



**City of Portland, Oregon**  
**Bureau of Development Services**  
**Land Use Services**

FROM CONCEPT TO CONSTRUCTION

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**Date:** August 8, 2014  
**To:** Interested Person  
**From:** Stacey Castleberry, Land Use Services  
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## **NOTICE OF A TYPE Ix DECISION ON A PROPOSAL IN YOUR NEIGHBORHOOD**

The Bureau of Development Services has **approved** a proposal in your neighborhood. The reasons for the decision are included in the version located on the BDS website <http://www.portlandonline.com/bds/index.cfm?c=46429>. Click on the District Coalition then scroll to the relevant Neighborhood, and case number. If you disagree with the decision, you can appeal. Information on how to do so is included at the end of this decision.

### **CASE FILE NUMBER: LU 13-235505 EN**

#### **GENERAL INFORMATION**

**Applicant:** Portland Bureau of Environmental Services / **Attn:** Ronda Fast  
1120 SW 5<sup>th</sup> Avenue, Suite #1000 / Portland, OR 97204

**Owners:** Union Labor Retirement Association  
6404 SE 23<sup>rd</sup> Avenue / Portland, OR 97202-5434

Portland Parks & Recreation / **Attn:** Emily Roth  
1120 SW 5<sup>th</sup> Avenue, Suite #1302 / Portland, OR 97204

Portland Fire and Rescue / **Attn:** Merrill Gonterman  
55 SW Ash Street / Portland, OR 97204

Westmoreland Union Manor / **Attn:** Doug Williams  
6404 SE 23<sup>rd</sup> Avenue / Portland, OR 97202

**Site Address:** 6404 SE 23<sup>rd</sup> Avenue

**Legal Description:** BLOCK 37 TL 300, WESTMORELAND; BLOCK 38 TL 800, WESTMORELAND; TL 200 6.32 ACRES, SECTION 14 1 S 1 E; TL 200 41.23 ACRES, SECTION 24 1S 1E

**Tax Account No.:** R899007850, R899008100, R991141020, R991240720  
**State ID No.:** 1S1E23AA 00300, 1S1E23AA 00800, 1S1E14D 00200, 1S1E24 00200

**Quarter Section:** 3733, 3832, 3833, 3632, 3732

**Neighborhood:** Sellwood-Moreland, contact Ellen Burr at 503-754-3868.

**Business District:** Sellwood-Westmoreland, contact Tom Brown at 503-381-6543.

**District Coalition:** Southeast Uplift, contact Bob Kellett at 503-232-0010.

**Plan District:** Johnson Creek Basin Plan District - Flood Plain Subdistrict

**Other Designations:** 100-year floodplain; Crystal Springs Creek Floodway; Westmoreland Park

**Zoning:** R1, R5, OS, a, d, c, p -- Residential 1,000, Residential 5,000, and Open Space base zones, with Alternative Design Density, Design, Environmental Conservation, and Environmental Protection overlay zones.

**Case Type:** EN – Environmental Review

**Procedure:** Type Ix, an administrative decision with appeal to the Oregon Land Use Board of Appeals (LUBA).

**Proposal:** The applicant proposes a stream and riparian enhancement project located on Crystal Springs Creek in southeast Portland between SE Glenwood Street and SE Bybee Boulevard at SE 23<sup>rd</sup> Avenue. The Bybee-Glenwood culvert project will replace the final two undersized culverts at SE Bybee and Glenwood streets. The project will also increase channel complexity by removing sections of concrete banks and replacing them with native bank materials, vegetation, and large wood structures. The project will significantly improve habitat access/quantity, water quality and temperature, and habitat complexity goals for Crystal Springs. To date, 7 of the 9 culverts that were identified as impassable to juvenile salmon have been replaced – the culverts at Bybee and Glenwood Streets are the final two to be replaced.

The project includes:

Fish passage improvements: - 600 feet of fish bearing habitat will be improved. The existing 4.0 ft round, corrugated metal culvert at Glenwood will be replaced with a 14 foot (span) x 6 foot (rise) precast concrete box culvert with a natural streambed. At Bybee Street the existing 3.8 ft round, concrete culvert will be replaced with a precast concrete 14 foot (span) x 9 foot (rise) box culvert. The proposed culverts were designed in conformance with the National Marine Fisheries Service Anadromous Salmonid Passage Facility Design manual. The proposed culverts meet the Oregon Department of Fish & Wildlife's requirements for fish passage and Portland's Bureau of Transportation standards for City owned culverts. The new culverts will be filled with natural stream channel substrates, consisting of approved gravel, cobble, and small boulders, creating a natural stream channel bottom through the culverts. Additional stream bed material will be imported and used to replace any excavated streambed and added specifically around the large wood structures.

Increase in-stream complexity: - Between the culverts, the stream will be artificially narrowed using natural substrates and large wood. The narrow width will ensure sufficient sediment transport within the reach to prevent deposition of fine sediments over the constructed streambed, thus preserving the integrity of the placed gravel substrate. The low flow benches, which extend through the culverts also provide increased flow depths for aquatic species (within the narrower channel) and provide for passage of small terrestrial species (along the bench) during low flow conditions. These habitat features protect creek banks, improve channel stability, and hydraulic diversity. Placement of large wood enhances aquatic habitat function and value by trapping sediments, diversifying flow patterns, and providing important rearing and refuge habitat and cover to native fish.

Establishment of native plant communities by removing invasives and planting native vegetation along the riparian corridor: New plantings will provide important feeding, nesting, and migration areas for native birds, amphibians, reptiles, and mammals that co-exist in the watershed complex. Vegetation also provides shade to reduce water temperatures in the creek.

One new stormwater green street facility is proposed along SE Bybee within the existing developed right-of-way. Overflow from the facility will be connected to the combined sewer system – no new outfalls are proposed to the creek.

Portions of the site are within the City's Environmental Conservation and Environmental Protection overlay zones. Certain Zoning Code environmental development standards must be met to allow the work to occur by right. If the standards are not met, an Environmental Review is required. In this case, construction activities for the removal of the culverts will occur in the resource area of the environmental zone and excavation will occur within

Crystal Springs Creek. The Resource Enhancement standards in Zoning Code Section 33.430.170 cannot be met by the culvert removal project; therefore the work that occurs outside the public right of way must be approved through an Environmental Review.

Note that those portions of the two culverts that are within the public right of way are exempt from environmental review according to Zoning Code Section 33.430.080 D.2., and only the work outside of the right of way is technically subject to environmental review.

