



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

Proposal Name: Chiu Vegetation Management

Proposal Address: 9900, 9910 NE 34th Street and 9957 Lake Washington Blvd

Proposal Description: The applicant requests a Critical Areas Land Use Permit for vegetation management on parts of three parcels. The application is in response to a code violation for cutting vegetation in areas containing steep slopes. Proposed management consists of planting with native plants.

File Number: 13-106152-LO

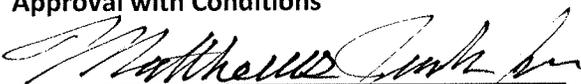
Applicant: Teresa Chiu

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

Planner: Michael Paine, Environmental Planning Manager

**State Environmental Policy Act
Threshold Determination:** **Determination of Non-Significance**

Carol V. Helland, Environmental Coordinator
Development Services Department

Director's Decision: **Approval with Conditions**

Carol V. Helland, Land Use Director
Development Services Department

Application Date: April 9, 2013
Notice of Application Publication Date: May 9, 2013
Decision Publication Date: May 30, 2013
Project/SEPA Appeal Deadline: June 13, 2013

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.

I. Proposal Description and Context

The applicant is proposing to revegetate two areas within steep slope critical areas on three separate properties located at 9900 and 9910 NE 34th Street and 9957 Lake Washington Blvd. NE. The property is located in the Northwest Bellevue subarea and enjoys views to the north and west toward Yarrow Point and Lake Washington. Approval of a Vegetation Management Plan (Plan) for this site will likely enhance these views while also protecting the functions and values of the steep slope critical area.

Figure 1: Approximate Violation Area



II. Vegetation Management Plan Performance Standards LUC 20.25H.055.C.3.v.i

(A) Does a qualified professional prepare the Vegetation Management Plan?

Yes or No

Describe: The applicant contracted with David Evans and Associates, an environmental consulting firm, to prepare the vegetation management plan. Scott Swarts, a senior fish and wildlife biologist, prepared the plan. He is a qualified professional.

(B) Does the Vegetation Management Plan include the following?

(1) A description of existing site conditions, including existing critical area functions and values;

Yes or No

Describe: The plan describes the site conditions, including the slope, aspect and vegetation

communities for all affected parcels. The plan also discusses observations of wildlife use, and that no significant habitat features exist.

(2) A site history;

Yes or No

Describe: The plan describes past cutting that has occurred in the affected area. Girdling and topping of mature maples was a common practice, apparently to enhance views of Lake Washington. Many trees felled on all affected parcels were small immature alders and branches from Big-leaf maples. However, numerous large trees were recently felled on 9957 Lake Washington Boulevard hence the recommendation to install 24 western red cedar trees on this parcel.

(3) A discussion of the plan objectives;

Yes or No

Describe: The plan lays out six management objectives. In summary they include:

- Replacing some taller species with lower growing specimens
- Creating a diversity of vegetation heights
- Creating wildlife snags
- Retaining much of the woody debris to promote soil building
- Promoting significant revegetation

(4) A description of all sensitive features;

Yes or No

Describe: The slope is the most sensitive feature and it is described in the plan.

(5) Identification of soils, existing vegetation, and habitat associated with species of local importance present on the site;

Yes or No

Describe: The plan identifies existing vegetation and the lack of any significant habitat associated with species of local importance. The Riley Group evaluated the stability of the site. Based on their observations, tree removal has not damaged the stability of the affected slopes and the proposed planting plan will not pose a risk to the slope. (See page 2 of the Riley Group letter dated April 2, 2013 for details.)

(6) Allowed work windows;

Yes or No

Describe: The proposed work is to take place in spring and early summer.

(7) A clear delineation of the area within which clearing and other vegetation management practices are allowed under the plan; and

Yes or No

Describe: Given removals occurred with benefit of permit, no specific management prescriptions are included. Instead, the plan includes detailed planting plans for each parcel

(8) Short- and long-term management prescriptions, including characterization of trees and vegetation to be removed, and restoration and revegetation plans with native species, including

native species with a lower growth habit. Such restoration and revegetation plans shall demonstrate that the proposed Vegetation Management Plan will not significantly diminish the functions and values of the critical area or alter the forest and habitat characteristics of the site over time.

Yes or No

Describe: The plan calls for restoration planting only. The long-term management prescription calls for the maintenance of the restored areas through support of the new plantings and keeping invasives from recolonizing.

(C) Would any proposed tree removal result in a significant impact to habitat associated with species of local importance?

Yes or No

Describe: The applicant removed the majority of the significant trees from affected areas without permits. Except on the steepest areas, the Plan calls for leaving the large woody debris in ground contact to prevent soil erosion and to support wildlife habitat.

If yes, may the function affected be replaced elsewhere within the management area subject to the plan?

Yes or No

Describe: Not applicable, since the plan will enhance wildlife habitat through the creation of wildlife snags and increasing species diversity on the site.

In no event may a tree that is an active nest site for a species of local importance be removed pursuant to this subsection.

(D) Is the area under application subject to any applicable neighborhood restrictive covenants that address view preservation or vegetation management? The existence of and provisions of neighborhood restrictive covenants shall not be entitled to any more or less weight than other reports and materials in the record.

Yes or No

If yes, describe:

III. Public Notice and Comment

Application Date:	April 9, 2013
Public Notice (500 feet):	May 9, 2013
Minimum Comment Period:	May 23, 2013

The Department published the Notice of Application for this project in the City of Bellevue Weekly Permit Bulletin on May 9, 2013. It was mailed to property owners within 500 feet of the project site. No comments were received from the public as of the writing of this staff report.

IV. State Environmental Policy Act (SEPA)

The environmental review indicates no probability of significant adverse environmental impacts occurring because of the proposal. The attached 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.

V. Critical Areas Land Use Permit Decision Criteria
LUC 20.30P.140

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

- A. The proposal obtains all other permits required by the Land Use Code; and
Yes or No
Describe: The applicant is required to obtain a Clearing and Grading Permit for disturbance in Critical Areas (GJ) to perform the proposed vegetation management.
- B. The proposal utilizes to the maximum extent possible the best available construction, design and development techniques which result in the least impact on the critical area and critical area buffer; and
Yes or No
Describe: A qualified professional designed the proposed vegetation management plan. It describes the best available techniques for forest replanting and monitoring the success of that planting over time.
- C. The proposal incorporates the performance standards of Part 20.25H LUC to the maximum extent applicable; and
Yes or No
Describe: As discussed in Section I above, the applicant has complied with the performance standards for vegetation management within a steep slope critical area.
- D. The proposal will be served by adequate public facilities including streets, fire protection, and utilities; and
Yes or No
Describe: The site is currently within the City of Bellevue and is served by adequate public facilities. Nothing in the proposal will increase the need for public services at the property.
- E. The proposal includes a mitigation or restoration plan consistent with the requirements of LUC 20.25H.210; except that a proposal to modify or remove vegetation pursuant to an approved Vegetation Management Plan under LUC 20.25H.055.C.3.i shall not require a mitigation or restoration plan; and
Yes or No
Describe: The proposal was designed to restore areas illegally cleared in violation of the City's codes and includes a mitigation or restoration plan consistent with the requirements of LUC 20.25H.210. This plan allows future maintenance of the affected areas only to the extent that these actions support continued restoration of the site according to the plan. No Modification or removal of vegetation is authorized for other purposes.

- F. The proposal complies with other applicable requirements of this code.
Yes or No

Describe: The applicant has complied with the code by requesting Critical Areas Land Use Permit approval. The applicant shall also apply for and obtain a clearing and grading permit to carry out the proposed replanting.

VI. 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 vegetation management plan within the steep slope critical area and critical area buffer at 610 97th Place SE.

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.

VII. Conditions of Approval

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

<u>Applicable Ordinances</u>	<u>Contact Person</u>
Clearing and Grading Code- BCC 23.76	Savina Uzunow, 425-452-7860
Land Use Code- BCC 20.25H	Michael Paine, 425-452-2739
Noise Control- BCC 9.18	Michael Paine, 425-452-2928

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

- 1. Restoration Plan Required.** To mitigate impacts to the existing vegetative community resulting from illegal clearing, a planting plan matching the precise limitations of the attached Vegetation Management Plan shall be submitted for review and approval in conjunction with the required clearing and grading permit. The planting plan must conform to planting details, densities and performance standards of the approved vegetation management plan (see attached). The City shall not authorize future construction until the associated restoration plan has been approved. Any modifications to this plan must be submitted for review and approval by the City prior to commencing any work.

