



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

### DETERMINATION OF NON-SIGNIFICANCE

**PROPONENT:** Abe Santos, City of Bellevue Utilities

**LOCATION OF PROPOSAL:** 1770 124<sup>th</sup> Avenue NE

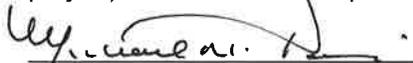
**DESCRIPTION OF PROPOSAL:** Wetland restoration and habitat improvement within a wetland complex adjacent to the West Tributary of Kelsey Creek and within a regional stormwater detention pond.

**FILE NUMBERS:** 15-122640-LO      **PLANNER:** Reilly Pittman

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 **2/4/2016**
- 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This DNS may be withdrawn at any time if the proposal is modified so as to have significant adverse environmental impacts; if there is significant new information indicating a proposals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

\_\_\_\_\_  
**1/21/2016**  
Date

**OTHERS TO RECEIVE THIS DOCUMENT:**

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



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

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**Proposal Name:** Kelsey Creek Detention Pond Wetland Restoration

**Proposal Address:** 1770 124<sup>th</sup> Avenue NE

**Proposal Description:** The City of Bellevue Utilities Department proposes a Critical Areas Land Use Permit for wetland restoration integrated within the West Tributary of Kelsey Creek detention pond as part of the long-range vision for the Bel-Red corridor.

**File Number:** 15-122640-LO

**Applicant:** Abe Santos, City of Bellevue Utilities

**Decisions Included** Critical Areas Land Use Permit  
(Process II. 20.30P)

**Planner:** Reilly Pittman, Land Use Planner

**State Environmental Policy Act  
Threshold Determination:**

**Determination of Non-Significance**

  
\_\_\_\_\_  
Carol V. Helland, Environmental Coordinator  
Development Services Department

**Director's Decision:**

**Approval with Conditions**  
Michael A. Brennan, Director  
Development Services Department

By:   
\_\_\_\_\_  
Carol V. Helland, Land Use Director

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**Application Date:** September 3, 2015  
**Notice of Application Date:** October 29, 2015  
**Decision Publication Date:** January 21, 2016  
**Project Appeal Deadline:** February 4, 2016

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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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### Attachments

1. Wetland Restoration Plans – Enclosed
2. Critical Areas Study and Report, Wetland Rating Forms – In File
3. Survey, SEPA Checklist, Application Forms, Materials – In File

**I. Proposal Description**

The applicant is requesting a Critical Areas Land Use Permit in order to conduct wetland restoration in the wetlands adjacent to the West Tributary of Kelsey Creek that flows across the site. Habitat improvement is an allowed use in a critical area per LUC 20.25H.055.C.3.J.

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

**A. Site Description**

The property is located at 1770 124<sup>th</sup> Avenue NE. This regional detention facility contains a segment of the West Tributary of Kelsey Creek, which flows across the site along with wetlands adjacent to the stream channel. The 5.8 acre Category II wetland complex on this property is a seasonally flooded palustrine forested and permanently flooded palustrine aquatic bed wetland complex. This wetland and stream are located in a highly urbanized area with the adjacent properties historically supporting industrial uses. Due to the surrounding development and land uses the site has limited habitat connectivity and provides only moderate habitat to mammals and high habitat value for invertebrates and amphibians. Beaver dams are found on the site which contribute to the ponding and high water levels. The dominant vegetation species in the wetland are reed canary grass and broadleaf cattail. Purple loosestrife, which is a noxious weed, is also found on the site. Upland vegetation includes Himalayan blackberry, Scot's broom, red alder, and big leaf maple. See attachment 2 for wetland report and rating. See figure 1 for existing site.



**Figure 1**

## **B. Zoning**

The property is zoned BR-R, Bel-Red Residential.

## **C. Land Use Context**

The property has a Comprehensive Plan Land Use Designation of BR-R, Bel-Red Residential

## **D. Critical Areas On-Site and Regulations**

### **i. Streams and Riparian Areas**

Most of the elements necessary for a healthy aquatic environment rely on processes sustained by dynamic interaction between the stream and the adjacent riparian area (Naiman et al., 1992). Riparian vegetation in floodplains and along stream banks provides a buffer to help mitigate the impacts of urbanization (Finkenbine et al., 2000 in Bolton and Shellberg, 2001). Riparian areas support healthy stream conditions.

Riparian vegetation, particularly forested riparian areas, affect water temperature by providing shade to reduce solar exposure and regulate high ambient air temperatures, slowing or preventing increases in water temperature (Brazier and Brown, 1973; Corbett and Lynch, 1985).

Upland and wetland riparian areas retain sediments, nutrients, pesticides, pathogens, and other pollutants that may be present in runoff, protecting water quality in streams (Ecology, 2001; City of Portland 2001). 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 (Novitzki, 1979; Verry and Boelter, 1979 in Mitsch and Gosselink, 1993). Upland and wetland areas can infiltrate floodflows, which in turn, are released to the stream as baseflow

Stream riparian areas, or buffers, can be a significant factor in determining the quality of wildlife habitat. For example, buffers comprised of native vegetation with multi-canopy structure, snags, and down logs provide habitat for the greatest range of wildlife species (McMillan, 2000). 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.

Sparsely vegetated or vegetated buffers with non-native species may not perform the needed functions of stream buffers. In cases where the buffer is not well vegetated, it is necessary to either increase the buffer width or require that the standard buffer width be restored or revegetated (May 2003). Until the newly planted buffer is established the near term goals for buffer functions may not be attained.

Riparian areas often have shallow groundwater tables, as well as areas where

groundwater and surface waters interact. Groundwater flows out of riparian wetlands, seeps, and springs to support stream baseflows. Surface water that flows into riparian areas during floods or as direct precipitation infiltrates into groundwater in riparian areas and is stored for later discharge to the stream (Ecology, 2001; City of Portland, 2001).

**ii. Wetlands**

Wetlands provide important functions and values for both the human and biological environment—these functions include flood control, water quality improvement, and nutrient production. These “functions and values” to both the environment and the citizens of Bellevue depend on their size and location within a basin, as well as their diversity and quality. While Bellevue’s wetlands provides various beneficial functions, not all wetlands perform all functions, nor do they perform all functions equally well (Novitski et al., 1995). However, the combined effect of functional processes of wetlands within basins provides benefits to both natural and human environments. For example, wetlands provide significant stormwater control, even if they are degraded and comprise only a small percentage of area within a basin.

