



DEVELOPMENT SERVICES DEPARTMENT
 ENVIRONMENTAL COORDINATOR
 450 110th Ave NE
 BELLEVUE, WA 98009-9012

DETERMINATION OF NON-SIGNIFICANCE

PROPONENT: Bruce Jensen, City of Bellevue Utilities Department

LOCATION OF PROPOSAL: 1221 148th Ave NE

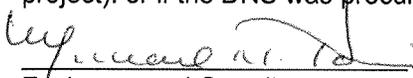
DESCRIPTION OF PROPOSAL: The Bellevue Utilities Department is requesting a Critical Areas Land Use Permit to stabilize an eroding stream bank adjacent to Kelsey Creek, a Type F, fish bearing stream. Soft stabilization measures will be used to stop the bank from eroding. The stream channel will be modified to reduce erosional downcutting and to prevent future exposure of the sewer line.

FILE NUMBERS: 14-126007-LO **PLANNER:** Heidi M. Bedwell, Senior Environmental Planner

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 **10/9/2014**
- 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 5:00 p.m. on _____.

This DNS may be withdrawn at any time if the proposal is modified so as to have significant adverse environmental impacts; if there is significant new information indicating a proposals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

9/24/2014
 Date

OTHERS TO RECEIVE THIS DOCUMENT:

- State Department of Fish and Wildlife / Stewart.Reinbold@dfw.gov; Christa.Heller@dfw.wa.gov;
- State Department of Ecology, Shoreline Planner N.W. Region / Jobu461@ecy.wa.gov; sepaunit@ecy.wa.gov
- Army Corps of Engineers Susan.M.Powell@nws02.usace.army.mil
- Attorney General ecyolvef@atg.wa.gov
- Muckleshoot Indian Tribe Karen.Walter@muckleshoot.nsn.us; Fisheries.fileroom@muckleshoot.nsn.us



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

Proposal Name: City of Bellevue Kelsey Creek Sewer Stabilization

Proposal Address: 1221 148th Ave NE

Proposal Description: The Bellevue Utilities Department is requesting a Critical Areas Land Use Permit to stabilize an eroding stream bank adjacent to Kelsey Creek, a Type F, fish bearing stream. Soft stabilization measures will be used to stop the bank from eroding. The stream channel will be modified to reduce erosional downcutting and to prevent future exposure of the sewer line.

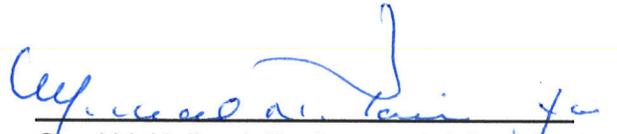
File Number: 14-126007-LO

Applicant: Bruce Jensen, City of Bellevue Utilities Department

Decisions Included: Critical Areas Land Use Permit (Process II LUC 20.30P)

Planner: Heidi M. Bedwell, Senior 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**



Carol V. Helland, Land Use Director
Development Services Department

Application Date: March 3, 2014
Notice of Application Publication Date: April 17, 2014
Decision Publication Date: September 25, 2014
Project/SEPA Appeal Deadline: October 9, 2014

For information on how to appeal a proposal, visit Development Services Center 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.

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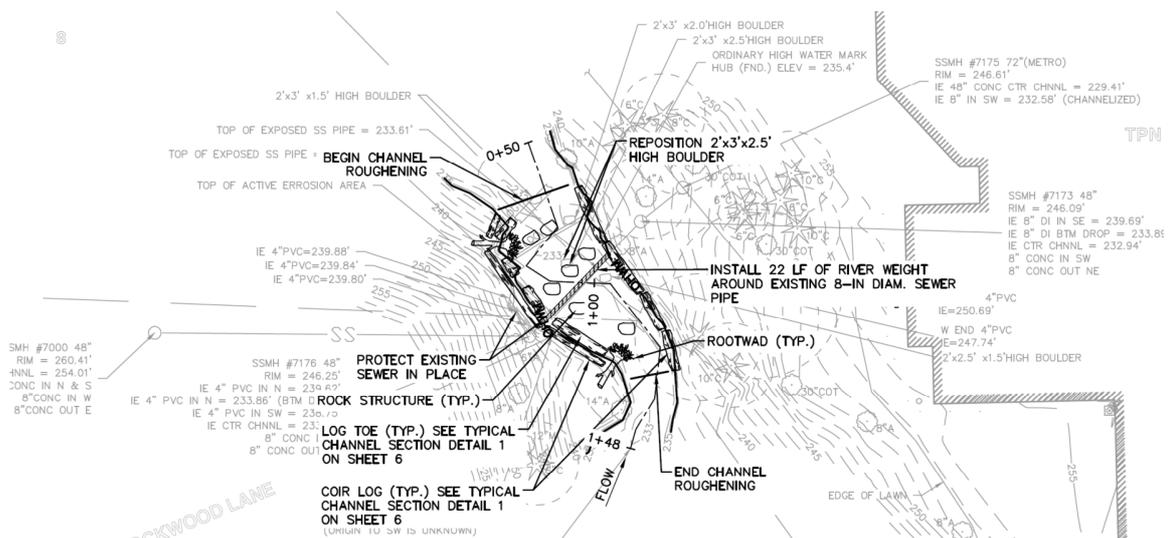
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Attachments

1. Critical Areas Report –including Project Plans
2. Environmental Checklist
3. Public Comment Letter and City Applicant Response to Public Comment

I. Proposal Description

This is an application for Critical Areas Land Use permit approval to stabilize eroding stream bank adjacent to Kelsey Creek, a Type F, fish bearing stream. Proposed stabilization techniques include placing toe logs and root wads along approximately 50 feet of the left bank of the stream. A coir log will be placed on top of the toe logs and planted with live stakes. A roughened channel will be constructed in the existing stream channel to reduce erosional downcutting and to prevent future exposure of the sewer line. Exposed areas will be planted with native shrubs or backfilled with stream gravels. Temporary construction access to the work site will be removed and restored to its existing condition or better. The project is regulated by the City of Bellevue Land Use Code (LUC) Critical Areas Overlay District requirements found in LUC 20.25H.



The proposed work is allowed by LUC 20.25H.055.B subject to compliance with applicable performance standards. Proposed in-stream work constitutes modifications of the stream channel and is allowed under LUC 20.25H.080.B which specifies that the stream channel may be only be modified through a critical areas report in conjunction with a stream stabilization measure or a habitat improvement project where there is a net benefit in ecological function.

In response to this requirement, the applicant has obtained the services of a qualified professional who has prepared a critical areas report and has identified impact mitigation. The critical areas report contains a complete project summary and outlines potential impacts and actions being taken to avoid or when unavoidable provide mitigation. The project critical areas report is included as **Attachment 1** along with the project plans.

II. Site Description, Zoning, Land Use and Critical Areas

A. Site Description

The project vicinity is mostly developed and consists of residential uses and an adjacent religious facility, Bellevue Christian Reformed Church. The project area is west of 148th Ave NE behind the church facility within a forested ravine with Kelsey Creek flowing in the bottom.

Riparian vegetation consists of deciduous trees dominated by red alder and big leaf maple, along with an understory of native shrubs and English ivy. Some naturally occurring large wood debris (LWD) is present in the stream. Substrate in Kelsey Creek is gravelly with some sand. Riffle and shallow pools are present in this reach of Kelsey Creek. A few boulders are present in the stream.

An existing public sewer line runs parallel to Kelsey Creek. The public facility has been undermined by stream erosion and the pipe and manhole have been exposed.



Photo 1- Left bank sanitary sewer man-hole cover and exposed side sewer from bank failure.

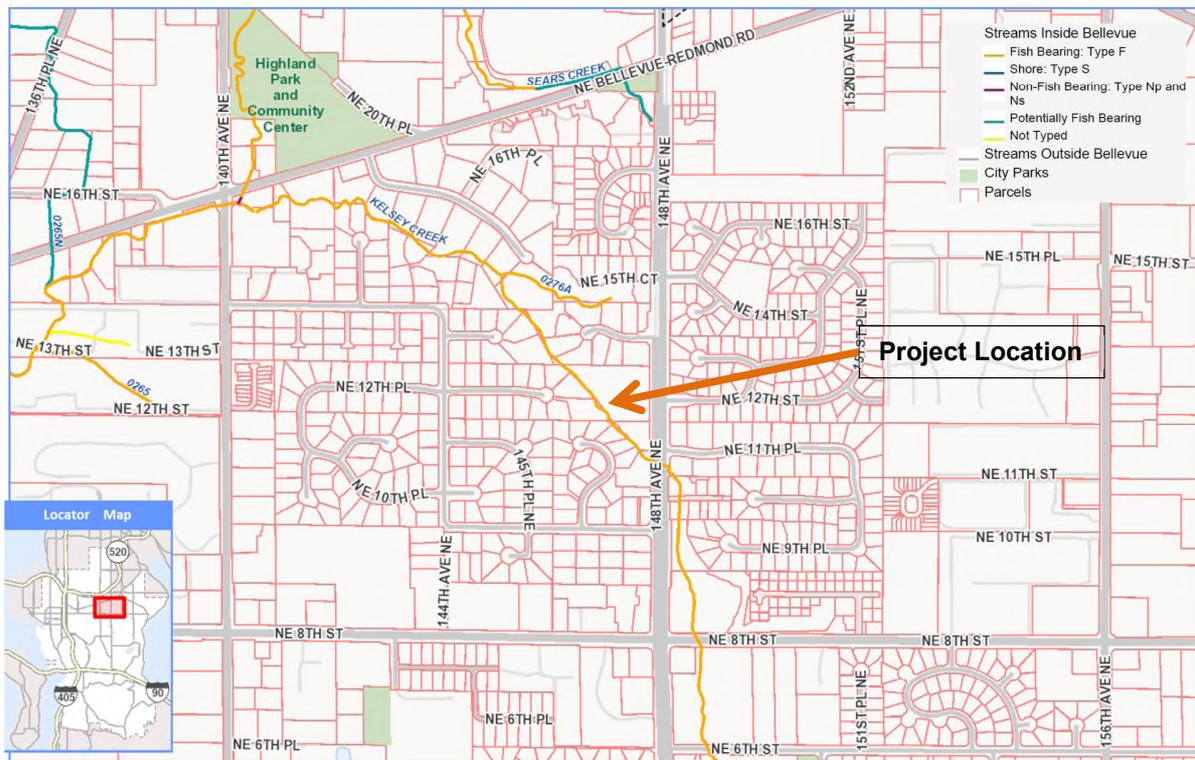


Figure 1 – Project Vicinity

B. Zoning and Land Use Context

The channel work will be conducted in the R-2.5 zoning district, a single family residential district predominantly developed with residential uses. The subject site is adjacent to a religious facility, Bellevue Christian Reformed Church. The general dimensional standards in LUC 20.20.010 do not apply, because there is no structural development proposed. The existing uses on the affected property are permitted and there is no proposed change in use.

C. Critical Areas Functions and Values

i. Streams and Riparian Areas

a. Stream and Riparian Area Functions:

A healthy aquatic environment relies on processes sustained by dynamic interaction between the stream and the adjacent riparian area. Riparian vegetation in floodplains and along stream banks provides a buffer to help mitigate the impacts of urbanization. Healthy riparian areas support healthy stream conditions.

Upland and wetland riparian areas retain sediments, nutrients, pesticides, pathogens, and other pollutants that may be present in runoff, protecting water quality in streams. The roots of riparian plants also hold soil and

prevent erosion and sedimentation that may affect spawning success or other behaviors, such as feeding.

Both upland and wetland riparian areas reduce the effects of flood flows. Riparian areas and wetlands reduce and desynchronize peak crests and flow rates of floods. Upland and wetland areas can infiltrate floodflows, which in turn, are released to the stream as baseflow.

Vegetated riparian areas also provide a source of large woody debris that helps create and maintain diverse in-stream habitat, as well as create woody debris jams that store sediments and moderate flood velocities.

ii. Areas of Special Flood Hazard

Areas of Special Flood Hazard Functions:

The value of floodplains can be described in terms of both the hydrologic and ecological functions that they provide. Flooding occurs when either runoff exceeds the capacity of rivers and streams to convey water within their banks, or when engineered stormwater systems become overwhelmed. Studies have linked urbanization with increased peak discharge and channel degradation (Dunne and Leopold 1978; Booth and Jackson 1997; Konrad 2000). Floodplains diminish the effects of urbanization by temporarily storing water and mediating flow to downstream reaches. The capacity of a floodplain to buffer upstream fluctuations in discharge may vary according to valley confinement, gradient, local relief, and flow resistance provided by vegetation. Development within the floodplain can dramatically affect the storage capacity of a floodplain, impact the hydrologic regime of a basin and present a risk to public health and safety and to property and infrastructure.

iii. Habitat Associated With Species of Local Importance

Habitat Functions:

Urbanization, the increase in human settlement density and associated intensification of land use, has a profound and lasting effect on the natural environment and wildlife habitat (McKinney 2002, Blair 2004, Marzluff 2005 Munns 2006), is a major cause of native species local extinctions (Czech et al 2000), and is likely to become the primary cause of extinctions in the coming century (Marzluff et al. 2001a).

Cities are typically located along rivers, on coastlines, or near large bodies of water. The associated floodplains and riparian systems make up a relatively small percentage of land cover in the western United States, yet they provide habitat for rich wildlife communities (Knopf et al. 1988), which in turn provide a source for urban habitat patches or reserves. Consequently, urban areas can support rich wildlife communities. In fact,

species richness peaks for some groups, including songbirds, at an intermediate level of development (Blair 1999, Marzluff 2005).

