City of Bellevue
Development Services Department
Land Use Staff Report

Proposal Name:	**Miller Residence**
Proposal Address:	**2389 Killarney Way**
Proposal Description:	The applicant requests a Critical Areas Land Use Permit to construct a 5,432 square-foot single-family residence. The proposal is supported by geotechnical and critical areas reports.
File Number:	**16-131522-LO**
Applicant:	**Daniel Buchser**
Decisions Included:	Critical Areas Land Use Permit (Process II. LUC 20.30P)
Planner:	**David Wong**, Planner
State Environmental Policy Act Threshold Determination:	**Exempt per WAC 197-11-800 (1)**
Director's Decision:	**Approval with Conditions**

Carol V. Helland, Land Use Director
Development Services Department

Application Date:	May 4, 2016
Notice of Application Publication Date:	June 30, 2016
Decision Publication Date:	September 1, 2016
Project/SEPA Appeal Deadline:	September 15, 2016

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.

CONTENTS

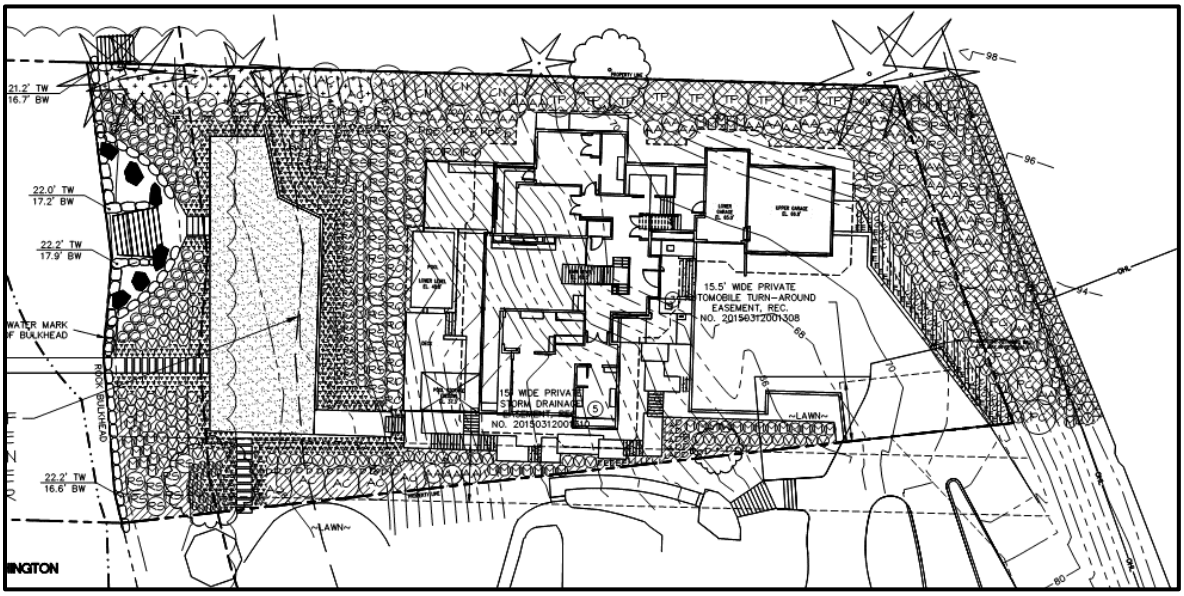
Attachments

1. Site Plan
2. Critical Areas Report (in file)
3. Geotechnical Recommendations (in file)
4. Mitigation, Restoration, and Enhancement Plan

I. Proposal Description

The applicant has requested a Critical Areas Land Use Permit (CALUP) in order to construct a 5,432 square-foot single-family residence that features an above grade pool, three (3) decks, a roof-top patio, and a three-car garage. Included in this proposal is a mitigation, restoration, and enhancement plan that provides approximately 9,179 square feet of native planting. See Figure 1 below for more information.

Figure 1



The project requires the approval of a Critical Areas Land Use Permit prior to issuance of development permits due to the proposed intrusion into an existing slope, slope buffer, and slope structure setbacks. Land Use Code (LUC) 20.25H.120.B prescribes a 50-foot critical area buffer from the surveyed top-of-slope and a 75-foot critical area structure setback from the surveyed toe-of-slope. LUC 20.25H.145 allows for the modification of steep slope critical areas and their buffers through a critical areas report (CAR). The CAR is a mechanism by which certain LUC requirements may be modified for a specific proposal.

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

A. Site Description

The site is approximately 23,277 square feet in size and is located along Killarney Way between 110th Ave SE and SE 25th St. The site fronts Lake Washington to the west and contains approximately 2,985 square feet of shoreline buffer area. In addition to shoreline critical area and buffer area, the site contains three (3) steep slopes and their buffers measuring approximately 12,169 square feet. Vegetation on-site primarily includes non-native grasses and Himalayan blackberry (*Rubus armeniacus*), however small areas of sword fern (*Polystichum munitum*), beaked hazelnut (*Corylus cornuta*), and big-leaf maple (*Acer macrophyllum*) were observed on-site (Attachment 2 pg. 32). See Figure 2 below for more information.

Figure 2

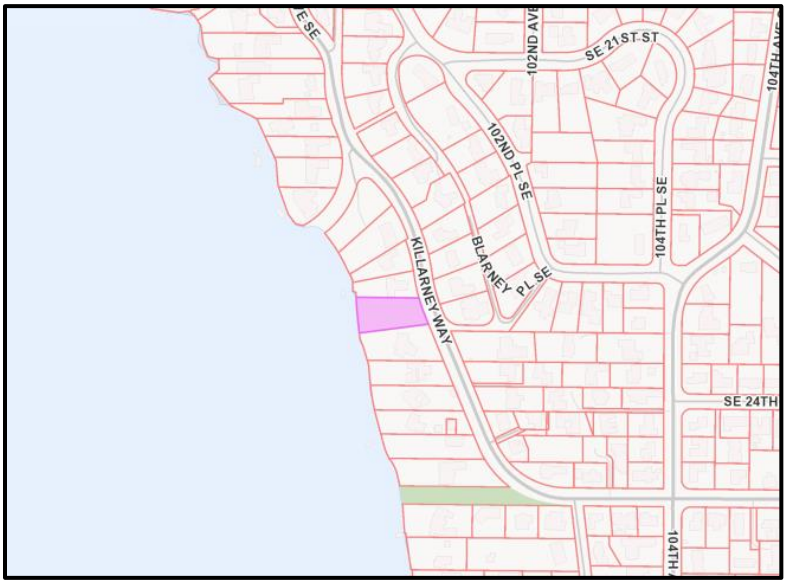
B. Zoning

The property is zoned R-1.8 and is located within the Southwest Bellevue subarea.

C. Land Use Context

The property is bordered by single-family residential districts (Zone R-1.8) to the north, south, and east, and is bordered by Lake Washington to the west. The Comprehensive Plan designation for this site is SF-L or Single-Family Low Density. See Figure 3 below for more information.

Figure 3



D. Critical Areas Functions and Values

i. Geologic Hazard Areas

Geologic hazards pose a threat to the health and safety of citizens when commercial, residential, or industrial 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 (WAC 365-190).

Steep slopes may serve several other functions and possess other values for the City and its residents. Several 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 provides 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.

ii. Shorelines

Shorelines provide a variety of functions including shade, temperature control, water purification, woody debris recruitment, channel, bank and beach erosion, sediment delivery, and terrestrial-based food supply (Gregory et al. 1991; Naiman et al. 1993; Spence et al.1996).

Shorelines provide a wide variety of functions related to aquatic and riparian habitat, flood control and water quality, economic resources, and recreation, among others. Each function is a product of physical, chemical, and biological processes at work within the overall landscape. In lakes, these processes take place within an integrated system (ecosystem) of coupled aquatic and riparian habitats (Schindler and Scheuerell 2002). Hence, it is important to have an ecosystem approach which incorporates an understanding of shoreline functions and values. The discussion presented herein emphasizes this ecosystem approach.

III. Consistency with Land Use Code Requirements:

A. Zoning District Dimensional Requirements:

The site is located in the R-1.8 zoning district. The plans demonstrate conformance with zoning dimensional standards, however conformance will be verified during construction permit review.

B. Critical Areas Requirements LUC 20.25H:

The City of Bellevue Land Use Code Critical Areas Overlay District (LUC 20.25H) establishes performance standards and procedures that apply to development on any

site which contains in whole or in part any portion designated as critical area, critical area buffer or structure setback from a critical area or buffer. The proposed single-family dwelling, decks, pool, and patio modify the steep slope critical area, 50-foot top-of-slope buffers, and 75-foot structure setback. The project is subject to the performance standards found in LUC 20.25H.125 which are reviewed below.

i. Consistency With Steep Slope Performance Standards (LUC 20.25H.125)
Development within a landslide hazard, 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.

1. **Structures and improvements shall minimize alterations to the natural contour of the slope, and foundations shall be tiered where possible to conform to the existing topography;**
   The existing site consists of three slopes sloping down from east to west with overlapping steep slope buffers and steep slope structure setbacks between the three slopes. The improvements have been designed and located to minimize alteration to the contours of the three slopes by prioritizing impacts to this overlapping buffer/structure setback area. The single-family residence and garage foundations have been tiered in accordance with these performance standards.