**III. Consistency with Land Use Code Requirements:**

**A. Zoning District Dimensional Requirements:**

No structures or changes are proposed that require review under the zoning dimensional requirements.

**B. Critical Areas Requirements LUC 20.25H:**

The City of Bellevue Land Use Code Critical Areas Overlay District (LUC 20.25H) establishes performance standards and procedures that apply to development on any site which contains in whole or in part any portion designated as critical area, critical area buffer or structure setback from a critical area or buffer. The following performance standards apply to projects that work in wetlands and streams.

**i. Consistency with LUC 20.25H.055.C.3.J**

The proposal has the goal to remove invasive vegetation and replace with native plants to improve the function and values of the wetland on this site. The project qualifies as habitat improvement which is an allowed use under LUC 20.25H.055. The project is sponsored by the City of Bellevue Utilities Department in a partnership with the City’s Parks Department that has future plans to provide public access and mitigation to this same wetland facility as part of a separate proposal. These are both public agencies that have a role in management and maintenance of natural and man-made features such as this wetland and stream storm facility. A critical areas study and report was prepared and is attachment 2 of this report. This report discusses the temporary impacts that result from invasive vegetation removal, planting plan design, beaver controls, and construction access needs that will be restored as part of this plan.

**ii. Consistency with LUC 20.25H.100 and LUC 20.25H.080**

Development on sites with a wetland, wetland critical area buffer, stream, or stream critical area buffer shall incorporate LUC 20.25H.80 and LUC 20.25H.100 performance standards in design of the development of the project. The only applicable performance standards to this project, which proposes no construction, are the following.

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

Dense vegetation is being installed within the wetland that is found around the stream. The planting proposed utilizes circular planting areas that are planted at double the usual density. High water levels, invasive vegetation, and beaver activity have informed the proposed planting design to allow water to flow, aid invasive vegetation control, and allow for plant attrition from beavers. The plan proposes to have the project biologist determine necessary beaver control measures in the field based on any beavers present. Given time and maintenance of the invasive species this vegetation will establish and provide dense vegetated habitat. The wetland and stream at this location are isolated from access by pets and humans. Any as-built drawings that are submitted to document changes made in the field by the project biologist are required to be submitted under the future clearing and grading permit as post-issuance revisions. All temporary disturbance from access is required to be restored. The need for temporary irrigation will be determined by the biologist, but due to high water levels the need is lessened. Planting is proposed to occur in the fall and winter. See attachment 1 for restoration plans. **See Conditions of Approval in Section X of this report.**

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

Use of pesticides, insecticides, or fertilizers in the City of Bellevue will be done per the City of Bellevue standards as described in the critical areas study.

**IV. Public Notice and Comment**

Application Date:	September 3, 2015
Public Notice (500 feet):	October 29, 2015
Minimum Comment Period:	November 12, 2015

The Notice of Application for this project was published the City of Bellevue weekly permit bulletin and Seattle Times on September 3, 2015. It was mailed to property owners within 500 feet of the project site. No comments were received.

**V. Summary of Technical Reviews**

**A. Clearing and Grading**

The Clearing and Grading Division of the Development Services Department has reviewed

the proposed site development for compliance with Clearing and Grading codes and standards. The Clearing and Grading staff approved the application.

**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.

**VII. Changes to Proposal Due to Staff Review**

Changes were requested to ensure sufficient plant density and plan accuracy. Due to the close proximity of the 124<sup>th</sup> Avenue NE construction and mitigation was coordination between Utilities and Transportation project teams was required to ensure construction access and avoidance of plan conflicts.

**VIII. Decision Criteria**

**A. 20.30P.140 Critical Area Land Use Permit Decision Criteria – Decision Criteria**

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

- 1. The proposal obtains all other permits required by the Land Use Code;**  
The applicant must obtain a clearing and grading permit and any associated permits.  
**See Conditions of Approval in Section X of this report.**
- 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;**  
The proposal will provide wetland restoration which will improve the function and habitat value of this critical area.
- 3. The proposal incorporates the performance standards of Part 20.25H to the maximum extent applicable, and ;**  
The performance standards related to wetlands and streams are being met by this proposal as described in Section III above.
- 4. The proposal will be served by adequate public facilities including street, fire protection, and utilities; and;**  
The proposed activity does not impact public services.
- 5. The proposal includes a mitigation or restoration plan consistent with the requirements of LUC Section 20.25H.210; and**

The mitigation planting is comparable with the City's planting templates wetlands and meets requirements in LUC 20.25H.210.

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

As discussed in this report, the proposal complies with all other applicable requirements of the Land Use Code.

**IX. Conclusion and Decision**

After conducting the various administrative reviews associated with this proposal, including Land Use Code consistency, City Code and Standard compliance reviews, the Director of the Development Services Department does hereby **approve with conditions** the proposed restoration and habitat improvement of the wetland and buffer adjacent to the West Tributary of Kelsey Creek found in the regional detention facility. **Approval of this Critical Areas Land Use Permit does not constitute a permit for construction. A building permit, clear and grade permit, and/or utility permit is required and all plans are subject to review for compliance with applicable City of Bellevue codes and standards.**

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

**X. Conditions of Approval**

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

<u>Applicable Ordinances</u>	<u>Contact Person</u>
Clearing and Grading Code- BCC 23.76	Tom McFarlane, 425-452-5207
Land Use Code- BCC Title 20	Reilly Pittman, 425-452-4350
Noise Control- BCC 9.18	Reilly Pittman, 425-452-2973

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

- 1. Clearing and Grading Permit:** Approval of this Critical Areas Land Use Permit does not constitute an approval of a development permit. Application for a clearing and grading permit or other required permits must be submitted and approved. Plans submitted as part of either permit application shall be consistent with the activity permitted under this approval.

Authority: Land Use Code 20.30P.140  
Reviewer: Reilly Pittman, Development Services Department

- 2. Temporary Disturbance:** Any areas of temporary disturbance from temporary access location are required to be restored per the plan.

