



CITY OF KIRKLAND
Planning & Community Development Department
123 Fifth Avenue, Kirkland, WA 98033
425.587.3225 - www.kirklandwa.gov

ADVISORY REPORT
FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

To: Eric R. Shields, AICP, Planning Director

From: David Barnes, Project Planner

Date: July 21, 2015

File: SAR14-00665, Gong Reasonable Use Permit

I. INTRODUCTION

A. APPLICATION

1. Applicant: Rui Gong
2. Site Location: Vacant property addressed as 9105 128th Avenue NE (see Attachment 1)
3. Request: A request for approval of a reasonable use permit to allow construction of one single-family residence within a Type II wetland buffer and a Class B stream buffer. A majority of the subject property is encumbered by a combination of stream, wetland, and their associated buffers. The stream and its buffer are within the wetland and wetland buffer. The proposal includes construction of a new residence with a proposed 1,440 square foot footprint and which includes a basement, garage and a main, second and partial third floor. The total floor area of the proposed home is 3,450 square feet. A driveway with an impervious area of 360 square feet is also part of the proposed access for the home's garage. The proposed home would be set back 10 feet from the front property line along 128th Avenue NE, except for the garage portion which would be setback 18 feet from the front property line. No portion of the new residence would extend into the wetland or stream and the disturbance area would be limited to 3,000 square feet. Attachment 2 shows the applicant's site plan, revised floor plan of proposed home and mitigation plan.
4. Review Process: Process I, Planning Director decision.
5. Summary of Key Issues and Conclusions: Compliance with the Reasonable Use Decisional Criteria reviewed under Process I and general Process I Decisional Criteria.

B. RECOMMENDATIONS

Based on Statements of Fact and Conclusions (Section II), and Attachments in this report, I recommend approval of this application subject to the following conditions:

1. This application is subject to the applicable requirements contained in the Kirkland Municipal Code, Zoning Code, and Building and Fire Code. It is the responsibility of the applicant to ensure compliance with the various provisions contained in these ordinances. Attachment 3, Development Standards, is provided in this report to familiarize the applicant with some of the additional

development regulations. This attachment does not include all of the additional regulations. When a condition of approval conflicts with a development regulation in Attachment 3, the condition of approval shall be followed.

2. The proposed modification to reduce the required front yard setback by 10 feet, as allowed by KZC Section 90.140.7, is approved. Any changes to the approved site plan must be reviewed and approved by the Planning Department (see Conclusion II.C.11).
3. Structures and improvements allowed in the required yards under KZC 115.115.3 are not permitted outside of the proposed structure's footprint with the exceptions of eaves at a maximum of 18 inches wide (see Conclusion II.C.11.c).
4. As part of the building permit application, the applicant shall submit:
 - a. Development plans that incorporate the wetland buffer enhancement, monitoring, and maintenance plans. Prior to submission of the permit, the applicant shall pay for an additional review by the City's consultant to ensure that the recommendations of the consultant have been followed (see Conclusion II.C.8.b(2)(a)).
 - b. Erosion control plans, which should depict the location of a six foot high construction phase fence along the boundary of the entire wetland buffer with silt screen fabric installed per City standard. The fencing shall be installed prior to issuance of any permits. The fence shall remain upright in the approved location for the duration of development activities.
 - c. A financial security device to cover the cost of completing the buffer enhancement improvements. The security shall be consistent with the standards outlined in Zoning Code section 90.145.
 - d. A signed and notarized covenant that holds the City harmless against any future claims that may arise as a result of the development of the property (see Attachment 10).
 - e. Plans showing a split rail fence along the edge of the approved site disturbance area. An access gate shall be provided for access into the wetland and wetland buffer for maintenance of the plantings and control of noxious weeds. Three permanent metal or wood signs shall be installed and maintained on the fence stating that the area contains a wetland, stream and associated buffer to be protected and maintained (see Conclusion II.C.8.(3)(e)).
 - f. A Notice of Reasonable Use Permit document for recording that includes the following (see Conclusion II.C.4):
 - i. A statement, approved by the City, that includes the following:
 - a) The footprint of the residence shall not be enlarged.
 - b) The floor area of the residence shall not be increased.
 - c) The total approved site disturbance area of 3,000 square feet shall not be increased;
 - d) Structures or improvements shall not encroach into any required yards, with the exception that the required front yard is reduced to 10 feet and the garage shall be set back 18 feet from the eats property line; and
 - e) The conditions and restrictions of this permit shall run with the property.

- ii. A copy of the approved site plan with a reference to the recorded NGPE (see Attachment 9).
5. Prior to occupancy of the residence:
- a. The wetland mitigation plan and as built shall be completed.
 - b. The split rail fencing and signage shall be installed.
 - c. A 5-year security shall be provided for the maintenance and monitoring of the mitigation plan.
 - d. A Native Growth Protection Easement shall be submitted for recording (see Conclusion II.C.8.b).

II. FINDINGS OF FACT AND CONCLUSIONS

A. SITE DESCRIPTION

1. Site Development and Zoning:
 - a. Facts:
 - (1) Size: The subject property contains 36,604 square feet (.84 acres)
 - (2) Land Use: Vacant property
 - (3) Zoning: RSX 7.2, a single-family, low density residential zone with a minimum lot size of 7,200 square feet (see attachment 1)
 - (4) Terrain: The property slopes to the west from 128th Avenue NE at a high of 108' to a low of 96' at the northwest corner of the site with an average grade of 3% (see attachment 2).
 - (5) Vegetation: An unmanaged wet forest community dominates the west of the site. Along the stream corridor and continuing east, the site is dominated by a mix of wet forest plant community. The plant community was identified as hydrophytic in character that is typical in wetlands. There are 42 significant trees identified the arborist report (see Attachment 12). Approximately 7 of these trees are located within the area of clearance and are proposed to be removed with the building permit for the new single family home.
 - (6) Hydrology: Hydrology within the overall project area appears to be the result of seasonal inundation by the stream, seasonal stormwater runoff from onsite and adjacent properties; short term seasonal ponding with depressional areas and soil characteristics. Stormwater surface runoff through the overall project area is directed by the topography generally into the stream corridor, which flows south through the project site.
 - b. Conclusions: The combination of the hydrology and vegetation on the subject property are relevant factors in this reasonable use permit application. Due to the fact that the sensitive areas and buffers encumber a majority of the site, there is no buildable area without allowing disturbance within a portion of a Type II wetland buffer and a Class B stream buffer.
2. Neighboring Development and Zoning:

- a. Facts: The five properties to the north contain single family residences and are zoned RSX 7.2. Five of these properties have a wetland in close proximity. Four of these five properties also have a stream located to the north. The property to the south is vacant and also encumbered with a wetland and stream. The properties to the east across 128th Avenue NE area zoned RSX 7.2 and contain single family residences. The property to the west is zoned RSX 7.2 and contains a single-family residence and is mostly encumbered with a wetland and two stream channels.
- b. Conclusion: The proposed single-family residence is compatible with neighboring development.

B. PUBLIC COMMENT

The public comment period ran from February 11th to March 6, 2015. Seven public comments were received (see attachment 4). Several public comments discuss the concern that the size of the house and garage were too large and will not fit in with the neighborhood. It was also expressed that the average setback from the east property line adjacent to 128th Avenue NE for other properties is approximately 40 feet, whereas the applicant's plan shows a 20 foot setback for the garage and a 10 foot setback for the home. A few comments reflect the loss of vegetation, habitat and the specifically the maple trees on the northeast corner of the property.

Staff Response: The applicant initially proposed a three story structure, with a total floor area of 4,050 square feet. Staff discussed the concerns about the size of the home with the applicant and the home was reduced in size to 3,450 square feet which was achieved by eliminating a second and third story above garage (see revised floor plan in Attachment 2).

The required setback for structures is 20 feet from the front (east) property line. However, the Kirkland Zoning Code section 90.140.7 allows a 50% reduction to be proposed for the required yard if it would result in moving the structure further away from a regulated sensitive area. In this case, a reduction in the required front yard will allow the home to be pushed further away from the wetland and stream.

The applicant is allowed to propose a maximum area of disturbance of 3,000 square feet in order to construct one new single family residence. Within the area of disturbance, there is vegetation that could support habitat. The proposed 4,500 square foot area of buffer enhancement will provide a superior functioning of the existing wetland, stream and their reduced buffers. The planting plan includes removal of non-native invasive plant species and the planting of native species which should support the habitat and existing wildlife on the entire site. In addition, the 33,000 square feet remaining on the site will be required to be placed in a native growth protection easement, ensuring that this area is protected in perpetuity.

The footprint of the house is sized at 1,450 square feet and is approximately the same as homes around the subject property. There is a stream on the southwest side of the proposed home and moving the house footprint to the south would further encroach on the stream. These constraints, coupled with the poor health of the maple trees on the northeast portion of the property, do not allow for their retention without becoming hazards to the surrounding properties.

C. REASONABLE USE DECISIONAL CRITERIA REVIEWED UNDER PROCESS I

1. Decisional Criteria of a Reasonable Use Application:

a. Facts:

- (1) KZC 90.60 establishes a process to modify a wetland buffer by no more than one-third of the standard buffer width. A Type II wetland and a Class B stream and associated buffers exist on this site. The combination of the wetland and stream covers approximately 88% of the property. When the buffers are applied, the entire site is completely encumbered (see Attachments 2). A 1/3 buffer reduction would only provide a 7 foot deep building pad on the northeast portion of the site.
- (2) KZC 90.140.3 establishes a reasonable use application to modify a wetland buffer by more than one-third of the standard buffer width if strict application of Chapter 90 KZC would preclude reasonable use of a site. A reasonable use application for a single family use may be considered under a Process I if the proposal does not exceed 3,000 square feet of total site disturbance area and does not encroach into the wetland or stream area.
- (3) KZC 90.140.4 establishes submittal requirements for a reasonable use application. The applicant has submitted a report, prepared by a qualified professional, meeting KZC.90.140.4.a through i (see Attachment 5). Both the wetland and stream delineation report and the wetland mitigation report have been reviewed by The Watershed Company, the City's consultant (see Attachment 6). The Watershed Company report dated February 5, 2015 contains additional recommendations that have been incorporated into the applicant's proposal which will enable the City to allow reasonable use to the subject property while still allowing for the least impact to this site.
- (4) KZC 90.140.5 establishes nine decisional criteria by which the decision maker shall determine whether or not application of KZC Chapter 90 will deny reasonable use of the property, and whether the proposed use and activities are a reasonable use of the property. Sections 2 through 10 below contain the staff's findings of fact and conclusions based on these nine criteria.
- (5) KZC Section 90.140.6 allows the City to approve reduction in required yards or buffer setbacks and may allow the maximum height of structures to be increased up to five feet to reduce the impact on the sensitive area and sensitive area buffer. The City shall include in the written decision any conditions and restrictions that the City determines are necessary to eliminate or minimize any undesirable effects of approving the exception. Section 11 contains staff's findings of fact and conclusions regarding proposed modifications.
- (6) The applicant is not proposing to increase the height of the structure.
- (7) The applicant is proposing to encroach in the required front yard setback by 10 feet, making the front yard setback on the east property line 10 feet wide instead of 20 feet wide.
- (8) Adjacent to the garage, the applicant is proposing to encroach in the required front yard setback by 2 feet, making the front yard setback 18 feet instead of 20 feet.

- (9) KZC 90.140.7 authorizes the Planning Director to approve a reasonable use exception under a Process I of Chapter 145 KZC, provided that the proposed improvements do not exceed 3,000 square feet (includes all structures, paved areas, landscaping, decks, driveways, utility installation and grading) and that the requirements of KZC 90.140.4 and 5 are met. Sections 12 and 13 below contain the staff's findings of fact and conclusions for the Process I approval of the reasonable use application.
- b. Conclusions:
- (1) Due to the extent of sensitive area on the property, the wetland buffer modification provisions under KZC 90.60 are not adequate to provide for reasonable use of the property.
 - (2) Based on the following analysis in Sections 2 through 13, and with the recommended conditions of approval, the application meets the established criteria for approving a reasonable use application under Process I.
2. Decisional Criterion: 90.140.5.a: There is no permitted type of land use for the property with less impact on the sensitive area and the buffer that is feasible and reasonable.
- a. Facts:
- (1) The subject property is located within the RSX 7.2 zone. This is a low density residential zone that allows the following land uses to be considered on the subject property, provided that all criteria (process, setbacks, special and general regulations, etc.) are met: detached dwelling unit, church, school or daycare center, mini school or day care center, golf course, public utility, government or community facility, or public park (see Attachment 7).
 - (2) The applicant proposes construction of one single-family residence with an attached garage.
- b. Conclusion: The proposed single family residence is the least intensive use. There is no other permitted land use for the subject property that would have a lesser impact on the wetland, stream and associated buffers than a single family residence.
3. Decisional Criterion: 90.140.5.b: There is no feasible on-site alternative to the proposed activities, including a reduction in the size, density or intensity, phasing of project implementation, change in timing of activities, revision of road and lot layout, and/or related site planning considerations that would allow a reasonable economic use with less adverse impacts to the sensitive area and buffer.
- a. Facts:
- (1) A Type II wetland is located over most of the subject property and requires a 75 foot buffer. A Class B stream lies within the wetland and requires a 60 foot buffer. A majority of the site is covered by buffer and sensitive area. The existing buffer does have some native species, but is also heavily encumbered by invasive species.
 - (2) The proposed residence will have a footprint of roughly 1,430 square feet. The total disturbed area would be a maximum of 3,000 square feet, including the residence, driveway and walkway to the home. The applicant has provided a footprint for the

proposal and the floor area will be a maximum of 3,450 square feet, with a floor area ratio of 9.4%. Total lot coverage is approximately 1,810 square feet or 5% (see Attachment 2).

- (3) KZC 15.30 requires a minimum 20- foot wide front setback yard in the RSX zone (see Attachment 7). The applicant requests a modification to this requirement and proposes a 10- foot wide front yard setback along the east property line for the living portion of the home and an 18 foot-wide front yard setback for the attached garage. The proposed modifications are discussed further in Section II.E.11 below.
- b. Conclusion: There is no feasible on-site alternative to the proposed development since the sensitive area covers almost the entire site. Construction of one single family home within 10 feet of the street frontage allows for reasonable economic use of the site with the minimum amount of impact to the sensitive area. The proposal is well below the maximum allowable lot coverage and floor area ratio. The proposed site plan minimizes the adverse impact on the sensitive area by locating the residence as far to the east as possible and away from the sensitive area, keeping the total site disturbance area to less than 3,000 square feet and enhancing the sensitive area.
4. Decisional Criterion 90.140.5.c: Unless the applicant can demonstrate unique circumstances related to the subject property, the amount of site area that will be disturbed by structure placement or other land alteration, including but not limited to grading, utility installation, decks, driveways, paving and landscaping, shall not exceed 3,000 square feet. In addition, the amount of allowable disturbance shall be that which will have the least practicable impact on the sensitive area and buffer given the characteristics and the context of the subject property, sensitive area and buffer.
 - a. Facts:
 - (1) The proposal shows a total site disturbance of 3,000 square feet (see Attachment 2).
 - (2) The proposal shows a 3,450 square-foot home which is on the edge of compatibility with homes in the neighborhood.
 - (3) The applicant is proposing the home be setback from the wetland edge ranging from 10.5 feet to 21 feet on the west side of the residence.
 - (4) The wetland, stream and required buffers cover the entire site.
 - (5) The wetland and stream buffers have both native and invasive species present. The Watershed Company has indicated 7 recommendations for changing the mitigation plan to insure that the plan will meet requirements of the Kirkland Zoning Code for reasonable use applications (see Attachment 6, Watershed report dated February 5, 2015). All of the Watershed Company's recommendations have been incorporated into the applicant's mitigation plan.
 - (6) KZC 90.45.2 requires a 10-foot building setback from the edge of the 75 foot buffer for a total setback of 85 feet from the wetland edge. Minor improvements that have no impact on the wetland or its buffers are permitted within the 10-foot buffer setback. In the past, the City has permitted eaves and 5 feet of a patio or

decking within the outer 5 feet of the buffer setback.

- (7) The Watershed Company considers a 5-foot setback from a wetland edge as the absolute minimum needed to protect a wetland and that no improvements or structures should be permitted in the 5-foot setback.
- (8) KZC 115.115.3 allows certain structures to extend up to 18 inches into required yards, including chimneys, bay windows, greenhouse windows, awning, canopies, eaves and cornices, storage sheds and paved surfaces, such as patios and walkways.
- (9) Prior to construction, KZC 90.50 requires that the applicant install a chain link fence along with a silt screen fabric at the edge of the wetland buffer disturbance limits.
- (10) Upon project completion, KZC 90.50 requires that the applicant install a barrier (split rail fence or vegetative barrier) to protect the wetland buffer.

b. Conclusions:

- (1) The proposed disturbance area, as conditioned, meets the limitations established in the criteria and is the minimum practical intrusion given the size and shape of the wetland, wetland buffer and buffer setback. The proposed grading and utility plan will result in keeping the proposed residence out of the wetland.
- (2) The proposed reductions to the required front yard as shown on the proposed drawings will minimize potential impact to the sensitive areas and their buffers (also see Section II.C.11 for modification criteria for required yards on reasonable use sites).
- (3) In order to comply with Kirkland Zoning Code Section 90.140.5c, the applicant should submit, as part of the building permit application, mitigation plans which follow the recommendations of the Watershed Co. report dated February 5, 2015.
- (4) To provide protection for the reduced wetland buffer, the minimum setbacks for the proposed structure and all improvements are as follows:
 - North: buffer setback is 5 feet from the north wall of the garage.
 - South: buffer setback is 5 feet from the south wall of the residence.
 - West: buffer setback is 5 feet from the rear of structure
 - East: property line setback is 10 feet for living space and 18 feet for the attached garage.
 - An exception shall be made for eaves of up to 18 inches into the above building setback areas.
- (5) The home's floor area should be restricted to the size proposed to keep the home size in line with surrounding homes in the neighborhood built under similar constraints.
- (6) To make future buyers aware of the development limitations placed on the subject property, a Reasonable Use Covenant (see Attachment 8), should be recorded that outlines the restrictions

within the approved site disturbance area, floor area restriction, along with a copy of the approved site plan and a reference to the separately recorded Natural Greenbelt Protective Easement document.

- (7) In order to comply with Kirkland Zoning Code section 90.50, the applicant should submit as part of a building permit, a revision to the site plan (see Attachment 2) to exhibit a split rail fence with signage around the property at the site disturbance boundary as shown in Attachment 2.
5. Decisional Criterion 90.140.5.d: The proposal is compatible in design, scale and use with other legally established development in the immediate vicinity of the subject property in the same zone and with similar constraints.

a. Facts:

- (1) A 3,450 square foot, three story structure, including a one-story garage roof top terrace, is proposed on the site. The total lot coverage will be approximately 1,810 square feet with a total disturbance area of less than 3,000 square feet.
- (2) Three properties located to the west of the subject property have received reasonable use zoning permit approvals to construct new single family residences. All three were severely encumbered by wetlands, streams and their associated buffers.
- (3) The residence at 9010 126th Avenue NE was approved as a 3,669 square foot home and Accessory Dwelling unit with a lot coverage total of 1,954 square feet and a disturbance area of 3,000 square feet.
- (4) The residence at 9118 126th Avenue NE was approved as a 3,927 square foot residence with a lot coverage total of 3,090 square feet and a disturbance area of approximately 5,623 square feet.
- (5) The residence at 9206 126th Avenue NE was approved as a 3,180 square foot residence with a lot coverage total of 3,075 square feet and a disturbance area of approximately 5,000 square feet.

Conclusion: The proposed single family residence is compatible in design, scale and use with the existing single family homes in the neighborhood, some of which have similar development constraints.

6. Decisional Criterion 90.140.5.e: The proposal utilizes to the maximum extent possible innovative construction, design, and development techniques, including pervious surfaces, which minimize to the greatest extent possible net loss of sensitive area functions and values.

a. Facts:

- (1) The only impervious surfaces proposed on the subject property are the footprint of the home and the driveway.
- (2) The existing sidewalks on the west side of the 128th Avenue NE right-of-way are impervious and located within the required wetland buffer.

- b. Conclusion: To utilize innovative construction, design, and development techniques, the proposed home should use only pervious concrete materials for the driveway and any future sidewalks, walkways or patios. These materials will help recharge the existing wetland.

7. Decisional Criterion 90.140.5.f: The proposed development does not pose an unacceptable threat to the public health, safety or welfare on or off the property.
- a. Facts: The proposal is to construct a residence in a wetland buffer, but not in the wetland. A wetland mitigation plan is proposed that will improve the quality and function of the wetland and wetland and stream buffers (see Attachment 2). Much of the buffer area that will be mitigated with native plantings was previously covered with invasive plant species. The City's consultant has additional requirements to further enhance the buffer that are required to be followed (see Section II.C.4.b).
 - b. Conclusion: The proposed development does not pose an unacceptable threat to the public health, safety or welfare on or off the property. The development will improve the function and quality of the sensitive area and its buffer.
8. Decisional Criterion 90.140.5.g: The proposal meets the mitigation, maintenance and monitoring requirements of KZC Chapter 90.
- a. Facts:
 - (1) KZC Section 90.50 establishes the requirements for construction phase fencing and a permanent barrier along wetland buffers.
 - (2) KZC Chapter 90 requires an enhancement plan that meets certain standards and a 5-year monitoring and maintenance program with at least two yearly visits and a yearly report completed by a qualified professional.
 - (3) The applicant submitted a final wetland mitigation plan (see Attachments 2) that was reviewed by the Planning Official for compliance with the Watershed Company's review letter dated February 5, 2015 (see Section II.C.4).
 - (4) KZC Section 90.145 establishes the performance and maintenance security requirements for projects involving sensitive areas.
 - (5) KZC Section 90.150 requires that consistent with law, the applicant shall dedicate development rights, air space, or grant a greenbelt protection or open space easement to the City to protect sensitive areas and their buffers (see Attachment 9).
 - (6) KZC Section 90.155 states that prior to issuance of a building permit, the applicant shall enter into an agreement with the City that runs with the property, in a form acceptable to the City Attorney, indemnifying the City from any claims, actions, liability and damages to sensitive areas arising out of development activity on the subject property (see Attachment 10).
 - b. Conclusions:
 - (1) The proposed wetland mitigation plan meets the minimum standards of Chapter 90 KZC for mitigation, maintenance and monitoring as it includes the additional requirements from the Watershed Company's report dated February 5, 2015.
 - (2) As part of the building permit application, the applicant should submit:
 - (a) Development plans that incorporate the approved wetland buffer enhancement, monitoring, and maintenance plans. Prior to submission of the permit, the applicant shall pay

- for an additional review by the City's consultant to ensure that the recommendations of the consultant have been followed.
- (b) Erosion control plans, which should depict the location of a six foot high construction phase fence along the boundary of the entire wetland buffer with silt screen fabric installed per City standard. The fencing should be installed prior to issuance of any permits. The fence should remain upright in the approved location for the duration of development activities.
 - (c) A financial security device to cover the cost of completing the buffer enhancement improvements. The security should be consistent with the standards outlined in Zoning Code section 90.145.
 - (d) Signed and notarized covenant that holds the City harmless against any future claims that may arise as a result of the development of the property (see Attachment 10).
- (3) Prior to final inspection of the building permit, the applicant should:
- (a) Complete installation of the buffer enhancement plan, and submit as built drawings, subject to inspection by the City's wetland consultant at the applicant's expense.
 - (b) Provide proof of a written contract with a qualified professional who will perform the monitoring program, together with a completed contract and fees to fund review of the monitoring and maintenance activities, (i.e. inspection of plant materials, annual monitoring reports or re-vegetation activities) by the City's wetland consultant. Alternatively, the applicant should provide a copy of a completed contract and fees to fund completion of the monitoring program by the City's wetland consultant.
 - (c) Provide proof of a written contract to cover maintenance activities outlined in the mitigation plan.
 - (d) Dedicate a Natural Greenbelt Protective Easement (NGPE) over all wetland and wetland buffer areas not impacted by the proposed development (see Attachment 8). All surveys should be located on KCAS or plat bearing system and tied to known monuments.
 - (e) Install a permanent 3 to 4 foot tall split rail fence, between the boundary of the wetland buffer and the developed portion of the site.
 - (f) Submit to the Planning Department a financial security device to cover all monitoring and maintenance activities that will need to be done including wetland consultant site visits, reports to the Planning Department, and any vegetation that needs to be replaced. The security should be consistent with the standards outlined in Zoning Code section 90.145.

