DEVELOPMENT SERVICES
ENVIRONMENTAL COORDINATOR
450 110th Ave NE., P.O. BOX 90012
BELLEVUE, WA 98009-9012

OPTIONAL DETERMINATION OF NON-SIGNIFICANCE (DNS) NOTICE MATERIALS

The attached materials are being sent to you pursuant to the requirements for the Optional DNS Process (WAC 197-11-355). A DNS on the attached proposal is likely. This may be the only opportunity to comment on environmental impacts of the proposal. Mitigation measures from standard codes will apply. Project review may require mitigation regardless of whether an EIS is prepared. A copy of the subsequent threshold determination for this proposal may be obtained upon request.

File No.	11-113752-LO
Project Name/Address:	Ng Critical Areas Modification 13612 SE 7th St.
Planner:	Reilly Pittman
Phone Number:	425-452-4350
Minimum Comment Period:	**June 16, 2011**

Materials included in this Notice:

- ☒ Blue Bulletin
- ☒ Checklist
- ☒ Vicinity Map
- ☒ Plans
- ☒ Other: Narrative Description
  Critical Areas Report: Wetland and Stream Study by J.S. Jones and Associates
  Wetland Rating and Data Forms – In File
  Habitat Assessment – In File
  Geotech Report – In File

Figure 1 - Vicinity Map

SEPA Checklist Reviewed by Reilly Pittman on 5/24/2011

City of Bellevue
ENVIRONMENTAL CHECKLIST

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

BACKGROUND INFORMATION

Property Owner: Eric Ng
Proponent: Eric Ng
Contact Person: Eric Ng A
(If different from the owner. All questions and correspondence will be directed to the individual listed.)
Address: 14828 12th Drive S.E.
Mill Creek, WA 98012
Phone: 206-321-8983

Proposal Title: Single-Family Residence Construction in a Stream Buffer and BSBL
Proposal Location: 13612 S.E. 7th St.
Bellevue, WA 98005
(Street address and nearest cross street or intersection) Provide a legal description if available. LOT 2 BELLEVUE SP #03-132377-LF REC #20041129900017 SD SP DAF W 260 FT OF N 1/2 OF S 1/2 OF SE 1/4 OF SW 1/4 LESS CO RD STR 34-25-05.

Give an accurate, brief description of the proposal's scope and nature:

1. General description: The applicant proposes to average a stream buffer and BSBL for the purposes of constructing a single-family residence under a building permit. The site was short-platted in 2004 with two NGPA containing steep slopes, and wetlands and streams. **reduction of 25-foot structure setback from stream buffer and buffer averaging to build new SFR.**

2. Acreage of site: 0.5 acres

3. Number of dwelling units/buildings to be demolished: None

4. Number of dwelling units/buildings to be constructed: One

5. Square footage of buildings to be demolished: N/A

6. Square footage of buildings to be constructed: Approximately 3,000 s.f (final design not ready)

7. Quantity of earth movement (in cubic yards): Not known

8. Proposed land use: Single-family residence

9. Design features, including building height, number of stories and proposed exterior materials: Three bedrooms, two floors, two-car garage, wood frame structure with wood, stucco and other exterior materials, design not completed at this time

RP

10. Other

Estimated date of completion of the proposal or timing of phasing:
Permitting Process: Starting May 2011
Construction Phase: Estimated September 2011, pending permit approval

Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes,explain No

List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.
A Critical Area Report: Wetland and Stream Study is accompanying the Critical Area Land Use Permit (see attached reports)
Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. List dates applied for and file numbers, if known.
None

List any government approvals or permits that will be needed for your proposal, if known. If permits have been applied for,list application date and file numbers, if known.
Critical Areas Land Use Permit
Building Permit
Clearing and Grading

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

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

_ Preliminary Plat or Planned Unit Development
Preliminary plat map

_ Clearing & Grading Permit
Plan of existing and proposed grading
Development plans

_Building Permit (or Design Review)
Site plan
Clearing & grading plan

_ Shoreline Management Permit
Site plan

RP

A. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site: _ Flat **X** Rolling _ Hilly **X** Steep slopes _ Mountains _ Other

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

40% **slopes contained within Native Growth Protection Area easement.**

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

Gravelly sandy loam

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

Not to our knowledge

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

None known

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

No. best management practices (BMPs) will be used to limit erosion (i.e. silt fence, mulching, vegetative buffer for construction site, sediment basin/trap).

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

20% **impervious surface coverage limits in LUC 20.20.010**

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

Implement a Temporary Erosion and Sediment Control (TESC) Plan.
Use of filter fence, straw mulch, clearing and grading during dry periods

2. AIR

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

During Construction: dust, emission from equipment, vehicles
Post Construction: automobile exhaust

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

No

RP

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

Implement standard measures to control emission during construction. May include use of dust control measures, alternative fuels and clean equipment, use of electricity.

3. WATER

a. Surface

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

There is a Category IV wetland and a Type N stream on the subject property, see submitted Critical Area Report. The stream and wetland are unnamed. The wetland and stream are tributary to Kelsey Creek.

wetland contained within existing Native Growth Protection Area easement.

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

Yes, removal of invasive Himalayan blackberry and planting of native plant species, see submitted Mitigation Plan.

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

None.

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

No

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

No

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

No

b. Ground

(1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description.

No

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

None

RP

c. Water Runoff (Including storm water)

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

Roof drains to be connected to the city's storm system.

drainage will be reviewed under construction permits

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

Fertilizers and pesticides from residential landscape use may enter ground water. **The City's BMPs would be applicable**

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

Limiting use of inorganic fertilizer and pesticides.
Use of environmentally safe organic fertilizer and pesticides.

4. Plants

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

_ deciduous tree: alder, maple, aspen, other
X evergreen tree: fir, cedar, pine, other
X shrubs
_ grass
_ pasture
_ crop or grain
_ wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other
_ water plants: water lily, eelgrass, milfoil, other
X other types of vegetation

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

Invasive such as blackberry

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

None

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

Split rail fencing to be placed at the edge of the proposed buffer.
Removal of invasive species.
Avoiding or minimizing disturbance of vegetation during construction.
signage will be placed as well as mitigation planting installed

5. ANIMALS

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

X Birds: hawk, heron, eagle, songbirds, other:
_ Mammals: deer, bear, elk, beaver, other:
_ Fish: bass, salmon, trout, herring, shellfish, other:

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

None

RP

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

No

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

A buffer restoration plan will be implemented on the property. This will include establishment of native trees, shrubs, and groundcovers.

6. Energy and Natural Resources

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

Electricity and natural gas for heating.

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

No

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

None

7. Environmental Health

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

None

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

Does not apply

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

Does not apply

b. Noise

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

Residential traffic

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

Short Term: Construction traffic (grading, hauling trucks, other vehicles)
Long Term: Vehicular traffic (passenger car)

Noise regulated by BCC 9.18

RP

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

None

8. Land and Shoreline Use

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

Residential - single family homes

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

No

c. Describe any structures on the site.

A private road easement has been installed.

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

No.

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

R 1.8

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

Residential **single-family low density**

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

None

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

Yes, there are two recorded NGPA's associated with the property.

NGPAs contain wetland and steep slopes

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

Approximately four (4) people will occupy the completed residence.

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

None

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

None

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

Compliance to the City of Bellevue' Land Use Code.

9. Housing

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

One unit of moderate income, single-family residence.

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

None

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

Does not apply

10. Aesthetics

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

Thirty five (35) feet. Exterior materials will be Cement Board, Wood, Stucco or other materials.

