

CRITICAL AREAS REPORT

Kirby Residence

September 2013
TWC Reference #130522

Prepared for:

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CRITICAL AREAS REPORT

KIRBY RESIDENCE – BELLEVUE, WA

1 INTRODUCTION

1.1 Background and Purpose

The purpose of this report is to document potential critical area, critical area buffer, and critical area structure setback impacts associated with the proposed residential addition project located on the shoreline of Lake Washington in the City of Bellevue, Washington (Figure 1). The subject lot presently contains a house (originally built in 1976), a driveway, a large wood deck, concrete bulkhead, and Jet Ski lift.

Lake Washington is considered a critical area by the City of Bellevue. The applicant proposes to construct an addition to the existing residence within portions of the critical area structure setback. Bellevue Land Use Code (LUC) 20.25H.230 requires compliance with specific critical areas report criteria as part of any modification to a critical area, critical area buffer, or structure setback. This report fulfills these criteria.

1.2 Description of Project Area

The subject property is located at 67 Skagit Key (parcel 6065310370) in the Newport Shores community in the City of Bellevue. Newport Shores borders Lake Washington to the east and includes several canals, or manmade inlets. The subject parcel is located just within the entrance to the canals, with the shoreline bordering the southwestern portion of the site. The canal in this location is approximately 100 feet wide and continues in a southeasterly direction for 400 feet before splitting into two separate canals that each extend inland approximately 2,000 feet. The canals were carved from uplands during the 1950's with the first residences established in the early 1960's. The canals are lined on both sides with concrete bulkheads. Vessels are typically moored parallel to the bulkhead with some properties containing lifts or moorage covers.

The Kirby parcel includes a residence built in 1976. The house is currently positioned approximately 45 feet from the top of the bulkhead, at its closest point. A wood deck extends from the rear of the house, coming within 14 feet of the bulkhead. The deck steps down to a concrete walkway that connects with the bulkhead and extends along the length of the shoreline, varying in width between 11 and 15 feet. A three-foot-wide by 18-foot-long wood dock extends from the

bulkhead near the southeast corner of the site. An additional small dock and attached Jet Ski lift are located in the northwest corner of the site.

A second concrete pathway extends perpendicularly from the shoreline in the northern portion of the site, eventually running along the north side of the house and connecting to a landscaped area near the entrance to the home.

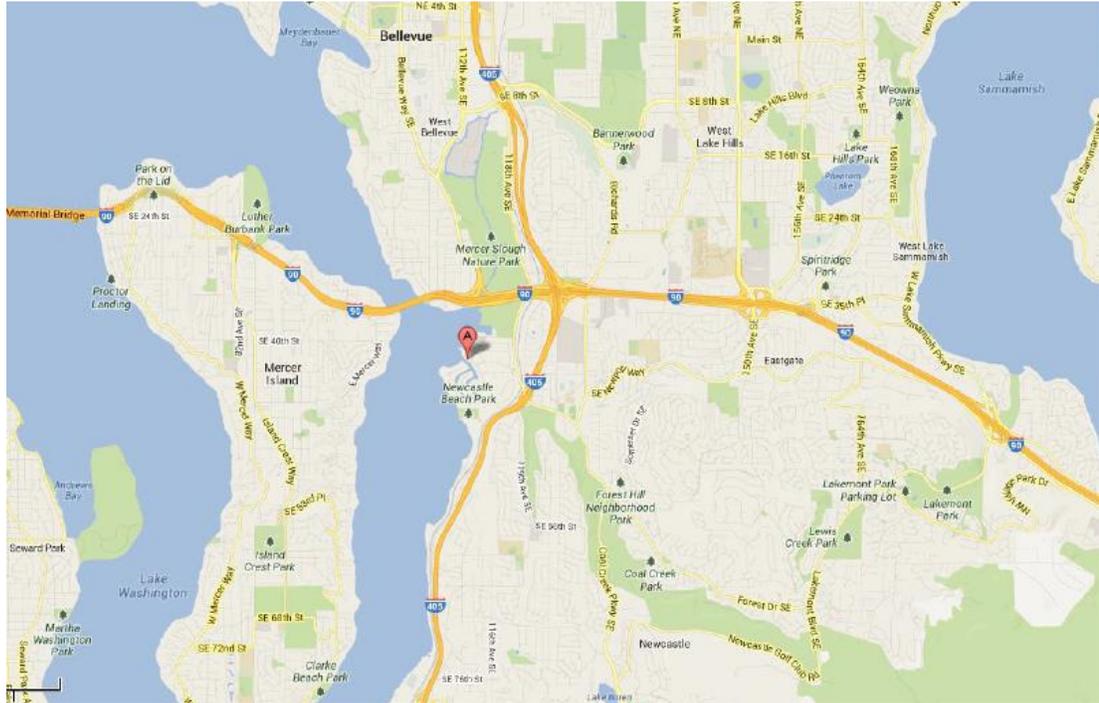


Figure 1. Vicinity Map (Google Maps).

No wetlands or streams were noted on the property, nor do publicly available data indicate the presence of aquatic areas aside from Lake Washington. According to the Natural Resources Conservation Service, the property contains Urban land (Ur) soils.

Habitat

Habitat structure on the property is virtually non-existent, with essentially no native vegetation present in the buffer or setback. Two hybrid birch trees, a number of ornamental shrubs, and areas of lawn are present. The lack of structural diversity limits food and cover opportunities for most wildlife species, including fruit producing plants which can provide a food source for songbirds and small mammals.



Figure 2. Bird's eye view of the parcel; note the extensive wood deck off the rear of the residence (Department of Ecology).

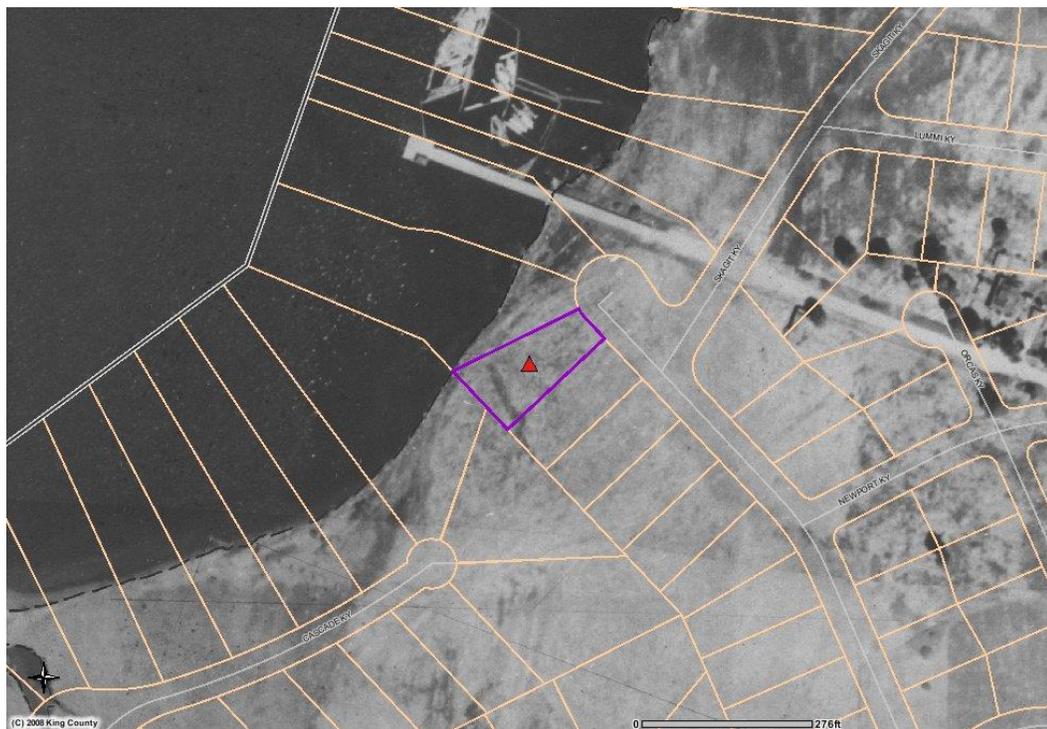


Figure 3. View of the subject site prior to excavation of the Newport canals (circa 1936 - photo courtesy of iMAP).



Figure 4. View of the existing shoreline area (looking east) – photo taken 6-12-13.



Figure 5. View of the existing shoreline (looking west) – photo taken 6-12-13.

2 LOCAL REGULATIONS

In Bellevue, shoreline areas are governed by Critical Areas Ordinance No. 5680 and regulated specifically by LUC 20.25H.115 and 20.25E. Developed sites on Lake Washington require a 25-foot critical area buffer [LUC 20.25H.115(B)(1)(a)(ii)] plus a 25-foot shoreline critical area structure setback [LUC 20.25H.115(C)(2)(b)]. The setback is intended to minimize long-term impacts of development and protect the critical area from adverse impacts during construction, maintenance, and uses associated with the structure.

Shoreline buffers and shoreline setbacks can only be modified through an approved critical areas report. The applicant must demonstrate that the modifications to the buffer and/or setback, combined with any mitigation efforts, will result in equivalent or better protection of critical area functions and values than would result from adhering to the standard application of the regulations (LUC 20.25H.230). Mitigation or restoration of the critical area may involve restoring the shoreline by removing structures or impervious surfaces, removing invasive plant species, and/or planting native vegetation within the buffer and/or setback. An approved mitigation plan would require monitoring and maintenance in accordance with LUC 20.25H.220.

3 PROJECT DESCRIPTION

The proposed project includes an addition to the existing residence. The addition would extend from the southern portion of the home and would occupy the area currently covered by portions of the wood deck. The first level of the addition would extend 19 feet waterward from the existing residence and would have a total footprint of 465 square feet, 435 square feet of which would fall within the shoreline structure setback. A smaller expansion waterward would occur on the second level where the addition would end approximately 11 feet short of the ground level expansion. Also proposed is the rebuilding of the ground-level wood deck. The existing deck will be completely removed to allow for construction of the residential addition. Following completion of the addition, a new deck will be installed in the same approximate footprint of the existing deck. The new deck will allow unimpeded access around the addition and portions of the existing residence.

In addition to the expansion of the residence and construction of a new deck, hardscape and landscape improvements are also proposed. Specifically, the concrete walkway adjoining the shoreline will be reduced in width and vegetation will be planted in areas of removal. In the northwestern portion of the parcel an existing wood planter will be removed and an adjacent pathway will be replaced with pavers. These modifications will allow for the planting of significant vegetation in this area. In the southwestern

portion of the lot an existing concrete walkway and several wood planters will also be removed. A paver pathway and vegetation will be installed in their place.

Project Purpose

The purpose of the proposed project is to modernize the existing residence for its aging occupants. Specifically, the residential addition will create a ground level 'stair-less' master bedroom able to accommodate the owner of the residence, who has limited mobility (Permanent Disability Placard #Z231991). The owner of the residence is no longer able to routinely access the stairs that lead to the existing master bedroom on the second floor of the home. Therefore, he would like to be able to make the transition from the master bedroom to the kitchen without the use of stairs. The only location on-site in which to construct a flush new master bedroom is off the southern corner of the house in the area of the existing deck. Therefore, the location of the addition is intended to provide a routinely accessible master bedroom for the property owner.

Mitigation Sequencing

Pursuant to LUC 20.25H.215, attempts to avoid and minimize impacts to the on-site shoreline buffer and setback have been taken.

Avoidance: As previously mentioned, the project site includes a 25-foot shoreline buffer and an additional 25-foot structure setback. Proposed improvements include a residential addition within the structure setback. Impacts to native vegetation have been avoided. Further, no impacts to the shoreline buffer or shoreline critical area are proposed.

Minimization: Minimization techniques were utilized during the design process in order to limit impacts to the shoreline buffer and setback. Minimization measures included locating the residential addition within the footprint of the existing wood deck, and preserving existing pervious surfaces.

Mitigation: Mitigation actions include the removal of 350 square feet of existing impervious surfaces. Mitigation also includes the enhancement of 906 square feet of the site through the planting of native vegetation within the buffer and portions of setback. An additional 395 square feet of native landscaping will be added to the setback. Specifically, portions of the concrete walkway that parallel the bulkhead will be removed. In its existing condition the walkway averages approximately 14 feet in width. The new walkway will be reduced to a width of approximately eight feet. Additional walkways on either side of the residence will be removed and replaced with pavers. These actions will reduce the overall amount of impervious surface within the buffer and setback by 350 square feet. Areas of removed concrete will be planted with native plantings. Additional plantings will be added in areas currently covered in lawn. Proposed species include vine maple, serviceberry, red-osier dogwood, oceansprary, red flowering currant, sea pink thrift, kinnikinnick, tufted hairgrass, sand strawberry, and

salal. The planting layout incorporates a diversity of native plant species. The mitigation plan will provide for substantially improved critical area and buffer functions relative to the existing condition. A monitoring and maintenance plan is also included in this report. Overall, a net improvement in critical area functions is proposed.

4 IMPACT ASSESSMENT / LIFT ANALYSIS

As mentioned, a residential addition will be constructed within the structure setback. The structural footprint of the expansion within the setback will measure 435 square feet in size. As mitigation for the increase in structure within the setback, impervious removal and native plantings are proposed. A summary of impacts and proposed mitigation is presented in the table below.

Table 1. Impact Assessment

	Shoreline Buffer	Structure Setback	Total
Existing Impervious Surfaces (Sq. Ft.)	1,742	1,089	2,831
Proposed Impervious Surfaces (Sq. Ft.)	1,119	1,362	2,481
Existing Native Vegetation (Sq. Ft.)	0	0	0
Proposed Mitigation Plantings (Sq. Ft.)	814	92	906
Proposed Native Landscaping	0	395	395

As can be seen in the above table, impervious surfaces within the shoreline buffer and structure setback will decrease by 350 square feet. Meanwhile 906 square feet of native mitigation plantings will be added to the buffer and portions of the setback. An additional 395 square feet of native landscaping will be added to the setback. An analysis of the specific functions and values provided by the existing site and the post-project site is provided in Table 2.

Table 2. Functional Lift Analysis

Critical Area/ Buffer Functions	Existing Conditions	Proposed Conditions	Functional Improvement?
Water Quality	The shoreline area is devoid of significant vegetation capable of filtering stormwater before it enters the lake.	Remove portions of concrete walkway and add native plantings.	Yes; water quality will be improved. New native plantings will help to filter stormwater prior to it reaching the shoreline.
Hydrology	The shoreline area lacks vegetative structure that can slow stormwater velocities discharging	Remove portions of concrete and restore portions of the shoreline buffer by	Yes; new native plantings will provide increased density and resistance to storm flows, reducing peak stormwater

	into the lake from the lawn and nearby impervious areas.	establishing native shrubs and groundcovers.	velocities entering the lake.
Habitat	The existing buffer and setback lack the native vegetation necessary to provide substantial forage and cover opportunities.	Enhance/restore habitat with native plantings.	Yes; new native plantings will provide a net increase in species and structural diversity. Further, new plantings may provide organic matter and other allochthonous inputs to the lake. New foraging and nesting opportunities for terrestrial wildlife, including several songbird species will also be provided.
Net Condition	Degraded buffer and setback with no native vegetation and extensive impervious surfaces.	Removed impervious surfaces and enhanced/restored habitat with native vegetation.	Shoreline habitat enhanced with an increase in native vegetation; filtering of stormwater by native plantings; increased habitat structural and compositional complexity, and an increase in organic material to the food chain.