Authority: Land Use Code 20.25H.220.H

Reviewer: Michael Paine, Development Services Department

2. **Temporary Irrigation Required.** Unless otherwise noted in the Plan, temporary irrigation shall be provided to guarantee establishment of restoration planting over the first two summers following installation. The restoration area shall be mulched to ensure water retention and reduce invasive growth.

Authority: Land Use Code 20.25H.220.H

Reviewer: Michael Paine, Development Services Department

2. **Monitoring and Reporting Required.** To ensure establishment occurs and long-term viability is assured, a yearly monitoring report demonstrating compliance with performance standards in the Plan shall be submitted to the Development Services Department for a period of five years. This monitoring effort may be shortened at the discretion of the City based on early performance data and evidence that the installation is accordance with the approved vegetation management plan or as amended by the Development Services Department.

Authority: Land Use Code 20.25.H.210

Reviewer Michael Paine, Development Services Department

3. **Recording of Restoration Areas:** Those parts of the site that include steep slope critical areas and their buffers shall be surveyed and marked in the field with permanent boundary markers noting their status as critical area and critical area buffer. The applicant shall record a site plan or other instrument noting that the provisions of 20.25H now or hereafter amended control use and development of the subject property.

Authority: Land Use Code 20.25H.030.B.1

Reviewer: Michael Paine, Development Services Department

4. **Rainy Season Restrictions:** Due to the steep slope critical area, no clearing and grading activity may occur during the rainy season, which is defined as October 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: Savina Uzunow, Clearing and Grading

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

Authority: Land Use Code 20.25H.220.H

Reviewer: Michael Paine, Development Services Department

6. **Noise Control:** Noise related to construction is exempt from the provisions of BCC 9.18 between the hours of 7 am to 6 pm Monday through Friday and 9 am to 6 pm on Saturdays, except for Federal holidays and as further defined by the Bellevue City Code. Noise emanating from construction is prohibited on Sundays or legal holidays unless expanded hours of operation are specifically authorized in advance. Requests for construction hour extension must occur in advance with submittal of a construction noise expanded exempt hours permit.

Authority: Bellevue Noise Code Chapter 9.18

Reviewer: Michael Paine, Development Services Department



The Riley Group, Inc.

April 2, 2013

Ms. Teresa Chiu
9920 Northeast 34th Street
Bellevue, Washington 98004
Email: Teresa.bellevue@gmail.com

**Subject: Geotechnical Review
Slope Stability and Planting Plan
Parcels 4122700130 and 2025059252
Bellevue, Washington
RGI Project No. 2013-165**

Dear Ms. Chiu,

As requested, The Riley Group, Inc. (RGI) is pleased to provide our review of the proposed planting plan. The parcels contain steep slopes and the City of Bellevue is requiring a review by a geotechnical engineer of the slope to ensure that the tree cutting has not damaged the slope stability and review of the planting plan to ensure the planting plan will not pose any risk to the slope.

The undersigned engineer visited the site on April 1, 2013 to observe the existing conditions. The parcels contain steep slopes and evidence of past grading was observed on both parcels.

Parcel 4122700130 – Vacant Lot 9900 Northeast 34th Street

This parcel is a steep slope that extends from the edge of an access drive off of Northeast 34th Street. Evidence of the recent tree cutting and clearing of the blackberries was observed. It appears that past grading created a flatter area that extends across the slope near the rear of the two adjacent houses. On the western portion of this flatter area where the small Red Alders have been cut, hummocky terrain and evidence of an arc shaped slope scarp were observed. This appears to be a slide that occurred prior to the most recent clearing as the trunks of the cut trees are growing straight in the slide debris. No recent movement of the slide was observed.

An area of yard debris was observed on the top of the slope on the eastern side of the lot. Concrete rubble was also observed on the top of the slope adjacent to the driveway. Both of these should be removed prior to planting.

Parcel 2025059252– Vacant Lot 9997 Northeast 34th Street

This parcel is a steep slope that extends from the back of the upslope lots to the flat area occupied by the sewer easement and sewer line. It appears the toe of the upper slope was removed during the grading associated with the sewer installation. Near vertical slopes were observed along the southern edge of the sewer easement. No indications of past or current slope stability failures was observed, however large portions of the slope are covered with downed trees making observation of the ground surface very difficult.

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Vegetation Management Plan

We reviewed the Vegetation Management Plan prepared by Scott Swarts in response to the cutting violation. Based on our observations on site, the cutting of the trees has not damaged the slope stability and the planting plan will not pose a risk to the slope. All planting should be completed by hand and in accordance with the site preparation recommendations in the planting plan.

The downed wood cut and left on the slope as recommended in the planting plan should be located on the flatter portions of the lots and be placed such that it does not promote the collection of water. Some of the plantings may need to be relocated because of the near vertical slopes observed on the south edge of the sewer easement. Seeding may be necessary to stabilize these areas from erosion after the planting is complete.

Limitations

This letter is the property of RGI, Ms. Teresa Chiu, and her designated agents. Within the limits of the scope and budget, this letter was prepared in accordance with generally accepted geotechnical engineering practices in the area at the time this letter was issued. This letter is intended for specific application to the clearing on parcels 4122700130 and 2025059252 located in Bellevue, Washington, and for the exclusive use of Teresa Chiu and her authorized representatives. No other warranty, expressed or implied, is made.

The conclusions and recommendations presented in this letter are based upon visual observations on site. No explorations or numerical slope stability analysis were completed as part of our services. Variations in site conditions can occur, the nature and extent of which may not become evident until the planting plan is implemented. If variations are encountered during planting, RGI should be requested to observe the conditions encountered.

We trust this letter meets your current needs. Please call us if you have any questions or need additional information at (425) 415-0551.

Sincerely,

The Riley Group, Inc.



Kristina M. Weller, P.E.
Senior Project Engineer

MEMORANDUM

DATE: March 11, 2013
TO: Teresa Chiu
9920 NE 34th Street
Bellevue, WA 98004
FROM: Scott Swarts
SUBJECT: VEGETATION MANAGEMENT PLAN
PROJECT: Teresa Chiu Tree Cutting Violation
COPIES: file

The following Vegetation Management Plan has been prepared in response to a tree cutting violation (12-12307-EA) on two parcels within the City of Bellevue. Ms. Chiu currently owns three parcels along the north side of NE 34th Street identified as parcel numbers 4122700180 (undeveloped), 4122700120 (rental), and 4122700110 (residence). Immediately north of these three parcels is parcel number 22025059252, which is undeveloped and owned by Coho Real Estate. Trees were cut on portions of parcels 4122700180 (ID # 9900) and 22025059252 (ID # 9957) as outlined in **Attachment 1**. The goal of this plan is to increase soil stability and improve wildlife habitat by increasing native plant diversity and density within the areas where the trees were cut. It is important to note that native vegetation is present within the footprint of where trees were cleared, and as such, overall planting density has been reduced to reflect this fact.

PARCEL 2025059252: This is a 1.19-acre undeveloped parcel owned by Coho Real Estate (ID # 9957). It is located immediately north of Ms. Chiu's three properties and south of State Route 520, at the base of a steep slope. A sewer easement crosses through the parcel generally east/west, an unnamed tributary to Yarrow Creek is near the northwest corner, and at least one slope wetland that drains to the unnamed tributary emanates from the base of the steep slope.

Approximately 0.50-acre of deciduous trees were cut down including big-leaf maple (*Acer macrophyllum*), red alder (*Alnus rubra*), and bitter cherry (*Prunus emarginata*). The overall area is a mixed deciduous/coniferous forest composed of big leaf maple, red alder, bitter cherry, black cottonwood (*Populus balsamifera*), western red-cedar (*Thuja plicata*), Douglas fir (*Pseudotsuga menziesii*), and western hemlock (*Tsuga heterophylla*) with an understory of salmonberry (*Rubus spectabilis*), Indian plum (*Oemleria cerasiformis*), and beaked hazelnut (*Corylus cornuta*). Ferns present include sword fern (*Polystichum munitum*), lady fern (*Athyrium filix-femina*), and bracken fern (*Pteridium aquilinum*). The herb layer includes piggy-back plant (*Tolmiea menziesii*) and giant horsetail (*Equisetum telmateia*). Non-native species present includes Himalayan blackberry (*Rubus armeniacus*), English holly (*Lix aquifolium*), and English ivy (*Hedera helix*).

