



**CITY OF KIRKLAND**  
**Planning and Building Department**  
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**ADVISORY REPORT  
 FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS**

**To:** Kirkland Hearing Examiner

**From:** David Barnes David Barnes, Project Planner  
Eric Shields Eric Shields, Planning Director

**Date:** October 11, 2017

**File:** SIMONDS ROAD SUBDIVISION, FILE SUB16-03082

**Hearing Date and Place:** October 19, 2017 – 9AM  
 City Hall Council Chamber  
 123 Fifth Avenue, Kirkland

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## I. **INTRODUCTION**

### A. **APPLICATION**

1. Applicant: Corey Christensen with Eclipse Holdings LLC
2. Site Location: 95XX Simonds Road NE (see Attachment 1)
3. Request: Proposal to subdivide one 153,432 square foot (3.52 acre) parcel into 12 single family lots. A new internal public road will be required to serve all lots within the development (see Attachment 2a and 2b).
4. Review Process: Process IIA, preliminary subdivision, Hearing Examiner conducts public hearing and makes final decision.
5. Summary of Key Issues and Conclusions:

Compliance with Kirkland Municipal Code for subdivision requirements (see Section II.D), compliance with critical area regulations, applicable development regulations in Attachment 3 (see Section II.E), and compliance with Comprehensive Plan requirements (see Section II.F).

### B. **RECOMMENDATIONS**

1. Based on Statements of Fact and Conclusions (Section II), and Attachments in this report, we recommend approval of this application subject to the following conditions:
2. 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 (see Conclusion II.G).
3. Trees shall not be removed or altered following short plat approval except as approved by the Planning Department. Attachment 3, Development Standards, contains specific information concerning tree retention requirements. Additionally, as part of the LSM application the applicant shall implement the following recommendations of the City's Arborist (see Conclusion II.E.7.b):
  - a. Submit an amended arborist report which lists and characterizes Tree #'s 1557, 1787, and 1788.
  - b. Protect the grove of trees ( #'s 1503, 1508, 1517, 1519 and 1521) with tree protection and also update the Tree Retention Plan to show an NGPE around the perimeter of Tract 998.
4. Prior to recording the subdivision, the applicant shall:
  - a. Install the required improvements as described in Attachment 3 and as follows (see Conclusion II.E.3.b):
    - (1) Install a R-24 street (24-foot curb to curb width) including storm drainage, curb and gutter, 4.5-foot planter strip with street trees 30 feet on center.

- (2) Provide a 70 foot diameter cul-de-sac at the end of the internal access street.
  - (3) If Lots 4 and 10 do not take access from the vehicular access easement, install a 15-foot wide paved road centered within the proposed 25-foot wide vehicular access easement (see Conclusion II.E.4.b)
  - (4) With the LSM application, the pavement in the vehicular access easement should be reduced to 15 feet in width and centered in the 25-foot wide vehicular access easement if Lots 4 or 10 do not take access from it
  - (5) The following half-street improvements within the Simonds Road NE right-of-way bordering the subject property:
    - (a) Widen the street to 20 feet from centerline to face of curb.
    - (b) Install storm drainage, curb and gutter, 8-foot wide sidewalk with 4' X 6' tree wells and street trees 30 feet on center.
    - (c) Provide ADA ramps across the new plat road.
  - (6) Prior to installing these improvements, plans must be submitted for approval by the Department of Public Works.
  - (7) In lieu of completing these improvements, the applicant may submit to the Department of Public Works a security device to cover the cost of installing the improvements and guaranteeing installation within one year of the date of final plat approval (see Conclusion II.E.9.b).
- b. Dedicate a 35-foot wide right-of-way for an internal public road and an 80-foot diameter right-of-way for a 70-foot wide diameter cul-de-sac (see Conclusion II.E.1.b).
  - c. Dedicate a Natural Greenbelt Easement (NGPE) (see Attachment 8) encompassing the onsite stream buffer along the subject property's southern property line and Tract 998. The NGPE should be shown on the face of the plat documents. The boundaries should correspond with the stream buffer and Tract 998 and should be established by survey. All surveys should be located on KCAS or plat bearing system and tied to known monuments (see Conclusion II.E.5.b and II.E.8.b).
5. As part of the application for any development permits, the applicant shall submit:
- a. Plans showing implementation of the geotechnical recommendations to mitigate identified impacts, along with a written acknowledgment on the face of the plans signed by the architect, engineer, and/or designer that he/she has reviewed the geotechnical recommendations and incorporated these recommendations into the plans (see Conclusion II.E.8.b).
  - b. A note to be placed on all plan sets that states a qualified geotechnical professional will be present on-site during land surface modification and foundation installation activities (see Conclusion II.E.8.b).