The mitigation plan proposes removal of impervious surfaces and a significant increase in native plantings on-site. The presence of these plants on the site provides greater potential for the site to develop a greater vegetative structure than exists in the area presently. The property will be more suitable overall for urban songbird, small mammal and herptile species than it is presently; the site will contain more woody vegetation and a greater structural complexity, which is more attractive to songbirds and small mammals than is lawn. As well, a mix of flowering, fruiting and seeding plants will provide forage opportunities that do not currently exist on-site. Wildlife species of the Pacific Northwest are also better adapted to forage provided by native plants than non-native and ornamental species.

5 CRITICAL AREAS REPORT CRITERIA

As previously mentioned, shoreline setbacks may be modified pursuant to LUC 20.25H.230. The Director may approve the modifications described above if it can be shown that, through mitigation, the modification will result in equivalent or better protection of critical area functions and values. The existing project site contains areas of

low functioning shoreline, as well as a degraded shoreline buffer and setback. Non-native vegetation and impervious surfaces occupy portions of the buffer and setback.

Per the LUC, the critical areas report must meet specific decision criteria in order for the Director to approve a proposal to modify the regulated structure setback. Compliance with the relevant critical areas report criteria listed in LUC 20.25H.250(B) is addressed below.

3. *Identification of each regulation or standard of this code proposed to be modified.*

The site is adjacent to Lake Washington, a regulated shoreline that, pursuant to LUC 20.25H.115(B)(1)(a)(ii) and LUC 20.25H.115(C)(2)(b), requires a 25-foot critical area buffer and a 25-foot shoreline critical area structure setback. The applicant proposes to construct an addition to the residence within the structure setback.

4. *An assessment of the probable cumulative impacts to critical areas resulting from development of the site and the proposed development.*

No in-water work is proposed; therefore all impacts and offsetting mitigation will occur within the buffer and structure setback. The proposed residential expansion will occur over an area currently occupied by a wood deck. Therefore, no additional ground disturbance will occur as part of the project. Instead, a structural encroachment will occur, bringing the building closer to the critical area. However, as mentioned, this area is currently covered by wood deck; therefore human activities are not moving any closer to the water. In fact, outdoor activities currently undertaken on the deck will be replaced by an enclosed structure and outdoor activities are now most likely to occur on the portion of the deck to remain that is located over 30 feet from the OHWM. The removal of impervious surfaces coupled with proposed native plantings adjacent to the shoreline are expected to provide for an overall increase in critical area functions at the site.

5. *An analysis of the level of protection of critical area functions and values provided by the regulations or standards of this Code, compared with the level of protection provided by the proposal. The analysis shall include:*

a. *A discussion of the functions and values currently provided by the critical area and critical area buffer on the site and their relative importance to the ecosystem in which they exist;*

The shoreline is presently armored, void of vegetation, and includes significant impervious surfaces and a large wood deck. A concrete walkway, averaging approximately 14 feet in width, directly abuts the

bulkhead. Therefore, water quality, hydrologic, and habitat functions are essentially absent from the shoreline. The bulkhead allows only simple habitat to exist in the nearshore area by presenting a vertical interface with the ordinary high water mark. In addition to being a physical shoreline barrier, this limits vegetation establishment and organic input and prevents the formation of quality shallow water habitat.

b. A discussion of the functions and values likely to be provided by the critical area and critical area buffer on the site through application of the regulations and standards of this Code over the anticipated life of the proposed development;

The strict application of the regulations and standards of LUC 20.25H would prevent the proposed improvements from being constructed, as the residential addition is proposed exclusively within the shoreline structure setback. The addition, based on both its size and location, is not an 'allowed use' per LUC 20.25H.055.B. Therefore, the shoreline buffer would remain in its existing condition, as described in the response above.

c. A discussion of the functions and values likely to be provided by the critical area and critical area buffer on the site through the modifications and performance standards included in the proposal over the anticipated life of the proposed development; and

By requesting a critical area modification pursuant to LUC 20.25H.230, the applicant is provided the opportunity to restore and enhance portions of the on-site shoreline critical area buffer and structure setback. A mitigation plan has been prepared (see Appendix A) that details the area proposed for mitigation. Mitigation will involve the enhancement of 906 square feet of the site through the planting of native vegetation within the buffer and portions of setback. An additional 395 square feet of native landscaping will be added to the setback. The planting layout incorporates a diversity of native plant species. A monitoring and maintenance plan for the proposed mitigation area is also included in this report. In addition to areas of plantings, an overall decrease of 350 square feet of impervious surfaces within the buffer and setback is proposed. Overall, a net gain in critical area functions is proposed. Therefore, modification of the on-site structure setback, and subsequent mitigation, will provide a substantially higher level of protection than provided through the application of the regulations of LUC 20.25H.

7. A discussion of the mitigation requirements applicable to the proposal pursuant to LUC 20.25H.210, and a recommendation for additional or modified mitigation, if any.

The proposed mitigation plan has been developed in accordance with the standards of LUC 20.25H.210 through 20.25H.225. The project applicant proceeded through the design of the proposed project by first attempting to avoid impacts to the on-site structure setback. However, because strict application of LUC 20.25H would result in the applicant being unable to fulfill the project purpose, the applicant proceeded with a design that minimized modifications and impacts to the greatest extent possible. Included as part of the plan to reduce the structure setback is a proposal to remove 350 square feet of impervious surfaces within the setback and buffer and restore portions of both areas with native plantings. The mitigation plan will improve the critical area functions and values relative to the existing condition. A monitoring and maintenance plan for the proposed mitigation area has also been prepared and is included in this report. The plan includes the components required by LUC 20.25H.220.

To allow a shoreline structure setback modification through an approved critical areas report, the Director must also find compliance with the decision criteria established in LUC 20.25H.255(A). Compliance with the relevant sections listed in LUC 20.25H.255(A) is addressed below.

1. *The modifications and performance standards included in the proposal lead to levels of protection of critical area functions and values at least as protective as application of the regulations and standards of this code.*

See response 5 in the preceding discussion.

2. *Adequate resources to ensure completion of any required mitigation and monitoring efforts.*

A comprehensive five-year maintenance and monitoring plan is included in this report (Section 6). The plan specifies appropriate species for planting and planting techniques, describes proper maintenance activities, and sets forth performance standards to be met yearly during monitoring. This will ensure that mitigation plantings will be maintained, monitored, and successfully established within the first five years following implementation. Furthermore, to ensure that the proposed plantings are installed and that the five-year maintenance and monitoring plan is implemented, the applicant will post an Installation Assurance Device and a Maintenance Assurance Device prior to building permit issuance.

3. *The modifications and performance standards included in the proposal are not detrimental to the functions and values of critical area and critical area buffers off-site.*

The on-site critical area (Lake Washington – Newport Shores canal) continues off-site slightly to the northwest and extensively to the southeast. An encroachment into the shoreline structure setback will not have a detrimental impact on off-site critical areas and buffers. As mentioned previously, the immediately adjacent critical area is essentially manmade; being constructed as part of the development of the Newport Shores canal system in the 1950's. The existing condition of the immediate area surrounding the project site is entirely developed, with many nearby lots having structures within the setback. This built-out (and manmade) environment will therefore not suffer a detrimental impact by the proposed residential addition. In fact, on-site improvements (impervious surface removal and mitigation plantings) will have a beneficial affect on the subject property and a small cumulative improvement to the overall habitat function of the resource.

4. *The resulting development is compatible with other uses and development in the same land use district.*

The existing single-family residence will remain compatible with adjacent properties and surrounding development within the same land use district (Single Family R-2.5). Adjacent properties also contain single-family land uses, all of a similar size and character.

Modification of a shoreline structure setback requires the applicant to apply for and receive a Critical Areas Land Use Permit. Before issuing a Critical Areas Land Use Permit, the Director must find that the project meets specific decision criteria. Compliance with the applicable Critical Areas Land Use Permit decision criteria listed in LUC 20.30P.140 is addressed below.

- A. *The proposal obtains all other permits required by the Land Use Code.*

The project applicant has applied for a Critical Areas Land Use Permit (LO) to modify the on-site shoreline structure setback. An application for a Shoreline Exemption (WD) has also been submitted. No other City of Bellevue land use permits will be required of the project at this time. A Building Permit will be applied for after approval of the LO and WD.

- 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.*

No direct impacts to the critical area are proposed. Additionally, the proposed residential addition will not encroach into the shoreline buffer. Temporary construction access will occur within the buffer; however, this

can be accomplished over areas of existing concrete or lawn. Permanent modifications to the buffer include impervious surface removal and replacement with native plantings. These design parameters represent avoidance of the critical area and buffer with permanent impacts.

- D. *The proposal will be served by adequate public facilities including streets, fire protection, and utilities.*

The proposed project will be served by adequate public facilities. No new streets will be needed to serve the site and the project site will utilize existing utilities available to the site. Additionally, fire and police protection are currently available at the site.

- 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.*

A mitigation plan has been prepared in accordance with the requirements of LUC 20.25H.210. See Section 6 and Appendix A.

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

The proposed project complies with all other applicable City of Bellevue Land Use Codes.

6 MITIGATION PLAN

6.1 Overview

The proposed mitigation plan fulfills the requirements of LUC 20.25H.220(B). The plan seeks to restore and enhance portions of the Lake Washington shoreline buffer and setback. To achieve this, the plan calls for the enhancement of 906 square feet of the buffer and portions of the setback through the planting of native trees, shrubs and groundcover. Species include vine maple, serviceberry, red-osier dogwood, oceansprary, red flowering currant, sea pink thrift, kinnikinnick, tufted hairgrass, sand strawberry, and salal.

6.2 Maintenance and Monitoring Plan

A 5-year maintenance and monitoring plan is proposed to ensure and document the plan meets performance standards.

Goals

- 1) Within the proposed mitigation areas, establish dense native vegetation that is appropriate to the eco-region and site.
- 2) Where indicated on the plan, planted mitigation areas will remain substantially vegetated with a preponderance of native plants and will contain little invasive or noxious weed cover.
- 3) Increase habitat cover, refuge and food resources for herptiles, small mammals, and invertebrates. In addition to cover and food resources, provide perching habitat for native birds.

Performance Standards

The standards listed below will be used to judge the success of the installation over time. If performance standards are met at the end of Year 5, the site will then be deemed successful and the performance security bond will be eligible for release by the City of Bellevue.

- 1) Survival: Achieve 100% survival of installed plants by the end of Year 1. This standard can be met through plant establishment or through replanting as necessary to achieve the required numbers.
- 2) Species diversity: Establish at least three native woody species by Year 3 and maintain this diversity through Year 5. Native volunteer species may count towards this standard.
- 3) Native cover:
 - a. Within shrub- and tree-planted areas, achieve 40% cover of native shrubs by Year 2. Native volunteer species may count towards this cover standard.
 - b. Within shrub planted areas, achieve 60% cover of native shrubs by Year 3. Native volunteer species may count towards this cover standard.
- 4) Invasive cover: Aerial cover for all non-native, invasive and noxious weeds will not exceed 10% at any year during the monitoring period. Invasive plants include Himalayan blackberry (*Rubus armeniacus*), cut leaf blackberry (*Rubus laciniatus*), cherry (hedge) laurel (*Prunus laurocerasus*), purple loosestrife (*Lythrum salicaria*), yellow-flag iris (*Iris pseudacorus*), reed canarygrass (*Phalaris arundinacea*), morning glory/bindweed (*Convolvulus arvensis*), English holly (*Ilex aquifolium*), and ivy species (*Hedera* spp.).

Monitoring Methods

This monitoring program is designed to track the success of the mitigation site over time and to measure the degree to which it is meeting the performance standards outlined in the preceding section.

An as-built plan will be prepared by the **restoration professional** (Watershed Company [(425) 822-5242] personnel, or other persons qualified to evaluate environmental restoration projects) prior to the beginning of the monitoring period. The as-built plan will be a mark-up of the planting plans included in this plan set. The as-built plan will document any departures in plant placement or other components from the proposed plan.

Monitoring will take place once annually in the fall for five years. Year-1 monitoring will commence in the first fall subsequent to successful installation as documented in the as-built plan.

The formal monitoring visit shall record and report the following in an annual report submitted to the City of Bellevue:

- 1) Visual assessment of the overall site.
- 2) Year-1 counts of live and dead woody plants by species. Year-2 through Year-5 counts of established woody plants by species.
- 3) Counts of dead plants where mortality is significant in any monitoring year.
- 4) Estimate of native woody species cover.
- 5) Estimate of non-native, invasive weed cover.
- 6) Tabulation of established native species, including both planted and volunteer species.
- 7) Photographic documentation from at least three fixed reference points.
- 8) Any intrusions into or clearing of the planting areas, vandalism, or other actions that impair the intended functions of the mitigation area.
- 9) Recommendations for maintenance or repair of any portion of the mitigation area.

Construction Notes and Specifications

Note: specifications for items in **bold** can be found below under “Material Specifications and Definitions.”

Note: The Watershed Company [(425) 822-5242] personnel, or other persons qualified to evaluate environmental restoration projects, will monitor:

- 1) All site preparation
 - a) Soil preparation.
 - b) Mulch placement.
- 2) Plant material inspection
 - a) Plant material delivery inspection.
 - b) 100% plant installation inspection.

General Work Sequence

- 1) All plant installation is to take place during the dormant season (October 15th – December 15th), for best survival.
- 2) Prepare a planting pit for each plant and install per the planting details.
- 3) Mulch the entire planted area with **wood chip mulch**, four inches thick.
- 4) Install a temporary, above ground **irrigation system** to provide full coverage to all plants within the restoration area.

Material Specifications and Definitions

- 1) **Fertilizer:** Slow release, granular PHOSPHOROUS-FREE fertilizer. Follow manufacturer's instructions for application. Keep fertilizer in a weather-tight container while on site. Note that fertilizer is to be applied only in Years 2 through 5 and not in the first year.
- 2) **Irrigation system:** Automated system capable of delivering at least one inch of water per week from June 1 through September 30 for the first two years following installation.
- 3) **Restoration Professional:** Watershed Company [(425) 822-5242] personnel, or other persons qualified to evaluate environmental restoration projects.
- 4) **Wood chip mulch:** Arborist chips (chipped woody material) approximately 1 to 3 inches in maximum dimension (not sawdust or coarse hog fuel). This material is commonly available in large quantities from arborists or tree-pruning companies. This material is sold as "Animal Friendly Hog Fuel" at Pacific Topsoils [(800) 884-7645]. Mulch must not contain appreciable quantities of garbage, plastic, metal, soil, and dimensional lumber or construction/demolition debris.

Contingencies

If there is a significant problem with the mitigation areas meeting performance standards, a contingency plan will be developed and implemented. Contingency plans can include, but are not limited to: soil amendment; additional plant installation; and plant substitutions of type, size, quantity, and location.

Maintenance

The site will be maintained in accordance with the following instructions for three years following completion of the construction.