2. **Structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation;**
   Improvements have been located within the degraded areas of the steep slopes, the steep slope buffers, and the steep structure setbacks to avoid impacts to the shoreline buffer and shoreline structure setback. Vegetation impacts will primarily include impacts to non-native invasive plants located within the proposed development area, however seven (7) existing trees are proposed to be removed to facilitate construction of improvements. Replacement trees have been included in the mitigation, restoration, and enhancement plan.

3. **The proposed development shall not result in greater risk or a need for increased buffers on neighboring properties;**
   Geotechnical analysis of the existing conditions and proposed improvements, *"… will not result in a greater geologic hazard risk or a need for increased buffer zones on neighboring properties.*" (Attachment 3 pg. 3) and *"…will provide much improved stability to this property and the adjacent property to the north."*

4. **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 walls;**
   Retaining walls have been proposed instead of regrading steep slope areas to

match existing contours.

5. **Development shall be designed to minimize impervious surfaces within the critical area and critical area buffer;**
   The proposal has been designed to minimize impervious surfaces within the critical areas and critical area buffers by utilizing an existing paved driveway and degraded slope area to site the house and driveway. No new impervious surface is being added within the shoreline buffer.

6. **Where a change in grade outside the building footprint is necessary, the site retention system should be stepped and regrading 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;**
   No changes in grade outside of the proposed building footprint are included in this project.

7. **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;**
   The project includes the use of foundation walls and retaining walls, however the retaining walls have been designed to tie into the proposed foundation. An architectural seat wall of approximately 30 inches in height is proposed outside of the lower slope and outside of the shoreline buffer.

8. **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;**
   The single-family residence and garage have been tiered to avoid unnecessary topographic modification.

9. **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**
   The proposed garage does not require the use of a piled deck support structure or fill-based construction.

10. **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.**
    The project includes a mitigation, restoration, and enhancement plan meeting

the requirements of 20.25H.210 that includes approximately 9,179 square feet of mitigation and enhancement.

C. Consistency with Critical Areas Report LUC 20.25H.230

The applicant supplied a complete critical areas report prepared by Altmann Oliver Associates, MacPherson Construction, and Yonemitsu Geological Services. The report met the minimum requirements in LUC 20.25H.250 and LUC 20.25H.140.

D. Consistency with Critical Areas Report LUC 20.25H.140

Modification of a steep slope and steep slope buffer requires a critical areas report as part of the application for a Critical Areas Land Use Permit. The applicant has obtained the services of a qualified geotechnical engineering company to study the site and document the observed conditions. Staff have reviewed the following documents:

- Geotechnical Recommendations – Proposed Miller Residence
  Prepared by Robert M. Pride dated July 19, 2016

IV. Public Notice and Comment

Application Date:	May 5, 2016
Public Notice (500 feet):	June 30, 2016
Minimum Comment Period:	July 14, 2016

The Notice of Application for this project was published in the City of Bellevue Weekly Permit Bulletin on June 30, 2016. It was mailed to property owners within 500 feet of the project site. One comment has been received from the public as of the writing of this staff report.

Summary of public comment:

The plans that were submitted with this project show a proposed dock but the permit description does not include the development of a dock.

Response:

The dock permit was approved in 2015 as a standalone shoreline substantial development permit with SEPA. At that time the applicant had decided to forego developing a single-family residence. The shoreline substantial development permit was reviewed for conformance and subsequently approved. This project does not include a review of the dock work that was previously approved or modifications to the previously approved permit.

V. Summary of Technical Reviews

Clearing and Grading:

The Clearing and Grading Division of the Development Services Department has reviewed the proposed development for compliance with Clearing and Grading codes and standards. The Clearing and Grading staff found no issues with the proposed development.

VI. Decision Criteria

A. Critical Areas Land Use Permit Decision Criteria 20.30P

The Director may approve or approve with modifications an application for a critical areas land use permit if:

1. The proposal obtains all other permits required by the Land Use Code;

Finding: A single-family building permit will be required to be obtained.

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

Finding: The proposal utilizes existing impervious and degraded areas to avoid unnecessary impacts to the steep slopes, steep slope buffer, steep slope structure setback, shoreline buffer, and shoreline structure setback. In addition to the mitigation, restoration, and enhancement work proposed, the project also proposes a tiered foundation system to avoid heavy modification to the existing contours.

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

Finding: As discussed in Section III, the proposal incorporates and adheres to the performance standards of LUC 20.25H.125

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

Finding: The proposal will be served by adequate public facilities.

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

Finding: A mitigation, restoration, and enhancement plan meeting the requirements of LUC 20.25H.210 and including 9,179 square feet of native planting has been submitted with this proposal. See Section VIII Conditions of Approval.

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

Finding: As discussed in Section III and V of this report, the proposal complies with all other applicable requirements of the Land Use Code.

VII. 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 to construct a single-family residence within the steep slope critical area/buffer.

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.

VIII. 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	David Wong, 425-452-4282
Noise Control- BCC 9.18	David Wong, 425-452-4282

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

1. Building Permit Required: Approval of this Critical Areas Land Use Permit does not constitute an approval of any development permit. An application for a building permit or clearing & grading permit must be submitted and approved prior to executing construction. Plans submitted as part of any permit application shall be consistent with the activity permitted under this approval

Authority: Land Use Code 20.30P.140; Clearing & Grading Code 23.76.035
Reviewer: David Wong, Land Use; Tom McFarlane, Clearing & Grading

2. Mitigation, Restoration, and Enhancement Plan: A mitigation, restoration, and enhancement plan for all areas of temporary and permanent new disturbance is required to be submitted for review and approval by the City of Bellevue prior to issuance of a Building Permit and/or Clearing and Grading Permit. The plan shall document the mitigation, restoration, and enhancement areas; the quantity & size of plant material used; and shall be in conformance with the restoration plan in Attachment 4.

Authority: Land Use Code 20.25H.220
Reviewer: David Wong, Land Use

3. Planting Cost Estimate: A planting cost estimate for the cost of plant materials, labor, and maintenance & monitoring activities shall be provided with the Building Permit application.

Authority: Land Use Code 20.25H.220
Reviewer: David Wong, Land Use

4. Maintenance & Monitoring: Maintenance & Monitoring of the project shall meet the stated performance standards outlined in Section 7 of the Critical Areas Report dated February 20, 2015 (Updated August 25, 2016), Attachment 2. These standards include:

Year 1

- 100% survival of all trees and shrubs within the restoration area
- No greater than 10% non-native vegetative cover within the mitigation, restoration, or enhancement area.

Year 2

- 90% survival rate of all trees and shrubs within the restoration area
- No greater than 10% non-native vegetative cover within the mitigation, restoration, or enhancement area

Year 3

- 85% survival rate of all trees and shrubs within the restoration area
- 60% cover of native trees and shrubs by year three
- No greater than 10% non-native vegetative cover within the mitigation, restoration, or enhancement area

Year 4

- 85% survival rate of all trees and shrubs within the restoration area
- 70% cover of native trees and shrubs by year four
- No greater than 10% non-native vegetative cover within the mitigation, restoration, or enhancement area

Year 5

- 85% survival rate of all trees and shrubs within the restoration area
- 80% cover of native trees and shrubs by year five
- No greater than 10% non-native vegetative cover within the mitigation, restoration, or enhancement area

Reporting shall be submitted no later than the end of each growing season or by October 31st, and shall include a site plan and photos from photo points established at the time

of Land Use inspection. Reports shall be submitted to David Wong or Heidi Bedwell by the above listed date and can be emailed to dwong@bellevuewa.gov or mailed directly to:

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

Authority: Land Use Code 20.25H.220
Reviewer: David Wong, Land Use

5. Land Use Inspection: Following installation of planting the applicant shall contact Land Use staff to inspect the planting area. At the end of five (5) years inspection by Land Use staff is required to release the maintenance surety. Staff will need to find that the plants are in a healthy and growing condition and the mitigation plan is successful per the established performance standards in the monitoring plan. Throughout the monitoring period Land Use staff has the right to enter the property to inspect the planting.

Authority: Land Use Code 20.25H.220
Reviewer: David Wong, Land Use

6. Surety: Financial surety equal to 100% of the cost of plant materials and labor, or 20% of the cost of the maintenance contract for five (5) years of maintenance shall be provided with the Building Permit application.

Authority: Land Use Code 20.30P.160
Reviewer: David Wong, Land Use

7. Geotechnical Recommendations: The project shall abide by all recommendations included in the Geotechnical Report submitted by Aspect Consulting dated March 10, 2016, which include but are not limited to the installation of the pin piles, site drainage and temporary construction erosion and sediment control, and oversight of recommendations by an on-site geotechnical engineer. The on-site engineer shall observe all excavations and fill areas and must submit a field report in writing to the DSD inspector for soils verification and foundation construction. All earthwork must be in general conformance with the recommendations in the geotechnical recommendations.

Authority: Land Use Code 20.25H.145; Clearing & Grading Code 23.76.160
Reviewer: David Wong, Land Use; Tom McFarlane, Clearing & Grading

8. Hold Harmless Agreement: The applicant shall provide a signed, notarized, and recorded copy of the City's Hold Harmless Agreement under the Building Permit application prior to approval and issuance of the Building Permit.