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

None

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

Does not apply

11. Light and Glare

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

Indoor and outdoor lighting fixtures during nighttime use.

required to be directed away or shielded from wetland and stream by LUC 20.25H

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

No

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

None

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

None

12. Recreation

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

None

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

No

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

Does not apply

13. Historic and Cultural Preservation

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

None

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

Does not apply.

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

Does not apply.

14. Transportation

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

S.E. 7th Street will serve as the short plat's access (see site plan).

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop? 140th Ave Se & Se 7th St

Bus stop at 168th Ave. SE and SE 19th St is 0.21 miles from the site.

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

Completed = 3
Eliminated = None

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

No

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

No

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

Daily passenger vehicle traffic of 10 vehicle trips or more is anticipated

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

None

15. Public Services

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

No

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

No

16. Utilities

a. Circle utilities currently available at the site:

Electricity, natural gas, water, refuse service, telephone, sanitary sewer, other (TV).

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

Electricity (PSE) underground connection to existing lines
Water - connect to existing stub
Sewer – connect to existing sewage disposal
Telephone (Qwest) connect to existing box
Cable (Comcast) connect to existing lines

Signature

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

Signature:

Date Submitted: 05-04-2011

NARRATIVE DESCRIPTION

TAX PARCEL NO. 342505-9285
13612 SE 7th St., Lot 2
Bellevue, WA

To comply with the decision criteria in Section 20.30P.140 of the City of Bellevue Code, the proponent will submit application documents for the Critical Areas Land Use Permit. The proponent hired a consulting firm to conduct a Critical Area Report (Wetland and Stream Study), a Fish and Wildlife Habitat Study. The Geotechnical Study for the Anspach 4-Lot Short Plat was submitted.

The applicant proposes to construct a single-family home residence on Lot 2 of the Anspach Short Plat No. 2. The Anspach Short Plat was recorded November 29, 2004. The Critical Area Report was conducted to determine the presence and/or extent of critical areas in the subject property. The Habitat Study was conducted to evaluate the impacts of the proposed development on fish and wildlife habitat. The Geotechnical Study was conducted to evaluate the subsurface conditions at the project site and to provide geotechnical engineering recommendations for developing the site. The results of these studies were used in the development of the site plan and to comply with all applicable land use requirements for development for the City of Bellevue.

The proposed site for the construction of a single-family residence is encumbered by a Category IV wetland and a Type N stream (see Wetland and Stream Assessment Report). No impacts to wetland and stream are proposed.

The applicant is requesting relief from the 25-foot building setback line (BSBL) from stream buffer. The lot was legally created in 2004 subject to the critical area setbacks and a small BSBL in the prior code. The current building setback was increased to 25 feet. In addition, the wetland boundary and stream ordinary high water (OHWM) in the original short plat was incorrect located. The 25-foot stream buffer extends beyond the recorded NGPA. The proposed site plan accurately depicts the location of the wetland and stream and stream buffer. The proposed area of impact within the BSBL is 1,125 square feet. The proposed BSBL is 6 to 25 feet with a small buffer averaging area. To improve and protect the functions of the stream and wetland, 1,125 square feet of the wetland and stream buffer will be improved by removing the existing invasive vegetation and replanted with native vegetation.

The site will not accommodate any single-family residence without relief from the full BSBL. There is no other use of the property than for a single-family residence. The proposed residence is of similar size to other residences in the neighborhood. The choice and design of the residence was determined by the applicant. The proposed house is located at the minimum side and front setbacks in the corner of the lot with the most area outside of the BSBL. There are no locations with less reduction to the BSBL. The

development of the lot will not adversely impact the wetlands and stream, but rather provides an opportunity for removal of invasives and establishment of a native plant community in the buffer.

The code may allow buffer averaging when certain criteria are met. The proposed development can not reasonable be accommodated without buffer averaging. Without buffer averaging there would not be access around the building for maintenance of the structure, fire protection and reasonable movement around the building. Buffer averaging will not impact buffer function, because the buffer is down slope from the stream and the buffer will be enhanced with native vegetation. The total buffer area is not reduced. The buffer is contiguous and on the same side of the wetland. Averaging does not affect slope stability or increase the likelihood of erosion. Averaging will not adversely impact habitat or species of local importance. At no point is the averaging less than 75% of the full buffer width.

The mitigation plan provides for enhancement of 1,125 square feet of buffer, which is equal to the area of reduced BSBL. The mitigation plan includes discuss of mitigation requirements, maintenance, monitoring and performance standards for the planting. The discussion of the functions and values is provided in the critical area report. Under the current conditions of the NGPE, buffer are functions at a low level. Although the on-site area of buffer tiny in comparison the size of the stream system, the opportunity for requiring enhancement exists as a condition of granting a reduced BSBL. The functional improvement to the buffer is significant for this property. The developed area is downslope from the stream buffer, so water quality will not be impacted. Stormwater will not be discharged to the on-site stream.

Decision Criteria

1. The proposal includes a plan for restoration of a portion of the critical area buffer.
2. There will be a net gain of 1,125 square feet of restored buffer by removing invasives and replanting with natives. Invasives will be removed from the entire on-site buffer.
3. Stormwater functions will not affect the on-site stream or buffer.
4. The applicant will post a performance, maintenance and monitoring bond for the mitigation.
5. Mitigation with performance standards will improve the functions of the buffer.
6. The resulting development is consistent with the use of other lots in the Anspach Short Plat and SE 7th Street.

J. S. Jones and Associates, Inc.

CRITICAL AREA REPORT: WETLAND AND STREAM STUDY

of the

Ng Property

13612 S.E. 7th St.
Bellevue, WA 98005

Tax Parcel Number: 342505-9285
Southwest Quarter of Section 34, Township 25N, Range 05E

Prepared for:

Eric & Michelle Ng

14828 12th Drive SE
Mill Creek, Washington 98012
206-321-8983

Date: May 4th, 2011

Prepared by:
Robert E. King, Certified Professional Wetland Scientist
Jeffrey S. Jones, Certified Professional Wetland Scientist

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Attachments

Wetland Determination Data Forms-Western Mountains, Valleys and Coast Region
DOE Wetland Rating Form
Wetland/Stream Map

1.0 Project Description

The applicant proposes to construct a single-family home residence on Lot 2 of the Anspach Short Plat No. 2. The Anspach Short Plat was recorded November 29, 2004. The purpose of this study is to identify and rate wetlands and streams on or near the site.

2.0 Parcel Identification and Directions

The tax parcel number is 342505-9285 (see Figure 1). The parcel is located in the southwest Section 34, Township 25 North, Range 5 East, of the Willamette Meridian.

Directions from Bellevue City Hall are as follows head north on 110th Avenue N.E. toward N.E. 6th Street and travel 0.2 miles; take the 2nd right onto N.E. 8th Street and travel 0.3 miles; keep right at the fork and travel 1.6 miles; turn right at 140th Avenue N.E. and travel 0.9 miles; turn right at S.E. 7th Street and travel 0.2 miles and arrive at 13612 S.E. 7th Street.

3.0 Methodology

The wetland assessment and delineation were performed using the Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (USACOE, 2008). The 1997 Washington State Wetlands Identification and Delineation Manual was not used because it was replaced by the COE methodologies March 14th, 2011.

The Routine Determination method was used with considerations for "Problem Areas". The Routine Determination methodology is "used when the project area is small, plant communities are homogeneous, plant community boundaries are abrupt, and the project is not controversial." The Atypical Method was not used because the alteration of the site was permitted and the wetland determination for these areas is not controversial. At the time the lot was legally created, a NGPE for critical areas was established. Clearing and grading outside of the NGPE occurred in preparation of site development.