- 1) Follow the recommendations noted in the previous monitoring site visit.
- 2) General weeding for all planted areas:
 - a. At least twice yearly, remove all competing weeds and weed roots from beneath each installed plant and any desirable volunteer vegetation to a distance of 18 inches from the main plant stem. Weeding should occur at least twice during the spring and summer. Frequent weeding will result in lower mortality, lower plant replacement costs, and increased likelihood that the plan meets performance standards by Year 5.
 - b. More frequent weeding may be necessary depending on weed conditions that develop after plan installation.
 - c. Do not weed the area near the plant bases with string trimmer (weed whacker/weed eater). Native plants are easily damaged or killed, and weeds easily recover after trimming.
 - d. Selective applications of herbicide may be needed to control invasive weeds, especially when intermixed with native species. Herbicide application, when necessary, shall be conducted only by a state-licensed applicator. Use only herbicide formulations approved for aquatic areas.
- 3) Apply slow release granular fertilizer to each installed plant annually in the spring (by June 1) of Years 2 through 5. Do not apply fertilizer to inundated or ponded areas or lakeshore areas that may become inundated.
- 4) Replace mulch as necessary to maintain a 4-inch-thick layer, retain soil moisture, and limit weeds.
- 5) Replace each plant found dead in the summer monitoring visits during the upcoming fall dormant season (October 15th – December 15th).
- 6) The homeowner will ensure that water is provided for the entire planted area with a minimum of 1 inch of water provided per week from June 1 through September 30 for the first two years following installation through the operation of a temporary irrigation system. Less water is needed during March, April, May and October.

7 SUMMARY

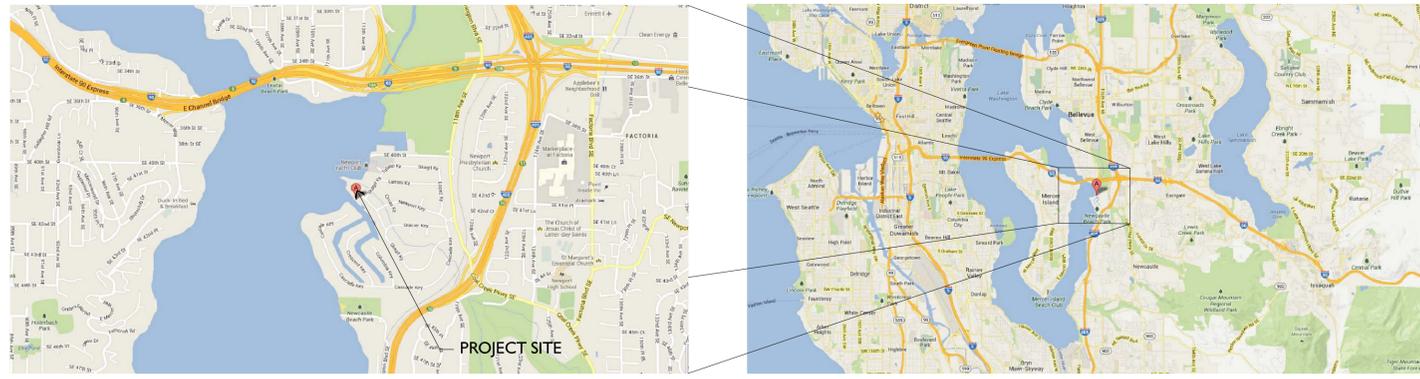
The proposed residential addition will occur within the shoreline structure setback. A total footprint of 435 square feet will be constructed within the

setback. To offset the proposed encroachment within the structure setback, a mitigation plan is proposed. Improvements will result in an overall decrease in impervious surfaces of 350 square feet and the planting of 906 square feet of native vegetation in the buffer and portions of the setback. Species include vine maple, serviceberry, red-osier dogwood, oceansprary, red flowering currant, sea pink thrift, kinnikinnick, tufted hairgrass, sand strawberry, and salal. An additional 395 square feet of native landscaping will be planted in the setback.

The planting layout incorporates a diversity of native plant species. The mitigation plan, coupled with an overall decrease in impervious surfaces will provide significantly better protection of those critical area functions and values than would be provided by the standard application of the critical area regulations. Therefore, an overall net gain in critical area buffer functions and values is proposed.

APPENDIX A

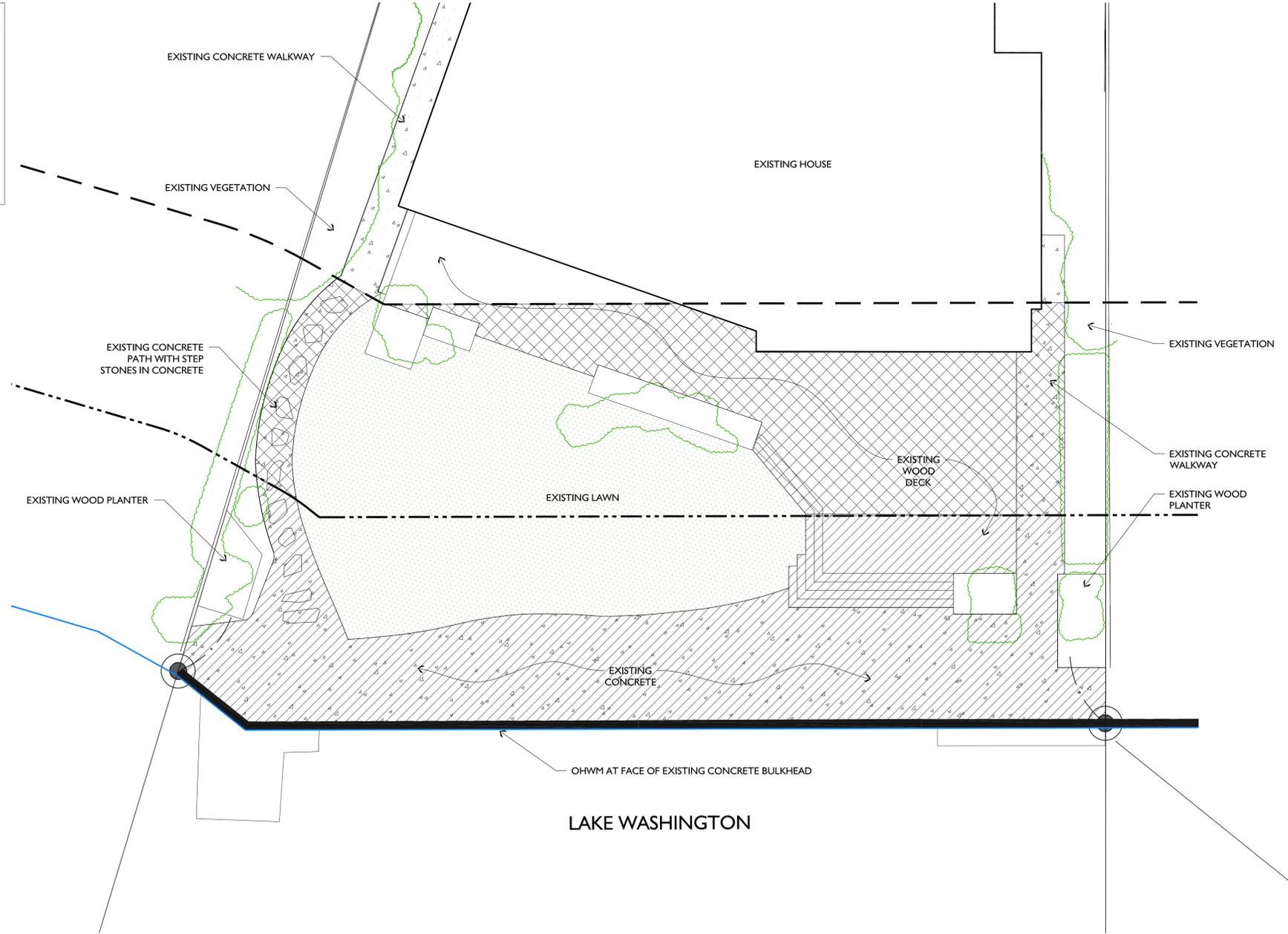
Mitigation Plan



VICINITY MAPS

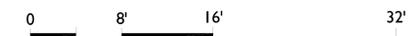
SHEET INDEX	
SHEET	TITLE
1.	EXISTING CONDITIONS
2.	PROPOSED SITE, TESC, IMPACTS AND MITIGATION PLAN
3.	PROPOSED PLANTING PLAN AND SCHEDULE
4.	PLANTING AND TESC NOTES, DETAILS, AND SPECIFICATIONS
5.	MITIGATION NOTES

LEGEND	
	OHWL
	25'-0" SHORELINE BUFFER
	25'-0" STRUCTURE SETBACK
	EXISTING IMPERVIOUS SURFACES / STRUCTURES IN BUFFER (SF)
	CONCRETE / PAVING 1,492
	WOOD DECK 250
	TOTAL: 1,742
	EXISTING IMPERVIOUS SURFACES / STRUCTURES IN SETBACK (SF)
	CONCRETE / PAVING 244
	WOOD DECK 845
	TOTAL: 1,089



EXISTING CONDITIONS

SCALE: 1/8" = 1'-0"



THE KIRBY RESIDENCE
SHORELINE MITIGATION PLAN
JEFF KIRBY
 67 SKAGIT KEY
 BELLEVUE, WA 98006

SUBMITTALS & REVISIONS				
NO.	DATE	DESCRIPTION	BY	MD
1	07-03-13	REVIEW SET		

SHEET SIZE:
 ORIGINAL PLAN IS 22" x 34"
 SCALE ACCORDINGLY.

PROJECT MANAGER: MG
 DESIGNED: MG
 DRAFTED: MD
 CHECKED: MG

JOB NUMBER:
130522

SHEET NUMBER:
1 OF 5

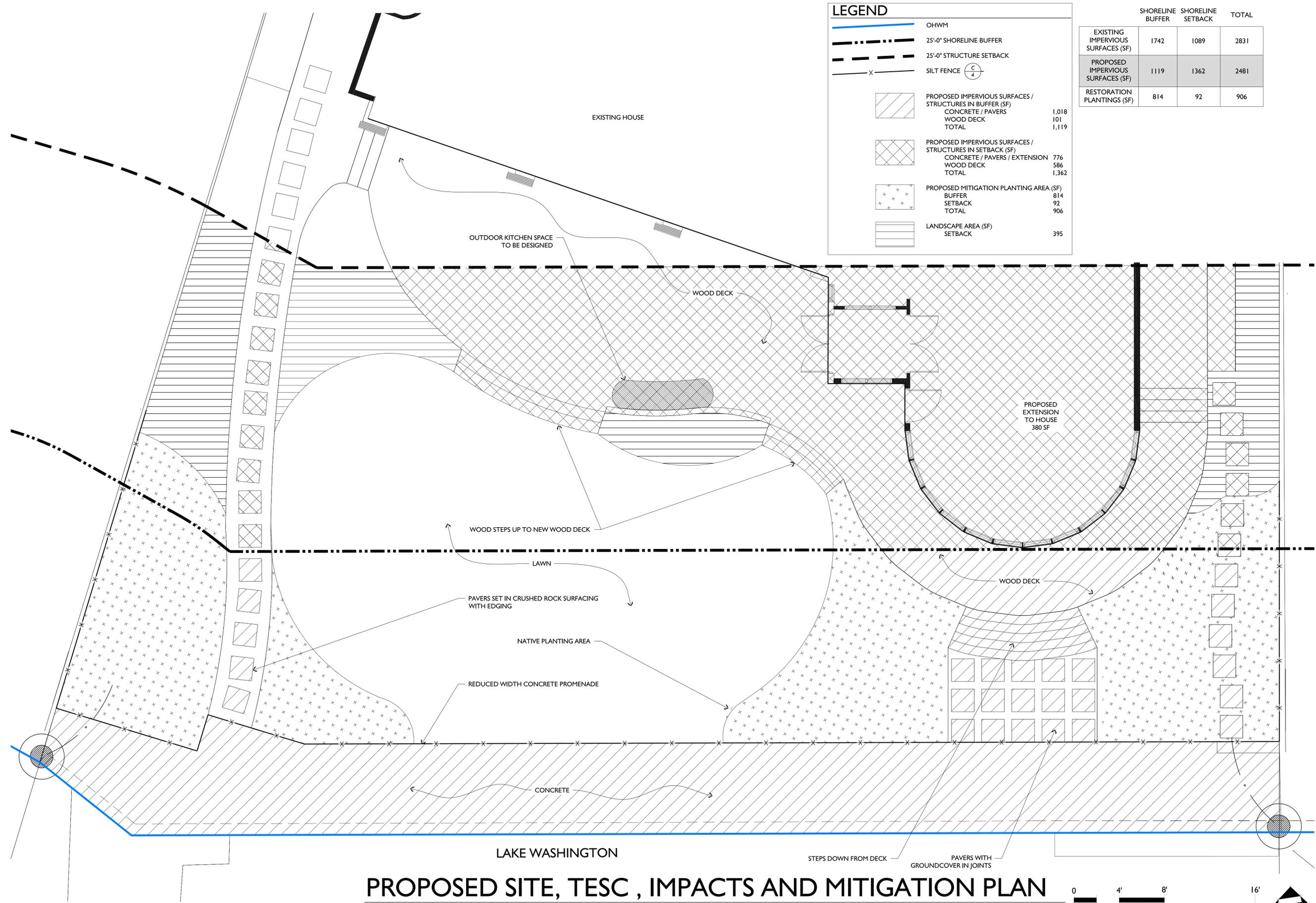
DATE: 7/2/13
 PRINTED BY: MONIKA FRENCH
 FILENAME: 130522_S01REV2.DWG

THE KIRBY RESIDENCE
SHORELINE MITIGATION PLAN
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BELLEVUE, WA 98006

	SHORELINE BUFFER	SHORELINE SETBACK	TOTAL
EXISTING IMPERVIOUS SURFACES (SF)	1742	1089	2831
PROPOSED IMPERVIOUS SURFACES (SF)	1119	1362	2481
RESTORATION PLANTINGS (SF)	814	92	906

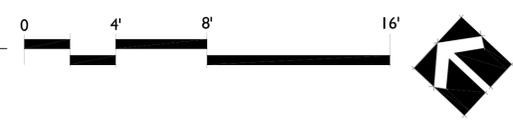
LEGEND

	OHWL	
	25'-0" SHORELINE BUFFER	
	25'-0" STRUCTURE SETBACK	
	SILT FENCE	
	PROPOSED IMPERVIOUS SURFACES / STRUCTURES IN BUFFER (SF)	1,018
	CONCRETE / PAVERS	101
	WOOD DECK	1,119
	PROPOSED IMPERVIOUS SURFACES / STRUCTURES IN SETBACK (SF)	776
	CONCRETE / PAVERS / EXTENSION	586
	WOOD DECK	1,362
	PROPOSED MITIGATION PLANTING AREA (SF)	814
	BUFFER	92
	SETBACK	906
	LANDSCAPE AREA (SF)	395
	SETBACK	



PROPOSED SITE, TESC, IMPACTS AND MITIGATION PLAN

SCALE: 1/4" = 1'-0"