PARCEL 4122700180: This is a 0.31-acre undeveloped parcel owned by Ms. Chiu (ID # 9900). The entire parcel is on a steep slope. The parcel contains two distinct vegetation areas. The upper three quarters of the parcel nearest NE 34th Street is predominantly deforested. Approximately 5 mature big-leaf maples remain. These trees are alive but were historically girdled and topped. The girdling and topping occurred many years ago based on bark re-growth around the girdle marks and branch re-growth extending 8 to 10 feet above the original topping. Numerous branches off the big-leaf maple trees and several small red alder trees (dbh ~ 2- 4 inch) were cut more recently. Most of the red alder trees/saplings were cut near a thicket of red alder trees within the northwest corner of this area. The area that was partially cleared includes numerous red alder and big-leaf maple saplings intermixed with Himalayan blackberry and sword fern. The lower one quarter is forested and no evidence of recent cutting was observed. However, the big-leaf maple trees were also previously topped many years ago, apparently about the same time period as the five big leaf maples described above.

REPLANTING PLAN

Location: Replanting is to occur within the two areas cleared by Ms. Chiu in portions of parcels 4122700180 (ID # 9900) and 22025059252 (ID # 9957). **Attachment 1** includes a planting plan worksheet for ID # 9900, and **Attachment 2** includes a planting plan worksheet for ID # 9957. Plant around all existing native vegetation.

Site Preparation: Each area to be planted has unique site preparation requirements. The site owned by Coho Real Estate is covered with downed trees. Some limbs and larger pieces will need to be cut and moved to make room for the new plantings. All limbs or trunks cut for purposes of installing new plantings should be kept on-site as downed wood. The vacant lot owned by Ms. Chiu has an existing component of Himalayan blackberry established throughout the clearing, which must be suppressed prior to replanting. Suppression can include use of herbicides and/or manual cutting. If manual cutting is undertaken the roots should be removed. In either case, keeping the Himalayan blackberry from re-infesting the site will require annual maintenance. Care must be taken to avoid impacting existing native vegetation within both clearings.

Species Key: Species to be planted includes western red-cedar, vine maple, beaked hazelnut, Indian plum, Nootka rose, salmonberry, and sword fern. Refer to **Attachments 2** and **3** for general location of plants. Planting density reflects the presence of numerous native saplings and ferns.

Table 1: Planting Schedule

Plant Legend/Key	Common Name	Size	Quantity at 9900	Quantity at 9957	Total
C	Western red-cedar	2 gallon	0	19	19
D	Douglas fir	2 gallon	0	10	10
V	Vine maple	1 gallon	16	47	63
B	Beaked hazelnut	1 gallon	18	18	36
R	Nootka rose	1 gallon	51	21	72
S	Snowberry	1 gallon	50	92	142
A	Salmonberry	1 gallon	0	47	47
F	Sword fern	1 gallon	33	71	104
Total			168	325	493

Removal of invasive species should be initiated during the summer of 2013, prior to installing the proposed plants. All plants should be installed in the fall of 2013 to take advantage of seasonal rains. If planting occurs during the spring or summer, watering during the summer is advised. All plantings should receive one inch of water per week during the first growing season from May 15 through October 31st.

Site Monitoring and Performance Standards: Monitoring will occur for a minimum of five years assuming the following performance measures are attained. The monitoring period will be extended if the following performance measures are not achieved. Replacing dead plants during the monitoring period will count toward plant survival for that year. Native recruits will count toward percent coverage.

Trees and Shrubs:

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

Annual Reporting: Monitoring forms will be prepared and submitted to the City of Bellevue on a yearly basis for five years from the date of installation. The mitigation memorandums will document plant mortality, replanting efforts, re-infestation of Himalayan blackberry, and achievement of performance standards. See **Attachments 4 and 5** for additional monitoring details.

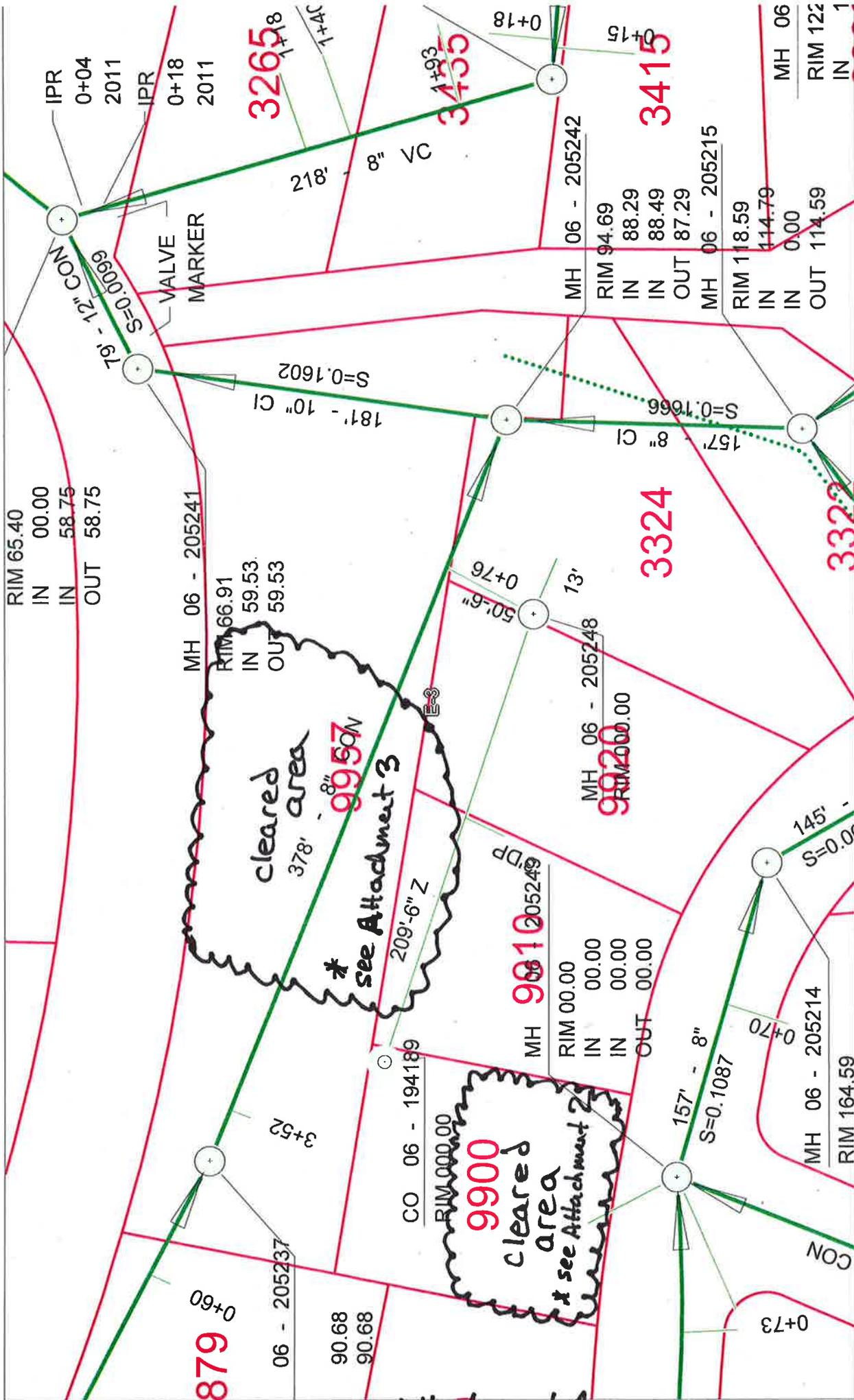
Site Maintenance: Site maintenance is required to minimize the abundance and spread of invasive species. The site should be inspected each year, once in the spring and again in the summer. All invasive species should be removed by hand or authorized herbicide. Species to be removed includes Himalayan blackberry, English ivy, Japanese knotweed, and any species from the King County noxious weed list.

Contingency Actions: If performance standards are not met, contingency actions may be required. The following table outlines frequently encountered issues and typical contingency actions implemented to meet performance standards.

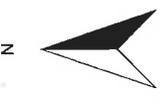
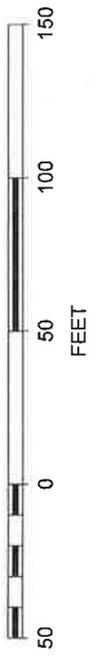
Table 2: Contingency Actions

Issue to Address	Contingency Action
Damage/mortality due to small rodents	Replace as necessary and install rodent guards.
Damage/mortality due to deer	Replace as necessary and/or install fencing, or spray with repellent.
Damage/mortality due to drought or desiccation	Replace as necessary and potentially change plant composition.
Damage/mortality due to disease	Change species composition and source of plants.