**Relevant Approval Criteria:**

To be approved, this proposal must comply with the criteria of Title 33.

The applicable criteria for the proposed culvert replacement project within the Environmental Conservation and Protection overlay zones are found in Zoning Code section:

- **33.430.250. B Resource Enhancement Projects**

**FACTS**

**Description of the Site:**

The site includes two intersections located in Southeast Portland; the SE 23<sup>rd</sup> Avenue/SE Glenwood Street intersection, and the SE 23<sup>rd</sup> Avenue/SE Bybee Boulevard intersection. The culverts at these intersections contain Crystal Springs Creek as it flows south from Eastmoreland Golf Course to Westmoreland Park. Crystal Springs Creek is a 2.3 mile long creek that originates from springs in Reed Canyon and Eastmoreland Golf Course. The creek flows westward from multiple spring headwater sources, crosses Union Pacific railroad (UPRR) tracks and SE McLoughlin Boulevard, then flows south through Westmoreland Park before it turns south through a residential area, and on to its confluence with Johnson Creek.

The northern culvert at SE 23<sup>rd</sup> Avenue and SE Glenwood is flanked by Westmoreland Union Manor to the north and south, and the southern culvert at SE 23<sup>rd</sup> Avenue and SE Bybee Boulevard is flanked by Portland Fire and Rescue to the north and Westmoreland Park to the south.

Crystal Springs Creek has a steep gradient through Reed Canyon (5% to 6%) but then changes to a low gradient through the golf course, Westmoreland Park and lower residential areas (less than 0.1%). Crystal Springs Creek provides cool, year-round flows to Johnson Creek. This cool, year round flow provides important habitat for federally listed Endangered Species, such as Coho and Chinook salmon and steelhead trout.

**Zoning:** The zoning designations on the site include Residential 1,000, Residential 5,000, and Open Space base zones, with Alternative Design Density, Design, Environmental Conservation, and Environmental Protection overlay zones (see zoning on Exhibit B).

The Open Space base zone (OS) is intended to preserve public and private open and natural areas to provide opportunities for outdoor recreation and a contrast to the built environment, preserve scenic qualities and the capacity and water quality of the stormwater drainage system, and to protect sensitive or fragile environmental areas. No new uses are proposed with this infrastructure improvement project, and the provisions of the zone do not apply to the proposal. The OS zone regulations are therefore not addressed through this Environmental Review.

The Residential 5,000 base zone (R5) is intended to foster the development of single-dwelling residences on lots having a minimum area of 3,000 square feet. Newly created lots must have a minimum density of 1 lot per 5,000 square feet of site area. The provisions of this zone allow this infrastructure improvement project; the base zone provisions are not addressed through this Environmental Review.

The Residential 1,000 base zone (R1) allows multi-dwelling residential development up to a maximum density of one unit per 1,000 square feet of site area, and requires a minimum density of one unit per 1,450 square feet of site area. The provisions of this zone allow this infrastructure improvement project; the base zone provisions are not specifically addressed through this Environmental Review.

The Alternative Design Density overlay zone (“a”) is intended to allow increased density that meets design compatibility requirements. It fosters owner-occupancy, focuses development on vacant sites, preserves existing housing stock, and encourages new development that is compatible with the surrounding residential neighborhood. Regulations in the “a” overlay chapter do not apply to this infrastructure project.

The Design overlay zone (“d”) promotes the conservation and enhancement of areas of the City with special historic, architectural or cultural value. Design overlay regulations do not apply to stream restoration activities and are not addressed as part of this Environmental Review.

The Johnson Creek Basin plan district provides for the safe, orderly, and efficient development of lands which are subject to a number of physical constraints, including significant natural resources, steep and hazardous slopes, flood plains, wetlands, and the lack of streets, sewers, and water services. Tree removal regulations identified in the plan district are addressed by the Environmental Review.

Environmental overlay zones (“c” and “p”) protect environmental resources and functional values that have been identified by the City as providing benefits to the public. The environmental regulations encourage flexibility and innovation in site planning and provide for development that is carefully designed to be sensitive to the site’s protected resources. They protect the most important environmental features and resources while allowing environmentally sensitive urban development where resources are less sensitive. The purpose of this land use review is to ensure compliance with the regulations of the environmental zones.

**Environmental Resources:** The application of the environmental overlay zones is based on detailed studies that have been carried out within separate areas throughout the City. Environmental resources and functional values present in environmental zones are described in environmental inventory reports for these respective study areas.

The project site is mapped within the Johnson Creek Basin Protection Plan (the Inventory) as Site # 2, Crystal Springs. Resources and functional values of concern on the project site include water, storm drainage, scenic, fish and wildlife habitat, aesthetics, heritage, flood storage, recreation, and education. The Inventory describes the quality of resources in Site #2: The water quality of Crystal Springs has been studied by the USGS in 1989 and 1990. The creek is known to support coho, steelhead, cutthroat trout, and some migrating fall Chinook. Crystal Springs is primarily spring fed, has a year-round flow, and receives little surface runoff. Native vegetation is limited, with more than 90% of Site #2 being landscaped lawn. The Wildlife Habitat Score for Site #2 is 39 (the range in scores for all *Johnson Creek Protection Plan* inventory sites is 18 to 83).

**Land Use History:** City records indicate that prior land use reviews have been conducted for this site. None of those land use reviews have direct bearing on the current proposal.

**Summary of Applicants Statement:** Surveys conducted by the Oregon Department of Fish and Wildlife (ODFW) found a range of native species distributed throughout Crystal Springs Creek, including Chinook and Coho salmon, rainbow and cutthroat trout, lamprey, largescale sucker, sculpin, northern pikeminnow and others. Native steelhead are also found in Johnson Creek and likely utilize Crystal Springs Creek.

Crystal Springs Creek has all the right ingredients for salmon recovery, but the creek has been heavily altered by development. Prior to 2010, nine culverts increased stream velocities and impaired juvenile fish passage. The duck pond at Westmoreland Park caused both temperature and sediment issues in the creek. Residential development along the creek edge has limited connections to adjacent floodplain habitat.

Starting in 2010, the City of Portland Bureau of Environmental Services (BES), together with several partners such as Reed College, TriMet, U.S. Army Corps of Engineers, Metro, and other agencies are working to enhance conditions in Crystal Springs Creek for the benefit of native fish with a focus on replacing or removing the nine culverts that restrict fish passage

and improving habitat in publically (or quasi-publically) owned areas, such as Westmoreland Park and Reed College.