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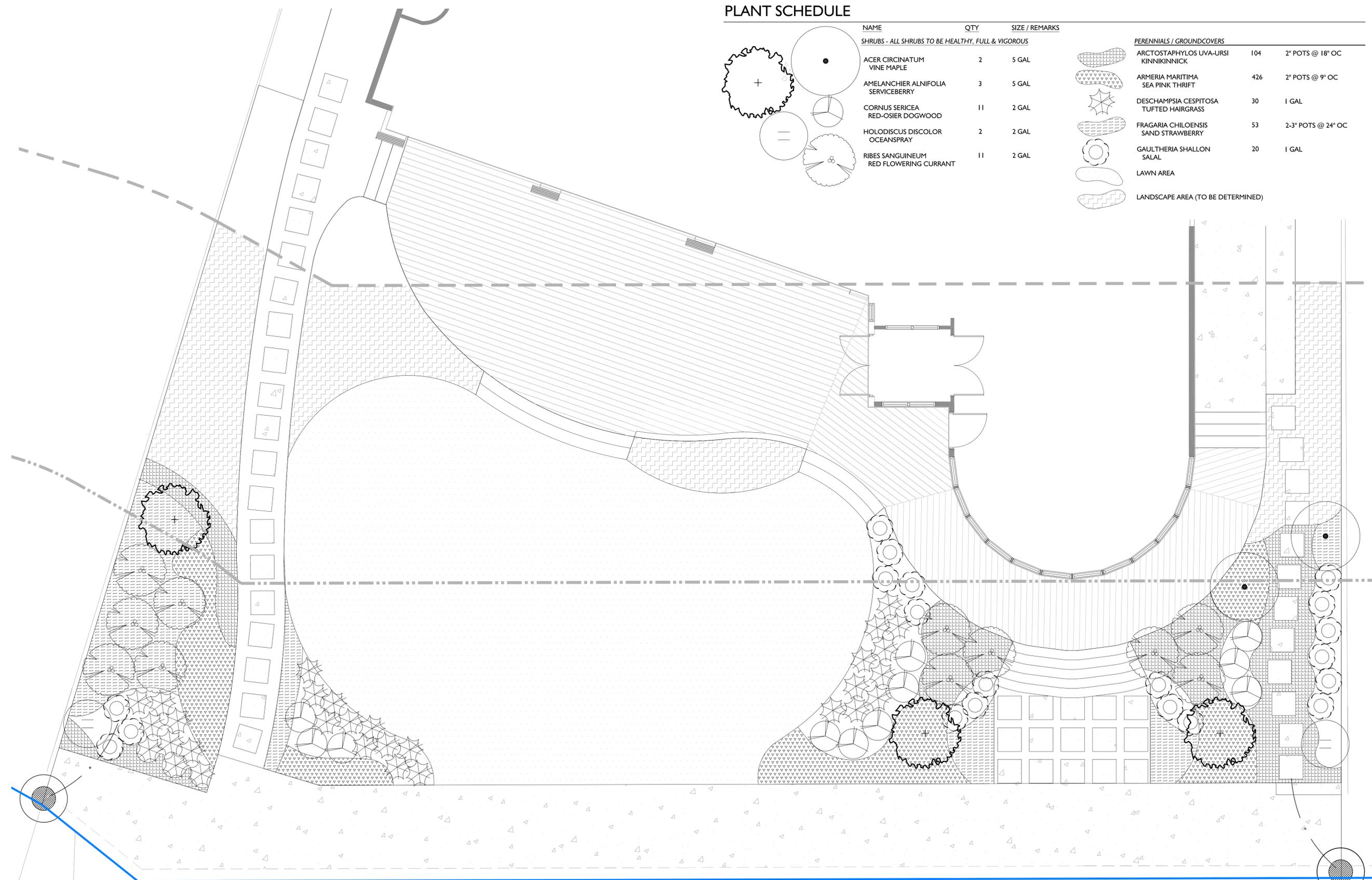
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JOB NUMBER: 130522
SHEET NUMBER: 2 OF 5

THE KIRBY RESIDENCE
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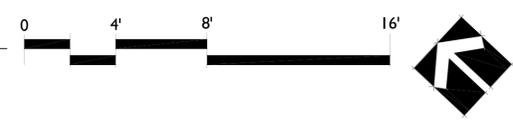
PLANT SCHEDULE

NAME	QTY	SIZE / REMARKS	PERENNIALS / GROUNDCOVERS	QTY	SIZE / REMARKS
SHRUBS - ALL SHRUBS TO BE HEALTHY, FULL & VIGOROUS					
ACER CIRCINATUM VINE MAPLE	2	5 GAL	ARCTOSTAPHYLOS UVA-URSI KINNIKINNIK	104	2" POTS @ 18" OC
AMELANCHIER ALNIFOLIA SERVICEBERRY	3	5 GAL	ARMERIA MARITIMA SEA PINK THRIFT	426	2" POTS @ 9" OC
CORNUS SERICEA RED-OSIER DOGWOOD	11	2 GAL	DESCHAMPSIA CESPITOSA TUFTED HAIRGRASS	30	1 GAL
HOLIDISCUS DISCOLOR OCEANSPRAY	2	2 GAL	FRAGARIA CHILOENSIS SAND STRAWBERRY	53	2-3" POTS @ 24" OC
RIBES SANGUINEUM RED FLOWERING CURRANT	11	2 GAL	GAULTHERIA SHALLON SALAL	20	1 GAL
			LAWN AREA		
			LANDSCAPE AREA (TO BE DETERMINED)		



PROPOSED PLANTING PLAN AND SCHEDULE

SCALE: 1/4" = 1'-0"



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DATE: 7/3/2013
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FILENAME: 130522_S03R02.DWG

PLANT INSTALLATION SPECIFICATIONS

NOTE: THESE SPECIFICATIONS ARE A LEGALLY BINDING CONTRACT

GENERAL NOTES

QUALITY ASSURANCE

- PLANTS SHALL MEET OR EXCEED THE SPECIFICATIONS OF FEDERAL, STATE, AND LOCAL LAWS REQUIRING INSPECTION FOR PLANT DISEASE AND INSECT CONTROL.
- PLANTS SHALL BE HEALTHY, VIGOROUS, AND WELL-FORMED, WITH WELL DEVELOPED, FIBROUS ROOT SYSTEMS, FREE FROM DEAD BRANCHES OR ROOTS. PLANTS SHALL BE FREE FROM DAMAGE CAUSED BY TEMPERATURE EXTREMES, LACK OR EXCESS OF MOISTURE, INSECTS, DISEASE, AND MECHANICAL INJURY. PLANTS IN LEAF SHALL BE WELL FOLIATED AND OF GOOD COLOR. PLANTS SHALL BE HABITUATED TO THE OUTDOOR ENVIRONMENTAL CONDITIONS INTO WHICH THEY WILL BE PLANTED (HARDENED-OFF).
- TREES WITH DAMAGED, CROOKED, MULTIPLE OR BROKEN LEADERS WILL BE REJECTED. WOODY PLANTS WITH ABRASIONS OF THE BARK OR SUNSCALD WILL BE REJECTED.

DEFINITIONS

- PLANTS/PLANT MATERIALS: PLANTS AND PLANT MATERIALS SHALL INCLUDE ANY LIVE PLANT MATERIAL USED ON THE PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CONTAINER GROWN, B&B OR BAREROOT PLANTS; LIVE STAKES AND FASCINES (WATTLES); TUBERS, CORMS, BULBS, ETC.; SPRIGS, PLUGS, AND LINERS.
- CONTAINER GROWN: CONTAINER GROWN PLANTS ARE THOSE WHOSE ROOTBALLS ARE ENCLOSED IN A POT OR BAG IN WHICH THAT PLANT GREW.

SUBSTITUTIONS

- IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN SPECIFIED MATERIALS IN ADVANCE IF SPECIAL GROWING, MARKETING OR OTHER ARRANGEMENTS MUST BE MADE IN ORDER TO SUPPLY SPECIFIED MATERIALS.
- SUBSTITUTION OF PLANT MATERIALS NOT ON THE PROJECT LIST WILL NOT BE PERMITTED UNLESS AUTHORIZED IN WRITING BY THE LANDSCAPE ARCHITECT / CONSULTANT.
- IF PROOF IS SUBMITTED THAT ANY PLANT MATERIAL SPECIFIED IS NOT OBTAINABLE, A PROPOSAL WILL BE CONSIDERED FOR USE OF THE NEAREST EQUIVALENT SIZE OR ALTERNATIVE SPECIES, WITH CORRESPONDING ADJUSTMENT OF CONTRACT PRICE.
- SUCH PROOF WILL BE SUBSTANTIATED AND SUBMITTED IN WRITING TO THE CONSULTANT AT LEAST 30 DAYS PRIOR TO START OF WORK UNDER THIS SECTION.

INSPECTION

- PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE CONSULTANT FOR CONFORMANCE TO SPECIFICATIONS, EITHER AT TIME OF DELIVERY ON-SITE OR AT THE GROWER'S NURSERY. APPROVAL OF PLANT MATERIALS AT ANY TIME SHALL NOT IMPAIR THE SUBSEQUENT RIGHT OF INSPECTION AND REJECTION DURING PROGRESS OF THE WORK.
- PLANTS INSPECTED ON SITE AND REJECTED FOR NOT MEETING SPECIFICATIONS MUST BE REMOVED IMMEDIATELY FROM SITE OR RED-TAGGED AND REMOVED AS SOON AS POSSIBLE.
- THE CONSULTANT MAY ELECT TO INSPECT PLANT MATERIALS AT THE PLACE OF GROWTH. AFTER INSPECTION AND ACCEPTANCE, THE CONSULTANT MAY REQUIRE THE INSPECTED PLANTS BE LABELED AND RESERVED FOR PROJECT. SUBSTITUTION OF THESE PLANTS WITH OTHER INDIVIDUALS, EVEN OF THE SAME SPECIES AND SIZE, IS UNACCEPTABLE.

MEASUREMENTS OF PLANTS

- PLANTS SHALL CONFORM TO SIZES SPECIFIED UNLESS SUBSTITUTIONS ARE MADE AS OUTLINED IN THIS CONTRACT.
- HEIGHT AND SPREAD DIMENSIONS SPECIFIED REFER TO MAIN BODY OF PLANT AND NOT BRANCH OR ROOT TIP TO TIP. PLANT DIMENSIONS SHALL BE MEASURED WHEN THEIR BRANCHES OR ROOTS ARE IN THEIR NORMAL POSITION.
- WHERE A RANGE OF SIZE IS GIVEN, NO PLANT SHALL BE LESS THAN THE MINIMUM SIZE AND AT LEAST 50% OF THE PLANTS SHALL BE AS LARGE AS THE MEDIAN OF THE SIZE RANGE. (EXAMPLE: IF THE SIZE RANGE IS 12" TO 18", AT LEAST 50% OF PLANTS MUST BE 15" TALL.)

SUBMITTALS

PROPOSED PLANT SOURCES

- WITHIN 45 DAYS AFTER AWARD OF THE CONTRACT, SUBMIT A COMPLETE LIST OF PLANT MATERIALS PROPOSED TO BE PROVIDED DEMONSTRATING CONFORMANCE WITH THE REQUIREMENTS SPECIFIED. INCLUDE THE NAMES AND ADDRESSES OF ALL GROWERS AND NURSERIES.

PRODUCT CERTIFICATES

- PLANT MATERIALS LIST - SUBMIT DOCUMENTATION TO CONSULTANT AT LEAST 30 DAYS PRIOR TO START OF WORK UNDER THIS SECTION THAT PLANT MATERIALS HAVE BEEN ORDERED. ARRANGE PROCEDURE FOR INSPECTION OF PLANT MATERIAL WITH CONSULTANT AT TIME OF SUBMISSION.
- HAVE COPIES OF VENDORS' OR GROWERS' INVOICES OR PACKING SLIPS FOR ALL PLANTS ON SITE DURING INSTALLATION. INVOICE OR PACKING SLIP SHOULD LIST SPECIES BY SURFACIFIC NAME, QUANTITY, AND DATE DELIVERED (AND GENETIC ORIGIN IF THAT INFORMATION WAS PREVIOUSLY REQUESTED).

DELIVERY, HANDLING, & STORAGE

NOTIFICATION

CONTRACTOR MUST NOTIFY CONSULTANT 48 HOURS OR MORE IN ADVANCE OF DELIVERIES SO THAT CONSULTANT MAY ARRANGE FOR INSPECTION.

PLANT MATERIALS

- TRANSPORTATION - DURING SHIPPING, PLANTS SHALL BE PACKED TO PROVIDE PROTECTION AGAINST CLIMATE EXTREMES, BREAKAGE AND DRYING. PROPER VENTILATION AND PREVENTION OF DAMAGE TO BARK, BRANCHES, AND ROOT SYSTEMS MUST BE ENSURED.
- SCHEDULING AND STORAGE - PLANTS SHALL BE DELIVERED AS CLOSE TO PLANTING AS POSSIBLE. PLANTS IN STORAGE MUST BE PROTECTED AGAINST ANY CONDITION THAT IS DETRIMENTAL TO THEIR CONTINUED HEALTH AND VIGOR.
- HANDLING - PLANT MATERIALS SHALL NOT BE HANDLED BY THE TRUNK, LIMBS, OR FOLIAGE BUT ONLY BY THE CONTAINER, BALL, BOX, OR OTHER PROTECTIVE STRUCTURE, EXCEPT BAREROOT PLANTS SHALL BE KEPT IN BUNDLES UNTIL PLANTING AND THEN HANDLED CAREFULLY BY THE TRUNK OR STEM.
- LABELS - PLANTS SHALL HAVE DURABLE, LEGIBLE LABELS STATING CORRECT SCIENTIFIC NAME AND SIZE. TEN PERCENT OF CONTAINER GROWN PLANTS IN INDIVIDUAL POTS SHALL BE LABELED. PLANTS SUPPLIED IN FLATS, RACKS, BOXES, BAGS, OR BUNDLES SHALL HAVE ONE LABEL PER GROUP.

WARRANTY

PLANT WARRANTY

PLANTS MUST BE GUARANTEED TO BE TRUE TO SCIENTIFIC NAME AND SPECIFIED SIZE, AND TO BE HEALTHY AND CAPABLE OF VIGOROUS GROWTH.

REPLACEMENT

- PLANTS NOT FOUND MEETING ALL OF THE REQUIRED CONDITIONS MUST BE REMOVED FROM SITE AND REPLACED IMMEDIATELY AT THE CONSULTANT'S DISCRETION.
- PLANTS NOT SURVIVING AFTER ONE YEAR TO BE REPLACED AT THE CONTRACTOR'S EXPENSE.

PLANT MATERIAL

GENERAL

- PLANTS SHALL BE NURSERY GROWN IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES UNDER CLIMATIC CONDITIONS SIMILAR TO OR MORE SEVERE THAN THOSE OF THE PROJECT SITE.
- PLANTS SHALL BE TRUE TO SPECIES AND VARIETY OR SUBSPECIES. NO CULTIVARS OR NAMED VARIETIES SHALL BE USED UNLESS SPECIFIED AS SUCH.

QUANTITIES

SEE PLANT LIST ON ACCOMPANYING PLANS.

