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

DETERMINATION OF NON-SIGNIFICANCE

PROPONENT: Gan Residence Slope Restoration and Stabilization
LOCATION OF PROPOSAL: 9912 SE 16th Street

DESCRIPTION OF PROPOSAL: Critical Areas Land Use Permit to stabilize and restore a slope after unpermitted clearing and grading activity. The proposal will add stabilization measures, including fill, to restore the slope to approximate preimpact conditions. Included in the proposal is a restoration plan to remove invasive species and replant the slope, buffer, and structure setback with native vegetation.

FILE NUMBERS: 19-103477-LO **PLANNER:** Drew Folsom

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 **7/25/2019**

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This DNS may be withdrawn at any time if the proposal is modified so as to have significant adverse environmental impacts; if there is significant new information indicating a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

7/11/2019
Date

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

City of Bellevue
Development Services Department
Land Use Staff Report

Proposal Name:	**Gan Residence Slope Restoration and Stabilization**
Proposal Address:	**9912 SE 16th Street**
Proposal Description:	Critical Areas Land Use Permit to stabilize and restore a slope after unpermitted clearing and grading activity. The proposal will add stabilization measures, including fill, to restore the slope to approximate preimpact conditions. Included in the proposal is a restoration plan to remove invasive species and replant the slope, buffer, and structure setback with native vegetation.
File Number:	**19-103477-LO**
Applicant:	Emilia Gan
Decisions Included:	Critical Areas Land Use Permit (Process II. LUC 20.30P)
Planner:	**Drew Folsom**, Associate Planner
State Environmental Policy Act Threshold Determination:	Determination of Non-Significance Elizabeth Stead, Environmental Coordinator Development Services Department
Director's Decision:	**Approval with Conditions** Michael A. Brennan, Director Development Services Department By: Elizabeth Stead, Land Use Director

Application Date:	January 18, 2019
Notice of Application Publication Date:	February 21, 2019
Decision Publication Date:	July 11, 2019
Project/SEPA Appeal Deadline:	July 25, 2019

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. Environmental Checklist
2. Restoration Plan

I. Proposal Description

The applicant requests a Critical Areas Land Use Permit for revegetation and slope stabilization in a steep slope critical area, associated buffer, and structure setback. The proposal is in response to an enforcement action, permit number 17-116368-EA, issued by the City on June 20, 2017, for excavation and vegetation removal within a steep slope without a permit.

The stabilization methods will consist of coir mats, ½-man boulders, soil enhancement, and fill to restore the slope to approximate preimpact conditions. The restoration plan includes the removal of invasive species and replanting with native vegetation, including native trees.

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

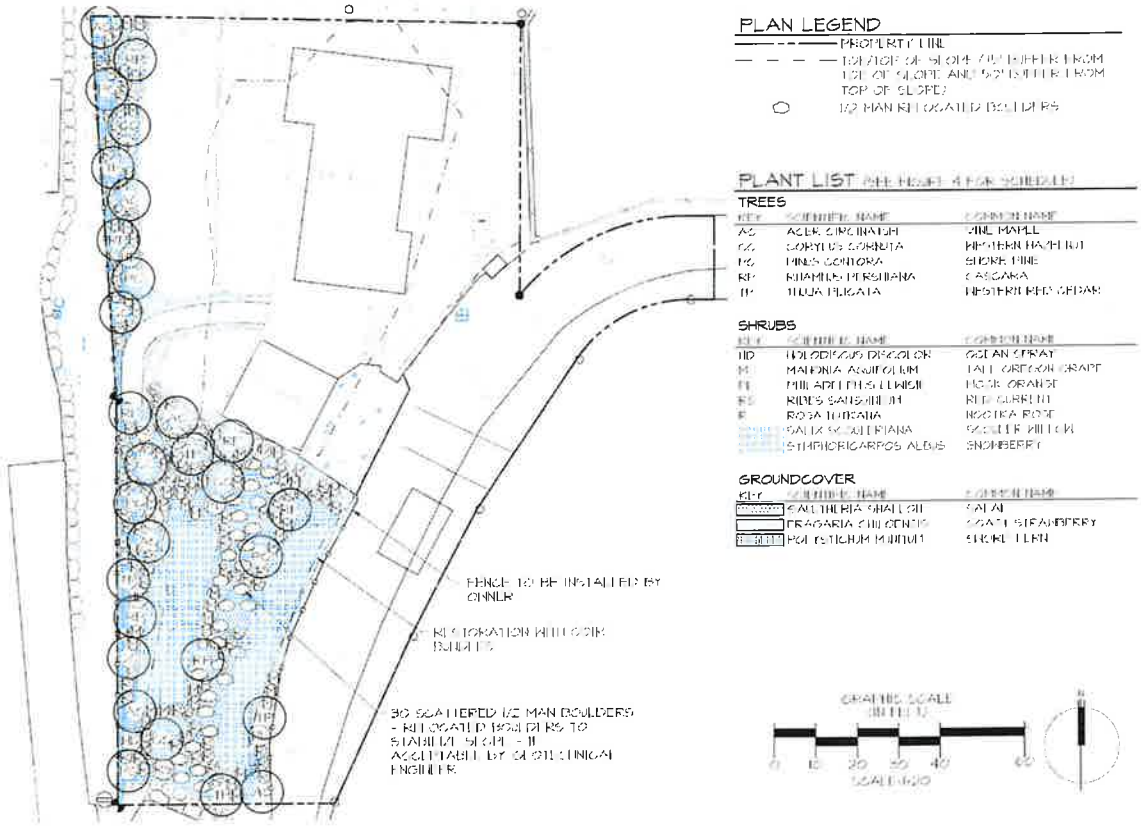
A. Site Description

The project site is located in a community of single-family homes in the Southwest Subarea of the City. The property is bounded on the east by a private road easement and surrounded by single family homes. The site is approximately 17,435 square feet in size and is currently developed with a single-family residence. Tiered landscape areas with small rockeries are located west of the house. Access to the site is gained via a private access road connecting to SE 16th Street.

The topography of the site slopes downward from east to west with a steep slope located in the southern portion of the property. Approximately 3,950 square feet of the site meets the definition of steep slopes under LUC 20.25H. The steep slope located in the southern portion of the site contains several significant trees. The understory of the steep slope was largely removed during unpermitted clearing and grading activity. This area is currently covered in plastic for erosion control. None of the significant trees within the existing steep slope will be removed as part of this proposal. The western portion of the site is within 200 feet of the ordinary high water mark of Lake Sammamish, and the site is within the Residential Shoreline Jurisdiction. See figures 1 and 2 below for the existing site and depiction of the work proposed.

Figure 1 – Aerial view of the property

Figure 2 – Stabilization and Restoration Plan



B. Zoning

The site is located in the R-1.8 zoning district. The property is within the Critical Areas Overlay and is regulated by the standards and regulations of LUC 20.25H due to the presence of a steep slope.

C. Land Use Context

The surrounding development is entirely single-family residential properties.

D. Critical Areas Functions and Values

i. Geologic Hazard Areas

Geologic hazards pose a threat to the health and safety of citizens when development is inappropriately sited in areas of significant hazard. Some geologic hazards can be reduced or mitigated by engineering, design, or modified construction practices. When technology cannot reduce risks to acceptable levels, building in geologically hazardous areas is best avoided.