The assessment included a review of the King County GIS Database, the current Washington Department of Natural Resources (DNR) GIS Data and the USDA Soil Conservation Service's, Soil Survey of the King County Area, Washington (Snyder, 1973). Wetland boundary and Ordinary High Water Mark flags and sample location were placed by *J. S. Jones and Associates, Inc*. staff. Flag locations were surveyed by a Group Four, Inc., licensed civil engineers and licensed professional land surveyors.

Figure 1 - Vicinity Map

4.0 General Site Description

According to aerial photos, sometime between 2005 and 2007, the private street was constructed and most of the subject lot was cleared and graded. The recorded NGPA was not fenced or signed or cleared. The current plant community of the NGPA is red alder and Himalayan blackberry. The NGPA has an excavated channel with a berm to the west of the channel. The channel intercepts and directs runoff from the lots above to the stream south of the private street. The stream is intermittent, non-fish bearing and tributary to Kelsey Creek. The remainder of the site has been graded to less than a 5% slope and is currently vegetated with grasses and weeds.

There is a new existing house on the lot to the north. The private street is to the west and south. The lots to the east have existing single-family residence with large lawns. Drainage pipes from these residences outflow onto the subject property.

5.0 Vegetation

5.1 Vegetation Methodology

Hydrophytic vegetation has adaptations that allow these species to survive in saturated or inundated environments. These environments are classified according to the *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin, 1979). The probability of species being found in wetland environments has been determined by the U.S. Fish and Wildlife Service in the *National List of Vascular Species that Occur in Wetlands: 1996 National Summary* (USFWS, 1996). An indicator status was applied to each species according to its probability of occurring in wetlands (see Table 1).

Table 1. Plant Indicator Status

Indicator Category	Symbol	Occurrence in Wetlands
Obligate Wetland	OBL	> 99%
Facultative Wetland	FACW	67-99%
Facultative	FAC	34-67%
Facultative Upland	FACU	1-33%
Upland	UPL	< 1%

Vegetation data was recorded at two sample locations. At each sample location, the dominant species were assessed by indicator status to determine if the plant community was predominantly hydrophytic. Rules for determining dominant species are from the Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (USACOE, 2008). Dominants were determined using the 50/20 rule. Using this rule, percent cover for each stratum was added by order of descending cover until 50% cover was reached. These species were considered dominants. The next most common species was also included as a dominant if it had over 20% cover.

5.2 Vegetation Results

At sample location 1 (SL-1), the plant community is dominated by red alder (*Alnus rubra*, FAC), unidentified grasses, (*Gramineae*, spp., FAC), skunk cabbage (*Lysichiton americanum*, OBL), lady fern (*Athyrium filix-femina*, FAC) and Himalayan blackberry (*Rubus armeniacus*, FACU). The plant community is hydrophytic because more than 50% of the dominant species are OBL, FACW, or FAC.

At SL-2, the plant community is dominated by unidentified grasses and weeds. The plant community is non-hydrophytic because more than 50% of the dominant species are OBL, FACW, or FAC.

6.0 Hydrology

6.1 Hydrology Methodology

The *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region,* requires the presence of hydrology indicators which are broken into four groups: Group A – direct observation of surface or groundwater; Group B – evidence of flooding or ponding; Group C – evidence of soil current or recent soil saturation; Group D – landscape characteristics and vegetation and soil features that indicate existing wet conditions. Indicators are further divided in primary and secondary categories. Wetland hydrology indicators can be found in Table 9 of the COE Interim Regional Supplement (COE, 2008). To meet the hydrology criteria, one primary or two secondary indicators must be present for 14 or more consecutive days of flooding or ponding, or a water table within 12 inched or less below the soil surface, during the growing season 5 out of 10 years. The growing season can either determined by above-ground growth and soil temperature.

6.2 Hydrology Results

SL-1 meets the criteria for wetland hydrology. A water table at the soil surface and saturated soils were present along the wetland boundary.

SL-2 does not have wetland hydrology. The soils profile was not saturated at or above 12 inches. A water table within 20 inches of the soil surface was not present. Although the soils profile is gleyed and mottled, mottling and gleyed soils are remnant of the original soils profile and did develop under the current hydrologic conditions. The upper soils horizons has been removed.

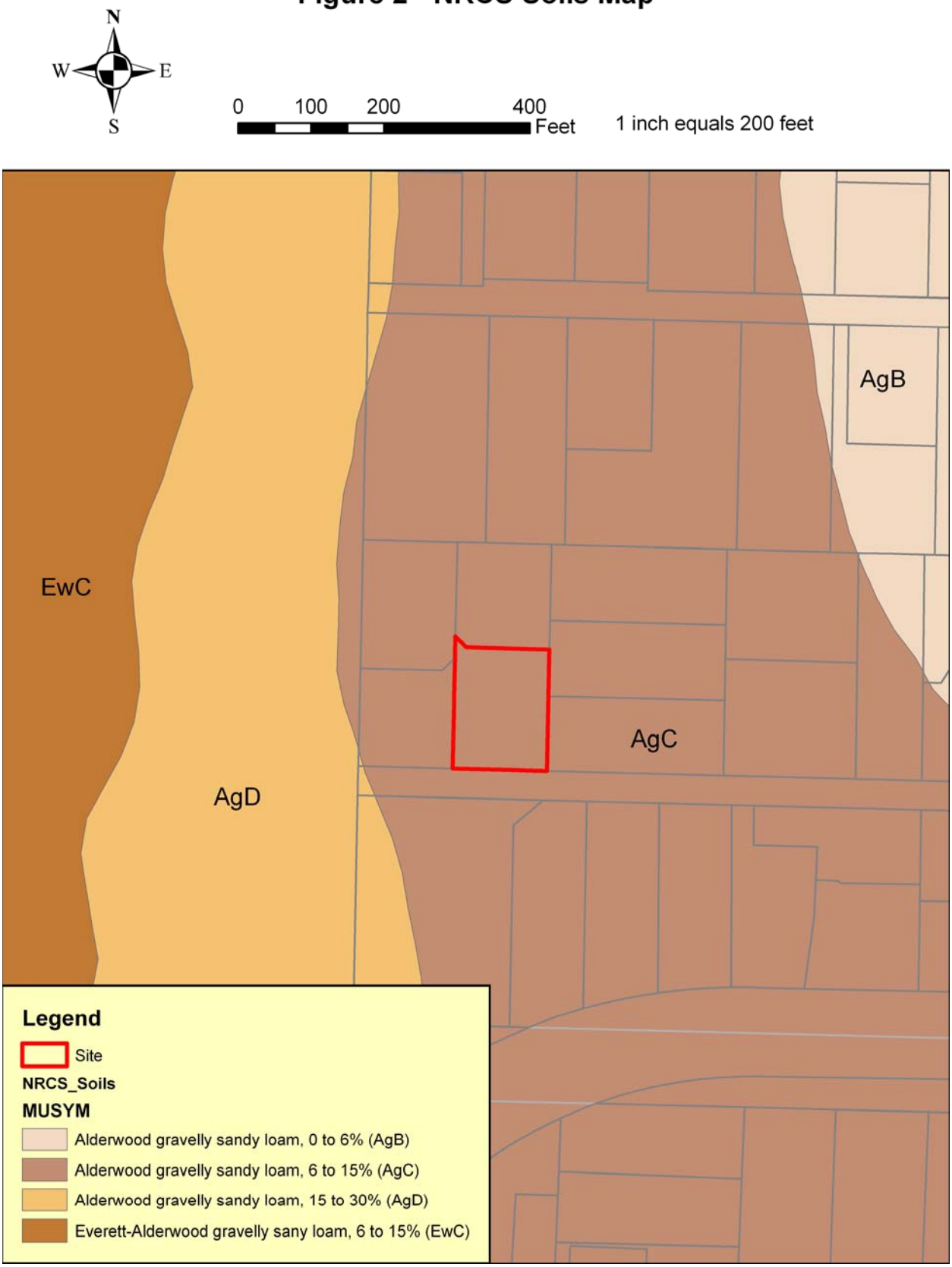
7.0 Soils

7.1 Soils Methodology

The procedures for soil sampling are provided in the Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (USACOE, 2008).