6. Prior to issuance of any development permit, the applicant shall:
  - a. Install a six-foot-high construction-phase chain link fence, as approved by the Planning Official, along the upland boundary of the entire stream buffer with silt screen fabric installed per City standard (see Conclusion II.E.5.b).
  - b. Sign and notarize a Save Harmless – Stream Agreement (see Attachment 7) that holds the City harmless against any future claims that may arise out of development of this property (see Conclusion II.E.5.b).
  - c. The applicant shall submit a signed and notarized Geologically Hazard Areas agreement for recording (see Conclusion II.E.8.b).
  
7. Prior to occupancy, the applicant shall:
  - a. Install between the upland boundary of the stream buffer and the developed portion of the site, either (1) a permanent three-to four-foot-tall split rail fence; or (2) permanent planting of equal barrier value; or (3) equivalent barrier, as approved by the Planning Official between the upland boundary of the stream buffer and the developed portion of the site (see Conclusion II.E.5.b)
  - b. Prior to occupancy of any homes, the applicant shall submit a final geotechnical report, certifying substantial compliance with the geotechnical recommendations and geotechnical-related permit requirements (see Conclusion II.E.8.b).

## II. FINDINGS OF FACT AND CONCLUSIONS

### A. SITE DESCRIPTION

1. Site Development and Zoning:
  - a. Facts:
    - (1) Size: 153,432 sq. ft. (3.52 acre)
    - (2) Land Use: The subject property is undeveloped.
    - (3) Zoning: RSA 4, Residential Single Family with a density of 4 dwelling units per acre and a minimum lot size of 7,600 square feet as depicted in KZC Section 15.30.
    - (4) Terrain: Elevations on the subject property range from a high of 330 feet at the top of the ridge located on the northwest portion of the site to a low of approximately 240 feet at the southeastern portion of the property (16% slope) over a distance of 556 feet. The subject property is not mapped on Kirkland's Landslide Area Map, but slopes do exist onsite which meet the definition of landslide hazard as described in Kirkland Zoning Code section 85.13(3). See

Section II.E.8 for further analysis of this proposal's compliance with KZC Chapter 85.

- (5) Vegetation: There are 328 significant trees onsite of which 88 are viable and 14 trees are proposed for retention. Five trees (#'s 1503, 1508, 1517, 1519 and 1521) form a grove on the northwest portion of the site. Attachment 4 shows the location, tree number, and general health of the trees, as assessed by the applicant's arborist. The applicant is proposing a phased review of the tree retention plan pursuant to KZC 95.30.6.a. See Attachment 3, Development Standards, for information on the City's review of the arborist report as well as the tree preservation requirements.
- (6) Streams: The City's Environmental Maps have identified an offsite Class A (Fish Bearing stream) located approximately from 50 – 65 feet from the subject property's southern property line (see Attachment 5). In addition, a stream outfall is located offsite approximately 85 feet from the northeastern corner of the site in the Simonds Road NE right-of-way (see Attachment 2b) The Watershed Company has verified the classification and the location of the streams (see Attachment 6). The applicant has proposed to not encroach into the stream buffer and buffer setbacks. See Section II.E.5 for additional analysis of the streams and compliance with KZC Chapter 90.

b. Conclusions:

The size, land use, zoning, vegetation are not constraining factors. The terrain and nearby streams, based on the compliance analysis of both KZC Chapter 85 and KZC Chapter 90 (see Conclusions II.E.8 and II.E.5), are not constraining factors in the review of this proposal.

2. Neighboring Development and Zoning:

- a. Facts: The subject property is bordered by the following zones and uses:

*North*: City of Bothell (Multi-Family Development)

*South*: Park/Open Space

*West*: RMA 3.6 (Residential Multi-Family Development)

*East*: RSA 4 (Residential Single-Family) and RMA 5.0 (Residential Multi-Family Development).

- b. Conclusion: Neighboring Development and Zoning are not constraining factors in the review of this proposal.

**B. PUBLIC COMMENT**

The public comment period for the proposal ran from February 24, 2017 to March 20, 2017. No public comment was received.