9. Decisional Criterion 90.140.5.h: The inability to derive reasonable use is not the result of actions by the applicant after the effective date of the ordinance codified in Chapter 90 KZC or its predecessor.
- a. Facts:
- (1) The size and shape of the subject property has changed slightly since it was originally platted as a Burke and Farrar's Division 14 plat in 1911.
 - (2) The property is a vacant legal building site that has never been built upon.
 - (3) A majority of the site contains a Type II wetland, a Class B stream, and associated required buffers.
- b. Conclusion: The inability to derive reasonable use is not the result of actions by the applicant after the effective date of the ordinance codified in Chapter 90 KZC or its predecessor. It results from the fact that a majority of the site is impacted by the Type II wetland and Class B stream and associated required buffers.
10. Decisional Criterion 90.140.5.i: The granting of the exception will not confer on the applicant any special privilege that is denied by Chapter 90 KZC to other lands, buildings, or structures under similar circumstances.
- a. Facts:
- (1) The applicant requests construction of a single family home with a footprint of 1,450 square feet and a 360 square foot parking pad which is 4.9% lot coverage and a maximum floor area of 3,450 square feet, which is a floor area ratio of 9.4% (see Attachment 2).
 - (2) Similar reasonable use exceptions have been granted within the City of Kirkland including several west of the subject property at 9010, 9018 and 9206 126th Avenue NE.
 - (3) Other property owners in the City have received grants of exceptions for reductions in sensitive area buffers, buffer setbacks and front yard setbacks that have allowed construction of new homes.
- b. Conclusion: The granting of the exception will not confer on the applicant any special privilege that is denied by Chapter 90 KZC to other lands, buildings, or structures under similar circumstances.
11. Modification and Conditions 90.140.6: The City may approve reductions in required yards or buffer setbacks and may allow the maximum height of structures to be increased up to five feet to reduce the impact on the sensitive area and sensitive area buffer. The City shall include in the written decision any conditions and restrictions that the City determines are necessary to eliminate or minimize any undesirable effects of approving the exception.
- a. Facts:
- (1) In order to reduce the impacts on the wetland buffer, the applicant is requesting the following modifications as part of this application:
 - Reduction of the front yard setback along the east property line from a minimum of 20 feet to a minimum

of 10 feet.

- (2) One potential impact of the proposal is the impacts to the wetland during construction and during post-construction maintenance activities.
- (3) The Watershed Company considers a 5 foot setback from the wetland the minimum necessary to allow for maintenance of structures without causing harm to the wetland.
- (4) The properties to the east of the subject property are currently developed with single family homes that are at least 80 feet away from the subject property's east property line.
- (5) The applicant is proposing a 1,430 square-foot house footprint that is average for the neighborhood.

b. Conclusion:

- (1) The proposed residence is comparable in size to neighboring single family residences and to other applications for reasonable use with similar constraints. The wetland impacts have been reduced by increasing the setback from the wetland buffer and shifting it in to the required setback yard. The new house would be closer to the neighboring property to the east by 10 feet than normally allowed, which would be unlikely to cause great impact because this property is located 60 feet across the 128th Avenue NE right-of-way.
- (2) Given the sizes of the surrounding homes in the single family neighborhood and other reasonable use applications, the proposed 1,430 square foot footprint is not unreasonable for this site with several constraints upon it including a wetland, stream and their required associated buffers.
- (3) The proposed modification to allow the house to encroach in to the front yard setback by 10 feet should be approved. Any changes to the site plan should be reviewed and approved by the Planning Department.
- (4) To make future buyers aware of the development limitations placed on the subject property, a "Notice of Reasonable Use Permit" document, prepared by the City, should be recorded that outlines the restrictions within the approved site disturbance area along with a copy of the approved site plan and a reference to the separately recorded Natural Greenbelt Protective Easement document.

12. Decisional Criterion 90.140.7.a: Under an administrative review through a Process I, the required front yard setback may be reduced by up to 50% where the applicant demonstrates that the development cannot meet the City's code requirements without encroaching into the sensitive area buffer.

a. Fact: The entire site contains a Type II wetland, Class B stream and associated required buffers.

b. Conclusion: A front yard setback reduction is appropriate for this site due to the constraints of the existing wetland buffer.

13. Decisional Criterion 90.140.7.b: Under an administrative review through a Process I, the encroachment of the proposed development shall only be into the

sensitive area buffer and not the sensitive area.

- a. Facts: The proposal encroaches into the wetland and stream buffer, but will not impact the Type II wetland or Class B stream (see Attachment 2).
- b. Conclusion: The proposal meets the administrative approval limitation of not encroaching into the wetland or stream.

D. GENERAL PROCESS I APPROVAL CRITERIA

1. Fact: KZC 145.45.2 states that a Process I application may be approved if it is consistent with all applicable development regulations and, to the extent there is no applicable development regulation, the Comprehensive Plan; and it is consistent with the public health, safety, and welfare.
2. Conclusion: With the recommended conditions of approval, the proposal complies with the criteria in KZC 145.45. It is consistent with all applicable development regulations (see Section II.C) and the Comprehensive Plan (see Section II.E). In addition, it is consistent with the public health, safety, and welfare because it will allow reasonable use of a property while improving the quality and function of the sensitive area buffer.

E. COMPREHENSIVE PLAN

1. Fact: The subject property is located within the North Rose Hill neighborhood. Figure NRH-4 on page XV.F-11 designates the subject property for low density residential use at a density of 6 dwelling units per acre (see Attachment 11).
2. Conclusion: The proposed use is consistent with the Rose Hill Neighborhood Plan.

F. DEVELOPMENT STANDARDS

1. Fact: Additional comments and requirements placed on the project are found on the Development Standards, Attachment 3.
2. Conclusion: The applicant should follow the requirements set forth in Attachment 3.

III. SUBSEQUENT MODIFICATIONS

Modifications to the approval may be requested and reviewed pursuant to the applicable modification procedures and criteria in effect at the time of the requested modification.

IV. APPEALS AND JUDICIAL REVIEW

The following is a summary of the deadlines and procedures for appeals. Any person wishing to file or respond to an appeal should contact the Planning Department for further procedural information.

A. APPEALS

Section 145.60 of the Zoning Code allows the Planning Director's decision to be appealed by the applicant or any person who submitted written comments or information to the Planning Director. A party who signed a petition may not appeal unless such party also submitted independent written comments or information. The appeal must be in writing and must be delivered, along with any fees set by ordinance, to the Planning Department by 5:00 p.m., _____, fourteen (14) calendar days following the postmarked date of distribution of the Director's decision.

B. JUDICIAL REVIEW

Section 145.110 of the Zoning Code allows the action of the City in granting or denying this zoning permit to be reviewed in King County Superior Court. The petition for review must be filed within 21 calendar days of the issuance of the final land use decision by the City.

V. LAPSE OF APPROVAL

Under KZC 90.140.8, the applicant must file a complete building permit application for the development activity, use of land or other actions approved under this chapter within one (1) year after the final approval of the City of Kirkland on the matter, or the decision becomes void; provided, however, that the applicant may apply for a one-time extension of up to one year. The application for extension must be submitted by letter to the Planning Official and, along with any other supplemental documentation, must demonstrate that the applicant is making substantial progress toward developing the subject property consistent with the approval and that circumstances beyond his/her control prevent compliance with the time limit under this section. An extension must be granted at least 30 days prior to the one year expiration to be valid.

Under KZC 145.115

The applicant must begin construction or submit to the City a complete building permit application for the development activity, use of land or other actions approved under this chapter within five (5) years after the final approval of the City of Kirkland on the matter, or the decision becomes void; provided, however, that in the event judicial review is initiated per KZC 145.110, the running of the five (5) years is tolled for any period of time during which a court order in said judicial review proceeding prohibits the required development activity, use of land, or other actions.

The applicant must substantially complete construction for the development activity, use of land, or other actions approved under this chapter and complete the applicable conditions listed on the notice of decision within nine (9) years after the final approval on the matter, or the decision becomes void.

V. APPENDICES

Attachments 1 through 12 are attached.

1. Vicinity Map
2. Revised Site/Floor Plan, mitigation plan prepared by Mark Heckert, dated March 15, 2015
3. Development Standards
4. Comment Letters
5. Reasonable Use Analysis prepared by Mark Heckert dated January 5, 2015
6. Watershed Company Report dated February 5, 2015
7. RSX Use Zone Standards
8. Reasonable Use Covenant
9. Natural Greenbelt Protective Easement
10. Save Harmless Agreements Wetland and Stream
11. Comprehensive Plan Land use map for North Rose Hill Neighborhood
12. Arborist Report from Tree Solutions dated April 22, 2014

VI. PARTIES OF RECORD

Applicant: Rui Gong
Parties of Record list
Department of Planning and Community Development
Department of Public Works
Department of Building and Fire Services

Review by Planning Director:

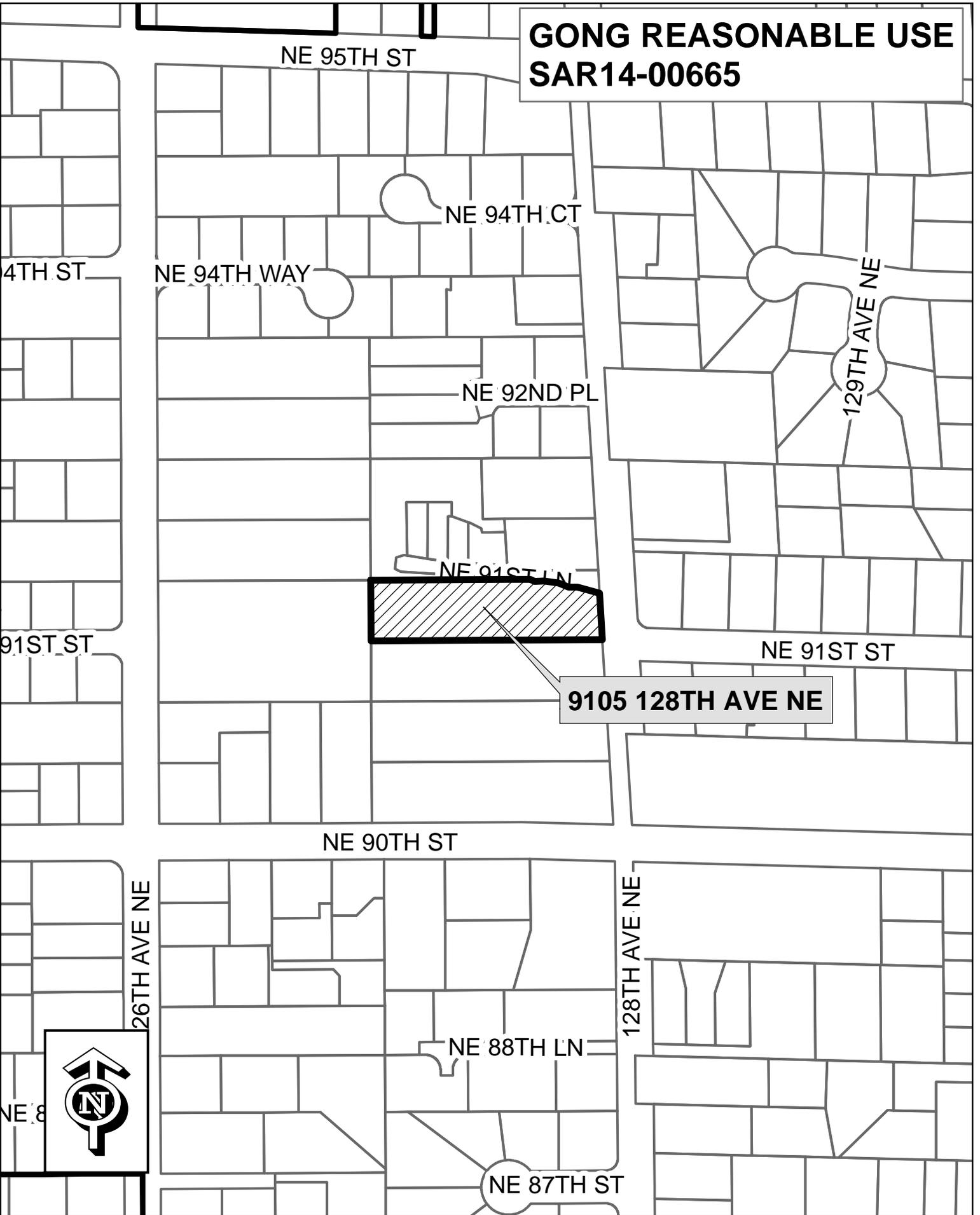
I concur I do not concur

Comments: _____

 July 17, 2015

Eric R. Shields Date

**GONG REASONABLE USE
SAR14-00665**



4TH ST

91ST ST

NE 8

NE 95TH ST

NE 94TH CT

NE 94TH WAY

NE 92ND PL

NE 91ST LN

NE 91ST ST

NE 90TH ST

NE 88TH LN

NE 87TH ST

26TH AVE NE

128TH AVE NE

129TH AVE NE

9105 128TH AVE NE



PROJECT IDENTIFICATION

APPLICABLE CODES:
2012 INTERNATIONAL RESIDENTIAL CODE
ZONING: RSX 7.2
PARCEL ID: 123850-0350
LOT AREA: 36,658 SF
RANGE/TOWNSHIP/SECTION/QUARTER: 05-25-04-NE
PROPOSED HOUSE
3 STORY HIGH, 3,030 SF LIVING SPACE (3 BEDS, 3 BATHS)
2 CAR ATTACHED GARAGE, 420 SF

ISSUED DATE:

OCTOBER 15, 2014

SYMBOLS

PARTITIONS	TYPE OF WORK
(NON-RATED PARTITION)	EXISTING TO REMAIN (SHOWN SHADED)
(1-HOUR RATED PARTITION)	EXISTING TO BE DEMOLISHED (SHOWN DASHED)
(2-HOUR RATED PARTITION)	NEW
WALL/PARTITION TYPE INDICATOR	FURNITURE OR EQUIPMENT BY OWNER
(WALL-MOUNTED FIRE EXTINGUISHER WITHOUT CABINET, TYPE DESIGNATED, MOUNT WITH VALVE AT 4'-0" AFF.)	FEC
	(FE-TYPE FIRE EXTINGUISHER IN CABINET, LOCATE TOP OF CABINET AT 4'-10" AFF.)

GENERAL NOTES

- DO NOT SCALE THE DRAWINGS.
- VERIFY FIELD CONDITIONS PRIOR TO COMMENCEMENT OF EACH PORTION OF THE WORK.
- THE CONTRACT DOCUMENTS ARE COMPLEMENTARY, AND WHAT IS REQUIRED BY ONE SHALL BE AS BINDING AS IF REQUIRED BY ALL. THE CONTRACTOR SHALL COORDINATE ALL PORTIONS OF THE WORK AS DESCRIBED IN THE CONTRACT DOCUMENTS. NOTIFY THE ARCHITECT FOR RESOLUTION OF ALL DISCREPANCIES PRIOR TO CONSTRUCTION.
- DIMENSIONS ARE TO THE STRUCTURAL GRID OR TO FINISH SURFACES, UNLESS OTHERWISE INDICATED.
- DOORS AND CASED OPENINGS INDICATED NEARBY WALL INTERSECTIONS, SHALL BE LOCATED SO THAT THE EDGE OF THE FINISH OPENING IS SIX INCHES FROM THE FACE OF THE NEARBY WALL UNLESS OTHERWISE INDICATED. ALL OTHER DOORS AND CASED OPENINGS SHALL BE CENTERED BETWEEN ADJACENT WALL INTERSECTIONS.
- EXISTING GRID DIMENSIONS ARE TAKEN FROM EXISTING DOCUMENTS. CONTRACTOR TO VERIFY AND CONFIRM ACTUAL DIMENSIONS/CONDITIONS. NOTIFY ARCHITECT OF ACTUAL DIMENSIONS AND CONDITIONS PRIOR TO CONSTRUCTION.

AN AND KIM
7415 LAKE BALLINGER WAY EDMONDS WA 98026
Phone: (206) 384-3317
Email: bennykim5@yahoo.com



GONG HOUSE
123850-0350
KIRKLAND WA 98074

PROJECT DIRECTORY

OWNER: RUI GONG
1009 205TH AVE NE
SAMMAMISH WA 98074
ARCHITECT: BENNY KIM
7415 LAKE BALLINGER WAY
EDMONDS, WA 98026
PHONE: 206-384-3317

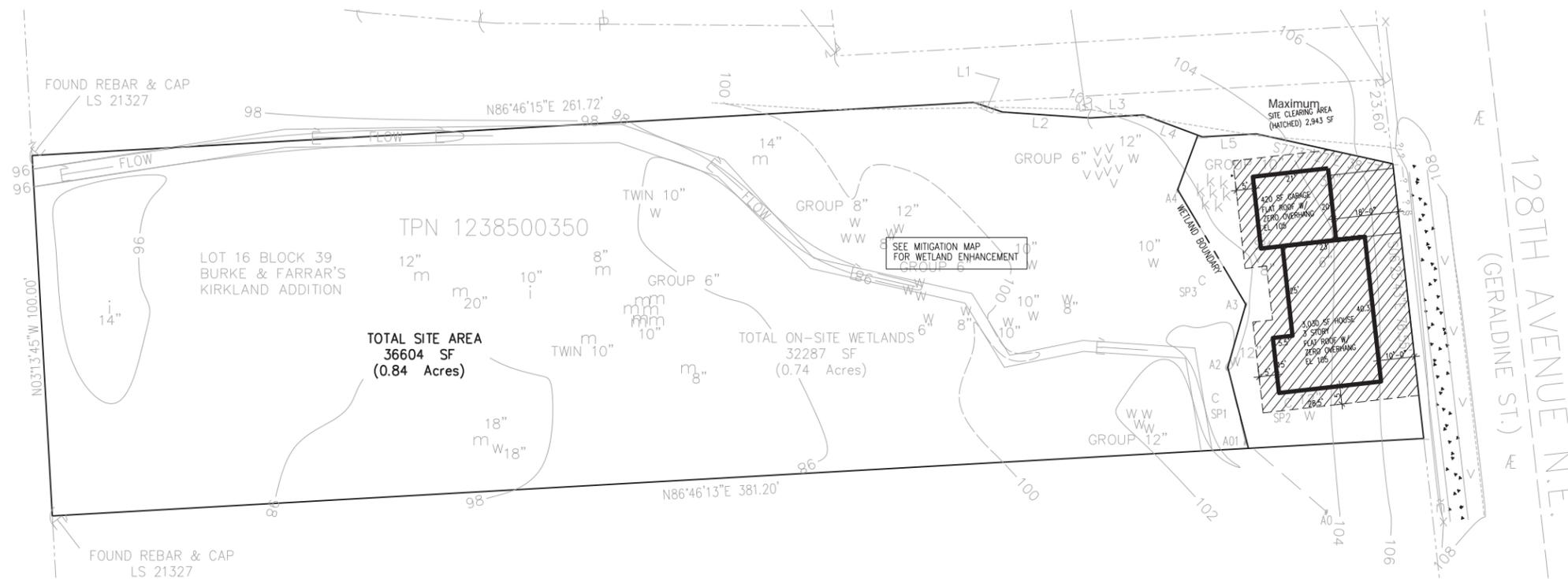
DRAWING INDEX

A-0.1 SITE PLAN AND GENERAL INFORMATION
A-1.0 HOUSE PLANS AND SECTION

SITE PLAN AND GENERAL INFORMATION

FILE 21416

A-0.1

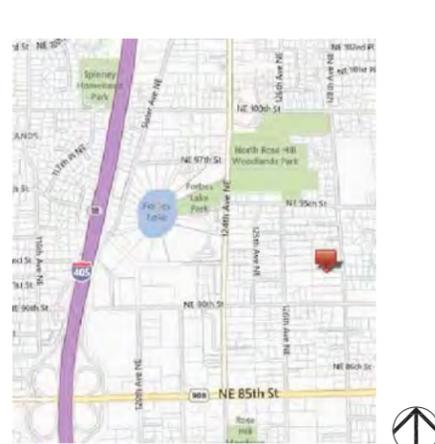


C1 SITE PLAN
SCALE: 1"=20'-0"

LEGAL DESCRIPTION

BURKE-FARRARS KIRKLAND DIV # 14 LOT 16 BLK 39 LESS PORTION DAF: BEG AT NE COR SD LOT 16 TH S 6-25-43 E 23.60 FT TH N77-37-27 W 38.77 FT TH S 86-46-15 W 15.00 FT TH N 69-35-59 W 17.46 FT TH N 86-09-47 W 24.39 FT TH S 86-46-15 W 14.80 FT TH N 71-30-59 W 8.27 FT TH N 86-46-15 E 113.59 FT TO BEG

VICINITY MAP



SCOPE OF WORK

NEW 3 STORY HIGH SINGLE FAMILY HOUSE



ISSUED DATE:

OCTOBER 15, 2014

AN AND KIM
7415 LAKE BALLINGER WAY EDMONDS WA 98026
Phone: (206) 384-3317
Email: bennykim5@yahoo.com

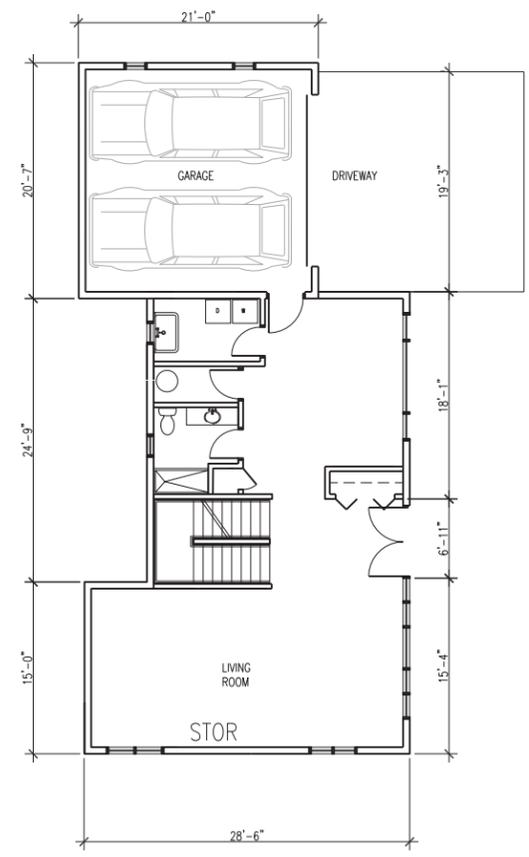


GONG HOUSE
123850-0350
KIRKLAND WA 98074

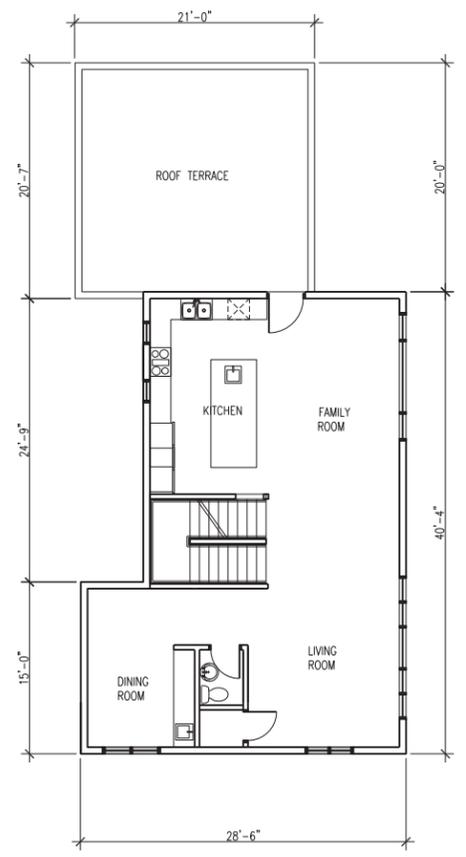
FLOOR PLANS AND SECTION

FILE 21416

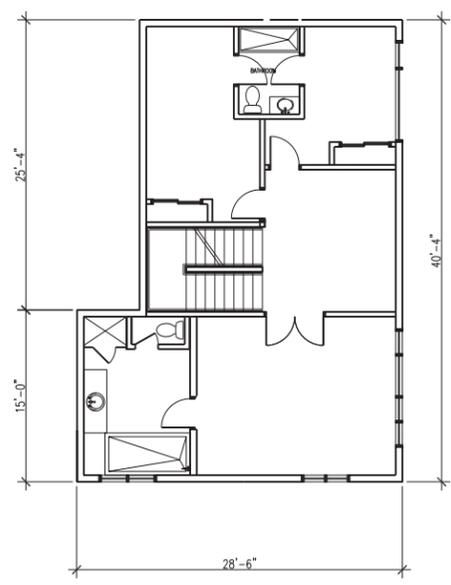
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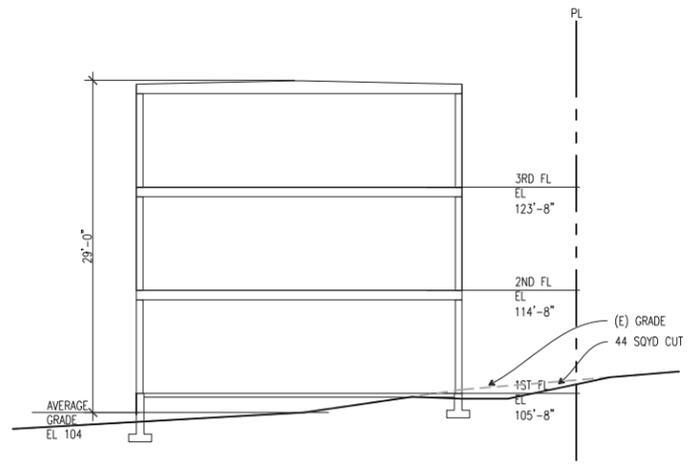
A1 1ST FLOOR PLAN (1,010 SF)
1/8"=1'-0"



A3 2ND FLOOR PLAN (1,010 SF)
1/8"=1'-0"



A5 3RD FLOOR PLAN (1,010 SF)
1/8"=1'-0"



A7 BUILDING SECTION
1/8"=1'-0"

FINAL MITIGATION PLAN
for
Reasonable Use Permit

Parcel number **1238500350**

91xxx – 128th Ave NE
Kirkland, WA

Prepared for:

Mr. Rui Gong & Ms. Zhirui Yuan
1009 205th ave NE
Sammamish WA 98074

Prepared by

H & S CONSULTING
P. O. Box 731695
Puyallup, WA 98373
253 732-6515

MHeckert@Q.com

March 16, 2015

EXECUTIVE SUMMARY

The Gong residence, 91xxx – 128th Ave NE (parcel # 1238500350) is located generally north of 128th Ave. NE, in the City of Kirkland, Washington. The project site is approximately 36,658 sq. ft.. The site is bounded on the north, east, and west by residential development, and on the south by a vacant parcel. The site is vacant of development.