Authority: Land Use Code 20.25H.170
Reviewer: David Wong, Land Use

9. Rainy Season restrictions: Due to the proximity to 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: Tom McFarlane, Clearing and Grading

10. 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: David Wong, Land Use

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

Authority: Bellevue City Code 9.18
Reviewer: David Wong, Land Use

GRADE PLANE

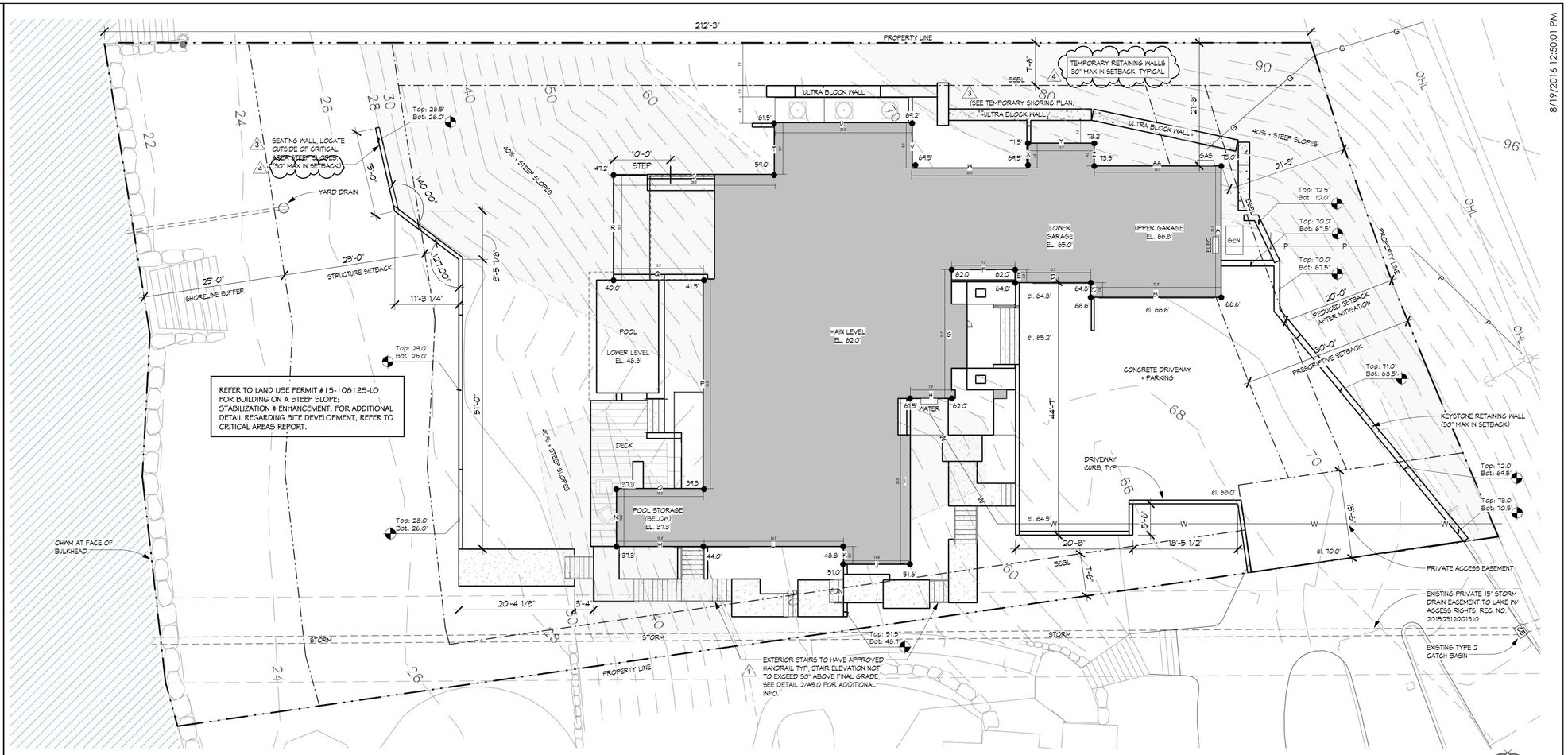
POINT	ELEV. 1	ELEV. 2	AVG.	LENGTH	AVG x LENGTH
A	75.0	66.6	70.8	23.1	1,635.5
B	66.6	66.6	66.6	22.8	1,518.5
C	66.6	64.8	65.7	2.6	170.8
D	64.8	64.8	64.8	13.3	861.8
E	64.8	62.0	63.4	2.3	145.8
F	62.0	62.0	62.0	11.2	694.4
G	62.0	62.0	62.0	22.7	1,407.4
H	62.0	61.5	61.8	7.3	450.8
I	61.5	51.6	56.6	29.0	1,640.0
J	51.6	51.0	51.3	11.8	605.3
K	51.0	48.8	49.9	3.1	154.7
L	48.8	44.0	46.4	24.5	1,136.8
M	44.0	37.3	40.7	15.4	626.0
N	37.3	37.3	37.3	10.2	380.5
O	37.3	39.3	38.3	15.3	586.0
P	39.3	41.5	40.4	36.8	1,486.7
Q	41.5	40.0	40.8	15.8	643.9
R	40.0	47.2	43.6	18.5	806.6
S	47.2	59.0	53.1	28.5	1,513.4
T	59.0	61.5	60.3	9.1	548.3
U	61.5	69.2	65.4	24.0	1,568.4
V	69.2	69.5	69.4	8.0	554.8
W	69.5	69.5	69.5	20.5	1,424.8
X	69.5	71.5	70.5	4.4	310.2
Y	71.5	73.2	72.4	11.7	846.5
Z	73.2	73.5	73.4	4.0	293.4
AA	73.5	75.0	74.3	22.3	1,655.8
TOTALS				418.2'	23,866'

GRADE PLANE = 23,866' / 418.2' = 56.6'

37.3' IS BELOW 56.6' THEREFORE LOWEST LEVEL IS CONSIDERED A BASEMENT.

SCALE THIS DRAWING, IN FEET

0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48



SITE PLAN

SCALE: 1" = 10'-0" @ 22x34

0' 10' 25' 50'

PLAN NORTH

8/19/2016 12:50:01 PM

DATE	REV.	BY	DESCRIPTION
2/12/16		DAN	PERMIT SUBMITTAL
05/27/16	1	DAN	PERMIT COMMENTS 1
08/04/16	3	DAN	PERMIT COMMENTS 2
08/16/16	4	DAN	PERMIT COMMENTS 3

PEREGRINE PINECOTE RESIDENCE

2389 Killarney Way
Bellevue, Washington 98004

SITE PLAN

MacPHERSON CONSTRUCTION & DESIGN
21626 SE 28th ST. SAMMAMISH, WA 98075-7125
PH. 425.391.3333 FAX 425.557.2841

DRAWING NUMBER: A1.0

FAR CALCS 4

MAX FAR = 0.5 LUC 20.25H.045.C

GROSS FLOOR AREA = 7,626 sf
(INCL. 500 sf HIGH VOLUME)

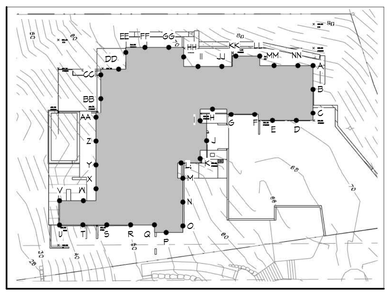
LAND AREA = 23,277 sf

FAR (FLOOR AREA / LAND AREA) 33% OK!

NOTE: PATIOS, DECKS & BALCONIES EXCLUDED FROM FLOOR AREA.

BUILDING HEIGHT CALCS

POINT	ELEVATION	COUNT
A	78	1
B	71.8	1
C	70.7	1
D	70.2	1
E	69.8	1
F	69.6	1
G	69.4	1
H	69.2	1
I	69	1
J	68.4	1
K	65.5	1
L	62	1
M	54.5	1
N	56.6	1
O	54.8	1
P	52	1
Q	51.4	1
R	50.1	1
S	49	1
T	44.3	1
U	37.8	1
V	39.3	1
W	46	1
X	46.1	1
Y	45	1
Z	46.5	1
AA	50.3	1
BB	54.4	1
CC	59	1
DD	65	1
EE	66.4	1
FF	68.2	1
GG	69.3	1



POINT	ELEVATION	COUNT
HH	69.9	1
II	70.2	1
JJ	71.5	1
KK	74	1
LL	76.2	1
MM	75.6	1
NN	76.5	1

2459 / 40 = 61.5' AVG. EXISTING GRADE

BUILDING HEIGHT

AVERAGE EXISTING GRADE =	61.5'
MAIN FLOOR ELEVATION =	62.0'
MAX PARAPET ELEVATION =	89.0'
ALLOWABLE BUILDING HEIGHT =	61.5' + 35' = 96.5'

89.0' IS LESS THAN 96.5' = OK
(SEE ELEVATIONS FOR COMPLIANCE DIAGRAM)

ENERGY CODES 3

Table R406.2 Summary

Option	Description	Credit(s)			
1a	Efficient Building Envelope 1a	0.5			0.5
1b	Efficient Building Envelope 1b	1.0			
1c	Efficient Building Envelope 1c	2.0			
2a	Air Leakage Control and Efficient Ventilation 2a	0.5			
2b	Air Leakage Control and Efficient Ventilation 2b	1.0			
2c	Air Leakage Control and Efficient Ventilation 2c	1.5			
3a	High Efficiency HVAC 3a	0.5			0.5
3b	High Efficiency HVAC 3b	1.0			
3c	High Efficiency HVAC 3c	2.0			
3d	High Efficiency HVAC 3d	1.0			
4	High Efficiency HVAC Distribution System	1.0			
5a	Efficient Water Heating	0.5			
5b	Efficient Water Heating	1.5			1.5
6	Renewable Electric Energy	0.5		*1200 kwh	0.0
Total Credits					**2.50**

TREE NOTES

1. THE ONLY SIGNIFICANT TREES ON THE SITE ARE LOCATED WITHIN THE STREET RIGHT-OF-WAY OR ON NEIGHBORING PROPERTIES. MAKE EVERY EFFORT TO PROTECT THESE TREES AT THE DRIPLINE.