Steep slopes may serve several other functions and possess other values for the City and its residents. Some of Bellevue's remaining large blocks of forest are located in steep slope areas, providing habitat for a variety of wildlife species and important linkages between habitat areas in the City. These steep slope areas also act as conduits for groundwater, which drains from hillsides to provide a water source for the City's wetlands and stream systems. Vegetated steep slopes also provide a visual amenity in the City, providing a "green" backdrop for urbanized areas enhancing property values and buffering urban development.

III. Consistency with Land Use Code Requirements:

A. Zoning District Dimensional Requirements:

The site is located in the R-1.8 zoning district. Development associated with this proposal is limited to the stabilization measures discussed above and replanting the slope with native vegetation.

B. Critical Areas Requirements LUC 20.25H:

A. Critical Areas Requirements LUC 20.25H

1) **Consistency With Land Use Code Critical Areas Performance Standards of LUC 20.25H.055.C.3.m.**

The following performance standards, when applicable, shall be incorporated in the design of development on sites with steep slope geologic hazard critical areas, buffers, or structure setbacks. The incorporation of performance standards is required to be documented prior to building permit or clearing and grading permit approval to install the proposed stabilization measures. See Section IX for permit related conditions of approval.

a. **When Allowed. New or enlarged stabilization measures shall be allowed only to protect existing primary structures and infrastructure, or in connection with uses and development**

allowed pursuant to subsection B of this section. Stabilization measures shall be allowed only where avoidance measures are not technically feasible.

This is an application for approval to stabilize a slope and revegetate with native vegetation. Due to the location of the slope, avoidance is not possible, and stabilization is allowed.

b. **Type of Stabilization Measure Used. Where a stabilization measure is allowed, soft stabilization measures shall be used, unless the applicant demonstrates that soft stabilization measures are not technically feasible. An applicant asserting that soft stabilization measures are not technically feasible shall provide the information relating to each of the factors set forth in this section for a determination of technical feasibility by the Director. Only after a determination that soft stabilization measures are not technically feasible shall hard stabilization measures be permitted. The determination of whether a technique or stabilization measure is "technically feasible" shall be made by the Director as part of the decision on the underlying permit after consideration of a report prepared by a qualified professional addressing the following factors:**

(1) Site conditions, including topography and the location of the primary structure in relation to the critical area;

(2) The location of existing infrastructure necessary to support the proposed measure or technique;

(3) The level of risk to the primary structure or infrastructure presented by erosion or slope failure and ability of the proposed measure to mitigate that risk;

(4) Whether the cost of avoiding disturbance of the critical area or critical area buffer is substantially disproportionate as compared to the environmental impact of proposed disturbance, including any continued impacts on functions and values over time; and

(5) The ability of both permanent and temporary disturbance to be mitigated.

The site was analyzed by Dennis M. Bruce, P.E., and a geotechnical evaluation and review of the restoration plan prepared by Altmann Oliver Associates, LLC was submitted as part of the permit application. The geotechnical engineer reviewed stabilization measures and feasibility of

avoidance. Generally, due to the slope's proximity to the existing private access road, the stability issues associated with the unpermitted clearing grading activity, and the existing grade (pitch) of the slope, avoidance was ruled out as neither the road nor the slope could be moved, or the hazard abated without some form of stabilization.

The report determined that much of the site can be restored and stabilized using soft and hard stabilization measures. The applicant is proposing the use of 30 ½-man boulders, along with coir mats, mulch, and native vegetation plantings to improve site stability

The stabilization measures are consistent with the Land Use Code requirements to stabilize the slope using both hardened and softened stabilization (LUC 20.25H.055). All evaluations and recommendations submitted as part of the permit package and used in the city's evaluation of the proposal were completed by licensed, qualified professionals. Any design or documentation submitted to the city as part of future permit applications related to this project must be prepared by a licensed qualified professional. See Geotechnical Inspection Conditions of Approval in Section IX of this report.

2) **Consistency With Land Use Code Critical Areas Performance Standards LUC 20.25H.125.**
Development within a landslide hazard or steep slope critical area or the critical area buffers of such hazards shall incorporate the following additional performance standards in design of the development, as applicable. The requirement for long-term slope stability shall exclude designs that require regular and periodic maintenance to maintain their level of function.

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

Finding: The proposed stabilization measures will not artificially alter the natural contour of the slope. The stabilization measures have been designed to match the natural topography prior to the unpermitted clearing and grading activity.

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

Finding: Slope stabilization and restoration have been designed to minimize disturbance of the slope and restore its natural landforms. Vegetation within the work area will be restored pursuant to the restoration plan submitted as part of this permit. See Restoration Related Conditions of Approval in Section IX of this report.

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

Finding: As stated in the geotechnical evaluations prepared by Dennis M. Bruce, the slope stability and restoration measures have no adverse geotechnical impacts and will reduce the risk of slope instability and impact to adjacent properties.

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

Finding: This proposal includes the use of fill and other stabilization measures to restore the slope to its condition prior to the unauthorized clearing and grading activity discussed in Section I. The stabilization measures are not expected to cause increased disturbance and seek to restore the slope grade to pre-impact conditions.

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

Finding: The proposal does not include an increase in impervious surface.

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

Finding: No topographic modification is expected outside of what is necessary through the installation of stabilization measures and restoration planting. Grading for yard area is not proposed. See Restoration Conditions of Approval in Section IX of this report.

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

Finding: This proposal does not include the modification of a building footprint. Freestanding retaining walls are not proposed as part of this permit.

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

Finding: This proposal does not include a request to construct or expand a residence or other structure.

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

Finding: This proposal does not include a request to construct or expand a residence or other structure.

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

Finding: The applicant has provided a site restoration plan that will be required as a condition of approval of this permit. See Restoration Plan Conditions of Approval in Section IX of this report.

IV. Public Notice and Comment

Application Date:	January 18, 2019
Public Notice (500 feet):	February 21, 2019
Minimum Comment Period:	March 7, 2019

The Notice of Application for this project was published in the City of Bellevue Weekly Permit Bulletin on February 21, 2019. It was mailed to property owners within 500 feet of the project site. Comments received were related to the status of the existing erosion control measures, the timing of the permit approval, and installation of permanent erosion control and stabilization.

V. Summary of Technical Reviews

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 found no issues with the proposed development. Due to the presence of a geological hazard critical area, no clearing and grading activity may occur during the rainy season, which is defined as November 1 through April 30 without written authorization of the Development Services Department. See Rainy Season Restrictions Conditions of Approval in Section IX of this report.

VI. State Environmental Policy Act (SEPA)

The environmental review indicates no probability of significant adverse environmental impacts occurring as a result of the proposal. The Environmental Checklist submitted with the application adequately discloses expected environmental impacts associated with the project. The City codes and requirements, including the Clear and Grade Code, Utility Code, Land Use Code, Noise Ordinance, Building Code and other construction codes are expected to mitigate potential environmental impacts. Therefore, issuance of a Determination of Non-Significance (DNS) is the appropriate threshold determination under the State Environmental Policy Act (SEPA) requirements.