Authority: Land Use Code 20.30P.140  
Reviewer: Reilly Pittman, Development Services Department

- 3. Restoration Planting and Monitoring Plans:** Plans submitted for the grading permit must show the proposed final mitigation planting and monitoring plans.

Authority: Land Use Code 20.30P.140  
Reviewer: Reilly Pittman, Development Services Department

- 4. Maintenance and Monitoring:** Maintenance and monitoring is required to be carried out as detailed in the submitted plan. The annual reports can be sent to Reilly Pittman at [rpittman@bellevuewa.gov](mailto:rpittman@bellevuewa.gov) or to the address below:

Environmental Planning Manager  
Development Services Department  
City of Bellevue  
PO Box 90012  
Bellevue, WA 98009-9012

Authority: Land Use Code 20.25H.220.D  
Reviewer: Reilly Pittman, Development Services Department

- 5. As-Built Drawing:** Any changes made in the field are to be shown on as-built drawings. A copy of any as-built drawings is required to be submitted under the issued clearing and grading permit.

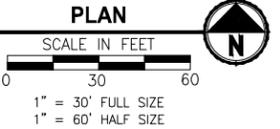
Authority: Land Use Code 20.30P.140  
Reviewer: Reilly Pittman, Development Services Department

- 6. Land Use Inspection:** Following installation of planting the applicant shall contact Land Use staff to inspect the planting area prior to final building inspection.

Authority: Land Use Code 20.30P.140  
Reviewer: Reilly Pittman, Development Services Department

- 7. 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: Reilly Pittman, Development Services Department

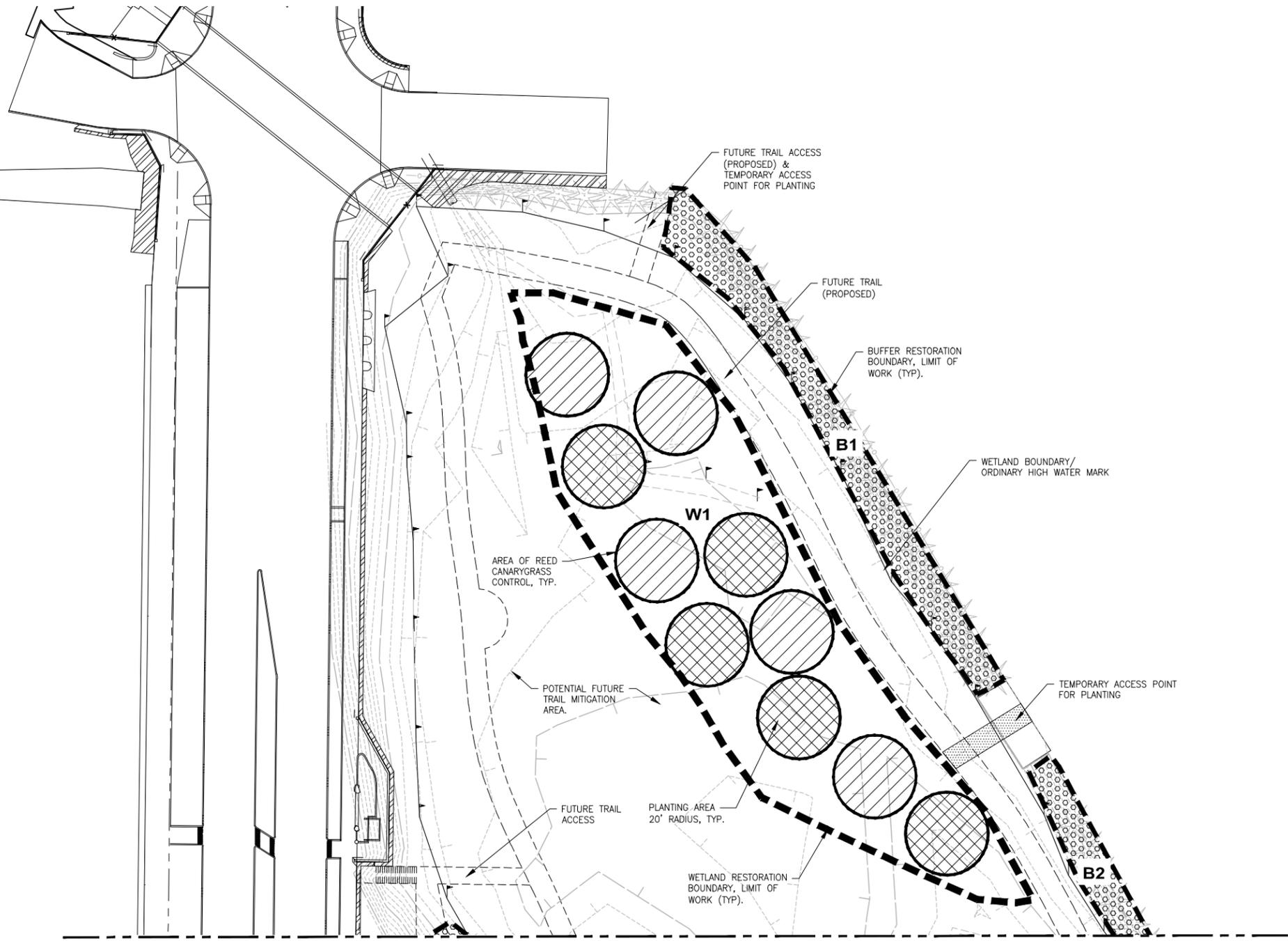


**GENERAL NOTES:**

- SEE SHEET L3 FOR PLANTING DETAILS AND REQUIREMENTS.
- WETLAND PLANTING AREA LIMITS AND BUFFER INTERPLANTING LOCATIONS SHALL BE STAKED IN THE FIELD AND APPROVED BY PROJECT REPRESENTATIVE PRIOR TO PLANTING.
- ALL WOODY NATIVE PLANTS WILL BE SAVED AND PROTECTED WITHIN MITIGATION AREAS. NOTIFY BIOLOGIST/LANDSCAPE ARCHITECT 5 DAYS PRIOR TO START OF CLEARING ACTIVITY. USE ONLY HAND TOOLS AND METHODS WHEN WORKING INSIDE THE DRIPLINE AREA OF EXISTING TREES AND SHRUBS.
- ANY CHANGES TO PLANT MATERIAL, SIZE, OR SPACING MUST BE APPROVED BY THE PROJECT REPRESENTATIVE PRIOR TO INSTALLATION.