#### Other Projects

Reed College began restoration of the canyon in 2001 by removing campus facilities in the canyon (i.e. a swimming pool), installing a fish ladder, extensive revegetation, and invasive species removal.

In 2010, together with Reed College, BES completed work on replacing a culvert crossing SE 28th Avenue. Reed College (LU 10-110619 EN). Reed also restored a 1.3 acre site and installed a green street facility along SE 28th Avenue as part of that same project.

In 2012, BES, partnered with TriMet and Union Pacific Railroad (UPRR) to replace the Railroad culvert (LU 12-111963 EN). That same year, with the U.S. Army Corps of Engineers and other partners, BES also replaced two culverts at Tenino and Umatilla Streets and removed one on a 1/3-acre restoration site (LU 10-103405 EN).

During the summer of 2013, together with the Army Corps of Engineers, the City restored a 2,400-foot section of Crystal Springs Creek at Westmoreland Park (LU 12-141042 EN). At Tacoma street, a fish passage barrier culvert was replaced (LU 12-141030 EN) and another at Eastmoreland Golf Course (LU 11-190987 EN). As a result of the current project, salmon of all life stages will be able to access and utilize the entire length of the Crystal Springs Creek.

**Agency and Neighborhood Review:** A Notice of Proposal in your Neighborhood was mailed on June 27, 2014.

**1. Agency Review:** Several Bureaus and agencies have responded to this proposal. Please see Exhibits E.1 through E.4 for details. The comments are addressed under the appropriate criteria for review of the proposal.

**2. Neighborhood Review:** No written responses were received from either the Neighborhood Association or notified property owners in response to the proposal.

### **ZONING CODE APPROVAL CRITERIA**

#### **33.430.250 Approval Criteria for Environmental Review**

**An environmental review application will be approved if the review body finds that the applicant has shown that all of the applicable approval criteria are met. When environmental review is required because a proposal does not meet one or more of the development standards of Section 33.430.140 through .190, then the approval criteria will only be applied to the aspect of the proposal that does not meet the development standard or standards.**

**Findings:** The approval criteria which apply to the proposed stream and riparian enhancement project are found in Section 33.430.250 B Resource Enhancement Projects. The applicant has provided findings for these approval criteria and BDS Land Use Services staff have summarized these findings, and added conditions where necessary to meet the approval criteria.

#### **33.430.250 B. Resource enhancement projects**

##### **1. There will be no loss of total resource area;**

**Findings:** Upon project completion, there will be no change in the amount of total resource area. The project will improve existing resource area by replacing a fish passage barrier with a wider, fish friendly culvert at SE Bybee and Glenwood Streets and improving in-stream and adjacent riparian habitat within the project area. This criterion is met.

##### **2. There will be no significant detrimental impact on any resources and functional values; and**

##### **3. There will be a significant improvement of at least one functional value.**

**Findings:** There will be no detrimental impact on any resources and functional values as part of this project. Rather, resources and values will either remain unchanged or improve. The project passes through Site #2 of the *Johnson Creek Basin Protection Plan*. Significant resource values identified in Site #2 include: water, storm drainage, scenic, fish and wildlife habitat, aesthetics, heritage, flood storage, recreation, and education. Out of 29 identified resource sites in the *Johnson Creek Basin Protection Plan* area, only five other sites rank as low or lower than Site #2. A description of how identified resource values will be improved by the project follows:

Water: In-stream habitat and hydrology for the migrating, rearing, feeding, and spawning of salmon will be significantly improved along this reach of Crystal Springs Creek.

Storm Drainage: Currently, stormwater within this catchment is directed to the combined system, with no treatment. The green street installed along SE Bybee Boulevard, as part of this project will filter pollutants, allow for some infiltration (high groundwater is present), while overflow will be directed to the combined system. No new outfalls to the creek are proposed. This value will be somewhat improved.

Fish and Wildlife Habitat: Crystal Springs Creek contains federally listed endangered fish species such as coho and Chinook salmon and steelhead trout. The project will improve fish passage by replacing culverts that do not meet the ODFW and NOAA guidelines for juvenile fish passage. The new culverts are designed to pass a 100 - year peak flow event and will be installed by counter-sinking the Glenwood culvert by 50% of the culvert rise and 33% of the culvert rise for Bybee. The new culverts stream velocities will be between ~ 1 and 2 cubic feet per second. This is between the ODFW and NOAA guidelines. This value will be significantly improved on the site.

A total of 12 of trees will be removed as part of this project. Most will be removed to accommodate the construction of new culverts, wing walls, and to accommodate channel work. Only two of the trees are native, and only three are larger than 12 inches. The long-term benefits of restoring Crystal Springs Creek are expected to far outweigh potential temporary, short-term impacts and permanent impacts related to construction of a two new culverts. The project will include replanting all of the work areas along Crystal Springs Creek with 150 native trees and 350 native riparian shrubs.

Additional site restoration / rehabilitation measures include:

- Large wood, weed-free top soil and native channel material displaced during construction will be stockpiled and potentially used during site restoration.
- Streambanks, soils and vegetation will be restored to renew ecosystem processes that form and maintain productive fish habitats. Streambanks and impacted areas will be planted with native grasses, shrubs, and trees following construction activities.
- Coir logs, straw bales and straw logs may be used to trap sediments and provide growth medium for riparian plants.

Flood Storage: There is no change to this functional value. A memo presenting results of 100-year flood event on Crystal Springs Creek for this project is included with this application. An effort to re-map the Floodplain Insurance Rate Maps (FIRM) is currently underway in partnership with USGS and FEMA.

Scenic Beauty: Minimal improvements are proposed to this functional value. Currently along SE 23rd Avenue, views of the creek are obstructed by chain link fencing and invasive vegetation. New plantings and a new decorative fence along SE 23rd will improve the pedestrian corridor.

Heritage: No changes are proposed to this functional value. However, this project, in combination with up-grading all of the culverts in Crystal Springs, will provide future generations the opportunity to view salmon spawning in the urban environment.

Recreation: No changes are proposed to this value. The pedestrian environment along the north edge of Westmoreland Park will improve with sidewalk and stormwater improvements within the existing right-of-way. The pedestrian corridor along SE 23rd will be improved as well.

Education: This value remains unchanged. However, a walking tour along the length of Crystal Springs, developed by a community group called the Crystal Springs Partnership, highlights this project, along with many others along the Creek.