ROOT TREATMENT

- CONTAINER GROWN PLANTS (INCLUDES PLUGS): PLANT ROOT BALLS MUST HOLD TOGETHER WHEN THE PLANT IS REMOVED FROM THE POT, EXCEPT THAT A SMALL AMOUNT OF LOOSE SOIL MAY BE ON THE TOP OF THE ROOTBALL.
- PLANTS MUST NOT BE ROOT-BOUND; THERE MUST BE NO CIRCLING ROOTS PRESENT IN ANY PLANT INSPECTED.
- ROOTBALLS THAT HAVE CRACKED OR BROKEN WHEN REMOVED FROM THE CONTAINER SHALL BE REJECTED.

CITY OF BELLEVUE NOTES

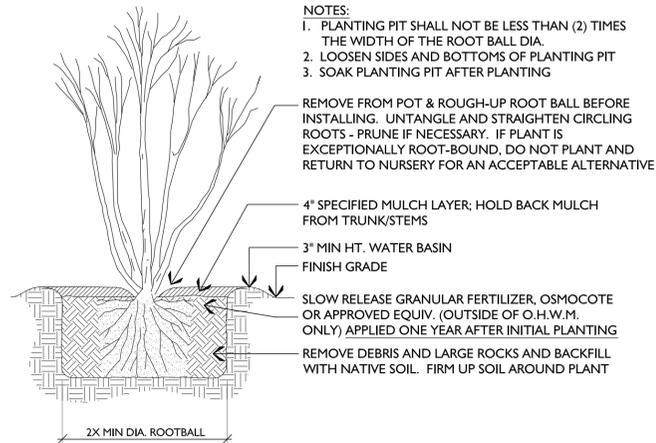
CLEARING AND GRADING STANDARD NOTES

- ALL CLEARING & GRADING CONSTRUCTION MUST BE IN ACCORDANCE WITH CITY OF BELLEVUE (COB) CLEARING & GRADING CODE, CLEARING & GRADING EROSION CONTROL STANDARD DETAILS (EC-1 THROUGH EC-23), DEVELOPMENT STANDARDS, LAND USE CODE, UNIFORM BUILDING CODE, PERMIT CONDITIONS, AND ALL OTHER APPLICABLE CODES, ORDINANCES, AND STANDARDS. THE DESIGN ELEMENTS WITHIN THESE PLANS HAVE BEEN REVIEWED ACCORDING TO THESE REQUIREMENTS. ANY VARIANCE FROM ADOPTED EROSION CONTROL STANDARDS IS NOT ALLOWED UNLESS SPECIFICALLY APPROVED BY THE CITY OF BELLEVUE DEPARTMENT OF PLANNING & COMMUNITY DEVELOPMENT (PCD) PRIOR TO CONSTRUCTION. IT SHALL BE THE SOLE RESPONSIBILITY OF THE APPLICANT AND THE PROFESSIONAL CIVIL ENGINEER TO CORRECT ANY ERROR, OMISSION, OR VARIATION FROM THE ABOVE REQUIREMENTS FOUND IN THESE PLANS. ALL CORRECTIONS SHALL BE AT NO ADDITIONAL COST OR LIABILITY TO THE COB. ALL DETAILS FOR STRUCTURAL WALLS, ROCKERIES OVER FOUR FEET IN HEIGHT, GEOGRID REINFORCED ROCKERIES AND GEOGRID REINFORCED MODULAR BLOCK WALLS, MUST BE STAMPED BY A PROFESSIONAL ENGINEER.
- A COPY OF THE APPROVED PLANS MUST BE ON-SITE DURING CONSTRUCTION. THE APPLICANT IS RESPONSIBLE FOR OBTAINING ANY OTHER REQUIRED OR RELATED PERMITS PRIOR TO BEGINNING CONSTRUCTION.
- ALL LOCATIONS OF EXISTING UTILITIES HAVE BEEN ESTABLISHED BY FIELD SURVEY OR OBTAINED FROM AVAILABLE RECORDS AND SHOULD, THEREFORE, BE CONSIDERED ONLY APPROXIMATE AND NOT NECESSARILY COMPLETE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INDEPENDENTLY VERIFY THE ACCURACY OF ALL UTILITY LOCATIONS AND TO DISCOVER AND AVOID ANY OTHER UTILITIES NOT SHOWN WHICH MAY BE AFFECTED BY THE IMPLEMENTATION OF THIS PLAN.
- THE AREA TO BE CLEARED AND GRADED MUST FLAGGED BY THE CONTRACTOR AND APPROVED BY THE CLEARING AND GRADING INSPECTOR PRIOR TO BEGINNING ANY WORK ON THE SITE.
- A REINFORCED SILT FENCE MUST BE INSTALLED IN ACCORDANCE WITH COB EC-5 AND SHALL BE LOCATED AS SHOWN ON THE APPROVED PLANS OR PER THE CLEARING AND GRADING INSPECTOR, ALONG SLOPE CONTOURS AND DOWN SLOPE FROM THE BUILDING SITE.
- A HARD-SURFACE CONSTRUCTION ACCESS PAD IS REQUIRED PER CLEARING & GRADING STANDARD DETAIL EC-1 OR EC-2. THIS PAD MUST REMAIN IN PLACE UNTIL PAVING IS INSTALLED.
- CLEARING SHALL BE LIMITED TO THE AREAS WITHIN THE APPROVED DISTURBANCE LIMITS. EXPOSED SOILS MUST BE COVERED AT THE END OF EACH WORKING DAY WHEN WORKING FROM OCTOBER 1ST THROUGH APRIL 30TH. FROM MAY 1ST THROUGH SEPTEMBER 30TH, EXPOSED SOILS MUST BE COVERED AT THE END OF EACH CONSTRUCTION WEEK AND ALSO AT THE THREAT OF RAIN.
- ANY EXCAVATED MATERIAL REMOVED FROM THE CONSTRUCTION SITE AND DEPOSITED ON PROPERTY WITHIN THE CITY LIMITS MUST BE DONE IN COMPLIANCE WITH A VALID CLEARING & GRADING PERMIT. LOCATIONS FOR THE MOBILIZATION AREA AND STOCKPILED MATERIAL MUST BE APPROVED BY THE CLEARING AND GRADING INSPECTOR AT LEAST 24 HOURS IN ADVANCE OF ANY STOCKPILING.
- TO REDUCE THE POTENTIAL FOR EROSION OF EXPOSED SOILS, OR WHEN RAINY SEASON CONSTRUCTION IS PERMITTED, THE FOLLOWING BEST MANAGEMENT PRACTICES (BMPs) ARE REQUIRED.
 - PRESERVE NATURAL VEGETATION FOR AS LONG AS POSSIBLE OR AS REQUIRED BY THE CLEARING AND GRADING INSPECTOR.
 - PROTECT EXPOSED SOIL USING PLASTIC (EC-14), EROSION CONTROL BLANKETS, STRAW OR MULCH (COB GUIDE TO MULCH MATERIALS, RATES, AND USE CHART), OR AS DIRECTED BY THE CLEARING AND GRADING INSPECTOR.
 - INSTALL CATCH BASIN INSERTS AS REQUIRED BY THE CLEARING AND GRADING INSPECTOR OR PERMIT CONDITIONS OF APPROVAL.
 - INSTALL A TEMPORARY SEDIMENT POND, A SERIES OF SEDIMENTATION TANKS, TEMPORARY FILTER VAULTS, OR OTHER SEDIMENT CONTROL FACILITIES. INSTALLATION OF EXPOSED AGGREGATE SURFACES REQUIRES A SEPARATE EFFLUENT COLLECTION POND ONSITE.
- FINAL SITE GRADING MUST DIRECT DRAINAGE AWAY FROM ALL BUILDING STRUCTURES AT A MINIMUM 2% SLOPE, PER THE UNIFORM BUILDING CODE.
- THE CONTRACTOR MUST MAINTAIN A SWEEPER ON SITE DURING EARTHWORK AND IMMEDIATELY REMOVE SOIL THAT HAS BEEN TRACKED ONTO PAVED AREAS AS RESULT OF CONSTRUCTION.
- TURBIDITY MONITORING MAY BE REQUIRED AS A CONDITION OF CLEARING AND GRADING PERMIT APPROVAL. IF REQUIRED, TURBIDITY MONITORING MUST BE PERFORMED IN ACCORDANCE WITH THE APPROVED TURBIDITY MONITORING PLAN AND AS DIRECTED BY THE CLEARING AND GRADING INSPECTOR. MONITORING MUST CONTINUE DURING SITE (EARTHWORK) CONSTRUCTION UNTIL THE FINAL SIGN-OFF BY THE CLEARING AND GRADING INSPECTOR.
- ANY PROJECT THAT IS SUBJECT TO RAINY SEASON RESTRICTIONS WILL NOT BE ALLOWED TO PERFORM CLEARING AND GRADING ACTIVITIES WITHOUT WRITTEN APPROVAL FROM THE PCD DIRECTOR. THE RAINY SEASON EXTENDS FROM NOVEMBER 1ST THROUGH APRIL 30TH, AS DEFINED IN SECTION 23.76.093A OF THE CLEARING AND GRADING CODE.

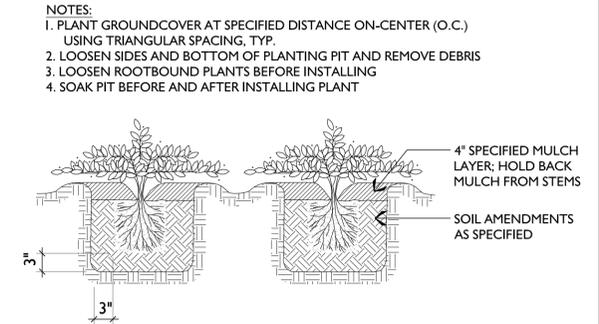
PLANTING NOTES

- NATIVE PLANT INSTALLATION SHALL OCCUR BETWEEN OCTOBER 15TH AND DECEMBER 15TH DURING FROST-FREE PERIODS ONLY FOR BEST SURVIVAL.
- REMOVE ANY AND ALL INVASIVE WEEDS AND THEIR ROOTS FROM THE PLANTING AREA. SPECIES TARGETED FOR REMOVAL INCLUDE HIMALAYAN BLACKBERRY, ENGLISH HOLLY, ENGLISH IVY, SCOT'S BROOM, JAPANESE KNOTWEED, ENGLISH LAUREL, YELLOW FLAG IRIS AND MORNING GLORY.
- LOCATE ALL EXISTING UTILITIES WITHIN THE LIMIT OF WORK. THE CONTRACTOR IS RESPONSIBLE FOR ANY UTILITY DAMAGE AS A RESULT OF THE LANDSCAPE CONSTRUCTION.
- LOOSEN ANY COMPACTED SOILS IN THE PLANTING AREA.
- LAYOUT PLANT MATERIAL PER PLAN FOR INSPECTION BY THE RESTORATION SPECIALIST. PLANT SUBSTITUTIONS WILL NOT BE ALLOWED WITHOUT THE APPROVAL OF THE RESTORATION SPECIALIST.
- INSTALL PLANTS PER PLANTING DETAILS. SEE THIS SHEET FOR PLANTING DETAILS AND INSTALLATION SPECIFICATIONS.
- WATER EACH PLANT THOROUGHLY TO REMOVE AIR POCKETS.
- INSTALL A 4" DEPTH, COARSE WOOD-CHIP MULCH LAYER THROUGHOUT THE ENTIRE PLANTING AREA.
- INSTALL A TEMPORARY OR PERMANENT IRRIGATION SYSTEM CAPABLE OF DELIVERING A MINIMUM 2" OF WATER PER WEEK TO THE ENTIRE PLANTED AREA. MAINTAIN IRRIGATION SYSTEM IN WORKING CONDITION FOR TWO (2) CONSECUTIVE SUMMERS AFTER INITIAL PLANT INSTALLATION.
- ONE YEAR AFTER INITIAL PLANT INSTALLATION, APPLY ORGANIC, SLOW-RELEASE FERTILIZER SUCH AS OSMOCOTE OR PERFECT BLEND 4-4-4 TO EACH PLANT FOR BEST SURVIVAL.

THE LANDSCAPE CONTRACTOR SHALL MAINTAIN ALL PLANT MATERIAL UNTIL FINAL INSPECTION AND APPROVAL BY THE OWNER OR OWNER'S REPRESENTATIVE. ALL PLANTINGS AND WORKMANSHIP SHALL BE GUARANTEED FOR ONE YEAR FOLLOWING FINAL PAPER ACCEPTANCE