**PLANTING NOTES:**

- THE INTENT OF THE WETLAND PLANTING PLAN IS TO CREATE PATCHES OR ISLANDS OF DENSE WOODY VEGETATION.  
TOTAL WETLAND RESTORATION AREA = 0.92 ACRE  
TOTAL WETLAND PLANTING AREA (1/2X) = 0.46 ACRE
- PLANTING AREAS ARE PROJECTED TO HAVE 2X TYPICAL PLANT DENSITY.
- PLANTING DENSITY SHOWN IS 4X TYPICAL TO ACCOUNT FOR 50% EXPECTED MORTALITY.



**PLANTING QUANTITY TAB - THIS SHEET ONLY -**

SYMBOL	QUANTITY BY AREA
FORESTED POCKETS	W1
SPACING - 2.5' O.C.	0.14 ACRE
BLACK COTTONWOOD	50
OREGON ASH	50
PACIFIC WILLOW	200
SITKA WILLOW	150
WESTERN CRABAPPLE	50

**PLANTING QUANTITY TAB - THIS SHEET ONLY -**

SYMBOL	QUANTITY BY AREA
SCRUB SHRUB	W1
SPACING - 1.25' O.C.	0.14 ACRE
RED OSIER DOGWOOD	200
SITKA WILLOW	400
DOUGLAS SPIRAEA	100
PACIFIC NINEBARK	100
BLACK TWINBERRY	100

**PLANTING QUANTITY TAB - THIS SHEET ONLY -**

SYMBOL	QUANTITY BY AREA
BUFFER RESTORATION	B1
INTERPLANTING	0.11 ACRE
DOUGLAS FIR	7
WESTERN RED CEDAR	7
WESTERN HEMLOCK	7
BIG LEAF MAPLE	7
INDIAN PLUM	7
SITKA SPRUCE	7
BEAKED HAZELNUT	7
OCEANSPRAY	20
MOCKORANGE	10
SNOWBERRY	20

**PLANTING QUANTITY TAB - THIS SHEET ONLY -**

SYMBOL	QUANTITY BY AREA
BUFFER RESTORATION	B2
INTERPLANTING	0.03 ACRE
DOUGLAS FIR	1
WESTERN RED CEDAR	1
WESTERN HEMLOCK	1
BIG LEAF MAPLE	1
SITKA SPRUCE	1
BEAKED HAZELNUT	1
OCEANSPRAY	5
MOCKORANGE	0
SNOWBERRY	5

MATCH LINE - SEE SHEET L2

**90% PLANS NOT FOR CONSTRUCTION**

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REVISIONS	DATE	BY	DESIGNED
			D.SANDENO
			R.PETTIT
			CHECKED
			APPROVED

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DATE: NOVEMBER 2015

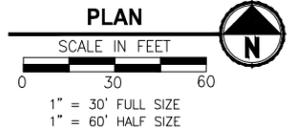
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PROJECT NAME  
**WEST TRIBUTARY KELSEY CREEK  
DMP 165 - WETLAND RESTORATION**  
BELLEVUE, WASHINGTON

**RESTORATION PLAN**

**811**  
Know what's below.  
Call before you dig.  
DRAWING NO.  
1 OF 4  
**L1**

MATCH LINE - SEE SHEET L1



**GENERAL NOTES:**

- SEE SHEET L3 FOR PLANTING DETAILS AND REQUIREMENTS.
- WETLAND PLANTING AREA LIMITS AND BUFFER INTERPLANTING LOCATIONS SHALL BE STAKED IN THE FIELD AND APPROVED BY PROJECT REPRESENTATIVE PRIOR TO PLANTING.
- ALL WOODY NATIVE PLANTS WILL BE SAVED AND PROTECTED WITHIN MITIGATION AREAS. NOTIFY BIOLOGIST/LANDSCAPE ARCHITECT 5 DAYS PRIOR TO START OF CLEARING ACTIVITY. USE ONLY HAND TOOLS AND METHODS WHEN WORKING INSIDE THE DRIPLINE AREA OF EXISTING TREES AND SHRUBS.
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**PLANTING QUANTITY TAB - THIS SHEET ONLY -**

SYMBOL	ITEM	QUANTITY BY AREA
	FORESTED POCKETS	W2
	SPACING - 2.5' O.C.	0.09 ACRE
	BLACK COTTONWOOD	40
	OREGON ASH	40
	PACIFIC WILLOW	110
	SITKA WILLOW	70
	WESTERN CRABAPPLE	40