Potential development impacts addressed by CM Plan: Temporary and permanent development impacts will be outweighed by the benefits of the overall site restoration. Potential short-term, temporary environmental impacts include ground disturbance, sedimentation and turbidity, site access, staging and stockpiling, fish salvage, loss of fish bearing habitat, and risk of fuel/oil spills from construction equipment. These impacts will be avoided by implementing the applicant's Construction Management Plan (see application case file Exhibit A5), as highlighted below.

Timing of construction activities will meet the required In-Water Work Periods as required by Oregon Department of Fish and Wildlife (ODFW) of July 15 – August 31. Staging and material stockpile areas will be limited to existing disturbance areas within the right-of-way along SE 23rd Avenue. Utilization of existing developed areas reduces the overall impact on the project area.

Orange construction fencing will delineate limits of disturbance to minimize disturbance on surrounding vegetation. Tree protection and erosion control measures will be in place prior to construction. All construction traffic shall be excluded from areas outside the limits of disturbance in order to retain undisturbed natural vegetation areas. There shall be no disturbance of native vegetation outside of the limits of disturbance as shown on the construction drawings. Care will be taken to avoid damage to the canopy of any trees overhanging the limits of disturbance.

A Hydrologic Isolation Plan (surface water diversion) will be planned to pass observed and modeled peak flows for Crystal Springs Creek; surface water diversion and if necessary, pumps will be sized to anticipate high peak flows, and the selected contractor will keep emergency erosion/pollution control best management practices on site at all times. Water quality treatments will be applied to all diverted stream water. Prior to diverting the stream, BES employees and volunteers will salvage fish, mussels, crustacean, amphibians from within the project area. A fish salvage permit will be acquired from Oregon Department of Fish and Wildlife. After construction, adult and juvenile passage will be restored through the project reach.

During construction activities, temporary fencing, barricades, and guards will protect trees and other plants, which are to remain, from all damage. Protective barrier fence will be installed prior to the start of any activity which may potentially intrude into root protection zones of trees and will be removed only after all work potentially injurious to trees and other plants is complete. Twelve trees are proposed to be removed as part of this project.

Proposed tree protection fencing will be 4-foot orange construction fencing. The standard 6-foot chain-link fencing is not ideal due to slopes along stream banks, proximity to work along stream banks. More information about tree preservation is included in the Arborist Report (see application case file Exhibit A.8).

The applicant states that the total disturbance area is 62,177 square feet. With regards to restoring this area of tree and shrub removal, bank regrading, and other demolition and construction access, the applicant proposes a stream restoration and revegetation plan (Exhibit C.22). While Exhibit C.22 identifies the species likely to be planted, and the quantities of trees and shrubs, it lacks information identifying the location and arrangement of the tree and shrub plantings. There is a significant amount of construction disturbance and tree removal identified for the construction areas in and along Crystal Springs Creek.

In order to demonstrate that the revegetation efforts will offset the construction disturbance sufficiently to actually improve functional values along Crystal Springs Creek, a more specific revegetation plan, showing specific plant locations and arrangement, is required.

Therefore, a Final Revegetation Plan will be required at permit time, to show complete replanting of the riparian areas along Crystal Springs Creek, within the delineated "Revegetation Area" on Exhibit C.22. The Final Revegetation Plan must agree with the Construction Management plans and the Tree Protection Plan.

With regards to activities within the 100-year floodplain and the floodway, BDS Site Development Services staff commented that no fill may be placed at or below the base flood elevation unless a compensating amount of material is removed from the same flood zone. Further, the project is located with the Floodway of Crystal Springs Creek. Development in the Floodway is prohibited unless a hydraulic no-rise analysis demonstrates no increase in base flood elevations. If the development causes any increase in base flood elevations, a Conditional Letter of Map Revision (CLOMR) must be obtained from FEMA prior to commencing work. The project narrative states that BES will update the hydraulic and hydrologic modeling and submit an application for a CLOMR and Letter of Map Revision (LOMR) for the project in lieu of performing a hydraulic no-rise analysis. The narrative indicates BES does not intend to start construction until the CLOMR process is complete. Therefore a condition of approval to require this will be included.

The culvert replacement and channel work is considered an alteration of a watercourse. As such, the applicant is required to comply with 44 CFR 60.3.b.6:

"Notify, in riverine situations, adjacent communities and the State Coordinating Office prior to any alteration or relocation of a watercourse, and submit copies of such notifications to the Federal Insurance Administrator."

And 44 CFR 60.3.b.7:

*"Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained"*

If the watercourse alteration affects flooding conditions, either increasing or decreasing flood elevations, the applicant is responsible to submit the changes to FEMA within 6 months of the change in accordance with 44 CFR 65.3.

The project narrative indicates the development is expected to lower base flood elevations.

The applicant is responsible for ensuring the changes are submitted to FEMA.

Therefore, with conditions for a final, detailed revegetation plan as described above, and for construction management practices described by the applicant in Exhibit A.5, along with conditions of approval for a CLOMAR and for notifying FEMA, with the proposed improvements to identified resources as described above, these criteria will be met.

## **DEVELOPMENT STANDARDS**

Unless specifically required in the approval criteria listed above, this proposal does not have to meet the development standards in order to be approved during this review process. The plans submitted for a building or zoning permit must demonstrate that all development standards of Title 33 can be met, or have received an Adjustment or Modification via a land use review prior to the approval of a building or zoning permit.

## **OTHER TECHNICAL REQUIREMENTS**

Technical decisions have been made as part of this review process, based on other City Titles, as administered by other City service agencies. These related technical decisions are not considered land use actions. If future technical decisions result in changes that bring the project out of conformance with this land use decision, a new land use review may be required. The following is a summary of technical requirements applicable to this proposal.



This list is not final, and is subject to change when final permit plans are provided for City review.

Bureau	Code Authority and Topic	Contact Information
Environmental Services	Title 17; 2008 Stormwater Manual	503-823-7740 <a href="http://www.portlandonline.com/bes">www.portlandonline.com/bes</a>
Transportation	Title 17 - Transportation System Plan	503-823-5185 <a href="http://www.portlandonline.com/transportation">www.portlandonline.com/transportation</a>
Development Services	Titles 24 - Building Code, Erosion Control, Flood plain, Site Development	503-823-7300 <a href="http://www.portlandonline.com/bds">www.portlandonline.com/bds</a>

## CONCLUSIONS

The applicant proposes to remove two fish barriers on Crystal Springs Creek—a 4-foot metal culvert and a 3.8 foot diameter concrete culvert—and replace them with 6-foot and 9-foot fish-friendly box culverts, respectively. Natural stream channel substrates, consisting of approved gravel, cobble, and small boulders will be placed to create a natural stream bottom through the new culverts. Large Woody Debris and additional stream bed material will be added to improve the stream channel up-and down-stream of both culverts. The project will enhance aquatic habitat function and value by trapping sediments, diversifying flow patterns, and providing important rearing and refuge habitat and cover to native fish. New plantings will be added along the creek to improve wildlife habitat and provide cooling shade along the creek.