2. NO SIGNIFICANT TREES ARE PROPOSED FOR REMOVAL.

GENERAL NOTES

1. ALL ROOF DRAINS AND FOOTING DRAINS SHALL BE SEPARATED. TIGHTLINE EACH TO STORM DRAINAGE SYSTEM AS REQUIRED. SEE DRAINAGE NOTES.
2. ALL EXCAVATED MATERIALS SHALL BE IMMEDIATELY REMOVED FROM THE SITE AND HAULED TO AN APPROVED DUMP SITE.
3. SEE DRAWINGS A0.0 & A0.1 FOR ADDITIONAL INFORMATION REGARDING DRAINAGE AND TESC MEASURES.
4. DISCONNECT AND PROTECT EXISTING SANITARY SEWER STUB. RECONNECT TO EXISTING STUB.
5. DISCONNECT ALL OTHER UTILITIES, PROTECT FROM DAMAGE DURING CONSTRUCTION. RECONNECT TO EXISTING UTILITIES.
6. ALL ROCK RETAINING WALLS OVER 4 FEET IN HEIGHT SHALL BE ENGINEERED BY THE INSTALLER IN ACCORDANCE WITH LOCAL CODES.
7. ALL SITE AND FOUNDATION WORK SHALL BE REVIEWED AND MONITORED BY THE GEOTECHNICAL ENGINEER TO VERIFY COMPLIANCE WITH THE DESIGN CRITRIA.

IMPERVIOUS

TOTAL LOT AREA:	23,277 sf
ALLOWED IMPERVIOUS AREA (50% OF TOTAL LOT AREA)	11,639 sf
ROOFS & BALCONIES:	4,910 sf
DRIVEWAY:	2,610 sf
DECKS, PATIOS & WALKS (UNCOVERED)	1,402 sf
PROPOSED IMPERVIOUS SURFACES:	8,922 sf

8,922 sf IS LESS THAN 11,639 sf = OK

LOT ZONING

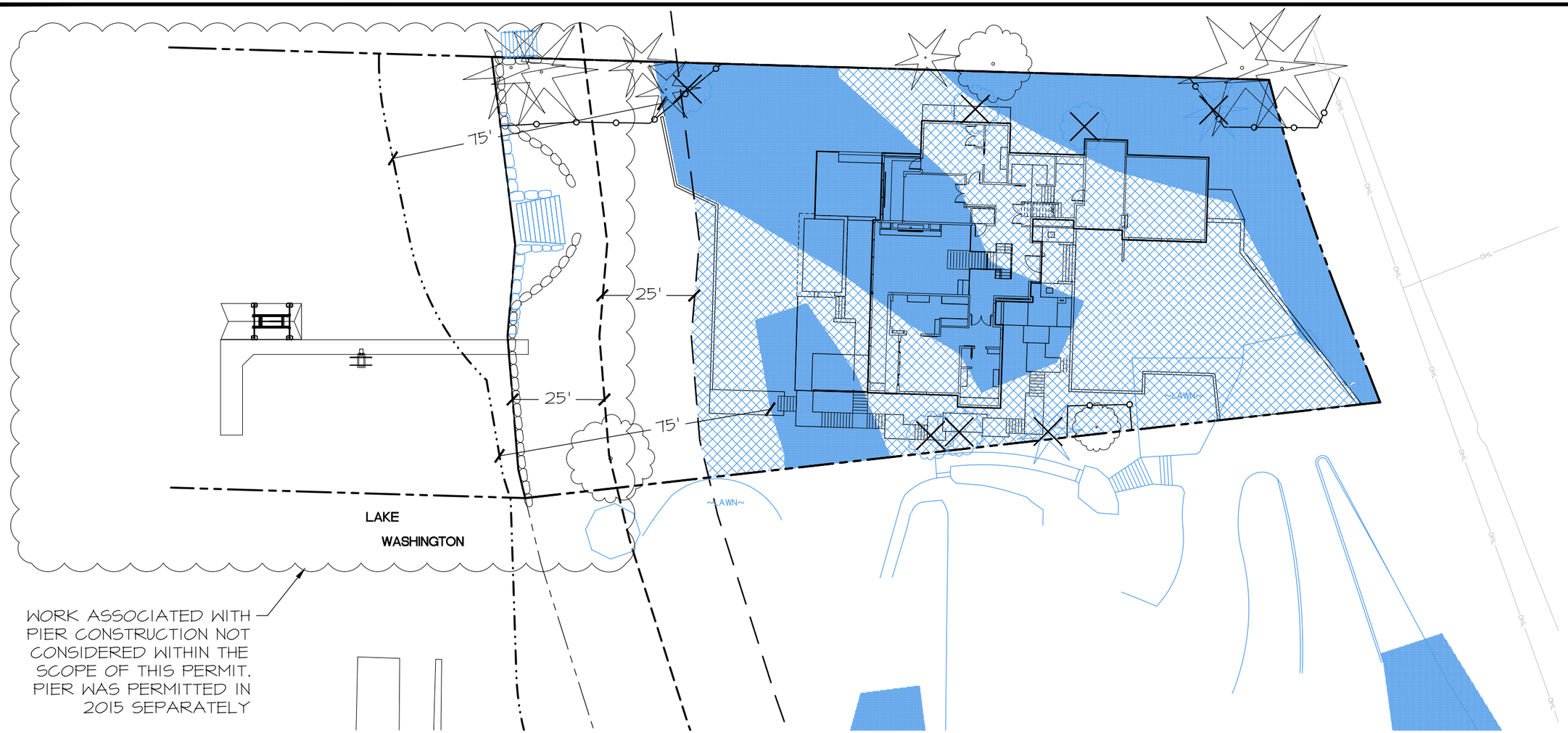
BELLEVUE LAND USE CODE (LUC)

LOT ZONING:	R1.8
LOT SIZE:	23,277 sf (KING COUNTY)
LOT SLOPE:	34% (94' - 22') / 210'
MAX LOT COVERAGE:	35% MAX. (NET LOT AREA)
MAX IMPERVIOUS:	50% MAX. (TOTAL LOT AREA)
MAX BUILDING HEIGHT:	30' FROM AVG. EXIST. GRADE
SETBACK - FRONT YARD:	30' (REDUCED TO 20')
SETBACK - REAR YARD:	50' FROM OHWM (LUC 20.25H.035)
SETBACK - SIDE YARD:	5'-0" MIN (15'-0" COMBINED) MINOR BUILDING ELEMENTS EXEMPT PER (LUC 20.20.025.C)

LOT COVERAGE

TOTAL LOT AREA:	23,277 sf
LESS CRITICAL AREAS (STEEP SLOPES):	7,250 sf
NET LOT AREA:	16,027 sf
ALLOWABLE LOT COVERAGE: (35% OF NET LOT AREA)	5,609 sf
ROOFS & BALCONIES:	4,704 sf
POOL & DECKS:	728 sf
PROPOSED LOT COVERAGE:	5,432 sf

5,432 sf IS LESS THAN 5,609 sf = OK



CRITICAL AREAS LEGEND

- 25' SHORELINE BUFFER
- 25' SHORELINE SETBACK
- 40%+ STEEP SLOPES
- 75' STEEP SLOPES SETBACK
- EXISTING TREES TO REMAIN
- EXISTING TREES TO BE REMOVED - REFER TO AFM ARBORIST REPORT FOR DETAILED INFORMATION ON SIGNIFICANT TREES AND TREE REPLACEMENT RATIOS.

NOTE: TREES HAVE NOT BEEN SURVEYED BUT WERE FIELD LOCATED BY AFM.

- TREE PROTECTION FENCE

GRAPHIC SCALE (IN FEET)

0 15 30 45 60 90

SCALE: 1:30

N

NOTES

1. BASE INFORMATION PROVIDED BY MACPHERSON CONSTRUCTION & DESIGN, 21626 SE 28TH STREET, SAMMAMISH, WA 98075 (425) 391-3333.