Hydric soils are soils that are “saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part (USACOE, 2008)”. They are either organic soils (peats and mucks), or are mineral soils that are saturated long enough to produce soil properties associated with a reducing environment. These soils have hydric characteristics such as a reduced matrix (a matrix that changes color when exposed to air), redox depletions (gleying), or redox concentrations (mottles). Detailed information regarding soils indicators can be found in the NTCHS, *Field Indicators of Hydric Soils in the United States* (Natural Resources Conservation Service, 2010).

Figure 2 - NRCS Soils Map



7.2 Soil Series

The USDA Soil Conservation Service (SCS) mapped the on-site soils as Alderwood gravelly sandy loam, 6 to 15 percent slopes (AgC) (see Figure 2). On-site investigation concurs that the soils profile was Alderwood prior to recent grading.

Alderwood gravelly sandy loam is a "moderately well drained that formed under conifers in glacial deposits. In a typical profile, the surface layer and subsoil are very dark brown, dark-brown, and grayish-brown gravelly sand loam about 27 inches thick. The substratum is grayish-brown, weakly consolidated to strongly consolidated glacial till that extends to a depth of 60 inches or more. Included with this soil in mapping are small areas Indianola loamy sand, Norma sandy loam or Dupont Muck." (Snyder, 1973).

Norma fine sandy loam is a "poorly drained" soil that formed in alluvium under sedges, grasses, conifers and hardwoods. This soil is on long, narrow, stream bottoms and in depressions and on alluvial fans throughout uplands. In a typical profile the surface layer is very dark brown loamy sand to a depth of 9 inches deep. The lower part to a depth of 30 inches is distinctly mottled, dark grayish brown fine sandy loam. The substrate, to a depth of 71 inches, is mottled, grayish brown sandy loam. (Snyder, 1973).

7.3 Soils Results

The soil at SL-1 is Norma sandy loam. From 0 to 6 inches the soil is a black gravelly sandy loam (10YR 2/1) (MacBeth, 2000). From 6+ inches, there is a restrictive layer. The soil is hydric since it has a one chroma and a restrictive layer.

The soil at SL-2 is the substratum of Alderwood gravelly sandy loam. From 0 to 18+ inches the soil is a dark greenish gray (Gley 2 4/1) with prominent mottling (10YR 5/8). The soil is non-hydric since grading deposited till material to the surface.

8.0 Wetland and Stream Determination, Ratings, and Buffers

The King County, National Wetland and DNR wetland inventories do not show wetlands within 225 feet of the property's boundary (see Figure 3). The King County Stream inventory shows an on-site stream traversing the property that is tributary to Kelsey Creek. There is another off-site stream located approximately 150 feet to the north that is also tributary to Kelsey Creek.

On-site field investigation found one wetland (Wetland A) and excavated stream occupying the recorded NGPA. The stream is an excavated channel that intercepts runoff from Wetland A and lots to the east. Wetland A is rated as a sloped wetland using the hydrogeomorphic method. Water flows through the wetland in one direction without being impounded. There is no overbank during heavy storm events. The buffers of Wetland A are disturbed by residential development and there is an absence of habitat structures. Overall, Wetland A scores 23 points which includes 15 habitat points and is rated a Category IV Wetland (see attached rating form).

According to the City of Bellevue's Land Use Code (CBLUC) Section 20.25H.095.C.1.a.ii states:

> Developed Site. A developed site is any site where the wetland and wetland buffer have been included within an NGPE or NGPA approved and recorded prior to August 1, 2006, or any site abutting an NGPA approved and recorded prior to August 1,

> 2006, containing the wetland and wetland buffer where such site does not also contain a wetland. Wetlands on developed sites shall be governed by the buffer established within the approved and recorded NGPA or NGPE, no additional wetland buffer shall apply.

Since the property was created in a short plat and recorded in 2004, the buffer of the wetland A does not extend beyond the boundary of the recorded NGPA.

The on-site stream is tributary to Kelsey Creek and was rated as Type O on the short plat. However, the stream meets the definition of a Type "N" water per CBLUC 20.25H.075.B.3 since it has a surface connection to Kelsey Creek. The NGPA south of the private street has a steep slope designation and is a natural barrier to fish passage. Type N Waters have a 25-foot buffer and a 25-foot (BSBL) structure setback.

9.0 Functional Assessment

The NGPE is currently functioning at a low level because the plant community is dominated by dense Himalayan blackberry. The presence of Himalayan blackberry indicates that the area was previously cleared. Two small diameter drainage pipes discharge into the wetland. The sources of water for these pipes are neighboring properties. Water quality may be poor. The wetland and stream are sloping and do not retain water for downstream flood control. Large black cottonwood and red alder lack large stick nests or other critical habitat features.

10.0 Impacts To The Building Setback Boundary Line (BSBL)

The applicant is requesting relief from the 25-foot BSBL from critical areas of the NGPA's. The lot was legally created in 2004 subject to the critical area setbacks in the prior code. The present building setback was increased to 25 feet. In addition, the wetland boundary and stream ordinary high water (OHWM) in the original short plat was incorrect. The 25-foot stream buffer extends beyond the recorded NGPE. The proposed site plan accurately depicts the location of the wetland and stream and stream buffer. The proposed area of impact within the BSBL is 1,125 square feet. The proposed BSBL is between 6 and 25 feet.

To improve and protect the functions of the stream and wetland, 1,125 square feet of the wetland and stream buffer will be improved by removing the existing invasive vegetation and replanted with native vegetation.