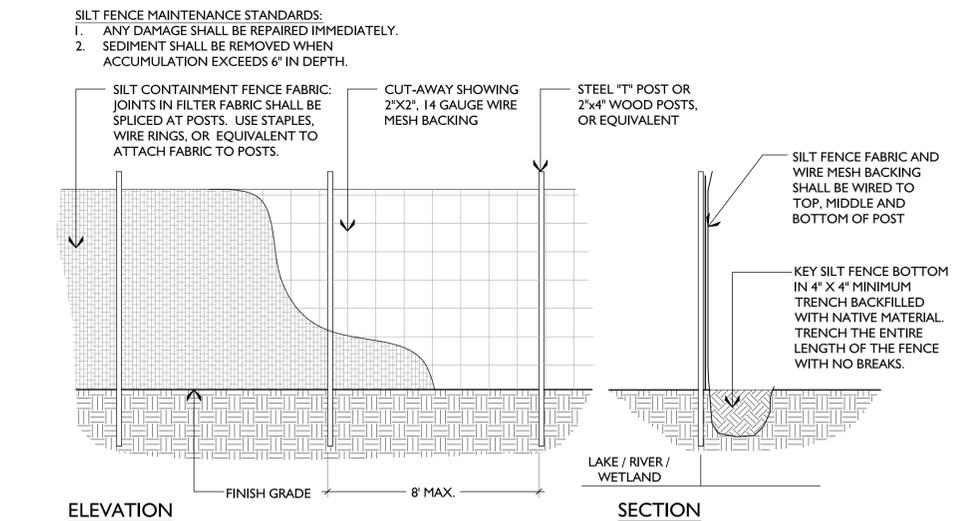


A TREE & SHRUB PLANTING DETAIL



B GROUNDCOVER & PERENNIAL PLANTING DETAIL

PLANTING DETAILS



C SILT FENCE DETAIL

TESC DETAIL

PLANTING AND TESC NOTES, DETAILS, AND SPECIFICATIONS



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Science & Design

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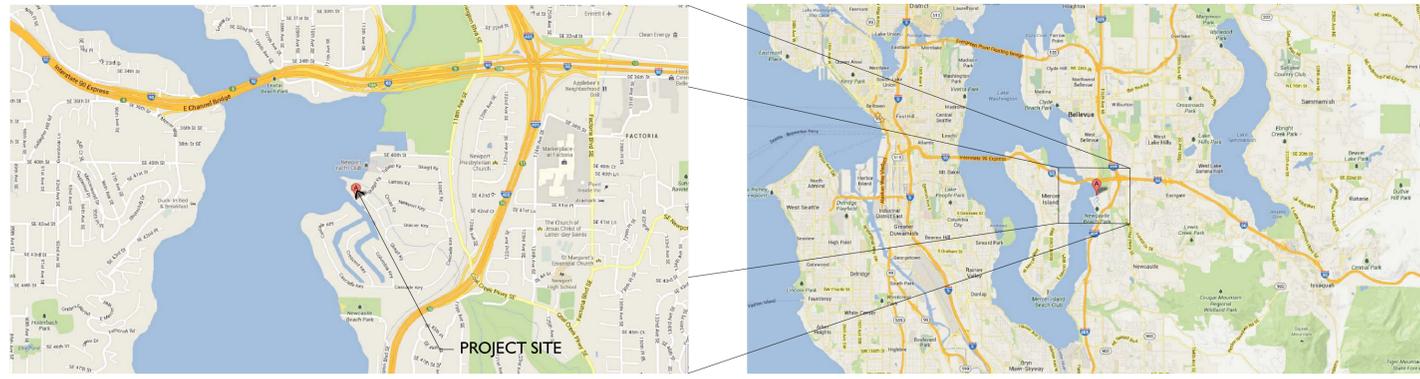
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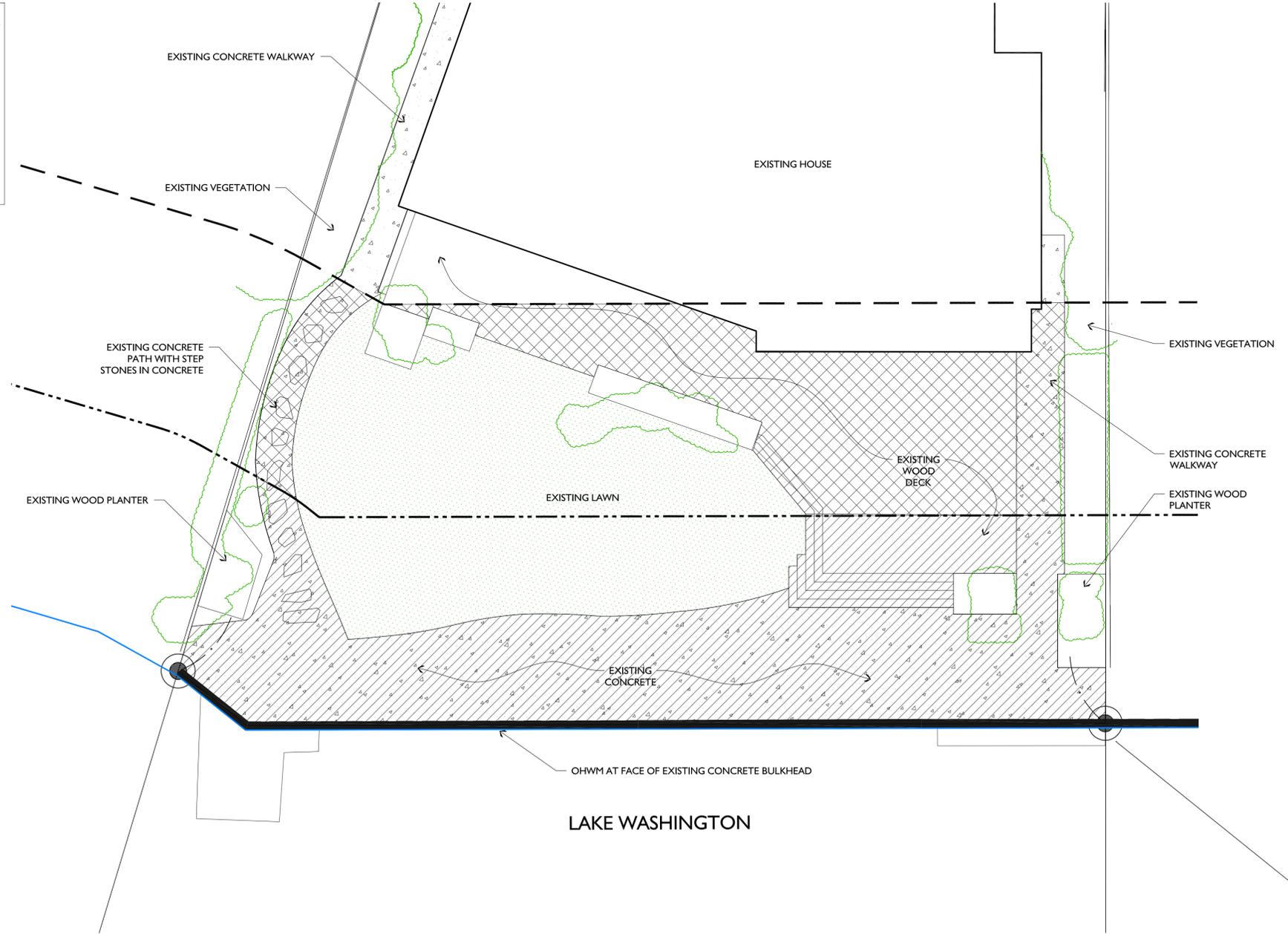
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VICINITY MAPS

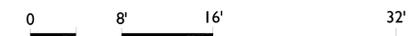
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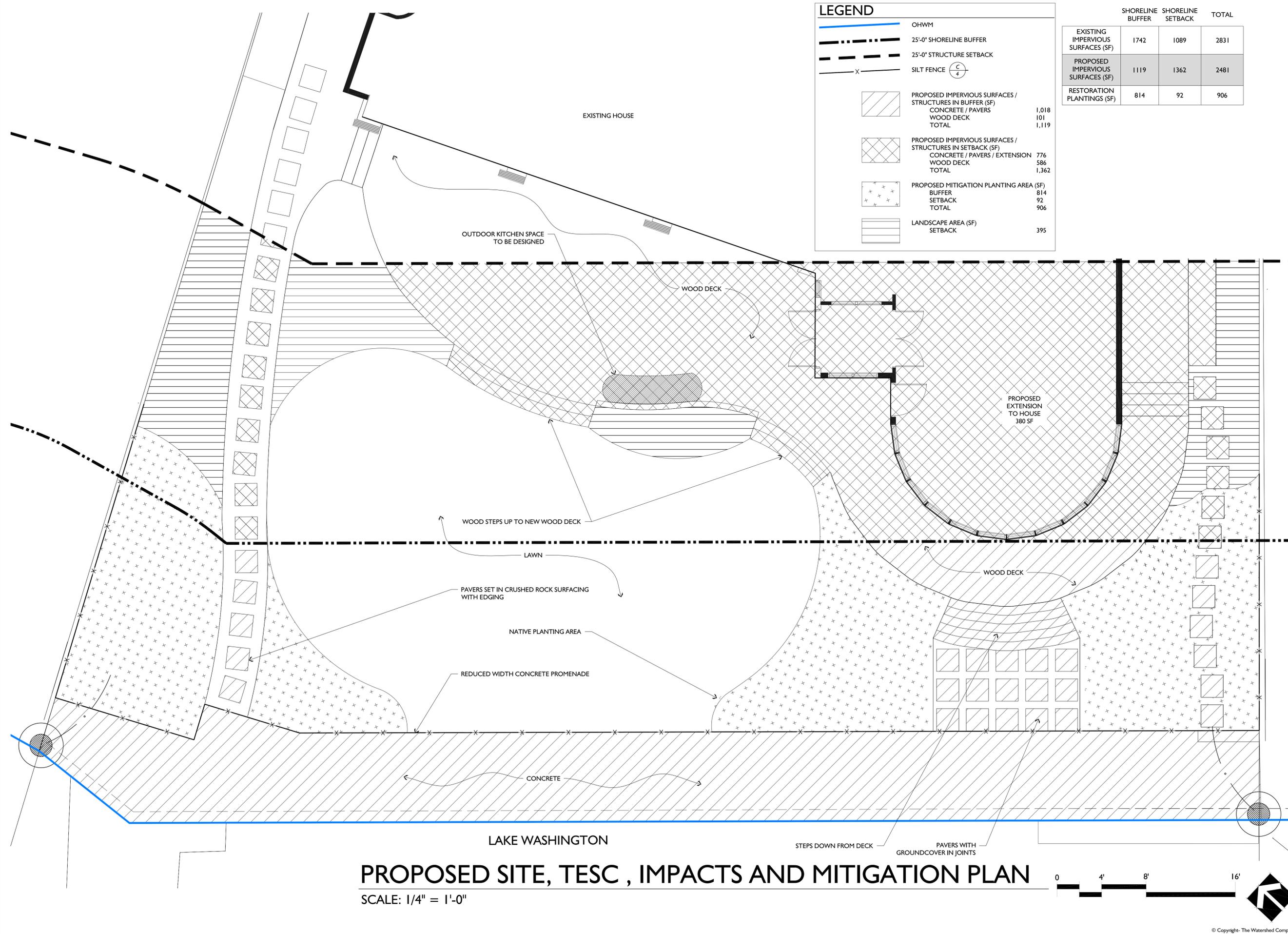
THE KIRBY RESIDENCE
SHORELINE MITIGATION PLAN

JEFF KIRBY
67 SKAGIT KEY
BELLEVUE, WA 98006

LEGEND

- OHWM
- 25'-0" SHORELINE BUFFER
- 25'-0" STRUCTURE SETBACK
- SILT FENCE
- PROPOSED IMPERVIOUS SURFACES / STRUCTURES IN BUFFER (SF)
CONCRETE / PAVERS
WOOD DECK
TOTAL 1,018
- PROPOSED IMPERVIOUS SURFACES / STRUCTURES IN SETBACK (SF)
CONCRETE / PAVERS / EXTENSION
WOOD DECK
TOTAL 1,119
- PROPOSED MITIGATION PLANTING AREA (SF)
BUFFER 814
SETBACK 92
TOTAL 906
- LANDSCAPE AREA (SF)
SETBACK 395

	SHORELINE BUFFER	SHORELINE SETBACK	TOTAL
EXISTING IMPERVIOUS SURFACES (SF)	1742	1089	2831
PROPOSED IMPERVIOUS SURFACES (SF)	1119	1362	2481
RESTORATION PLANTINGS (SF)	814	92	906



PROPOSED SITE, TESC , IMPACTS AND MITIGATION PLAN

SCALE: 1/4" = 1'-0"



SUBMITTALS & REVISIONS

NO.	DATE	DESCRIPTION	BY	MD
1	07-03-13	REVIEW SET		

SHEET SIZE:
ORIGINAL PLAN IS 22" x 34"
SCALE ACCORDINGLY.

PROJECT MANAGER: MG
DESIGNED: MG
DRAFTED: MD
CHECKED: MG

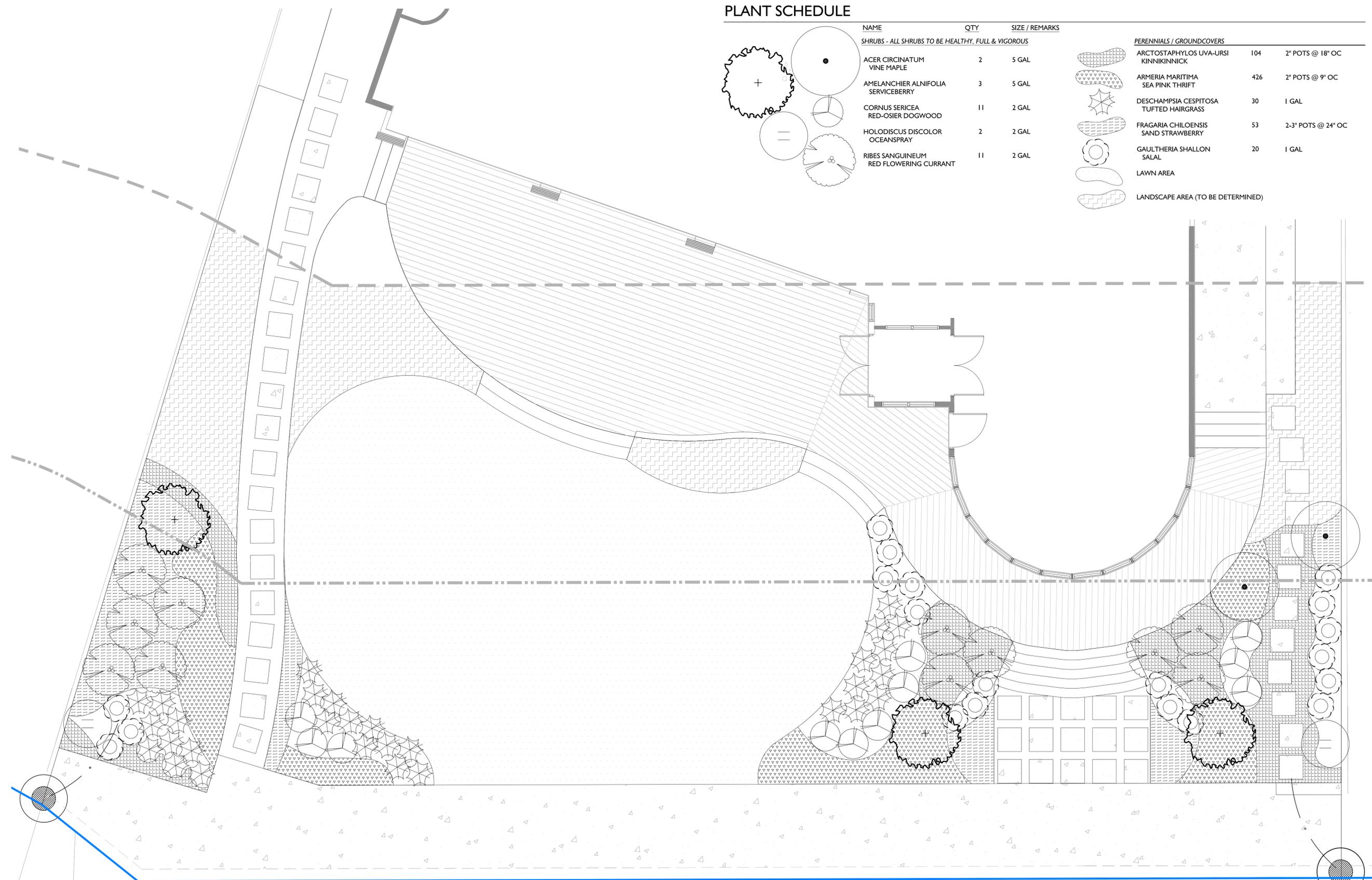
JOB NUMBER: 130522
SHEET NUMBER: 2 OF 5

DATE: 7/2/13
PRINTED BY: MONIKA TRENCH
FILENAME: 130522_S02R02.DWG

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JEFF KIRBY
67 SKAGIT KEY
BELLEVUE, WA 98006

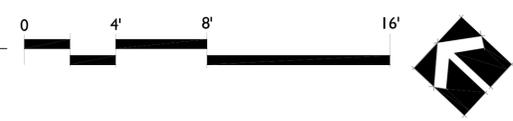
PLANT SCHEDULE

NAME	QTY	SIZE / REMARKS	PERENNIALS / GROUNDCOVERS	QTY	SIZE / REMARKS
SHRUBS - ALL SHRUBS TO BE HEALTHY, FULL & VIGOROUS					
ACER CIRCINATUM VINE MAPLE	2	5 GAL	ARCTOSTAPHYLOS UVA-URSI KINNIKINNIK	104	2" POTS @ 18" OC
AMELANCHIER ALNIFOLIA SERVICEBERRY	3	5 GAL	ARMERIA MARITIMA SEA PINK THRIFT	426	2" POTS @ 9" OC
CORNUS SERICEA RED-OSIER DOGWOOD	11	2 GAL	DESCHAMPSIA CESPITOSA TUFTED HAIRGRASS	30	1 GAL
HOLIDISCUS DISCOLOR OCEANSPRAY	2	2 GAL	FRAGARIA CHILOENSIS SAND STRAWBERRY	53	2-3" POTS @ 24" OC
RIBES SANGUINEUM RED FLOWERING CURRANT	11	2 GAL	GAULTHERIA SHALLON SALAL	20	1 GAL
			LAWN AREA		
			LANDSCAPE AREA (TO BE DETERMINED)		



PROPOSED PLANTING PLAN AND SCHEDULE

SCALE: 1/4" = 1'-0"



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JOB NUMBER:
130522

SHEET NUMBER:
3 OF 5

PLANT INSTALLATION SPECIFICATIONS

NOTE: THESE SPECIFICATIONS ARE A LEGALLY BINDING CONTRACT

GENERAL NOTES

QUALITY ASSURANCE

- PLANTS SHALL MEET OR EXCEED THE SPECIFICATIONS OF FEDERAL, STATE, AND LOCAL LAWS REQUIRING INSPECTION FOR PLANT DISEASE AND INSECT CONTROL.
- PLANTS SHALL BE HEALTHY, VIGOROUS, AND WELL-FORMED, WITH WELL DEVELOPED, FIBROUS ROOT SYSTEMS, FREE FROM DEAD BRANCHES OR ROOTS. PLANTS SHALL BE FREE FROM DAMAGE CAUSED BY TEMPERATURE EXTREMES, LACK OR EXCESS OF MOISTURE, INSECTS, DISEASE, AND MECHANICAL INJURY. PLANTS IN LEAF SHALL BE WELL FOLIATED AND OF GOOD COLOR. PLANTS SHALL BE HABITUATED TO THE OUTDOOR ENVIRONMENTAL CONDITIONS INTO WHICH THEY WILL BE PLANTED (HARDENED-OFF).
- TREES WITH DAMAGED, CROOKED, MULTIPLE OR BROKEN LEADERS WILL BE REJECTED. WOODY PLANTS WITH ABRASIONS OF THE BARK OR SUNSCALD WILL BE REJECTED.