**C. STATE ENVIRONMENTAL POLICY ACT (SEPA) and Concurrency**

1. Facts:
  - a. A Determination of Nonsignificance (DNS) was issued on September 7, 2017 (see Attachment 7).
  - b. The Public Works Department has reviewed the application for concurrency. A concurrency test was passed for water, sewer and traffic on October 6, 2016.
  - c. The DNS was not appealed.
2. Conclusion: The applicant and the City have satisfied the requirements for SEPA and concurrency.

**D. APPROVAL CRITERIA**

1. PRELIMINARY PLATS
  - a. Facts: Municipal Code section 22.12.230 states that the Hearing Examiner may approve a proposed plat only if:
    - (1) There are adequate provisions for open spaces, drainage ways, rights-of-way, easements, water supplies, sanitary waste, power service, parks, playgrounds, and schools; and
    - (2) It will serve the public use and interest and is consistent with the public health, safety, and welfare. The Hearing Examiner shall be guided by the policy and standards and may exercise the powers and authority set forth in RCW 58.17.  
  
Zoning Code section 150.65 states that the Hearing Examiner may approve a proposed plat only if:
    - (3) It is consistent with the all applicable development regulations, including but not limited to the Zoning Code and Subdivision Code, and to the extent there is no applicable development regulation, the Comprehensive Plan.
  - b. Conclusion: The proposal complies with Municipal Code section 22.12.230 and Zoning Code section 150.65. It is consistent with the Comprehensive Plan (see Section II.F). With the recommended conditions of approval, it is consistent with the Zoning Code and Subdivision regulations (see Section II.E) and there are adequate provisions for open spaces, drainage ways, rights-of-way, easements, water supplies, sanitary waste, power service, parks, playgrounds, and schools. It will serve the public use and interest and is consistent with the public health, safety, and welfare because the proposal will create infill residential development while meeting the goals of the Comprehensive Plan.

**E. DEVELOPMENT REGULATIONS**

1. Provisions for Public and Semi-Public Land

- a. Facts: Municipal Code section 22.28.020 states that the City may require dedication of land for school sites, parks and open space, rights-of-way, utilities infrastructure, or other similar uses if this is reasonably necessary as a result of the subdivision.
- (1) Zoning Code section 110.60 states that the Public Works Director may require the applicant to make land available, by dedication, for new rights-of-way and utility infrastructure if this is reasonably necessary as a result of the development activity.
  - (2) Attachment 3, Development Regulations (Public Works Conditions) describes the required dedications for rights of way for this subdivision.
  - (3) The applicant is required to dedicate a 35-foot wide right-of-way for an internal public road and an 80-foot diameter right-of-way for a 70-foot wide diameter cul-de-sac.
- b. Conclusion: Pursuant to Municipal Code section 22.28.020 and Zoning Code section 110.60, the applicant should follow the Public Works requirements for Street and Pedestrian Improvement Conditions as shown in Attachment 3, Development Regulations. The dedications and improvements are necessary as a result of the development activity. The dedications of right-of-way should be shown on the face of the plat prior to submitting for recording.

2. General Lot Layout, Site Development Standards and Density Calculation

- a. Facts:
- (1) Municipal Code section 22.28.030 requires all lots to meet the minimum size requirements established for the property in the Kirkland Zoning Code or other regulatory documents.
  - (2) Municipal Code section 22.28.050 states that lots must be of a shape so that reasonable use and development may be made of the lot. Generally, the depth of the lot should not be more than twice the width of the lot. In no case should a lot be less than fifteen feet in width where it abuts the right-of-way, vehicular access easement or tract providing vehicular access to subject lot. For lots smaller than 5,000 square feet in size located in "low density zones" as defined in the Zoning Code, the lot width at the back of the required front yard shall be no less than 50' (unless the lot is a flag lot or a covenant is signed prior to plat recording ensuring that the garage will be located at the rear of the lot).
  - (3) Municipal Code section 22.28.070 states that, generally, blocks should not exceed five hundred feet in length.

- (4) The fundamental site development standards pertaining to a detached dwelling unit in a low density zone are set forth in Zoning Code section 15.30.060.
- (5) The proposed lots range in size from 7,605 to 10,417 square feet.
- b. Conclusion: The proposal complies with the minimum lot size and dimension regulations as set forth in Municipal Code section 22.28.050 and Zoning Code section 15.30.060.