FIGURE 1: EXISTING CRITICAL AREAS
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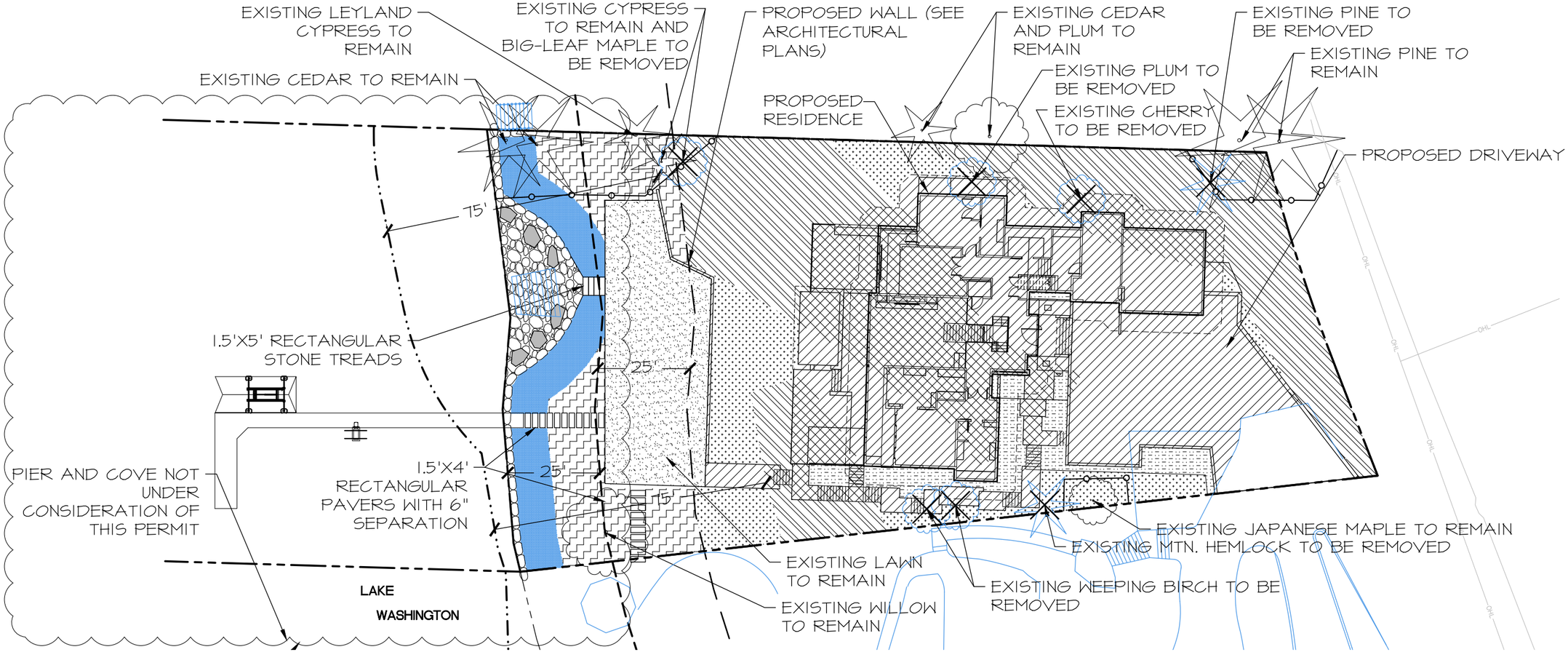

PLAN LEGEND

EXISTING LAWN TO REMAIN	2,005 SF
LANDSCAPE AREA	2,086 SF

IMPACT LEGEND

STEEP SLOPE IMPACTS	3,471 SF
STEEP SLOPE BUFFER IMPACTS	5,571 SF
TOTAL IMPACTS - MINUS THE 140 SF OF EXISTING STEPS REMOVAL IN THE SHORELINE SETBACK (SEE FIGURE 1)	8,902 SF

MITIGATION LEGEND

STEEP SLOPE ENHANCEMENT	4,633 SF
STEEP SLOPE BUFFER ENHANCEMENT	2,099 SF
SHORELINE ENHANCEMENT	1,851 SF
BEACH GRAVELS	539 SF
TOTAL MITIGATION (DOES NOT INCLUDE ENHANCEMENT FOR DOCK INSTALLATION)	9,122 SF
10' SHORELINE ENHANCEMENT FOR DOCK INSTALLATION - SEE MACPHERSON PIER AT KILLARNEY PLANTING PLAN	1,195 SF

GRAPHIC SCALE (IN FEET)

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SCALE: 1:30

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NOTES

1. BASE INFORMATION PROVIDED BY MACPHERSON CONSTRUCTION & DESIGN, 21626 SE 28TH STREET, SAMMAMISH, WA 98075 (425) 391-3333.

FIGURE 2: IMPACTS AND MITIGTION CONCEPT PLAN
MILLER PROPERTY
2389 KILLARNEY WAY SE
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PARCEL #0524059016

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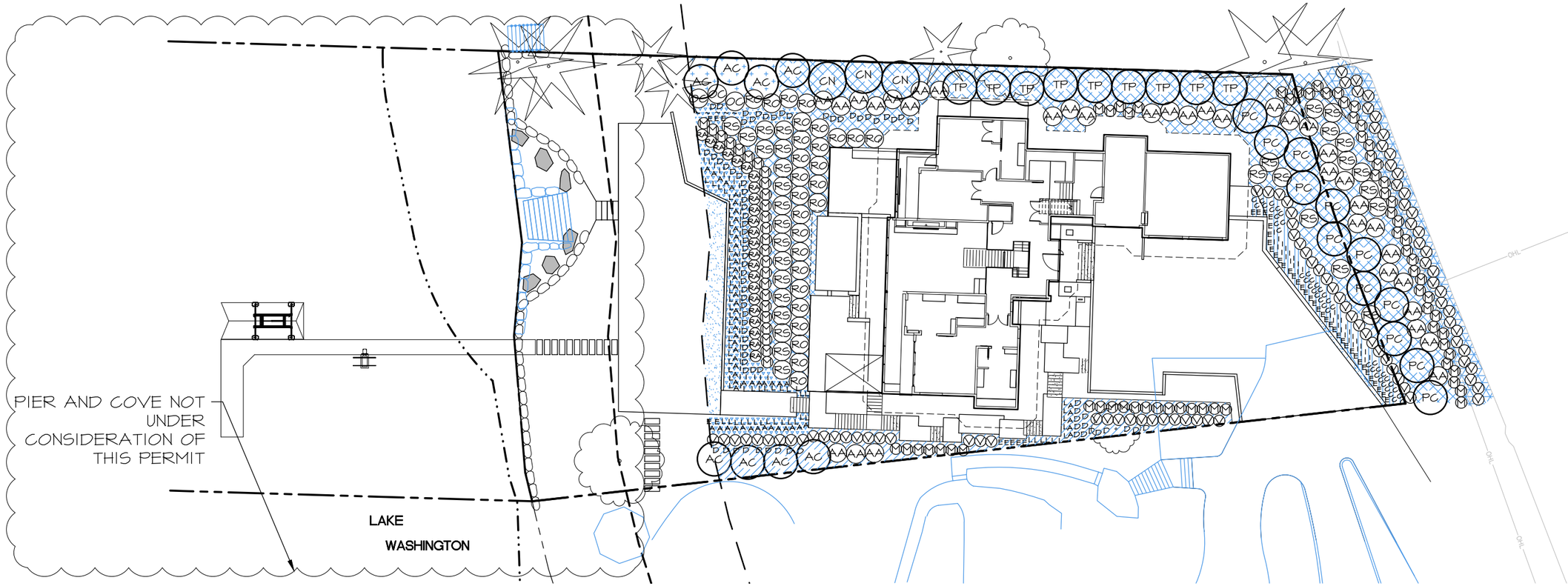

PLANT LIST (SEE FIGURE 4 FOR COMPLETE SCHEDULES)

LARGE TREES

KEY	SCIENTIFIC NAME	COMMON NAME
CN	CORNUS NUTTALII	PACIFIC DOGWOOD
PC	PINUS CONTORTA	SHORE PINE
TP	THUJA PLICATA	WESTERN RED CEDAR

SMALL TREES

KEY	SCIENTIFIC NAME	COMMON NAME
AC	ACER CIRCINATUM	VINE MAPLE

SHRUBS

KEY	SCIENTIFIC NAME	COMMON NAME
AA	AMELANCHIER ALNIFOLIA	SERVICEBERRY
	GAULTHERIA SHALLON	SALAL
M	MAHONIA AQUIFOLIUM	TALL OREGON GRAPE
OC	OEMLERIA CERASIFORMIS	INDIAN PLUM
	POLYSICHUM MUNITUM	SWORD FERN
RA	RHODODENDRON ALBIFLORUM	WHITE FLOWERED RHODODENDRON
RO	RHODODENDRON MACROPHYLLUM	PACIFIC RHODODENDRON
RS	RIBES SANGUINEUM	RED CURRANT
V	VACCINIUM OVATUM	EVERGREEN HUCKLEBERRY

GROUNDCOVER

KEY	SCIENTIFIC NAME	COMMON NAME
	CEANOTHUS 'POINT REYES'	POINT REYES CEANOTHUS
	DESCHAMPSIA CESPITOSA	TUFTED HAIRGRASS
	FRAGARIA CHILOENSIS	COAST STRAWBERRY
	PHYLLODOCE EMPETRIFORMIS	PINK MOUNTAIN HEATHER

PERENNIALS

KEY	SCIENTIFIC NAME	COMMON NAME
A	CAMASSIA QUAMASH	COMMON CAMAS
C	CAMPANULA ROTUNDIFOLIA	COMMON HAIRBELL
L	CLAYTONIA LANCEOLATA	WESTERN SPRING BEAUTY
D	DIGITALIS PURPUREA	FOXGLOVE
E	ERYTHRONIUM MONTANUM	AVALANCHE LILY
I	IRIS TENAX	OREGON IRIS
~	LUPINUS POLYPHYLLUS	LARGE-LEAVED LUPINE

N

GRAPHIC SCALE (IN FEET)

0 15 30 45 60 90

SCALE: 1:30

NOTES

1. BASE INFORMATION PROVIDED BY MACPHERSON CONSTRUCTION & DESIGN, 21626 SE 28TH STREET, SAMMAMISH, WA 98075 (425) 391-3333.