As part of the site planning process an assessment of the project site was completed following the procedures outlined in the *Washington State Wetlands Identification and Delineation Manual* (Wash. Manual) and the *Corps of Engineers Wetland Delineation Manual* (2010 Supplement). Drainage corridors were also assessed in accordance with the criteria established by the City of Kirkland and the State of Washington Department of Natural Resources (WDNR) Forest Practice Rules (WAC 222-16-030). These assessment activities resulted in the identification of one wetland area and one stream (See *Wetland and Drainage Corridor Evaluation and Delineation Report and Conceptual Mitigation Plan for Unavoidable Buffer Impacts*, Gong residence, H & S Consulting, November 20, 2013). The site is totally encumbered by wetlands, stream, and their buffers.

The selected site development actions for this project site is the development of a single-family residence consistent with the City of Kirkland comprehensive plan and local land use zoning. Through site planning the project team has been able to design the house and associated utilities and access to avoid adversely impacting the identified onsite wetlands or stream. However, to obtain reasonable use of the parcel to accommodate a single-family house, the buffer of the on-site wetland and the stream will be reduced. To mitigate for the encroachment into the standard buffer, the reduced buffer area and retained wetland will be revegetated with native trees and shrubs.

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STANDARD OF CARE

Prior to extensive site planning, this document should be reviewed and the wetland boundaries verified by the appropriate resource and permitting agencies. Wetland boundaries, wetland classifications, wetland ratings, proposed buffers, and proposed compensatory mitigation should be reviewed and approved by City of Kirkland Planning dept. personnel and potentially other resource agency staff. H & S Consultants has provided professional services that are in accordance with the degree of care and skill generally accepted in the nature of the work accomplished. No other warranties are expressed or implied. H & S Consultants is not responsible for design costs incurred before this document is approved by the appropriate resource and permitting agencies.

Mark Heckert
H & S Consultants

INTRODUCTION

This report details activities to mitigate for unavoidable impacts to regulated City of Kirkland Environmentally Critical Areas as an initial element of the site planning process for the GONG residence (Parcel # 1238500350). The project site is approximately 36,658 sq. ft.. The site is bounded on the north, east, and west by residential development, and on the south by a vacant parcel. The site is vacant of development.

STUDY PURPOSE

This purpose of this document is to present the plan for mitigation of unavoidable impacts to the regulated wetland buffer within the project site. This study was designed to accommodate site planning and potential regulatory actions. This report is suitable for submittal to federal, state, and local authorities for wetland boundary verification and permitting actions.

SITE DESCRIPTION

The site is roughly rectangular, approximately 36,658 sq. ft., sloping to the west throughout, and located within an urbanizing area of the City of Kirkland.

Movement of surface water runoff across the site is generally to the west to the stream (unnamed tributary of Forbes Cr.), then to the west. The majority of onsite surface water runoff pools on-site and infiltrates.

MITIGATION PLAN

The selected site development actions for the Gong residence is the development of a single-family residence consistent with the City of Kirkland comprehensive plan and local land use zoning. The creation of this residence will include the establishment of a house, and internal access for driveway and utilities. Through site planning the project team has been able to design the homesite and associated utilities to avoid adversely impacting the identified onsite wetland and stream. The standard buffer of the stream and wetland must be reduced to accommodate reasonable use of the site.

An encroachment into the identified buffer for the on-site wetland is required to establish the home site. The proposed development is the minimum required to achieve reasonable use of the site. The development is situated as far from the wetland and stream as practicable.

Mitigation for the required buffer impact at the eastern boundary of the project site will be provided by re planting the retained buffer, and the area would be planted with a variety of native trees and shrubs. Additional mitigation for the required buffer reduction at the eastern boundary of the project site will be provided through enhancement of additional buffer area in the wetland west of the house site along the creek.

Through this compensatory mitigation the development would **not** result in a “net loss” of regulated wetland area, function, or value consistent with City of Kirkland Zoning Code – Chap. 90.

Impact Area Analysis – (in sq. ft.)

Area	Development Impact	Mitigation Enhancement	Mitigation ratio
Buffer – east of stream	2,943	1,229 (5 ft. setback)	
Wetland (Area A)	0	2,575	
Wetland (Area B)	0	780	
TOTAL	2,943	4,314	1.5:1

Fencing: A fence will be installed at the eastern reduced buffer boundary of the wetland and stream. City of Kirkland wetland buffer boundary will be attached on every third post. No further activity will occur within the fenced area once enhancement planting is complete.

The existing wetland in the interior of the site has been severely degraded by prior logging and clearing of vegetation. The shrub layer is dominated by Himalayan blackberry (*Rubus armeniacus*) and is devoid of tree recruitment and sparse in mature trees.

Also proposed is the placement of downed large woody debris (tree logs & root wads) to provide surface for wildlife habitat and insect habitat.

Potential impacts to habitat from the development are:

- 1). **Short-term construction disruption.** This impact will be mitigated thru the placement of silt fence barriers in every area which may flow into the wetland and stream (see Gong residence Site Civil Plans, erosion control Plan) and oversight by the project biologist during construction. The project biologist will observe and consult with construction crews during construction to ensure compliance with best management practices during the excavation of the buffer area.
- 2). **Long-term impacts from development:**
 - a). Permanent loss of habitat area. There will be no functional loss of habitat area. The present wetland and buffer in the mitigation area is moderate functional. Functional buffer area will increase as a result of installation of trees and habitat structures.

b). Loss of habitat utility due to light and noise from the development and increased visitation by people. Lighting of the developed area will increase “spill-over” of light to the mitigated buffer and wetland. All lighting will be directed away from the mitigation area. A boundary planting of shrubs within the retained buffer to provide light and auditory shading. The boundary fence will be a 2-post cedar fence to inhibit intrusion by people.

MITIGATION FUNCTIONAL COMPARISON

ENVIRONMENTAL FUNCTION	EXISTING	PROPOSED
Hydrological Support Function	Low	Moderate
Stormwater Storage Function	High	High
Floodwater Storage Function	High	High
Water Quality Function	Moderate	High
Groundwater Recharge Function	Moderate	Moderate
Natural Biological Functions	Moderate	High
Education and Recreational Opportunities	Low	Low
Threatened and Endangered Species	Moderate	Moderate

(after Adamus et al. 1987; Reppert et al. 1979)

DESCRIPTION OF THE MITIGATION PROGRAM

1. As mitigation for the unavoidable impact to 2,943 sq. ft. of City of Kirkland regulated Category 2 Wetland and Class B Stream buffer at the eastern boundary of the project site, the retained buffer of 1,229 sq. ft. will be restored with native shrubs. An adjacent area within the on-site wetland of 3,355 sq. ft. will be enhanced with native trees contiguous with the existing stream bank (attachment). The upland and wetland area to be enhanced is presently dominated by blackberries. The wetland areas to be enhanced will be cleared of exotic species (retaining native trees and shrubs) and opportunistically planted with native trees around existing vegetation. Supportive hydrology will continue to be provided by the existing stream corridor.
2. Temporary and long-term erosion control measures will be implemented (see Gong residence Site Civil Plans erosion control Plan). These measures include silt fencing during site preparation and buffer enhancement, retention of all possible existing vegetation and planting of new vegetation.
3. All onsite activities will be monitored by the project biologist. Following the completion of onsite planting activities a "record-drawing" plan will be prepared and submitted to City of Kirkland. A **five-year** monitoring program will be undertaken to assure the success of the wetland and buffer enhancement program. A series of financial

guarantees will also be implemented to assure that the proposed work is completed and is successful.

4. The outer boundaries of the established buffer tract would be marked with standard City of Kirkland buffer boundary signs. The buffer boundaries will be fenced to limit human intrusions between the upland boundary of the remaining buffer and the developed portion of the site. In addition, the project team will remove the trash, debris, and invasive shrubs within the retained wetland and buffer areas.
5. Wetland, stream and buffer vegetation cleared or otherwise damaged during the installation of the mitigation plan, including damage caused by installation of woody debris, shall be revegetated with appropriate native plants installed at an appropriate density to restore the damaged condition. These plants shall be subject to the same performance standards indicated in the mitigation plan.

GOAL AND OBJECTIVE OF THE MITIGATION PLAN

The **GOAL** of the Mitigation Plan is to fully compensate for the unavoidable adverse impact to regulated buffer areas. Upon the completion of this mitigation plan there will be no net loss of wetland acreage, functions, or values; and an increase in the potential for the buffer to protect aquatic habitats.

To achieve the defined **GOAL**, the following **OBJECTIVES and PERFORMANCE CRITERIA** have been established to apply to the compensatory mitigation wetland area.:

Objective A. The retained & enhanced buffer area will total 1,229 sq. ft. and be located directly west of the house near the eastern boundary of the wetland. The enhanced buffer will be hydrologically connected to the adjacent City of Kirkland Category II wetland. The enhanced buffer area will exhibit a scrub/shrub vegetation classes within five years following initial planting.

Performance Criterion #A1: As defined by plant counts 100% of the shrubs installed as a part of the initial planting phase will be alive at the end of the first growing season.

Performance Criterion #A2: As defined by plant counts 80% of the shrubs installed as a part of the initial planting phase will be alive at the end of the fifth growing season.

Performance Criterion #A3: As defined by aerial cover, invasives will cover less than 10% of the planting area in any one year.

Objective B. The enhanced mitigation wetland area will total 3,355 sq. ft. and be located west of the house the eastern portion of the wetland. The enhanced wetland will be hydrologically connected to the City of Kirkland Category II wetland. The enhanced wetland area will exhibit a tree vegetation class within five years following initial planting.

Performance Criterion #B1: As defined by plant counts 100% of the trees installed as a part of the initial planting phase will be alive at the end of the first growing season.

Performance Criterion #B2: As defined by plant counts 80% of the trees installed as a part of the initial planting phase will be alive at the end of the fifth growing season.

Performance Criterion #B3: As defined by aerial cover, invasives will cover less than 10% of the planting area in any one year.

Objective C. The restored wetland and buffer area will provide cover habitat for passerine birds common to the area within three years.

Performance Criterion #C1: Four stumps (minimum 5 feet in length, minimum 10 inch diameter at the top, minimum 5 inch diameter at bottom of root ball) and two logs (minimum 25 feet in length, minimum 10 inch diameter) will be placed within the enhancement area to provide habitat for passerine birds common to the area.

Performance Criterion #C2: The enhancement area will be used for cover by at least two species of passerine birds common to the area within three years of completion of construction of the mitigation area. This will be monitored through observations and photographs of individual birds and habitat utilization.

SELECTED PLANT COMMUNITIES

The plant communities and plants selected for the created wetland and buffer areas will be obtained as nursery stock. These selected species are native and commonly occur in the local area. The plant species prescribed are selected to increase plant diversity, match present onsite communities, increase wildlife habitats, and enhance the aquatic environment. Plantings will be located as depicted on the attached Gong Mitigation Plan drawing.

PLANTING AREA: RETAINED BUFFER – 1229 sq. ft. @ 0.028/sq. ft. = 35 shrubs

	COMMON NAME SCIENTIFIC NAME	LOCATION	PROPOSED SPACING (oc)	PROPOSED SIZE	INDICATOR STATUS
6	Western crabapple (PYF) <i>Pyrus fusca</i>	buffer	8 ft	4 ft height minimum	FACW
6	Vine maple (ACC) <i>Acer circinatum</i>	Buffer	6 ft	2 gal	FACU
6	Wild rose (ROG) <i>Rosa gymnocarpa</i>	Buffer	4 ft	2 gal	FACU
6	Black twinberry (LOI) <i>Lonicera involucrata</i>	buffer	4 ft	2 gal	FAC+
6	Pacific ninebark (PHC) <i>Physocarpus capitatus</i>	buffer	4 ft	2 gal	FACW-
5	Hazelnut (COC) <i>Corylus cornuta</i>	Buffer	4 ft	2 gal	FACU

PLANTING AREA: ENHANCED WETLAND, Area A – 2,575 sq. ft. @ 0.012/sq. ft. = 32 TREES; planted between existing native shrubs

	COMMON NAME SCIENTIFIC NAME	LOCATION	PROPOSED SPACING (oc)	PROPOSED SIZE	INDICATOR STATUS
8	Western red cedar (THP) <i>Thuja plicata</i>	Wetland	18 ft	5 ft height minimum	FAC
8	Sitka spruce (PIS) <i>Picea sitchensis</i>	Wetland	18 ft	5 ft height minimum	FAC
8	Oregon ash (FRL) <i>Fraxinus latifolia</i>	Wetland	18 ft	4 ft height minimum	FACW
8	Western crabapple (PYF) <i>Pyrus fusca</i>	Wetland	18 ft	4 ft height minimum	FACW

PLANTING AREA: ENHANCED WETLAND, Area B – 780 sq. ft. @ 0.012/sq. ft. = 12 TREES; planted between existing native shrubs

	COMMON NAME SCIENTIFIC NAME	LOCATION	PROPOSED SPACING (oc)	PROPOSED SIZE	INDICATOR STATUS
3	Western red cedar (THP) <i>Thuja plicata</i>	Wetland	18 ft	5 ft height minimum	FAC
3	Sitka spruce (PIS) <i>Picea sitchensis</i>	Wetland	18 ft	5 ft height minimum	FAC
3	Oregon ash (FRL) <i>Fraxinus latifolia</i>	Wetland	18 ft	4 ft height minimum	FACW
3	Western crabapple (PYF) <i>Pyrus fusca</i>	Wetland	18 ft	4 ft height minimum	FACW

RESTORATION PLANTING GUIDELINES

1. Trees 9' O.C., or 0.012 per square foot of area; (this assumes 2-5 gal. size)
— such trees are to be at least 50% conifers;
2. Plus shrubs 6' O.C., or 0.028 per square foot (this assumes 1-2 gal. size);

CONSTRUCTION INSPECTION

Essential to the success of the compensatory mitigation program is the accurate inspection of onsite activities immediately prior to and during the wetland creation and planting phases. These activities include pre-construction site inspection, onsite inspection and technical direction during wetland creation and planting activities, and post-creation/planting site inspection and evaluation.

The pre-creation site inspection allows the project proponent and the project biologist to evaluate and, if necessary, adjust the onsite construction steps. These steps include analysis of project site elevation features, project sequencing and timing, final grade analysis, unforeseen required minor modifications to the original establishment plan, and the establishment of environmental protections (silt fences, etc.) required during construction. Interaction with City of Kirkland wetland staff is also an essential element during pre-construction site inspections and discussions. Onsite technical inspection during construction and planting activities will be implemented by the project biologist. The project biologist will perform oversight and address minor unforeseen difficulties to assure that the intent of the wetland mitigation plan is met.

The project biologist shall also be responsible for ensuring that the species and sizes of native plants selected are utilized during initial planting. If selected native species become unavailable, the project biologist will consult with City of Kirkland wetland staff for substitute plant species to ensure that the intent of the wetland mitigation plan is met. Post-creation site inspection/evaluation will include the preparation of a "record-drawings" which will be submitted to City of Kirkland wetland staff.

VEGETATION MAINTENANCE PLAN

Maintenance of the created wetland and buffer plant communities may be required to assure the long-term health and welfare of the wetland's and buffer's environmental functions. The overall objective is to establish undisturbed plant communities that do not require maintenance.

The reduced wetland buffer will require irrigation for the monitoring period. Irrigation will be supplied June 1 thru September 1 at a rate of 1 inch per week.

Activities will include, but are not limited to, the removal of invasive non-native vegetation and the additional irrigation of selected areas. Established maintenance activities include the removal of any trash within the buffer.

MITIGATION CONSTRUCTION SCHEDULE

PROJECT TASK	TASK SCHEDULE (on or before)
Onsite pre-creation meeting	February, 2015
Placement of protective fencing, final marking, and identification of work area.	February, 2015
Mulching of disturbed areas.	April, 2015
Planting of enhancement wetland & buffer	April, 2015
Record-drawings report to City	June, 2015

PROJECT MONITORING

Following the successful completion of the proposed compensatory mitigation plan a **five-year** monitoring and evaluation program will be undertaken. The purpose of this program is to assure the success of the selected mitigation as measured by an established set of performance criteria (*see above*). This monitoring will also provide valuable information on the effectiveness of mitigation procedures.

STANDARDS OF SUCCESS**Vegetation Sampling Methodology and Monitoring Schedule**

Onsite monitoring will count and clearly identify each tree and shrub installed during the initial planting phase. Such monitoring will also include any subsequent planting required to meet the performance criteria. These defined performance criteria will be applied at the time of monitoring. All installed trees and shrubs will be visually evaluated to determine the rate of survivorship, health, and vigor of each plant.

Vegetation Monitoring

1. Upon the completion of initial planting and as a part of each monitoring period the project biologist will count the number of live plants which were planted within the wetland and buffer areas. Plants will be identified to species and observations of general plant condition (i.e., plant health, amount of new growth) are to be recorded for each plant.
2. The project biologist will count the number of undesirable invasive plants and estimate the aerial coverage (as if the observer were looking straight down from above) of these invasive plants. Undesirable plants include blackberries, Scot's broom, tansy ragwort, and other such plants listed in the Washington State Noxious Weed List.
3. The project biologist will count the number of desirable "volunteer" plants and estimate the aerial coverage of these plants within the mitigation area.

4. The project biologist will take photographs that show the entire mitigation area. During the five-year monitoring period photos will be taken in the same direction and at the same location to provide a series of photos. These photos will show plant growth, plant species, and plant coverage.
5. Upon the completion of the initial project planting and upon the completion of each monitoring period the project biologist will prepare a report defining methods, observations, and results along with the date the observations were completed. Each report will be sent to the City of Kirkland Planning Dept..
6. The monitoring schedule is defined as:
 - A. **At the completion of initial project planting.** This report will include a “record drawing” defining the species used, locations, and general site conditions. This report will also include a “lessons learned” section to assist in future monitoring and final project assessment. This “record drawing” and report will be provided to the City within two weeks after the completion of onsite planting.
 - B. **Twice per year for five years following the completion of initial onsite planting.** Onsite monitoring will be completed once in the spring and once near the end of the growing season (late September). For each onsite monitoring activity a report will be prepared and provided to the City within two weeks after the completion of onsite monitoring.

The last monitoring report will include notification to the City biologist that the monitoring program has concluded and that City review and site inspection is required for project analysis and release of the financial guarantee. This final report will also include a “lessons learned” section to assist and final project assessment and to potentially assist in the evaluation other mitigation projects.

Vegetation Monitoring Sequencing

IDENTIFIED TASK	DATE OF COMPLETION (on or before)
First growing season fall plant inspection	September 30, 2015
First growing season fall report	October 15, 2015
Second growing season spring plant inspection	May 30, 2016
Second growing season spring report	June 15, 2016
Second growing season fall plant inspection	September 30, 2016
Second growing season fall report	October 15, 2016
Third growing season spring plant inspection	May 30, 2016
Third growing season spring report	June 15, 2016
Third growing season fall plant inspection	September 30, 2016
Third growing season fall report	October 15, 2016
Fourth growing season spring plant inspection	May 30, 2017
Fourth growing season spring report	June 30, 2017
Fourth growing season fall plant inspection	September 30, 2017
Fourth growing season fall report	October 15, 2017
Fifth growing season spring plant inspection	May 30, 2018
Fifth growing season spring report	June 15, 2018
Fifth growing season fall plant inspection	September 30, 2018
Fifth growing season fall report	October 15, 2018

WILDLIFE OBSERVATIONS

Observations of wildlife will coincide with the onsite activities undertaken as part of the Vegetation Monitoring Program. The onsite team will document the extent of bird species abundance, site utilization, nesting and feeding activities, and species diversity. In addition, documentation of terrestrial and aquatic reptiles, amphibians, and mammals observable without trapping will also be documented. Wildlife observations will be documented within the Vegetation Monitoring Reports noted above.

REMOVAL OF INVASIVE NON-NATIVE VEGETATION

As a contingency, should the removal of invasive non-native vegetation become necessary, the project proponent will contact City of Kirkland wetland staff to establish and define specific actions to be taken. Resultant contingency plan activities will be implemented when the ongoing vegetation monitoring program indicates that plants listed in the Washington State Noxious Weed List and Scot's broom are becoming dominant in the community (greater than 20%).

Following initial planting of the wetland and buffer areas the project team will undertake an invasive vegetation control program through the five-year monitoring program. This control program will focus on biannual hand-removal of re-sprouting invasive shrubs and will not adversely impact the desirable plants within the wetland and buffer.

SALVAGE AND REUSE OF WOODY MATERIAL

Woody material salvaged from trees cleared for construction of the new home will be salvaged and installed as large woody debris in the retained wetland and the wetland mitigation planting areas. No woody material will be imported to the site.

Vegetation Control Program Schedule

TASK	TO BE COMPLETED ON OR ABOUT
First growing season fall removal	September 15, 2015
Second growing season fall removal	September 15, 2016
Third growing season fall removal	September 15, 2017
Fourth growing season spring removal	September 15, 2018
Fifth growing season fall removal	September 15, 2019

COVERAGE FOR EXPOSED BUFFER AREA

Coverage for all exposed surfaces within the mitigation area will be completed within two weeks following the completion of onsite grading.

Coverage will be by heavy (4-inch thick) applications of woodchip mulch as a “blanket” treatment in cleared areas.

CONTINGENCY PLAN

As a contingency, should the proposed compensatory plan fail to meet the performance criteria the project proponent will undertake required remedial actions. Where plant survival is the failing component the project proponent will replant and ensure the success of this second planting which would be held to the same standard of success as measured by threshold criteria and monitoring processes. Should additional remedial actions be required, the project proponent will meet with City of Kirkland environmental staff to establish and define actions to be taken to meet the desired goal of this program.

PLANTING NOTES

All plant materials shall be native to the southern Puget Sound Region. The project biologist shall inspect plant materials to ensure the appropriate plant schedule and plant characteristics are met. The project proponent shall warrant that all plants will remain alive and healthy for a period of one year following completion of planting activities. The project proponent shall replace all dead and unhealthy plants with plants of the same specifications.

REFERENCE LIST

- Adamus, P.R., E.J. Clairain Jr., R.D. Smith, and R.E. Young. 1987. Wetland Evaluation Technique (WET); Volume II: Methodology, Operational Draft Technical Report Y-87, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. Office of Biological Services, U.S. Fish and Wildlife Service, U.S. Department of the Interior, FWS/OBS-79/31.
- Environmental Laboratory. 1987. "Corps of Engineers Wetlands Delineation Manual," Technical Report Y-87-1, US army Engineer Waterways Experiment Station, Vicksburg, Miss.
- Hitchcock, C.L., A. Cronquist. 1977. Flora of the Pacific Northwest. University of Washington Press. Seattle, Washington.
- Reppert, R.T., W. Sigleo, E. Stakhiv, L. Messman, and C. Meyers. 1979. Wetland Values - Concepts and Methods for Wetland Evaluation. Research Report 79-R1, U.S. Army Corps of Engineers, Institute for Water Resources, Fort Belvoir, Virginia.
- U.S. Army Corps of Engineers. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-10-3. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
- U.S. Department of Agriculture, Soils Conservation Service. Soils Survey of King County Area Washington, February 1979.
- Washington State Department of Ecology. 1997. Washington State Wetlands Identification and Delineation Manual. Publication Number 96-94.