Protected wild areas alone cannot be depended on to conserve wildlife species. Impacts from catastrophic events, environmental changes, and evolutionary processes (genetic drift, inbreeding, colonization) can be magnified when a taxonomic group or unit is confined to a specific area, and no one area or group of areas is likely to support the biological processes necessary to maintain biodiversity over a range of geographic scales (Shaughnessy and O'Neil 2001). As well, typological approaches to taxonomy or the use of indicators present the risk that evolutionary potential will be lost when depending on reserves for preservation (Rojas 2007). Urban habitat is a vital link in the process of wildlife conservation in the U.S.

III. Consistency with Land Use Code Requirements:

A. Zoning District Dimensional Requirements:

This is a proposal to stabilize a stream channel and protect an existing sewer line facility. Work is limited to the stabilization activity including grading, the placement of wood and rock, and planting of native vegetation. Standard zoning district development standards do not apply.

B. Consistency with Critical Areas Performance Standards LUC 20.25H:

i. Stabilization Measures LUC 20.25H.055.C3.m

The stabilization measures proposed for the stream bank include the use of toe logs and root wads and coir logs planted with live stakes. All of these techniques are considered soft stabilization measures that mimic and preserve the functions and values of the critical area.

ii. Performance Standards for Stream Critical Areas LUC 20.25H.080.A and LUC 20.25H.080.B

The proposed project has met the criteria of an "allowed use" under LUC 20.25H.055. It includes activities that are consistent with stream stabilization and habitat improvement projects. An approved Critical Areas Report has been prepared and submitted to support the design of the project and its desired objectives. The applicant will be required to submit information regarding the use of pesticides, insecticides, and fertilizers to avoid impacts to water resources. See Section IX for related conditions of approval.

iii. Performance Standards for Areas of Special Flood Hazard LUC 20.25H.180.C

The proposed project does not result in an increase in the Base Flood Elevation (BFE). The applicant has stated that the channel design will be restored to a condition that was present when the original sewer line was installed. In addition,

the channel will be roughened using embedded boulders, to reduce erosional downcutting and to prevent future exposure of the sewer line. The area of special flood hazard will maintain its hydraulic connectivity to the source of flooding. The construction is proposed to occur all in the same season/work window. The work includes habitat improvements including modifications to the stream channel and is necessary to stabilize an existing public utility facility. The applicant shall maintain the altered stream channel to ensure that the flood-carrying capacity is not diminished. Maintenance shall be for a period of five years. A maintenance plan shall be submitted with the required clearing and grading permit. **See conditions in Section IX of this report.**

C. Consistency with Critical Areas Report LUC 20.25.230:

The applicant supplied a complete critical areas report prepared by a qualified professional. The report meets the minimum requirements in LUC 20.25H.250 demonstrates that the proposed stream channel modifications will enhance riparian areas within project limits. The report is included as **Attachment 1** to this staff report.

IV. Public Notice and Comment

Application Date: March 3, 2014
Public Notice (500 feet): April 17, 2014
Minimum Comment Period: May 1, 2014

The Notice of Application for this project was published in the City of Bellevue weekly permit bulletin on March 3, 2014. It was mailed to agencies, tribes, and property owners within 500 feet of the project site. One public comment letter was received from the Muckleshoot Indian Tribe Fisheries Division. The letter included several technical questions and comments related to the following issues:

1. Photo 1 in the packet shows several pieces of wood currently in Kelsey Creek that are likely provided fish habitat elements. How will this wood be managed during construction and repositioned post construction?
2. How does the City intend to monitor this site to ensure that pipeline remains covered and the roughed channel is stable and does not become a barrier to fish passage?
3. The proposed 3 year plant monitoring schedule should be expanded to at least 5 years as there are invasive plants on site or nearby (see response to 4.a in checklist).
4. We would like a copy of the fish exclusion data for this project.
5. We would also like copies of the monitoring plan reports for this project when they are available.

The comment letter and applicant response to the comments is included as **Attachment 3**. The applicant has agreed to make the following modifications to the proposed plans:

- A note will be added to the plans that states all wood that is moved from the dewatered construction area will be placed back within the OHWM of the stream.
- The City application will send a copy of the first year, end of growing season report to the commenter.

In addition, the approval will require a 5 year monitoring period with the condition that if performance measures are met, the monitoring may be reduced to 3 years at the discretion of the permitting agency. The changes will be incorporated into the clearing and grading permit as conditioned in Section IX of this report.

V. Summary of Technical Reviews

Clearing and Grading:

The Clearing and Grading Division of the Development Services Department has reviewed the proposed development for compliance with Clearing and Grading codes and standards. The Clearing and Grading staff found no issues with the proposed development.

VI. 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. Therefore, issuance of a Determination of Non-Significance (DNS) is the appropriate threshold determination under the State Environmental Policy Act (SEPA) requirements.

A. Earth and Water

A temporary erosion and sedimentation control plan is included in the project plans (Attachment 1), and addresses all requirements for construction management and restoring the site to an improved post construction condition. Erosion and sediment control best management practices include the use of a dewatering plan to dry out as much as feasible during the proposed construction activity. Final approval of the temporary erosion and sedimentation control plan will happen with the required Clearing and Grading Permit. The applicant will also be required to submit information regarding the use of pesticides, insecticides, and fertilizers to avoid impacts to water resources. See Section IX for related conditions of approval.

B. Animals

The project site is located around and within a regulated stream, riparian wetlands and part of a habitat corridor. Fish use has been documented throughout the Kelsey Creek Basin. Of note is the presence of cutthroat trout, Coho salmon, Puget Sound Chinook, and Western Brook lamprey. The restoration plan has been designed to further enhance the vegetation structure on the site, which is expected to have a positive impact on the wildlife habitat resources. The applicant is required to submit a final restoration and mitigation plan as part of the Clearing and Grading Permit application. See Section IX for related conditions of approval.

C. Plants

Mitigation for temporary and permanent disturbance will be approved pursuant to an approved restoration and enhancement plan. A complete restoration plan with monitoring performance standards and contingency plan will be required and implemented as a condition of the subsequent clearing and grading permit. See Section IX for related conditions of approval.

D. Noise

Construction noise will be limited by the City's Noise Ordinance (Chapter 9.18 BCC) which regulates construction hours and noise levels. See Section IX for a related condition of approval.

VII. Decision Criteria

A. Critical Areas Report Decision Criteria- General Criteria LUC 20.25H.255

The Director may approve, or approve with modifications, the proposed modification where the applicant demonstrates:

- 1. The modifications and performance standards included in the proposal lead to levels of protection of critical area functions and values at least as protective as application of the regulations and standards of this code;**

Finding: The applicant has provided a complete critical areas report that demonstrates that the proposal leads to levels of protection of critical area functions and values that area at least as protective as the regulations and standards of this code. The planting of native vegetation and installation of woody material, and increased stream roughness will enhance the instream habitat in the project reach and stabilize the stream bank, ensuring that the sewer line is protected from breakage and spills.

- 2. Adequate resources to ensure completion of any required mitigation and monitoring efforts;**

Finding: The applicant, the City of Bellevue, has adequate resources to complete the required mitigation and monitoring efforts.

3. The modifications and performance standards included in the proposal are not detrimental to the functions and values of critical area and critical area buffers off-site; and

Finding: The proposal complies with all of the applicable performance standards for streams, habitat areas, and areas of special flood hazard and includes an appropriate restoration and enhancement plan to offset identified short and long term impacts.

4. The resulting development is compatible with other uses and development in the same land use district.

Finding: The construction of the stream stabilization and habitat improvement work is consistent with the surrounding land uses. There is no change in use on the site or any of the adjacent sites.

B. Critical Areas Land Use Permit Decision Criteria 20.30P

The Director may approve or approve with modifications an application for a critical areas land use permit if:

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

Finding: The proposed activity is required to obtain a clearing and grading permit from the City of Bellevue. The activity is also required to obtain permission from the Washington State Departments of Ecology and Fish & Wildlife, as well as the Army Corps of Engineers. A copy of the permit approvals granted by other agencies shall be submitted to City of Bellevue prior to the issuance of the clearing and grading permit. See Section IX for related conditions of approval.

2. 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;

Finding: The proposal has been designed by qualified professionals from Northwest Environmental Consulting, with consultation with City of Bellevue, in order to ensure the best available design and techniques have been incorporated. In response to public comment on the project, the applicant is also proposing to re-install pieces of wood removed during construction at a location near the OHWM. See Section IX for related conditions of approval.

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

Finding: Section III above discusses how project designs incorporate applicable performance standards.

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

Finding: The area is adequately serviced by public facilities. The proposal will not change the need for public facilities.

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

Finding: A restoration plan consistent with the requirement of LUC 20.25H.210 has been prepared and submitted along with the project's critical areas report. The applicant is required to submit a final restoration and monitoring plan as part of the Clearing and Grading Permit application. See Section IX for related conditions of approval.

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

Finding: As discussed in Section IV & V of this report, the proposal complies with all other applicable requirements of the Land Use Code.

VIII. 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 Director does hereby **approve with conditions** the proposal to stabilize an eroding stream bank adjacent to Kelsey Creek, a Type F, fish bearing stream. The stream channel modified to reduce erosional downcutting and to prevent future exposure of the sewer line.

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 or other necessary development permits within one year of the effective date of the approval.

IX. 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	Janney Gwo, 425-452-6190
Land Use Code- BCC 20.25H	Heidi M. Bedwell, 425-452-4862
Noise Control- BCC 9.18	Heidi M. Bedwell, 425-452-4862

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

1. **Revised Design Plans:** As part of the required clearing and grading permit, the applicant shall incorporate a note that requires all wood that is moved from the dewatered construction area to be placed back within the OHWM of the stream.

Authority: Land Use Code 20.25H.220.H
Reviewer: Heidi M. Bedwell, Development Services Department

2. **Clearing and Grading Permit:** Before commencing any construction activity the applicant must apply for and obtain a Clearing and Grading Permit.

Authority: Bellevue City Code Section 23.76.025
Reviewer: Janney Gwo, Development Services Department

3. **Stream Channel and Restoration Plan:** The applicant shall be required to submit a final stream channel and restoration plan as part of the underlying clearing and grading permit required to implement the project as described in this approval (See Attachment 1 Critical Areas Report). All areas of temporary disturbance shall be restored per the City's Critical Areas Handbook.

Authority: Land Use Code 20.25H.220, 20.25H.180.C.5
Comprehensive Plan Policies EN-1, EN-10, EN-28, EN-30
Reviewer: Heidi M. Bedwell, Land Use

4. **Submittal of Restoration Maintenance and Monitoring Reports:** The applicant shall submit annual monitoring reports to the Development Services Department Land Use Division at the end of the growing season by no later than November 30 for each year monitored. During each entry, plant growth will be evaluated, soils amended as needed, and invasive plants will be suppressed.

In order to ensure the restoration plan successfully establishes, the plantings shall meet the following performance standards for a period of five years following installation:

Year 1: 100% survival of all installed plants & 0% invasive coverage
Year 2: 90% survival of all installed plants & <10% invasive coverage
Year 3: 85% survival of all installed plants, >35% native coverage & <10% invasive coverage.
Year 4: >50% native coverage & <15% invasive coverage
Year 5: >70% native coverage & <15% invasive coverage

Authority: Land Use Code 20.25H.220.D

Reviewer: Heidi M. Bedwell, Land Use

5. Rainy Season Restrictions: Due to the proximity Kelsey Creek no clearing and grading activity may occur during the rainy season, which is defined as November 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: Janney Gwo, Development Services Department

6. In-Water Work Window: Work below the Ordinary High Water mark approved by the underlying Clearing and Grading Permit must be completed during an in-water work window of July 1 through August 31, unless otherwise authorized in writing by the Washington State Department of Fish and Wildlife.

Authority: Land Use Code 20.25H.160
Reviewer: Heidi M. Bedwell, Land Use

7. Pesticides, Insecticides, and Fertilizers: The applicant must submit as part of the required Clearing and Grading Permit information regarding the use of pesticides, insecticides, and fertilizers in accordance with the City of Bellevue's "Environmental Best Management Practices".

Authority: Land Use Code 20.25H.220.H
Reviewer: Heidi M. Bedwell, Development Services Department

8. Noise Control: Noise related to construction is exempt from the provisions of BCC 9.18 between the 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. Noise emanating from construction is prohibited on Sundays or legal holidays unless expanded hours of operation are specifically authorized in advance. Requests for construction hour extension must be done in advance with submittal of a construction noise expanded exempt hours permit.

Authority: Bellevue City Code 9.18
Reviewer: Heidi M. Bedwell, Development Services Department

9. Obtain All Other Applicable State and/or Federal Permits: Before issuance of construction permit, all applicable state and federal permits must be presented to the Development Services Department and copies placed in the project file.

Authority: Land Use Code 20.25H.180.C.2

Reviewer: Heidi M. Bedwell, Development Services Department

10. **Temporary Erosion and Sedimentation Control Plan:** Prior to the initiation of any clearing or grading activities, a Temporary Erosion and Sedimentation Control Plan must be approved as part of a Clearing and Grading permit and all clearing limits and the location of temporary erosion and sedimentation control measures shall be field staked for approval by the on-site clearing and grading inspector's approval.