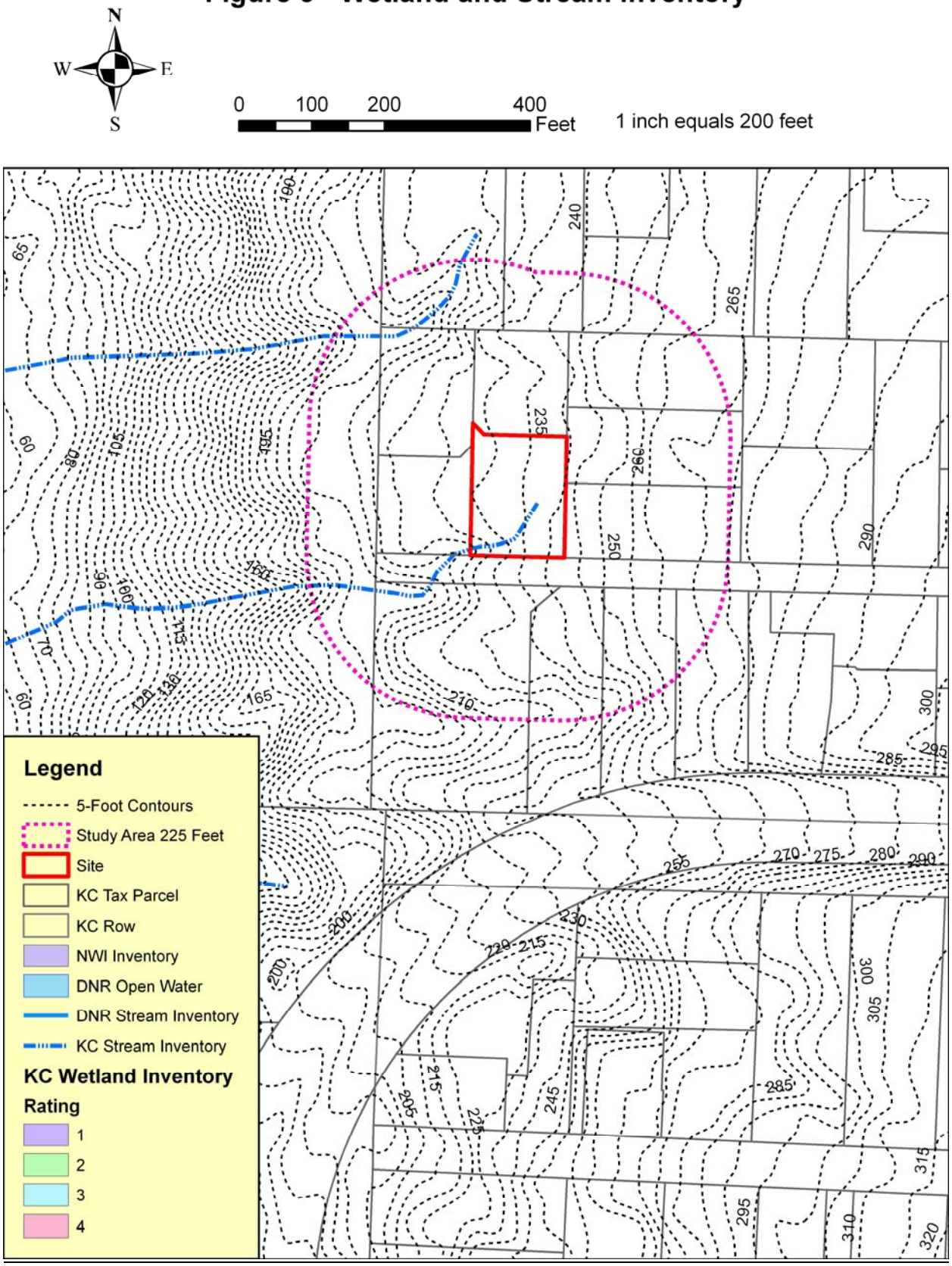
11.0 Authority

This wetland and stream determination is in accordance with Section 404 of the Clean Water Act. Wetlands are "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas" (Federal Register, 1980) (Federal Register, 1982).

12.0 Limitations

Wetland determinations and delineations are not final until approved by regulatory agencies and/or local jurisdictions. *J. S. Jones and Associates, Inc.* does not guarantee acceptance or approval by regulatory agencies, or that any intended use will be achieved.

Figure 3 - Wetland and Stream Inventory



13.0 References

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Federal Register. 1980. 40 CFR Part 230: Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material. Vol. 45, No. 249, 85352-85353. U.S. Government Printing Office, Washington D.C.

Federal Register. 1982. Title 33: Navigation and Navigable Waters; Chapter II, Regulatory Programs of the Corps of Engineers. Vol. 47, No. 138, p 31810. U.S. Government Printing Office, Washington D.C.

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USFWS. 1996. National List of Plant Species that Occur in Wetlands: 1996 National Summary. U.S. Fish and Wildlife Service. St. Petersburg, FL.

Attachments

NG PROPERTY - MITIGATION PLAN

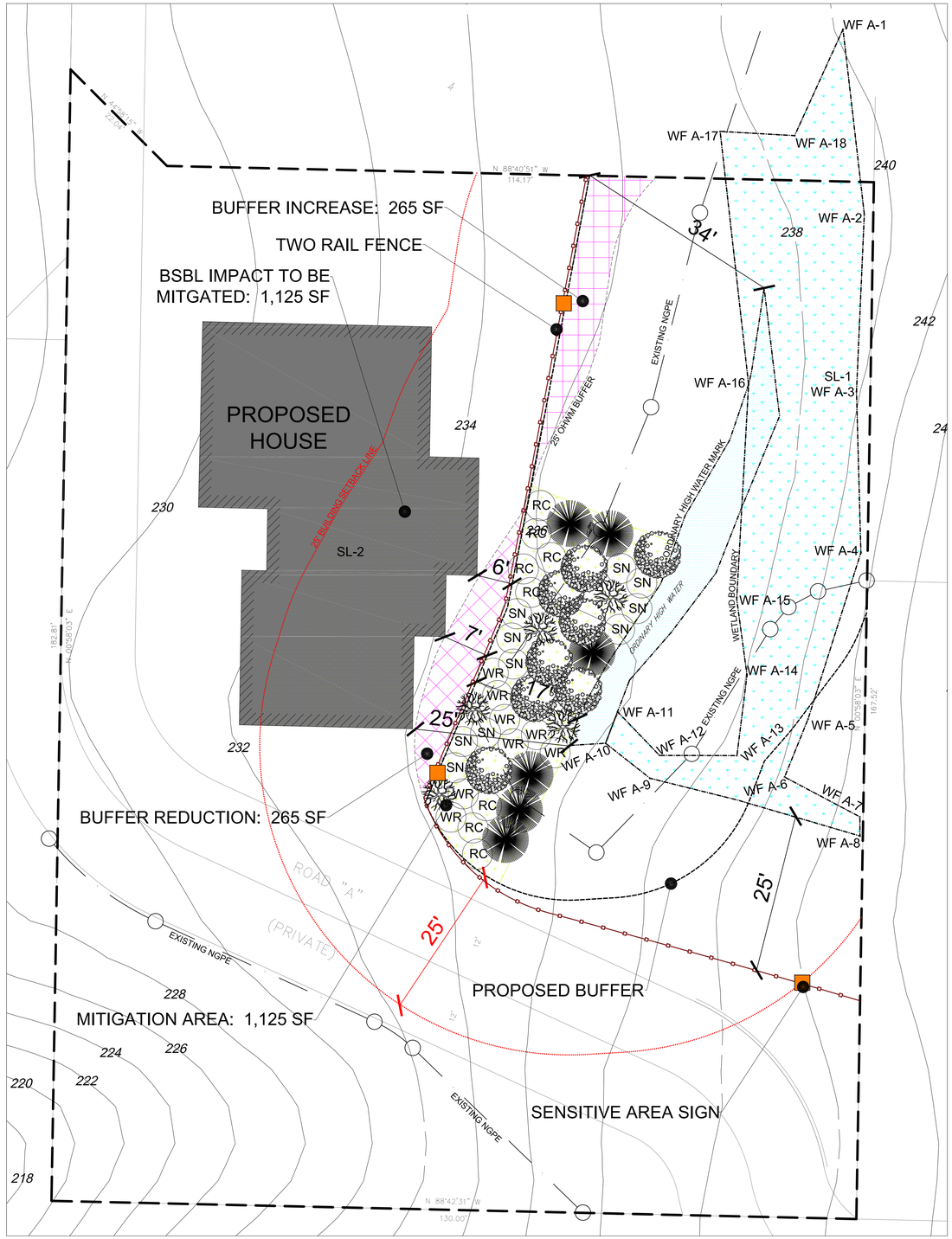
SW 1/4 OF SEC. 34, TWP. 25 N, RGE. 05 E, W.M.