PLANTING AREA: RETAINED BUFFER – 1229 sq. ft. @ 0.028/sq. ft. = 35 shrubs

	COMMON NAME SCIENTIFIC NAME	LOCATION	PROPOSED SPACING (oc)	PROPOSED SIZE	INDICATOR STATUS
6	Western crabapple (PYF) <i>Pyrus fusca</i>	buffer	8 ft	4 ft height minimum	FACW
6	Vine maple (ACC) <i>Acer circinatum</i>	Buffer	6 ft	2 gal	FACU
6	Wild rose (ROG) <i>Rosa gymnocarpa</i>	Buffer	4 ft	2 gal	FACU
6	Black twinberry (LOI) <i>Lonicera involucrata</i>	buffer	4 ft	2 gal	FAC+
6	Pacific ninebark (PHC) <i>Physocarpus capitatus</i>	buffer	4 ft	2 gal	FACW-
5	Hazelnut (COC) <i>Corylus cornuta</i>	Buffer	4 ft	2 gal	FACU

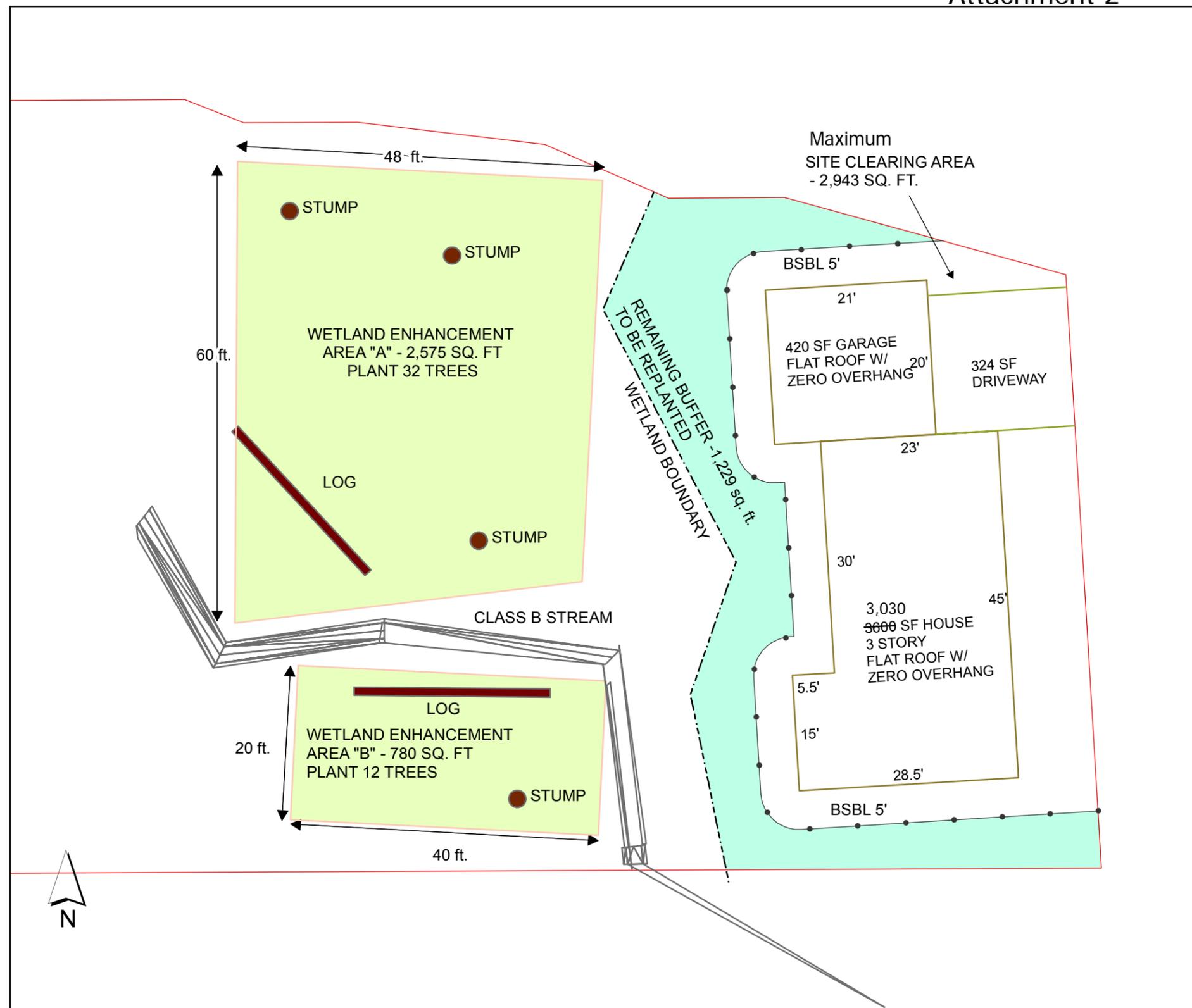
PLANTING AREA: ENHANCED WETLAND, Area A – 2,575 sq. ft. @ 0.012/sq. ft. = 32 TREES; planted between existing native shrubs

	COMMON NAME SCIENTIFIC NAME	LOCATION	PROPOSED SPACING (oc)	PROPOSED SIZE	INDICATOR STATUS
8	Western red cedar (THP) <i>Thuja plicata</i>	Wetland	18 ft	5 ft height minimum	FAC
8	Sitka spruce (PIS) <i>Picea sitchensis</i>	Wetland	18 ft	5 ft height minimum	FAC
8	Oregon ash (FRL) <i>Fraxinus latifolia</i>	Wetland	18 ft	4 ft height minimum	FACW
8	Western crabapple (PYF) <i>Pyrus fusca</i>	Wetland	18 ft	4 ft height minimum	FACW

PLANTING AREA: ENHANCED WETLAND, Area B – 780 sq. ft. @ 0.012/sq. ft. = 12 TREES; planted between existing native shrubs

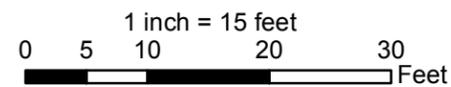
	COMMON NAME SCIENTIFIC NAME	LOCATION	PROPOSED SPACING (oc)	PROPOSED SIZE	INDICATOR STATUS
3	Western red cedar (THP) <i>Thuja plicata</i>	Wetland	18 ft	5 ft height minimum	FAC
3	Sitka spruce (PIS) <i>Picea sitchensis</i>	Wetland	18 ft	5 ft height minimum	FAC
3	Oregon ash (FRL) <i>Fraxinus latifolia</i>	Wetland	18 ft	4 ft height minimum	FACW
3	Western crabapple (PYF) <i>Pyrus fusca</i>	Wetland	18 ft	4 ft height minimum	FACW

Wetland, stream and buffer vegetation cleared or otherwise damaged during the installation of the mitigation plan, including damage caused by installation of woody debris, shall be revegetated with appropriate native plants installed at an appropriate density to restore the damaged condition. These plants shall be subject to the same performance standards indicated in the mitigation plan.



Legend

- Parcel Boundaries
- Buffer Boundary - Fence & Signs
- Clearing Limits - See Site Plan C.1
- Buffer Enhancement - 1,229 Sq. Ft. PLANT 35 shrubs
- Wetland Enhancement Areas - 3,355 Sq. Ft. PLANT 44 trees - Interspersed w/ Existing Veg.



 Critical Areas Mitigation Bond Quantity Worksheet					
Project Name: GONG RUE		Date: 3/16/2015		Prepared by: Mark Heckert	
Project Number:		Project Description: Wetland & Buffer Enhancement			
Location: Parcel # 1238500350		Applicant: Mr. Rui Gong		Phone:	
PLANT MATERIALS (includes labor cost for plant installation)					
Type	Unit Price	Unit	Quantity	Description	Cost
PLANTS: Potted, 4" diameter, medium	\$5.00	Each			\$ -
PLANTS: Container, 1 gallon, medium soil	\$11.50	Each			\$ -
PLANTS: Container, 2 gallon, medium soil	\$20.00	Each	30.00		\$ 600.00
PLANTS: Container, 5 gallon, medium soil	\$36.00	Each	49.00		\$ 1,764.00
PLANTS: Seeding, by hand	\$0.50	SY			\$ -
PLANTS: Slips (willow, red-osier)	\$2.00	Each			\$ -
PLANTS: Stakes (willow)	\$2.00	Each			\$ -
PLANTS: Stakes (willow)	\$2.00	Each			\$ -
PLANTS: Flats/plugs	\$2.00	Each			\$ -
TOTAL					\$ 2,364.00
INSTALLATION COSTS (LABOR, EQUIPMENT, & OVERHEAD)					
Type	Unit Price	Unit	Quantity	Description	Cost
Compost, vegetable, delivered and spread	\$37.88	CY			\$ -
Decompacting till/hardpan, medium, to 6" depth	\$1.57	CY			\$ -
Decompacting till/hardpan, medium, to 12" depth	\$1.57	CY			\$ -
Hydroseeding	\$0.51	SY			\$ -
Labor, general (landscaping other than plant installation)	\$40.00	HR	20.00		\$ 800.00
Labor, general (construction)	\$40.00	HR	40.00		\$ 1,600.00
Labor: Consultant, supervising	\$55.00	HR			\$ -
Labor: Consultant, on-site re-design	\$95.00	HR	20.00		\$ 1,900.00
Rental of decompacting machinery & operator	\$70.00	HR			\$ -
Sand, coarse builder's, delivered and spread	\$42.00	CY			\$ -
Staking material (set per tree)	\$7.00	Each			\$ -
Surveying, line & grade	\$250.00	HR			\$ -
Surveying, topographical	\$250.00	HR			\$ -
Watering, 1" of water, 50' soaker hose	\$3.62	MSF			\$ -
Irrigation - temporary	\$3,000.00	Acre	0.50		\$ 1,500.00
Irrigation - buried	\$4,500.00	Acre			\$ -
Tilling topsoil, disk harrow, 20hp tractor, 4'-6" deep	\$1.02	SY			\$ -
TOTAL					\$ 5,800.00
HABITAT STRUCTURES*					
ITEMS	Unit Cost	Unit	Quantity	Description	Cost
Fascines (willow)	\$ 2.00	Each			\$ -
Logs, (cedar), w/ root wads, 16'-24" diam., 30' long	\$1,000.00	Each			\$ -
Logs (cedar) w/o root wads, 16'-24" diam., 30'	\$400.00	Each			\$ -
Logs, w/o root wads, 16'-24" diam., 30' long	\$245.00	Each	2.00		\$ 490.00
Logs w/ root wads, 16'-24" diam., 30' long	\$460.00	Each			\$ -
Rocks, one-man	\$60.00	Each			\$ -
Rocks, two-man	\$120.00	Each			\$ -
Root wads	\$163.00	Each	4.00		\$ 652.00
Spawning gravel, type A	\$22.00	CY			\$ -
Weir - log	\$1,500.00	Each			\$ -
Weir - adjustable	\$2,000.00	Each			\$ -
Woody debris, large	\$163.00	Each			\$ -
Snags - anchored	\$400.00	Each			\$ -
Snags - on site	\$50.00	Each	6.00		\$ 300.00
Snags - imported	\$800.00	Each			\$ -
<small>* All costs include delivery and installation</small> TOTAL					\$ 1,442.00
EROSION CONTROL					
ITEMS	Unit Cost	Unit	Quantity	Description	Cost
Backfill and Compaction-embankment	\$ 4.89	CY			\$ -
Crushed surfacing, 1 1/4" minus	\$30.00	CY			\$ -
Ditching	\$7.03	CY			\$ -
Excavation, bulk	\$4.00	CY			\$ -
Fence, silt	\$1.60	LF	100.00		\$ 160.00
Jute Mesh	\$1.26	SY			\$ -
Mulch, by hand, straw, 2" deep	\$1.27	SY			\$ -
Mulch, by hand, wood chips, 2" deep	\$3.25	SY	72.00		\$ 234.00
Mulch, by machine, straw, 1" deep	\$0.32	SY			\$ -
Piping, temporary, CPP, 6"	\$9.30	LF			\$ -
Piping, temporary, CPP, 8"	\$14.00	LF			\$ -
Piping, temporary, CPP, 12"	\$18.00	LF			\$ -
Plastic covering, 6mm thick, sandbagged	\$2.00	SY			\$ -
Rip Rap, machine placed, slopes	\$33.98	CY			\$ -
Rock Constr. Entrance 100x15x1'	\$3,000.00	Each			\$ -
Rock Constr. Entrance 50x15x1'	\$1,500.00	Each			\$ -
Sediment pond riser assembly	\$1,695.11	Each			\$ -
Sediment trap, 5' high berm	\$15.57	LF			\$ -
Sediment trap, 5' high berm w/spillway incl. riprap	\$59.60	LF			\$ -
Sodding, 1" deep, level ground	\$5.24	SY			\$ -
Sodding, 1" deep, sloped ground	\$6.48	SY			\$ -
Straw bales, place and remove	\$600.00	TON			\$ -
Hauling and disposal	\$20.00	CY			\$ -
Topsoil, delivered and spread	\$35.73	CY			\$ -
TOTAL					\$ 394.00

GENERAL ITEMS					
ITEMS	Unit Cost	Unit			Cost
Fencing, chain link, 6' high	\$18.89	LF			\$ -
Fencing, chain link, corner posts	\$111.17	Each			\$ -
Fencing, chain link, gate	\$277.63	Each			\$ -
Fencing, split rail, 3' high (2-rail)	\$10.54	LF	100.00		\$ 1,054.00
Fencing, temporary (NGPE)	\$1.20	LF			\$ -
Signs, sensitive area boundary (inc. backing, post, install)	\$28.50	Each			\$ -
TOTAL					\$ 1,054.00
OTHER				(Construction Cost Subtotal)	\$ 11,054.00
ITEMS	Percentage of Construction	Unit			Cost
Mobilization	10%	1			\$ 1,105.40
Contingency	30%	1			\$ 3,316.20
TOTAL					\$ 4,421.60
<p>MAINTENANCE AND MONITORING</p> <p>NOTE: Projects with multiple permit requirements may be required to have longer monitoring and maintenance terms. This will be evaluated on a case-by-case basis for development applications. Monitoring and maintenance ranges may be assessed anywhere from 5 to 10 years.</p>					
Maintenance, annual (by owner or consultant)					
Less than 1,000 sq.ft. and buffer mitigation only	\$ 1.08	SF	959.00	(3 X SF total for 3 annual events; Includes monitoring)	\$ 1,035.72
Less than 1,000 sq.ft. with wetland or aquatic area mitigation	\$ 1.35	SF		(3 X SF total for 3 annual events; Includes monitoring)	\$ -
Larger than 1,000 sq. ft. but less than 5,000 sq.ft. of buffer mitigation	\$ 180.00	EACH		(4hr @ \$45/hr)	\$ -
Larger than 1,000 sq. ft. but less than 5,000 sq.ft. of wetland or aquatic area mitigation	\$ 270.00	EACH	5.00	(6hr @ \$45/hr)	\$ 1,350.00
Larger than 5,000 sq.ft. but < 1 acre -buffer mitigation only	\$ 360.00	EACH		(8 hrs @ 45/hr)	\$ -
Larger than 5,000 sq.ft. but < 1 acre with wetland or aquatic area mitigation	\$ 450.00	EACH		(10 hrs @ \$45/hr)	\$ -
Larger than 1 acre but < 5 acres - buffer and / or wetland or aquatic area mitigation	\$ 1,600.00	DAY		(WEC crew)	\$ -
Larger than 5 acres - buffer and / or wetland or aquatic area mitigation	\$ 2,000.00	DAY		(1.25 X WEC crew)	\$ -
Monitoring, annual (by owner or consultant)					
Larger than 1,000 sq.ft. but less than 5,000 wetland or buffer mitigation	\$ 720.00	EACH	10.00	(8 hrs @ 90/hr)	\$ 7,200.00
Larger than 5,000 sq.ft. but < 1 acre with wetland or aquatic area impacts	\$ 900.00	EACH		(10 hrs @ \$90/hr)	\$ -
Larger than 1 acre but < 5 acres - buffer and / or wetland or aquatic area impacts	\$ 1,440.00	DAY		(16 hrs @ \$90/hr)	\$ -
Larger than 5 acres - buffer and / or wetland or aquatic area impacts	\$ 2,160.00	DAY		(24 hrs @ \$90/hr)	\$ -
TOTAL					\$ 9,585.72
Total					\$25,061.32

PLANNING DEPARTMENT

CITY OF KIRKLAND

Planning and Community Development Department
123 Fifth Avenue, Kirkland, WA 98033
425.587-3225 ~ www.kirklandwa.gov

DEVELOPMENT STANDARDS LIST

File: SAR14-00665

Gong Reasonable Use Exception

ZONING CODE STANDARDS

90.45 Wetlands and Wetland Buffers. No land surface modification may take place and no improvement may be located in a wetland or within the environmentally sensitive area buffers for a wetland, except as specifically provided in this Section.

90.50 Wetland Buffer Fence. Prior to development, the applicant shall install a six-foot high construction phase fence along the upland boundary of the wetland buffer with silt screen fabric installed per City standard. The fence shall remain upright in the approved location for the duration of development activities. Upon project completion, the applicant shall install between the upland boundary of all wetland buffers and the developed portion of the site, either 1) a permanent 3 foot tall split rail fence, or 2) permanent planting of equal barrier value.

90.55 Monitoring and Maintenance of Wetland Buffer Modifications: Modification of a wetland buffer will require that the applicant submit a 5-year monitoring and maintenance plan consistent with the criteria found in 95.55 and which is prepared by a qualified professional and reviewed by the City's wetland consultant. The cost of the plan and the City's review shall be borne by the applicant.

90.80 Streams. No land surface modification may take place and no improvements may be located in a stream except as specifically provided in this Section.

90.90 Stream Buffers. No land surface modification may take place and no improvement may be located within the environmentally sensitive buffer for a stream, except as provided in this Section.

90.95 Stream Buffer Fence. Prior to development, the applicant shall install a six-foot high construction phase fence along the upland boundary of the entire stream buffer with silt screen fabric installed per City standard. The fence shall remain upright in the approved location for the duration of development activities. Upon project completion, the applicant shall install between the upland boundary of all stream buffers and the developed portion of the site, either 1) a permanent 3 foot tall split rail fence, or 2) permanent planting of equal barrier value.

90.100.3 Monitoring and Maintenance of Stream Buffer Modifications: Modification of a stream buffer will require that the applicant submit a 5-year monitoring and maintenance plan consistent with KZC section 95.55. This plan shall be prepared by a qualified professional and reviewed by the City's wetland consultant. The cost of the plan and the City's review shall be borne by the applicant.

90.125 Frequently Flooded Areas. No land surface modification may take place and no improvements may be located in a frequently flooded area, except as specifically provided in Chapter 21.56 of the Kirkland Municipal Code.

92.35 Prohibited Materials In Design Districts. If in a design district the following building materials are prohibited or limited in use: mirrored glass or reflective materials, corrugated fiberglass, chain link fencing, metal siding, concrete block backlit awnings. Water spigots are required along building facades along sidewalks for cleaning and plant watering. Commercial buildings with more than one tenant shall install a cornerstone or plaque.

95.51.2.a Required Landscaping. All required landscaping shall be maintained throughout the life of the development. The applicant shall submit an agreement to the city to be recorded with King County which will perpetually maintain required landscaping. Prior to issuance of a certificate of occupancy, the proponent shall provide a final as-built landscape plan and an agreement to maintain and replace all landscaping that is required by the City.

95.50 Tree Installation Standards. All supplemental trees to be planted shall conform to the Kirkland Plant List. All installation standards shall conform to Kirkland Zoning Code Section 95.45.

95.52 Prohibited Vegetation. Plants listed as prohibited in the Kirkland Plant List shall not be planted in the City.

105.10.2 Pavement Setbacks. The paved surface in an access easement or tract shall be set back at least 5 feet from any adjacent property which does not receive access from that easement or tract. An access easement or tract that has paved area greater than 10 feet in width must be screened from any adjacent property that does not receive access from. Screening standards are outlined in this section.

105.18 Pedestrian Walkways. All uses, except single family dwelling units and duplex structures, must provide pedestrian walkways designed to minimize walking distances from the building entrance to the right of way and adjacent transit facilities, pedestrian connections to adjacent properties, between primary entrances of all uses on the subject property, through parking lots and parking garages to building entrances. Easements may be required. In design districts through block pathways or other pedestrian improvements may be required. See also Plates 34 in Chapter 180.

105.19 Public Pedestrian Walkways. The height of solid (blocking visibility) fences along pedestrian pathways that are directly adjacent a public or private street right-of-way shall be limited to 42 inches unless otherwise approved by the Planning or Public Works Directors. All new building structures shall be setback a minimum of five feet from any pedestrian access right-of-way, tract, or easement that is not directly adjacent a public or private street right-of-way. If in

design district, see section and Plate 34 for through block pathways standards.

105.20 Required Parking. 2 parking spaces are required for this use.

105.47 Required Parking Pad. Except for garages accessed from an alley, garages serving detached dwelling units in I density zones shall provide a minimum 18-foot by 20-foot -wide parking pad between the garage and the access easement tract, or right-of-way providing access to the garage.

110.60.5 Street Trees. All trees planted in the right-of-way must be approved as to species by the City. All trees must be two inches in diameter at the time of planting as measured using the standards of the American Association of Nurserymen with a canopy that starts at least six feet above finished grade and does not obstruct any adjoining sidewalk or driving lanes.

115.07.9 Accessory Dwelling Units Market and Norkirk Neighborhoods. Accessory dwelling units are prohibited on lots smaller than the required minimum lot size approved using the Small Lot Single-family and Historic Preservation subdivision regulations.

115.25 Work Hours. It is a violation of this Code to engage in any development activity or to operate any heavy equipment before 7:00 am. or after 8:00 pm Monday through Friday, or before 9:00 am or after 6:00 pm Saturday. No development activity or use of heavy equipment may occur on Sundays or on the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas Day. The applicant will be required to comply with these regulations and any violation of this section will result in enforcement action, unless written permission is obtained from the Planning official.

115.40 Fence Location. Fences over 6 feet in height may not be located in a required setback yard. A detached dwelling unit abutting a neighborhood access or collector street may not have a fence over 3.5 feet in height within the required front yard. No fence may be placed within a high waterline setback yard or within any portion of a north or south property line yard, which is coincident with the high waterline setback yard.

A detached dwelling unit may not have a fence over 3.5 feet in height within 3 feet of the property line abutting a principal minor arterial except where the abutting arterial contains an improved landscape strip between the street and sidewalk. The area between the fence and property line shall be planted with vegetation and maintained by the property owner.

115.42 Floor Area Ratio (F.A.R.) Limits. Floor area for detached dwelling units is limited to a maximum floor area ratio in low density residential zones. See Use Zone charts for the maximum percentages allowed. This regulation does not apply within the disapproval jurisdiction of the Houghton Community Council.

115.43 Garage Requirements for Detached Dwelling Units in Low Density Zones. Detached dwelling units served by an open public alley, or an easement or tract serving as an alley, shall enter all garages from that alley. Whenever practicable, garage doors shall not be placed on the front façade of the house. Side-entry garages shall minimize blank walls. For garages with garage doors on the front façade, increased setbacks apply, and the garage width shall not exceed 50% of the total width of the front façade. These regulations do not apply within the disapproval jurisdiction of the Houghton Community Council. Section 115.43 lists other exceptions to these requirements.

115.45 Garbage and Recycling Placement and Screening. For uses other than detached dwelling units, duplexes, moorage facilities, parks, and construction sites, all garbage receptacles and dumpsters must be setback from property lines, located outside landscape buffers, and screened from view from the street, adjacent properties and pedestrian walkways or parks by a solid sight-obscuring enclosure.

115.47 Service Bay Locations. All uses, except single family dwellings and multifamily structures, must locate service bays away from pedestrian areas. If not feasible must screen from view.

115.75.2 Fill Material. All materials used as fill must be non-dissolving and non-decomposing. Fill material must not contain organic or inorganic material that would be detrimental to the water quality, or existing habitat, or create any other significant adverse impacts to the environment.

115.85 Rose Hill Business District Lighting Standards: See this section for specific requirements that apply to all exterior lighting on buildings, all open air parking areas and equipment storage yards within this business district. The intent of this section is to discourage excessive lighting and to protect low density residential zones from adverse impacts that can be associated with light trespass from nonresidential and medium to high density residential development.

115.90 Calculating Lot Coverage. The total area of all structures and pavement and any other impervious surface on the subject property is limited to a maximum percentage of total lot area. See the Use Zone charts for maximum lot coverage percentages allowed. Section 115.90 lists exceptions to total lot coverage calculations See Section 115.90 for a more detailed explanation of these exceptions.

115.95 Noise Standards. The City of Kirkland adopts by reference the Maximum Environmental Noise Levels established pursuant to the Noise Control Act of 1974, RCW 70.107. See Chapter 173-60 WAC. Any noise, which injures, endangers the comfort, repose, health or safety of persons, or in any way renders persons insecure in life, or in the use of property is a violation of this Code.

115.115 Required Setback Yards. This section establishes what structures, improvements and activities may be within required setback yards as established for each use in each zone.

115.115.3.g Rockeries and Retaining Walls. Rockeries and retaining walls are limited to a maximum height of four feet in a required yard unless certain modification criteria in this section are met. The combined height of fences and retaining walls within five feet of each other in a required yard is limited to a maximum height of 6 feet, unless certain modification criteria in this section are met.

115.115.3.n Covered Entry Porches. In residential zones, covered entry porches on dwelling units may be located within 13 feet of the front property line if certain criteria in this section are met. This incentive is not effective within the

disapproval jurisdiction of the Houghton Community Council.

115.115.3.o Garage Setbacks. In low density residential zones, garages meeting certain criteria in this section can be placed closer to the rear property line than is normally allowed in those zones.

115.115.3.p HVAC and Similar Equipment: These may be placed no closer than five feet of a side or rear property line, and shall not be located within a required front yard; provided, that HVAC equipment may be located in a storage shed approved pursuant to subsection (3)(m) of this section or a garage approved pursuant to subsection (3)(o)(2) of this section. All HVAC equipment shall be baffled, shielded, enclosed, or placed on the property in a manner that will ensure compliance with the noise provisions of KZC 115.95.

115.115.5.a Driveway Width and Setbacks. For a detached dwelling unit, a driveway and/or parking area shall not exceed 20 feet in width in any required front yard, and shall be separated from other hard surfaced areas located in the front yard by a 5-foot wide landscape strip. Driveways shall not be closer than 5 feet to any side property line unless certain standards are met.

115.115.5.b Driveway Setbacks. For attached and stacked dwelling units in residential zones, driveways shall have a minimum 5' setback from all property lines except for the portion of any driveway, which connects with an adjacent street. Vehicle parking areas shall have a minimum 20-foot setback from all front property lines and meet the minimum required setbacks from all other property lines for the use.

115.115.5.c Driveway Setbacks. Vehicle parking areas for schools and day-care centers greater than 12 students shall have a minimum 20-foot setback from all property lines.

115.115.d Driveway Setbacks. Parking areas and driveways for uses other than detached dwelling units, attached and stacked dwelling units in residential zones, or schools and day-cares with more than 12 students, may be located within required setback yards, but, except for the portion of any driveway which connects with an adjacent street, not closer than 5 feet to any property line.

115.120 Rooftop Appurtenance Screening. New or replacement appurtenances on existing buildings shall be surrounded by a solid screening enclosure equal in height to the appurtenance. New construction shall screen rooftop appurtenance by incorporating them in to the roof form.

115.135 Sight Distance at Intersection. Areas around all intersections, including the entrance of driveways onto streets, must be kept clear of sight obstruction as described in this section.

