Non-Significance Notice Materials

Brian-

Can you shed some light on what Karen is asking about?

In your March 29 Floodplains email (attached), you provide analysis that identifies the expected floodplain elevation. The plans provided (also attached) for the bridge construction indicate the lowest point of the bridge spans will be above the labeled OHWM, although there is no floodplain elevation shown on the plans. Your email indicates the floodplain is “fully contained within the channel”, “contained within the channel bank”, and “not located in the 100-year floodplain” for bridges 1, 2, and 3 respectively.

Given that the floodplain (or flood flow rate as you also call it) is to be contained within the channel banks, and the lowest point of the bridge spans are to be located above the channel banks, do you feel, in your professional judgment, that there is sufficient clearance between the floodplain (or flood flow) and the bridges to not cause a blockage during flood events? Yes I do. The intent of my email was to show with calculations and professional judgment that the proposed bridges will be 3.5 to 4' above the water surface elevation during the 100-year flooding event and I think the clearance will pass most debris. However, there are some fairly large trees in the area so it's possible that a blockage could occur because if a large tree were to fall into the creek. Fortunately, the bridge is a pedestrian bridge and is not carrying a steady stream of users.

Thank you for your help!

From: Pyle, David

Sent: Tuesday, June 25, 2013 10:24 AM

To: 'Karen Walter'

Subject: RE: Primrose loop trail and bridge replacement , 13-115560-LO, Optional Determination of Non-Significance Notice Materials

Karen-

Please see attached email outlining calculations on the floodplain elevation for the proposed bridges. I will inquire as to if there is sufficient clearance.

David Pyle
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From: Karen Walter [<mailto:KWalter@muckleshoot.nsn.us>]
Sent: Thursday, June 20, 2013 3:09 PM
To: Pyle, David
Subject: RE: Primrose loop trail and bridge replacement , 13-115560-LO, Optional Determination of Non-Significance Notice Materials

Okay!

Karen Walter
Watersheds and Land Use Team Leader

*Muckleshoot Indian Tribe Fisheries Division
Habitat Program
39015 172nd Ave SE
Auburn, WA 98092
253-876-3116*

From: DPyle@bellevuewa.gov [<mailto:DPyle@bellevuewa.gov>]
Sent: Thursday, June 20, 2013 2:22 PM
To: Karen Walter
Subject: RE: Primrose loop trail and bridge replacement , 13-115560-LO, Optional Determination of Non-Significance Notice Materials

Good point, I'll check with the project engineer.

From: Karen Walter [<mailto:KWalter@muckleshoot.nsn.us>]
Sent: Thursday, June 20, 2013 2:17 PM
To: Pyle, David
Subject: RE: Primrose loop trail and bridge replacement , 13-115560-LO, Optional Determination of Non-Significance Notice Materials

David,
Thanks for the quick reply!!! For question one, please look at Sheet L6 for Site 2. If the Scale is correct, there is only about 2 feet clearance at the deepest point on this bridge. For Site 2 (Sheet L8), the highest bridge clearance appears to be about 4' if the scale on the drawing is correct. It may or may not be enough. The CALUP narrative did not address this particular issue so someone should check.

As far as question 2, we don't want any of the existing trees that are 4 inches in diameter or greater and within 200 feet of either affected stream (both Type F waters) to be removed. They should all be placed back into the stream channel as mitigation for their removal. Tree replacement is not enough as the new trees are generally significantly smaller than the existing trees, especially for the 30" DBH Maple.

Karen Walter
Watersheds and Land Use Team Leader

Muckleshoot Indian Tribe Fisheries Division

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From: DPyle@bellevuewa.gov [<mailto:DPyle@bellevuewa.gov>]

Sent: Thursday, June 20, 2013 2:12 PM

To: Karen Walter

Subject: RE: Primrose loop trail and bridge replacement , 13-115560-LO, Optional Determination of Non-Significance Notice Materials

Thanks Karen, I believe #1 is addressed in the plans due to the required floodplain clearance (the bridges will be much higher than the existing bridges ☺), and #2 will depend on how they import the bridges – right now they are talking about using a logging style rigging system with a cable line and winch to move the huge bridge structures down there, so tree removal should not be required if done properly. I'll add a condition regarding tree removal requiring tree replacement and wood disposal.

Have a good afternoon.

David Pyle
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dpyle@bellevuewa.gov
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From: Karen Walter [<mailto:KWalter@muckleshoot.nsn.us>]

Sent: Thursday, June 20, 2013 2:06 PM

To: Pyle, David

Subject: Primrose loop trail and bridge replacement , 13-115560-LO, Optional Determination of Non-Significance Notice Materials

David,

We have reviewed Bellevue Park's proposal to replace three existing bridges and conduct other trail maintenance work along the Primrose Loop Trail in the Coal Creek basin. We have a couple of comments as noted below:

1. The new bridge clearance should be high enough to ensure that any instream wood that needs to transport underneath the bridge, can do so unencumbered. This is a critical issue as the vegetation in Coal Creek basin continues to mature and fall into the stream channel over time. This would avoid future bridge damage and/or the need to cut up large wood into smaller pieces so it can pass without damaging the bridge.
2. Please verify that no existing significant trees will be removed (page 5 of the CALUP narrative). Sheet L7 for Site 3 shows a 30" Big Leaf Maple proposed to be removed. If this tree must be removed for construction, then it should be placed back into Coal Creek as partial mitigation for future wood recruitment impacts that will occur due to its removal.

We appreciate the opportunity to review this project and look forward to the City's responses. Please let me know if you have any questions.

Thank you,
Karen Walter
Watersheds and Land Use Team Leader

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