Authority: Bellevue City Code 23.76.060 and 23.76.090

Reviewer: Janney Gwo, Development Services Department

11. **Storm Water Pollution Prevention Plan:** To ensure contaminated stormwater or construction-related runoff does not pollute adjacent surface water, a construction stormwater pollution prevention plan (CSWPPP) is required for all clearing and grading permit applications for industrial, commercial, multi-family, plat and short plat developments. The CSWPPP outline should be generally consistent with the SWPPP requirements of the National Pollutant Discharge Elimination System (NPDES) General Storm water Permit for Construction Activities.

Turbidity and pH monitoring will be required during the site grading. A monitoring plan must be submitted as part of the CSWPPP with the Clearing & Grading permit application or during review of the Clearing and Grading permit application.

Authority: Clearing and Grading Code BCC 23.76

Reviewer: Janney Gwo, Development Services Department

12. **Stream Channel Maintenance and Monitoring Plan and Reporting:** To ensure successful performance of the proposed channel modifications, the applicant shall submit a final stream channel modification maintenance and monitoring plan identifying channel restoration goals and monitoring metrics for a period five years. Following completion of stream channel improvements, the applicant shall complete an as-built survey of the channel to serve as a baseline for future monitoring efforts and submit annual monitoring reports to the Development Services Department Land Use Division by no later than November 30 for each year monitored demonstrating compliance with restoration goals outlined in the Stream Channel Maintenance and Monitoring Report.

Authority: Land Use Code 20.25H.220, 20.25H.180.C.5

Comprehensive Plan Policies EN-1, EN-10, EN-28, EN-30

Reviewer: Heidi M. Bedwell, Land Use

Kelsey Creek Sewer Stabilization Critical Areas Report

Prepared for

The City of Bellevue
450 110th Ave. NE / P.O. Box 90012
Bellevue, WA 98009

Prepared by

 **Northwest**
Environmental Consulting, LLC

3639 Palatine Ave N
Seattle, WA 98103
206-234-2520

February 2014

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Introduction

The City of Bellevue is proposing to stabilize streambank erosion that has taken place along Kelsey Creek. The erosion has caused failure of a side sewer and streambank, and has jeopardized an existing manhole structure on the bank of Kelsey Creek. In addition, downcutting of the stream has exposed the top of the existing sewer line in the bed of the stream.

The project is a maintenance project and certain elements are exempt from Critical Areas Reporting requirements per City of Bellevue Land Use Code Title 20, Part 20.25H.055, footnote 1 & 2. All work above the Ordinary High Water Mark is allowed for maintenance and minor stream work would also be allowed. However, the channel modification required to protect the existing infrastructure is not an exempt activity. This Critical Areas Report was completed to meet the requirements of Section 20.25H.250 of the City of Bellevue Code.

Project Proposal

The project proposes to stabilize the eroding bank by placing toe logs and root wads along approximately 50 feet of the left bank of the stream. A coir log will be placed on top of the toe logs and planted with live stakes. A roughened channel will be installed in the channel to reduce erosional downcutting and to prevent future exposure of the sewer line by maintaining the original stream contours present when the sewer was installed. A roughened channel is a technique that uses embedded boulders to control the stream grade. River weights (used to counteract the buoyancy of the pipe) will be used on the sewer line to hold it in place. Exposed areas will be planted with native shrubs or backfilled with stream gravels. Temporary construction access to the work site will be removed and restored.

Habitat Assessment

Existing Environmentally Critical Areas

The project area is in a forested ravine with Kelsey Creek flowing in the bottom. The surrounding area is a neighborhood with single-family residences and the Bellevue Christian Reformed Church.

Riparian vegetation consists of deciduous trees dominated by red alder and big leaf maple, along with an understory of native shrubs and English ivy. Some naturally occurring large wood debris (LWD) is present in the stream. Substrate in Kelsey Creek is gravelly with some sand. Riffle and shallow pools are present in this reach of Kelsey Creek. A few boulders are present in the stream.

Water quality is good near the project area. As Kelsey Creek approaches Mercer Slough downstream, it reaches Category 5 (polluted) on the 2008 303(d) list for fecal coliform and urban lawn chemical pollutants.

Priority Species Use

The possible presence in and use of Kelsey Creek by federally listed species was evaluated by reviewing data received from the Washington State Department of Fish and Wildlife's (WDFW) Priority Habitats and Species (PHS) database. The PHS database indicates that Kelsey Creek is used by winter steelhead and fall Chinook salmon, as well as Coho salmon, resident cutthroat trout, and sockeye salmon. Kelsey Creek is not listed as Critical Habitat for Chinook salmon. However, Lake Washington is designated as Critical Habitat for Chinook salmon. Lake Washington is 5 to 6 miles downstream from the project.

Tributaries of Lake Washington, including Kelsey Creek, are not thought to be suitable for bull trout during any season, especially higher up the stream where this project takes place (6 miles). Bull trout have not been documented to occur in Kelsey Creek during summer; temperatures are generally too high and would deter bull trout from entering the stream while construction activities are underway. Lake Washington is considered the closest suitable habitat for bull trout. No other priority species are listed within 1 mile of the project.

The Washington State Department of Natural Resources does not have any records of rare habitats or plants in the project area.

Impacts

The project will temporarily bypass stream flows, excavate stream gravels, and clear riparian vegetation to create a temporary bypass.

Direct Impacts

Noise during construction will not reach the disturbance threshold for listed species. There will be no underwater noise. Minor turbidity could occur when the temporary stream diversion is installed and removed and the area is re-watered. Approximately 0.09 acres of riparian understory will be cleared for temporary access. No trees over 4" in diameter are expected to be removed.

Indirect Impacts

The project will reduce the chances of erosion along the stream channel. The project will also reduce the chances of future sewer failures that would release raw sewage into Kelsey Creek. The roughened channel will be designed to be fish passable for all life stages of salmonids and will not affect fish passage. Restoring the streambank with native vegetation and reducing long-term erosion potential will improve food chain support of stream functions from riparian inputs.

Impact to Stream functions and values

Kelsey Creek provides hydrologic, geomorphic, biological and water quality functions and values. Hydrologic functions provided by Kelsey Creek include surface water storage and conveyance and sub-surface transfer and flow variation. Geomorphic functions include sediment continuity and substrate mobility. Biological functions include biodiversity maintenance, habitat creation (aquatic and riparian), and trophic structure maintenance. Water quality functions include nutrient cycling, chemical regulation, and thermal regulation.

The project will temporarily disrupt these functions by bypassing and dewatering about 50 linear feet, excavating substrates, and clearing riparian undergrowth to create temporary access.

Mitigation Strategy

Avoidance and Minimization

The project is a maintenance project. The existing infrastructure would require being relocated which would cause additional disturbance to the stream, and the sewer line would still need to cross over or under Kelsey Creek in some other location, so avoiding impacts all together is not feasible.

Project impacts will be minimized by installing a temporary stream diversion to isolate the main channel of Kelsey Creek from the work area and performing work during the window permitted for fish-bearing tributaries to Lake Washington. The amount of disturbance will be minimized to the project area. The project design follows Integrated Streambank Protection Guidelines so the project does not significantly degrade Kelsey Creek.

In order to meet water quality standards during removal of the temporary bypass, turbidity cannot extend more than 300 feet downstream and 100 feet upstream (WAC 172-201A-400). Water from behind the temporary berm will be gradually released, allowing water levels to ramp down so no surge is created.

Mitigation Approach

Methods to mitigate for project impacts include using soft engineering techniques to stabilize the streambank by installing toe logs and rootwads to stabilize the toe of the slope, using a roughened channel to restore the streambed to original contours, and filling in around new features with specified stream gravels. The bank stabilization will include revegetation, log toes, and rootwads that will prevent bank failure and reduce the amount of fines that enter the stream. All disturbed upland areas will be restored with native shrubs and trees.

Stream Function and Values Improvements

The completed project will not negatively affect hydrologic or geomorphic stream functions and values. The project will add a roughened channel that will stabilize the channel, will allow fish passage, and maintain sediment continuity and substrate mobility. The stabilization will prevent rapid downcutting that can occur in streams surrounded by urban development with flashy flows. The addition of deeper gravel substrates from the roughened channel may increase transfer of ground and surface water between the stream and groundwater.

The project will improve stream biological functions by restoring 0.09 acre of riparian habitat. The dense plantings will provide allochthonous food sources for the aquatic organisms. The addition of rootwads and log toes will create substrates for aquatic invertebrates to attach to increasing the abundance of instream food sources. The roughened channel will maintain fish passage for all life stages of salmonids in the stream.

The project will preserve water quality functions and values by reducing the chances of future releases of raw sewage into Kelsey Creek. The addition of dense riparian plantings will help with filtering surface runoff from adjacent lawns and provide additional shading enhancing thermal regulation of the stream.

Proposed Mitigation

Mitigation goals

Mitigation goals will include the following:

- Restore 0.09 acre of riparian buffer
- Prevent future erosion of streambanks within the project footprint

Performance standards

Riparian buffer plantings shall maintain a 100% survival for the first year and achieve 80% survival in years 2 and 3.

Bank stabilizing structures will remain in place for 3 years of monitoring and erosion of stream banks will not occur for the 3 year monitoring period.

Planting plan

Trees and shrubs will be containerized and placed on 4 foot centers. Quantities are shown in Table 1 Planting Schedule. Limits of Zone 1 and 2 are shown on page 7 of the project drawings.

Plant	Scientific name	Type	Spacing	Zone 1	Zone 2	Total
Trees						
Sitka Spruce	<i>Picea sitchensis</i>	container	4'		15	15
Red Alder	<i>Alnus rubra</i>	container	4'		15	15
Shrubs						
Black Twinberry	<i>Lonicera involucrata</i>	container	4'	50		50
Salmonberry	<i>Rubus spectabilis</i>	container	4'	25		25
Red Osier Dogwood	<i>Cornus sericea</i>	container	4'	15		15
Snowberry	<i>Symphoricarpos albus</i>	container	4'		30	30
Indian plum	<i>Oemleria cerasiformis</i>	container	4'		25	25
Vine maple	<i>Acer circinatum</i>	container	4'		20	20
Sword fern	<i>Polystichum munitum</i>	container	4'		50	50
Total				90	155	245

Schedule and Maintenance

Plantings shall be installed after completion of the stream work. Watering will be required during the first year after planting if drought conditions occur.

Monitoring and Contingency

To ensure that the performance standards are met, plantings will be counted in August or September for survival for the first year. All dead plantings will be replaced so that 100% survival is reached for the first year. Sub sampling can be completed to assure that the 100% survival is reached.

A qualified engineer will check annually instream structures for compromised anchoring, unusual erosion, movement by impact, or other problems that may occur. Any problems that may result in substantial streambank erosion or threaten any structures on the property will be properly resolved to remedy the situation.

Reporting

Monitoring reports shall be prepared and submitted to City of Bellevue annually on years 1-3

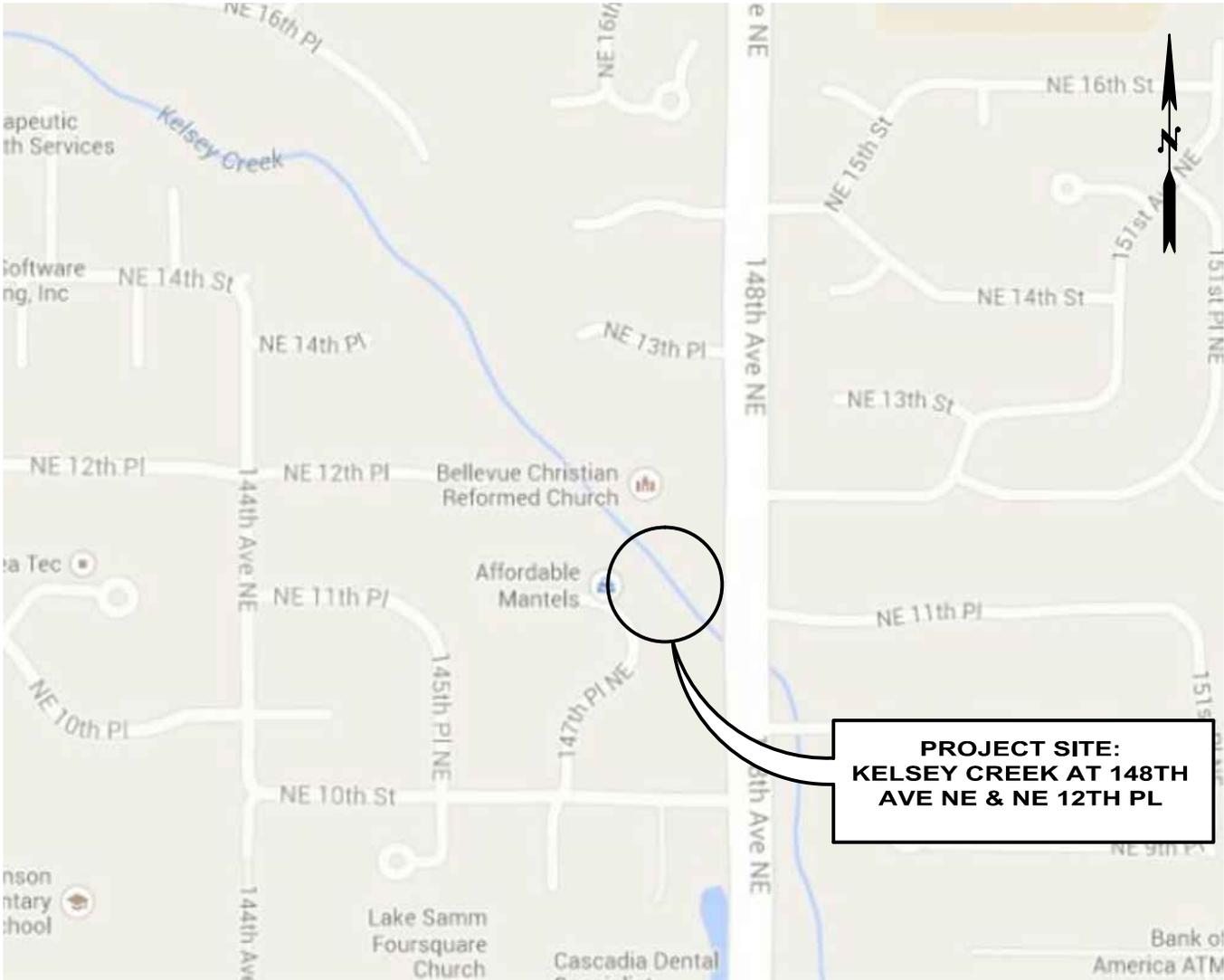
References

King County iMap. 2013. Interactive property and critical areas mapping tool.
<http://www.kingcounty.gov/operations/GIS/Maps/iMAP.aspx>. Queried
September 28, 2013.