145.22.2 Public Notice Signs. Within seven (7) calendar days after the end of the 21-day period following the City's final decision on the permit, the applicant shall remove all public notice signs.

Prior to issuance of a grading or building permit:

85.40 Natural Greenbelt Protective Easement. The applicant shall submit for recording a natural greenbelt protective easement, in a form acceptable to the City Attorney, for recording with King County (see Attachment 8).

85.45 Liability. The applicant shall enter into an agreement with the City, which runs with the property, in a form acceptable to the City Attorney, indemnifying the City for any damage resulting from development activity on the subject property which is related to the physical condition of the property (see Attachment 9).

90.50 Wetland Buffer Fence. Prior to development, the applicant shall install a six-foot high construction phase fence along the upland boundary of the wetland buffer with silt screen fabric installed per City standard. The fence shall remain upright in the approved location for the duration of development activities. Upon project completion, the applicant shall install between the upland boundary of all wetland buffers and the developed portion of the site, either 1) a permanent 3 foot tall split rail fence, or 2) permanent planting of equal barrier value.

90.95 Stream Buffer Fence. Prior to development, the applicant shall install a six-foot high construction phase fence along the upland boundary of the entire stream buffer with silt screen fabric installed per City standard. The fence shall remain upright in the approved location for the duration of development activities. Upon project completion, the applicant shall install between the upland boundary of all stream buffers and the developed portion of the site, either 1) a permanent 3 foot tall split rail fence, or 2) permanent planting of equal barrier value.

90.145 Bonds. The City may require a bond and/or a perpetual landscape maintenance agreement to ensure compliance with any aspect of the Drainage Basins chapter or any decision or determination made under this chapter. A security is required for Performance of the Wetland and Stream Buffer Mitigation Plan (see Attachment 2).

90.150 Natural Greenbelt Protective Easement. The applicant shall submit for recording a natural greenbelt protective easement, in a form acceptable to the City Attorney, for recording with King County (see Attachment 8).

90.155 Liability. The applicant shall enter into an agreement with the City which runs with the property, in a form acceptable to the City Attorney, indemnifying the City for any damage resulting from development activity on the subject property which is related to the physical condition of the stream, minor lake, or wetland (see Attachment 9).

95.30(4) Tree Protection Techniques. A description and location of tree protection measures during construction for trees to be retained must be shown on demolition and grading plans.

95.34 Tree Protection. Prior to development activity or initiating tree removal on the site, vegetated areas and individual trees to be preserved shall be protected from potentially damaging activities. Protection measures for trees to be retained shall include (1) placing no construction material or equipment within the protected area of any tree to be retained; (2) providing a visible temporary protective chain link fence at least 6 feet in height around the protected area of retained trees or groups of trees until the Planning Official authorizes their removal; (3) installing visible signs spaced no further apart than 15 feet along the protective fence stating "Tree Protection Area, Entrance Prohibited" with the City code enforcement phone number; (4) prohibiting excavation or compaction of earth or other damaging activities within the barriers unless approved

by the Planning Official and supervised by a qualified professional; and (5) ensuring that approved landscaping in a protected zone shall be done with light machinery or by hand.

27.06.030 Park Impact Fees. New residential units are required to pay park impact fees prior to issuance of a building permit. Please see KMC 27.06 for the current rate. Exemptions and/or credits may apply pursuant to KMC 27.06.050 and KMC 27.06.060. If a property contains an existing unit to be removed, a "credit" for that unit shall apply to the first building permit of the subdivision.

Prior to occupancy:

90.145 Bonds. The City may require a bond and/or a perpetual landscape maintenance agreement to ensure compliance with any aspect of the Drainage Basins chapter or any decision or determination made under this chapter. A security is required for Monitoring and Maintenance of the Wetland and Stream Buffer Mitigation Plan (see Attachment 2).

95.51.2.a Required Landscaping. All required landscaping shall be maintained throughout the life of the development. The applicant shall submit an agreement to the city to be recorded with King County which will perpetually maintain required landscaping. Prior to issuance of a certificate of occupancy, the proponent shall provide a final as-built landscape plan and an agreement to maintain and replace all landscaping that is required by the City.

95.51.2.b Tree Maintenance. For detached dwelling units, the applicant shall submit a 5-year tree maintenance agreement to the Planning Department to maintain all pre-existing trees designated for preservation and any supplemental trees required to be planted.

95.51.3 Maintenance of Preserved Grove. The applicant shall provide a legal instrument acceptable to the City ensuring the preservation in perpetuity of approved groves of trees to be retained.

110.60.5 Landscape Maintenance Agreement. The owner of the subject property shall sign a landscape maintenance agreement, in a form acceptable to the City Attorney, to run with the subject property to maintain landscaping within the landscape strip and landscape island portions of the right-of-way.

110.60.6 Mailboxes. Mailboxes shall be installed in the development in a location approved by the Postal Service and the Planning Official. The applicant shall, to the maximum extent possible, group mailboxes for units or uses in the development.

110.75 Bonds. The City may require or permit a bond to ensure compliance with any of the requirements of the Required Public Improvements chapter.

PUBLIC WORKS DEPARTMENT

Permit #: SAR14-00665

Project Address: 9105 128th Ave NE

Public Works General Conditions:

1. All public improvements associated with this project including street and utility improvements, must meet the City of Kirkland Public Works Pre-Approved Plans and Policies Manual. A Public Works Pre-Approved Plans and Policies manual can be purchased from the Public Works Department, or it may be retrieved from the Public Works Department's page at the City of Kirkland's web site at www.ci.kirkland.wa.us.

2. This project will be subject to Public Works Permit and Connection Fees. It is the applicant's responsibility to contact the Public Works Department by phone or in person to determine the fees. The fees can also be reviewed on the City of Kirkland web site at www.ci.kirkland.wa.us. The applicant should anticipate the following fees:

Water and Sewer connection Fees (paid with the issuance of a Building Permit)

Side Sewer Inspection Fee (paid with the issuance of a Building Permit)

Water Meter Fee (paid with the issuance of a Building Permit)

Right-of-way Fee

Review and Inspection Fee (for utilities and street improvements).

Traffic, Park and School Impact Fee (paid with the issuance of Building Permit). For additional information, see notes below.

3. Building Permits associated with this proposed project will be subject to the traffic, park, and school impact fees per Chapter 27 of the Kirkland Municipal Code. The impact fees shall be paid prior to issuance of the Building Permit(s).

4. All civil engineering plans which are submitted in conjunction with a building, grading, or right-of-way permit must conform to the Public Works Policy titled ENGINEERING PLAN REQUIREMENTS. This policy is contained in the Public Works Pre-Approved Plans and Policies manual.

5. All street improvements and underground utility improvements (storm, sewer, and water) must be designed by a Washington State Licensed Engineer; all drawings shall bear the engineer's stamp.

6. All plans submitted in conjunction with a building, grading or right-of-way permit must have elevations which are based on the King County datum only (NAVD 88).

7. A completeness check meeting is required prior to submittal of any Building Permit applications.

Utility Maintenance: Each property owner shall be responsible for maintenance of the sanitary sewer or storm water stub from the point of use on their own property to the point of connection in the City sanitary sewer main or storm water main. Any portion of a sanitary sewer or surface water stub, which jointly serves more than one property, shall be jointly maintained and repaired by the property owners sharing such stub. The joint use and maintenance shall "run with the land" and will be binding on all property owners within this subdivision, including their heirs, successors and assigns.

Public Right-of-way Sidewalk and Vegetation Maintenance: Each property owner shall be responsible for keeping the sidewalk abutting the subject property clean and litter free. The property owner shall also be responsible for the maintenance of the vegetation within the abutting landscape strip. The maintenance shall "run with the land" and will be binding on the property owner of this parcel, including their heirs, successors and assigns.

Sanitary Sewer Conditions:

1. The existing sanitary sewer main within the public right-of-way along the front of the property is adequate to serve all the lots within the proposed project.
2. Provide a 6-inch minimum side sewer stub to the lot.

Water System Conditions:

1. The existing water main in the public right-of-way along the front of the subject property is adequate to serve this proposed development.
2. Provide a separate 1" minimum water service from the water main to the meter for the lot; City of Kirkland will set the water meter. Due to the sensitive nature of the wetland and the location of the stream near the front of the property, disturbance must be kept to a minimum and boring under the stream for the water service may be necessary.

Surface Water Conditions:

2009 KCSWDM

1. Provide temporary and permanent storm water control per the 2009 King County Surface Water Design Manual and Kirkland Addendum. See Policies D-2 and D-3 in the PW Pre-Approved Plans for drainage review information, or contact city of Kirkland Surface Water staff at (425) 587-3800 for help in determining drainage review requirements. Summarize below are the levels of drainage review based on site and project characteristics:

Small Project Drainage Review (Types I & II)

Small project drainage reviews are divided into two types, Type I and Type II, primarily based on the amount of impervious surface area. Typical Type I projects create between 500 and 1,999ft² impervious surface area. Type II projects involve between 2,000 and 9,999ft² impervious surface areas, with a total of no more than 5,000ft² of new impervious area and not more than a total of 9,999ft² impervious surface area added since 01/08/01.

Targeted Drainage Review

A targeted project drainage review is required for projects that meet the new impervious area criteria for small projects but also have additional characteristics that require a more in-depth level of review, such as sensitive drainage areas or construction/modification of a 12" pipe or ditch.

2. Evaluate the feasibility and applicability of dispersion, infiltration, and other stormwater low impact development facilities on-site (per section 5.2 in the 2009 King County Surface Water Design Manual). If feasible, stormwater low impact development facilities are required. See PW Pre-Approved Plan Policy L-1 for more information on this requirement.
3. A storm detention system is not required.
4. The storm water may be discharged from the project site to a natural location so as not to be diverted onto the adjacent downstream property. The site storm drainage system shall include a flow dispersal device in order to mitigate erosion and flooding.
5. Provide a level one off-site analysis (based on the King County Surface Water Design Manual, core requirement #2)
6. Provide an erosion control report and plan with Building Permit application. The plan shall be in accordance with the 2009 King County Surface Water Design Manual.

7. Construction drainage control shall be maintained by the developer and will be subject to periodic inspections. During the period from May 1 and September 30, all denuded soils must be covered within 7 days; between October 1 and April 30, all denuded soils must be covered within 12 hours. Additional erosion control measures may be required based on site conditions and weather conditions. Exposed soils shall be stabilized at the end of the workday prior to a weekend, holiday, or predicted rain event.

8. Below are additional surface water conditions for permit PRE12-01406 .

The applicant must submit a drainage report analyzing potential onsite and offsite drainage impacts associated with development of the project site; and propose appropriate mitigations of those impacts. In addition to standard requirements, the report must include the following:

Hydraulic modeling (Hec-ras software or other similar product) with supporting drainage calculations to verify all proposed structures are outside the 100-yr flood path.

A downstream analysis, assessing the project impact to downstream properties.

An assessment of any loss of flood storage on the project site and how this will be mitigated.

The applicant must meet the conditions under KMC 21.56 Flood Damage Prevention.

If armoring of the stream bank is proposed, the applicant must meet the conditions under KZC 90.110 Bulkheads in Streams.

Street and Pedestrian Improvement Conditions:

1. A 2-inch asphalt street overlay will be required where three or more utility trench crossings occur within 150 lineal ft. street length or where utility trenches parallel the street centerline. Grinding of the existing asphalt to blend in the overlay will be required along all match lines.

2. Remove and replace all broken existing curb, gutter, and sidewalk along property frontage.

3. The driveway for each lot shall be long enough so that parked cars do not extend into the access easement or right-of-way.

4. The driveway width shall be a min/max of 10ft/20ft, respectively.

5. It shall be the responsibility of the applicant to relocate any above-ground or below-ground utilities which conflict with the project associated street or utility improvements.

6. Underground all new and existing on-site utility lines and overhead transmission lines.

7. Zoning Code Section 110.60.9 establishes the requirement that existing utility and transmission (power, telephone, etc.) lines on-site and in rights-of-way adjacent to the site must be underground. The Public Works Director may determine if undergrounding transmission lines in the adjacent right-of-way is not feasible and defer the undergrounding signing an agreement to participate in an undergrounding project, if one is ever proposed. In this case, the Public Works Director has determined that undergrounding of existing overhead utility on 128th Avenue NE is not feasible at this time ; the undergrounding of off-site/frontage transmission lines should be deferred with a Local Improvement District (LID) No Protest Agreement. The final recorded subdivision mylar shall include a condition requiring all associated lots to sign a LID No Protest Agreement prior to the issuance of a building permit for said lot. In addition, if a house is to be saved on one of the lots within the subdivision, a LID No Protest Agreement shall be recorded against this lot at the time of subdivision recording.

David Barnes

From: Greg Wellman <gwellman@princeton.com>
Sent: Sunday, March 01, 2015 11:30 AM
To: David Barnes
Cc: Mary J Olsen; Pat Doughty
Subject: Public Comment re SAR14-00665

Follow Up Flag: Follow up
Flag Status: Flagged

David Barnes,
 Project Planner,
 City of Kirkland

Public Comment re SAR14-00665

Dear Sir,

Although we understand the reasonable use law will probably allow the construction of a home on the lot in question, we believe this specific application can and should be rejected on any or all of the following grounds.

1. The posted site plan does not indicate the trees that were designated as protected during the earlier survey. Some of those trees still have the survey tape on them, and from just eyeballing the site plan, it would appear that the proposed driveway and garage would eliminate at least one such tree, possibly more, including the large maple on the corner. Even if the driveway misses the maple, it seems likely to destroy a large fraction of the maple's root system.

2. The proposed house, at 3600 square feet would be far larger than the average size in the neighborhood, possibly the largest. Reasonable use would be a home that fits into the neighborhood. This is more like "maximalist use". Requiring more setback(*), which would also reduce the square footage, would help the house fit into the neighborhood, as would a more traditional roofline (i.e. sloping, with eaves).

(*) The posted plans show a setback of 10 feet. You're the expert, but I seem to recall reading that even in cases where a short setback is granted due to some encumbrance, the setback can't be less than the half the average setback on the street. The average setback for houses on 128th Ave between 90th and 95th streets appears to be 40 feet or more.

3. The site is far from flat and the posted plans do not give any information regarding at what level the proposed house would be built (and thus how much fill and/or excavation would be used). Clearly any fill would pose a risk to the stream, and the more fill is used, the further it should be kept from the stream. That leads to the next point ...

4. The proposed site plan has a very narrow border (5') around the house in order to limit the disrupted area to the 3000 square foot legal limit. It is doubtful that the construction process of such a large house could be contained within such a narrow border, even more so if fill is used - the fill would have to be permanently stable at whatever slope is necessary to drop from the house level to the existing surroundings over the width of that border. Hence the more fill and the larger the house, the wider the border that should be required. Closely related, we would strongly suggest that you have someone double-check the exact path of the stream at the closest point to the proposed house, and to do so when the stream is running high. We think you may find it spreads closer to the proposed site than the posted plans show.

Separate from these comments on the proposed construction, my neighbors and I would like to express our disappointment that when each of us (back when we were buying our homes) inquired with the city what "protected wetland" meant, we were each told that no one could build there. No mention of the reasonable use exception was made at that time.

Greg Wellman
Patricia Barres
12708 NE 91st Lane

Mary Jean Olsen
12702 NE 91st Lane

Pat Doughty
9115 128th Ave NE

David Barnes

From: Uko Gorter <uko@ukogorter.com>
Sent: Wednesday, March 04, 2015 9:50 AM
To: David Barnes
Subject: Public comment Re: SAR 14-00665

To:

David Barnes
Planning and Community Development
City of Kirkland

Public comment regarding: SAR 14-00665

Dear Mr. Barnes,

With much concern we learned about the plans of the proposed single family residence south of our property. While we understand and appreciate that the Reasonable Use Exception provision allows a landowner to build at least one residence on his/her property, encumbered by a sensitive wetland, the proposed 3600 sq ft home will be far larger than any residence in our immediate neighborhood. I understand that the developer wants to maximize his return. However, its planned scale does not seem “reasonable” to us.

We are alarmed to see that large trees (e.g., the mature broadleaf maple on the corner of NE 91st Lane and 128th Ave NE) will be removed to make room for this large mansion. We were let to believe that the blue ribbons left by survey crews indicated that these trees would be saved.

The immediate proximity of the proposed mansion and garage along our driveway is disconcerting. We are concerned whether we can safely exit and enter our driveway (private lane), as the proposed driveway seems to (as far as we can tell) obliquely intersect with our lane.

Looking at historic maps and aerial photos it becomes clear that the land between NE 91st Lane, 128th Ave NE, and NE 90th Street, has never been developed, and for good reason. In rainy winter months nearly the entire land is inundated.

We are not against the landowner’s wishes and right to develop his land. However, the enormous size of this proposed residence is out of scale with the neighborhood and sets a terrible precedence for future development on the adjacent land south of Mr. Gong’s property.

We thank you for the opportunity to voice our concern regarding this proposed mansion. We hope the developer is willing to scale down the proposed residence and become a good neighbor.

Kind regards,

Uko and Susan Gorter

12712 NE 91st Lane
Kirkland, WA 98033
425-827-3437
uko@ukogorter.com
uko.susan@frontier.com

Project Planner
David Barnes
123 5th Ave
Kirkland, WA 98033
Permit Number: SAR14-00665

Dear Mr. Barnes,

I would like to discuss with you the construction of a new single family residence in the RSX 7.2 Use Zone that is being planned. I would first like to tell you that I am one of five residential homes that live right next to these wetlands, and I have been living in this place of my current residency for nearly 13 years. The residents here have all been told for many years that these wetlands that you are allowing to be constructed upon are protected. And one of these residents also runs a business from their home here, and if construction takes place that will create problems for their business; especially since they work with school age children.

There are many species of plants, animals, and fungi that call these wetlands home. We have deer, rabbit, raccoon, opossum, and an occasional coyote that lives here. We also have a number of different birds that are native to wetlands such as this one. If these wetlands are taken out and built upon, even a small portion, these creatures and a number of others will lose their homes, including our residential bald eagles and mallard ducks that use this place for breeding, nesting, and feeding grounds. A diverse ecosystem is living right next door, and should be protected like we were told; not built upon.

I would also like to point out the stream that goes through these wetlands. This stream is a source of nourishment for many plants and animals, and if you build near this stream there is a very high probability that this stream will become polluted and become filled with large amounts of sediment. This, in turn, will cause the oxygen levels in the water to plummet and potentially cause a deadly algal bloom and create unlivable conditions for the plants and creatures that call that stream home. These wetlands are beautiful and shouldn't be destroyed for one eyesore of a house.

The planned house to be built on this property will stick out due to it being built only 10 feet from the property line, while all of the other houses in this area and off this street are about 20 feet away from their property lines; not to mention that the building in question will be three stories high with a flat roof while all the other residential houses in the area are only one or two stories tall with slanted roofs.

I grew up right next to these wetlands and grew to really appreciate the beauty of these large trees that have been around longer than I have and the life that they support. If these magnificent trees, such as the Big Leaf Maple on the corner of 128th Avenue NE and NE 91st Lane, are cut down, many creatures will be losing their homes, and the chances of the soil eroding will most likely increase twofold. These large trees keep the soil in place a lot better than the total planned 79 newly planted trees that won't have a deeply planted roots system to keep all of the soil in place during our large amounts of rainfall that take place regularly here. And the soil that erodes will have large amounts of runoff that could potentially go into the stream and cause the problems that I have mentioned above.

I am sad to say that I am genuinely upset with the destruction of even a portion of these beautiful wetlands. The area has beautiful picturesque views that should be left untouched. I have taken a number of pictures of this beautiful setting and enjoy the beauty of nature that these wetlands have given me.

The definition of wetlands, according to authors and professors Jay Withgott and Matthew Laposata in their textbook *Essential Environment: The Science Behind the Stories*, is that they are "systems in which the soil is saturated with water, and they generally feature shallow standing water with ample vegetation." This is exactly what our wetlands are. The authors also state that "wetlands are extremely valuable habitat for wildlife." If this isn't true, which I believe that it is true; why, then, are you allowing this place to be built upon? Please reconsider your decision, or at the very least, put all or some of what I have said into consideration. I love these wetlands, and many other people do as well.

Thank you for taking the time out of your day to read this letter, and please feel free to contact me via post, e-mail, or by either of my phone numbers provided below.

Sincerely,

Katherine C. Doughty
9115 128th Ave NE
Kirkland, WA 98033

E-mail: katdoughty1@gmail.com

Home Number: (425)-889-5464

Cell Number: (425)-289-8013

David Barnes

From: kdwardell . <kdwardell@gmail.com>
Sent: Thursday, March 05, 2015 6:31 PM
To: David Barnes
Subject: In reference to permit number SAR14-00665

Follow Up Flag: Follow up
Flag Status: Flagged

Dear David,

After deciding I would write a comment about this particular project and why I am opposed to it, I will tell you briefly about myself. For what it's worth, I have lived on Rose Hill since I was born in the 50's and the house where I lived for a few years was my grandfather's and still stands, for now, on 126th Ave. My father built a house nearby, and that was my family home. After a few short term moves after I was on my own, I then bought a home with my late husband and have lived here, on NE 95th Street for about 30+ years.

To say I've seen change wouldn't suffice. Rose Hill was unincorporated King County not so long ago. We took our own trash to the dump. We paid different taxes. Septic systems were the norm. Large lots were common, kids played outside in the yard. I entered kindergarten in the brand new Mark Twain Elementary in 1961 or so. There wasn't a single traffic light on NE 85th Street. Modest ramblers and fewer sidewalks and less people, in general. I totally understand things change and probably mostly for the better. I very much want families to find this a great place to live, which it is. We are situated close to everything we need, I have wonderful neighbors who have lived here as long or longer than I have.

Rose Hill has recently been "discovered", for lack of a better word. I can't even count the number of scraped off homes being replaced by 2 or more modern homes here. I invite you to come and drive around, I'll tell you some stories. There is a distinct lack of continuity or melding of design or any semblance of maintaining any flavor or character of the neighborhood. With the onesy, twosy way that these places are slipping in, there won't be any covenants or restrictions on what the homes can look like. Gigantic lot-swallowing, flat or sloped roof varieties, or multilevel, multicolored mini mansions tower over neighboring yards, negating privacy, pushing the envelope of what we once thought of as the personal space we called our "yards". The sky and imagination seem to be the limit to how many homes can be squeezed or shoehorned in. Apparently, though I mean no disrespect, the City of Kirkland heartily approves anything and everything that is proposed by builders. After all, the revenue from such a slice and dice is very lucrative. No thought is given, it seems, to the way streets are left afterwards, wetlands, runoff, lost trees, overcrowded schools. The increased and multiple utility dig ups are poorly restored and left to turn into potholes in the streets, an ever evolving patchwork we have to drive on.

So, now, this applicant for this permit has asked you to approve his significant contribution to everything I've just described. He would like to have you be okay with letting him develop basically 1/4 of a wetland area which has existed untouched for so many years (way longer than you or I have been here- probably forever). In return for you okaying this "Reasonable Use" (?) he will bless the neighborhood with his 3600 sq ft home and

additional garage and all the trappings associated. Two things come immediately to mind. One is that this will set the precedent for just wiping up the entire wetland quickly with more homes, due to the foot in the door mentality! Two is that neither I nor you have any idea just what damage will be done to the wetland!!! Rerouting of streams, springs that get plugged, birds and animals that get displaced, plants and trees disposed of when they contribute so much in the way of filtering noise and freshening the air and just breaking up the monotony of our lives.

I wonder what would be harmed by leaving this space the way it is? I understand someone must have purchased the property with an assumption they could use it at some point, but that was done with the understanding that it is a wetland with no guarantee of future use!!! Buyer beware. Now, wetland is no longer valued? What changed? Is the city feeling an obligation to say yes? It's a huge chunk of a wetland, and I don't see how any mitigation of the space can be accomplished responsibly. Personally, in my humble opinion, if they can afford a huge custom home, they may possibly be able to afford a different locale. I'm just saying.

Thank you for your consideration on this matter of distress to myself and many of my neighbors. I await your reply.

Sincerely,

Kristie Wardell
12851 NE 95th St
Kirkland, WA 98033
[425 246 5772](tel:4252465772) mobile

David Barnes

From: Elena Salaks <elena.salaks@gmail.com>
Sent: Friday, March 06, 2015 7:49 PM
To: David Barnes
Subject: Permit SAR14-00665

David Barnes,

I am writing to inform you that I am against new development at location 9105 128th Ave NE, Kirkland. This location is a green belt and should be preserved. I would need to understand the impact and value add before any development begins.

Name: Elena Salaks

Address: 12731 NE 94th Ct, Kirkland, WA 98033

Email: Elena.salaks@gmail.com

Thank you,
Elena

David Barnes

From: mbakislander@aol.com
Sent: Friday, March 06, 2015 9:06 PM
To: dbarnes@kirklandwa.gov.
Subject: permit number SAR14-00665

Myles an Audrey Asper
9234 128th Ave NE
Kirkland, WA 98033
Email mbakislander@aol.com

David Barnes
123 5th Ave
Kirkland, WA 98033

Mr Barnes:

I spoke to you about 3 wks ago. Sorry my letter did not get to you in time. But I still don't think you have check in with Mark Twain School to find out the impact. I don't think you have check the impact of anything, nor will you check. The school already has to many portables. How about the fire department, say nothing about the street. The only thing you can see is more taxes being collected.

I am very much against building in swamp land. And we don't need another 3 story home that don't fit. The City of Kirkland does some real strange things at times.