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FIGURE 3: PLANTING PLAN
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PARCEL #0524059016

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PLANT SCHEDULE (STEEP SLOPE)

LARGE TREES

KEY	SCIENTIFIC NAME	COMMON NAME	SPACING	QTY.	SIZE (MIN.)	NOTES
CN	CORNUS NUTTALII	PACIFIC DOGWOOD	10' O.C.	3	5 GAL.	SINGLE TRUNK, WELL BRANCHED
PC	PINUS CONTORTA	SHORE PINE	10' O.C.	12	5 GAL.	FULL & BUSHY
TP	THUJA PLICATA	WESTERN RED CEDAR	10' O.C.	9	5 GAL.	FULL & BUSHY

SMALL TREES

KEY	SCIENTIFIC NAME	COMMON NAME	SPACING	QTY.	SIZE (MIN.)	NOTES
AC	ACER CIRCINATUM	VINE MAPLE	6' O.C.	8	5 GAL.	MULTI-STEM (3 MIN.)

SHRUBS

KEY	SCIENTIFIC NAME	COMMON NAME	SPACING	QTY.	SIZE (MIN.)	NOTES
AA	AMELANCHIER ALNIFOLIA	SERVICEBERRY	5' O.C.	35	2 GAL.	MULTI-STEM (3 MIN.)
	GAULTHERIA SHALLON	SALAL	2' O.C.	724	1 GAL.	FULL & BUSHY
M	MAHONIA AQUIFOLIUM	TALL OREGON GRAPE	4' O.C.	90	2 GAL.	FULL & BUSHY
OC	OEMLERIA CERASIFORMIS	INDIAN PLUM	5' O.C.	3	1 GAL.	MULTI-STEM (3 MIN.)
	POLYSICHUM MUNITUM	SWORD FERN	3' O.C.	21	1 GAL.	FULL & BUSHY
RA	RHODODENDRON ALBIFLORUM	WHITE FLOWERED RHODODENDRON	3' O.C.	23	2 GAL.	FULL & BUSHY
RO	RHODODENDRON MACROPHYLLUM	PACIFIC RHODODENDRON	5' O.C.	27	2 GAL.	FULL & BUSHY
RS	RIBES SANGUINEUM	RED CURRANT	5' O.C.	32	2-5 GAL.	MULTI-STEM (3 MIN.)
V	VACCINIUM OVATUM	EVERGREEN HUCKLEBERRY	3' O.C.	93	2 GAL.	FULL & BUSHY

GROUNDCOVER

KEY	SCIENTIFIC NAME	COMMON NAME	SPACING	QTY.	SIZE (MIN.)	NOTES
	CEANOTHUS 'POINT REYES'	POINT REYES CEANOTHUS	3' O.C.	68	1 GAL.	FULL & BUSHY
	DESCHAMPSIA CESPITOSA	TUFTED HAIRGRASS	1' O.C.	478	1 GAL.	FULL & BUSHY
	FRAGARIA CHILOENSIS	COAST STRAWBERRY	2' O.C.	210	1 GAL.	FULL & BUSHY
	PHYLLODOCE EMPETRIFORMIS	PINK MOUNTAIN HEATHER	1' O.C.	351	1 GAL.	FULL & BUSHY

PERENNIALS

KEY	SCIENTIFIC NAME	COMMON NAME	SPACING	QTY.	SIZE MIN.)	NOTES
A	CAMASSIA QUAMASH	COMMON CAMAS	1' O.C.	56	1 GAL. OR 4" POT	FULL & BUSY
C	CAMPANULA ROTUNDIFOLIA	COMMON HAIRBELL	1' O.C.	43	1 GAL. OR 4" POT	FULL & BUSHY
L	CLAYTONIA LANCEOLATA	WESTERN SPRING BEAUTY	9" O.C.	63	1 GAL. OR 4" POT	FULL & BUSHY
D	DIGITALIS PURPUREA	FOXGLOVE	1' O.C.	76	1 GAL. OR 4" POT	FULL & BUSHY
E	ERYTHRONIUM MONTANUM	AVALANCHE LILY	6" O.C.	46	1 GAL. OR 4" POT	FULL & BUSHY
I	IRIS TENAX	OREGON IRIS	1' O.C.	73	1 GAL. OR 4" POT	FULL & BUSHY
~	LUPINUS POLYPHYLLUS	LARGE-LEAVED LUPINE	2' O.C.	5	1 GAL. OR 4" POT	FULL & BUSHY

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FIGURE 4: PLANT SCHEDULE (STEEP SLOPE)
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PARCEL #052405-9076

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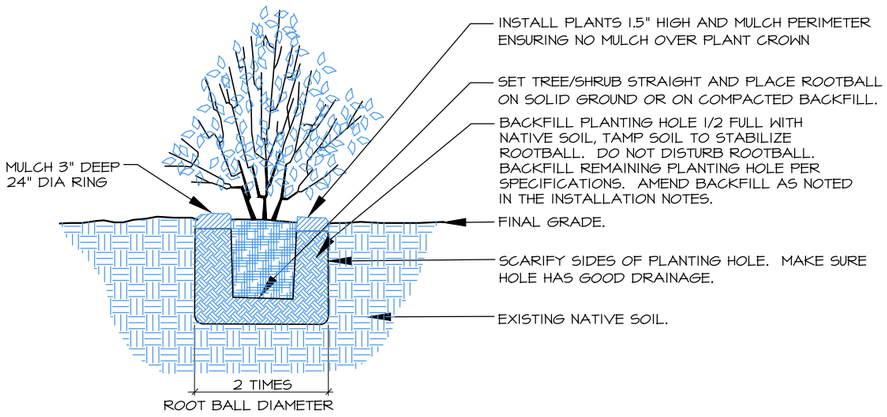
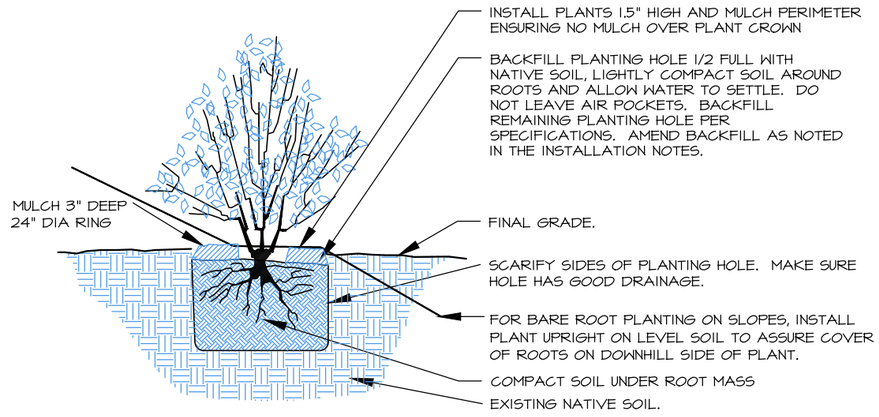


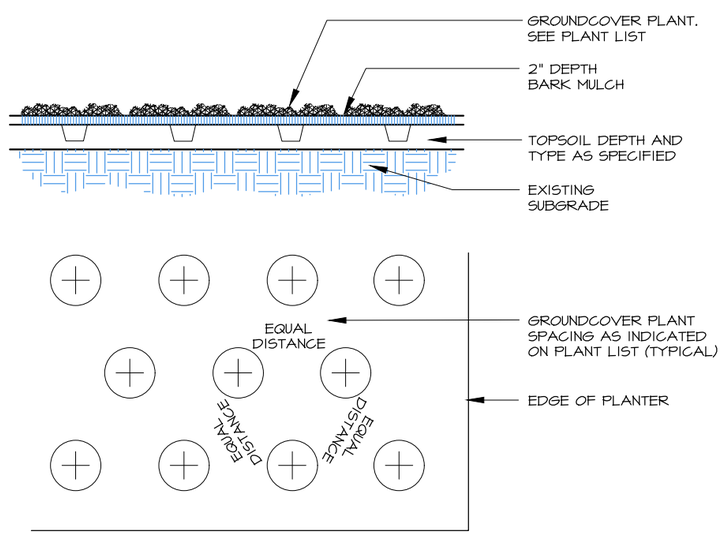
1 CONTAINER TREE/SHRUB PLANTING (TYP.)