**PLANTING QUANTITY TAB - THIS SHEET ONLY -**

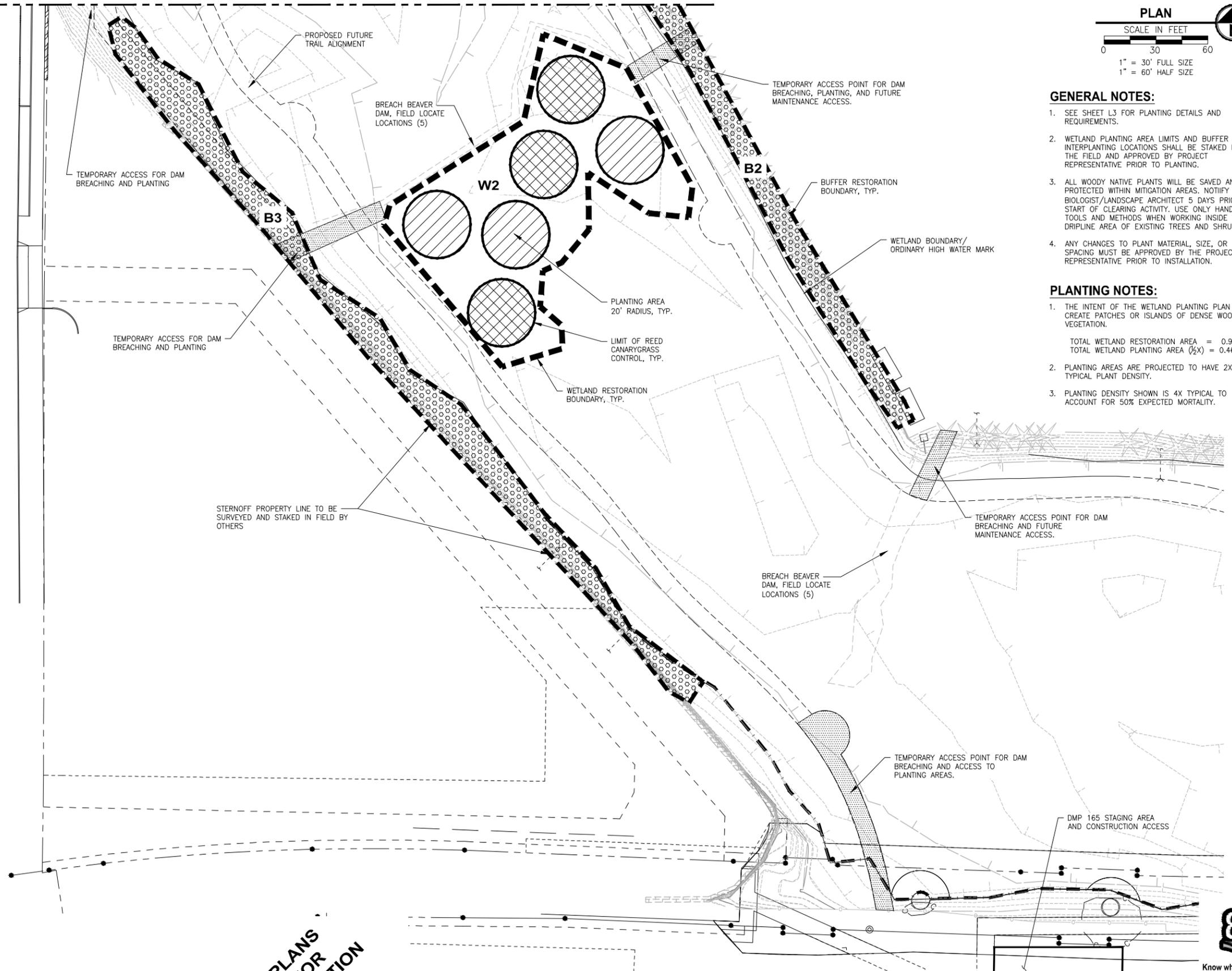
SYMBOL	ITEM	QUANTITY BY AREA
	SCRUB SHRUB	W2
	SPACING - 1.25' O.C.	0.09 ACRE
	RED OSIER DOGWOOD	120
	SITKA WILLOW	200
	DOUGLAS SPIRAEA	120
	PACIFIC NINEBARK	80
	BLACK TWINBERRY	80

**PLANTING QUANTITY TAB - THIS SHEET ONLY -**

SYMBOL	ITEM	QUANTITY BY AREA
	BUFFER RESTORATION	B2
	INTERPLANTING	0.09 ACRE
	DOUGLAS FIR	3
	WESTERN RED CEDAR	3
	WESTERN HEMLOCK	3
	BIG LEAF MAPLE	3
	INDIAN PLUM	3
	SITKA SPRUCE	3
	BEAKED HAZELNUT	3
	OCEANSPRAY	7
	MOCKORANGE	7
	SNOWBERRY	7

**PLANTING QUANTITY TAB - THIS SHEET ONLY -**

SYMBOL	ITEM	QUANTITY BY AREA
	BUFFER RESTORATION	B3
	INTERPLANTING	0.19 ACRE
	DOUGLAS FIR	7
	WESTERN RED CEDAR	7
	WESTERN HEMLOCK	7
	BIG LEAF MAPLE	7
	SITKA SPRUCE	7
	BEAKED HAZELNUT	7
	OCEANSPRAY	20
	MOCKORANGE	10
	SNOWBERRY	20



**90% PLANS NOT FOR CONSTRUCTION**

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REVISIONS	DATE	BY	DESIGNED
			D.SANDENO
			R.PETTIT
			CHECKED
			APPROVED

ONE INCH AT FULL SCALE, IF NOT, SCALE ACCORDINGLY  
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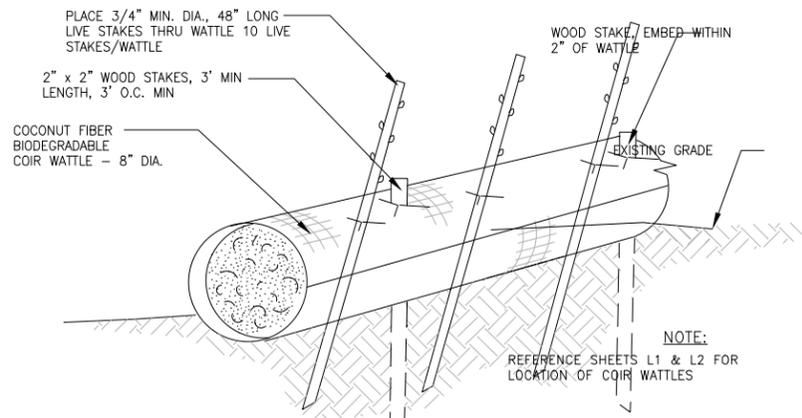
**Parametrix**  
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 1019 39TH AVENUE SE, SUITE 100  
 PUYALLUP, WASHINGTON 98374  
 T. 253.604.6600 F. 253.604.6799  
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PROJECT NAME  
**WEST TRIBUTARY KELSEY CREEK  
 DMP 165 - WETLAND RESTORATION**  
 BELLEVUE, WASHINGTON

**RESTORATION PLAN**

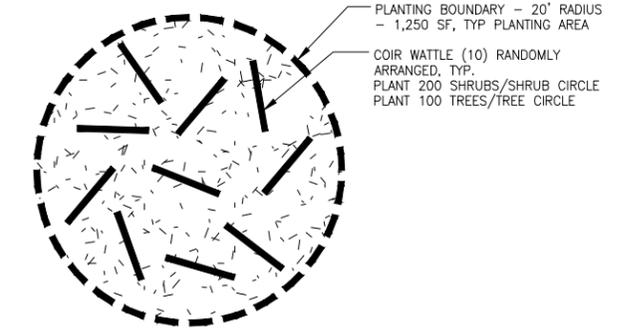
**811**  
 Know what's below.  
 Call before you dig.  
 DRAWING NO.  
 2 OF 4  
**L2**