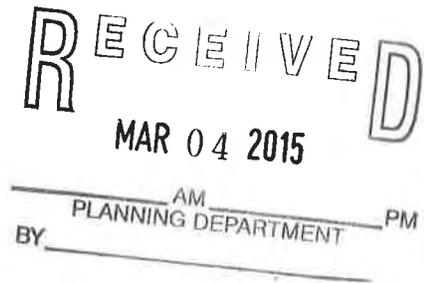
You say well we can't afford this or that. The city upsets me very much. I realize you don't have alot to do with different things. The city does not an will not take care of the ditch out here. They drilled 2 large holes in our driveway 5 yrs ago. For what to check see if the tile was broken. It is, they said we'll be back in a couple days to fix this. But we didn't ask a couple days from where. So there for like all gov a city projects, Why don't you take care of what you have. You can even take care of sidewalks.

It kinda make one laugh, you say just write to us, for why you will do as you please anyhow. You will say well there wasn't a lot of interest. Why don't you send flyers like you do for everything else. Can't do that because it would draw to much interest. If I were on the planning comm. I'd want to get as many people as I could.

Thank You for your time.
Myles an Audrey Asper

To: David Barnes
123 5th Avenue, Kirkland, WA 98033

SAR14-00665



Dear Mr. Barnes,

I am writing in response to the proposed plan for development in the Gong Reasonable Use Permit. I am vehemently opposed to this application and request that the City of Kirkland deny this permit. Rather than bore you with a long winded write-up I am going to outline my objections in some quick bullets.

- The amount of wildlife in this particular wetland is quite varied. The proposed construction will undoubtedly mis-place a large portion of this wildlife to the detriment of the entire community. The suggestion to plant a few trees to mitigate the impact is ludicrous. There are numerous signs placed throughout this area that states "Protected Wetlands". I suggest we do just that and protect them.
- The proposed house is 3600 square feet – far from reasonable. This would be far larger than the average size in the neighborhood, would stick out like a sore thumb, and the size would require even further disruption to this wetland. While I am not surprised to see a request for reasonable use, I am utterly shocked that this size house would be proposed.
- When I first purchased my home about 8 to 9 years ago I visited the planning department for the City of Kirkland to inquire about this area and the possibility for development. I spoke to a rather senior individual in the department and I now regret that I did not record the individuals name at the time. But I was told in no uncertain terms that there was no possibility for development given the protected status of the area. I would like to see the City of Kirkland's Planning Department live up to its word.

In conclusion Mr. Barnes, I understand the pressure the city is feeling in terms of revenue. However, I would like to think that the City of Kirkland would not make a short term decision that results in some nominal monetary benefit, at the expense of long term prosperity.

I greatly appreciate your time and consideration in this matter.

Sincerely,

A handwritten signature in blue ink, appearing to read "James and Olivia Pennella". The signature is fluid and cursive, with a large loop at the beginning.

James and Olivia Pennella



January 5, 2015

Mr. David Barnes, Planner
City of Kirkland Planning Dpt.
132 Fifth Avenue
Kirkland, WA 98033

RE: Reasonable Use Exception Justification Letter Parcel # 1238500350
91xxx – 128th Ave NE

Mr. Barnes,

The site of Mr. Rui Gong, Parcel number 1238500350, is currently vacant, and it is his intention to develop the parcel as a single-family home. H & S completed a Wetland delineation study on the property. A Type 2 wetland was identified on this property. This wetland was surveyed and is shown on the plan sheets that have been prepared as part of this proposal. Kirkland Zoning Code (KZC) requires that a 50' wetland buffer and 15' BSBL extends from the edge of this type 2 wetland. After these setbacks and the property line setbacks are applied there is no area remaining to build a structure, therefore this Reasonable Use Application has been submitted.

This project satisfies the requirements specified in KZC Section 90.140 for a Reasonable Use Exception. The relevant section of KZC are shown below *in italics with* response in regular font.

KZC 90. 140.4 Submittal Requirements

- a. *A determination and delineation of the sensitive area and sensitive area buffer containing all the information specified in KZC 90.40(3) for a wetland or based on the definitions contained in this chapter for a stream;*

H&S completed an onsite Wetland Delineation and Concept mitigation plan August 20, 2013. This delineation has been reviewed and accepted by City of Kirkland.

- b. *An analysis of whether any other reasonable use with less impact on the sensitive area and sensitive area buffer is possible;*

The proposed development will not impact the onsite sensitive areas. A portion of the wetland buffer will be impacted, and a wetland buffer mitigation plan is proposed in order to compensate for the wetland buffer impacts. The proposed development is located as far from the onsite

wetland as possible while maintaining the City of Kirkland (COK) required front yard BSBL. Also, the clearing and grading limits have been restricted in order to minimize the site disturbance. Lastly, the proposed house footprint has been reduced so that it is only 2,943 sf including the garage area. This proposed footprint is less than the average new home footprint constructed in the COK.

- c. *Sensitive site design and construction staging of the proposal so that the development will have the least practicable impact on the sensitive area and sensitive area buffer;*

The clearing and grading limits have been restricted, and other temporary erosion control measures have been put in place in order to have the least practicable impact on the sensitive area and buffer.

- d. *A description of the area of the site which is within the sensitive area or within the setbacks or buffers required by this chapter;*

The entire site is encumbered by a wetland, stream, and their buffers. Only the eastern 40 ft. of the site is outside of the wetland.

- e. *A description of protective measures that will be undertaken such as siltation curtains, hay bales and other siltation prevention measures, and scheduling the construction activity to avoid interference with wildlife and fisheries rearing, nesting or spawning activities;*

Clearing and grading limits, filter fabric fence, and cover measures will be utilized in order to prevent siltation.

- f. *An analysis of the impact that the amount of development proposed would have on the sensitive area and the sensitive area buffer;*

None of the proposed development will take place within the onsite wetlands. However, a portion of the wetland buffer will be disturbed by clearing, grading, and construction of the home. In order to mitigate for the disturbance a wetland buffer mitigation plan has been designed. This plan includes planting of native trees and shrubs in the portions of the wetland buffer that currently is vegetated with invasive shrubs.

- g. *How the proposal minimizes to the greatest extent possible net loss of sensitive area functions;*

The onsite sensitive area will not be directly disturbed. However, it's buffer will be reduced in areas. The reduced buffer area is primarily forested that provide moderate quality functions. The loss of this area will be mitigated by planting trees and shrubs in the wetland in areas vegetated by invasive blackberries, returning it to forested condition. Also the total buffer disturbance will be the minimum necessary to create a reasonable house footprint in this site.

- h. *Whether the improvement is located away from the sensitive area and the sensitive area buffer to the greatest extent possible; and*

The improvement area is as close to 128th Ave. NE as is allowed by COK code. We will reduce this set-back if permitted. This location is the furthest possible from the wetland.

Such other information or studies as the Planning Official may reasonably require.

All information requested by the planning official has been provided.

KZC 90. 140.5 Decision Criteria

a. That no permitted type of land use for the property with less impact on the sensitive area and associated buffer is feasible and reasonable, which in a residential zone shall be one single- family dwelling and in a commercial or industrial zone shall be an office use;

This parcel is zoned residential. Therefore, one single family home is reasonable. The proposed development will not impact the onsite sensitive areas. A portion of the wetland buffer will be impacted, and a wetland enhancement mitigation plan is proposed in order to compensate for the wetland buffer impacts.

Respectfully Submitted,

Mark Heckert



February 5, 2015

David Barnes
City of Kirkland Planning and Community Development
123 – 5th Avenue
Kirkland, WA 98125

**Re: Mitigation Plan Revision Review
Gong Project Site, 9105 – 128th Avenue NE**

Dear David:

This letter presents the findings of an environmental review of the revised reasonable use proposal, buffer mitigation plan and report submitted for this project. Documents reviewed include the following:

- January 5 2015 reasonable use exception justification letter, prepared by H&S Consulting (H&S).
- January 6, 2014 Mitigation plan, prepared by H&S. This plan contains a bond quantity worksheet, an architectural site plan by Kim Architecture, and a mitigation plan drawing presumably by H&S (no author indicated)

The approved wetland rating is a Kirkland Type 2, Ecology Category II and the approved stream was rated as a Kirkland Class B, Washington State Type IV. The buffer from these features encompasses all of the remaining non-wetland portion of the site. One single-family home, garage and driveway are proposed in the buffer.

Review Findings

There are a few remaining corrections needed to the mitigation plan. These are as follows:

1. Woodchip mulch is proposed in the mitigation plan report on page 12 and this is the preferred type of mulch. However, the bond quantity worksheet lists straw mulch. The applicant should use the woodchip mulch line, doubling the quantity such that 4-inches of mulch is reflected in the bond amount (the line item uses 2-inches).
2. Seeding for erosion control is mentioned on pages 3 and 5 of the mitigation plan report. Seeding is unnecessary due to the application of mulch. Seeding, even by sterile grasses, tends to compete with installed native vegetation and should not be used on this site.

3. There are missing words in the first sentence of Objective A on page 4 of the mitigation plan report.
4. Woody debris should be salvaged from trees cleared for construction of the new home and should not be imported to the site. The mitigation plan and report should specify such salvage and re-use of woody debris.
5. Woody debris is not listed as a line item on the bond quantity worksheet. Since it will be salvaged on-site, there are no materials costs. However, the applicant should ensure the labor cost of positioning the woody debris is included.
6. Item 4 on page 4 mentions fencing of the remaining buffer area "where applicable." This should be defined to mean between the upland boundary of the remaining buffer and the developed portion of the site. This is consistent with KZC 90.50 and the mitigation plan drawing.
7. The mitigation plan and report should both contain the following language:
Wetland, stream and buffer vegetation cleared or otherwise damaged during the installation of the mitigation plan, including damage caused by installation of woody debris, shall be revegetated with appropriate native plants installed at an appropriate density to restore the damaged condition. These plants shall be subject to the same performance standards indicated in the mitigation plan.

Clarification and incorporation of the above comments will bring the plan into conformance with the Kirkland Zoning Code.

Please call if you have any questions or if I can provide you with any additional information.

Sincerely,



Hugh Mortensen, PWS
Principal

CHAPTER 15 – LOW DENSITY RESIDENTIAL ZONES (RS, RSX, RSA, WD II, PLA 3C, PLA 6C, PLA 6E, PLA 16)

Sections:

- 15.05 User Guide
 - 15.05.010 Applicable Zones
 - 15.05.020 Common Code References
- 15.10 General Regulations
 - 15.10.010 All Low Density Residential Zones
 - 15.10.020 RS Zone
 - 15.10.030 RSA Zone
 - 15.10.040 WD II Zone
 - 15.10.050 PLA 3C Zone

- 15.20 Permitted Uses
- 15.30 Density/Dimensions
- 15.40 Development Standards

15.05 User Guide

- Step 1. Check that the zone of interest is included in KZC 15.05.010, Applicable Zones. If not, select the chapter where it is located.
- Step 2. Refer to KZC 15.05.020, Common Code References, for relevant information found elsewhere in the code.
- Step 3. Refer to the General Regulations in KZC 15.10 that apply to the zones as noted.
- Step 4. Find the Use of interest in the Permitted Uses Table in KZC 15.20 and read across to the column pertaining to the zone of interest. If a Use is not listed in the table, it is not allowed. A listed use is permitted unless “NP” (Not Permitted) is noted for the table. Note the Required Review Process and Special Regulations that are applicable. There are links to the Special Regulations listed immediately following the table (PU-1, PU-2, PU-3, etc.).
- Step 5. Find the Use of interest in the Density/Dimensions Table in KZC 15.30 and read across the columns. Note the standards (Minimum Lot Size, Required Yards, Maximum Lot Coverage, and Maximum Height of Structure) and Special Regulations that are applicable. There are links to the Special Regulations listed immediately following the table (DD-1, DD-2, DD-3, etc.).
- Step 6. Find the Use of interest in the Development Standards Table in KZC 15.40 and read across the columns. Note the standards (Landscape Category, Sign Category, and Required Parking Spaces) and Special Regulations that are applicable. There are links to the Special Regulations listed immediately following the table (DS-1, DS-2, DS-3, etc.).

Note: Not all uses listed in the Density/Dimensions and Development Standards Tables are permitted in each zone addressed in this chapter. Permitted uses are determined only by the Permitted Uses Table.

15.10

15.05.010 Applicable Zones

This chapter contains the regulations for uses in the following zones of the City: RS 35, RS 12.5, RS 8.5, RS 7.2, RS 6.3 and RS 5.0; RSX 35, RSX 12.5, RSX 8.5, RSX 7.2 and RSX 5.0 zones; RSA 1, RSA 4, RSA 6 and RSA 8 zones; WD II zones; PLA 3C, PLA 6C and 6E, and PLA 16 zones.

15.05.020 Common Code References

1. Refer to Chapter 1 KZC to determine what other provisions of this code may apply to the subject property.
2. Public park development standards will be determined on a case-by-case basis. See KZC 45.50.
3. For properties within the Holmes Point (HP) Overlay Zone, see Chapter 70 KZC for additional regulations.
4. Review processes, density/dimensions and development standards for shoreline uses (RS, RSA, WD II, PLA 3C zones) can be found in Chapter 83 KZC, Shoreline Management.
5. Chapter 115 KZC contains regulations regarding home occupations and other accessory uses, facilities and activities associated with Attached Dwelling Units in PLA 3C and Detached Dwelling Unit uses.
6. A hazardous liquid pipeline is located near the RSX 35 zone in the Bridle Trails neighborhood along the eastern boundary of the City, and extends through or near the RSA 1, 4, 6 and 8 zones in the vicinity of 136th Avenue NE. Refer to Chapter 118 KZC for regulations pertaining to properties near hazardous liquid pipelines.
7. Garages shall comply with the requirements of KZC 115.43. These requirements are not effective within the disapproval jurisdiction of the Houghton Community Council.

(Ord. 4476 § 2, 2015)

15.10 General Regulations

15.10.010 All Low Density Residential Zones

1. Structures located within 30 feet of a parcel in a low density zone or a low density use in PLA 17 shall comply with additional limitations on structure size established by KZC 115.136, except for the following uses: KZC 15.20.060, Detached Dwelling Unit, and KZC 15.20.100, Piers, Docks, Boat Lifts and Canopies Serving Detached Dwelling Unit.

15.10.020 RS Zone

1. May not use lands waterward of the ordinary high water mark to determine lot size or to calculate allowable density.

Kirkland Zoning Code

15.10.030 RSA Zone

1. All subdivisions and short subdivisions in the RSA 1 zone shall be clustered such that development is located away from critical areas. The open space resulting from such clustering shall be placed in a separate tract that includes at least 50 percent of the subject property. Open space tracts shall be permanent and shall be dedicated to a homeowner's association or other suitable organization for purposes of maintenance. Passive recreation, with no development of recreational facilities, and natural-surface pedestrian and equestrian trails are acceptable uses within the open space tract. If access to the open space is provided, the access shall be located in a separate tract. A greenbelt protection or open space easement shall be dedicated to the City to protect the designated open space tract resulting from lot clustering.
2. May not use lands waterward of the ordinary high water mark to determine lot size or to calculate allowable density.

15.10.040 WD II Zone

1. May not use lands waterward of the ordinary high water mark to determine lot size or to calculate allowable density.
2. The required yard abutting an unopened right-of-way shall be a side property rather than a front property line.
3. The required rear yard for each use shall be the same as the required rear yard for the same use in the RS zone, unless otherwise specified in KZC 30.25.010(9) and (10). (Does not apply to Piers, Docks, Boat Lifts and Canopies Serving Detached Dwelling Unit.)
4. Residential uses abutting Lake Washington may have an associated private shoreline park that is commonly owned and used by residents and guests.

15.10.050 PLA 3C Zone

1. Development shall be subject to the following development standards:
 - a. Structures must be clustered and located so that they will not significantly impact slope stability, drainage patterns, erosion or landslide hazards, and steep ravine areas on the subject property or adjacent property.
 - b. Vegetative cover shall be retained to the maximum extent possible to stabilize slopes.
 - c. Pursuant to the requirements of KZC 85.15(1) through (4), the applicant shall submit a geotechnical report prepared by a qualified geotechnical engineer evaluating the potential geologic hazard areas of the subject and adjacent properties to minimize damage to life and property. Specific structural designs and construction techniques to ensure long-term stability shall be considered as part of the analysis. The applicant's geotechnical report and recommendations shall be reviewed by a qualified geotechnical engineer selected and retained by the City at the applicant's expense. The applicant shall comply with the performance standards contained in KZC 85.25 and 85.45.

15.20

- d. The City may require traffic control devices, shared access points, right-of-way realignment, or limit development if necessary to further reduce traffic impacts.
- e. Development must ensure that the City has the ability to access and provide necessary emergency services.

(Ord. 4476 § 2, 2015)

15.20 Permitted Uses

Permitted Uses Table – Low Density Residential Zones (RS, RSX, RSA, WD II, PLA 3C, PLA 6C, PLA 6E, PLA 16)
(See also KZC 15.30, Density/Dimensions Table, and KZC 15.40, Development Standards Table)

Use		Required Review Process:							
		I = Process I, Chapter 145 KZC IIA = Process IIA Chapter 150 KZC				IIB = Process IIB, Chapter 152 KZC None = No Required Review Process			
		NP = Use Not Permitted # = Applicable Special Regulations (listed after the table)							
		RS	RSX	RSA	WD II	PLA 3C	PLA 6C	PLA 6E	PLA 16
15.20.010	Attached Dwelling Units	NP	NP	NP	NP	I 1	NP	NP	NP
15.20.020	Church	2, 3, 4c	2, 4c	2, 4c, 13	NP	IIA 4c	2, 4c	2, 4c	IIA
15.20.030	Commercial Equestrian Facility	NP	NP	NP	NP	NP	NP	NP	IIB 5
15.20.040	Commercial Recreation Area and Use	NP	NP	NP	NP	NP	NP	NP	IIB 6
15.20.050	Community Facility	2, 3, 4b	2, 4b	2, 4b	IIA 4b	IIA 4b	2	2	IIA
15.20.060	Detached Dwelling Unit	None	None	None 8, 9	None 8, 11	None	None 8	None 8	None 7, 8
15.20.070	Golf Course	IIA 4b, 12	IIA 4b, 12	IIA 4b, 12, 13	NP	NP	NP	NP	NP

Permitted Uses Table – Low Density Residential Zones (RS, RSX, RSA, WD II, PLA 3C, PLA 6C, PLA 6E, PLA 16) (Continued)
 (See also KZC 15.30, Density/Dimensions Table, and KZC 15.40, Development Standards Table)

Use		Required Review Process:							
		RS	RSX	RSA	WD II	PLA 3C	PLA 6C	PLA 6E	PLA 16
		I = Process I, Chapter 145 KZC IIA = Process IIA Chapter 150 KZC IIB = Process IIB, Chapter 152 KZC None = No Required Review Process NP = Use Not Permitted # = Applicable Special Regulations (listed after the table)							
15.20.080	Government Facility	2, 3, 4b	2, 4b	2, 4b	IIA 4b	IIA 4b	2	2	IIA
15.20.090	Mini-School or Mini-Day-Care Center	I 4a, 4b, 14, 15, 16, 18	I 4a, 4b, 14, 15, 16, 18	I 4a, 4b, 13, 14, 15, 16, 18	NP	I 4a, 4b, 14, 15, 16, 18	I 15, 16, 17, 18, 19	None 15, 16, 17, 18, 19	None 15, 16, 17, 18, 19
15.20.100	Piers, Docks, Boat Lifts and Canopies Serving Detached Dwelling Unit	NP	NP	I 10	10	NP	NP	NP	NP
15.20.110	Public Park	Development standards will be determined on a case-by-case basis. See KZC 45.50.							
15.20.120	Public Utility	2, 3, 4b	2, 4b	2, 4b	IIA 4b	IIA 4b	2	2	IIA
15.20.130	School or Day-Care Center	2, 3, 4, 14, 16, 18, 20	2, 4, 14, 16, 18, 20	2, 4, 13, 14, 16, 18, 20	NP	IIA 4, 14, 16, 18, 20	2, 4, 14, 16, 18, 20	2, 4, 14, 16, 18, 20	IIA 16, 17, 18, 19, 20

Permitted Uses (PU) Special Regulations:

- PU-1. a. No more than two units may be attached to each other.
 b. Attached dwelling units must be designed to look like a detached single-family house using such techniques as limiting the points of entry on each facade, providing pitched roofs and covered porches.
- PU-2. The required review process is as follows:
 a. If the subject property, including all contiguous property owned by the applicant and held by others for future use by the applicant, is less than five acres, the required review process is Process IIA, Chapter 150 KZC.

15.20

- b. If the subject property, including all contiguous property owned by the applicant and held by others for future use by the applicant, is five or more acres, a Master Plan, approved through Process IIB, Chapter 152 KZC, is required. The Master Plan must show building placement, building dimensions, roadways, utility locations, land uses within the Master Plan area, parking location, buffering, and landscaping.
- PU-3. Within the disapproval jurisdiction of the Houghton Municipal Corporation, the required review process is Process IIB, Chapter 152 KZC.
- PU-4. May locate on the subject property only if:
- a. It will not be materially detrimental to the character of the neighborhood in which it is located.
 - b. Site and building design minimizes adverse impacts on surrounding residential neighborhoods.
 - c. The property is served by a collector or arterial street (does not apply to existing school sites).
- PU-5.
- a. This use may include arenas, stables, roaming and grazing areas, club house and ancillary equestrian facilities.
 - b. This use must comply with KZC 80.30 through 80.45.
 - c. An improved public equestrian access trail through the subject property and appropriate public signing must be provided. The trail must be located and designed to allow for an eventual connection between NE 60th Street and Bridle Trails State and King County Parks.
- PU-6.
- a. This use may include activities such as: indoor and outdoor tennis courts, club house, swimming pool, other sport court games and ancillary commercial recreation activities.
 - b. Hours of operation may be limited by the City to reduce impacts on residential uses.
 - c. Vehicular and pedestrian circulation to and from the property shall be coordinated with the other properties in the vicinity to the maximum extent possible.
- PU-7. If lot size is less than 35,000 square feet, then Process IIB, Chapter 152 KZC.
- PU-8. For this use, only one dwelling unit may be on each lot regardless of the size of the lot.
- PU-9. Residential uses abutting Lake Washington may have an associated private shoreline park that is commonly or individually owned and used by residents and guests.
- PU-10. See Chapter 141 KZC for additional procedural requirements in addition to those in Chapter 145 KZC.
- PU-11. At the northern terminus of the 5th Avenue West vehicular access easement, the average parcel depth shall be measured from the ordinary high water mark to the public pedestrian access easement: providing access to Waverly Beach Park.
- PU-12.
- a. May not include miniature golf.
 - b. The following accessory uses are specifically permitted as part of this use.
 - 1) Equipment storage facilities.
 - 2) Retail sales and rental of golf equipment and accessories.
 - 3) A restaurant.
- PU-13. This use is not permitted on properties within the jurisdiction of the Shoreline Management Act.

Kirkland Zoning Code

- PU-14. Hours of operation and maximum number of attendees may be limited by the City to reduce impacts on nearby residential uses.
- PU-15. Structured play areas must be set back from all property lines by five feet.
- PU-16. May include accessory living facilities for staff persons.
- PU-17. May locate on the subject property if:
- It will serve the immediate neighborhood in which it is located; or
 - It will not be materially detrimental to the character of the neighborhood in which it is located.
- PU-18. A six-foot-high fence is required along the property lines adjacent to the outside play areas.
- PU-19. Hours of operation may be limited by the City to reduce impacts on nearby residential uses.
- PU-20. Structured play areas must be set back from all property lines as follows:
- Twenty feet if this use can accommodate 50 or more students or children.
 - Ten feet if this use can accommodate 13 to 49 students or children.