A. Earth and Water

The proposed project will require the installation of structure fill, coir mats, and the planting of the restored/impacted area with native vegetation. All stabilization work is required to be inspected by a licensed civil engineer. No fill material aside from that required to restore to pre-impact conditions and stabilize the slope is proposed. No modification to the regulated top of slope buffer is proposed. Disturbance of existing vegetation will be minimized during construction, and the remaining critical slope area will be restored once construction is complete. A Temporary Erosion Sedimentation Control Plan will be required as part of the building permit application and must address all requirements of erosion and sedimentation best management practices (BMP's). See Temporary Erosion Control Related Conditions of Approval in Section IX of this report.

B. Animals

No threatened or endangered species are expected to be present in the project vicinity, and the area is fully developed with residential uses. Due to the degraded condition of the construction area, the proposal is not anticipated to have negative impacts to animals, and the new vegetation and restoration plan will provide potential wildlife habitat in the future.

C. Plants

Because the area was impacted by unpermitted grading activity then covered with plastic, there is very little existing ground cover vegetation found within the limits of construction. No existing trees are proposed to be removed. To enhance the areas' plant communities and potential to provide habitat, the applicant is required to replant the areas of disturbance with native plants per the restoration planting plan prepared by Altmann Oliver and Associates, LLC dated January 18, 2019. The proposed plan includes approximately 4,500 square feet of steep slope, buffer, and structure setback to be replanted with native vegetation. Species proposed for installation include vine maple, western hazelnut, shore pine, cascara, western red cedar, ocean spray, Oregon grape, mock orange, red currant, Nootka rose, scouler willow, snowberry, salal, coarse strawberry, and sword fern. Prior to clearing and grading permit issuance, the applicant will be required to submit an assignment of savings financial security device to ensure

the restoration is installed and maintenance is completed as required. See Restoration Plan, Installation, and Maintenance Conditions of Approval in Section IX of this report.

D. Noise

The only noise anticipated as a result of this work will be from construction equipment. Noise is regulated by Chapter 9.18 BCC. See Construction Noise Related Conditions of Approval in Section IX of this report.

VII. Decision Criteria

A. Critical Areas Land Use Permit Decision Criteria 20.30P

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

a) The proposal obtains all other permits required by the Land Use Code; and

Finding: The applicant will be required to apply for a clearing and grading permit. See Permitting Conditions of Approval in Section IX of this report.

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

Finding: As discussed in Section III of this report, the proposed stabilization measures and slope restoration will result in the least impact on the critical area and critical area buffer.

The review of this permit is reliant upon the findings of qualified professionals submitted by the applicant as part of this proposal. The property owner will be required to execute a Hold Harmless Agreement releasing the City from liability for any improvements within the critical area or critical area buffer. See Hold Harmless Conditions of Approval in Section IX of this report.

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

Finding: As discussed in Section III of this report, the proposal meets the performance standards of LUC Section 20.25H.055.C.3.m for stabilization measures on geological hazard areas and LUC Section 20.25H.125 for areas of geological hazards.

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

Finding: The site is adequately served by existing public facilities.

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

Finding: The applicant will be required to implement the Restoration Plan prepared by Altmann Oliver and Associates, LLC dated January 18, 2019, as a condition of approval of this permit. See Restoration Plan Conditions of Approval in Section IX of this report.

f) The proposal complies with other applicable requirements of this code.

Finding: As conditioned and discussed in this report, the proposal complies with all applicable code requirements including, but not limited to, performance standards for development in geologic hazard areas and Critical Areas Land Use Permit decision criteria.

VIII. Conclusion and Decision

After conducting the various administrative reviews associated with this proposal, including Land Use Code consistency, SEPA, City Code and Standard compliance reviews, the Director of the Development Services Department does hereby **approve with conditions** the proposal of slope stabilization and restoration within the geological hazard critical area, buffer, and structure setback at the address of 9912 SE 16th Street.

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

IX. Conditions of Approval

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

Applicable Ordinances	Contact Person
Clearing and Grading Code- BCC 23.76	Tom McFarlane, 425-452-5207
Land Use Code- BCC 20.25H	Drew Folsom, 425-452-4441
Noise Control- BCC 9.18	Drew Folsom, 425-452-4441

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

1. Restoration Plan: The applicant must include the Restoration Plan prepared by Altmann Oliver and Associates, LLC dated January 18, 2019, as part of the clearing and grading permit submittal for review and approval by the City of Bellevue.

Authority: Land Use Code 20.25H.055.C.3.i.v.
Reviewer: Drew Folsom, Development Services Department

2. Rainy Season restrictions: Due to the presence of a geological hazard critical area, no clearing and grading activity may occur during the rainy season, which is defined as November 1 through April 30 without written authorization of the Development Services Department. Should approval be granted for work during the rainy season, increased erosion and sedimentation measures, representing the best available technology must be implemented prior to beginning or resuming site work.

Authority: Bellevue City Code 23.76.093.A
Reviewer: Tom McFarlane, Development Services Department, Clearing & Grading Section

3. Clearing and Grading Permit Required: Approval of this critical areas land use permit does not constitute an approval of a clearing and grading permit. Application for clearing and grading permit must be submitted and approved prior to the commencement of construction. Plans submitted as part of the clearing and grading permit application must be consistent with the activity permitted under this approval.

Authority: Land Use Code 20.30P.140, Clearing & Grading Code 23.76.035
Reviewer: Tom McFarlane, Development Services Department, Clearing & Grading Section; Drew Folsom, Development Services Department

4. Noise – Construction Hours: Construction will be subject to normal operation hours of 7 a.m. to 6 p.m., Monday through Friday and 9:00 a.m. to 6:00 p.m. on Saturdays, except for Federal holidays and as further defined by the Bellevue City Code. Proximity to existing residential uses will be given special consideration.

Authority: Bellevue City Code 9.18
Reviewer: Drew Folsom, Development Services Department

5. Restoration for Areas of Temporary Disturbance: In order to mitigate for the permitted disturbance inside the regulated critical area, a restoration plan for all areas of temporary disturbance shall be submitted for review and approval by the City of Bellevue prior to the issuance of the Clearing and Grading Permit. The plan shall include documentation of existing site conditions, proposed restoration measures to return the site to its existing conditions per LUC 20.25H.220.H, prescribed maintenance activities to ensure plant survival, and monitoring

requirements (including reporting) to document success/failure.

Authority: Land Use Code 20.25H.220.H
Reviewer: Drew Folsom, Development Services Department

6. Hold Harmless Agreement: Prior to building permit or clearing and grading permit approval, the applicant or property owner shall submit a hold harmless agreement releasing the City of Bellevue from any and all liability associated with the installation of slope stabilization measures. The agreement must meet city requirements and must be reviewed by the City Attorney's Office for formal approval.

Authority: Land Use Code 20.30P.170
Reviewer: Drew Folsom, Development Services Department

7. Installation Device: To ensure the required slope vegetation restoration and restoration of areas of temporary disturbance is completed, the applicant shall post an Installation Assurance Device prior to clearing and grading permit issuance. The device will be released when the applicant demonstrates the restoration has successfully been installed.

Authority: Land Use Code 20.25H.125.J and 20.25H.220
Reviewer: Drew Folsom, Development Services Department

8. Maintenance and Monitoring Plan: Maintenance and monitoring are required for three years after plant installation. A maintenance and monitoring plan with goals and objectives must be included with the restoration plan and submitted under the clearing and grading permit.

Authority: Land Use Code 20.25H.220
Reviewer: Drew Folsom, Development Services Department

9. Cost Estimate: A cost estimate based on the cost and labor to install the proposed planting and to maintain and monitor the planting for three years is required to be submitted under the clearing and grading permit.