Washington Department of Fish and Wildlife. 2013. SalmonScape interactive mapping tool.
<http://fortress.wa.gov/dfw/gispublic/apps/salmonscape/default.htm>. Queried
September 28, 2013.

Figures

VICINITY MAP



SHEET INDEX

SHEET #	SHEET TITLE
1	VICINITY MAP
2	BYPASS, TESC, AND FISH REMOVAL PLAN
3	BYPASS, TESC, AND FISH REMOVAL DETAILS
4	BYPASS, TESC, AND FISH REMOVAL DETAILS
5	PLAN AND PROFILE
6	TYPICAL SECTIONS AND DETAILS
7	PLANTING PLAN
8	PLANT LIST AND DETAILS

**PROJECT SITE:
KELSEY CREEK AT 148TH
AVE NE & NE 12TH PL**

REFERENCE: (USACE will provide)

APPLICANT: CITY OF BELLEVUE, WA
KELSEY CREEK AT 148TH & NE 12 PL

ADJACENT PROPERTY OWNERS:

- G. HARMS / 7385200080
- P. BALARAJAN / 7385200090

LOCATION: 1221 148TH AVE NE / 2725059046

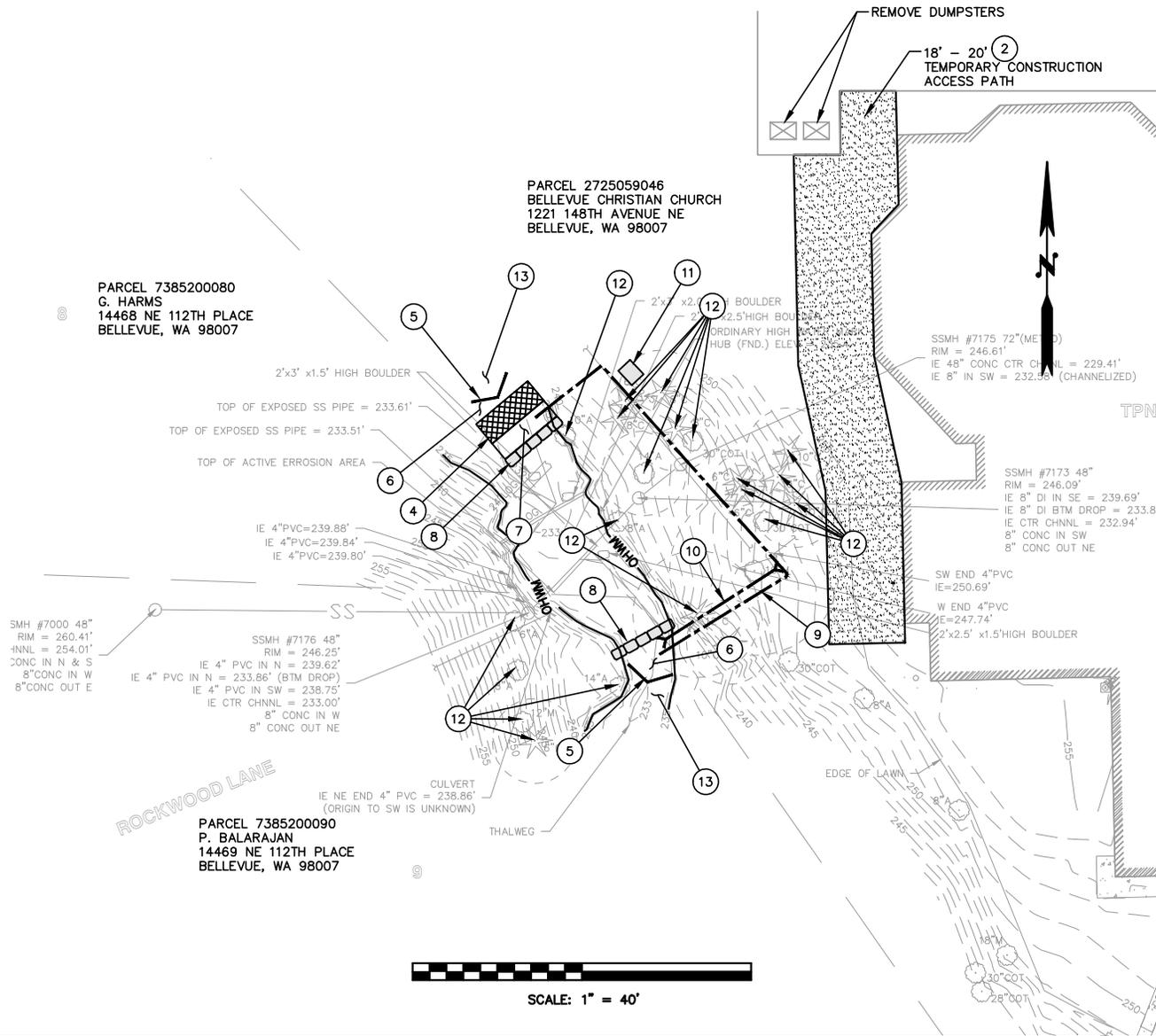
LAT/LONG: 47.62104N / -122.14484W

PAGE 1 OF 8 DATE: JAN. 2014

PROPOSED PROJECT:
STABILIZE THE BANK AND BED OF KELSEY CREEK
AND PROTECT THE CITY'S SEWER SYSTEM

IN: KELSEY CREEK
NEAR/AT: BELLEVUE
COUNTY: KING
STATE: WA

BYPASS, TESC, AND FISH REMOVAL PLAN



GENERAL NOTES:

1. NATIVE WOODY DEBRIS SHALL BE PROTECTED IN PLACE OR RELOCATED ON-SITE.

TEMPORARY STREAM BYPASS AND TESC KEYED NOTES:

1. MARK PROJECT LIMITS IN ACCORDANCE WITH ECOLOGY BMP C103: HIGH VISIBILITY PLASTIC FENCE. CLEAR AND GRUB, AS NEEDED, WITHIN PROJECT LIMITS.
2. VEHICLE ACCESS ONTO UNPAVED EASEMENT AREAS MUST BE APPROVED BY THE ENGINEER. INSTALL ECOLOGY BMP C105: STABILIZED CONSTRUCTION ENTRANCE PRIOR TO VEHICLE ACCESS.
3. INSTALL ECOLOGY BMP C220: STORM DRAIN INLET PROTECTION. IN SITE ACCESS AND STAGING AREAS (PARKING LOT).
4. INSTALL SEDIMENT MAT PER DETAIL ON PAGE 4.
5. INSTALL FISH SCREEN PER DETAIL ON PAGE 3.
6. CAPTURE AND REMOVE ALL FISH BETWEEN THE FISH SCREENS IN ACCORDANCE WITH THE CONTRACT PROVISIONS AND THE HPA. FISH CAPTURE SHALL BE PERFORMED UNDER THE SUPERVISION OF AN EXPERIENCED FISHERY BIOLOGIST.
7. INSTALL TEMPORARY PLASTIC LINER TO PREVENT EROSION AT BYPASS PIPE AS NEEDED TO PERFORM WORK. SEE TEMPORARY STREAM BYPASS OUTLET PER DETAIL ON PAGE 4.
8. INSTALL GRAVEL BAG BERM. SEE DETAIL ON PAGE 3.
9. INSTALL TEMPORARY STREAM BYPASS. ADJUST LOCATION OF BYPASS PIPE AS NEEDED TO PERFORM WORK. SEE TEMPORARY STREAM BYPASS DETAIL ON SHEET 3.
10. INSTALL TEMPORARY STORMDRAIN BYPASS.
11. FILTER BAG FOR DEWATERING AND SEDIMENT REMOVAL. SEE DETAIL ON PAGE 3.
12. EXISTING TREE/VEGETATION TO REMAIN. PROTECT DURING CONSTRUCTION PER ECOLOGY BMP C101: PRESERVING NATURAL VEGETATION. TREE LIMBS MAY BE TRIMMED WITH APPROVAL FROM THE CITY'S ARBORIST.
13. TURBIDITY MONITORING STATION. SEE CONTRACT SPECIFICATIONS FOR MONITORING REQUIREMENTS.

REFERENCE: (USACE will provide)

APPLICANT: CITY OF BELLEVUE, WA
KELSEY CREEK AT 148TH & NE 12 PL

ADJACENT PROPERTY OWNERS:

1. G. HARMS / 7385200080
2. P. BALARAJAN / 7385200090

LOCATION: 1221 148TH AVE NE / 2725059046

LAT/LONG: 47.62104N / -122.14484W

PAGE 2 OF 8 DATE: JAN. 2014

PROPOSED PROJECT:

STABILIZE THE BANK AND BED OF KELSEY CREEK
AND PROTECT THE CITY'S SEWER SYSTEM

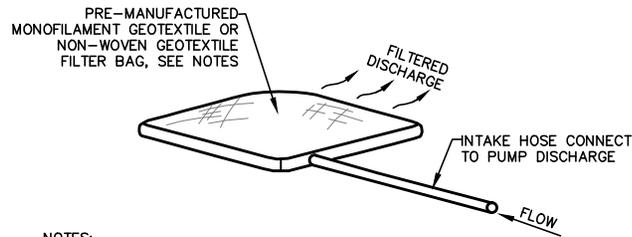
IN: KELSEY CREEK

NEAR/AT: BELLEVUE

COUNTY: KING

STATE: WA

BYPASS, TESC, AND FISH REMOVAL DETAILS

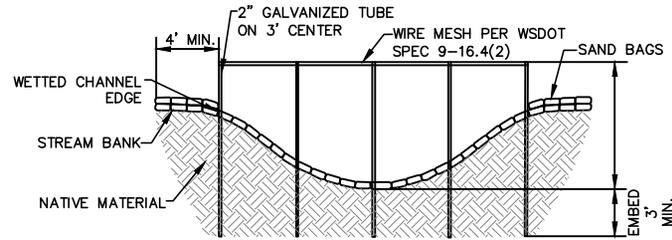


NOTES:

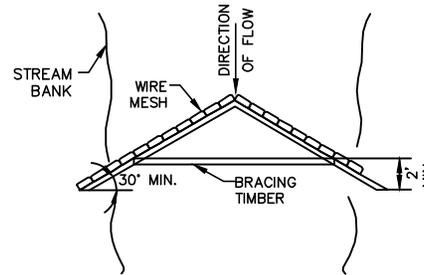
1. FILTER BAG SHALL BE MINIMUM 10' X 15' AND REPLACED AS NEEDED TO ACCOMMODATE ACTUAL SEDIMENT LOAD CONDITIONS (I.E. VOLUME, TYPE OF SEDIMENT, ETC.)
2. DRAIN FILTER BAG TO APPROVED (GRASSY, UPLAND) RECEIVING AREA, MONITOR SYSTEM FREQUENTLY TO VERIFY ADEQUATE PERFORMANCE AND CONDITION OF FACILITIES.

FILTER BAG DETAIL

NOT TO SCALE



FRONT VIEW



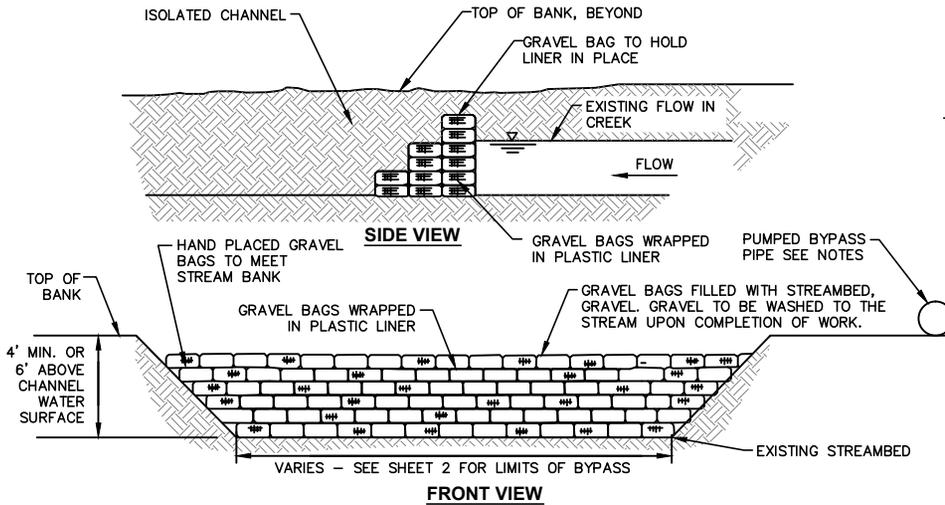
PLAN VIEW

FISH SCREEN DETAIL

NOT TO SCALE

CONSTRUCTION SEQUENCE

- ① INSTALL 2" GALVANIZED TUBES ON 3' CENTERS.
- ② SECURE WIRE MESH TO 2" GALVANIZED TUBES WITH WIRE FASTENER.
- ③ SECURE 1/4" MAX. FISH NYLON NET TO UPSTREAM SIDE OF WIRE MESH WITH WIRE FASTENER.
- ④ SECURE NYLON FISH NET TO STREAM BOTTOM WITH SAND BAGS.
- ⑤ EXTEND SAND BAGS 4' MIN. INTO STREAM BANKS.
- ⑥ ADD BRACING TIMBER AS NEEDED TO SUPPORT THE SCREEN
- ⑦ REMOVAL OF DEBRIS FROM THE UPSTREAM SIDE OF THE FENCE IS NECESSARY OTHERWISE THE SCREEN WILL BECOME CLOGGED AND WATER MAY TOPPLE OR BREACH THE SCREEN.