LAYOUT: L3 PATH: c:\pma\Temp\AcPublish\_9632\ PLOTTED BY: sander DATE: Wednesday, November 18, 2015 10:37:19 AM



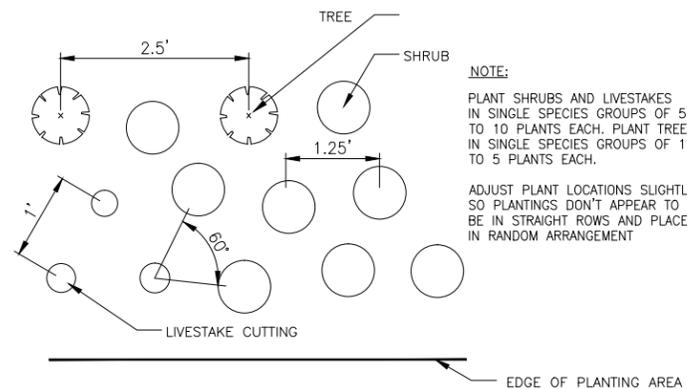
**COIR LOG PLANTING  
DETAIL**

NO SCALE



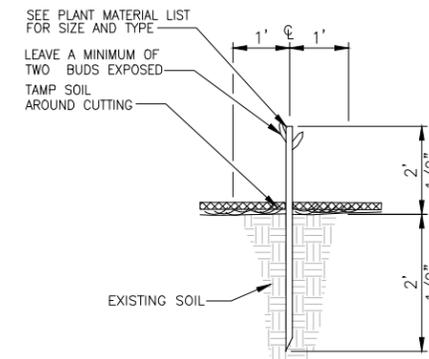
**TYPICAL WETLAND PLANTING CIRCLE  
DETAIL**

NO SCALE



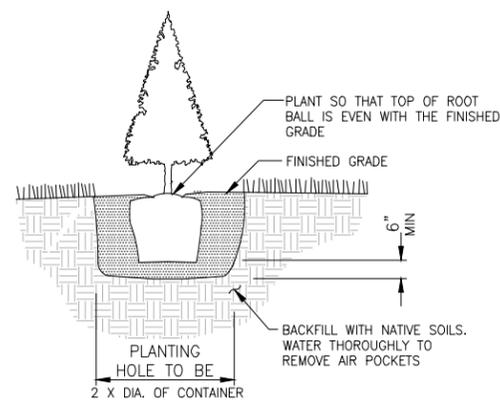
**TYPICAL TREE AND SHRUB SPACING - INTERPLANTING  
DETAIL**

NO SCALE



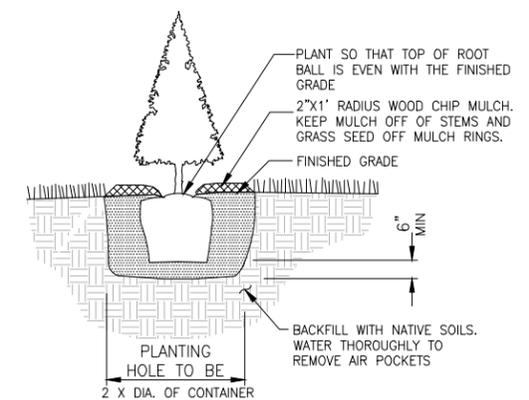
**LIVE STAKE CUTTING PLANTING  
DETAIL**

NO SCALE



**CONTAINER PLANTING - WETLANDS  
DETAIL**

NO SCALE



**CONTAINER PLANTING - UPLANDS  
DETAIL**

NO SCALE

**90% PLANS  
NOT FOR  
CONSTRUCTION**

REVISIONS	DATE	BY	DESIGNED
			D.SANDENO
			R.PETTIT
			CHECKED
			APPROVED

**ONE INCH AT FULL SCALE,  
IF NOT, SCALE ACCORDINGLY**  
FILE NAME  
xPS01580072 C-LS  
JOB No.  
553-1580-072  
DATE  
NOVEMBER 2015

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PROJECT NAME  
**WEST TRIBUTARY KELSEY CREEK  
DMP 165 - WETLAND RESTORATION**  
BELLEVUE, WASHINGTON

**PLANTING DETAILS &  
MATERIALS LIST**

811  
Know what's below.  
Call before you dig.  
DRAWING NO.  
3 OF 4  
**L3**

**RESTORATION CONSTRUCTION NOTES:**

1. PRIOR TO CONSTRUCTION, CLEARING LIMITS SHALL BE CLEARLY IDENTIFIED WITH HIGH VISIBILITY FENCE. THE OWNERS REPRESENTATIVE SHALL VERIFY AND APPROVE FENCE LOCATIONS PRIOR TO CONSTRUCTION.
2. CONTRACTOR SHALL ARRANGE TO MEET ON SITE WITH OWNERS REPRESENTATIVE AND BIOLOGIST TO DISCUSS LIMITS OF WORK AND METHODS. CONSTRUCTION ACTIVITIES SHALL NOT COMMENCE UNTIL ACCESS, LIMITS OF WORK, AND METHODS ARE APPROVED.
3. PLANTING PLANS REPRESENT A CONCEPTUAL PLANT LAYOUT. FINAL PLANT LOCATIONS SHALL BE APPROVED BY BIOLOGIST/LANDSCAPE ARCHITECT PRIOR TO PLANTING.
4. USE ONLY HAND TOOLS TO CLEAR AND CULTIVATE SOIL UNDER THE CANOPY (WITHIN AND 5' OUTSIDE THE DRIPLINE) OF EXISTING TREES.
5. ALL PLANTS SHALL BE NURSERY GROWN A MINIMUM OF ONE YEAR. PLANT MATERIAL IS TO BE SUPPLIED BY COMMERCIAL NURSERIES THAT SPECIALIZE IN PLANTS NATIVE TO THE PACIFIC NORTHWEST. PLANT SUBSTITUTIONS ARE SUBJECT TO APPROVAL BY BIOLOGIST/LANDSCAPE ARCHITECT.
6. PLANTING SHALL TAKE PLACE DURING THE DORMANT SEASON (NOVEMBER 1ST TO FEBRUARY 28TH). PLANTING MAY BE ALLOWED AT OTHER TIMES AFTER REVIEW AND WRITTEN APPROVAL BY BIOLOGIST/LANDSCAPE ARCHITECT.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER DISPOSING OF ALL DEBRIS AND EXCESS SOIL OCCASIONED BY THIS PROJECT.
8. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO EXCAVATION.
9. ALL DIMENSIONS FOR PLANT SIZES ARE MINIMUM REQUIREMENTS.
10. EXISTING AREAS DISTURBED BY CONSTRUCTION ACTIVITIES AND NOT SHOWN TO BE RE-VEGETATED ON THESE PLANS SHALL BE RESTORED
11. DISCREPANCIES BETWEEN THE PLANS AND SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE BIOLOGIST/LANDSCAPE ARCHITECT PRIOR TO PROCEEDING.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING PLANTS FOR THE FIRST YEAR IN BUFFER ONLY.