(Ord. 4476 § 2, 2015)

15.30 Density/Dimensions

Density/Dimensions Table – Low Density Residential Zones (RS, RSX, RSA, WD II, PLA 3C, PLA 6C, PLA 6E, PLA 16)
 (Refer to KZC 15.20, Permitted Uses Table, to determine if a use is allowed in the zone; see also KZC 15.40, Development Standards Table)

Use	Minimum Lot Size	REQUIRED YARDS ¹ (See Ch. 115 KZC)			Maximum Lot Coverage	Maximum Height of Structure ABE = Average Building Elevation
		Front	Side	Rear		
15.30.010 Attached Dwelling Units	2, 3	20' ⁴	10' ⁵	10' ⁵	50%	25' above ABE.
15.30.020 Church	RS, RSX, RSA: ⁷ PLA 3C: 12,500 sq. ft. PLA 6C: 8,500 sq. ft. PLA 6E: 7,200 sq. ft. PLA 16: 35,000 sq. ft.	20'	20'	20'	70% RSA: 70% ⁶ PLA 3C: 50%	RS, PLA 3C, PLA 6C, PLA 6E: 25' above ABE. RSX, RSA, PLA 16: 30' above ABE.
15.30.030 Commercial Equestrian Facility	3 acres	20'	20'	20'	80%	^{8a}
15.30.040 Commercial Recreation Area and Use	1 acre	20'	20'	20'	80%	38' above ABE. ^{8a, b}

15.30

Density/Dimensions Table – Low Density Residential Zones (RS, RSX, RSA, WD II, PLA 3C, PLA 6C, PLA 6E, PLA 16)
(Refer to KZC 15.20, Permitted Uses Table, to determine if a use is allowed in the zone; see also KZC 15.40, Development Standards Table)

Use	Minimum Lot Size	REQUIRED YARDS ¹ (See Ch. 115 KZC)			Maximum Lot Coverage	Maximum Height of Structure ABE = Average Building Elevation	
		Front	Side	Rear			
15.30.050	Community Facility	None	20'	10' WD II: ⁹	10'	70% RSA: 70% ⁶ PLA 3C: 50% RS, WD II, PLA 3C, PLA 6C, PLA 6E: 25' above ABE. RSA, RSX, PLA 16: 30' above ABE.	
			WD II: 10'				
15.30.060	Detached Dwelling Unit	RS, RSX: 11, 12, 13 RSA: 11, 17, 18, 19 WD II: 12,500 sq. ft. ²³ PLA 3C: 12,500 sq. ft. ^{2, 27} PLA 6C, PLA 6E: 5,000 sq. ft. ²⁸ PLA 16: 35,000 sq. ft. ^{13, 29, 30}	RS: 20' ^{14, 16} RSX: 20' ^{15, 16} RSA: 20' ^{15, 16, 20} WD II: 14, 22, 32 PLA 3C, PLA 6C, PLA 6E, PLA 16: 20' ⁴	5'/15' ⁹ RSX: 5' ¹⁵ RSA: 5' WD II: 24'	10' RS, RSX: 10' ¹⁶	50% RSA: 50% ⁶ RS, PLA 3C, PLA 6C, PLA 6E: 25' above ABE. RSX, PLA 16: 30' above ABE. RSA: 30' above ABE. ²¹ WD II: 25' above ABE. ^{25, 26}	
15.30.070	Golf Course	1 acre	50'	50'	50'	50% RSA: 50% ⁶ RS: 25' above ABE. RSA, RSX: 30' above ABE.	
15.30.080	Government Facility	None	20'	10' WD II: 5'/15' ⁹	10'	70% RSA: 70% ⁶ PLA 3C: 50% RS, WD II, PLA 3C, PLA 6C, PLA 6E: 25' above ABE. RSA, RSX, PLA 16: 30' above ABE.	
			WD II: 10'				
15.30.090	Mini-School or Mini-Day-Care Center	RS, RSX, RSA: 7 PLA 3C: 12,500 sq. ft. PLA 6C: 5,000 sq. ft. PLA 6E: 3,600 sq. ft. PLA 16: 35,000 sq. ft.	20'	5'/15' ⁹	10' PLA 3C: 20'	50% RSA: 50% ⁶ PLA 6E: 60% RS, PLA 3C, PLA 6C, PLA 6E: 25' above ABE. RSX, RSA, PLA 16: 30' above ABE.	
15.30.100	Piers, Docks, Boat Lifts and Canopies Serving Detached Dwelling Unit	None	See Chapter 83 KZC.			–	See Chapter 83 KZC.
15.30.110	Public Park	Development standards will be determined on a case-by-case basis.					

Density/Dimensions Table – Low Density Residential Zones (RS, RSX, RSA, WD II, PLA 3C, PLA 6C, PLA 6E, PLA 16)
 (Refer to KZC 15.20, Permitted Uses Table, to determine if a use is allowed in the zone; see also KZC 15.40, Development Standards Table)

	Use	Minimum Lot Size	REQUIRED YARDS ¹ (See Ch. 115 KZC)			Maximum Lot Coverage	Maximum Height of Structure ABE = Average Building Elevation
			Front	Side	Rear		
15.30.120	Public Utility	None	20'	20' WD II: 5'/15' ⁹	20'	70% RSA: 70% ⁶ PLA 3C: 50%	RS, WD II, PLA 3C, PLA 6C, PLA 6E: 25' above ABE. RSA, RSX, PLA 16: 30' above ABE.
			WD II: ¹⁰				
15.30.130	School or Day-Care Center	RS, RSX, RSA: ⁷ PLA 3C: 12,500 sq. ft. PLA 6C: 8,500 sq. ft. PLA 6E: 7,200 sq. ft. PLA 16: 35,000 sq. ft.	If this use can accommodate 50 or more students or children, then:			70% RSA: 70% ⁶ PLA 3C: 50%	RS: 25' above ABE. ³¹ RSX, RSA, PLA 16: 30' above ABE. ³¹ PLA 3C: 25' above ABE. ⁶ PLA 6C, PLA 6E: 25' above ABE. ³¹
		50'	50'	50'			
		If this use can accommodate 13 to 49 students or children, then:					
			20'	20'	20'		

Density/Dimensions (DD) Special Regulations:

- DD-1. In the WD II zone, for shoreline setbacks see Chapter 83 KZC.
- DD-2. a. Maximum dwelling units per acre is six dwelling units. Not more than one dwelling unit may be on each lot regardless of the size of the lot.
 b. Within a subdivision or short plat the minimum lot size is 5,000 square feet.
 c. Road dedication and vehicular access easements or tracts may not be included in the density calculation or in the minimum lot size per dwelling unit.
- DD-3. For lots containing less than 7,200 square feet, the floor area ratio (F.A.R.) requirements of KZC 115.42 shall apply. The maximum floor area ratio is 50 percent of the lot size; provided, that F.A.R. may be increased to 60 percent if the primary roof form of all structures on the site is peaked with a minimum pitch of four feet vertical to 12 feet horizontal.
 See KZC 115.42, Floor Area Ratio (F.A.R.) Calculation for Detached Dwelling Units in Low Density Residential Zones, for additional information.
- DD-4. On corner lots with two required front yards, one may be reduced to the average of the front yards for the two adjoining properties fronting the same street as the front yard to be reduced. The applicant may select which front yard will be reduced (see Plate 24).
- DD-5. The side or rear yard may be reduced to zero feet if the side or rear of the dwelling unit is attached to a dwelling unit on an adjoining lot within the short plat or subdivision.
- DD-6. Except 30 percent for RSA 1 zone. See RSA General Regulation 1 (KZC 15.10.030(1)) and KZC 15.05.020(3).

15.30

- DD-7. As established on the Zoning Map. Minimum lot size is as follows:
- a. In RS 35 and RSX 35 zones, the minimum lot size is 35,000 square feet.
 - b. In RS 12.5 and RSX 12.5 zones, the minimum lot size is 12,500 square feet.
 - c. In RS 8.5 and RSX 8.5 zones, the minimum lot size is 8,500 square feet.
 - d. In RS 7.2 and RSX 7.2 zones, the minimum lot size is 7,200 square feet.
 - e. In RS 6.3 zones, the minimum lot size is 6,300 square feet.
 - f. In RS 5.0 and RSX 5.0 zones, the minimum lot size is 5,000 square feet.
 - g. In RSA 1 zones, newly platted lots shall be clustered and configured in a manner to provide generally equal sized lots outside of the required open space area.
 - h. In RSA 4 zones, the minimum lot size is 7,600 square feet.
 - i. In RSA 6 zones, the minimum lot size is 5,100 square feet.
 - j. In RSA 8 zones, the minimum lot size is 3,800 square feet.
- DD-8. a. Structures exceeding 25 feet above average building elevation must have the ground floor placed below existing grade to the extent possible and screened by a vegetative earthen berm.
- b. Structures can be placed at existing grade if the structures are located on lower ground than adjacent properties and if the adjacent properties are developed and do not contain residential use
- DD-9. Five feet, but two side yards must equal at least 15 feet.
- DD-10. The dimension of any required yard, other than as specifically listed, will be determined on a case-by-case basis. The City will use the setback for this use in RS zones as a guide.
- DD-11. As established on the Zoning Map. Minimum lot size per dwelling unit is as follows:
- a. In RS 35 and RSX 35 zones, the minimum lot size is 35,000 square feet.
 - b. In RS 12.5 zones, the minimum lot size is 12,500 square feet.
 - c. In RS 8.5 and RSX 8.5 zones, the minimum lot size is 8,500 square feet.
 - d. In RS 7.2 and RSX 7.2 zones, the minimum lot size is 7,200 square feet.
 - e. In RS 6.3 zones, the minimum lot size is 6,300 square feet.
 - f. In RS 5.0 and RSX 5.0 zones, the minimum lot size is 5,000 square feet.
 - g. In RS 35, RSX 35, RS 12.5, RS 8.5, RSX 8.5, RS 7.2, RSX 7.2, RS 6.3, RS 5.0 and RSX 5.0 zones, not more than one dwelling unit may be on each lot, regardless of the size of each lot.
 - h. In RSA 1 zones, newly platted lots shall be clustered and configured in a manner to provide generally equal sized lots outside of the required open space area.
 - i. In RSA 4 zones, the minimum lot size is 7,600 square feet.
 - j. In RSA 6 zones, the minimum lot size is 5,100 square feet.
 - k. In RSA 8 zones, the minimum lot size is 3,800 square feet.
- DD-12. Floor Area Ratio (F.A.R.) allowed for the subject property is as follows:
- a. In RS 35 and RSX 35 zones, F.A.R. is 20 percent of lot size.

- b. In RS 12.5 and RSX 12.5 zones, F.A.R. is 35 percent of lot size.
- c. In RS 8.5 and RSX 8.5 zones, F.A.R. is 50 percent of lot size.
- d. In RS 7.2 and RSX 7.2 zones, F.A.R. is 50 percent of lot size.
- e. In RS 6.3 zones, F.A.R. is 50 percent of lot size.
- f. In RS 5.0 and RSX 5.0 zones, F.A.R. is 50 percent of lot size; provided, that F.A.R. may be increased up to 60 percent of lot size for the first 5,000 square feet of lot area if the following criteria are met:
 - 1) The primary roof form of all structures on the site is peaked, with a minimum pitch of four feet vertical: 12 feet horizontal; and
 - 2) A setback of at least 7.5 feet is provided along each side yard.
 See KZC 115.42, Floor Area Ratio (F.A.R.) Calculation for Detached Dwelling Units in Low Density Residential Zones, for additional information.
 A reduced F.A.R. may be required pursuant to subdivision design requirements in Chapter 22.28 KMC.

Not effective within the disapproval jurisdiction of the Houghton Community Council.

- DD-13. Residential lots in the RS 35, RSX 35 and PLA 16 zones within the Bridle Trails neighborhood north and northeast of Bridle Trails State Park must contain a minimum area of 10,000 permeable square feet, and shall comply with regulations for horses in KZC 115.20(5).
- DD-14. On corner lots with two required front yards, one may be reduced to the average of the front yards for the two adjoining properties fronting the same street as the front yard to be reduced. The applicant may select which front yard will be reduced (see Plate 24).
- DD-15. On corner lots, only one front yard must be a minimum of 20 feet. All other front yards shall be regulated as a side yard (minimum five-foot yard). The applicant may select which front yard shall meet the 20-foot requirement.
- DD-16. On lots with two front yards that are essentially parallel to one another, only one front yard must be a minimum of 20 feet. The other will be regulated as a rear yard (minimum 10 feet). The front yard shall be the yard adjacent to the front facade of the dwelling unit.
- DD-17. Maximum units per acre is as follows:
 - a. In RSA 1 zones, the maximum units per acre is one dwelling unit.
 - b. In RSA 4 zones, the maximum units per acre is four dwelling units.
 - c. In RSA 6 zones, the maximum units per acre is six dwelling units.
 - d. In RSA 8 zones, the maximum units per acre is eight dwelling units.
 Where the maximum number of units results in a fraction, the number shall be rounded up if the fraction is 0.50 or greater. In RSA 1, 4, 6 and 8 zones, not more than one dwelling unit may be on each lot, regardless of the size of the lot.
- DD-18. Road dedication and vehicular access easements or tracts may be included in the density calculation, but not in the minimum lot size per dwelling unit.
- DD-19. Floor Area Ratio (F.A.R.) allowed for the subject property is as follows:
 - a. In RSA 1 zones, F.A.R. is 20 percent of lot size.
 - b. In RSA 4 zones, F.A.R. is 50 percent of lot size.
 - c. In RSA 6 zones, F.A.R. is 50 percent of lot size.



REASONABLE USE COVENANT

<i>File Number(s):</i>	_____
<i>Building Permit Number(s):</i>	_____
<i>Project Name:</i>	_____
<i>Project Address:</i>	_____

Declarants Insert Names hereby declares and agrees as follows:

1. Declarant is the owner of the real property described below in the legal description, which is referred to as the "Property" in this Covenant.
2. The total approved site disturbance area for the above-referenced project ("Project") is 3,000 square feet. The total approved site disturbance area may not be increased and site disturbances in areas not approved by the Project are prohibited.
3. The footprint of the residence associated with the Project may not be enlarged.
4. The floor area of the residence associated with the Project may not be enlarged.
5. Structures and improvements shall not encroach into the 5 foot building setbacks from the approved site disturbance area along the east and south sides of the residence, with the exception of eaves.
6. This Covenant is binding on all owners of the Property described below and their heirs, successors and assigns. This Covenant shall run with the land described as follows:

LEGAL DESCRIPTION:

Exhibit A ("the Properties")

(Sign in blue ink)

(Individuals Only)

OWNER(S) OF REAL PROPERTY (INCLUDING SPOUSE)

(Individuals Only)

STATE OF WASHINGTON)

) SS.

County of King)

On this ____ day of _____, _____, before me, the undersigned, a Notary Public in and for the State of Washington, duly commissioned and sworn, personally appeared _____ and _____

_____ to me known to be the individual(s) described herein and who executed the Reasonable Use Covenant and acknowledged that _____ signed the same as _____ free and voluntary act and deed, for the uses and purposes therein mentioned.

WITNESS my hand and official seal hereto affixed the day and year first above written.

Notary's Signature

Print Notary's Name
Notary Public in and for the State of Washington,
Residing at: _____
My commission expires: _____

(Corporations Only)

OWNER(S) OF REAL PROPERTY

(Name of Corporation)

By President

By Secretary

(Corporations Only)

STATE OF WASHINGTON }
County of King } SS.

On this _____ day of _____, _____, before me, the undersigned, a Notary Public in and for the State of Washington, duly commissioned and sworn, personally appeared _____ and _____

_____ to me, known to be the President and Secretary, respectively, of _____, the corporation that executed the Reasonable Use Covenant and acknowledged the said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein set forth, and on oath stated that they were authorized to sign said instrument and that the seal affixed is the corporate seal of said corporation.

WITNESS my hand and official seal hereto affixed the day and year first above written.

Notary's Signature

Print Notary's Name
Notary Public in and for the State of Washington,
Residing at: _____
My commission expires: _____

NATURAL GREENBELT PROTECTIVE EASEMENT

Grantor: _____, owner of the hereinafter described real property, hereby grants to

Grantee: The City of Kirkland, a municipal corporation.

A natural greenbelt protective easement over and across the following described real property to wit ("Easement Area"):

No tree trimming, tree topping, tree cutting, tree removal, shrub or brush-cutting or removal of native vegetation, application of pesticides, herbicides, or fertilizers; construction; clearing; or alteration activities shall occur within the Easement Area without prior written approval from the City of Kirkland. Application for such written approval to be made to the Kirkland Department of Planning and Community Development who may require inspection of the premises before issuance of the written approval and following completion of the activities. Any person conducting or authorizing such activity in violation of this paragraph or the terms of any written approval issued pursuant hereto, shall be subject to the enforcement provisions of Chapter 1.12, Kirkland Municipal Code. In such event, the Kirkland Department of Planning and Community Development may also require within the immediate vicinity of any damaged or fallen vegetation, restoration of the affected area by planting replacement trees and other vegetation as required in applicable sections of the Kirkland Zoning Code. The Department also may require that the damaged or fallen vegetation be removed.

It is the responsibility of the property owner to maintain critical areas and their buffers by removing non-native, invasive, and noxious plants in a manner that will not harm critical areas or their buffers and in accordance with Kirkland Zoning Code requirements for trees and other vegetation within critical areas and critical area buffers.

The City shall have a license to enter the Easement Area (and the property if necessary for access to the Easement Area) for the purpose of monitoring compliance with the terms of this easement.

Development outside of this Natural Greenbelt Protective Easement may be limited by codified standards, permit conditions, or movement of the critical area.

Each of the undersigned owners agree to defend, pay, and save harmless the City of Kirkland, its officers, agents, and employees from any and all claims of every nature whatsoever, real or imaginary, which may be made against the City, its officers, agents, or employees for any damage to property or injury to any person arising out of the existence of said Natural Greenbelt Protective Easement over said owner's property or the actions of the undersigned owners in carrying out the responsibilities under this agreement, including all costs and expenses, and recover attorney's fees as may be incurred by the City of Kirkland in defense thereof; excepting therefrom only such claims as may arise solely out of the negligence of the City of Kirkland, its officers, agents, or employees.

This easement is given to satisfy a condition of the development permit approved by the City of Kirkland under Kirkland File/Permit No. _____, for construction of _____ upon the following described real property:

This easement shall be binding upon the parties hereto, their successors and assigns, and shall run with the land.

DATED at Kirkland, Washington, this _____ day of _____, _____.

**SAVE HARMLESS AGREEMENT - WETLAND**

The undersigned, being all of the owners of the hereinafter described real property, hereby agree to indemnify, defend, and save harmless the City of Kirkland, its officers and employees from any claim, real or imaginary, filed against the City of Kirkland, its officers, or employees, alleging damage or injury caused by fault on the part of the undersigned, their employees or agents, and/or the City of Kirkland, its officers, or employees and arising out of maintenance, flooding, damming or enlargement of the wetland existing on the hereinafter described real property; provided, however, this agreement shall not include damage resulting from the sole fault of the City of Kirkland, its officers, or employees. Fault as herein used shall have the same meaning as set forth in RCW 4.22.01. This Agreement shall also include all reasonable cost and expense, including attorney's fees, incurred by the City of Kirkland in investigation and/or defense of any such claim.

This Agreement shall be binding upon the heirs, successors, and assigns of the parties hereto and shall run with the land.

The real property subject to this Agreement is situated in Kirkland, King County, Washington, and described as follows:

DATED at Kirkland, Washington, this ____ day of _____, ____.

(Sign in blue ink)

(Individuals Only)

OWNER(S) OF REAL PROPERTY (INCLUDING SPOUSE)

(Individuals Only)

STATE OF WASHINGTON)

) SS.

County of King)

On this ____ day of _____, _____, before me, the undersigned, a Notary Public in and for the State of Washington, duly commissioned and sworn, personally appeared and

_____ to me known to be the individual(s) described herein and who executed the Public Ingress and Egress Easement and acknowledged that _____ signed the

same as _____ free and voluntary act and deed, for the uses and purposes therein mentioned.

WITNESS my hand and official seal hereto affixed the day and year first above written.

Notary's Signature

Print Notary's Name

Notary Public in and for the State of Washington,

Residing at: _____

My commission expires: _____



SAVE HARMLESS AGREEMENT - STREAM

The undersigned, being all of the owners of the hereinafter described real property, hereby agree to indemnify, defend, and save harmless the City of Kirkland, its officers and employees from any claim, real or imaginary, filed against the City of Kirkland, its officers, or employees, alleging damage or injury caused by fault on the part of the undersigned, their employees or agents, and/or the City of Kirkland, its officers, or employees and arising out of maintenance, flooding, damming or enlargement of the stream existing on the hereinafter described real property; provided, however, this agreement shall not include damage resulting from the sole fault of the City of Kirkland, its officers, or employees. Fault as herein used shall have the same meaning as set forth in RCW 4.22.01. This Agreement shall also include all reasonable cost and expense, including attorney's fees, incurred by the City of Kirkland in investigation and/or defense of any such claim.

This Agreement shall be binding upon the heirs, successors, and assigns of the parties hereto and shall run with the land.

The real property subject to this Agreement is situated in Kirkland, King County, Washington, and described as follows:

See Exhibit A

DATED at Kirkland, Washington, this _____ day of _____, _____.

(Sign in blue ink)

(Individuals Only)

OWNER(S) OF REAL PROPERTY (INCLUDING SPOUSE)

(Individuals Only)

STATE OF WASHINGTON)

) SS.

County of King)

On this ____ day of _____, before me, the undersigned, a Notary Public in and for the State of Washington, duly commissioned and sworn, personally appeared and

_____ to me known to be the individual(s) described herein and who executed the Public Ingress and Egress Easement and acknowledged that _____ signed the

same as _____ free and voluntary act and deed, for the uses and purposes therein mentioned.

WITNESS my hand and official seal hereto affixed the day and year first above written.

Notary's Signature

Print Notary's Name

Notary Public in and for the State of Washington,

Residing at: _____

My commission expires: _____

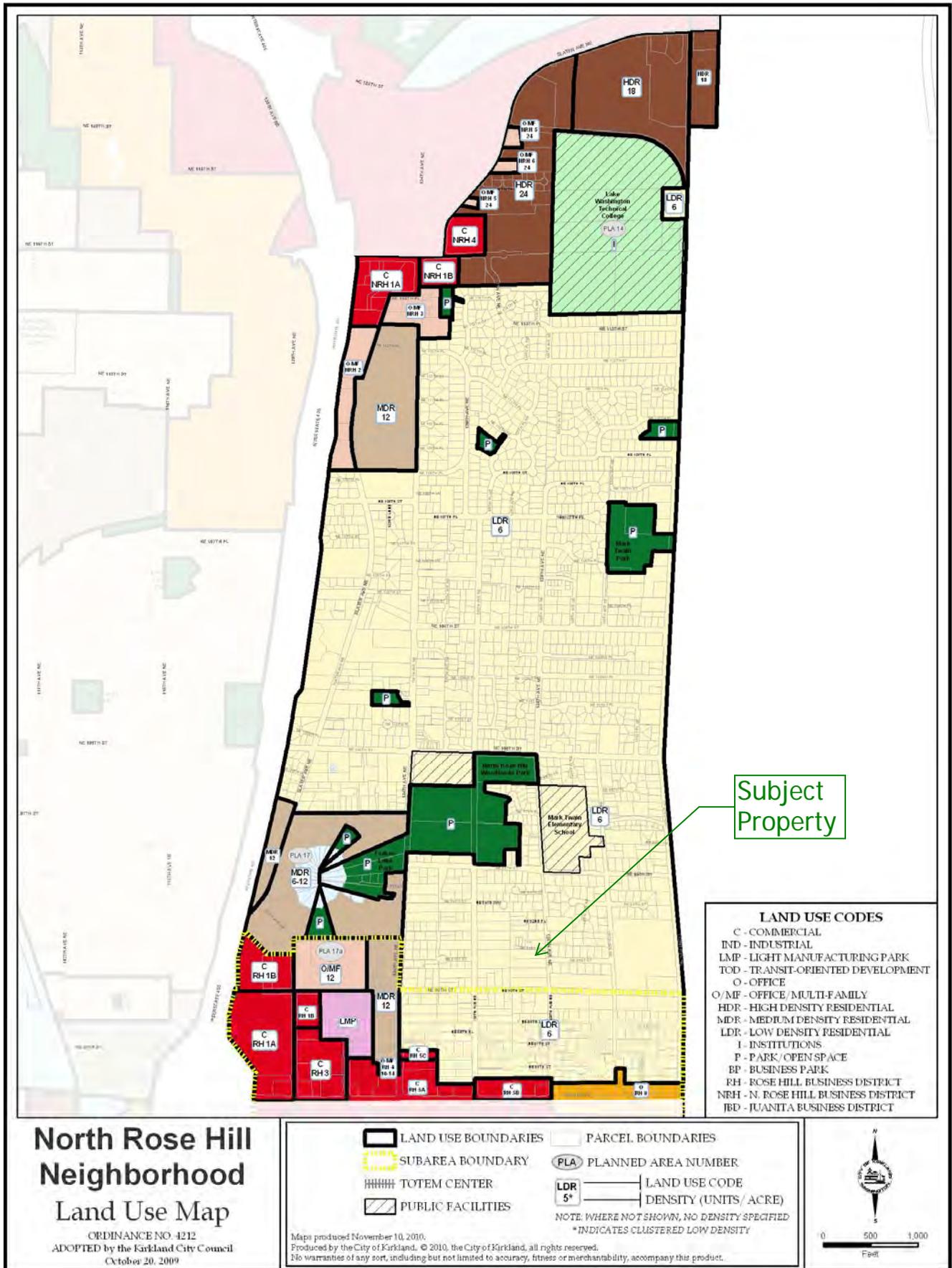


Figure NRH-4: North Rose Hill Land Use

TO: Rui Gong

JOB SITE: 9105 128th Ave NE, Kirkland, WA, 98033

SUBJECT: Tree Inventory and Assessments for Parcel #1238500350

DATE: April 22, 2013

PREPARED BY: Nicholas W. Dankers,
ISA Certified Arborist #PN-5628A
ISA Qualified Tree Risk Assessor

Contents

- Summary**
- Assignment & Scope of Report**
- Observations**
- Analysis and Testing**
- Discussion**
- Recommendations**
- Glossary**
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- Assumptions & Limiting Conditions**
- Photographs**
- Attachments: Site Photograph with Tree Numbers**
- Table of Trees**

Summary

After inspecting the trees on site, I found the majority of the trees in fair condition and growing in saturated soils. The property has wetlands within its boundaries and many of the trees are shallow-rooted.

For this property, the Kirkland Zoning Code (95.33) requires a minimum tree density of 25.3 credits; the existing trees I recommend retaining are worth 66 credits.

Assignment & Scope of Report

This report outlines the site inspection by Nicholas W. Dankers of Tree Solutions Inc. April 22, 2013. Included is a table which identifies tree species for trees shown on the site photograph. Mr. Gong requested these services to in accordance to the guidelines provided by the City of Kirkland.

Unless stated otherwise: 1) information contained in this report covers only those trees that were examined and reflects the condition of those trees at the time of inspection; and 2) the inspection is limited to visual examination of the subject trees without dissection, excavation, probing, climbing, or coring unless explicitly specified. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the subject trees may not arise in the future.