3. Right-of-Way Improvements

- a. Facts: Access - Right-of-Way: Municipal Code section 22.28.090 requires the applicant to comply with the requirements of Chapter 110 of the Zoning Code with respect to dedication and improvement of adjacent right-of-way.
  - (1) Zoning Code sections 110.30 – 110.50 establish right-of-way improvement requirements for the new internal access street. The new internal street must be improved with the following:
    - (a) Install a R-24 street (24 foot curb to curb width) including storm drainage, curb and gutter, 4.5 foot planter strip with street trees 30 feet on center.
    - (b) Provide a 70 foot diameter cul-de-sac at the end of the internal access street.
  - (2) Sections 110.10 and 110.25 require the applicant to make half street improvements in rights-of-way abutting the subject property. The subject property abuts Simonds Road NE which is shown on the City Rights-of-Way Designation Map as an arterial street. Section 110.30 -110.50 establishes that the south side of Simonds Road NE arterial must be improved with the following:
    - (a) Widen the street to 20 feet from centerline to face of curb.
    - (b) Install Storm drainage, curb and gutter, 8-foot wide sidewalk with 4' X 6' tree wells and street trees 30 feet on center.
    - (c) Provide ADA ramps across the new plat road.
- b. Conclusions: Pursuant to sections 110.10 and 110.25, the applicant should improve the internal access street and one-half of the Simonds Road NE right-of-way immediately adjacent to the subject property, consistent with the standards set forth in Chapter 110 and as described in Attachment 3, Public Works Conditions – Street and Pedestrian Improvement Conditions section.

4. Vehicular Access Easements or Tracts
- a. Facts: Municipal Code sections 22.28.110 and 22.28.130 establish that if vehicular access within the plat is provided by means other than rights-of-way, the plat must establish easements or tracts, compliant with Zoning Code Section 105.10, which will provide the legal right of access to each of the lots served.
- (1) Zoning Code section 105.10 establishes the minimum dimensional standards for vehicular access easements or tracts. Easements or tracts which serve 1-4 lots must be 21 feet wide and contain a paved surface 16 feet in width. / Easements or tracts less than 100 feet in length which serve 1-4 lots may be 15 feet wide and contain a paved surface 10 feet in width.
  - (2) The applicant has proposed a 25-foot wide vehicular access easement with 20 feet of pavement centered in the easement which will cross Lot 11 for the purposes of serving Lot 12.
  - (3) The proposed access easement is approximately 82 feet in length.
  - (4) KZC 105.10.2(f) requires that the paved surface in the easement or tract shall be set back at least five (5) feet from any adjacent property which does not receive access from that easement or tract.
  - (5) Lots 4 and 10 are adjacent to the access easement, but it is not clear if they will take access from it as they also have direct access from the new internal right-of-way.
- b. Conclusion: The proposed 25-foot wide vehicular access easement is greater than required, but complies with Zoning Code section 105.10. With the LSM application, the pavement in the vehicular access easement should be reduced to 15 feet in width and centered in the 25-foot wide vehicular access easement if Lots 4 or 10 do not take access from it. The access easement should be installed prior to recording the subdivision.
5. Environmentally Sensitive Areas - Streams, Lakes and Wetlands
- a. Facts: Municipal Code section 22.28.200 establishes that the City may require that any area adjacent to a Class A, B and C stream, a lake, or a wetland be kept in its natural or pre-existing state if reasonably necessary to prevent hazards to persons or property, or to protect unique and valuable environments.
- (1) Municipal Code section 22.28.180 states that the applicant has the responsibility in proposing a plat to be sensitive with respect to the natural features, including topography, streams, lakes, wetlands, habitat, geologic features and vegetation, of the property. The plat must be designed to preserve and enhance as many of these valuable features as possible.