SCALE: NTS



2 BARE-ROOT SHRUB PLANTING (TYP.)

SCALE: NTS



3 GROUNDCOVER PLANTING (TYP.)

SCALE: NTS

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FIGURE 5: PLANTING DETAILS
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SPECIFICATIONS

1. THIS PLAN PERTAINS TO PLANTING PORTION OF THE SITE WORK ONLY. SEE BULKHEAD REMOVAL PLANS FOR BULKHEAD REMOVAL/BEACH CONSTRUCTION.
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. 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.
4. UPON COMPLETION OF COVE INSTALLATION (SEE CONSTRUCTION PLANS PREPARED BY ENGINEER) ALL PLANTING AREAS SHALL BE OVER-EXCAVATED 12" FOR PLACEMENT OF 12" OF IMPORTED 3-WAY TOPSOIL (DEJONG'S) OR STOCKPILED NATIVE TOPSOIL. AOA TO APPROVE TOPSOIL PRIOR TO PLACEMENT.
5. ALL PLANTS SHOULD BE INSTALLED BETWEEN DECEMBER 1ST AND MARCH 15TH.
6. 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.
7. 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.
8. ALL PLANTS SHALL BE PIT-PLANTED IN PLANTING PITS EXCAVATED 2X THE DIAMETER OF THE PLANT. PITS SHALL BE BACKFILLED WITH A 30/70 MIX OF ORGANIC WEED-FREE COMPOST TO NATIVE SOIL. PITS SHALL BE AMENDED WITH A HYDRATED SOIL POLYMER (INSTALLED AT RATES PER MANUFACTURER'S SPECIFICATIONS). PLANTS SHALL BE INSTALLED 2" HIGH AND SURFACED MULCHED TO A DEPTH OF 2" WITH MEDIUM-COURSE BARK MULCH PLACED CONTINUOUSLY THROUGHOUT THE PLANTING BED.
9. 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.
10. PLANT LAYOUT SHALL BE APPROVED BY AOA PRIOR TO INSTALLATION AND APPROVED UPON COMPLETION OF PLANTING.
11. UPON COMPLETION OF PLANTING, BARE AREAS SHALL BE STRAW MULCHED TO A DEPTH OF 1" AND ALL PLANTS SHALL BE THOROUGHLY WATERED.
12. UPON APPROVAL OF PLANTING INSTALLATION BY AOA, THE CITY OF BELLEVUE WILL BE NOTIFIED TO CONDUCT A SITE REVIEW FOR FINAL APPROVAL OF CONSTRUCTION.
13. MAINTENANCE SHALL BE REQUIRED IN ACCORDANCE WITH THE CITY OF BELLEVUE SENSITIVE AREAS MITIGATION GUIDELINES AND APPROVED PLANS.
20. THE EXISTING IRRIGATION SYSTEM SHALL BE AMENDED BY THE LANDSCAPE CONTRACTOR TO PROVIDE SEPARATE ZONE COVERAGE TO THE LAWN AREAS VERSUS THE PLANTING BEDS.
21. 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.
22. TIE IRRIGATION INTO EXISTING SITE IRRIGATION SYSTEM AND CREATE SEPARATE ZONES FOR THE SHORELINE PLANTING BEDS, STEEP SLOPE PLANTING AREAS AND LAWN AREAS.
23. 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
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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
1. 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.
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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PARCEL #0524059076

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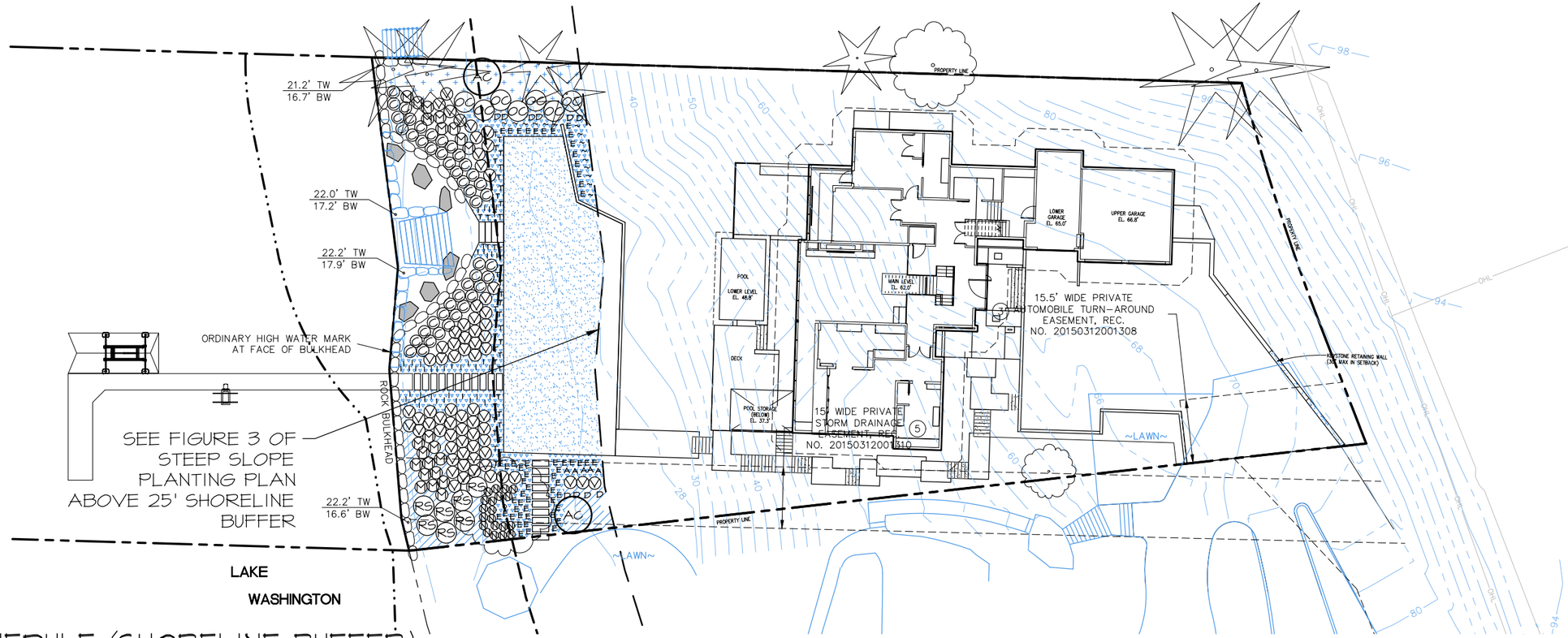


PLANT SCHEDULE (SHORELINE BUFFER)

SMALL TREES

KEY	SCIENTIFIC NAME	COMMON NAME	SPACING	QTY.	SIZE (MIN.)	NOTES
AC	ACER CIRCINATUM	VINE MAPLE	6' O.C.	2	5 GAL.	MULTI-STEM (3 MIN.)

SHRUBS

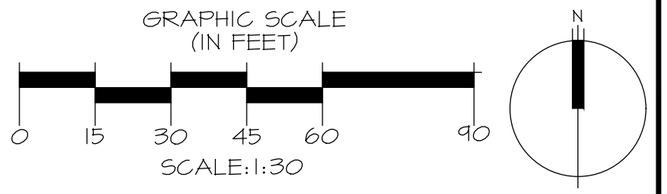
KEY	SCIENTIFIC NAME	COMMON NAME	SPACING	QTY.	SIZE (MIN.)	NOTES
C	CORNUS SERICEA	RED OSIER DOGWOOD	3' O.C.	44	1 GAL.	MULTI-STEM (3 MIN.)
M	MAHONIA AQUIFOLIUM	TALL OREGON GRAPE	4' O.C.	22	2 GAL.	FULL & BUSHY
OC	OEMLERIA CERASIFORMIS	INDIAN PLUM	5' O.C.	7	1 GAL.	MULTI-STEM (3 MIN.)
+	POLYSICHUM MUNITUM	SWORD FERN	3' O.C.	46	1 GAL.	FULL & BUSHY
RS	RIBES SANGUINEUM	RED CURRANT	3' O.C.	7	2-5 GAL.	MULTI-STEM (3 MIN.)
N	ROSA NUTKANA	NOOTKA ROSE	2' O.C.	20	1 GAL.	MULTI-STEM (3 MIN.)
V	VACCINIUM OVATUM	EVERGREEN HUCKLEBERRY	2' O.C.	69	2 GAL.	FULL & BUSHY

GROUNDCOVER

KEY	SCIENTIFIC NAME	COMMON NAME	SPACING	QTY.	SIZE (MIN.)	NOTES
	CEANOTHUS 'POINT REYES'	POINT REYES CEANOTHUS	3' O.C.	29	1 GAL.	FULL & BUSHY
	FRAGARIA CHILOENSIS	COAST STRAWBERRY	2' O.C.	248	1 GAL.	FULL & BUSHY

PERENNIALS

KEY	SCIENTIFIC NAME	COMMON NAME	SPACING	QTY.	SIZE MIN.)	NOTES
T	ARMERIA MARITIMA	THRIFT	9" O.C.	44	1 GAL. OR 4" POT	FULL & BUSHY
A	CAMASSIA QUAMASH	COMMON CAMAS	1' O.C.	5	1 GAL. OR 4" POT	FULL & BUSHY
D	DIGITALIS PURPUREA	FOXGLOVE	1' O.C.	10	1 GAL. OR 4" POT	FULL & BUSHY
E	ERYTHRONIUM MONTANUM	AVALANCHE LILY	6" O.C.	54	1 GAL. OR 4" POT	FULL & BUSHY
I	IRIS TENAX	OREGON IRIS	1' O.C.	42	1 GAL. OR 4" POT	FULL & BUSHY
~	LUPINUS POLYPHYLLUS	LARGE-LEAVED LUPINE	2' O.C.	15	1 GAL. OR 4" POT	FULL & BUSHY



NOTES

1. BASE INFORMATION PROVIDED BY MACPHERSON CONSTRUCTION & DESIGN, 21626 SE 28TH STREET, SAMMAMISH, WA 98075 (425) 391-3333.