SIDE VIEW

FRONT VIEW

TEMPORARY STREAM BYPASS DETAIL

NOT TO SCALE

NOTES:

1. TYPICAL SUMMER FLOW ≤ 20CFS. STORM FLOWS ARE SIGNIFICANTLY HIGHER 2-YR STORM = 64 CFS AND 10-YR STORM = 102 CFS).
2. BYPASS PUMP INTAKE SHALL BE SCREENED TO PREVENT FISH FROM ENTERING BYPASS SYSTEM. SEE SECTION 8-03 OF THE CONTRACT PROVISIONS AND THE HPA FOR ADDITIONAL INFORMATION ON TEMPORARY STREAM BYPASS.
3. CONTRACTOR SHALL HAVE ON SITE, EMERGENCY BACKUP PUMPS, PIPE, AND APPURTENANCES IN THE EVENT OF HIGH FLOWS.

REFERENCE: (USACE will provide)

APPLICANT: CITY OF BELLEVUE, WA
KELSEY CREEK AT 148TH & NE 12 PL

ADJACENT PROPERTY OWNERS:

1. G. HARMS / 7385200080
2. P. BALARAJAN / 7385200090

LOCATION: 1221 148TH AVE NE / 2725059046

LAT/LONG: 47.62104N / -122.14484W

PAGE 3 OF 8 DATE: JAN. 2014

PROPOSED PROJECT:

STABILIZE THE BANK AND BED OF KELSEY CREEK AND PROTECT THE CITY'S SEWER SYSTEM

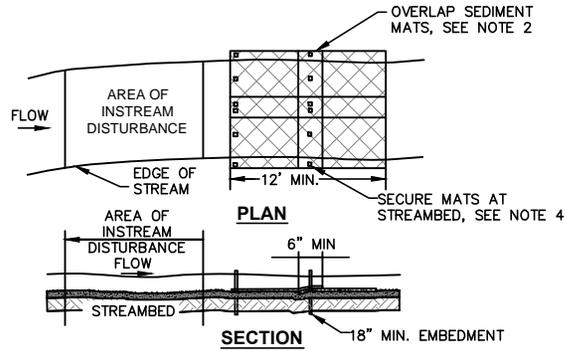
IN: KELSEY CREEK

NEAR/AT: BELLEVUE

COUNTY: KING

STATE: WA

BYPASS, TESC, AND FISH REMOVAL DETAILS

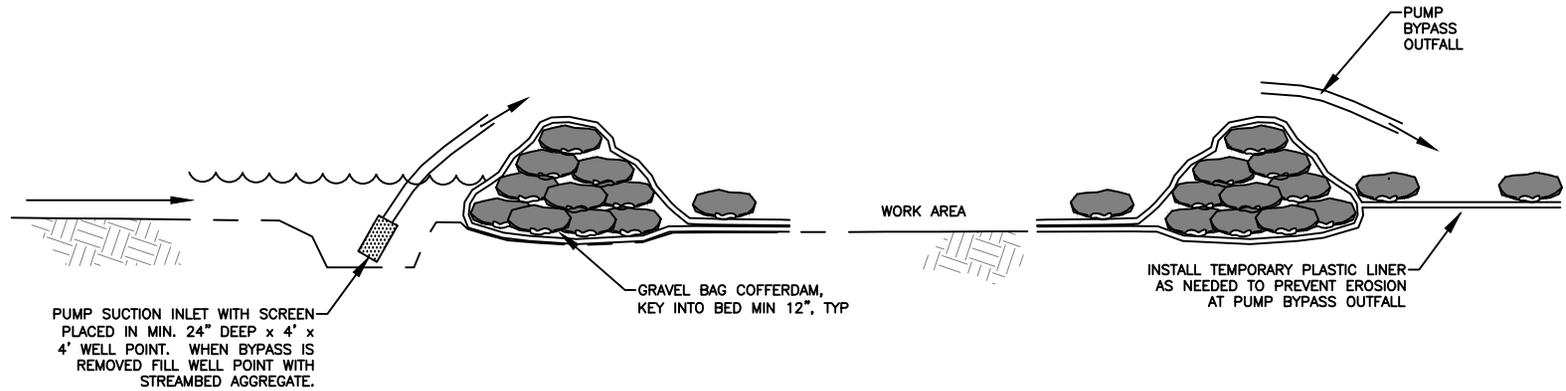


NOTES:

1. INSTALL MATS FLAT ON THE STREAM BOTTOM AT DOWNSTREAM EDGE OF DISTURBED AREA IMMEDIATELY PRIOR TO INSTREAM DISTURBANCE AND REMOVE IMMEDIATELY AFTER INSTREAM ACTIVITIES ARE COMPLETED.
2. OVERLAP THE TRAILING EDGE OF UPSTREAM MATS OVER THE LEADING EDGE OF DOWNSTREAM MATS BY AT LEAST 6". OVERLAP SIDES A MINIMUM OF 6".
3. HOLD THE LEADING EDGE OF THE MATS TIGHTLY TO STREAMBED CONTOURS WITH ROCKS OR OTHER WEIGHTS.
4. SECURE UPSTREAM CORNERS AND CENTERS OF MATS IN THE STREAMBED WITH 2" X 2" X 2' LONG WOOD STAKES.
5. IF STREAM VELOCITY IS HIGH, ENGINEER MAY REQUIRE ADDITIONAL LENGTH OF SEDIMENT MAT.

SEDIMENT MAT DETAIL

NOT TO SCALE



STREAM BYPASS PUMP INTAKE AND BYPASS OUTLET DETAIL

NOT TO SCALE

REFERENCE: (USACE will provide)

APPLICANT: CITY OF BELLEVUE, WA
KELSEY CREEK AT 148TH & NE 12 PL

ADJACENT PROPERTY OWNERS:

1. G. HARMS / 7385200080
2. P. BALARAJAN / 7385200090

LOCATION: 1221 148TH AVE NE / 2725059046

LAT/LONG: 47.62104N / -122.14484W

PAGE 4 OF 8 DATE: JAN. 2014

PROPOSED PROJECT:

STABILIZE THE BANK AND BED OF KELSEY CREEK AND PROTECT THE CITY'S SEWER SYSTEM

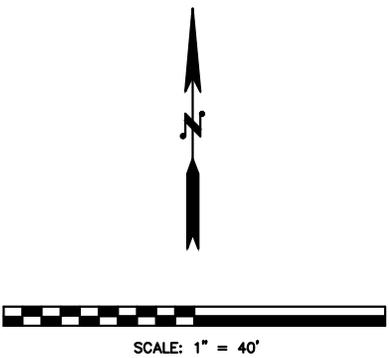
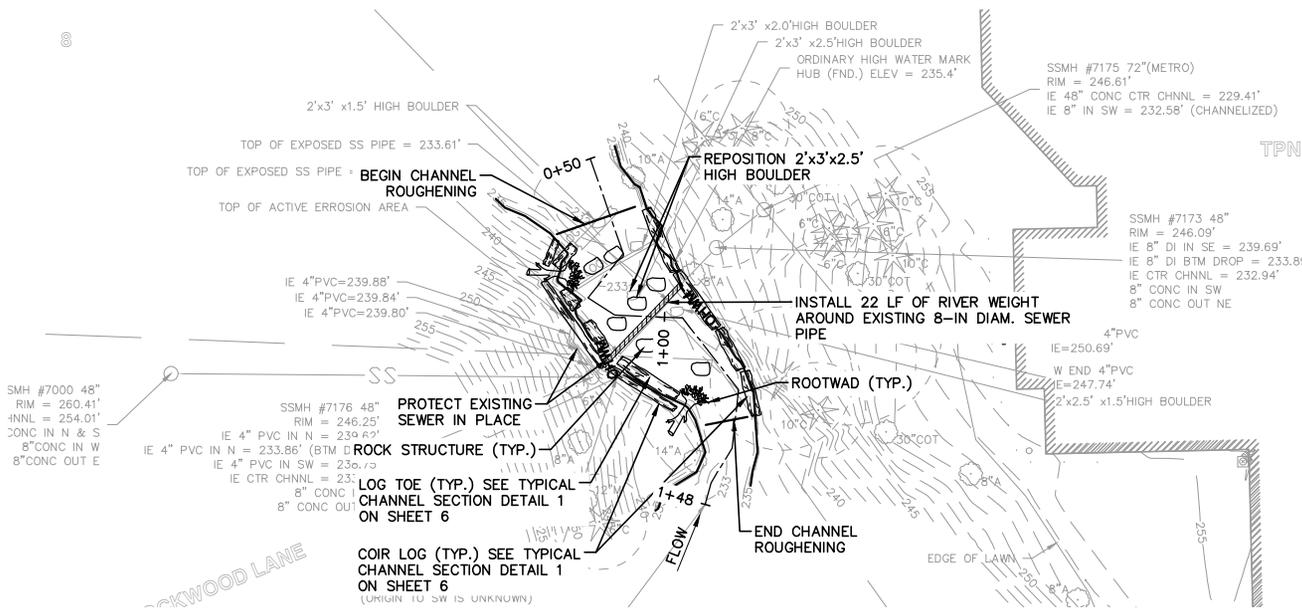
IN: KELSEY CREEK

NEAR/AT: BELLEVUE

COUNTY: KING

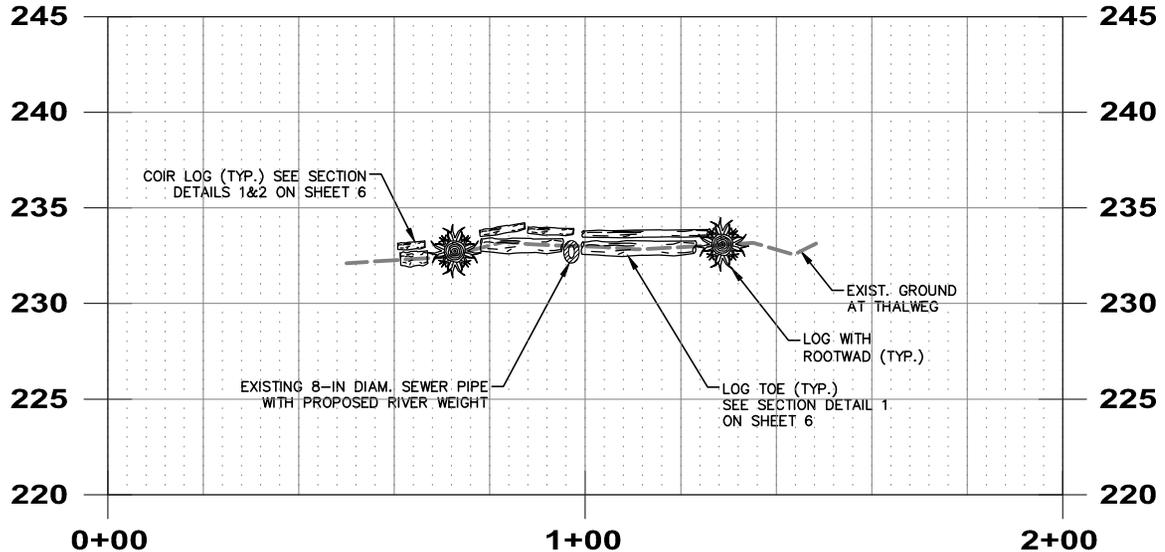
STATE: WA

PLAN & PROFILE



GENERAL NOTES:

1. NATIVE WOODY DEBRIS SHALL BE PROTECTED IN PLACE OR RELOCATED ON-SITE.



REFERENCE: (USACE will provide)