The applicants and the above findings have shown that the proposal meets the applicable resource enhancement approval criteria with conditions. Therefore, this proposal should be approved, subject to the following conditions.

## ADMINISTRATIVE DECISION

**Approval** of an Environmental Review for replacement of 2 culverts, regrading streambanks, placement of Large Woody Debris and stream bed material, and removal of 12 trees;

within the Environmental Conservation and Protection overlay zones, and in substantial conformance with Exhibits A.5 Construction Management Plan, and Exhibits C.6 through C.22, and C.27 through C.32, as approved by the City of Portland Bureau of Development Services on **August 6, 2014**. Approval is subject to the following conditions:

Note: If the watercourse alteration affects flooding conditions, either increasing or decreasing flood elevations, the applicant is responsible to submit the changes to FEMA within 6 months of the change in accordance with 44 CFR 65.3 (see Exhibit E.3 for details).

Note: To retain the existing less-than-standard sidewalk corridor configurations in the public right of way, the applicant must file for and receive approval of a Design Exception from PBOT. All plans associated with this project must reflect ADA compliant corner/ramp upgrades (see Exhibit E.2 for details).

- A. The applicant must obtain a Conditional Letter of Map Revision (CLOMR) from FEMA prior to issuance of building permits and/or commencement of work in the floodway. The applicant shall submit a flood map revision to FEMA within six (6) months of project completion, or as otherwise approved by FEMA.**
- B. A BDS development permit** is required for work outside of the public right of way, and for work in the right of way not constructed under the authority of the City Engineer or BES Chief Engineer
- C. BDS Zoning Permit** is required for inspection of required plantings.
- D. All Permits:** Copies of the stamped Exhibits A.5, C.6, C.11, C.12, and C.22 from LU 13-235505 EN and Conditions of Approval listed below, shall be included within all plan sets submitted for permits (building, Zoning, grading, Site Development, erosion control, etc. These exhibits shall be included on a sheet that is the same size as the plans

submitted for the permit and shall include the following statement, ***"Any field changes shall be in substantial conformance with approved LU 13-235505 EN Exhibits A.5, C.6 through C.22, and C.27 through C.32."***

**Permit applications shall include a Final Revegetation Plan as described below in Condition F.**

- E.** Temporary, 4-foot high, construction fencing shall be placed along the Limits of Construction Disturbance for the approved development, in conformance with Exhibit A.5, and as depicted on Exhibit C.6 through C.12, outside of the right of way; and in order to protect trees as shown on Exhibit C.6, and as described in the Arborists Report (Exhibit A.8); or as required by inspection staff during plan review and/or inspection stages.
1. No mechanized construction vehicles are permitted outside of the approved "Limits of Construction Disturbance" delineated by the temporary construction fence. All planting work, invasive vegetation removal, and other work to be done outside the Limits of Construction Disturbance, shall be conducted using hand held equipment.
- F.** A Final Revegetation Plan shall be included with any permit application, and prior to any construction activity on the site, showing complete replanting of the riparian areas along Crystal Springs Creek within the delineated limits of disturbance shown on Exhibits C.6 through C.12. This plan shall include standard, individual, landscape graphic symbols, and a planting legend that clearly identifies the individual location, species, quantity, size, and spacing of all plantings approved on Exhibit C.22.

The Final Revegetation Plan shall show a total of 150 trees, 350 shrubs, and native ground covers, selected from the Portland Plant List, to be planted, in substantial conformance with Exhibits C.22 Stream Restoration Revegetation Plan. The Final Revegetation Plan shall agree with the Construction Management plans and the Tree Protection Plan (Exhibits C.6 through C.12).

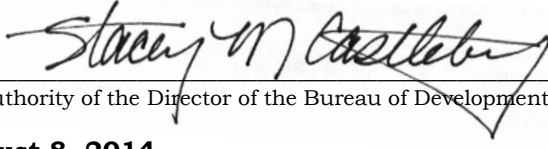
1. Plantings shall be installed between October 1 and March 31 (the planting season).
  2. Prior to installing required mitigation plantings, non-native invasive plants shall be removed from all areas within 10 feet of mitigation plantings, using handheld equipment.
  3. All mitigation and remediation shrubs and trees shall be marked in the field by a tag attached to the top of the plant for easy identification by the City Inspector. All tape shall be a contrasting color that is easily seen and identified.
  4. After installing the required mitigation plantings, the applicant shall request inspection of mitigation plantings and final the BDS Zoning Permit.
- G. The land owner shall maintain the required plantings** for two years to ensure survival and replacement. The land owner is responsible for ongoing survival of required plantings during and beyond the designated two-year monitoring period. The landowner shall:
1. Obtain a Zoning Permit for a final inspection at the end of the 2-year maintenance and monitoring period. The permit must be finalized no later than 2 years from the final inspection for the installation of mitigation planting, for the purpose of ensuring that the required plantings remain. Any required plantings that have not survived must be replaced.
- H.** Failure to comply with any of these conditions may result in the City's reconsideration of this land use approval pursuant to Portland Zoning Code Section 33.700.040 and /or enforcement of these conditions in any manner authorized by law.

**Note:** In addition to the requirements of the Zoning Code, all uses and development must comply with other applicable City, regional, state and federal regulations.

This decision applies to only the City's environmental regulations. Activities which the City regulates through PCC 33.430 may also be regulated by other agencies. In cases of overlapping City, Special District, Regional, State, or Federal regulations, the more stringent

regulations will control. City approval does not imply approval by other agencies.

**Staff Planner: Stacey Castleberry**

**Decision rendered by:**  **on August 6, 2014**

By authority of the Director of the Bureau of Development Services

**Decision mailed on August 8, 2014.**

**About this Decision.** This land use decision is **not a permit** for development. Permits may be required prior to any work. Contact the Development Services Center at 503-823-7310 for information about permits.

**Procedural Information.** The application for this land use review was submitted on December 6, 2013, and was determined to be complete on June 3, 2014.