**CONSTRUCTION SEQUENCE**

THE RESTORATION PLAN IS ASSUMED TO BE CONSTRUCTED IN ONE PHASE. SITE PREPARATION ACTIVITIES WILL BEGIN IN THE SUMMER 2016 FOLLOWING PERMIT ISSUANCE. SITE PREPARATION ACTIVITIES INCLUDE: ACCESS ROAD AND STAGING AREA ESTABLISHMENT, IMPLEMENTATION OF TESC MEASURES, BEAVER DAM BREACHING, & WEED CONTROL MEASURES. PLANTING WILL OCCUR DURING THE FALL OR WINTER (NOVEMBER-FEBRUARY) 2016-2017.

1. PRE-CONSTRUCTION MEETING: PRIOR TO ANY SITE WORK, A PRE-CONSTRUCTION MEETING WILL BE HELD WITH THE GENERAL CONTRACTORS, LANDSCAPE CONTRACTORS, AND BIOLOGISTS TO ENSURE THAT THE WORK IS CONSTRUCTED AS DESIGNED, AND THAT CONTRACTORS UNDERSTAND AND COMPLY WITH ALL ENVIRONMENTAL PERMIT CONDITIONS.
2. THE WETLAND BIOLOGIST WILL BE AVAILABLE FOR ON-SITE INSPECTIONS AND APPROVAL OF ALL WORK DURING CONSTRUCTION.
3. CITY UTILITIES DEPARTMENT WILL LOWER WATER LEVELS IN POND TO 127' PRIOR TO CONSTRUCTION (JULY 2016).
4. CITY UTILITIES DEPARTMENT WILL INSPECT DMP165 IN MAY-JUNE 2016 TO IDENTIFY ANY BEAVER ACTIVITY. IF EVIDENCE OF BEAVER ACTIVITY IS FOUND, CITY WILL HAVE BEAVERS REMOVED PRIOR TO JULY 1, 2016
5. ACCESS ROADS AND STAGING AREAS: A CLEAR ACCESS WORK AREA WILL BE ESTABLISHED IN THE FIELD BY THE CONTRACTOR PRIOR TO BEGINNING ANY EARTHWORK. THE STAGING AREA IS PROPOSED FOR THE CITY PROPERTY SOUTH OF DMP 165. ACCESS POINTS ARE SHOWN ON THE PLAN.
6. TEMPORARY EROSION AND SEDIMENT CONTROL (TESC): HIGH VISIBILITY CONSTRUCTION FENCING WILL BE PLACED AT THE EDGE OF WORK AREAS TO ENSURE THAT ACTIVITIES DO NOT EXTEND BEYOND THE APPROVED WORK AREA.
7. BREACH BOTH BEAVER DAMS IN FIVE LOCATIONS (EACH LOCATION AND SIZE OF BREACHES TO BE DETERMINED IN THE FIELD). BREACH SOUTHERN DAM FIRST, NORTHERN DAM SECOND. BREACH USING CHAIN SAW AND WRECKING BAR, OR OTHER APPROPRIATE HAND TOOLS. BREACHES WILL BE A MINIMUM OF 5 FT WIDE AND CUT DOWN TO BELOW THE SEDIMENT OR WATER LEVEL. REMOVED DAM DEBRIS WILL BE REMOVED BY HAND FROM THE RESTORATION AREA TO THE EXTENT PRACTICAL AND AS APPROVED BY THE WETLAND BIOLOGIST.
8. STAKE CENTERPOINT OF WETLAND PLANTING AREAS BY BIOLOGIST.
9. IMPLEMENT AND COMPLETE WEED CONTROL MEASURES IN UPLAND BUFFER AND WETLAND.
10. INSTALL COIR WATTLES AND PLANT WETLANDS.
11. PLANT UPLAND BUFFER.
12. FOLLOWING SITE PREPARATION ACTIVITIES, PLANT THE RESTORATION AREA WITH NATIVE WOODY VEGETATION AS SHOWN IN THE PLAN SET.
13. REMOVE ACCESS ROADS AND TESC MEASURES.
14. RESTORE ACCESS AREAS BY SEEDING WITH UPLAND SEED MIX.
15. CONTRACTOR SHALL ARRANGE FOR A SITE MEETING WITH CITY AND BIOLOGISTS TO VERIFY PROJECT WAS CONSTRUCTED ACCORDING TO PLANS.
16. CONTRACTOR TO PREPARE AS-BUILT DRAWINGS OF BEAVER DAM BREACHES AND PLANT LOCATIONS.

**NOXIOUS WEED CONTROL MEASURES**

PRIOR TO INSTALLING NEW PLANT MATERIAL, NOXIOUS WEEDS IN THE WETLAND AND ITS BUFFER WILL BE REMOVED.