LOCATION: 1221 148TH AVE NE / 2725059046

PROPOSED PROJECT:
 STABILIZE THE BANK AND BED OF KELSEY CREEK
 AND PROTECT THE CITY'S SEWER SYSTEM

APPLICANT: CITY OF BELLEVUE, WA
 KELSEY CREEK AT 148TH & NE 12 PL

LAT/LONG: 47.62104N / -122.14484W

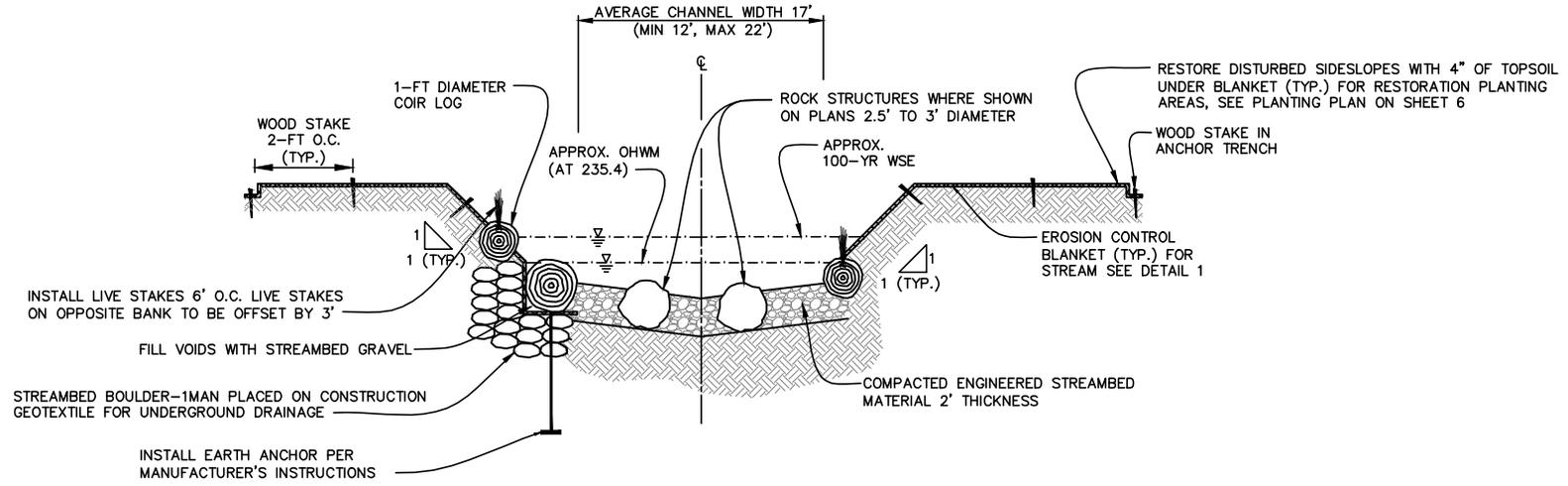
ADJACENT PROPERTY OWNERS:

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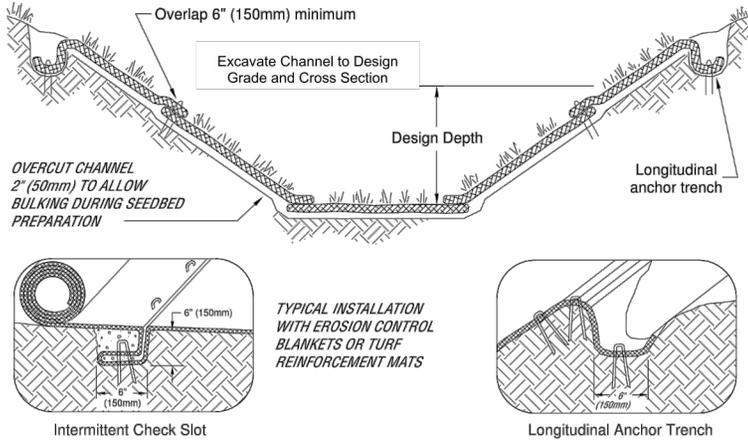
IN: KELSEY CREEK
 NEAR/AT: BELLEVUE
 COUNTY: KING
 STATE: WA

FILE NAME: O:\PROJECTS\10-130044 KELSEY CREEK SEWER STABILIZATION\3 CADD\FIGURES\JARPA_P_10-130044_JARPA.DWG

TYPICAL SECTIONS AND DETAILS

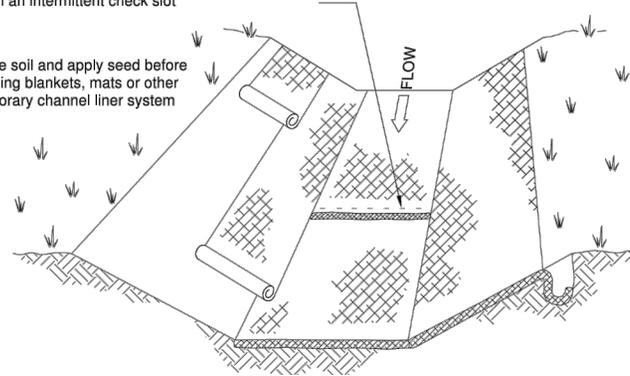


1 TYPICAL CHANNEL SECTION
NOT TO SCALE



Shingle-lap spliced ends or begin new roll in an intermittent check slot

Prepare soil and apply seed before installing blankets, mats or other temporary channel liner system



NOTES:

- DESIGN VELOCITIES EXCEEDING 2 FT/SEC (0.5M/SEC) REQUIRE TEMPORARY BLANKETS, MATS OR SIMILAR LINERS TO PROTECT SEED AND SOIL UNTIL VEGETATION BECOMES ESTABLISHED.
- GRASS-LINED CHANNELS WITH DESIGN VELOCITIES EXCEEDING 6 FT/SEC (2M/SEC) SHOULD INCLUDE TURF REINFORCEMENT MATS.
- BLANKET INSTALLATION SHALL INCORPORATE EROSION CONTROL BLANKET MANUFACTURERS INSTALLATION RECOMMENDATIONS.

EROSION CONTROL BLANKET
NOT TO SCALE

REFERENCE: (USACE will provide)

APPLICANT: CITY OF BELLEVUE, WA
KELSEY CREEK AT 148TH & NE 12 PL

ADJACENT PROPERTY OWNERS:

- G. HARMS / 7385200080
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LOCATION: 1221 148TH AVE NE / 2725059046

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PAGE 6 OF 8 **DATE:** JAN. 2014

PROPOSED PROJECT:

STABILIZE THE BANK AND BED OF KELSEY CREEK AND PROTECT THE CITY'S SEWER SYSTEM

IN: KELSEY CREEK

NEAR/AT: BELLEVUE

COUNTY: KING

STATE: WA

PLANTING PLAN

GENERAL NOTES:

1. PLANTING AREA INCLUDES ENTIRE GROUND SURFACE REGARDLESS OF SURFACE COVER BETWEEN PLANTS.
2. VERIFY IN-WATER WORK RESTRICTIONS WITH THE CITY OF BELLEVUE PRIOR TO PLANTING.
3. PLACE ALL PLANTS IRREGULARLY AT THE DESIGNATED LOCATIONS AND SPACING. INTERMIX SPECIES GROUPS FOR NATURAL APPEARANCE.
4. PLANT MATERIAL SHALL CONFORM TO AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z601-2004) FOR PLANT SIZE AND CONDITION FOR SPECIFIED MATERIAL.
5. PLANT MATERIAL SHALL BE LOCALLY GROWN (PUGET SOUND REGION) AND SHALL BE IN HEALTHY AND VIGOROUS GROWING CONDITION.
6. SEE PAGE 8 FOR PLANTING LIST AND DETAILS.

PLANT NOTES:



ZONE 1 = 1,457 SQ FT
PLANT THE FOLLOWING TREES AND SHRUBS AT 4' O.C. FOR SIZES AND SPACING SEE PLANT LIST AND DETAILS ON SHEET B.

SHRUBS
BLACK TWNBERRY
SALMONBERRY
REDOSIER DOGWOOD



ZONE 2 = 2,463 SQ FT
PLANT THE FOLLOWING TREES AND SHRUBS AT 4' O.C. FOR SIZES AND SPACING SEE PLANT LIST AND DETAILS ON SHEET B.

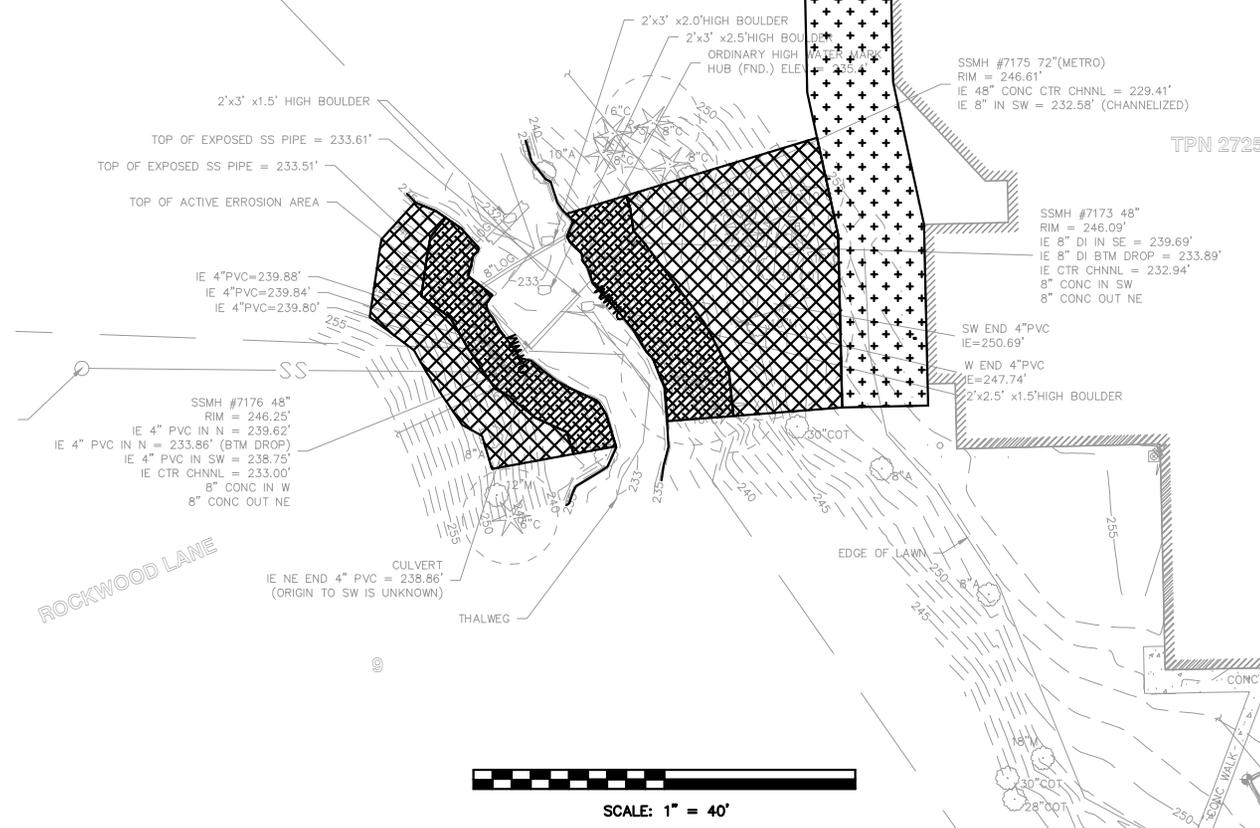
TREES
SITKA SPRUCE
RED ALDER

SHRUBS
SNOWBERRY
INDIAN PLUM
VINE MAPLE
SWORD FERN



ZONE 3 = 2,390 SQ FT
HYDROSEED (GRASS MIX)

RESTORE AREA TO ORIGINAL GRADE AND HYDROSEED AT A RATE OF 60LBS/ACRE GRASS MIX. COVER AREA WITH STRAW OR OTHER APPROVED COVER TO PROTECT SEED AND SOIL.



REFERENCE: (USACE will provide)

APPLICANT: CITY OF BELLEVUE, WA
KELSEY CREEK AT 148TH & NE 12 PL

ADJACENT PROPERTY OWNERS:

1. G. HARMS / 7385200080
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LAT/LONG: 47.62104N / -122.14484W

PAGE 7 OF 8 DATE: JAN. 2014

PROPOSED PROJECT:

STABILIZE THE BANK AND BED OF KELSEY CREEK AND PROTECT THE CITY'S SEWER SYSTEM

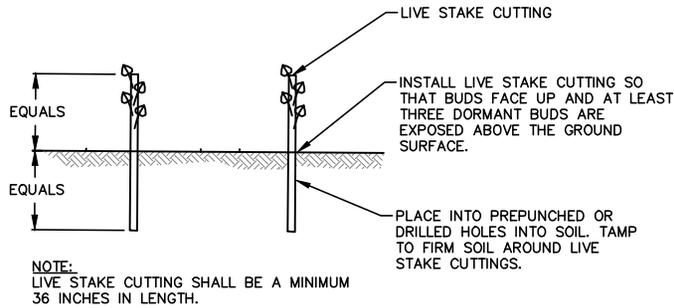
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NEAR/AT: BELLEVUE

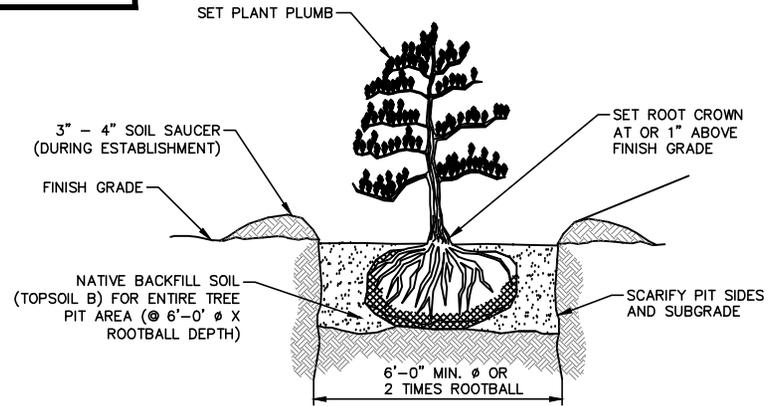
COUNTY: KING

STATE: WA

PLANT LIST AND DETAILS



LIVE STAKE INSTALLATION DETAIL
N.T.S.