SEWER GRID E-3



SCALE 1 : 743

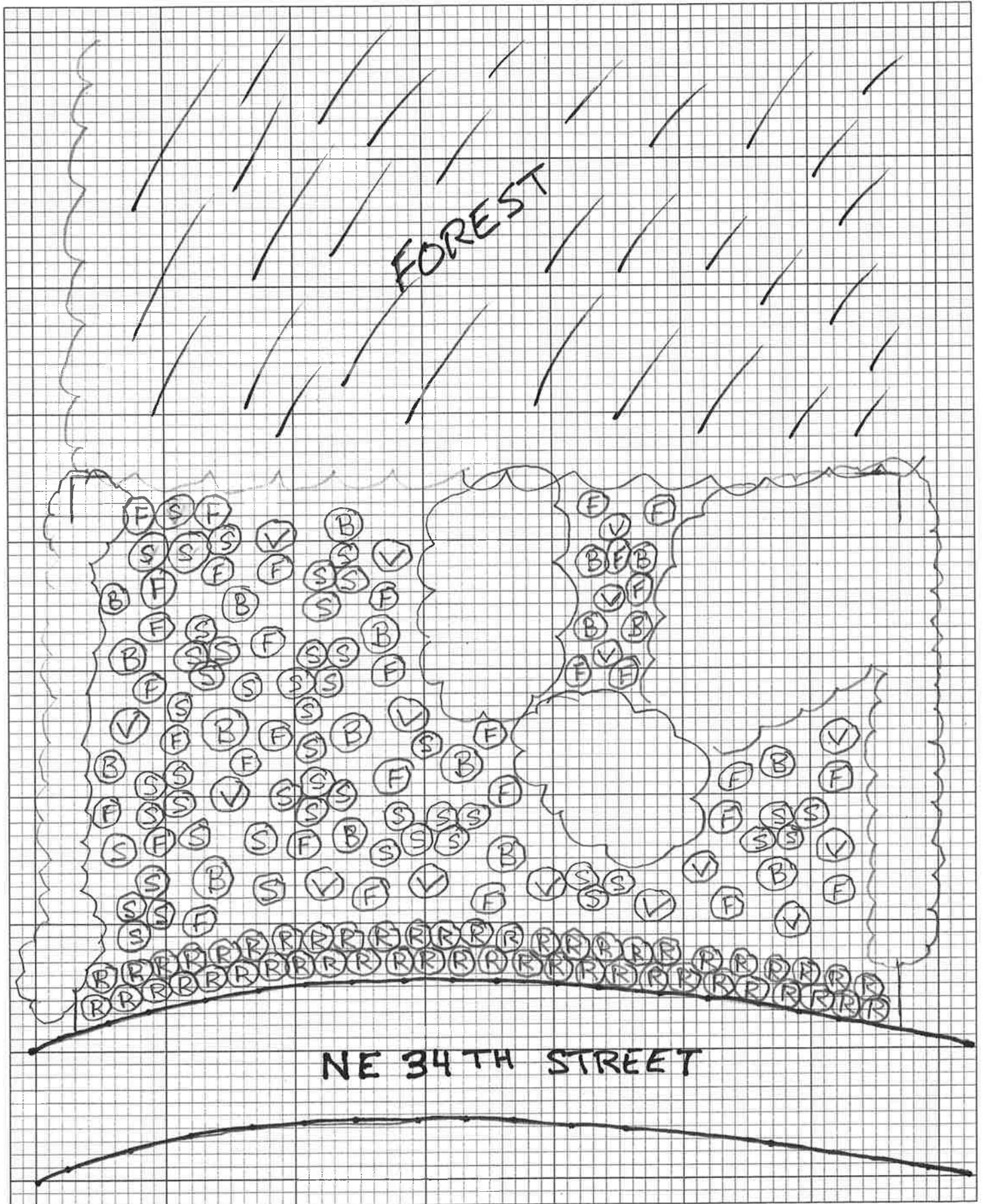


Attachment 1

↑ North

PLANT LEGEND & PLANTING PLAN WORKSHEET

9900

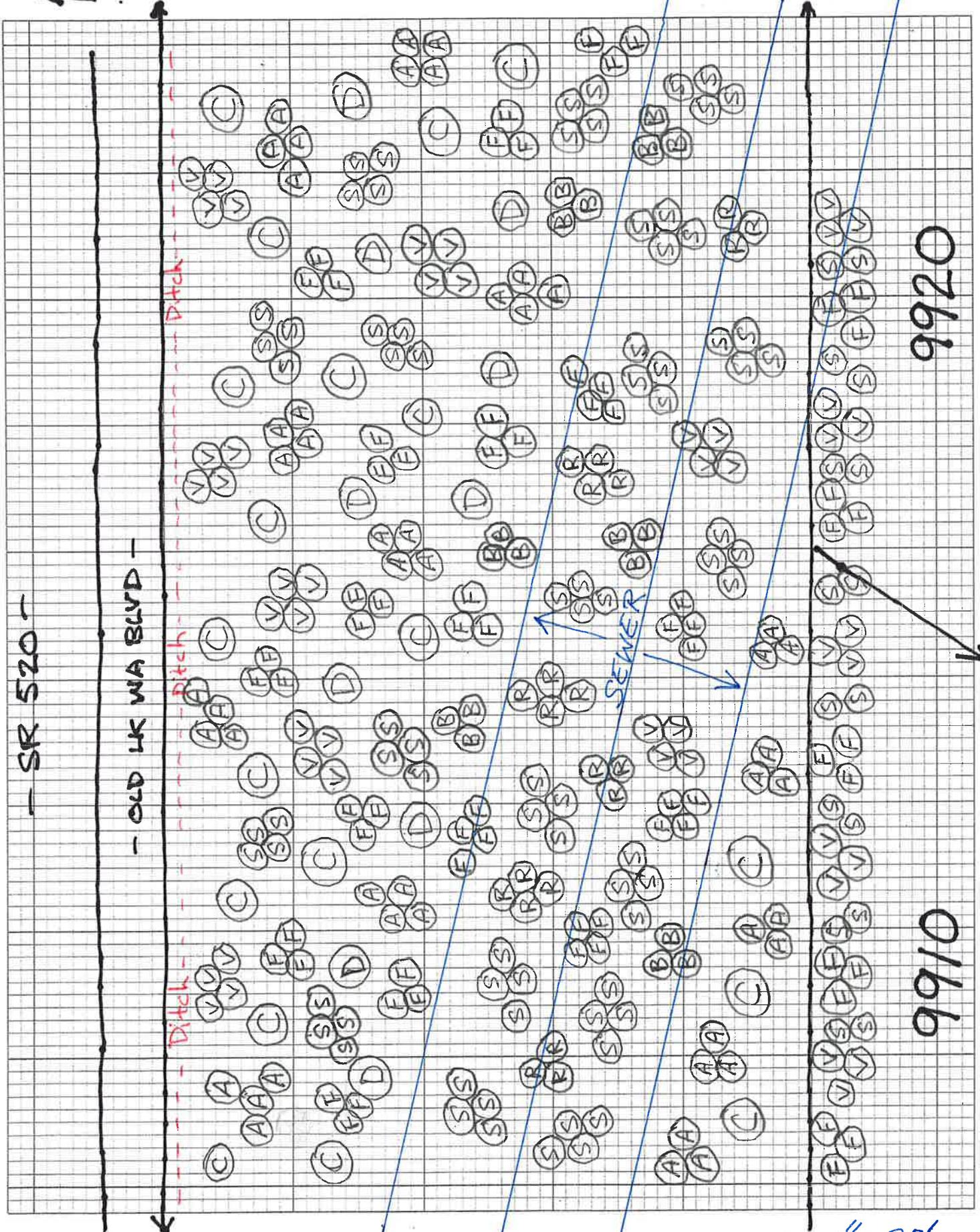


Notes: 9900

Scale: 1" = 20'

North
NTS

PLANT LEGEND & PLANTING PLAN WORKSHEET



Notes:

Scale: 1" = 20'

MITIGATION and RESTORATION MONITORING GUIDANCE

The following monitoring guidance is intended assist project applicants meet code requirements, achieve positive mitigation outcomes and save both time and money. Bellevue's critical areas ordinance (CAO), contained in section 20.25H of the Land Use Code, states that a mitigation and restoration plan must be developed anytime temporary or permanent impacts are proposed for critical areas, their buffers, or their structure setbacks. One key element of the mitigation and restoration plan is a monitoring program with performance measures that ensure the plan's goals and objectives are being met. The monitoring program allows for recognition of performance deficiencies and corrective actions to be taken as part of ongoing maintenance actions.