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FIGURE 1: PLANTING PLAN
MACPHERSON RESIDENCE
2310 100TH AVENUE SE
BELLEVUE, WA 98004
PARCEL #0524059076

Altmann Oliver Associates, LLC | AOA
Environmental Planning & Landscape Architecture
PO Box 578 Camano, WA 98014
Office (425) 333-4535 Fax (425) 333-4569

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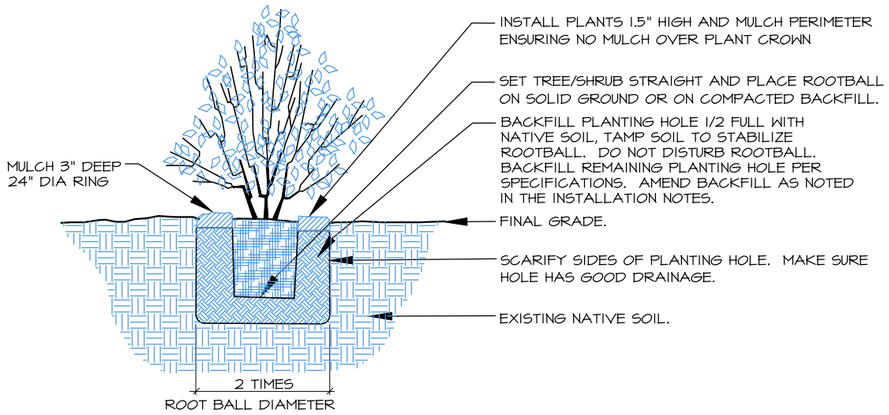
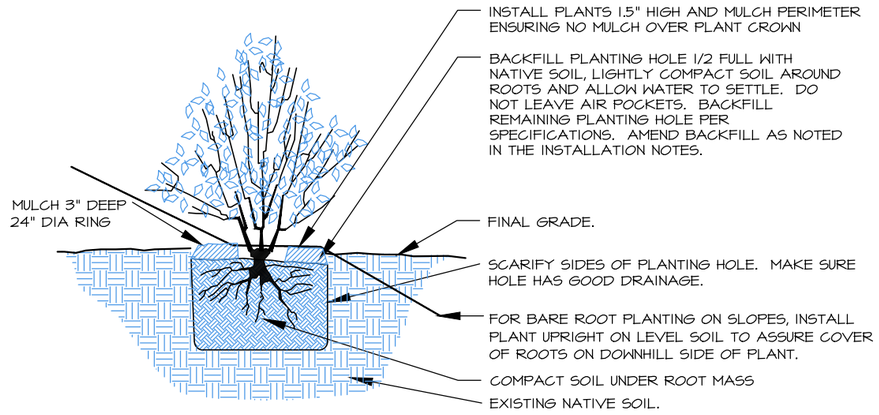


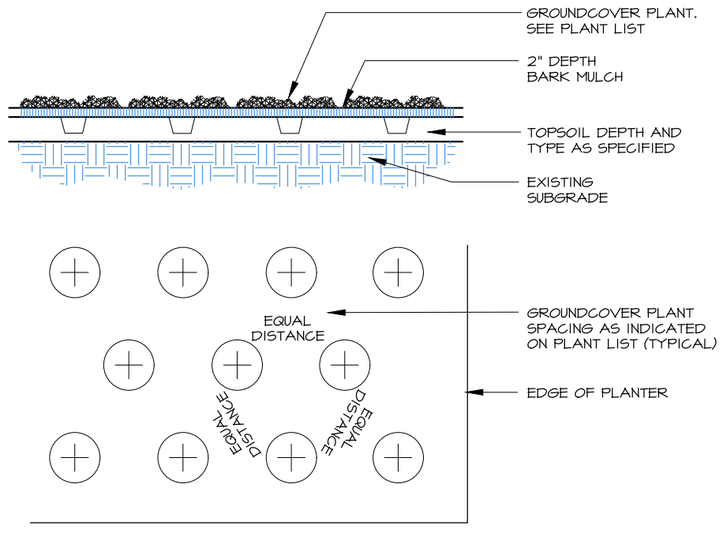
1 CONTAINER TREE/SHRUB PLANTING (TYP.)

SCALE: NTS



2 BARE-ROOT SHRUB PLANTING (TYP.)

SCALE: NTS



3 GROUNDCOVER PLANTING (TYP.)

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FIGURE 2: PLANTING DETAILS
MACPHERSON PIER AT KILLARNEY
2310 100TH AVENUE SE
BELLEVUE, WA 98004
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SPECIFICATIONS

1. THIS PLAN PERTAINS TO PLANTING PORTION OF THE SITE WORK ONLY. SEE BULKHEAD REMOVAL PLANS FOR BULKHEAD REMOVAL/BEACH CONSTRUCTION.
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. 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.
4. UPON COMPLETION OF COVE INSTALLATION (SEE CONSTRUCTION PLANS PREPARED BY ENGINEER) ALL PLANTING AREAS SHALL BE OVER-EXCAVATED 12" FOR PLACEMENT OF 12" OF IMPORTED 3-WAY TOPSOIL (DEJONG'S) OR STOCKPILED NATIVE TOPSOIL. AOA TO APPROVE TOPSOIL PRIOR TO PLACEMENT.
5. ALL PLANTS SHOULD BE INSTALLED BETWEEN DECEMBER 1ST AND MARCH 15TH.
6. 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.
7. 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.
8. ALL PLANTS SHALL BE PIT-PLANTED IN PLANTING PITS EXCAVATED 2X THE DIAMETER OF THE PLANT. PITS SHALL BE BACKFILLED WITH A 30/70 MIX OF ORGANIC WEED-FREE COMPOST TO NATIVE SOIL. PITS SHALL BE AMENDED WITH A HYDRATED SOIL POLYMER (INSTALLED AT RATES PER MANUFACTURER'S SPECIFICATIONS). PLANTS SHALL BE INSTALLED 2" HIGH AND SURFACED MULCHED TO A DEPTH OF 2" WITH MEDIUM-COURSE BARK MULCH PLACED CONTINUOUSLY THROUGHOUT THE PLANTING BED.
9. 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.
10. PLANT LAYOUT SHALL BE APPROVED BY AOA PRIOR TO INSTALLATION AND APPROVED UPON COMPLETION OF PLANTING.
11. UPON COMPLETION OF PLANTING, BARE AREAS SHALL BE STRAW MULCHED TO A DEPTH OF 1" AND ALL PLANTS SHALL BE THOROUGHLY WATERED.
12. UPON APPROVAL OF PLANTING INSTALLATION BY AOA, THE CITY OF BELLEVUE WILL BE NOTIFIED TO CONDUCT A SITE REVIEW FOR FINAL APPROVAL OF CONSTRUCTION.
13. MAINTENANCE SHALL BE REQUIRED IN ACCORDANCE WITH THE CITY OF BELLEVUE SENSITIVE AREAS MITIGATION GUIDELINES AND APPROVED PLANS.
20. THE EXISTING IRRIGATION SYSTEM SHALL BE AMENDED BY THE LANDSCAPE CONTRACTOR TO PROVIDE SEPARATE ZONE COVERAGE TO THE LAWN AREAS VERSUS THE PLANTING BEDS.
21. 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.
22. TIE IRRIGATION INTO EXISTING SITE IRRIGATION SYSTEM AND CREATE SEPARATE ZONES FOR THE SHORELINE PLANTING BEDS, STEEP SLOPE PLANTING AREAS AND LAWN AREAS.
23. 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 SPECIFICATIONS
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MAINTENANCE & MONITORING PLAN

CONSTRUCTION MANAGEMENT

1. Prior to commencement of any work in the shoreline setback enhancement area, 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 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 shoreline setback enhancement area 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

1. Success of plant establishment within the shoreline setback enhancement area will be evaluated on the basis of percent survival of planted species.
2. For woody planted species, success will be based on at least an 85% survival rate of all planted trees and 85% survival rate for all shrubs and groundcovers for a growth rate of at least five years.
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 4: MAINTENANCE & MONITORING PLAN
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