Authority: Land Use Code 20.30P.140
Reviewer: Drew Folsom, Development Services Department

10. Maintenance Surety: A maintenance surety is required. The surety will be for 150 percent of the cost estimate provided for maintenance and monitoring over three years. The maintenance surety is required prior to clearing and grading permit issuance.

Authority: Land Use Code 20.25H.220
Reviewer: Drew Folsom, Development Services Department

11. Geotechnical Inspection: The project geotechnical engineer must provide geotechnical inspection during project construction, including monitoring and testing of soil cuts and fill, and any unusual seepage, slope, or subgrade conditions.

Authority: Bellevue City Code 23.76
Reviewer: Tom McFarlane, Development Services Department, Clearing & Grading Section

DEVELOPMENT SERVICES DEPARTMENT
450 110TH AVENUE NE
BELLEVUE, WA 98009-9012

SEPA Environmental Checklist

If you need assistance in completing the checklist or have any questions regarding the environmental review process, please visit the Land Use Desk in the Permit Center between 8 a.m. and 4 p.m., Monday through Friday (Wednesday, 10 to 4) or call or email the Land Use Division at 425-452-4188 or landusereview@bellevuewa.gov. Assistance for the hearing impaired: Dial 711 (Telecommunications Relay Service).

Purpose of checklist:
The City of Bellevue uses this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants:
This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies and reports. Please make complete and accurate answers to these questions to the best of your ability in order to avoid delays.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The City may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

PLEASE REMEMBER TO SIGN THE CHECKLIST. Electronic signatures are also acceptable.

7/11/19

7/19/19

A. Background [help]

1. Name of proposed project, if applicable: [help]
   Gan Steep Slope Stabilization and Restoration Project

2. Name of applicant: [help]
   Emilia Gan

3. Address and phone number of applicant and contact person: [help]
   Applicant: Emilia Gan
   9912 SE 16th St, Bellevue WA 98004
   617-519-1461

   Contact Person: Emilia Gan
   9912 SE 16th St, Bellevue WA 98004
   617-519-1461

4. Date checklist prepared: [help]
   January 17, 2019

5. Agency requesting checklist: [help]
   City of Bellevue

6. Proposed timing or schedule (including phasing, if applicable): [help]
   The hopeful timing for approval of the Critical Areas Land Use Permit to be issued by the City of Bellevue is 2019.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain. [help]
   No, only the restoration of the steep slope buffer is proposed.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. [help]
   A Steep Slope Restoration Plan and Vegetation Management Plan has been prepared by Altmann Oliver Associates, LLC. A Geotechnical Evaluation and Recommendations Report has been prepared by Dennis M. Bruce, P.E.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. [help]
   There are no additional applications affecting this property.

10. List any government approvals or permits that will be needed for your proposal, if known. [help]
    Critical Areas Land Use Permit approval from the City of Bellevue.

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

[help]
The existing site has a single family residence and vegetated with several fruit trees. The site contains 7,560 SF of steep slope and 9,708 SF of steep slope buffer encumbering the whole site. The site is roughly 17,460 square feet. The orchard area is covered with black plastic and Himalayan blackberry. Installation of a barrier along the road and restoration of the slope and buffers is proposed.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. [help]
The site's tax parcel number is 062405-9034. It's located at the 9912 SE 16th St Bellevue WA, 98004. A legal description, vicinity map and topographic survey are attached with this submittal.

B. Environmental Elements [help]

1. Earth [help]

a. General description of the site: [help] (select one): ☐Flat, ☐rolling, ☐hilly, ☒steep slopes, ☐mountainous, other: *The parcel slopes down from east to west across the whole lot.*

b. What is the steepest slope on the site (approximate percent slope)? [help]
Approximately 40 to 50%.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils. [help]
The site contains dense native soils that provide 3,000 p.s.f. bearing capacity within 6" of the surface. The soils are mapped as Kitsap silt loam.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe. [help]
Yes, part of the steep slope restoration involves stabilization of the slope with planter boxes, rock walls, and improved drainage. The slope and unstable soils triggered the stop work order on the intial project.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill. [help]
3,778 SF of steep slope restoration and 956 SF of steep slope buffer restoration is planned. Additionally terraced block

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DL 2/9/19

walls will be installed to support the slope.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. [help]
Part of the plans design is to prevent erosion on the steep slope. A Temporary Erosion and Sedimentation Control (TESC) Plan has been designed and is included in the submittal package. It includes silt fence, clearing/grading limits, construction entrance and filter fabric on nearby catch basins. TESC measures will be implemented to minimize erosion during construction.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? [help]
Approximately 40%. This includes the driveway and home/garage footprint.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any: [help]
A TESC Plan has been designed which includes Best Management Practices (BMPs) to reduce and control erosion. EROSION FURTHER MITIGATED PER BCC "EROSION CONTROL"

2. Air [help]

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known. [help]
Does not apply.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. [help]
No.

c. Proposed measures to reduce or control emissions or other impacts to air, if any: [help]
No measures are proposed.

3. Water [help]

a. Surface Water:

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. [help]
There are no water bodies in the immediate vicinity. Lake Washington is approximately 205 ft away from the western edge of the site.

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. [help]
No, the site and all restoration work is further than 200ft

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away.

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. [help]
None.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. [help]
No.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. [help]
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. [help]
No.

b. Ground Water:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known. [help]
No groundwater will be withdrawn nor will any water be discharged to groundwater.

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. [help]
No waster water will be discharged from this project.

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe. [help]
There will be no new runoff for this project.

2) Could waste materials enter ground or surface waters? If so, generally describe. [help]
No.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe. [help]
No

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any: [help]

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See TESC Plan.

4. Plants [help]

a. Check the types of vegetation found on the site: [help]
☒deciduous tree: alder, maple, aspen, other: *bitter cherry, Oregon ash, hawthorn, hazelnut.*
☒evergreen tree: fir, cedar, pine, other: *Douglas fir*
☒shrubs
☐grass
☐pasture
☐crop or grain
☒Orchards, vineyards or other permanent crops.
☐wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other: *Click here to enter text.*
☐water plants: water lily, eelgrass, milfoil, other: *Click here to enter text.*
☐other types of vegetation: *Click here to enter text.*

b. What kind and amount of vegetation will be removed or altered? [help]
27 trees, 1874 shrubs (includes cuttings), and 342 groundcover plants will be planted on site to restore the buffer. Also removed will be invasive non-native Himalayan blackberry. Please refer to the landscape plans prepared by AOA.

c. List threatened and endangered species known to be on or near the site. [help]
None to our knowledge.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any: [help]
A Steep Slope Restoration Plan has been designed to restore the steep slope and the buffer.

e. List all noxious weeds and invasive species known to be on or near the site. [help]
Himalayan blackberry

5. Animals [help]

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site. [help]

Examples include:

birds: ☐hawk, ☐heron, ☐eagle, ☒songbirds, other: *Click here to enter text.*
mammals: ☐deer, ☐bear, ☐elk, ☐beaver, other: *small mammals typical of suburban and urban environments*
fish: ☐bass, ☐salmon, ☐trout, ☐herring, ☐shellfish, other: *Click here to enter text.*

b. List any threatened and endangered species known to be on or near the site. [help]

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

c. Is the site part of a migration route? If so, explain. [help]
Not to our knowledge.

d. Proposed measures to preserve or enhance wildlife, if any: [help]
Existing deciduous and evergreen trees will be preserved. The steep slope restoration will provide new native shrubs and trees which will enhance wildlife habitat.

e. List any invasive animal species known to be on or near the site. [help]
None known.