MONITORING TIMEFRAME

The Bellevue's CAO requires monitoring at various timeframes depending on the scope of the mitigation and restoration effort. When mitigation is required to lessen unavoidable impacts to critical areas and their functions, then a minimum of 5 years of mitigation monitoring is required. When voluntary critical area restoration is proposed, the monitoring timeframe may be reduced to 3 years. The CAO also requires that temporary disturbance restoration be monitored for at least one year from the date of project acceptance. In situations where the resource is of relatively high value or the impacted functions may take longer or be more difficult to replicate, the requirements may be lengthened beyond 5 years. If routine monitoring reveals the site is not meeting the performance standard, then corrective action must be taken within 30 days or the monitoring program will repeat the current year until standard is met.

Whenever a project is subject to greater monitoring timeframes required by state or federal permitting authorities, the city does not require that a separate monitoring program be developed. The city will accept the approved program and monitoring reports, even if city's monitoring schedule expires before that of the federal or state agencies'.

MONITORING METHODOLOGY

For smaller mitigation and/or restoration areas (<500 square feet) the entire area should be monitored. For larger areas (>500 square feet), the use of sample plots should be used and the results extrapolated for the entire area based on the percentage sampled of the entire mitigation area. The sample plots (circular, 100th-acre plots with radius of 11.8 feet) should be randomly placed throughout the area with one plot for each 5,000 square feet of mitigation area. For mitigation areas of less than 5,000 square feet, there should be at least one plot.

In years 1 and 2, the monitoring focuses on plant survival and invasive species exclusion. Plant survival is reported as a percentage of surviving native plants to the total number plants installed. Invasive species is reported by estimating the percent area of ground covered by foliage from invasive, non-native species. In year 3, the monitoring program adds in an estimation of percent ground covered by native plants. The estimate includes both installed and naturally volunteering natives. In years 4 and 5, the percent plant survival is removed, and only percent native plant and invasive species coverage are tracked.

At least three photo points should be shown on the project plans. These points should be clearly marked in the field with stakes. Photographs from each of these points should be included with each monitoring report.

Permit Number:	Monitoring Date:	Reporting Date:
Applicant Name:	Consultant Name and Company:	
Applicant Phone or Email:	Consultant Phone or Email:	

** Any criteria not meeting standard shall be accompanied by the attached CORRECTIVE ACTION ADDENDUM**

Length of Monitoring Program (Circle one)	Mitigation requires 5 years			Restoration requires 3 years			
	Monitoring Year & Monitoring Schedule (Circle the year)	Reporting Deadline (Circle one)	Restoration of temporary disturbance requires 1 year				
			Year 1	Year 2	Year 3		
	Date of Installation: _____	If mitigation is installed during Fall or Winter, then first monitoring event shall occur at the beginning of the growing season (April ¹), to assess leaf emergence and shoot growth of the installed plants; and then be monitored again at the end of the growing season (September-October ²).	Year 1	Year 2	Year 3	Year 4	Year 5
			¹ May 1 st ² November 30th	November 30th	November 30th	November 30th	November 30th
			Performance: At Standard? YES or NO	Performance: At Standard? YES or NO	Performance: At Standard? YES or NO	Performance: At Standard? YES or NO	Performance: At Standard? YES or NO
			100%	90%	85%	>70%	<15%
			Native Vegetation Cover	N/A	N/A	N/A	N/A



Attachment 5

WAC 197-11-960 Environmental checklist.

ENVIRONMENTAL CHECKLIST

Purpose of checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

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

Use of checklist for nonproject proposals:

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

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:

Native vegetation replanting in response to a tree cutting code violation (12-129121-EA).

2. Name of applicant: **Teresa Chiu**

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

9920 NE 34th Street

Bellevue, WA 98004

Phone number: (425) 941-4553

4. Date checklist prepared: **April 5, 2013**

5. Agency requesting checklist: **City of Bellevue**

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

Planting proposed to occur during the fall 2013 to take advantage of seasonal rains.

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

Five years of monitoring and maintenance as needed to meeting success standards.

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

- **Geotechnical Review conducted by The Riley Group, Inc. (Memorandum dated April 2, 2013).**
- **Vegetation Management Plan (Prepared by Scott Swarts, biologist, dated March 11, 2013).**

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.

None known.

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

City of Bellevue Critical Areas Land Use Permit

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

The proposal is to install native vegetation within portions of two parcels previously cleared by Ms. Chiu. This includes parcel numbers 4122700180 (Lot ID # 9900 [owned by Ms. Chiu but sale pending]) and 2025059252 (Lot ID # 9957 [owned by Coho Real Estate]). The parcel owned by Ms. Chiu is a 0.31-acre undeveloped lot on a steep slope. The parcel owned by Coho Real Estate is a 1.19 acre undeveloped lot located mostly at the base of a steep slope (some steep slopes present). Revegetation is proposed at both parcels. However, the pending sale and residential development of Ms. Chiu's lot (Lot ID # 9900) would negate the need for replanting. This assumes the lot is in fact sold and developed in the very near future.

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.

Both parcels are located in northwest Bellevue (immediately south of Kirkland), approximately 0.35-mile west of Bellevue Way NE, immediately south of State Route (SR) 520, between NE 34th Place and SR 520 in Section 20, Range 5 East, Township 25 North.

TO BE COMPLETED BY APPLICANT

EVALUATION FOR
AGENCY USE ONLY

B. ENVIRONMENTAL ELEMENTS

1. Earth

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

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

According to the City of Bellevue Sensitive Areas Notebook (1987) the steepest slope on both parcels is 40% +. Lot # 9900 is mapped as consisting of approximately 3/4th 40% + and 1/4th 15% - 40% slopes. Lot # 9957 is mapped as consisting of approximately 5/8th 15% - 40% slopes, 2/8th 40% +, and 1/8th 0% - 15% slopes.

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

The entire area (both parcels) is mapped by the United States Department of Agriculture – Natural Resources Conservation Service as Kitsap silt loam, 15 to 30 percent slopes.

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

According to the Geotechnical Review there is evidence of an arc shaped slope scarp that occurred prior to the most recent clearing on Lot # 9900. No observation of past unstable soils was reported for Lot # 9957, but the large amount of downed trees made closer inspection difficult.

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

No clearing or grading is proposed as part of this action.

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

According the Geotechnical Review, “the cutting of the trees has not damaged slope stability and the planting plan will not pose a risk to the slope”.

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

Zero since the project does not include any paving, building, or development-related actions.

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

The installation of native plants in areas previously cleared of vegetation will, by design, improve slope stability by increasing root density which will help hold soils in place and thereby reduce or control erosion.

a. **Air**

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

A minor release of emissions would occur due to the transport of plants and supplies to the site, as well as from the use of a chainsaw. No emissions to the air would occur after the plants have been installed.

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

None.

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

None.

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.

A tributary to Yarrow Creek flows through the northeast corner of Lot # 9957. A ditch flows along the north edge of Lot #9957 that connects to the tributary to Yarrow Creek. A small seep wetland is present along the toe-of-slope near the southern edge of Lot #9957 that also drains to the tributary to Yarrow Creek.

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

The water bodies mentioned above will be avoided by this action.

- 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.

No fill or dredge material will be placed in or removed from surface waters or wetlands as part of this action.

- 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, purpose, and approximate quantities if known.

No ground water will be withdrawn or discharged by this action.

- 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.

Not applicable to this action.

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.

Not applicable to this action.

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

Not applicable to this action.

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

Not applicable to this action.

4. Plants

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

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

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

Removal of vegetation is limited to Himalayan blackberry, which is a non-native species that tends to dominate previously disturbed sites. It is most prevalent at Lot # 9900.

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

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

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

Proposed use of native plants is as follows:

Planting Schedule

Common Name	Size	Quantity at 9900	Quantity at 9957	Total
Western red-cedar	2 gallon	0	19	19
Douglas fir	2 gallon	0	10	10
Vine maple	1 gallon	16	47	63
Beaked hazelnut	1 gallon	18	18	36
Nootka rose	1 gallon	51	21	72
Snowberry	1 gallon	50	92	142
Salmonberry	1 gallon	0	47	47
Sword fern	1 gallon	33	71	104
Total		168	325	493

5. Animals

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

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 present.

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

No.

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

The installation of native trees and shrubs will enhance wildlife habitat.

6. Energy and natural resources

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

None will be used for this action.

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 this 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.

No.

1) Describe special emergency services that might be required.