Observations

The Site

This vacant lot has an area of 36,658 square feet and includes areas of wetlands that extend to the surrounding properties. The buildable area is in the northeast corner of the property and I crossed a flowing stream to access the remainder of the site.

Signs described “Protected Wetlands” on the western side of the property, and I could not access the trees in this area due to deep mud. I could not see any significant trees greater than 6-inches in diameter on the west side of the site.

In the middle of the parcel, I found saturated soils and areas of mud. The driest soils are in the northwest corner of the site.

The Trees

The trees on site are a mixture of native species. The specific observations pertaining to individual trees are summarized in the following Table of Trees. The table includes: **Tree number** which is also indicated on the site map; **Tree species**; **Tree diameter** (measured in inches at 4.5-feet above ground level), and **Comments**.

A majority of the trees had shallow root systems. I could see pronounced buttress and lateral roots growing at ground level. This is evident in the Western hemlock (*Tsuga heterophylla*) tree #983 in the middle of the site.

Nearby, the largest conifer on site is the 30.9-inch diameter Western Red cedar (*Thuja plicata*) Tree #982.

Numerous Red alder (*Alnus rubra*) trees have corrected leans, where the trunks curved towards the vertical orientation after a past, partial failure. Many trees have dead tops and show other signs of decline.

A group of the Western Red cedar trees, #986 through #991, are growing off a single tree that had fallen over previously. Multiple shoots had since grown upwards and rooted into the ground. I noted internal decay in Tree #990.

The Big Leaf maple (*Acer macrophyllum*) trees in the northwest corner of the property are multi-trunk sprouts off old stumps. After the original trees had been cut, the numerous shoots have grown around an area of decay. I found fungal pathogens at the bases of Tree #611, #618, and #620.

I only found one significant Pacific willow (*Salix lucida*) Tree #619 within the property boundaries and there is a column of basal decay in this double-trunk individual.

Though there is a well-established understory of native plants, I found thickets of Himalayan blackberry (*Rubus armeniana*) plants on site.

Due to some of the patches of this invasive species, I could not tag Trees #994, #995, #626, and #628. These tree locations are indicated on the Site Photograph.

Tree Density Credits

The Kirkland Zoning Code (95.33) requires tree density to satisfy 30 tree credits per acre. The property at 9105 128th Ave NE is 36,658-square feet, or 0.841-acres. Therefore, a tree density worth 25.25 tree credits ($0.841 \times 30 = 25.25$) is required in order for the site to meet the City's minimum requirement.

Based on the various diameters of the retained tree on site, their values are worth 103 tree credits. Section 95.33 of the Kirkland Zoning Code describes "Tree Credits for Existing Significant Trees" in a Table 95.33.1. The existing trees on site fulfill the required tree density for this lot.

Discussion

With the wetland conditions and saturated soils on site, it will be necessary to locate these boundaries to insure the proper setbacks as required by the City of Kirkland.

The shallow root system around many of these trees require an expanded critical root zone (CRZ). On the tree inventory, I noted the limits of disturbance that consider the lean of individual trees.

A majority of the trees around the wetlands on site are good candidates for retention. I did not find any trees that present an excessive risk to the surrounding properties or infrastructure.

Despite the questionable roots of the Western Red cedar trees growing off a fallen parent, it is likely that this group will continue to root themselves into the ground. Trees #986 through #991 should be inspected every 5 years to determine their structural integrity.

In the northwest corner of the property, I determined that the multi-stem Big Leaf maple trees should not be retained. The basal decay will continue to weaken the tree as it grows. It is possible that this structural issue could lead to trunk failures in the future.

Even with the recommended removals, the remaining trees on site would represent 66 Tree Credits. This would satisfy the 25.25 required Tree Density Credits for this sized parcel.

The decay in the base of Pacific willow Tree #619 could lead to the failure of the top. At this point, this tree appears stable and is a potential source of wildlife habitat.

Himalayan blackberry is a wide-spread, invasive species that can dominate native understory plants. Though this species is limited by shade, it will continue to spread on this parcel unless the canes and rhizomes are removed.

Recommendations

1. Obtain all necessary permits and approval from City prior to the commencement of site work.
2. Determine the setbacks and buffers around the wetlands on site.
3. Near the potential building site, determine which trees to retain and delineate the Tree Protection Zone (TPZ) boundary around the drip lines of these trees.
4. Indicate trees to be removed and retained on site plans.
5. Include tree protection measures on site plans.
6. Install tree protection measures prior to heavy equipment arriving on site.
7. Mulch the area beyond the limits of disturbance with a 6-inch thick layer of wood chips.
8. Designate specific trees to remove.
9. Clear all black berry plants on site with approval from the City of Kirkland. To remove these thickets, it is critical to dig up the rhizome and roots of each plant.
10. Replant trees and native plants as required by the City of Kirkland.

I hope you find this information helpful. Please call me if I can be of further assistance.

Respectfully,

Nicholas W. Dankers, Associate Consultant, Tree Solutions, Inc.

Appendix A - Photographs



Photo 1: Trees #981 through #991 from the NW



Photo 2: Western Red Cedar Trees #981 and #982 from the W



Photo 3: Western Red Cedar Trees #986 through #991 from the W



Photo 4: Red Alder Trees #992 and #993 from the N

Appendix B - Glossary

- codominant stems:** stems or branches of nearly equal diameter, often weakly attached (Matheny *et al.* 1998)
- cracks:** defects in trees that, if severe, may pose a risk of tree or branch failure (Lilly 2001)
- crown:** the aboveground portions of a tree (Lilly 2001)
- DBH or DSH:** diameter at breast or standard height; the diameter of the trunk measured 54 inches (4.5 feet) above grade (Matheny *et al.* 1998)
- deciduous:** tree or other plant that loses its leaves sometime during the year and stays leafless generally during the cold season (Lilly 2001)
- evergreen:** tree or plant that keeps its needles or leaves year round; this means for more than one growing season (Lilly 2001)
- ISA:** International Society of Arboriculture
- included bark:** bark that becomes embedded in a crotch between branch and trunk or between codominant stems and causes a weak structure (Lilly 2001)
- lateral:** secondary or subordinate branch (Lilly 2001)
- monitoring:** keeping a close watch; performing regular checks or inspections (Lilly 2001)
- pathogen:** causal agent of disease (Lilly 2001)
- phototropic growth:** growth toward light source or stimulant (Harris *et al.* 1999)
- PNWISA:** Pacific Northwest Chapter of ISA
- significant size:** a tree measuring 6" DSH or greater
- snag:** a tree left partially standing for the primary purpose of providing habitat for wildlife
- soil structure:** the arrangement of soil particles (Lilly 2001)
- structural defects:** flaws, decay, or other faults in the trunk, branches, or root collar of a tree, which may lead to failure (Lilly 2001)
- target:** person, object, or structure that could be injured or damaged in the event of tree or branch failure (Lilly 2001)

References

ANSI A300 (Part 1) – 2008 American National Standards Institute. American National Standard for Tree Care Operations: Tree, Shrub, and Other Woody Plant Maintenance: Standard Practices (Pruning). New York: Tree Care Industry Association, 2008.

Lilly, Sharon. Arborists' Certification Study Guide. Champaign, IL: The International Society of Arboriculture, 2001.

Matheny, Nelda and James R. Clark. Trees and Development: A Technical Guide to Preservation of Trees During Land Development. Champaign, IL: International Society of Arboriculture, 1998.

Mattheck, Claus and Helge Breloer, The Body Language of Trees.: A Handbook for Failure Analysis. London: HMSO, 1994.

Appendix C - Assumptions & Limiting Conditions

1. Consultant assumes that any legal description provided to Consultant is correct and that title to property is good and marketable. Consultant assumes no responsibility for legal matters. Consultant assumes all property appraised or evaluated is free and clear, and is under responsible ownership and competent management.

2. Consultant assumes that the property and its use do not violate applicable codes, ordinances, statutes or regulations.

3. Although Consultant has taken care to obtain all information from reliable sources and to verify the data insofar as possible, Consultant does not guarantee and is not responsible for the accuracy of information provided by others.

4. Client may not require Consultant to testify or attend court by reason of any report unless mutually satisfactory contractual arrangements are made, including payment of an additional fee for such Services as described in the Consulting Arborist Agreement.

5. Unless otherwise required by law, possession of this report does not imply right of publication or use for any purpose by any person other than the person to whom it is addressed, without the prior express written consent of the Consultant.

6. Unless otherwise required by law, no part of this report shall be conveyed by any person, including the Client, the public through advertising, public relations, news, sales or other media without the Consultant's prior express written consent.

7. This report and any values expressed herein represent the opinion of the Consultant, and the Consultant's fee is in no way contingent upon the reporting of a specific value, a stipulated result, the occurrence of a subsequent event or upon any finding to be reported.

8. Sketches, drawings and photographs in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys. The reproduction of any information generated by architects, engineers or other consultants and any sketches, drawings or photographs is for the express purpose of coordination and ease of reference only. Inclusion of such information on any drawings or other documents does not constitute a representation by Consultant as to the sufficiency or accuracy of the information.

9. Unless otherwise agreed, (1) information contained in this report covers only the items examined and reflects the condition of the those items at the time of inspection; and (2) the inspection is limited to visual examination of accessible items without dissection, excavation, probing, climbing, or coring. Consultant makes no warranty or guarantee, express or implied, that the problems or deficiencies of the plans or property in question may not arise in the future.

10. Loss or alteration of any part of this Agreement invalidates the entire report.

Appendix D – Tree Protection Specification

Kirkland Tree Protection Specifications – as stated in Chapter 95.34 of KZC

6. Tree Protection during Development Activity. Prior to development activity or initiating tree removal on the site, vegetated areas and individual trees to be preserved shall be protected from potentially damaging activities pursuant to the following standards:

a. Placing Materials near Trees. No person may conduct any activity within the protected area of any tree designated to remain, including, but not limited to, operating or parking equipment, placing solvents, storing building material or soil deposits, or dumping concrete washout or other chemicals. During construction, no person shall attach any object to any tree designated for protection.

b. Protective Barrier. Before development, land clearing, filling or any land alteration, the applicant shall:

1) Erect and maintain readily visible temporary protective tree fencing along the limits of disturbance which completely surrounds the protected area of all retained trees or groups of trees. Fences shall be constructed of chain link and be at least four feet high, unless other type of fencing is authorized by the Planning Official.

2) Install highly visible signs spaced no further than 15 feet along the entirety of the protective tree fence. Said sign must be approved by the Planning Official and shall state at a minimum “Tree Protection Area, Entrance Prohibited” and provide the City phone number for code enforcement to report violations.

3) Prohibit excavation or compaction of earth or other potentially damaging activities within the barriers; provided, that the Planning Official may allow such activities approved by a qualified professional and under the supervision of a qualified professional retained and paid for by the applicant.

4) Maintain the protective barriers in place until the Planning Official authorizes their removal.

5) Ensure that any approved landscaping done in the protected zone subsequent to the removal of the barriers shall be accomplished with light machinery or hand labor.

6) In addition to the above, the Planning Official may require the following:

a) If equipment is authorized to operate within the critical root zone, cover the areas adjoining the critical root zone of a tree with mulch to a depth of at least six inches or with plywood or similar material in order to protect roots from damage caused by heavy equipment.

b) Minimize root damage by excavating a two-foot-deep trench, at edge of critical root zone, to cleanly sever the roots of trees to be retained.

c) Corrective pruning performed on protected trees in order to avoid damage from machinery or building activity.

d) Maintenance of trees throughout construction period by watering and fertilizing.

c. Grade.

1) The grade shall not be elevated or reduced within the critical root zone of trees to be preserved without the Planning Official's authorization based on recommendations from a qualified professional. The Planning Official may allow coverage of up to one half of the area of the tree's critical root zone with light soils (no clay) to the minimum depth necessary to carry out grading or landscaping plans, if it will not imperil the survival of the tree. Aeration devices may be required to ensure the tree's survival.

2) If the grade adjacent to a preserved tree is raised such that it could slough or erode into the tree's critical root zone, it shall be permanently stabilized to prevent suffocation of the roots.

3) The applicant shall not install an impervious surface within the critical root zone of any tree to be retained without the authorization of the Planning Official. The Planning Official may require specific construction methods and/or use of aeration devices to ensure the tree's survival and to minimize the potential for root-induced damage to the impervious surface.

4) To the greatest extent practical, utility trenches shall be located outside of the critical root zone of trees to be retained. The Planning Official may require that utilities be tunneled under the roots of trees to be retained if the Planning Official determines that trenching would significantly reduce the chances of the tree's survival.

5) Trees and other vegetation to be retained shall be protected from erosion and sedimentation. Clearing operations shall be conducted so as to expose the smallest practical area of soil to erosion for the least possible time. To control erosion, it is encouraged that shrubs, ground cover and stumps be maintained on the individual lots, where feasible.

d. Directional Felling. Directional felling of trees shall be used to avoid damage to trees designated for retention.

e. Additional Requirements. The Planning Official may require additional tree protection measures that are consistent with accepted urban forestry industry practices.

Tree #	Scientific Name	Common Name	DSH (inches)	Drip Line	Condition	Limits of Disturbance				Retain	Credits	Notes
						North	South	East	West			
981	<i>Thuja plicata</i>	Western Red cedar	24.6	20	Good	20	20	20	20	Yes	8	
982	<i>Thuja plicata</i>	Western Red cedar	30.9	25	Good	25	25	25	25	Yes	11	
983	<i>Tsuga heterophylla</i>	Western hemlock	12	12	Good	12	12	12	12	Yes	2	
984	<i>Alnus rubra</i>	Red alder	18.4	20	Fair	15	15	20	15	Yes	5	Top Dieback
985	<i>Alnus rubra</i>	Red alder	15.5	17	Fair	12	12	17	12	Yes	3	Top Dieback
986	<i>Thuja plicata</i>	Western Red cedar	23.7	25	Good	25	25	25	25	Yes	7	Multiple Trunks
987	<i>Thuja plicata</i>	Western Red cedar	12.7	13	Good	13	13	13	13	Yes	2	Shoot on Fallen Tree
988	<i>Thuja plicata</i>	Western Red cedar	6.5	8	Fair	8	8	8	8	Yes	1	Shoot on Fallen Tree
989	<i>Alnus rubra</i>	Red alder	12	12	Poor	12	12	12	12	Yes	2	No tag, good habitat
990	<i>Thuja plicata</i>	Western Red cedar	13	20	Fair	20	15	15	20	Yes	2	Decay, Leaning to NW
991	<i>Thuja plicata</i>	Western Red cedar	6	10	Fair	10	6	10	6	Yes	1	Shoot on Fallen Tree
992	<i>Alnus rubra</i>	Red alder	13.6	20	Fair	14	20	14	14	Yes	2	Dead top
993	<i>Alnus rubra</i>	Red alder	7.8	8	Fair	8	8	8	15	Yes	1	Dead top
994	<i>Thuja plicata</i>	Western Red cedar	11	12	Fair	12	12	12	12	Yes	1	No tag
995	<i>Thuja plicata</i>	Western Red cedar	11.5	12	Fair	12	12	12	12	Yes	1	No tag
Additional Notes: Wet soils Nearby stream												

Table of Trees

Tree #	Scientific Name	Common Name	DSH (inches)	Drip Line	Condition	Limits of Disturbance				Retain	Credits	Notes
						North	South	East	West			
981	<i>Thuja plicata</i>	Western Red cedar	24.6	20	Good	20	20	20	20	Yes	8	
982	<i>Thuja plicata</i>	Western Red cedar	30.9	25	Good	25	25	25	25	Yes	11	
983	<i>Tsuga heterophylla</i>	Western hemlock	12	12	Good	12	12	12	12	Yes	2	
984	<i>Alnus rubra</i>	Red alder	18.4	20	Fair	15	15	20	15	Yes	5	Top Dieback
985	<i>Alnus rubra</i>	Red alder	15.5	17	Fair	12	12	17	12	Yes	3	Top Dieback
986	<i>Thuja plicata</i>	Western Red cedar	23.7	25	Good	25	25	25	25	Yes	7	Multiple Trunks
987	<i>Thuja plicata</i>	Western Red cedar	12.7	13	Good	13	13	13	13	Yes	2	Shoot on Fallen Tree
988	<i>Thuja plicata</i>	Western Red cedar	6.5	8	Fair	8	8	8	8	Yes	1	Shoot on Fallen Tree
989	<i>Alnus rubra</i>	Red alder	12	12	Poor	12	12	12	12	Yes	2	No tag, good habitat
990	<i>Thuja plicata</i>	Western Red cedar	13	20	Fair	20	15	15	20	Yes	2	Decay, Leaning to NW
991	<i>Thuja plicata</i>	Western Red cedar	6	10	Fair	10	6	10	6	Yes	1	Shoot on Fallen Tree
992	<i>Alnus rubra</i>	Red alder	13.6	20	Fair	14	20	14	14	Yes	2	Dead top
993	<i>Alnus rubra</i>	Red alder	7.8	8	Fair	8	8	8	15	Yes	1	Dead top
994	<i>Thuja plicata</i>	Western Red cedar	11	12	Fair	12	12	12	12	Yes	1	No tag
995	<i>Thuja plicata</i>	Western Red cedar	11.5	12	Fair	12	12	12	12	Yes	1	No tag
996	<i>Alnus rubra</i>	Red alder	10	15	Fair	15	10	10	15	Yes	1	Leaning NW
997	<i>Alnus rubra</i>	Red alder	6.3	12	Fair	12	7	7	7	Yes	1	Leaning N



Table of Trees

Date of Inventory 4-22-13Table Prepared 4-22-13Table Revised 5-1-13

998	<i>Alnus rubra</i>	Red alder	12	14	Fair	14	12	14	12	Yes	2	Leaning NE
999	<i>Alnus rubra</i>	Red alder	7.9	11	Fair	11	8	11	8	Yes	1	Leaning NE
1000	<i>Alnus rubra</i>	Red alder	7.5	11	Fair	11	8	11	8	Yes	1	Leaning NE
927	<i>Alnus rubra</i>	Red alder	12	16	Fair	16	12	16	12	Yes	2	Leaning NE
928	<i>Alnus rubra</i>	Red alder	6	16	Fair	16	7	7	7	Yes	1	Leaning N
929	<i>Alnus rubra</i>	Red alder	10.5	13	Fair	11	11	11	13	yes	1	2 Trunks, Leaning W
930	<i>Alnus rubra</i>	Red alder	7.5	12	Fair	12	8	12	8	Yes	1	Leaning NW
931	<i>Alnus rubra</i>	Red alder	7.5	8	Fair	8	8	8	8	Yes	1	Basal Decay
603	<i>Alnus rubra</i>	Red alder	10.8	15	Fair	11	15	11	15	Yes	1	Leaning SW
604	<i>Alnus rubra</i>	Red alder	10.5	14	Fair	11	14	11	11	Yes	1	Leaning S
607	<i>Alnus rubra</i>	Red alder	12	16	Fair	16	12	12	12	Yes	1	Leaning N
608	<i>Alnus rubra</i>	Red alder	11.5	16	Fair	12	12	16	12	Yes	1	Leaning E
609	<i>Alnus rubra</i>	Red alder	16.5	20	Good	18	20	18	18	Yes	1	Leaning S
611	<i>Acer macrophyllum</i>	Big Leaf maple	10.9	12	Poor	12	12	12	12	No	1	Stump sprout
612	<i>Alnus rubra</i>	Red alder	13.4	16	Fair	14	14	16	14	No	2	2 Trunks
618	<i>Acer macrophyllum</i>	Big Leaf maple	21	26	Poor	20	20	20	20	No	6	Stump sprout
619	<i>Salix lucida</i>	Pacific willow	9	10	Poor	10	10	10	10	No	1	Basal Decay
620	<i>Acer macrophyllum</i>	Big Leaf maple	38.2	30	Poor	30	30	30	30	No	15	Decay, stump spouts



Table of Trees

622	<i>Acer macrophyllum</i>	Big Leaf maple	9	10	Fair	10	10	10	10	No	1	
623	<i>Alnus rubra</i>	Red alder	15.5	18	Good	16	16	16	18	No	3	Leaning W
626	<i>Alnus rubra</i>	Red alder	8	18	Fair	10	10	10	18	No	1	Leaning W
627	<i>Alnus rubra</i>	Red alder	11	14	Good	11	14	11	11	No	1	Leaning S
628	<i>Alnus rubra</i>	Red alder	18.5	22	Good	22	19	19	22	No	5	Leaning NW
629	<i>Acer macrophyllum</i>	Big Leaf maple	16.5	20	Fair	20	20	20	20	No	1	

Appendix A – Site Photograph



Tree Locations for Lot at 9105 128th Ave NE, Kirkland, WA, 98033

Table of Trees

Tree #	Scientific Name	Common Name	DSH (inches)	Drip Line	Condition	Limits of Disturbance				Retain	Credits	Notes
						North	South	East	West			
981	<i>Thuja plicata</i>	Western Red cedar	24.6	20	Good	20	20	20	20	Yes	8	
982	<i>Thuja plicata</i>	Western Red cedar	30.9	25	Good	25	25	25	25	Yes	11	
983	<i>Tsuga heterophylla</i>	Western hemlock	12	12	Good	12	12	12	12	Yes	2	
984	<i>Alnus rubra</i>	Red alder	18.4	20	Fair	15	15	20	15	Yes	5	Top Dieback
985	<i>Alnus rubra</i>	Red alder	15.5	17	Fair	12	12	17	12	Yes	3	Top Dieback
986	<i>Thuja plicata</i>	Western Red cedar	23.7	25	Good	25	25	25	25	Yes	7	Multiple Trunks
987	<i>Thuja plicata</i>	Western Red cedar	12.7	13	Good	13	13	13	13	Yes	2	Shoot on Fallen Tree
988	<i>Thuja plicata</i>	Western Red cedar	6.5	8	Fair	8	8	8	8	Yes	1	Shoot on Fallen Tree
989	<i>Alnus rubra</i>	Red alder	12	12	Poor	12	12	12	12	Yes	2	No tag, good habitat
990	<i>Thuja plicata</i>	Western Red cedar	13	20	Fair	20	15	15	20	Yes	2	Decay, Leaning to NW
991	<i>Thuja plicata</i>	Western Red cedar	6	10	Fair	10	6	10	6	Yes	1	Shoot on Fallen Tree
992	<i>Alnus rubra</i>	Red alder	13.6	20	Fair	14	20	14	14	Yes	2	Dead top
993	<i>Alnus rubra</i>	Red alder	7.8	8	Fair	8	8	8	15	Yes	1	Dead top
994	<i>Thuja plicata</i>	Western Red cedar	11	12	Fair	12	12	12	12	Yes	1	No tag
995	<i>Thuja plicata</i>	Western Red cedar	11.5	12	Fair	12	12	12	12	Yes	1	No tag
996	<i>Alnus rubra</i>	Red alder	10	15	Fair	15	10	10	15	Yes	1	Leaning NW
997	<i>Alnus rubra</i>	Red alder	6.3	12	Fair	12	7	7	7	Yes	1	Leaning N



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927	<i>Alnus rubra</i>	Red alder	12	16	Fair	16	12	16	12	Yes	2	Leaning NE
928	<i>Alnus rubra</i>	Red alder	6	16	Fair	16	7	7	7	Yes	1	Leaning N
929	<i>Alnus rubra</i>	Red alder	10.5	13	Fair	11	11	11	13	yes	1	2 Trunks, Leaning W
930	<i>Alnus rubra</i>	Red alder	7.5	12	Fair	12	8	12	8	Yes	1	Leaning NW
931	<i>Alnus rubra</i>	Red alder	7.5	8	Fair	8	8	8	8	Yes	1	Basal Decay
603	<i>Alnus rubra</i>	Red alder	10.8	15	Fair	11	15	11	15	Yes	1	Leaning SW
604	<i>Alnus rubra</i>	Red alder	10.5	14	Fair	11	14	11	11	Yes	1	Leaning S
607	<i>Alnus rubra</i>	Red alder	12	16	Fair	16	12	12	12	Yes	1	Leaning N
608	<i>Alnus rubra</i>	Red alder	11.5	16	Fair	12	12	16	12	Yes	1	Leaning E
609	<i>Alnus rubra</i>	Red alder	16.5	20	Good	18	20	18	18	Yes	1	Leaning S
611	<i>Acer macrophyllum</i>	Big Leaf maple	10.9	12	Poor	12	12	12	12	No	1	Stump sprout
612	<i>Alnus rubra</i>	Red alder	13.4	16	Fair	14	14	16	14	No	2	2 Trunks
618	<i>Acer macrophyllum</i>	Big Leaf maple	21	26	Poor	20	20	20	20	No	6	Stump sprout
619	<i>Salix lucida</i>	Pacific willow	9	10	Poor	10	10	10	10	No	1	Basal Decay
620	<i>Acer macrophyllum</i>	Big Leaf maple	38.2	30	Poor	30	30	30	30	No	15	Decay, stump spouts



Table of Trees

622	<i>Acer macrophyllum</i>	Big Leaf maple	9	10	Fair	10	10	10	10	No	1	
623	<i>Alnus rubra</i>	Red alder	15.5	18	Good	16	16	16	18	No	3	Leaning W
626	<i>Alnus rubra</i>	Red alder	8	18	Fair	10	10	10	18	No	1	Leaning W
627	<i>Alnus rubra</i>	Red alder	11	14	Good	11	14	11	11	No	1	Leaning S
628	<i>Alnus rubra</i>	Red alder	18.5	22	Good	22	19	19	22	No	5	Leaning NW
629	<i>Acer macrophyllum</i>	Big Leaf maple	16.5	20	Fair	20	20	20	20	No	1	