6. Energy and Natural Resources [help]

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc. [help]
none

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe. [help]
No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any: [help]
None.

7. Environmental Health [help]

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. [help]
No.

1) Describe any known or possible contamination at the site from present or past uses. [help]
None known.

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity. [help]
None known

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project. [help]
The only toxic materials would be those associated with single family homes and the maintenance of the homes.

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4) Describe special emergency services that might be required. [help]
None.

5) Proposed measures to reduce or control environmental health hazards, if any: [help]
None.

b. Noise [help]

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? [help]
Usual residentral noise, shovels, general outside work.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indi-cate what hours noise would come from the site. [help]
On a short-term basis, there will be some noise of trucks for plant deliveries, and noise associated with installation of the restoration plan, and general laborers. On a long-term basis, there will essentially be no noise generated, because of the single-family use.

3) Proposed measures to reduce or control noise impacts, if any: [help]
None. NOISE FURTHER MITIGATED BCC 9.15 "NOISE CONTROL"

8. Land and Shoreline Use [help]

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe. [help]
Currently there is a single family residence on site. The parcel is surrounded by other single family homes and the proposed restoration won't directly impact adjacent properties.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use? [help]
Not to our knowledge.

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how: [help]
No.

c. Describe any structures on the site. [help]
A single family home and a carport with a shop below it. The home is 3,100 SF, the carport is 400 SF, and the shop is 300 SF.

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d. Will any structures be demolished? If so, what? [help]
Not applicable.

e. What is the current zoning classification of the site? [help]
R-1.8

f. What is the current comprehensive plan designation of the site? [help]
Single-family residential.

g. If applicable, what is the current shoreline master program designation of the site? [help]
Does not apply.

h. Has any part of the site been classified as a critical area by the city or county? If so, specify. [help]
Yes, a steep slope is located on the site.

i. Approximately how many people would reside or work in the completed project? [help]
One family.

j. Approximately how many people would the completed project displace? [help]
None.

k. Proposed measures to avoid or reduce displacement impacts, if any: [help]
None.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: [help]
none

m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any: [help]
Not applicable.

9. Housing [help]

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. [help]
none

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. [help]
None.

c. Proposed measures to reduce or control housing impacts, if any: [help]
None.

10. Aesthetics [help]

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

No proposed structures.

b. What views in the immediate vicinity would be altered or obstructed? [help]
Views looking west could potentially be partially obstructed as plants mature.

c. Proposed measures to reduce or control aesthetic impacts, if any: [help]
None necessary.

11. Light and Glare [help]

a. What type of light or glare will the proposal produce? What time of day would it mainly occur? [help]
None.

b. Could light or glare from the finished project be a safety hazard or interfere with views? [help]
No.

c. What existing off-site sources of light or glare may affect your proposal? [help]
None.

d. Proposed measures to reduce or control light and glare impacts, if any: [help]
None.

12. Recreation [help]

a. What designated and informal recreational opportunities are in the immediate vicinity? [help]
Chism Beach Park and Killarney Glen Park are within a mile away.

b. Would the proposed project displace any existing recreational uses? If so, describe. [help]
No.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: [help]
None.

13. Historic and cultural preservation [help]

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe. [help]
None to our knowledge.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources. [help]

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To our knowledge, there are no known archaeological, historical, scientific, and/or cultural landmarks on or next to the site.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc. [help]
GIS mapping was used to look at nearby resources.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required. [help]
None.

14. Transportation [help]

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any. [help]
Access to the site is from SE 16th strees and Killarney Way.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop? [help]
The closest transport stop is located at 104th Ave SE & 16th St which is approximately 1,710 ft away from the site.

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate? [help]
none.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private). [help]
No.

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe. [help]
No.

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates? [help]
None.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe. [help]
No.

h. Proposed measures to reduce or control transportation impacts, if any: [help]
None.

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15. Public Services [help]

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe. [help]
No.

b. Proposed measures to reduce or control direct impacts on public services, if any. [help]
None are proposed.

16. Utilities [help]

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

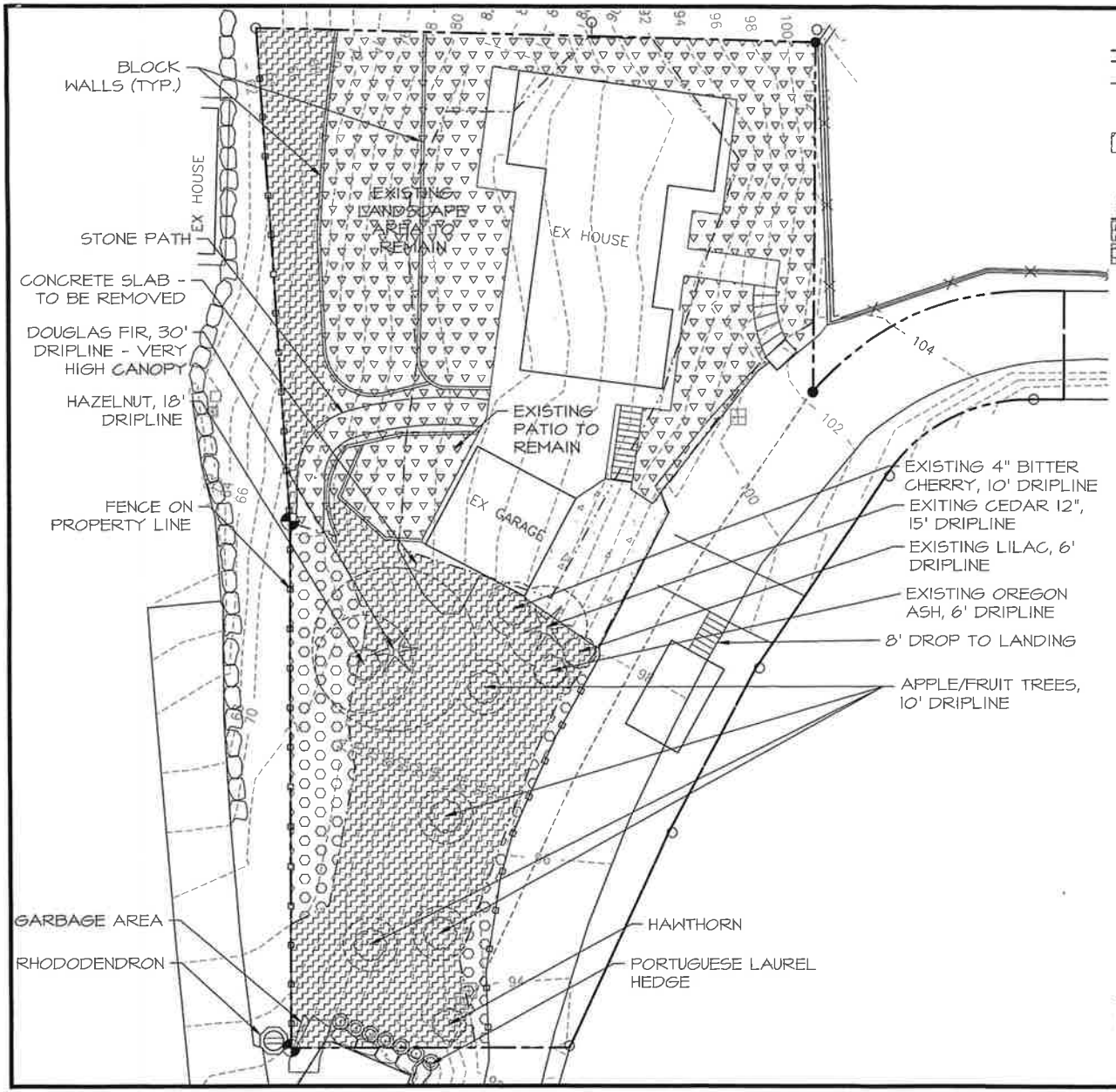
c. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed. [help]
Water – City of Bellevue