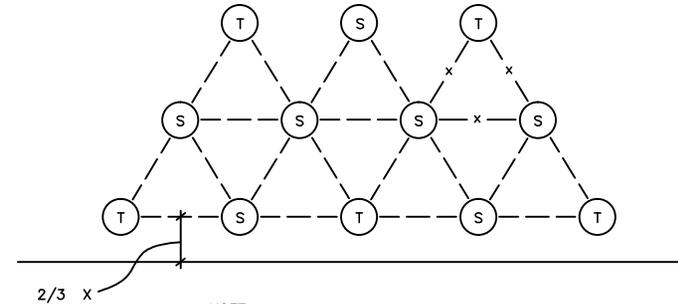


NOTE:
DECIDUOUS AND EVERGREEN TREES SHALL
BE A MINIMUM 12" TALL.

DECIDUOUS AND EVERGREEN TREE AND SHRUB PLANTING

N.T.S.

PLANT MATERIAL LIST						
COMMON NAME	SCIENTIFIC NAME	TYPE	SPACING	ZONE 1	ZONE 2	TOTAL
TREES						
SITKA SPRUCE	<i>PICEA SITCHENSIS</i>	CONTAINER	4'		15	15
RED ALDER	<i>ALNUS RUBRA</i>	CONTAINER	4'		15	15
SHRUBS						
BLACK TWINBERRY	<i>LONICERA INVOLUCRATA</i>	CONTAINER	4'	50		50
SALMONBERRY	<i>RUBUS SPECTABILIS</i>	CONTAINER	4'	25		25
RED OSIER DOGWOOD	<i>CORNUS SERICEA</i>	CONTAINER	4'	15		15
SNOWBERRY	<i>SYMPHORICARPOS ALBUS</i>	CONTAINER	4'		30	30
INDIAN PLUM	<i>OEMLERIA CERASIFORMIS</i>	CONTAINER	4'		25	25
VINE MAPLE	<i>ACER CIRCINATUM</i>	CONTAINER	4'		20	20
SWORD FERN	<i>POLYSTICHUM MUNITUM</i>	CONTAINER	4'		50	50
TOTAL				90	155	245



TYPICAL PLANT SPACING

X = PLANT SPACING (SEE PLANT MATERIAL LIST)

(S) = SHRUB
(T) = TREE

REFERENCE: (USACE will provide)

LOCATION: 1221 148TH AVE NE / 2725059046

PROPOSED PROJECT:

APPLICANT: CITY OF BELLEVUE, WA
KELSEY CREEK AT 148TH & NE 12 PL

LAT/LONG: 47.62104N / -122.14484W

STABILIZE THE BANK AND BED OF KELSEY CREEK
AND PROTECT THE CITY'S SEWER SYSTEM

ADJACENT PROPERTY OWNERS:

1. G. HARMS / 7385200080
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PAGE 8 **OF** 8

DATE: JAN. 2014

IN: KELSEY CREEK

NEAR/AT: BELLEVUE

COUNTY: KING

STATE: WA

Photos



Photo 1 - Site looking downstream



Photo 2 - Right bank sanitary sewer man-hole.



Photo 3 - Left bank sanitary sewer man-hole cover and exposed side sewer from bank failure.



Photo 4 - Left bank looking downstream.

WAC 197-11-960 Environmental checklist.

ENVIRONMENTAL CHECKLIST

Purpose of 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 agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. 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 governmental agencies 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. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D).

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.

A. BACKGROUND

1. Name of proposed project, if applicable:

Kelsey Creek Sewer Stabilization

2. Name of applicant:

City of Bellevue, Utilities Engineering Department

3. Address and phone number of applicant and contact person:

Bruce Jensen
City of Bellevue, Utilities Engineering Department
450 110th Ave. NE / P.O. Box 90012
Bellevue, WA 98009
(425) 452-6932
BJensen@bellevuewa.gov

4. Date checklist prepared:

January 2014

5. Agency requesting checklist:

City of Bellevue

6. Proposed timing or schedule (including phasing, if applicable):

Summer 2014. Construction will take up to 4 weeks.

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

There are no plans for further activity related to this proposal.

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

JARPA (Northwest Environmental Consulting, 2014)
Biological Evaluation for Kelsey Creek Sewer Stabilization ((Northwest Environmental Consulting, 2014)
Critical Areas Report for Kelsey Creek Sewer Stabilization ((Northwest Environmental Consulting, 2014)

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

There are no other applications pending that directly affect the subject property.

10. List any government approvals or permits that will be needed for your proposal, if known.

Hydraulic Project Approval, Washington Dept. of Fish and Wildlife
Section 404 permit, U.S. Army Corps of Engineers
City of Bellevue, Critical Areas Permit
City of Bellevue, Grading Permit

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11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The City of Bellevue is proposing to stabilize streambank erosion that has taken place along Kelsey Creek. The erosion has caused failure of a sanitary side sewer and streambank, and has jeopardized an existing manhole structure on the bank of Kelsey Creek. (See Photo section attached) In addition, downcutting of the stream has exposed the top of the existing sewer line in the bed of the stream. Unabated streambank erosion and downcutting have the potential to destabilize these sewer facilities through ongoing bank erosion and scour.

The project proposes to stabilize the eroding bank by placing toe logs and root wads along approximately 50 feet of the left bank of the stream along the OHWM. A coir log will be placed on top of the toe logs and planted with live stakes. Erosion control blankets will be used to stabilize the streambank and excavated areas of the stream. A roughened channel will be installed, using embedded boulders, to reduce erosional downcutting and to prevent future exposure of the sewer line by maintaining the original stream contours present when the sewer was installed. River weights (used to counteract the buoyancy of the pipe) will be used on the sewer line to hold it in place. Exposed areas will be planted with native shrubs or backfilled with stream gravels. Temporary construction access to the work site will be removed and restored following construction.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The project is located in King County, on land privately owned by the Bellevue Christian Reformed Church at 1221 148th Ave NE in the city of Bellevue. The site is in the southeast corner of Section 27, Township 25N, Range 5E. A vicinity map is attached as Sheet 1.

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B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountainous, other .

The site is a wooded ravine. The ravine slopes range from 35 to 60 percent.

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

60 percent.

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 National Resource Conservation Service (NRCS) mapping, the soil is Alderwood Gravelly Sandy Loam.

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

Channel erosion has exposed a sewer pipe adjacent to the creek, and further erosion may undermine the sewer line to the point of failure. The project purpose is to stabilize the channel and prevent further damage to the sewer line.

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

Approximately 45 cubic yards will be excavated at the toe of the slope to install the toe logs and rootwads. The same material will be used to backfill along the toe of the slope around the toe logs and rootwads or removed from the site. Approximately 94 cubic yards of stream gravel will be used to replace eroded material. The river weights will require about eight cubic yards of material excavation, and will require an additional three cubic yards of material to fill in around the sanitary sewer. The source of fill will be washed stream gravels from a licensed commercial source.

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

Erosion could occur during construction when soils are exposed during a rain event before the area is stabilized.

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

None of the site will be covered with impervious surfaces.

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

The project is an erosion control project and should prevent future erosion of the stream bank. During construction erosion will be prevented by diverting the stream channel so all work is completed in the dry. All access areas will be stabilized during use and restored after completion of the project.

Erosion control per
BCC 23.76

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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.

Normal emissions from construction equipment are anticipated. If dust is an issue during construction, BMPs will be used to suppress the dust to reduce air born emissions.

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 or odor that could affect this proposal.

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

Machines will not be left idling when not in use. If dust is observed on the construction access road, water will be sprayed to keep it settled.

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.

Kelsey Creek is an 8.6-mile-long year-round stream. It drains the Lake Hills Greenbelt, flowing into Mercer Slough, which empties 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 project will require work in the stream channel and the adjacent stream bank. The creek will be diverted past the work area as shown in the attached drawings.

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.

Approximately 45 cubic yards will be excavated at the toe of the slope to install the toe logs and rootwads. The same material will be used to backfill along the toe of the slope around the toe logs and rootwads or removed from the site. Approximately 94 cubic yards of stream gravel will be used to replace eroded material. The river weights will require about eight cubic yards of material excavation, and will require an additional three cubic yards of material to fill in around the sanitary sewer. The source of fill will be washed stream gravels from a licensed commercial source.

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

The creek will be diverted during construction and restored to the normal channel after work is completed. Work will be done during the dry season when creek flows are at lower summer flows.

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

According to the City of Bellevue's FEMA map, all proposed work within the stream lies within the 100-year floodplain of Kelsey Creek.

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 waste materials will be discharged to surface waters. The project's primary purpose is to protect existing sewer infrastructure and prevent the release of waste into Kelsey Creek.

b. Ground:

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

Ground water will not be discharged, nor will water be discharged to ground water.

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.

No waste material will be discharged.

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 project will not affect stormwater flows. No new impervious surface will be created from the project.

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

There is no potential for waste materials to enter ground or surface waters.

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

TESC plans are shown in the attached drawings. Flow will not be restored to the channel until the channel is stable.

Impacts will be minimized per
BCC 23.76

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4. Plants

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

- X deciduous tree: alder, maple, aspen, other
- X evergreen tree: fir, cedar, pine, other
- X shrubs
- X grass (zone 3 construction access)
- pasture
- crop or grain
- wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
- water plants: water lily, eelgrass, milfoil, other
- other types of vegetation

The property is in a wooded residential area. Riparian vegetation consists of deciduous and evergreen trees dominated by alder and big leaf maple. A shrub understory consists of salmonberry, sword fern, Himalayan blackberry, and English Ivy.

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

Vegetation disturbance will be minimal. Some riparian shrubs to access the stream and lawn between the Bellevue Christian Reformed Church and the riparian corridor will be removed in the temporary construction access corridor.

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

The Washington DNR Natural Heritage Program database was consulted and no rare plant species were found 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:

All disturbed upland riparian areas will be restored after construction with native trees and shrubs as shown in the attached drawings. The temporary access to the riparian corridor across existing lawn will be hydroseeded.

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:

- X birds: hawk, heron, eagle, songbirds, other:
- X mammals: deer, bear, elk, beaver, other (raccoons):
- X fish: bass, salmon, trout, herring, shellfish, other:

Chinook, coho and sockeye salmon are present in Kelsey Creek, as well as resident trout, sculpins, lampreys and suckers.

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

Puget Sound Chinook salmon

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

Kelsey Creek is home to several anadromous fish species. The site is also part of the Pacific Flyway.

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

The project will be completed during the allowable inwater work period and completed in the dry. The work area will be screened for fish before dewatering to prevent stranding. The design uses fish friendly engineering to stabilize the streambanks while creating aquatic habitat features and maintains fish passage through the site. All disturbed areas will be restored, and native trees and shrubs will be planted in the ravine.

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.

The completed project will not use energy.

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

The project will not affect potential use of solar energy by adjacent properties.

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 additional energy needs are anticipated; therefore no control measures are proposed.

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.

The project purpose is to prevent the chances of future releases of raw sewage into Kelsey Creek. No environmental health hazards are expected to occur because of the project. Spills from construction equipment could occur during construction. A spill kit will be on site to contain and clean up any spills that might occur.

1) Describe special emergency services that might be required.

Emergency spill containment will be required. Primary containment equipment will be available on the site.

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

Hazmat emergency numbers will be kept on site during construction. Primary spill containment gear will be available on site.

b. Noise

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

The area is residential and there is minor traffic noise. This noise will not affect the proposal.

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.

Construction equipment may make noise between 7:00 AM and 7:00 PM, in accordance with the local noise ordinance, which permits construction noise until 10:00 PM on weekdays.

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

Noise will be limited to hours prescribed in the City of Bellevue Noise Ordinance.

8. Land and shoreline use

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

The site is in a forested ravine behind the Bellevue Reformed Christian Church on the east side of the project site. Residential properties are present on the west side of the project site.

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

The site has not been used for agriculture.

c. Describe any structures on the site.

There are two sanitary sewer manhole structures along the work site.

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

No structures will be demolished.

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

R-2.5

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

Single Family, Medium Density (SF-M).

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

Not applicable

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

The site is a fish-bearing stream and is designated a "Chinook distribution area" on the King County iMap interactive mapper. It is a critical area per the City of Bellevue.

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

No one will reside or work in the completed project.

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

No one will be displaced by the completed project.

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

No displacement impacts are anticipated; therefore, no control measures are proposed.

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

The project is a maintenance project for an existing utility. No changes to the existing or projected land use will occur because of the project.

9. Housing

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

No housing units will be provided.

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

No housing units will be eliminated.

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

No housing impacts are anticipated; therefore, no control measures are proposed.

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?

No structures are proposed.

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

No views will be altered or obstructed.

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

No aesthetic impacts are anticipated; therefore, no control measures are proposed.

11. Light and glare

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

The project will not produce light or glare.

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

No, the project will not produce light or glare.

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

There are no existing sources of light or glare that could affect this proposal.

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

No light and glare impacts are anticipated; therefore, no control measures are proposed.

12. Recreation

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

The Claridge Neighborhood Park, Crossroads Shopping Center, and Bellevue Skate Park are within a mile of the site.