- (2) The City's Sensitive Area Map has identified two offsite streams. One stream is located south of the subject property's south property line (Stream A) and the second is located in the Simonds Road NE right-of-way near the northeast corner of the subject property (Stream B) (see Attachment 5).
- (3) The applicant has submitted a stream determination and delineation prepared by the City's consultant, the Watershed Company (see Attachment 6) which has classified both streams (Stream A and B) as Class A (fish bearing) streams. The streams and the subject property all are within the Juanita Creek drainage basin, which is a primary basin.
- (4) KZC 90.90.1 requires a 75-foot buffer and a 10-foot buffer setback from Class A streams located in primary drainage basins.
- (5) The applicant has proposed to keep all development activities outside of Stream A's 75-foot stream buffer, which the civil plans acknowledge, and does not propose any improvements in the 10-foot stream buffer setback (see Attachment 2b).
- (6) Offsite Stream B is located approximately 85 feet from the northeast corner of the subject property therefore the buffer and buffer setback for this stream do not extend onto the subject property. The improvements proposed with the project do not encroach into this stream's buffer or buffer setback (see Attachment 2b).
- (7) Zoning Code Section 90.95 requires that prior to the start of development activities, the applicant shall install a six-foot high construction-phase chain link fence or equivalent fence, as approved by the Planning Official, along the upland boundary of the entire stream buffer with silt screen fabric installed per City standard.
- (8) Zoning Code Section 90.95 requires the applicant to install either (1) a permanent three to four-foot tall split rail fence; or (2) permanent planting of equal barrier value; or (3) equivalent barrier, as approved by the Planning Official between the upland boundary of all stream buffers and the developed portion of the site.
- (9) KZC Section 90.155 establishes that prior to issuance of a land surface modification permit or building permit, whichever is issued first, 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. The applicant shall record this agreement with the King County Department of Election and Records.

- (10) Zoning Code Section 90.150 requires the applicant to grant a greenbelt protection easement to the City to protect sensitive areas and their buffers. Land survey information shall be provided by the applicant for this purpose.

b. Conclusions:

The proposed project complies with the 75-foot stream buffer and 10-foot buffer setback that is required from the two streams near the subject property. In addition, the project should comply with the following:

- (1) Prior to development, the applicant shall install a six-foot high construction-phase chain link fence or equivalent fence, as approved by the Planning Official, 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 the development activities.
- (2) Upon project completion, the applicant should install between the upland boundary of the stream buffer and the developed portion of the site, either (1) a permanent three-to four-foot-tall split rail fence; or (2) permanent planting of equal barrier value; or (3) equivalent barrier, as approved by the Planning Official between the upland boundary of the stream buffer and the developed portion of the site.
- (3) Prior to development, the applicant should sign and notarize a Save Harmless – Stream Agreement (see Attachment 8) that holds the City harmless against any future claims that may arise out of development of this property.
- (4) Prior to recording the plat, the applicant should dedicate a Natural Greenbelt Easement (NGPE) (see Attachment 9) encompassing the onsite stream buffer along the subject property's southern property line. The NGPE should be shown on the face of the plat documents. The boundaries should correspond with the stream buffer and should be established by survey. All surveys should be located on KCAS or plat bearing system and tied to known monuments.

6. Maximum Development Potential

a. Facts:

- (1) Zoning Code Section 90.135 provides that the maximum potential number of dwelling units for a site which contains a wetland, stream, minor lake, or their buffers shall be the buildable area in square feet divided by the maximum lot area per unit or maximum dwelling units per acre as specified in KZC Chapters 15 through 60, plus the required area buffer in square feet divided by the minimum lot area or maximum dwelling units per acre as specified in KZC Chapters 15 through 60, multiplied by the development factor from Subsection 2 of KZC Section 90.135.

- (2) The following is a maximum development potential calculation for the subject property:

Total Property Size	153,432 sq.ft.
Stream Area	0 sq.ft.
Unmodified Stream Buffer	26,453 sq.ft.
Buildable Area	126,799 sq.ft.
Percentage of Site in Stream Buffer	17%
Units Per Acre	4
Development Factor per Chart in Section 90.135	90%
Maximum Development Potential	13 units

- (3) The Applicant is proposing 12 lots.

- b. Conclusion: With 12 proposed lots, the proposed preliminary plat does not exceed the maximum lots permitted by KZC 90.135.

7. Natural Features - Significant Vegetation

- a. Facts:

- (1) Regulations regarding the retention of trees can be found in Chapter 95 of the Kirkland Zoning Code. The applicant is required to retain all viable trees on the site following the short plat approval. Tree removal will be considered at the land surface modification and building permit stages of development.
- (2) The applicant has submitted a Tree Retention Plan (see Attachment 2b, Sheet C3.0), with information prepared by a certified arborist report (see Attachment 4). Specific information regarding the tree density on site and the viability of each tree can be found in Attachment 3, Development Standards.
- (3) The City's Arborist has reviewed the Tree Retention Plan and the applicant's arborist report and has made specific recommendations concerning the applicant's tree plan, including the following:
- (a) Tree #'s 1557, 1787 and 1788 are shown on the Tree Retention Plan, but are not listed or characterized in the applicant's arborist table.