C. Signature [help]

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: _____

Name of signee: *Simone Oliver*
Position and Agency/Organization: *Landscape Architect, Altmann Oliver Associates*
Date Submitted: *January 18, 2019*



PLAN LEGEND

- PROPERTY LINE
- TOE/TOP OF SLOPE (75' BUFFER FROM TOE OF SLOPE AND 50' BUFFER FROM TOP OF SLOPE)
- EXISTING LANDSCAPE TO REMAIN

RESTORATION LEGEND

STEEP SLOPE RESTORATION	3,718 SF
STEEP SLOPE BUFFER RESTORATION	956 SF

GRAPHIC SCALE (IN FEET)

0 10 20 30 40 60

SCALE: 1:20

N

NOTES

1. BASE INFORMATION PROVIDED BY WESSEL, JONAS & ASSOC., P.O. BOX 99681, LAKEWOOD, WA 98496, (253) 581-6107.

PROJECT 5772
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2/7

FIGURE 2: STEEP SLOPE RESTORATION PLAN
GAN PROPERTY
9912 SE 16TH STREET
BELLEVUE, WA 98004
PARCEL 062405-9034-02

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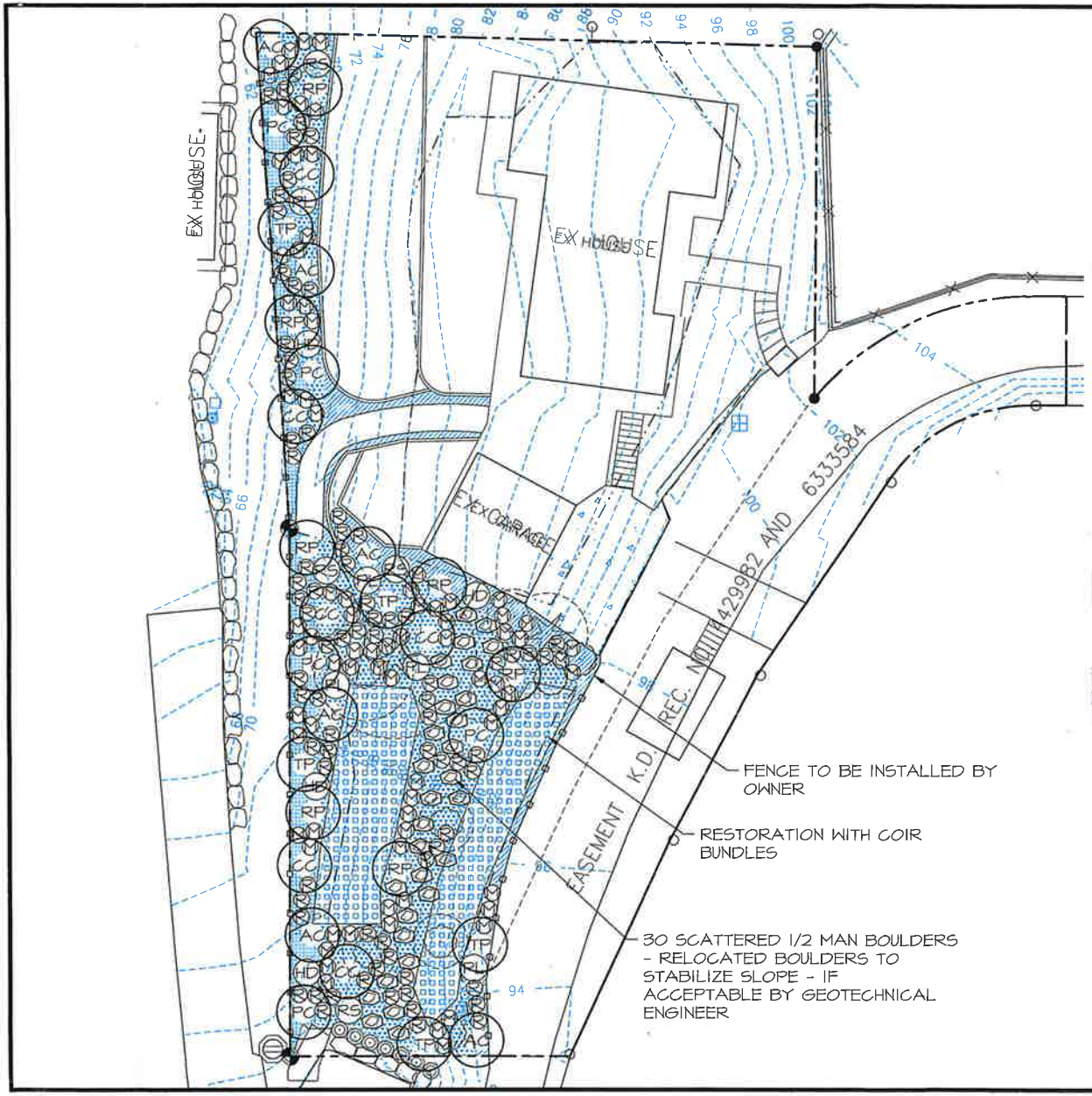

PLAN LEGEND

- PROPERTY LINE
- TOE/TOP OF SLOPE (75' BUFFER FROM TOE OF SLOPE AND 50' BUFFER FROM TOP OF SLOPE)
- 1/2 MAN RELOCATED BOULDERS

PLANT LIST (SEE FIGURE 4 FOR SCHEDULE)

TREES

KEY	SCIENTIFIC NAME	COMMON NAME
AC	ACER CIRCINATUM	VINE MAPLE
CC	CORYLUS CORNUTA	WESTERN HAZELNUT
PC	PINUS CONTORA	SHORE PINE
RP	RHAMNUS PERSHIANA	CASCARA
TP	THUJA PLICATA	WESTERN RED CEDAR

SHRUBS

KEY	SCIENTIFIC NAME	COMMON NAME
HD	HOLODISCUS DISCOLOR	OCEAN SPRAY
M	MAHONIA AQUIFOLIUM	TALL OREGON GRAPE
PL	PHILADELPHUS LEWISII	MOCK ORANGE
RS	RIBES SANGUINEUM	RED CURRENT
R	ROSA NUTKANA	NOOTKA ROSE
	SALIX SCOULERIANA	SCOULER WILLOW
	SYMPHORICARPOS ALBUS	SNOWBERRY