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

The project will not displace any existing recreational uses.

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

No recreational impacts are anticipated; therefore, no control measures are proposed.

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.

The nearest historical site is the Twin Valley Dairy in Kelsey Creek Park, nearly a mile from the site.

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

Not applicable.

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

There will be no impacts to historic or cultural resources; therefore, no control measures are proposed.

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 site is served by 148th Street, which is a major arterial.

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

The site is served by transit. It is just a few blocks from the Sound Transit Rapid Ride B Line.

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

The project does not affect the church's parking lot.

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).

Temporary construction access will be needed; no new roads or improvements will be needed.

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

The project does not occur in the immediate vicinity of water, rail, or air transportation.

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

The project will not generate any vehicular trips.

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

No transportation impacts are anticipated; therefore, no control measures are proposed.

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.

The project will not result in an increased need for public services.

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

No public service impacts are anticipated; therefore, no control measures are proposed.

16. Utilities

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

The neighborhood has access to all utilities; the sewer line extends under Kelsey Creek.

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.

The project is a sanitary sewer maintenance project.

C. 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:



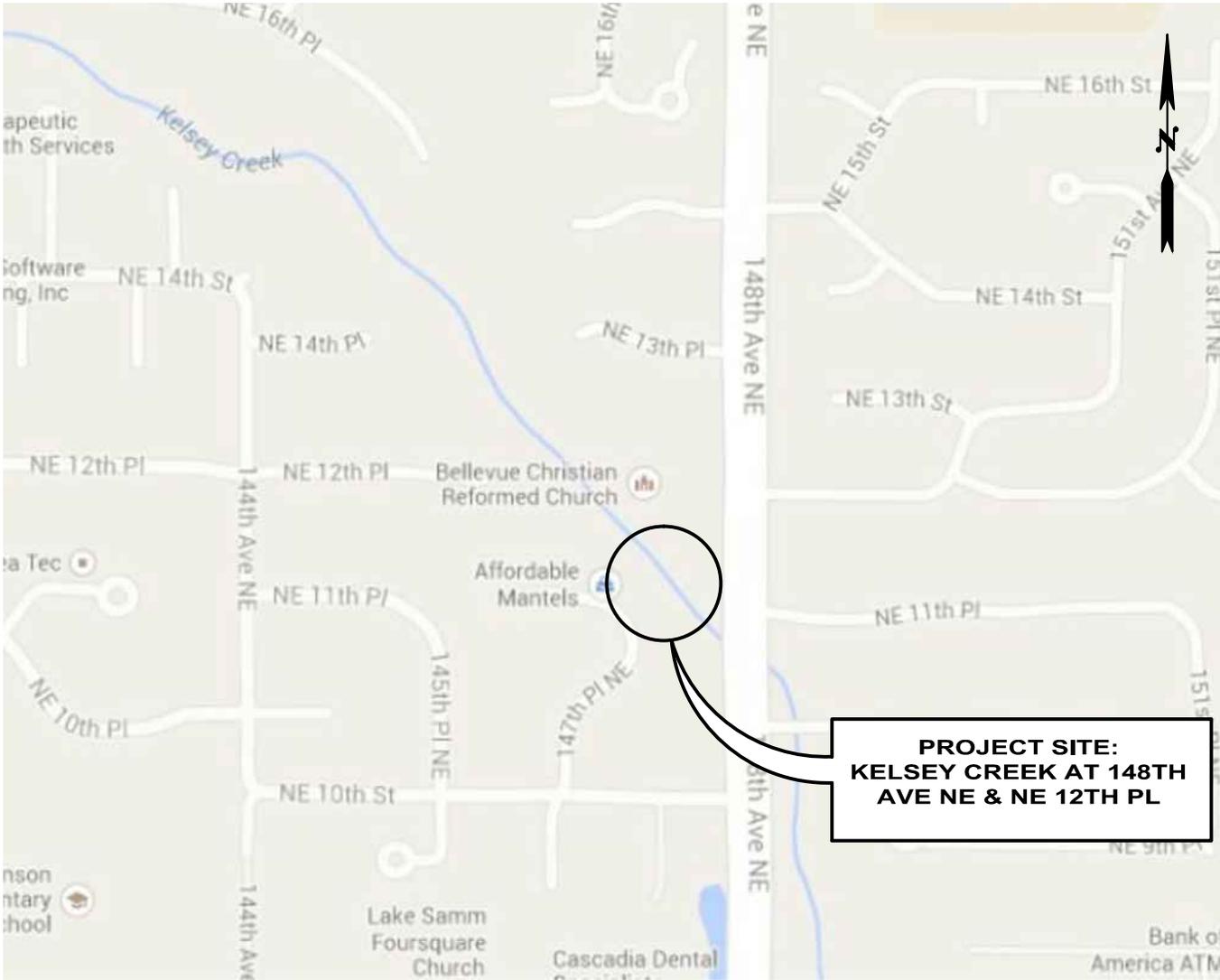
Date Submitted:

3/3/2014

HMB 4/8/2014

Figures

VICINITY MAP



SHEET INDEX

SHEET #	SHEET TITLE
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2	BYPASS, TESC, AND FISH REMOVAL PLAN
3	BYPASS, TESC, AND FISH REMOVAL DETAILS
4	BYPASS, TESC, AND FISH REMOVAL DETAILS
5	PLAN AND PROFILE
6	TYPICAL SECTIONS AND DETAILS
7	PLANTING PLAN
8	PLANT LIST AND DETAILS

**PROJECT SITE:
KELSEY CREEK AT 148TH
AVE NE & NE 12TH PL**

REFERENCE: (USACE will provide)

APPLICANT: CITY OF BELLEVUE, WA
KELSEY CREEK AT 148TH & NE 12 PL

ADJACENT PROPERTY OWNERS:

- G. HARMS / 7385200080
- P. BALARAJAN / 7385200090

LOCATION: 1221 148TH AVE NE / 2725059046

LAT/LONG: 47.62104N / -122.14484W

PAGE 1 OF 8 DATE: JAN. 2014

PROPOSED PROJECT:
STABILIZE THE BANK AND BED OF KELSEY CREEK
AND PROTECT THE CITY'S SEWER SYSTEM

IN: KELSEY CREEK
NEAR/AT: BELLEVUE
COUNTY: KING
STATE: WA

ATTACHMENT 3

Re Kelsey Creek Sewer stabilization 14-126007-LO Optional Determination of Non-Significance
From: Brad Thiele <brad@northwest-environmental.com>
Sent: Thursday, September 11, 2014 3:24 PM
To: Karen Walter
Cc: Bedwell, Heidi; Jensen, Bruce; lauriet; Powell, Susan M NWS; Cross, Mark
Subject: Re: Kelsey Creek Sewer stabilization, 14-126007-LO, Optional Determination of Non-Significance

Hi Karen,

Responses are below in red. Please excuse the delay, the City has been very busy with construction this summer.

Regards,

Brad Thiele
brad@northwest-environmental.com
o 206-634-9193
c 206-234-2520
3639 Palatine Ave N, Seattle, WA 98103
www.northwest-environmental.com

On Jul 31, 2014, at 3:56 PM, Karen Walter <Kwalter@muckleshoot.nsn.us> wrote:

Brad,
Thank you for getting back to us with responses on our follow-up comments. Generally, they responded to our concerns. The only two outstanding issues are the proposed 3 year monitoring plan for vegetation is still too short.

Per the City of Bellevue Critical Areas Handbook, restoration only projects are to be monitored for a period of three years. Mitigation projects are to be monitored for longer periods. This project is a restoration only project (restoring temporary impacts) and the official policy of the City of Bellevue is to monitor for 3 years. If any of the other permits require additional monitoring time, those requirements will be met. If after three years, the site is not meeting the restoration goals, additional action and monitoring may take place.

Also can the City explain to me why we have to ask annually after year 1 for a copy of the monitoring reports when these reports will automatically be sent to the Corps and other regulatory agencies?

This is a City of Bellevue policy is to not automatically send out copies of reports unless requested. The Tribe will be sent the first year monitoring report as a reminder to request the copy for the following year if the Tribe is still interested in receiving the reports.

Should the pipeline become exposed in the future, we would like to be notified as the City makes this discovery and be included in the early discussions about remedies.

If the pipe should become exposed again, permits will be required for the fix and the Tribe will be notified that a fix is necessary. The project was modified before permits were submitted through informal communication with the Tribe and the grade control weirs were removed and the roughened channel approach was taken. The City of Bellevue project teams appreciate the early input on the project as this prevents costly design changes later in the process and the roughened channel approach may be a better long term solution.

Best regards,
Karen Walter
Watersheds and Land Use Team Leader

Muckleshoot Indian Tribe Fisheries Division
Page 1

Re Kelsey Creek Sewer stabilization 14-126007-LO Optional Determination of Non-Significance
Habitat Program
39015 172nd Ave SE
Auburn, WA 98092
253-876-3116

From: Brad Thiele [mailto:brad@northwest-environmental.com]
Sent: Wednesday, July 30, 2014 7:56 AM
To: Karen Walter
Cc: HBedwell@bellevuewa.gov; Bruce Jensen; lauriet
Subject: Re: Kelsey Creek Sewer stabilization, 14-126007-LO, Optional
Determination of Non-
Significance

Hi Karen,

Please see our responses below in red. Let us know if you have anymore questions.

Regards,

Brad Thiele
brad@northwest-environmental.com
o 206-634-9193
c 206-234-2520
3639 Palatine Ave N, Seattle, WA 98103
www.northwest-environmental.com

On Jun 12, 2014, at 12:52 PM, Karen Walter <Kwalter@muckleshoot.nsn.us> wrote:

Brad,
Thank you for sending us responses to our questions and initial comments. We have follow-up responses:

1. Any wood that is within the Ordinary High Water Mark that is moved or modified as this project needs to remain within the OHWM. The City should commit to this approach.

A note will be added to the plan that states all wood that is moved from the dewatered construction area will be placed back within the OHWM of the stream.

2. The response regarding the monitoring needs to verify the pipeline is sufficiently buried and not a fish passage problem is insufficient. The City should design a monitoring component to address these concerns.

The City will monitor the sewer line periodically (annually) to verify that the bed of the stream remains at an elevation that completely covers the sewer line. It is our assumption that if the bed of the stream is stable, there will not be a fish passage issue. If a fish passage issue becomes apparent, the problem will be remedied. We expect the stream to remain at a 10% maximum grade through the project site. If you have a specific monitoring component you would like us to complete, we are open to considering any monitoring protocols.

3. The monitoring schedule is too short and will likely not meet Corp permit requirements. The response also indicates that the City has an approved HPA for this project. We have not seen the HPA for this project and would appreciate the HPA control number for this project.

The monitoring period required by all permits will be followed. The project has

Re Kelsey Creek Sewer stabilization 14-126007-LO Optional Determination of Non-Significance
not received an HPA.

4. Please accept this email as our standing request for all monitoring reports for this project. It is unreasonable to expect us to have to request these reports annually.

The City will send a copy of the first year, end of growing season report, to you but you will need to request to stay on the distribution list at that time.

Best regards,
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: Brad Thiele [mailto:brad@northwest-environmental.com]
Sent: Tuesday, June 10, 2014 1:36 PM
To: Karen Walter
Cc: Laura Ruppert; lauriet Thomsen; MCross@bellevuewa.gov; BJensen@bellevuewa.gov
Subject: Re: Kelsey Creek Sewer stabilization, 14-126007-LO, Optional Determination of Non-Significance

Hi Karen,

Please see our attached responses to your comments. Let us know if you have any further questions.

Regards,

Brad Thiele
Northwest Environmental Consulting
3639 Palatine Ave N
Seattle, WA 98103
206-234-2520
brad@northwest-environmental.com

From: Bedwell, Heidi
Sent: Thursday, May 01, 2014 3:31 PM
To: Jensen, Bruce
Cc: Cross, Mark
Subject: FW: Kelsey Creek Sewer stabilization, 14-126007-LO, Optional Determination of Non-Significance

See comments below from Karen Walter. Please provide a response as soon as possible.

Thanks.
Heidi

From: Karen Walter [mailto:KWalter@muckleshoot.nsn.us]
Sent: Thursday, May 01, 2014 3:22 PM
To: Bedwell, Heidi
Subject: Kelsey Creek Sewer stabilization, 14-126007-LO, Optional Determination of Non-Significance

Heidi,

Re Kelsey Creek Sewer stabilization 14-126007-LO Optional Determination of Non-Significance
We have reviewed the Optional Determination of Non-Significance Notice Materials
for Bellevue's
proposed sewer stabilization project on Kelsey Creek at 1221 148th Ave NE. We
have some questions
and initial comments as follows:

1. Photo 1 in the packet shows several pieces of wood currently in Kelsey Creek that are likely provided fish habitat elements. How will this wood be managed during construction and repositioned post construction?
2. How does the City intend to monitor this site to ensure that pipeline remains covered and the roughed channel is stable and does not become a barrier to fish passage?
3. The proposed 3 year plant monitoring schedule should be expanded to at least 5 years as there are invasive plants on site or nearby (see response to 4.a in checklist).
4. We would like a copy of the fish exclusion data for this project.
5. We would also like copies of the monitoring plan reports for this project when they are available.

We appreciate the opportunity to review this proposal and look forward to the City's responses.

Thank you,
Karen Walter
Watersheds and Land Use Team Leader

Muckleshoot Indian Tribe Fisheries Division
Habitat Program
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253-876-3116