DEFINITIONS

- PLANTS/PLANT MATERIALS: PLANTS AND PLANT MATERIALS SHALL INCLUDE ANY LIVE PLANT MATERIAL USED ON THE PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CONTAINER GROWN, B&B OR BAREROOT PLANTS; LIVE STAKES AND FASCINES (WATTLES); TUBERS, CORMS, BULBS, ETC.; SPRIGS, PLUGS, AND LINERS.
- CONTAINER GROWN: CONTAINER GROWN PLANTS ARE THOSE WHOSE ROOTBALLS ARE ENCLOSED IN A POT OR BAG IN WHICH THAT PLANT GREW.

SUBSTITUTIONS

- IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN SPECIFIED MATERIALS IN ADVANCE IF SPECIAL GROWING, MARKETING OR OTHER ARRANGEMENTS MUST BE MADE IN ORDER TO SUPPLY SPECIFIED MATERIALS.
- SUBSTITUTION OF PLANT MATERIALS NOT ON THE PROJECT LIST WILL NOT BE PERMITTED UNLESS AUTHORIZED IN WRITING BY THE LANDSCAPE ARCHITECT / CONSULTANT.
- IF PROOF IS SUBMITTED THAT ANY PLANT MATERIAL SPECIFIED IS NOT OBTAINABLE, A PROPOSAL WILL BE CONSIDERED FOR USE OF THE NEAREST EQUIVALENT SIZE OR ALTERNATIVE SPECIES, WITH CORRESPONDING ADJUSTMENT OF CONTRACT PRICE.
- SUCH PROOF WILL BE SUBSTANTIATED AND SUBMITTED IN WRITING TO THE CONSULTANT AT LEAST 30 DAYS PRIOR TO START OF WORK UNDER THIS SECTION.

INSPECTION

- PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE CONSULTANT FOR CONFORMANCE TO SPECIFICATIONS, EITHER AT TIME OF DELIVERY ON-SITE OR AT THE GROWER'S NURSERY. APPROVAL OF PLANT MATERIALS AT ANY TIME SHALL NOT IMPAIR THE SUBSEQUENT RIGHT OF INSPECTION AND REJECTION DURING PROGRESS OF THE WORK.
- PLANTS INSPECTED ON SITE AND REJECTED FOR NOT MEETING SPECIFICATIONS MUST BE REMOVED IMMEDIATELY FROM SITE OR RED-TAGGED AND REMOVED AS SOON AS POSSIBLE.
- THE CONSULTANT MAY ELECT TO INSPECT PLANT MATERIALS AT THE PLACE OF GROWTH. AFTER INSPECTION AND ACCEPTANCE, THE CONSULTANT MAY REQUIRE THE INSPECTED PLANTS BE LABELED AND RESERVED FOR PROJECT. SUBSTITUTION OF THESE PLANTS WITH OTHER INDIVIDUALS, EVEN OF THE SAME SPECIES AND SIZE, IS UNACCEPTABLE.

MEASUREMENTS OF PLANTS

- PLANTS SHALL CONFORM TO SIZES SPECIFIED UNLESS SUBSTITUTIONS ARE MADE AS OUTLINED IN THIS CONTRACT.
- HEIGHT AND SPREAD DIMENSIONS SPECIFIED REFER TO MAIN BODY OF PLANT AND NOT BRANCH OR ROOT TIP TO TIP. PLANT DIMENSIONS SHALL BE MEASURED WHEN THEIR BRANCHES OR ROOTS ARE IN THEIR NORMAL POSITION.
- WHERE A RANGE OF SIZE IS GIVEN, NO PLANT SHALL BE LESS THAN THE MINIMUM SIZE AND AT LEAST 50% OF THE PLANTS SHALL BE AS LARGE AS THE MEDIAN OF THE SIZE RANGE. (EXAMPLE: IF THE SIZE RANGE IS 12" TO 18", AT LEAST 50% OF PLANTS MUST BE 15" TALL.)

SUBMITTALS

PROPOSED PLANT SOURCES

- WITHIN 45 DAYS AFTER AWARD OF THE CONTRACT, SUBMIT A COMPLETE LIST OF PLANT MATERIALS PROPOSED TO BE PROVIDED DEMONSTRATING CONFORMANCE WITH THE REQUIREMENTS SPECIFIED. INCLUDE THE NAMES AND ADDRESSES OF ALL GROWERS AND NURSERIES.

PRODUCT CERTIFICATES

- PLANT MATERIALS LIST - SUBMIT DOCUMENTATION TO CONSULTANT AT LEAST 30 DAYS PRIOR TO START OF WORK UNDER THIS SECTION THAT PLANT MATERIALS HAVE BEEN ORDERED. ARRANGE PROCEDURE FOR INSPECTION OF PLANT MATERIAL WITH CONSULTANT AT TIME OF SUBMISSION.
- HAVE COPIES OF VENDORS' OR GROWERS' INVOICES OR PACKING SLIPS FOR ALL PLANTS ON SITE DURING INSTALLATION. INVOICE OR PACKING SLIP SHOULD LIST SPECIES BY SURFACIFIC NAME, QUANTITY, AND DATE DELIVERED (AND GENETIC ORIGIN IF THAT INFORMATION WAS PREVIOUSLY REQUESTED).

DELIVERY, HANDLING, & STORAGE

NOTIFICATION

CONTRACTOR MUST NOTIFY CONSULTANT 48 HOURS OR MORE IN ADVANCE OF DELIVERIES SO THAT CONSULTANT MAY ARRANGE FOR INSPECTION.

PLANT MATERIALS

- TRANSPORTATION - DURING SHIPPING, PLANTS SHALL BE PACKED TO PROVIDE PROTECTION AGAINST CLIMATE EXTREMES, BREAKAGE AND DRYING. PROPER VENTILATION AND PREVENTION OF DAMAGE TO BARK, BRANCHES, AND ROOT SYSTEMS MUST BE ENSURED.
- SCHEDULING AND STORAGE - PLANTS SHALL BE DELIVERED AS CLOSE TO PLANTING AS POSSIBLE. PLANTS IN STORAGE MUST BE PROTECTED AGAINST ANY CONDITION THAT IS DETRIMENTAL TO THEIR CONTINUED HEALTH AND VIGOR.
- HANDLING - PLANT MATERIALS SHALL NOT BE HANDLED BY THE TRUNK, LIMBS, OR FOLIAGE BUT ONLY BY THE CONTAINER, BALL, BOX, OR OTHER PROTECTIVE STRUCTURE, EXCEPT BAREROOT PLANTS SHALL BE KEPT IN BUNDLES UNTIL PLANTING AND THEN HANDLED CAREFULLY BY THE TRUNK OR STEM.
- LABELS - PLANTS SHALL HAVE DURABLE, LEGIBLE LABELS STATING CORRECT SCIENTIFIC NAME AND SIZE. TEN PERCENT OF CONTAINER GROWN PLANTS IN INDIVIDUAL POTS SHALL BE LABELED. PLANTS SUPPLIED IN FLATS, RACKS, BOXES, BAGS, OR BUNDLES SHALL HAVE ONE LABEL PER GROUP.

WARRANTY

PLANT WARRANTY

PLANTS MUST BE GUARANTEED TO BE TRUE TO SCIENTIFIC NAME AND SPECIFIED SIZE, AND TO BE HEALTHY AND CAPABLE OF VIGOROUS GROWTH.

REPLACEMENT

- PLANTS NOT FOUND MEETING ALL OF THE REQUIRED CONDITIONS MUST BE REMOVED FROM SITE AND REPLACED IMMEDIATELY AT THE CONSULTANT'S DISCRETION.
- PLANTS NOT SURVIVING AFTER ONE YEAR TO BE REPLACED AT THE CONTRACTOR'S EXPENSE.

PLANT MATERIAL

GENERAL

- PLANTS SHALL BE NURSERY GROWN IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES UNDER CLIMATIC CONDITIONS SIMILAR TO OR MORE SEVERE THAN THOSE OF THE PROJECT SITE.
- PLANTS SHALL BE TRUE TO SPECIES AND VARIETY OR SUBSPECIES. NO CULTIVARS OR NAMED VARIETIES SHALL BE USED UNLESS SPECIFIED AS SUCH.

QUANTITIES

SEE PLANT LIST ON ACCOMPANYING PLANS.

ROOT TREATMENT

- CONTAINER GROWN PLANTS (INCLUDES PLUGS): PLANT ROOT BALLS MUST HOLD TOGETHER WHEN THE PLANT IS REMOVED FROM THE POT, EXCEPT THAT A SMALL AMOUNT OF LOOSE SOIL MAY BE ON THE TOP OF THE ROOTBALL.
- PLANTS MUST NOT BE ROOT-BOUND; THERE MUST BE NO CIRCLING ROOTS PRESENT IN ANY PLANT INSPECTED.
- ROOTBALLS THAT HAVE CRACKED OR BROKEN WHEN REMOVED FROM THE CONTAINER SHALL BE REJECTED.