*Zoning Code Section 33.700.080* states that Land Use Review applications are reviewed under the regulations in effect at the time the application was submitted, provided that the application is complete at the time of submittal, or complete within 180 days. Therefore this application was reviewed against the Zoning Code in effect on December 6, 2013.

ORS 227.178 states the City must issue a final decision on Land Use Review applications within 120-days of the application being deemed complete. The 120-day review period may be waived or extended at the request of the applicant. In this case the applicant did not waive or extend the 120-day review period. Unless further extended by the applicant, **the 120 days will expire on: October 1, 2014.**

**Some of the information contained in this report was provided by the applicant.**

As required by Section 33.800.060 of the Portland Zoning Code, the burden of proof is on the applicant to show that the approval criteria are met. The Bureau of Development Services has independently reviewed the information submitted by the applicant and has included this information only where the Bureau of Development Services has determined the information satisfactorily demonstrates compliance with the applicable approval criteria. This report is the decision of the Bureau of Development Services with input from other City and public agencies.

**Conditions of Approval.** If approved, this project may be subject to a number of specific conditions, listed above. Compliance with the applicable conditions of approval must be documented in all related permit applications. Plans and drawings submitted during the permitting process must illustrate how applicable conditions of approval are met. Any project elements that are specifically required by conditions of approval must be shown on the plans, and labeled as such.

These conditions of approval run with the land, unless modified by future land use reviews. As used in the conditions, the term "applicant" includes the applicant for this land use review, any person undertaking development pursuant to this land use review, the proprietor of the use or development approved by this land use review, and the current owner and future owners of the property subject to this land use review.

**This decision, and any conditions associated with it, is final.** It may be appealed to the Oregon Land Use Board of Appeals (LUBA), within 21 days of the date the decision is mailed, as specified in the Oregon Revised Statute (ORS) 197.830. Among other things, ORS 197.830 requires that a petitioner at LUBA must have submitted written testimony during the comment period for this land use review. Contact LUBA at 775 Summer St NE Suite 330, Salem, OR 97301-1283 or phone 1-503-373-1265 for further information.

The file and all evidence on this case are available for your review by appointment only. Please call the Request Line at our office, 1900 SW Fourth Avenue, Suite 5000, phone 503-823-7617, to schedule an appointment. I can provide some information over the phone. Copies of all information in the file can be obtained for a fee equal to the cost of services.

Additional information about the City of Portland, city bureaus, and a digital copy of the Portland Zoning Code is available on the internet at [www.portlandonline.com](http://www.portlandonline.com).

**Recording the final decision.**

If this Land Use Review is approved, the final decision must be recorded with the Multnomah County Recorder. A building or zoning permit will be issued only after the final decision is recorded. The final decision may be recorded on or after **August 8, 2014**.

The applicant, builder, or a representative may record the final decision as follows:

- By Mail: Send the two recording sheets (sent in separate mailing) and the final Land Use Review decision with a check made payable to the Multnomah County Recorder to: Multnomah County Recorder, P.O. Box 5007, Portland OR 97208. The recording fee is identified on the recording sheet. Please include a self-addressed, stamped envelope.
- In Person: Bring the two recording sheets (sent in separate mailing) and the final Land Use Review decision with a check made payable to the Multnomah County Recorder to the County Recorder's office located at 501 SE Hawthorne Boulevard, #158, Portland OR 97214. The recording fee is identified on the recording sheet.

For further information on recording, please call the County Recorder at 503-988-3034

For further information on your recording documents please call the Bureau of Development Services Land Use Services Division at 503-823-0625.

**Expiration of this approval.** An approval expires three years from the date the final decision is rendered unless a building permit has been issued, or the approved activity has begun.

Where a site has received approval for multiple developments, and a building permit is not issued for all of the approved development within three years of the date of the final decision, a new land use review will be required before a permit will be issued for the remaining development, subject to the Zoning Code in effect at that time.

**Applying for your permits.** A building permit, occupancy permit, or development permit may be required before carrying out an approved project. At the time they apply for a permit, permittees must demonstrate compliance with:

- All conditions imposed herein;
- All applicable development standards, unless specifically exempted as part of this land use review;
- All requirements of the building code; and
- All provisions of the Municipal Code for the City of Portland, and all other applicable ordinances, provisions and regulations of the City.

**EXHIBITS**

NOT ATTACHED UNLESS INDICATED

A. Applicant's Statements

1. Applicants table of contents and overview map
2. Project description, approval criteria and incomplete response
3. Johnson Creek Plan District standards response
4. Description of Resources
5. Construction Management Plan (attached)
6. Impact evaluation, alternatives analysis, and mitigation
7. Revegetation Plan
8. Arborist Report
9. Site photos
10. Geotechnical Report

B. Zoning Map (attached)

## C. Plans/Drawings:

1. Cover Sheet
2. Existing Conditions
3. Traffic plan
4. Traffic plan
5. Traffic plan
6. Tree Protection (attached)
7. Demolition
8. Demolition
9. Demolition
10. Stream Diversion & Erosion Control
11. (Proposed improvements) Site Plan (attached)
12. (Proposed improvements) Site Plan (attached)
13. Stormwater
14. Stream Restoration & Erosion Control
15. Stream Restoration & Grading
16. Stream Restoration & Grading
17. Stream Profile
18. Stream Profile
19. Cross sections
20. Cross sections
21. Cut & Fill
22. Stream Restoration & Revegetation (attached)
23. Street plan
24. Street plan
25. Stormwater details
26. Parapet & railing details
27. Tree Protection details
28. Erosion Control details
29. Erosion Control details
30. Stream diversion details
31. Stream restoration details
32. Stream restoration details

## D. Notification information:

1. Mailing list
2. Mailed notice

## E. Agency Responses:

1. Bureau of Environmental Services
2. Bureau of Transportation Engineering and Development Review
3. Site Development Review Section of BDS

## F. Correspondence:

1. Lance Barschak, July 12, 2014, requests notice of Decision

## G. Other:

1. Original LU Application
2. Incomplete Letter

**The Bureau of Development Services is committed to providing equal access to information and hearings. Please notify us no less than five business days prior to the event if you need special accommodations. Call 503-823-7300 (TTY 503-823-6868).**