TAX PARCEL ID NO.: 342505-9285

NORTH

0 5 10 20 40

SCALE: 1" = 10'

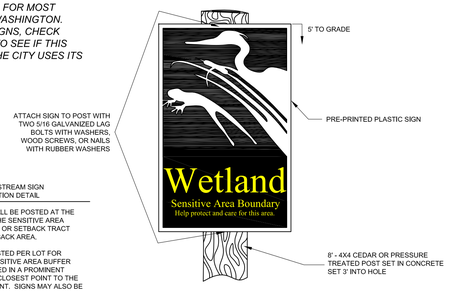


PLANT SCHEDULE

SYMBOL	COMMON NAME	SCIENTIFIC NAME	QTY.	SIZE
	BIG-LEAF MAPLE	ACER MACROPHYLLUM	8	5 GAL
	DOUGLAS FIR	PSEUDOTSUGA MENZIESII	6	5 GAL
	VINE MAPLE	ACER CIRCINATUM	5	2 GAL
RC	RED-FLOWERING CURRANT	RIBES SANGUINEUM	8	1 GAL
WR	WOOD ROSE	ROSA GYMNOCARPA	8	1 GAL
SN	SNOWBERRY	SYMPHORICARPOS ALBUS	10	1 GAL

SENSITIVE AREA SIGN DETAIL

NOTE: THIS DETAIL IS TYPICAL FOR MOST JURISDICTIONS IN WESTERN WASHINGTON. PRIOR TO INSTALLATION OF SIGNS, CHECK WITH THE CITY OF BELLEVUE TO SEE IF THIS SIGN IS APPROPRIATE OR IF THE CITY USES ITS OWN SPECIFIC SIGN.



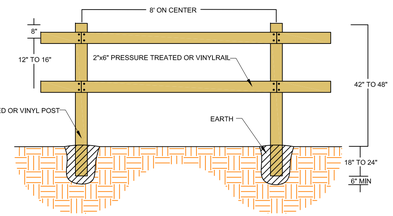
WETLAND/STREAM SIGN INSTALLATION DETAIL

THE WETLAND SIGN SHALL BE POSTED AT THE BOUNDARY BETWEEN THE SENSITIVE AREA BUFFER, SETBACK AREA OR SETBACK TRACT AND THE BUILDING SETBACK AREA.

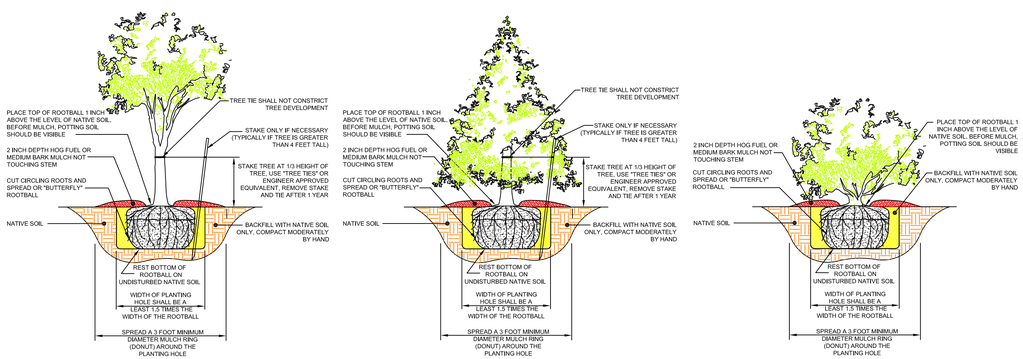
ONE SIGN SHALL BE POSTED PER LOT FOR EVERY 100-FEET OF SENSITIVE AREA BUFFER AND SHALL BE STATIONED IN A PROMINENT LOCATION, I.E.: AT THE CLOSEST POINT TO THE PORPOSED DEVELOPMENT. SIGNS MAY ALSO BE ATTACHED TO FENCES.

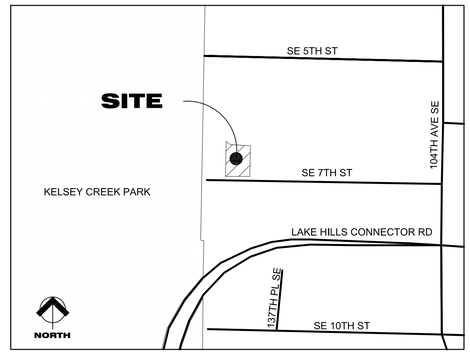
TWO RAIL FENCE DETAIL

NOTE: TWO RAIL FENCE MUST BE WILDLIFE PASSIBLE. FENCE MAYBE CONSTRUCTED OF WOOD OR VINYL COATED PLASTIC.



TREE AND SHRUB PLANTING AND STAKING DETAIL





VICINITY MAP

NOT TO SCALE

CONTACT INFORMATION

APPLICANT:
ERIC & MICHELLE NG
14828 12TH DRIVE SE
MILL CREEK, WASHINGTON 98012
206-321-8983

ENVIRONMENTAL CONSULTANT:
J. S. JONES AND ASSOCIATES, INC.
ATTN: JEFFERY S. JONES, PWS
P.O. BOX 1908
ISSAQUAH, WASHINGTON 98027
253-905-5736

LEGAL DESCRIPTION

342505 285 LOT 2 BELLEVUE SP #03-132377-LF REC #20041129900017 SD SP DAF W 260 FT OF N 1/2 OF S 1/2 OF SE 1/4 OF SW 1/4 LESS CO RD STR 34-25-05.

KEY

- WETLAND BOUNDARY
- ORDINARY HIGH WATER MARK (OHWM)
- 25' ORDINARY HIGH WATER MARK BUFFER
- 25' BUILDING SETBACK LINE (BSBL)
- EXISTING NGPE
- PROPOSED OHWM BUFFER
- SPLIT RAIL FENCE
- BUFFER REDUCTION: 265 SF
- BUFFER INCREASE: 265 SF
- BSBL IMPACT TO BE MITIGATED: 1,125 SF
- OHWM BUFFER TO BE ENHANCED: 1,125 SF

NOTES

- THE BUFFER FOR THE ON-SITE WETLAND IS NOT SHOWN BECAUSE OF THE ESTABLISHED NGPE.

NO.	DATE	BY	REVISION
1	5/22/11	LRE	SCALE, SAMPLE LOCATIONS, NOTES

CONSULTANT:

J. S. Jones and Associates, Inc.
Environmental Consultants
Wetlands, Streams, and Wildlife
P.O. BOX 1908 ISSAQUAH, WASHINGTON 98027 253-905-5736

CLIENT:

ERIC & MICHELLE NG
14828 12TH DRIVE SE MILL CREEK, WASHINGTON 98012 206-321-8983

PROJECT:

NG PROPERTY
MITIGATION PLAN
TAX PARCEL ID NO.: 342505-9285

DESIGNED BY:	L. Erickson
DRAWN BY:	L. Erickson
CHECKED BY:	Jeff Jones
APPROVED BY:	
DATE:	5/4/11

SCALE 1"=10'

SHEET 1 of 2

NG PROPERTY - MITIGATION PLAN

SW 1/4 OF SEC. 34, TWP. 25 N, RGE. 05 E, W.M.

TAX PARCEL ID NO.: 342505-9285

1.0 Project Description
The applicant proposes to build a single-family residence on the subject parcel. The development area is limited by the presence of an on-site wetland and stream. When the subject property was plated an NGPE was established to protect the on-site sensitive areas. The City of Bellevue has updated its Land Use Code since the property was plated and the NGPE was created. Buffers and Building Setback Lines (BSBL) were increased with the updated Land Use Code. The current Ordinary High Water Mark (OHWM) buffer extends beyond the established NGPE. In addition, the BSBL extends an additional 25 feet from the OHWM buffer. The applicant proposes to construct the proposed residence outside of the current 25-foot OHWM buffer but inside of the 25-foot BSBL. The proposed BSBL impact is 1,125 square feet. The BSBL impact area will be mitigated by removing invasive plant material and installing native trees and shrubs in 1,125 square feet of the OHWM buffer. Since the proposed structure will be located immediately adjacent to the 25-foot buffer, the applicant proposes buffer averaging to allow approximately 5 feet of access around the structure. The proposed reduction is 265 square feet and the proposed increase is 265 square feet. No net loss of buffer area is proposed. The new proposed buffer will be fenced with a wild life passible two rail fence and sensitive area signs will be posted to deter future intrusions into the sensitive areas.