Not applicable.

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

No.

b. Noise

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

Noise from SR 502 is measurable in the project area, but it will not affect the installation of plants.

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

Noise generated from this action is generally limited to the use of a chainsaw, which is required to make room to install the plants at Lot 9957. This will be short-term and anticipated to occur intermittently for four to six hours. This would occur during daylight hours.

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

None proposed.

8. Land and shoreline use

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

Both parcels are currently undeveloped, while some of the adjacent parcels consist of single-family homes. Forested areas are also present in the project vicinity.

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

No.

c. Describe any structures on the site.

Not applicable.

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

No.

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

Single Family R-2.5

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

Single Family – Medium Density SF-M

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

Not applicable.

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

Steep slopes, tributary to Yarrow Creek, and wetland(s).

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

Not applicable.

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

None.

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

Not applicable.

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

Not applicable since this action is limited to the installation of native plants, maintenance, and monitoring.

9. Housing

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

Not applicable.

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

Not applicable.

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

None.

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?

Not applicable.

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

Previous tree cutting at both sites were undertaken to improve views. The use of trees at Lot # 9957 was avoided due to the prevalence of tree cutting by upslope residents. Numerous trees were included at Lot # 9900 to mimic the composition of adjoining forested areas. These trees, once mature, will reduce or limit the views of adjoining upslope parcels.

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

Plant only shrubs at Lot # 9957.

11. Light and glare

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

None.

- 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 and glare impacts, if any:

None.

12. Recreation

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

Walking and bicycle riding.

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:

Not applicable.

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.

No.

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

Not applicable.

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

None.

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.

Vehicle access to this area is limited to NE 34th Place. Lot # 5597 is isolated from vehicle access. An abandoned section of old Lake Washington Boulevard is present immediately south of SR 520, but this road is generally closed to vehicle access (unless you have a key to the gate) and may be destined to become part of a regional trail network.

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

No.

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

None – Not Applicable.

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.

None – Not Applicable.

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

None – Not Applicable.

15. Public services

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

No.

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

None – Not Applicable.

16. Utilities

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

Both parcels are undeveloped and lack on-site utilities.

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.

None – Not Applicable.

C. SIGNATURE

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

Signature: *Jenisa Chinn*

Date Submitted: *4/9/2013*

D. SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS

(do not use this sheet for project actions)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

Proposed measures to avoid or reduce such increases are:

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

3. How would the proposal be likely to deplete energy or natural resources?

Proposed measures to protect or conserve energy and natural resources are:

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

Proposed measures to protect such resources or to avoid or reduce impacts are:

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

Proposed measures to avoid or reduce shoreline and land use impacts are:

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

Proposed measures to reduce or respond to such demand(s) are:

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.



The Riley Group, Inc.

April 2, 2013

Ms. Teresa Chiu
9920 Northeast 34th Street
Bellevue, Washington 98004
Email: Teresa.bellevue@gmail.com

**Subject: Geotechnical Review
Slope Stability and Planting Plan
Parcels 4122700130 and 2025059252
Bellevue, Washington
RGI Project No. 2013-165**

Dear Ms. Chiu,

As requested, The Riley Group, Inc. (RGI) is pleased to provide our review of the proposed planting plan. The parcels contain steep slopes and the City of Bellevue is requiring a review by a geotechnical engineer of the slope to ensure that the tree cutting has not damaged the slope stability and review of the planting plan to ensure the planting plan will not pose any risk to the slope.

The undersigned engineer visited the site on April 1, 2013 to observe the existing conditions. The parcels contain steep slopes and evidence of past grading was observed on both parcels.

Parcel 4122700130 – Vacant Lot 9900 Northeast 34th Street

This parcel is a steep slope that extends from the edge of an access drive off of Northeast 34th Street. Evidence of the recent tree cutting and clearing of the blackberries was observed. It appears that past grading created a flatter area that extends across the slope near the rear of the two adjacent houses. On the western portion of this flatter area where the small Red Alders have been cut, hummocky terrain and evidence of an arc shaped slope scarp were observed. This appears to be a slide that occurred prior to the most recent clearing as the trunks of the cut trees are growing straight in the slide debris. No recent movement of the slide was observed.

An area of yard debris was observed on the top of the slope on the eastern side of the lot. Concrete rubble was also observed on the top of the slope adjacent to the driveway. Both of these should be removed prior to planting.

Parcel 2025059252– Vacant Lot 9997 Northeast 34th Street

This parcel is a steep slope that extends from the back of the upslope lots to the flat area occupied by the sewer easement and sewer line. It appears the toe of the upper slope was removed during the grading associated with the sewer installation. Near vertical slopes were observed along the southern edge of the sewer easement. No indications of past or current slope stability failures was observed, however large portions of the slope are covered with downed trees making observation of the ground surface very difficult.

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Vegetation Management Plan

We reviewed the Vegetation Management Plan prepared by Scott Swarts in response to the cutting violation. Based on our observations on site, the cutting of the trees has not damaged the slope stability and the planting plan will not pose a risk to the slope. All planting should be completed by hand and in accordance with the site preparation recommendations in the planting plan.

The downed wood cut and left on the slope as recommended in the planting plan should be located on the flatter portions of the lots and be placed such that it does not promote the collection of water. Some of the plantings may need to be relocated because of the near vertical slopes observed on the south edge of the sewer easement. Seeding may be necessary to stabilize these areas from erosion after the planting is complete.

Limitations

This letter is the property of RGI, Ms. Teresa Chiu, and her designated agents. Within the limits of the scope and budget, this letter was prepared in accordance with generally accepted geotechnical engineering practices in the area at the time this letter was issued. This letter is intended for specific application to the clearing on parcels 4122700130 and 2025059252 located in Bellevue, Washington, and for the exclusive use of Teresa Chiu and her authorized representatives. No other warranty, expressed or implied, is made.

The conclusions and recommendations presented in this letter are based upon visual observations on site. No explorations or numerical slope stability analysis were completed as part of our services. Variations in site conditions can occur, the nature and extent of which may not become evident until the planting plan is implemented. If variations are encountered during planting, RGI should be requested to observe the conditions encountered.

We trust this letter meets your current needs. Please call us if you have any questions or need additional information at (425) 415-0551.

Sincerely,

The Riley Group, Inc.



Kristina M. Weller, P.E.
Senior Project Engineer

MEMORANDUM

DATE: March 11, 2013
TO: Teresa Chiu
9920 NE 34th Street
Bellevue, WA 98004
FROM: Scott Swarts
SUBJECT: VEGETATION MANAGEMENT PLAN
PROJECT: Teresa Chiu Tree Cutting Violation
COPIES: file

The following Vegetation Management Plan has been prepared in response to a tree cutting violation (12-12307-EA) on two parcels within the City of Bellevue. Ms. Chiu currently owns three parcels along the north side of NE 34th Street identified as parcel numbers 4122700180 (undeveloped), 4122700120 (rental), and 4122700110 (residence). Immediately north of these three parcels is parcel number 22025059252, which is undeveloped and owned by Coho Real Estate. Trees were cut on portions of parcels 4122700180 (ID # 9900) and 22025059252 (ID # 9957) as outlined in **Attachment 1**. The goal of this plan is to increase soil stability and improve wildlife habitat by increasing native plant diversity and density within the areas where the trees were cut. It is important to note that native vegetation is present within the footprint of where trees were cleared, and as such, overall planting density has been reduced to reflect this fact.

PARCEL 2025059252: This is a 1.19-acre undeveloped parcel owned by Coho Real Estate (ID # 9957). It is located immediately north of Ms. Chiu's three properties and south of State Route 520, at the base of a steep slope. A sewer easement crosses through the parcel generally east/west, an unnamed tributary to Yarrow Creek is near the northwest corner, and at least one slope wetland that drains to the unnamed tributary emanates from the base of the steep slope.

Approximately 0.50-acre of deciduous trees were cut down including big-leaf maple (*Acer macrophyllum*), red alder (*Alnus rubra*), and bitter cherry (*Prunus emarginata*). The overall area is a mixed deciduous/coniferous forest composed of big leaf maple, red alder, bitter cherry, black cottonwood (*Populus balsamifera*), western red-cedar (*Thuja plicata*), Douglas fir (*Pseudotsuga menziesii*), and western hemlock (*Tsuga heterophylla*) with an understory of salmonberry (*Rubus spectabilis*), Indian plum (*Oemleria cerasiformis*), and beaked hazelnut (*Corylus cornuta*). Ferns present include sword fern (*Polystichum munitum*), lady fern (*Athyrium filix-femina*), and bracken fern (*Pteridium aquilinum*). The herb layer includes piggy-back plant (*Tolmiea menziesii*) and giant horsetail (*Equisetum telmateia*). Non-native species present includes Himalayan blackberry (*Rubus armeniacus*), English holly (*Lix aquifolium*), and English ivy (*Hedera helix*).