# ZONING



Site



### Historic Landmark

This Site is Located Within The:  
Johnson Creek Basin Plan District



NORTH

File No. LU 13-235505 EN

1/4 Section 3632,3732,3733,3832,3833

Scale 1 inch = 600 feet

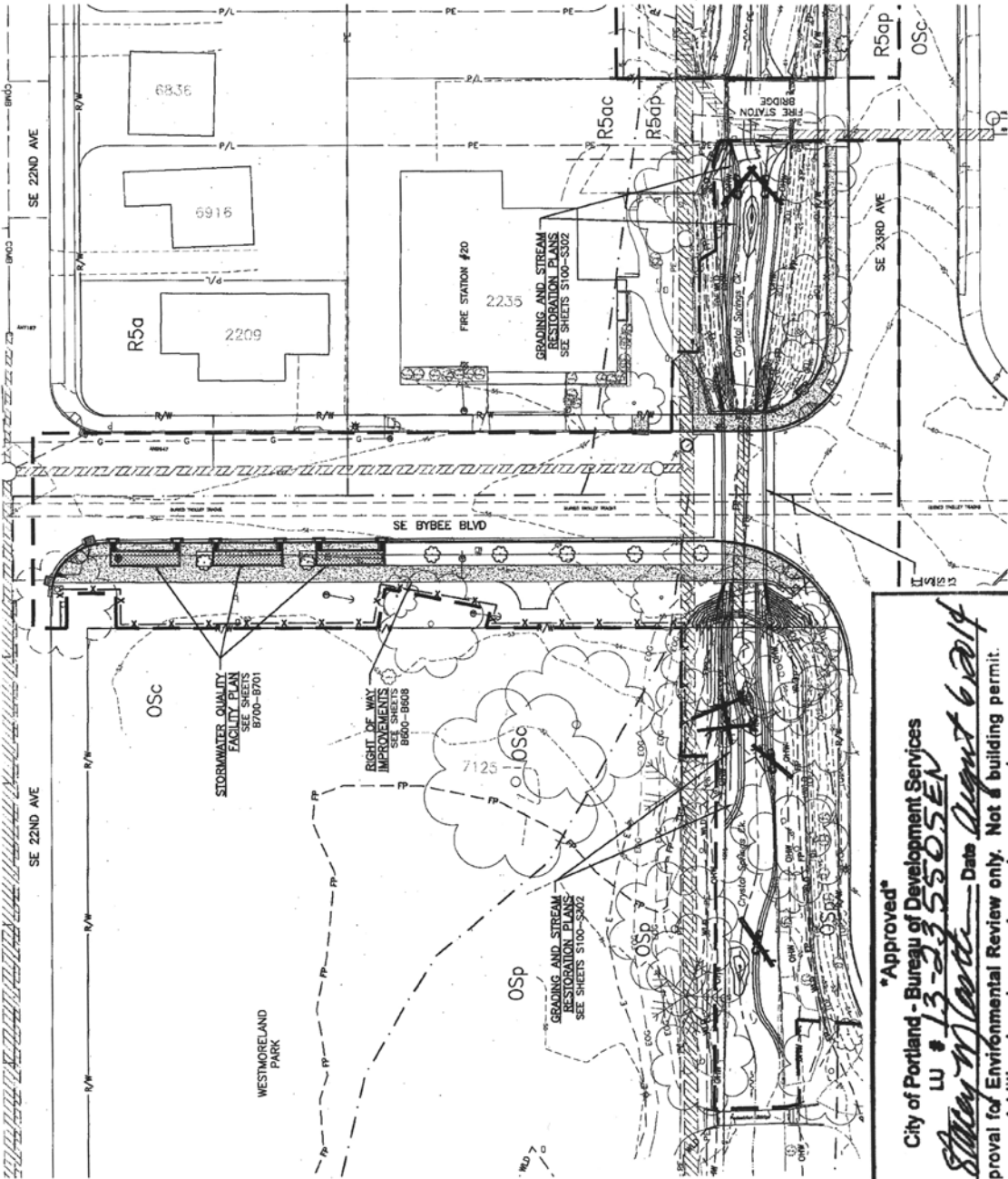
State Id 1S1E24 200

Exhibit B (Dec 11, 2013)









**LEGEND:**

- EXISTING TREE
- ORANGE PLASTIC FENCE (DETAIL 1, SHEET 007)
- CHAIN LINK FENCE (DETAIL 2, SHEET 007)
- ZONING BOUNDARY
- LIMITS OF DISTURBANCE
- ORDINARY HIGH WATER BOUNDARY
- 100-YR FLOODPLAIN BOUNDARY
- WETLAND BOUNDARY
- RIGHT-OF-WAY BOUNDARY
- CHANNEL THALWEG
- PROPOSED CHANNEL THALWEG

**\*Approved\***  
 City of Portland - Bureau of Development Services  
 LU # 13-23505EN  
 Planner *Stacy M. Smith* Date *August 6, 2014*  
 \* Approval for Environmental Review only. Not building permit.  
 Additional zoning requirements may apply.

CITY OF PORTLAND ENVIRONMENTAL SERVICES NICK FISH WILLIAM F. RYAN, P.E. COMMISSIONER CHIEF ENGINEER		CITY OF PORTLAND ENVIRONMENTAL REVIEW STEVE NOVAK STEVE TOWNSEN, P.E. COMMISSIONER CITY ENGINEER	
SHEET NO. 3732 OF 3732 PROJECT NO. E10460 SHEET NO. B101 OF B101		BYBEE/GLENWOOD CULVERT REPLACEMENT PROJECT BYBEE CULVERT SITE PLAN	
DATE: 5/30/14		SCALE: 1" = 40'	

C.12



Construction of the culvert work takes place generally in a developed area between Union Manor Retirement Center to the north, Westmoreland Park to the south, SE McLoughlin Boulevard to the east and Fire Station #20 to the west. Existing developed portions of the right-of-way will be utilized for construction to minimize impacts on resources in the project area.

Construction related activities are temporary and minimal in effect, only lasting for the duration of the project. *No activities that violate existing state, federal and local regulations are anticipated.* BES inspectors are on-site at all times to ensure standards, conditions, and regulations are met.

#### **Geotechnical background information**

According to a preliminary geotechnical report, the project is located in a buried ancient stream channel. The stream ran north-south and the channel deposits are bounded by 22<sup>nd</sup> and 27<sup>th</sup> Avenues to the east and west. As-built drawings from the 1913 Insley Trunk Sewer project indicate that the Crystal Springs Creek channel was moved 10 to 50 feet east to permit construction of the sewer. More than 100 feet of the sewer was constructed in the historic creek channel alignment.