1.2 Goals and Objectives
The goal of mitigation is to increase the functions and values of the existing OHWM buffer through enhancement. Currently the OHWM buffer is dominated by invasive vegetation. The applicant proposes to remove invasive plant material at a ratio of 1:1 (impact to enhancement). Native plant material will provide wildlife habitat, increase plant diversity, and as they develop will help shade out invasives. The objectives necessary to meet the above stated goal area as follows:

- Remove invasive vegetation from the buffer
- Install native vegetation within the buffer
- Maintain and monitor the enhancement area for a period of three years or until the site meets the specified performance standards
- Install sensitive area signs at the limit of the buffer to deter future intrusions into the sensitive area
- Record the sensitive area in a "Notice on Title"
- If the enhancement area fails to meet performance standards provide a contingency plan to rectify the situation.

2.0 Project Location
The property is located at 13612 SE 7th Street, in Bellevue, Washington.

3.0 Responsible Parties
Property Owners
Eric & Michelle Ng
14828 12th Drive SE
Mill Creek, Washington 98012
206-321-8983

Environmental Consultant
J. S. Jones and Associates, Inc.
Attn: Jeffery S. Jones, PWS
P.O. Box 1908
Issaquah, Washington 98027
253-905-5736

4.0 Standards
All work and materials shall conform to City of Bellevue standards and specifications, and to the specifications and details shown on these plans.

5.0 Contractor Information
When it is available, contact information shall be provided to City of Bellevue staff that includes names, addresses and phone numbers of persons/firms that will be responsible for grading the mitigation area, installing required plants, and performing required maintenance and monitoring.

6.0 Contractor's Qualifications
Contractor/Landscape Installer must be experienced in mitigation work. The Permittee shall provide that there is one person on the site at all times during work and installation who is thoroughly familiar with the type of materials being installed and the best methods for their installation, and who shall direct all work being performed under these specifications. This person shall be experienced in installing native plant materials for wetland mitigation or restoration projects, unless otherwise allowed by the Landscape Designer, Wetland Biologist and/or City of Bellevue staff.

7.0 Site Conditions
The Contractor shall immediately notify the Landscape Designer and/or Wetland Biologist of drainage or soil conditions likely to be detrimental to the growth or survival of plants. Locations shall be as depicted in the approved plan set. The Landscape Designer and/or Wetland Biologist may adjust the locations of plantings shown on plans based on field conditions. Planting operations shall not be conducted under the following conditions: freezing weather, when the ground is frozen, excessively wet weather, excessively windy weather, or in excessive heat. Changes should be documented and as-built drawings submitted to City of Bellevue staff upon request for formal construction approval.

8.0 Plants
8.1 Origin: Plant materials shall be Northwest native plants, nursery grown in the Puget Sound region of Washington.
8.2 Plant Names: Plant names shall comply with those generally accepted in the native plant nursery trade. Any questions regarding plant species or variety shall be referred to the Landscape Designer or Wetland Biologist. All plant materials shall be true to species and variety.
8.3 Plant Substitutions: Same species substitutions of larger size do not require special permission. However, small plants often experience less transplant shock and adapt more quickly to site conditions, resulting in a higher success rate. As such, smaller plants will be approved as substitutions based on certain site-specific conditions (trees not less than 1 gallon size however). All plant substitutions shall be approved by Landscape Designer, Wetland Biologist and/or City of Bellevue staff.
8.4 Quality and Condition: Plants shall be normal in pattern of growth, healthy, well-branched, vigorous, with well-developed root systems, and free of pests and diseases. Damaged, diseased, pest-infested, scraped, bruised, dried-out, burned, broken, or defective plants will be rejected.
8.5 Intermediate Inspections: All plants shall be inspected and approved by the Landscape Designer and/or Wetland Biologist prior to installation. Condition of roots of a random sample of plants will be inspected, as well as all aboveground growth on all plants. Roots of any bare root plants, if permitted for use, will be inspected. Plant material may be approved at the source, at the discretion of the Landscape Designer and/or Wetland Biologist, but all material must be re-inspected and approved on the site prior to installation.
8.6 Handling: Plants shall be handled so as to avoid all damage, including breaking, bruising, root damage, sunburn, drying, freezing or other injury. Plants must be covered during transport. Plants shall not be bound with wire or rope in a manner that could damage branches. Protect plant roots with shade and wet soil in the time period between delivery and installation. Do not lift container stock by trunks, stems, or tops. Do not remove from containers until ready to plant. Water all plants as necessary to keep moisture levels appropriate to the species horticultural requirements. Plants shall not be allowed to dry out. All plants shall be watered thoroughly immediately upon installation. Soak all containerized plants thoroughly prior to installation. Bare root plants are subject to the following special requirements, and shall not be used unless planted between November 1 and March 1, and only with the permission of the Landscape Designer, Wetland Biologist, and/or City of Bellevue staff. Bare root plants must have enough fibrous root to insure plant survival. Roots must be covered at all times with mud and/or wet straw, moss, or other suitable packing material until time of installation. Plants whose roots have dried out from exposure will not be accepted at installation inspection.
8.7 Damaged Plants: Damaged, dried out, or otherwise mishandled plants will be rejected at installation inspection. All rejected plants shall be immediately removed from the site.
8.8 Roots: All plants shall be balled and burlapped or containerized, unless explicity authorized by the Landscape Designer and/or Wetland Biologist. Root bound plants or B&B plants with damaged, cracked or loose rootballs (major damage) will be rejected. Immediately before installation, plants with minor root damage (some broken and/or twisted) must be root-pruned. Matted or circling roots of containerized plantings must be pruned or straightened and the sides of the root ball must be roughened from top to bottom to a depth of approximately half and inch in two to four places. Bare root plantings of woody material is allowed only with permission from the Landscape Designer, Wetland Biologist, and/or City of Bellevue staff.
8.9 Sizes: Plant sizes shall be the size indicated in the plant schedule. Larger stock may be acceptable provided that it has not been cut back to size specified, and that the root ball is proportionate to the size of the plant. Smaller stock may be acceptable, and under some circumstances preferable, based on site-specific conditions. Measurements, caliper, branching and balling and burlapping shall conform to the American Standard of Nursery Stock by the American Association of Nurserymen (latest edition).
8.10 Form: Evergreen trees, if used, shall have single trunks and symmetrical, well-developed form. Deciduous trees shall be single trunked unless specified as multi-stem in the plant schedule. Shrubs shall have multiple stems, and be well-branched.
8.11 Planting: Planting shall be done in accordance with illustrated details in the mitigation plan set and accepted industry standards. Plant locations shall also be inspected and approved prior to planting.
8.12 Timing of Planting: Unless otherwise approved by City of Bellevue staff, all planting shall occur between September 1 and March 31.
8.13 Planting in Pits: Planting pits shall be circular or square with vertical sides, and shall be 6" larger in diameter than the root ball of the plant. Break up the sides of the pit in compacted soils. Set plants upright in pits, as illustrated in planting detail. Burlap shall be removed from the planting pit. Backfill shall be worked back into holes such that air pockets are removed without adversely compacting soils.
8.14 Soil Amendments: Unless otherwise specified and approved by City of Bellevue staff, native soil will be incorporated into the planting pits.
8.15 Mulch: The soil surface surrounding all planting pit areas shall receive no less than 2"-4" of hog fuel or medium bark mulch after planting. Hog fuel or mulch shall be kept well away (at least 2") from the trunks and stems of woody plants.
8.16 Fertilizer: Slow release fertilizer may be used if pre-approved by City of Bellevue staff. Fertilizers shall be applied only at the base of plantings underneath the required covering of mulch (that does not make contact with stems of the plants). No fertilizers will be placed in planting holes.
8.17 Water: Plants shall be watered upon completion of backfilling. For spring plantings (if approved), a rim of earth shall be mounded around the base of the tree or shrub no closer than the drip line, or no less than 30" in diameter, except on steep slopes or in hollows. Plants shall be watered a second time within 24-48 hours after installation. The earthen rim/dam should be leveled prior to the second growing season.
8.18 Staking: Most shrubs and many trees do not require any staking. If the plant can stand alone without staking in a moderate wind, do not use a stake. If the plant needs support, then strapping or webbing should be used as low as possible on the trunk to loosely brace the tree with one stake (see Planting Detail). Do not brace the tree tightly or too high on the trunk. If the tree is unable to sway, it will further lose the ability to support itself. As soon as supporting the plant becomes unnecessary, remove the stakes. All stakes must be removed within two (2) years of installation.
8.19 Weeding: Existing and exotic vegetation in the mitigation and buffer areas will be hand weeded from around all newly installed plants at the time of installation and on routine basis through monitoring period. No chemical control of vegetation on any portion of the site is allowed without the written permission of City of Bellevue staff.
8.20 Wildlife Control: As determined by the Landscape Designer and/or Wetland Biologist, fencing or deer repellents may be needed to limit deer intrusion while installed plants are becoming established.