1. REED CANARYGRASS CONTROL STRATEGIES WILL INCLUDE PRE-PLANTING HERBICIDE APPLICATION. IN PLANTING CIRCLE AREAS, REED CANARYGRASS WILL BE CONTROLLED USING A COMBINATION OF MOWING (USING PORTABLE WEED EATERS) AND APPROVED HERBICIDE IN ACCORDANCE WITH THE CITY OF BELLEVUE'S Bmps AND THE STATE'S REQUIREMENTS FOR HERBICIDAL APPLICATIONS NEAR WATER. IN GENERAL, THE FOLLOWING SEQUENCE OF CONTROL TREATMENTS WILL REDUCE REED CANARYGRASS COVER AND VIGOR SUFFICIENTLY TO ENHANCE WOODY PLANT ESTABLISHMENT:
  - STAKE PLANTING AREAS BY CITY BIOLOGIST
  - MOW OR "WEED EAT" THE DESIGNATED PLANTING AREAS
  - ALLOW RE-SPROUTING OF REED CANARYGRASS TO APPROXIMATELY 1 FOOT
  - SPRAY WITH APPROVED HERBICIDE
  - RE-SPRAY WITH APPROVED HERBICIDE AFTER 1 FOOT OF REGROWTH
  - PLANT WETLANDS NO SOONER THAN 30 DAYS AFTER HERBICIDE APPLICATION OR NO SOONER THAN NOVEMBER 1ST.
2. THIS SEQUENCE CAN BE MODIFIED BY THE CITY OF BELLEVUE TO BEST MEET SITE CONDITIONS AT THE TIME OF CONSTRUCTION. DETAILS OF THE WEED CONTROL PLANS ARE DESCRIBED ABOVE AND IN THE CRITICAL AREAS REPORT FOR THE PROJECT.
3. IN THE WETLANDS AREA PURPLE LOOSESTRIFE WILL BE LOCATED AND REMOVED TO THE GREATEST EXTENT PRACTICABLE. COMMON NIGHTSHADE (SOLANUM DULCAMERA) AND YELLOW FLAG IRIS (IRIS PSEUDACORUS) ARE ALSO COMMON IN THE DETENTION FACILITY. BOTH SPECIES CAN OUTCOMPETE DESIRABLE NATIVE SPECIES; THEREFORE, THEY WILL BE REMOVED BY HAND WHERE DISCRETE MANAGEABLE PATCHES ARE FOUND AND CAN BE ACCESSED.
4. IN THE UPLAND BUFFER, BLACKBERRY (RUBUS SPP.), ENGLISH IVY, AND SCOT'S BROOM ARE PREVALENT. THESE SPECIES WILL BE CONTROLLED USING HERBICIDE APPLICATIONS OR HAND REMOVAL MEASURES. IN BUFFER PLANTING AREAS, THESE SPECIES WILL BE COMPLETELY REMOVED PRIOR TO PLANTING.
5. OTHER NOXIOUS WEEDS ON THE KING COUNTY, WASHINGTON, LIST OF NOXIOUS WEEDS WILL BE CONTROLLED USING APPROPRIATE METHODS.

**WETLAND PLANTINGS**

QUANTITY	BOTANICAL NAME	COMMON NAME	MIN. SIZE	CONDITION
90	POPULOUS BALSAMIFERA	BLACK COTTONWOOD	1"x48" HT	LIVE STAKE
90	FRAXINUS LATIFOLIA	OREGON ASH	½"x48" HT	LIVE STAKE
85	SALIX LUCIDA VAR LASIANDRA	PACIFIC WILLOW	¾"x48" HT	LIVE STAKE
835	SALIX SITCHENSIS	SITKA WILLOW	¾"x48" HT	LIVE STAKE
90	MALUS FUSCA	WESTERN CRABAPPLE	36" HT	1 GAL CONT.
320	CORNUS SERICEA	RED-TWIG DOGWOOD	12" HT	1 GAL CONT.
220	SPIREA DOUGLASII	DOUGLAS SPIREA	12" HT	1 GAL CONT.
180	PHYSOCARPUS CAPITATUS	PACIFIC NINEBARK	12" HT	1 GAL CONT.
180	LONICERA INVOLUCRATA	BLACK TWINBERRY	12" HT	1 GAL CONT.

**BUFFER INTERPLANTINGS**

QUANTITY	BOTANICAL NAME	COMMON NAME	MIN. SIZE	CONDITION
18	PSUEDOTSUGA MENZIESII	DOUGLAS FIR	12" HT	1 GAL CONT.
18	THUJA PLICATA	WESTERN RED CEDAR	12" HT	1 GAL CONT.
18	TSUGA HETEROPHYLLA	WESTERN HEMLOCK	12" HT	1 GAL CONT.
18	ACER MACROPHYLLUM	BIG LEAF MAPLE	18" HT	1 GAL CONT.
10	OEMLERIA CERASIFORMIS	INDIAN PLUM	12" HT	1 GAL CONT.
18	PICEA SITCHENSIS	SITKA SPRUCE	12" HT	1 GAL CONT.
18	CORYLUS CORNUTA	BEAKED HAZELNUT	12" HT	1 GAL CONT.
52	HOLODISCUS DISCOLOR	OCEAN SPRAY	12" HT	1 GAL CONT.
27	PHILADELPHUS LEWISII	MOCKORANGE	12" HT	1 GAL CONT.
52	SYMPHORICARPOS ALBUS	SNOWBERRY	12" HT	1 GAL CONT.

**UPLAND SEED MIX**

QUANTITY	BOTANICAL NAME	COMMON NAME
15 LBS/AC.	HORDEUM BRACHYANTHERUM	MEADOW BARLEY
15 LBS/AC.	BROMUS CARINATUS	CALIFORNIA BROME
5 LBS/AC.	FESTUCA RUBRA	RED FESCUE
5 LBS/AC.	AGROSTIS EXARATA	SPIKE BENTGRASS

LAYOUT: L4 PATH: c:\pwworkspace\Temp\AcPublish\_9632\ DATE: Wednesday, November 18, 2015 10:37:19 AM PLOTTED BY: sandeja

REVISIONS	DATE	BY	DESIGNED
			D.SANDENO
			DRAWN R.PETTIT
			CHECKED
			APPROVED

**ONE INCH AT FULL SCALE, IF NOT, SCALE ACCORDINGLY**  
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**90% PLANS NOT FOR CONSTRUCTION**

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PROJECT NAME  
**WEST TRIBUTARY KELSEY CREEK  
 DMP 165 - WETLAND RESTORATION**  
 BELLEVUE, WASHINGTON

**CONSTRUCTION NOTES**

DRAWING NO.  
 4 OF 4  
**L4**