PARCEL 4122700180: This is a 0.31-acre undeveloped parcel owned by Ms. Chiu (ID # 9900). The entire parcel is on a steep slope. The parcel contains two distinct vegetation areas. The upper three quarters of the parcel nearest NE 34th Street is predominantly deforested. Approximately 5 mature big-leaf maples remain. These trees are alive but were historically girdled and topped. The girdling and topping occurred many years ago based on bark re-growth around the girdle marks and branch re-growth extending 8 to 10 feet above the original topping. Numerous branches off the big-leaf maple trees and several small red alder trees (dbh ~ 2- 4 inch) were cut more recently. Most of the red alder trees/saplings were cut near a thicket of red alder trees within the northwest corner of this area. The area that was partially cleared includes numerous red alder and big-leaf maple saplings intermixed with Himalayan blackberry and sword fern. The lower one quarter is forested and no evidence of recent cutting was observed. However, the big-leaf maple trees were also previously topped many years ago, apparently about the same time period as the five big leaf maples described above.

REPLANTING PLAN

Location: Replanting is to occur within the two areas cleared by Ms. Chiu in portions of parcels 4122700180 (ID # 9900) and 22025059252 (ID # 9957). **Attachment 1** includes a planting plan worksheet for ID # 9900, and **Attachment 2** includes a planting plan worksheet for ID # 9957. Plant around all existing native vegetation.

Site Preparation: Each area to be planted has unique site preparation requirements. The site owned by Coho Real Estate is covered with downed trees. Some limbs and larger pieces will need to be cut and moved to make room for the new plantings. All limbs or trunks cut for purposes of installing new plantings should be kept on-site as downed wood. The vacant lot owned by Ms. Chiu has an existing component of Himalayan blackberry established throughout the clearing, which must be suppressed prior to replanting. Suppression can include use of herbicides and/or manual cutting. If manual cutting is undertaken the roots should be removed. In either case, keeping the Himalayan blackberry from re-infesting the site will require annual maintenance. Care must be taken to avoid impacting existing native vegetation within both clearings.

Species Key: Species to be planted includes western red-cedar, vine maple, beaked hazelnut, Indian plum, Nootka rose, salmonberry, and sword fern. Refer to **Attachments 2** and **3** for general location of plants. Planting density reflects the presence of numerous native saplings and ferns.

Table 1: Planting Schedule

Plant Legend/Key	Common Name	Size	Quantity at 9900	Quantity at 9957	Total
C	Western red-cedar	2 gallon	0	19	19
D	Douglas fir	2 gallon	0	10	10
V	Vine maple	1 gallon	16	47	63
B	Beaked hazelnut	1 gallon	18	18	36
R	Nootka rose	1 gallon	51	21	72
S	Snowberry	1 gallon	50	92	142
A	Salmonberry	1 gallon	0	47	47
F	Sword fern	1 gallon	33	71	104
Total			168	325	493

Removal of invasive species should be initiated during the summer of 2013, prior to installing the proposed plants. All plants should be installed in the fall of 2013 to take advantage of seasonal rains. If planting occurs during the spring or summer, watering during the summer is advised. All plantings should receive one inch of water per week during the first growing season from May 15 through October 31st.

Site Monitoring and Performance Standards: Monitoring will occur for a minimum of five years assuming the following performance measures are attained. The monitoring period will be extended if the following performance measures are not achieved. Replacing dead plants during the monitoring period will count toward plant survival for that year. Native recruits will count toward percent coverage.

Trees and Shrubs:

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

Annual Reporting: Monitoring forms will be prepared and submitted to the City of Bellevue on a yearly basis for five years from the date of installation. The mitigation memorandums will document plant mortality, replanting efforts, re-infestation of Himalayan blackberry, and achievement of performance standards. See **Attachments 4 and 5** for additional monitoring details.

Site Maintenance: Site maintenance is required to minimize the abundance and spread of invasive species. The site should be inspected each year, once in the spring and again in the summer. All invasive species should be removed by hand or authorized herbicide. Species to be removed includes Himalayan blackberry, English ivy, Japanese knotweed, and any species from the King County noxious weed list.

Contingency Actions: If performance standards are not met, contingency actions may be required. The following table outlines frequently encountered issues and typical contingency actions implemented to meet performance standards.

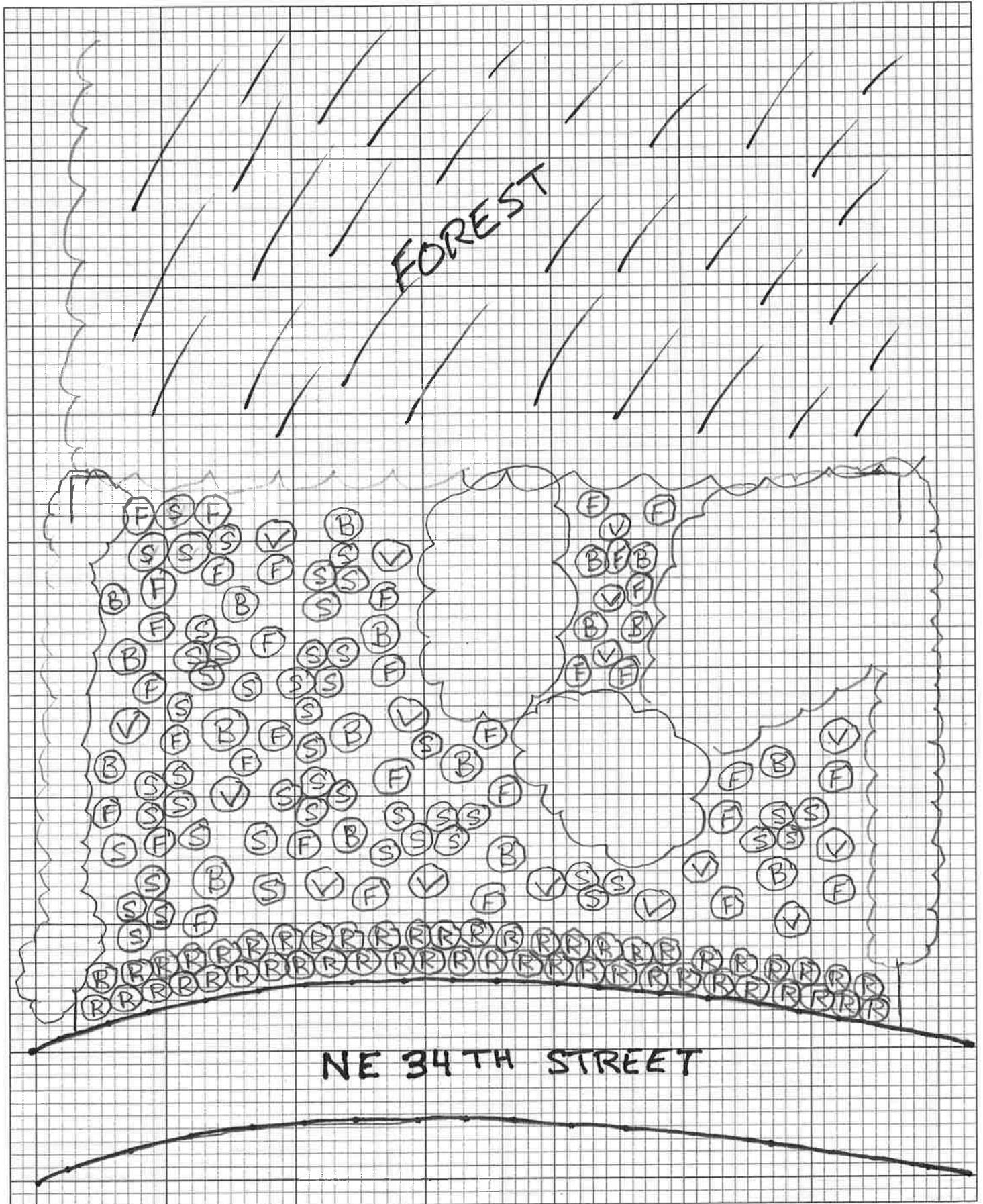
Table 2: Contingency Actions

Issue to Address	Contingency Action
Damage/mortality due to small rodents	Replace as necessary and install rodent guards.
Damage/mortality due to deer	Replace as necessary and/or install fencing, or spray with repellent.
Damage/mortality due to drought or desiccation	Replace as necessary and potentially change plant composition.
Damage/mortality due to disease	Change species composition and source of plants.