GROUNDCOVER

KEY	SCIENTIFIC NAME	COMMON NAME
	GAULTHERIA SHALLON	SALAL
	FRAGARIA CHILOENSIS	COAST STRAWBERRY
	POLYSTICHUM MUNITUM	SWORD FERN

GRAPHIC SCALE (IN FEET)

0 10 20 30 40 60

SCALE: 1:20

N

FIGURE 3: PLANTING PLAN
GAN PROPERTY
9912 SE 16TH STREET
BELLEVUE, WA 98004
PARCEL 062405-9034-02

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Altmann Oliver Associates, LLC
AOA
Environmental Planning & Landscape Architecture
PO Box 179 Carnation, WA 98014 Office (425) 333-4535 Fax (425) 333-4630

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PLANT SCHEDULE

TREES

KEY	SCIENTIFIC NAME	COMMON NAME	SPACING	QTY.	SIZE (MIN.)	NOTES
AC	ACER CIRCINATUM	VINE MAPLE	10' O.C.	5	2 GAL.	MULTI-STEM (3 MIN.)
CC	CORYLUS CORNUTA	WESTERN HAZELNUT	10' O.C.	6	2 GAL.	SINGLE TRUNK
PC	PINUS CONTORA	SHORE PINE	10' O.C.	5	2 GAL.	FULL & BUSHY
RP	RHAMNUS PERSHIANA	CASCARA	10' O.C.	6	2 GAL.	SINGLE TRUNK
TP	THUJA PLICATA	WESTERN RED CEDAR	10' O.C.	5	2 GAL.	FULL & BUSHY

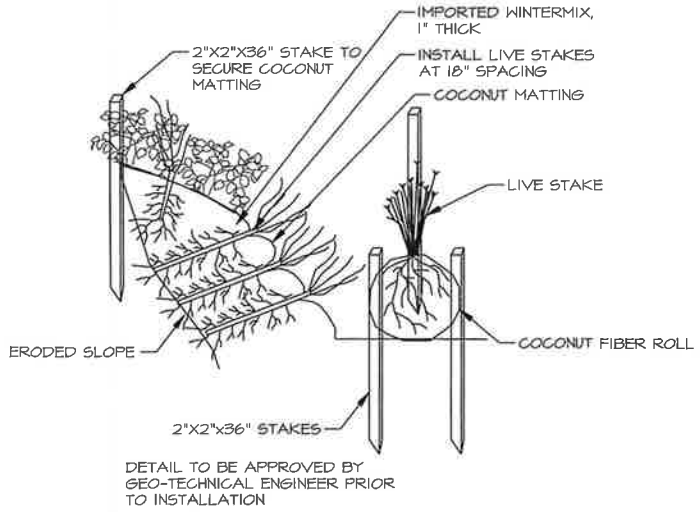
SHRUBS

KEY	SCIENTIFIC NAME	COMMON NAME	SPACING	QTY.	SIZE (MIN.)	NOTES
HD	HOLODISCUS DISCOLOR	OCEAN SPRAY	5' O.C.	4	1 GAL.	MULTI-STEM (3 MIN.)
M	MAHONIA AQUIFOLIUM	TALL OREGON GRAPE	3' O.C.	72	1 GAL.	FULL & BUSHY
PL	PHILADELPHUS LEWISII	MOCK ORANGE	5' O.C.	5	1 GAL.	FULL & BUSHY
RS	RIBES SANGUINEUM	RED CURRENT	5' O.C.	3	1 GAL.	MULTI-STEM (3 MIN.)
R	ROSA NUTKANA	NOOTKA ROSE	3' O.C.	76	1 GAL.	MULTI-STEM (3 MIN.)
	SALIX SCOULERIANA	SCOULER WILLOW	18" O.C.	*857	4' CUTTING	1/2" DIA. MIN., BARK INTACT
	SYMPHORICARPOS ALBUS	SNOWBERRY	18" O.C.	*857	3' CUTTING	1/2" DIA. MIN., BARK INTACT

*3 CUTTINGS PER SYMBOL

GROUNDCOVER

KEY	SCIENTIFIC NAME	COMMON NAME	SPACING	QTY.	SIZE (MIN.)	NOTES
	GAULTHERIA SHALLON	SALAL	2' O.C.	214	1 GAL.	FULL & BUSHY
	FRAGARIA CHILOENSIS	COAST STRAWBERRY	2' O.C.	89	1 GAL.	FULL & BUSHY
	POLYSTICHUM MUNITUM	SWORD FERN	3' O.C.	39	1 GAL.	FULL & BUSHY



DETAIL TO BE APPROVED BY GEO-TECHNICAL ENGINEER PRIOR TO INSTALLATION

1 COIR BUNDLES
SCALE: NTS

FIGURE 4: PLANT SCHEDULE & DETAILS
GAN PROPERTY
9912 SE 16TH STREET
BELLEVUE, WA 98004
PARCEL 062405-9034-02

PROJECT 5772
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SCALE AS NOTED
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SPECIFICATIONS