10.0 Maintenance
Maintenance shall be required in accordance with City of Bellevue guidelines and approved plans.
10.1 Duration and Extent: In order to achieve performance standards, the Permittee shall have the mitigation area maintained for the duration of the monitoring period, 3 years. All maintenance shall be directed by the Landscape Designer and/or Wetland Biologist.
Maintenance will include:

- watering (see 10.7 for details)
- weeding around base of installed plants
- pruning
- replacement (see 10.5 for details)
- restaking
- removal of all classes of noxious weeds (see Washington State Noxious Weeds List, WAC 16-7150-005) as well as Himalayan blackberry
- any other measures needed to insure plant survival (see 10.6 for details)
- general maintenance activities which include the replacement of any vandalized or damaged signs, habitat features, fences or other structural component of the mitigation site.

10.2 Survival: The Permittee shall be responsible for the health of 100% of all newly installed plants for one growing season after installation has been accepted by City of Bellevue staff (see Performance Standards). A growing season for these purposes is defined as occurring from March 1 to October 31. For fall installation (often required), the growing season will begin the following spring. The Permittee shall replace any plants that are failing, weak, defective in a manner of growth, or dead during this growing season, as directed by the Landscape Designer, Wetland Biologist, and/or City of Bellevue staff.
10.3 Installation Timing for Replacement Plants: Replacement plants shall be installed between September 1 and March 31, unless otherwise determined by the Landscape Designer, Wetland Biologist, and/or City of Bellevue staff.
10.4 Standards for Replacement Plants: Replacement plants shall meet the same standards for size and type as those specified for original installation unless otherwise directed by the Landscape Designer, Wetland Biologist, and/or City of Bellevue staff. Replacement plants shall be inspected as described above for the original installation.
10.5 Replanting: Plants that have settled in their planting pits too deep, too shallow, loose, or crooked shall be replanted as directed by the Landscape Designer, Wetland Biologist, and/or City of Bellevue staff.
10.6 Herbicides/Pesticides: Limited use of herbicides may be approved depending on site specific conditions, only if approved by City of Bellevue staff.
10.7 Irrigation/Watering: Water shall be provided during the dry season (July 1-October 15) for the first two years after installation to ensure plant survival and establishment. Water should be provided by a temporary above ground irrigation system. Water should be applied at a rate of 1" of water two times a week for Year 1 and 1" of water one time a week during Year 2.

11.0 Performance Standards - Plant Cover and Survival

- Plant survival and cover standards are established to measure mitigation success as follows:

	Year 1	Year 2	Year 3
Shrub and Sapling Tree Cover*	>10%	>15%	>20%
Shrub and Sapling Tree Survival	100%	>85%	>80%

*Includes beneficial native plants in that category that are naturally recruiting volunteers

- Less than 10% invasive vegetation during any monitoring event.
- The establishment of 2 species of native trees and 3 species of native shrubs at the end the the monitoring period.

12.0 Monitoring
Monitoring shall be conducted annually for 3 years in accordance with the approved mitigation monitoring plan.
12.1 Vegetation Monitoring: Sample points or transects will be established for vegetation monitoring. Linear transects are the preferred method for vegetation monitoring for this site. No less than one (1) 100-foot transect per 10,000 square feet of area will be established in the mitigation area. Permanent transect location(s) must be identified on mitigation site plans in the first monitoring report (they may be drawn on approved mitigation plans by hand). Plots located at the end of each transect shall detail herb, shrub, and tree aerial cover at radii of 1m, 5m, and 10m respectively, using the Braun-Blanquet releve method or other acceptable field method. Monitoring of vegetation transects shall occur annually between August 1 and September 30 (prior to leaf drop), unless otherwise specified.
12.2 Photopoints: No less than four (4) permanent photo points will be established within the mitigation area. Photographs will be taken from these points to visually record the condition of the mitigation area. Photos shall be taken annually between August 1 and September 30 (prior to leaf drop), unless otherwise specified.
12.3 Reports: Monitoring reports shall be submitted by December 31 of each year during the monitoring period. As applicable, monitoring reports must include description/data for:

- Site plan and location map
- Historic description of project, including date of installation, current year of monitoring, restatement of mitigation goals, and performance standards
- Plant survival, vigor, and aerial coverage from every plant community (transect data), and explanation of monitoring methodology in the context of assessing performance standards
- Slope condition, site stability, any structures or special features
- Buffer conditions, e.g. surrounding land use, use by humans, wild and domestic creatures
- Observed wildlife, including amphibians, avians and others
- Assessment of nuisance/exotic biota and recommendations for management
- Soils, including texture, Munsell color, rooting and oxidized rhizoshperes
- Color photographs taken from permanent photo points as shown in the first as-built plan or the first monitoring report.
- Summary of maintenance and contingency measures proposed for next season and completed for past season

12.4 Deficiencies: Any deficiency discovered during any monitoring or inspection visit must be corrected within 60 days of approval by City of Bellevue staff.
12.5 Contingency Plan: Should any monitoring report reveal the mitigation has failed in whole or in part, and should that failure be beyond the scope of routine maintenance, a Contingency Plan will be submitted. The Contingency Plan may range in complexity from a list of plants substituted, to cross-sections of proposed engineered structures. Once approved, it may be installed, and will replace the approved mitigation plan. If the failure is substantial, City of Bellevue staff may extend the monitoring period for that mitigation.

13.0 Bond
Prior to beginning any work, the Permittee must provide a mitigation bond or assignment of funds per City of Bellevue. A bond quantity worksheet has been completed based on all elements of the mitigation plan. The total cost, plus contingency fees has been determined to be $ 8,277.38 , which will be the amount of the mitigation bond the Permittee is required to provide.

NO. | DATE | BY | REVISION

CONSULTANT:
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Environmental Consultants
Wetlands, Streams, and Wildlife
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PROJECT:
NG PROPERTY
MITIGATION PLAN
TAX PARCEL ID NO.: 342505-9285

DESIGNED BY: L. Erickson
DRAWN BY: L. Erickson
CHECKED BY: Jeff Jones
APPROVED BY:
DATE: 5/4/11

SCALE NONE

SHEET 2 of 2