CITY OF BELLEVUE NOTES

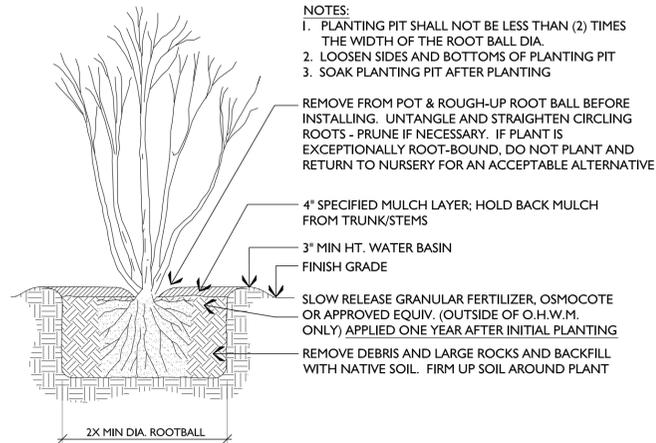
CLEARING AND GRADING STANDARD NOTES

- ALL CLEARING & GRADING CONSTRUCTION MUST BE IN ACCORDANCE WITH CITY OF BELLEVUE (COB) CLEARING & GRADING CODE, CLEARING & GRADING EROSION CONTROL STANDARD DETAILS (EC-1 THROUGH EC-23), DEVELOPMENT STANDARDS, LAND USE CODE, UNIFORM BUILDING CODE, PERMIT CONDITIONS, AND ALL OTHER APPLICABLE CODES, ORDINANCES, AND STANDARDS. THE DESIGN ELEMENTS WITHIN THESE PLANS HAVE BEEN REVIEWED ACCORDING TO THESE REQUIREMENTS. ANY VARIANCE FROM ADOPTED EROSION CONTROL STANDARDS IS NOT ALLOWED UNLESS SPECIFICALLY APPROVED BY THE CITY OF BELLEVUE DEPARTMENT OF PLANNING & COMMUNITY DEVELOPMENT (PCD) PRIOR TO CONSTRUCTION. IT SHALL BE THE SOLE RESPONSIBILITY OF THE APPLICANT AND THE PROFESSIONAL CIVIL ENGINEER TO CORRECT ANY ERROR, OMISSION, OR VARIATION FROM THE ABOVE REQUIREMENTS FOUND IN THESE PLANS. ALL CORRECTIONS SHALL BE AT NO ADDITIONAL COST OR LIABILITY TO THE COB. ALL DETAILS FOR STRUCTURAL WALLS, ROCKERIES OVER FOUR FEET IN HEIGHT, GEOGRID REINFORCED ROCKERIES AND GEOGRID REINFORCED MODULAR BLOCK WALLS, MUST BE STAMPED BY A PROFESSIONAL ENGINEER.
- A COPY OF THE APPROVED PLANS MUST BE ON-SITE DURING CONSTRUCTION. THE APPLICANT IS RESPONSIBLE FOR OBTAINING ANY OTHER REQUIRED OR RELATED PERMITS PRIOR TO BEGINNING CONSTRUCTION.
- ALL LOCATIONS OF EXISTING UTILITIES HAVE BEEN ESTABLISHED BY FIELD SURVEY OR OBTAINED FROM AVAILABLE RECORDS AND SHOULD, THEREFORE, BE CONSIDERED ONLY APPROXIMATE AND NOT NECESSARILY COMPLETE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INDEPENDENTLY VERIFY THE ACCURACY OF ALL UTILITY LOCATIONS AND TO DISCOVER AND AVOID ANY OTHER UTILITIES NOT SHOWN WHICH MAY BE AFFECTED BY THE IMPLEMENTATION OF THIS PLAN.
- THE AREA TO BE CLEARED AND GRADED MUST FLAGGED BY THE CONTRACTOR AND APPROVED BY THE CLEARING AND GRADING INSPECTOR PRIOR TO BEGINNING ANY WORK ON THE SITE.
- A REINFORCED SILT FENCE MUST BE INSTALLED IN ACCORDANCE WITH COB EC-5 AND SHALL BE LOCATED AS SHOWN ON THE APPROVED PLANS OR PER THE CLEARING AND GRADING INSPECTOR, ALONG SLOPE CONTOURS AND DOWN SLOPE FROM THE BUILDING SITE.
- A HARD-SURFACE CONSTRUCTION ACCESS PAD IS REQUIRED PER CLEARING & GRADING STANDARD DETAIL EC-1 OR EC-2. THIS PAD MUST REMAIN IN PLACE UNTIL PAVING IS INSTALLED.
- CLEARING SHALL BE LIMITED TO THE AREAS WITHIN THE APPROVED DISTURBANCE LIMITS. EXPOSED SOILS MUST BE COVERED AT THE END OF EACH WORKING DAY WHEN WORKING FROM OCTOBER 1ST THROUGH APRIL 30TH. FROM MAY 1ST THROUGH SEPTEMBER 30TH, EXPOSED SOILS MUST BE COVERED AT THE END OF EACH CONSTRUCTION WEEK AND ALSO AT THE THREAT OF RAIN.
- ANY EXCAVATED MATERIAL REMOVED FROM THE CONSTRUCTION SITE AND DEPOSITED ON PROPERTY WITHIN THE CITY LIMITS MUST BE DONE IN COMPLIANCE WITH A VALID CLEARING & GRADING PERMIT. LOCATIONS FOR THE MOBILIZATION AREA AND STOCKPILED MATERIAL MUST BE APPROVED BY THE CLEARING AND GRADING INSPECTOR AT LEAST 24 HOURS IN ADVANCE OF ANY STOCKPILING.
- TO REDUCE THE POTENTIAL FOR EROSION OF EXPOSED SOILS, OR WHEN RAINY SEASON CONSTRUCTION IS PERMITTED, THE FOLLOWING BEST MANAGEMENT PRACTICES (BMPs) ARE REQUIRED.
 - PRESERVE NATURAL VEGETATION FOR AS LONG AS POSSIBLE OR AS REQUIRED BY THE CLEARING AND GRADING INSPECTOR.
 - PROTECT EXPOSED SOIL USING PLASTIC (EC-14), EROSION CONTROL BLANKETS, STRAW OR MULCH (COB GUIDE TO MULCH MATERIALS, RATES, AND USE CHART), OR AS DIRECTED BY THE CLEARING AND GRADING INSPECTOR.
 - INSTALL CATCH BASIN INSERTS AS REQUIRED BY THE CLEARING AND GRADING INSPECTOR OR PERMIT CONDITIONS OF APPROVAL.
 - INSTALL A TEMPORARY SEDIMENT POND, A SERIES OF SEDIMENTATION TANKS, TEMPORARY FILTER VAULTS, OR OTHER SEDIMENT CONTROL FACILITIES. INSTALLATION OF EXPOSED AGGREGATE SURFACES REQUIRES A SEPARATE EFFLUENT COLLECTION POND ONSITE.
- FINAL SITE GRADING MUST DIRECT DRAINAGE AWAY FROM ALL BUILDING STRUCTURES AT A MINIMUM 2% SLOPE, PER THE UNIFORM BUILDING CODE.
- THE CONTRACTOR MUST MAINTAIN A SWEEPER ON SITE DURING EARTHWORK AND IMMEDIATELY REMOVE SOIL THAT HAS BEEN TRACKED ONTO PAVED AREAS AS RESULT OF CONSTRUCTION.
- TURBIDITY MONITORING MAY BE REQUIRED AS A CONDITION OF CLEARING AND GRADING PERMIT APPROVAL. IF REQUIRED, TURBIDITY MONITORING MUST BE PERFORMED IN ACCORDANCE WITH THE APPROVED TURBIDITY MONITORING PLAN AND AS DIRECTED BY THE CLEARING AND GRADING INSPECTOR. MONITORING MUST CONTINUE DURING SITE (EARTHWORK) CONSTRUCTION UNTIL THE FINAL SIGN-OFF BY THE CLEARING AND GRADING INSPECTOR.
- ANY PROJECT THAT IS SUBJECT TO RAINY SEASON RESTRICTIONS WILL NOT BE ALLOWED TO PERFORM CLEARING AND GRADING ACTIVITIES WITHOUT WRITTEN APPROVAL FROM THE PCD DIRECTOR. THE RAINY SEASON EXTENDS FROM NOVEMBER 1ST THROUGH APRIL 30TH, AS DEFINED IN SECTION 23.76.093A OF THE CLEARING AND GRADING CODE.

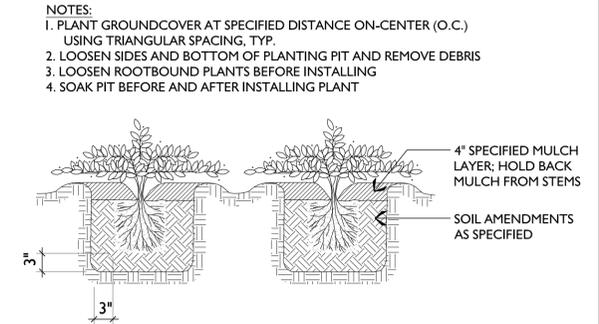
PLANTING NOTES

- NATIVE PLANT INSTALLATION SHALL OCCUR BETWEEN OCTOBER 15TH AND DECEMBER 15TH DURING FROST-FREE PERIODS ONLY FOR BEST SURVIVAL.
- REMOVE ANY AND ALL INVASIVE WEEDS AND THEIR ROOTS FROM THE PLANTING AREA. SPECIES TARGETED FOR REMOVAL INCLUDE HIMALAYAN BLACKBERRY, ENGLISH HOLLY, ENGLISH IVY, SCOT'S BROOM, JAPANESE KNOTWEED, ENGLISH LAUREL, YELLOW FLAG IRIS AND MORNING GLORY.
- LOCATE ALL EXISTING UTILITIES WITHIN THE LIMIT OF WORK. THE CONTRACTOR IS RESPONSIBLE FOR ANY UTILITY DAMAGE AS A RESULT OF THE LANDSCAPE CONSTRUCTION.
- LOOSEN ANY COMPACTED SOILS IN THE PLANTING AREA.
- LAYOUT PLANT MATERIAL PER PLAN FOR INSPECTION BY THE RESTORATION SPECIALIST. PLANT SUBSTITUTIONS WILL NOT BE ALLOWED WITHOUT THE APPROVAL OF THE RESTORATION SPECIALIST.
- INSTALL PLANTS PER PLANTING DETAILS. SEE THIS SHEET FOR PLANTING DETAILS AND INSTALLATION SPECIFICATIONS.
- WATER EACH PLANT THOROUGHLY TO REMOVE AIR POCKETS.
- INSTALL A 4" DEPTH, COARSE WOOD-CHIP MULCH LAYER THROUGHOUT THE ENTIRE PLANTING AREA.
- INSTALL A TEMPORARY OR PERMANENT IRRIGATION SYSTEM CAPABLE OF DELIVERING A MINIMUM 2" OF WATER PER WEEK TO THE ENTIRE PLANTED AREA. MAINTAIN IRRIGATION SYSTEM IN WORKING CONDITION FOR TWO (2) CONSECUTIVE SUMMERS AFTER INITIAL PLANT INSTALLATION.
- ONE YEAR AFTER INITIAL PLANT INSTALLATION, APPLY ORGANIC, SLOW-RELEASE FERTILIZER SUCH AS OSMOCOTE OR PERFECT BLEND 4-4-4 TO EACH PLANT FOR BEST SURVIVAL.

THE LANDSCAPE CONTRACTOR SHALL MAINTAIN ALL PLANT MATERIAL UNTIL FINAL INSPECTION AND APPROVAL BY THE OWNER OR OWNER'S REPRESENTATIVE. ALL PLANTINGS AND WORKMANSHIP SHALL BE GUARANTEED FOR ONE YEAR FOLLOWING FINAL WATER ACCEPTANCE

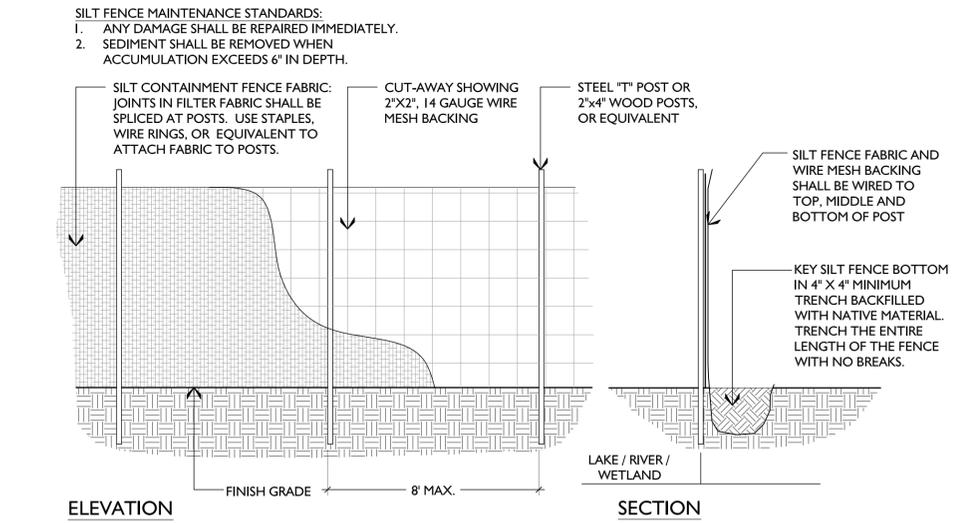


A TREE & SHRUB PLANTING DETAIL



B GROUNDCOVER & PERENNIAL PLANTING DETAIL

PLANTING DETAILS



C SILT FENCE DETAIL

TESC DETAIL

PLANTING AND TESC NOTES, DETAILS, AND SPECIFICATIONS



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Science & Design

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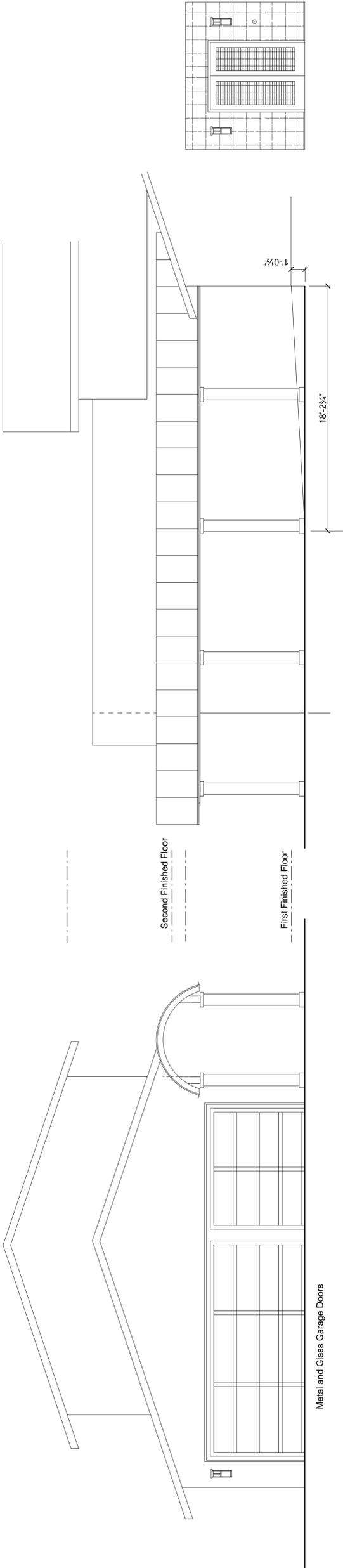
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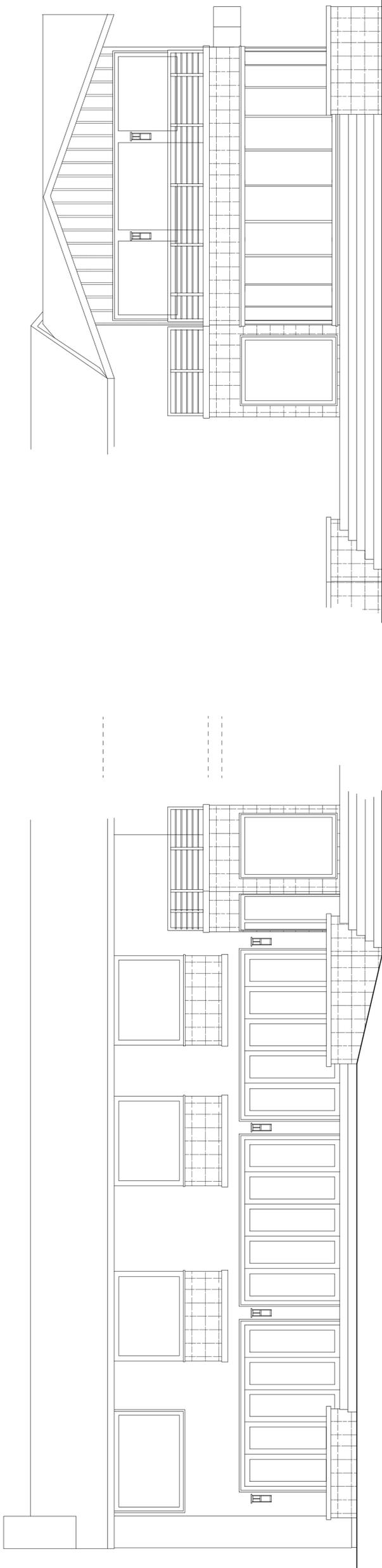
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4 OF 5



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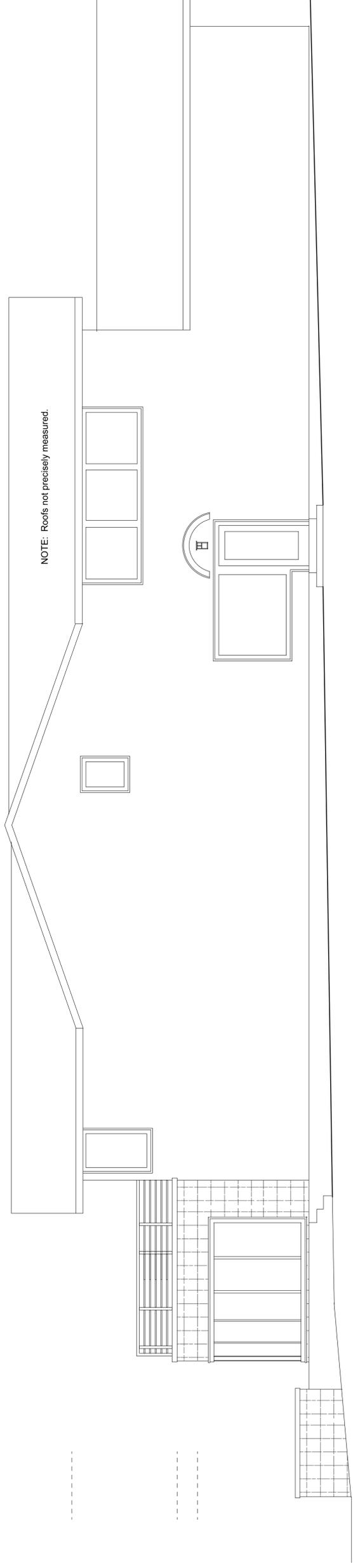
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