↑ North

PLANT LEGEND & PLANTING PLAN WORKSHEET

9900

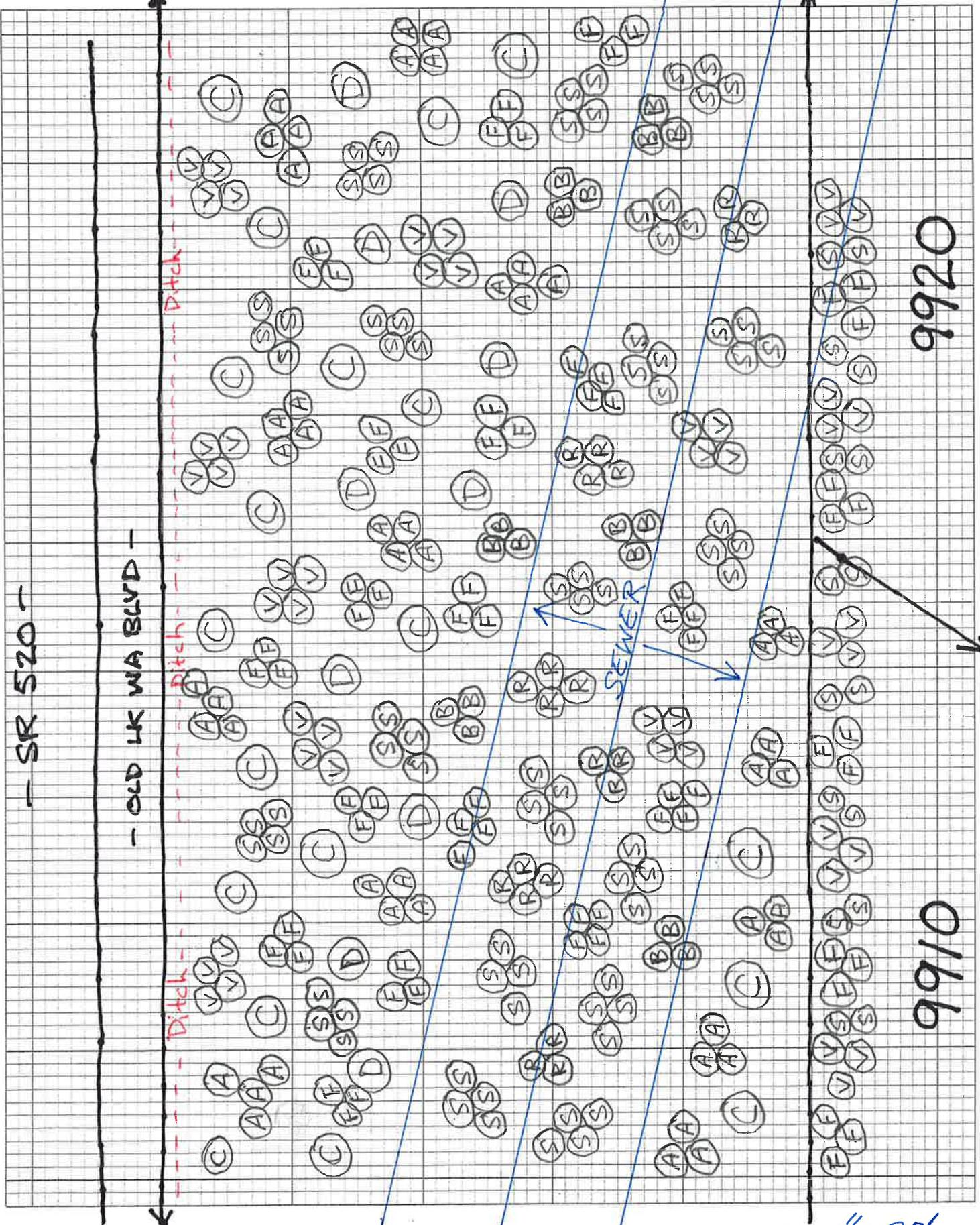


Notes: 9900

Scale: 1" = 20'

North
NTS

PLANT LEGEND & PLANTING PLAN WORKSHEET



Notes:

Scale: 1" = 20'

MITIGATION and RESTORATION MONITORING GUIDANCE

The following monitoring guidance is intended assist project applicants meet code requirements, achieve positive mitigation outcomes and save both time and money. Bellevue's critical areas ordinance (CAO), contained in section 20.25H of the Land Use Code, states that a mitigation and restoration plan must be developed anytime temporary or permanent impacts are proposed for critical areas, their buffers, or their structure setbacks. One key element of the mitigation and restoration plan is a monitoring program with performance measures that ensure the plan's goals and objectives are being met. The monitoring program allows for recognition of performance deficiencies and corrective actions to be taken as part of ongoing maintenance actions.

MONITORING TIMEFRAME

The Bellevue's CAO requires monitoring at various timeframes depending on the scope of the mitigation and restoration effort. When mitigation is required to lessen unavoidable impacts to critical areas and their functions, then a minimum of 5 years of mitigation monitoring is required. When voluntary critical area restoration is proposed, the monitoring timeframe may be reduced to 3 years. The CAO also requires that temporary disturbance restoration be monitored for at least one year from the date of project acceptance. In situations where the resource is of relatively high value or the impacted functions may take longer or be more difficult to replicate, the requirements may be lengthened beyond 5 years. If routine monitoring reveals the site is not meeting the performance standard, then corrective action must be taken within 30 days or the monitoring program will repeat the current year until standard is met.

Whenever a project is subject to greater monitoring timeframes required by state or federal permitting authorities, the city does not require that a separate monitoring program be developed. The city will accept the approved program and monitoring reports, even if city's monitoring schedule expires before that of the federal or state agencies'.

MONITORING METHODOLOGY

For smaller mitigation and/or restoration areas (<500 square feet) the entire area should be monitored. For larger areas (>500 square feet), the use of sample plots should be used and the results extrapolated for the entire area based on the percentage sampled of the entire mitigation area. The sample plots (circular, 100th-acre plots with radius of 11.8 feet) should be randomly placed throughout the area with one plot for each 5,000 square feet of mitigation area. For mitigation areas of less than 5,000 square feet, there should be at least one plot.

In years 1 and 2, the monitoring focuses on plant survival and invasive species exclusion. Plant survival is reported as a percentage of surviving native plants to the total number plants installed. Invasive species is reported by estimating the percent area of ground covered by foliage from invasive, non-native species. In year 3, the monitoring program adds in an estimation of percent ground covered by native plants. The estimate includes both installed and naturally volunteering natives. In years 4 and 5, the percent plant survival is removed, and only percent native plant and invasive species coverage are tracked.

At least three photo points should be shown on the project plans. These points should be clearly marked in the field with stakes. Photographs from each of these points should be included with each monitoring report.

Permit Number:	Monitoring Date:	Reporting Date:
Applicant Name:	Consultant Name and Company:	
Applicant Phone or Email:	Consultant Phone or Email:	

** Any criteria not meeting standard shall be accompanied by the attached CORRECTIVE ACTION ADDENDUM**

Length of Monitoring Program (Circle one)	Mitigation requires 5 years			Restoration requires 3 years					
	Monitoring Year & Monitoring Schedule (Circle the year)	Reporting Deadline (Circle one)	Restoration of temporary disturbance requires 1 year						
			Year 1	Year 2	Year 3				
	Date of Installation: _____	If mitigation is installed during Fall or Winter, then first monitoring event shall occur at the beginning of the growing season (April ¹), to assess leaf emergence and shoot growth of the installed plants; and then be monitored again at the end of the growing season (September-October ²).	Year 1	Year 2	Year 3	Year 4	Year 5		
			¹ May 1 st	November 30th	Performance: <u>90%</u>	Performance: <u>N/A</u>	Performance: <u>>35%</u>	Performance: <u>>70%</u>	Performance: <u><10%</u>
			² November 30th	November 30th	Performance: <u>At Standard?</u> YES or NO	Performance: <u>N/A</u>	Performance: <u>At Standard?</u> YES or NO	Performance: <u>At Standard?</u> YES or NO	Performance: <u>At Standard?</u> YES or NO
			November 30th	November 30th	Performance: <u>At Standard?</u> YES or NO				
			November 30th	November 30th	Performance: <u>At Standard?</u> YES or NO				



Attachment 5