A 14-foot wide box culvert is proposed. A wider culvert with an open bottom would be optimal, but proximity to a 72" sewer main line, fine grained alluvium soils, and high groundwater require a fully-enclosed, narrower culvert.

Approximately 7 feet of horizontal separation is proposed between the new Bybee culvert structure and the existing sewer line. A box culvert is preferred because it has a larger bearing area to distribute its load, it distributes the culvert's weight farther from the existing sewer and it is less vulnerable to differential settlement. Either type of culvert could work at the Glenwood Street site but a box culvert would accommodate the soft soils with less settlement.

So that the culvert can be built in the short in-water work timeframe, the culverts will be constructed from precast concrete elements rather than be poured in-place. The abutments, wingwalls, and lid sections can be placed using the same equipment.

#### **Timing of Construction**

Timing of construction activities will meet the required In-Water Work Periods as required by Oregon Department of Fish and Wildlife (ODFW) of July 15 – August 31.

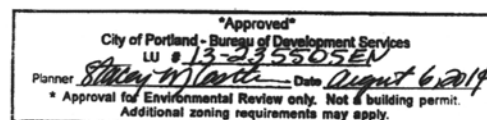
#### **Traffic Control**

Continuous two-way traffic will be provided during construction on SE Bybee during construction - traffic will be shifted north, then south, while opposite sections of the culvert are constructed - similar to the Tacoma street project completed in 2013. There are some important differences in the traffic control plan between this and the Tacoma project:

- The right-of-way on Bybee is much wider (80 feet, rather than 60 feet), **but** nearly 30 feet of it is incorporated into Westmoreland Park.
- Pedestrian and bike detours cannot be accommodated as easily due to the size of the blocks north and south of the project area. Pedestrian and bike lanes must be incorporated into the traffic control plan, making the overall width needed for traffic control much wider for this project than for the Tacoma project.

Due to these considerations, and to allow space to construct the culvert work, the undeveloped area of the right-of-way that is within Westmoreland Park must be lengthened utilized to accommodate the traffic diversion. However, when the project is complete, the culvert top section (lid) in this area will be removed after traffic phasing is complete. The wing walls and culvert base will remain.

#### **Staging/stockpiling areas**



Staging and material stockpile areas will be limited to existing disturbance areas within the right-of-way along SE 23<sup>rd</sup> Avenue. Utilization of existing developed areas reduces the overall impact on the project area. Oregon Department of Transportation has given preliminary approval to close the off-ramp on the north side of Bybee (from McLoughlin/99W). The off-ramp on the south side of Bybee will remain open.

Orange construction fencing will delineate limits of disturbance to minimize disturbance on surrounding vegetation. Tree protection and erosion control measures will be in place prior to construction. All construction traffic shall be excluded from areas outside the limits of disturbance in order to retain undisturbed natural vegetation areas. There shall be no disturbance of native vegetation outside of the limits of disturbance as shown on the construction drawings. Care will be taken to avoid damage to the canopy of any trees overhanging the limits of disturbance.

### **Sedimentation and Turbidity**

Removal of earth, roadway and culvert material, vegetation and ground cover may temporarily increase sedimentation and turbidity in Crystal Springs Creek if high summer flows inundate exposed soils during or immediately following construction before site restoration (and erosion control seeding) is complete. Sedimentation and turbidity may also result if dewatering techniques are breached due to high summer flows.

To avoid this impact, all work will occur in-the-dry, hydrologically isolated from surface flowing waters. As the streambed and streambank are disturbed, bank erosion will be contained within the isolated work area - effectively reducing the potential for increasing sedimentation downstream. A Hydrologic Isolation Plan (surface water diversion) will be planned to pass observed and modeled peak flows for Crystal Springs Creek; surface water diversion and if necessary, pumps will be sized to anticipate high peak flows, and the selected contractor will keep emergency erosion/pollution control best management practices on site at all times. Water quality treatments will be applied to all diverted stream water.

### **Stream Diversion/Dewatering**

The dewatering be conducted using a pumped bypass pipe and coffer dams upstream and downstream of the work site. Flat topography will likely require the use of pumps to dewater the creek and keep the streambed dry to complete the work. All dewatering activities for this project will include silt curtains and turbidity monitoring downstream of the diversion activities.

Prior to diverting the stream, BES employees and volunteers will salvage fish, mussels, crustacean, amphibians from within the project area. A fish salvage permit will be acquired from Oregon Department of Fish and Wildlife. After construction, adult and juvenile passage will be restored through the project reach.

### **Tree Protection Measures**

During construction activities, temporary fencing, barricades, and guards will protect trees and other plants, which are to remain, from all damage. Protective barrier fence will be installed prior to the start of any activity which may potentially intrude into root protection zones of trees and will be removed only after all work potentially injurious to trees and other plants is complete. Twelve trees are proposed to be removed as part of this project.

Proposed tree protection fencing will be 4-foot orange construction fencing. The standard 6-foot chain-link fencing is not ideal due to slopes along stream banks, proximity to work along stream banks. More information about tree preservation is included in the Attachment 8 – Arborist Report.

### **Erosion Prevention and Sediment Control**

Erosion prevention and sediment control within the construction zone of the proposed project will follow best management practices and conform to the construction management plan and to clearing, grading and erosion control code contained within the City of Portland Erosion Control Manual and Title 10. Work will be conducted during summer months, when risk of rain and runoff are greatly reduced. City staff will



be present on the job site at all times, and will have coir fabrics and other geotextiles and erosion control measures on site. Contractors (with assurance from BES inspectors) will monitor erosion control devices twice daily. Equipment, materials, and personnel will be excluded from waterways using silt fences and exclusion zone fences where work will not be conducted, as shown on the plans.

BES, Watershed Revegetation Program will provide native seed to the construction contractor for application to all exposed/disturbed soils within the project boundaries including all graded areas, access routes, staging areas, and stockpile areas. Additionally, BES may apply native seed to other areas within the project boundary to provide competition to invasive plant species and aid in vegetation management. Species composition of the native seed mix is shown in the table below:

Native Grasses	Common Name	Lbs/Acre
Deschampsia cespitosa	Tufted Hairgrass	3
Hordeum brachyantherum	Meadow Barley	2
Elymus glaucus	Blue Wild Rye	5
Agrostis exarata	Spike Bentgrass	2
Juncus patens	Spreading Rush	1
Alopecurus geniculatus	Water Foxtail	4

See Attachment 6 – Impacts/Alternatives/Mitigation for more information about revegetation and planting proposed for the site.