1. THIS PLAN PERTAINS TO PLANTING PORTION OF THE SITE WORK ONLY.
2. CONTRACTOR INFORMATION. WHEN IT IS AVAILABLE, CONTACT INFORMATION SHALL BE PROVIDED TO THE CITY OF BELLEVUE THAT INCLUDES NAMES, ADDRESSES AND PHONE NUMBERS OF PERSONS/FIRMS THAT WILL BE RESPONSIBLE FOR INSTALLING REQUIRED PLANTS AND PERFORMING REQUIRED MAINTENANCE.
3. COIR BUNDLE DETAIL SHOULD BE APPROVED BY GEO-TECHNICAL ENGINEER PRIOR TO INSTALLATION.
4. UPON APPROVAL OF GEO-TECHNICAL ENGINEER, EXISTING 1/2-MAN BOULDERS CAN BE PLACED BETWEEN COIR BUNDLES AREA. BURY 1/3 THE DEPTH OF THE ROCK INTO EXISTING SOILS.
5. ONE-HALF INCH JUTE COCONUT JUTE MATTING OVER ALL PLANTING AREAS OUTSIDE OF COIR BUNDLES. ANCHOR PER MANUFACTURER'S SPECIFICATIONS.
6. CONTRACTOR'S QUALIFICATIONS. ALL WORK SHALL BE PERFORMED BY A LICENSED LANDSCAPE CONTRACTOR REGISTERED IN THE STATE OF WASHINGTON. CONTRACTOR MUST BE EXPERIENCED IN MITIGATION AND RESTORATION WORK. THE CONTRACTOR 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 HAVE A MINIMUM OF FIVE (5) YEARS EXPERIENCE INSTALLING NATIVE PLANT MATERIALS FOR WETLAND MITIGATION OR RESTORATION PROJECTS, UNLESS OTHERWISE ALLOWED BY THE LANDSCAPE DESIGNER, WETLAND BIOLOGIST AND/OR THE CITY OF BELLEVUE.
7. EXISTING STRUCTURES AND NON-NATURAL MATERIALS SHALL BE REMOVED FROM ALL MITIGATION AND LANDSCAPED AREAS PRIOR TO PLANTING.
8. ALL PLANTING AREAS SHALL RECEIVE 3" OF WINTERMIX PRIOR TO INSTALLATION OF PLANTS. PLANTING PITS SHALL BE BACKFILLED WITH A 30/70 MIX OF CEDAR GROVE COMPOST TO NATIVE SOIL.
9. ALL PLANTS SHOULD BE INSTALLED BETWEEN DECEMBER 1ST AND MARCH 15TH UNLESS SUPPLEMENTAL IRRIGATION IS PROVIDED IMMEDIATELY AFTER PLANTING.
10. 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 THE WETLAND BIOLOGIST, BUT ALL MATERIAL MUST BE RE-INSPECTED AND APPROVED ON THE SITE PRIOR TO INSTALLATION. PLANT LOCATIONS SHALL ALSO BE INSPECTED AND APPROVED PRIOR TO PLANTING.
11. PRIOR TO INSTALLATION OF PLANT MATERIAL, THE PLANTING AREAS WILL BE LAID OUT BASED ON THE PLANTING PLAN, AND ALL HIMALAYAN BLACKBERRY, ENGLISH IVY OR OTHER INVASIVE PLANT SPECIES LOCATED IN THE PLANTING AREAS WILL BE REMOVED BY HAND.
12. ALL PLANTS SHALL BE PIT-PLANTED IN PLANTING PITS EXCAVATED 2X THE DIAMETER OF THE PLANT. PLANTS SHALL BE INSTALLED 3" HIGH AND SURFACED MULCHED TO A DEPTH OF 3" WITH MEDIUM-COURSE HOG-FUEL PLACED CONTINUOUSLY THROUGHOUT THE PLANTING BED EXCEPT IN COIR BUNDLE AREAS.
13. ALL PLANTS SHALL BE NURSERY GROWN (IN WESTERN WA OR OR) FOR AT LEAST 1 YEAR FROM PURCHASE DATE, FREE FROM DISEASE OR PESTS, WELL-ROOTED, BUT NOT ROOT-BOUND AND TRUE TO SPECIES.
14. PLANT LAYOUT SHALL BE APPROVED BY AOA PRIOR TO INSTALLATION AND APPROVED UPON COMPLETION OF PLANTING.
15. UPON COMPLETION OF PLANTING, ALL PLANTS SHALL BE THOROUGHLY WATERED.
16. UPON APPROVAL OF PLANTING INSTALLATION BY AOA, THE CITY OF BELLEVUE WILL BE NOTIFIED TO CONDUCT A SITE REVIEW FOR FINAL APPROVAL OF CONSTRUCTION.
17. MAINTENANCE SHALL BE REQUIRED IN ACCORDANCE WITH THE CITY OF BELLEVUE SENSITIVE AREAS MITIGATION GUIDELINES AND APPROVED PLANS.
18. AN IRRIGATION SHALL BE DESIGN/BUILT BY LANDSCAPE CONTRACTOR TO PROVIDE SEPARATE ZONE COVERAGE TO THE LAWN AREAS VERSUS THE PLANTING BEDS.
19. THE ZONE TO THE PLANTING BEDS SHALL BE SET TO PROVIDE 1/2" OF FLOW 2-3 TIMES WEEKLY FROM JULY 1 - OCTOBER 31 THE FIRST YEAR AFTER PLANTING. FLOW SHALL REDUCE TO 1-2 TIMES WEEKLY THE SECOND YEAR AFTER PLANTING AND ONCE WEEKLY THE YEARS 3-5. NO FURTHER IRRIGATION IS NECESSARY AFTER THE THIRD YEAR FOR THE NATIVE PLANTING BEDS.
20. THE IRRIGATION SYSTEM SHALL UTILIZE MP-3 ROTARY HEADS AND WILL HAVE A RAIN SENSOR ATTACHED.
21. MAINTENANCE SHALL BE IMPLEMENTED ON A REGULAR BASIS ACCORDING TO THE SCHEDULE BELOW.

ANNUAL MAINTENANCE SCHEDULE

MAINTENANCE ITEM	J	F	M	A	M	J	J	A	S	O	N	D
WEED CONTROL			1		1	1	1	1	1	1		
GENERAL MAINT.			1		1	1	1	1	1	1		
WATERING - YEAR 1						4	8	8	8			
WATERING - YEAR 2 *						4	8	8	8			
WATERING - YEARS 3-5						4	4	4	4			

1-8 = NUMBER OF TIMES TASK SHALL BE PERFORMED PER MONTH.

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FIGURE 6: SPECIFICATIONS
GAN PROPERTY
9412 SE 16TH STREET
BELLEVUE, WA 98004
PARCEL 062405-9034-02

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MAINTENANCE & MONITORING PLAN

CONSTRUCTION MANAGEMENT

1. Prior to commencement of any work in the steep slope and shoreline setback enhancement areas, the clearing limits will be staked and all existing vegetation to be saved will be clearly marked. A pre-installation meeting will be held at the site to review and discuss all aspects of the project with the owner.
2. A biologist will supervise plan implementation during construction to ensure that objectives and specifications of the steep slope and shoreline setback enhancement plan are met.
3. Any necessary significant modifications to the design that occur as a result of unforeseen site conditions will be jointly approved by the City of Bellevue and the biologist prior to their implementation.

MONITORING METHODOLOGY

1. The monitoring program will be conducted twice yearly (in the beginning and end of the growing season) for a period of five years, with reports submitted annually (at the end of the growing season) to the City of Bellevue.
2. Vegetation establishment within the steep slope and shoreline setback enhancement areas will be monitored during each field visit with a record kept of all plant species found.
3. Photo-points will be established from which photographs will be taken throughout the monitoring period. These photographs will document general appearance and progress in plant community establishment in the enhancement areas. Review of the photos over time will provide a semi-quantitative representation of success of the enhancement plan.

PERFORMANCE STANDARDS

Success of plant establishment within the steep slope and shoreline setback enhancement areas will be evaluated on the basis of percent survival of planted species.

1. Native woody cover will be a minimum of; 10% at construction completion, 15% at year 1, 20% at year 2, 25% at year 3 and 40% at year 5.
2. There will be 100% survival of all woody planted species throughout the mitigation planted area at the end of the first year of planting. For years 2-5, success will be based on an 85% survival rate or similar number of recolonized native woody plants.
3. Exotic and invasive plant species will be maintained at levels below 10% total cover. Removal of these species will occur immediately following the monitoring event in which they surpass the above maximum coverage. Removal will occur by hand whenever possible.

MAINTENANCE (M) & CONTINGENCY (C)

1. Established performance standards for the project will be compared to the monitoring results in order to judge the success of the enhancement project.
2. Contingency will include many of the items listed below and would be implemented if these performance standards are not met.
3. Maintenance and remedial action on the site will be implemented immediately upon completion of the monitoring event, (unless otherwise specifically indicated below).

- replace dead plants with the same species or a substitute species that meet the goal of the enhancement plan (C)
- re-plant areas after reason for failure has been identified (e.g., moisture regime, poor plant stock, disease, shade/sun conditions, wildlife damage, etc.) (C)
- irrigate following plant installation for five years (M)

PERFORMANCE BOND

1. A performance bond or other surety device will be posted with the City of Bellevue by the applicant to cover the costs of steep slope and shoreline setback enhancement plan implementation (including labor, materials, maintenance, and monitoring).
2. The bond or assignment may be released in partial amounts in proportion to work successfully completed over the five year monitoring period, as the applicant demonstrates performance and corrective measures.

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FIGURE 7: MAINTENANCE & MONITORING PLAN
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