- (b) Tree #'s 1503, 1508, 1517, 1519 and 1521 form a grove on the northwest portion of the site and located in Tract 998.
  - (4) KZC 95.51(3) requires that any applicant who has a grove of trees identified for preservation on an approved Tree Retention Plan pursuant to KZC 95.30(2) shall provide prior to occupancy the legal instrument acceptable to the City to ensure preservation of the grove and associated vegetation in perpetuity, except that the agreement may be extinguished if the Planning Official determines that preservation is no longer appropriate.
  - (5) The applicant proposes to install a rockery and retaining walls along eastern perimeter of Tract 998 to retain the slopes in the northwestern and southwestern portions of the site (see Attachment 2b, sheets C1.0 and C3.0).
- b. Conclusions:
- (1) The applicant has provided a Tree Retention Plan with the preliminary plat application and this plan has been reviewed by the City's Arborist. The applicant should retain all viable trees during the construction of plat improvements and residences and comply with the specific recommendations of the City's arborist unless approved to be removed as part of the phased tree retention review process.
  - (2) With the submittal of the LSM application, the applicant should submit an amended arborist report which lists and characterizes Tree #'s 1557, 1787, and 1788.
  - (3) An NGPE is being required over Tract 998 to protect the steep slope in this area (see Conclusion II.E.8.b). Since the grove is located within this NGPE, additional protection is not needed. With the submittal of the LSM application, the applicant should protect the grove of trees (#'s 1503, 1508, 1517, 1519 and 1521) with tree protection and also update the Tree Retention Plan to show an NGPE around the perimeter of Tract 998.

8. Geologically Hazardous Areas

a. Facts:

- (1) KMC 22.28.180 states that the applicant has the responsibility in proposing the plat to be sensitive with respect to natural features, including topography, streams, lakes, wetlands, habitat, geologic features and vegetation of the property. The plat must be designed to preserve and enhance as many of these valuable features as possible.

Zoning Code regulations on geologically hazardous areas address slope stability, run-off, structural concerns, and liability issues. The Planning Department evaluates proposals located on hazardous slopes based on the criteria in KZC Chapter 85. The evaluation is based on a geotechnical report prepared by a qualified geotechnical engineer.

KZC Chapter 85 of the Kirkland Zoning Code authorizes the City to require a geotechnical report when the property that contains a high landslide hazard area is proposed to be developed.

- (2) KZC Section 85.13.3.a defines a High Landslide Hazard Area as:  
Areas sloping 40 percent or greater, areas subject to previous landslide activities and areas sloping between 15 percent and 40 percent with zones of emergent groundwater or underlain by or embedded with impermeable silts or clays.
- (3) The slopes on the subject property as shown on the applicant's civil plans (see Attachment 2b) exceed 15% on much of site.
- (4) The applicant has submitted a geotechnical report from Terra Associates (see Attachment 10) which has identified that a high landslide hazard area exists on the site due to evidence from previous landslides.
- (5) The geotechnical report states that it is possible to eliminate the landslide hazard on the site by removing the landslide deposits from the site and restoring grade with engineered fill.
- (6) The geotechnical report also outlines recommendations related to site development including, but not limited to retaining walls, roads, infrastructure, and foundations of proposed buildings and onsite geotechnical assistance during the development process.
- (7) Pursuant to KZC 85.25, the City may require the following to mitigate the identified High Landslide impacts:
  - (a) Implementation of the geotechnical recommendations to mitigate identified impacts, along with a written acknowledgment on the face of the plans signed by the architect, engineer, and/or designer that he/she has reviewed the geotechnical recommendations and incorporated these recommendations into the plans.

- (b) Require that a qualified geotechnical professional be present on-site during land surface modification and foundation installation activities, and submittal by a geotechnical engineer of a final report prior to occupancy, certifying substantial compliance with the geotechnical recommendations and geotechnical-related permit requirements.
- (8) According to the geotechnical report, the site does not contain a seismic hazard area and erosion hazards can be mitigated by existing City erosion control development standards.
- (9) Pursuant to KZC Section 85.25.8, the City may require a Natural Greenbelt Easement (NGPE) to be dedicated over the portion of the property that includes the high landslide area.
- (10) An NGPE is being required to protect the stream buffer (see Section II.E.5) which includes varying portions of the onsite slopes as measured from the southern property line of the subject property to the rear portions of Lots 5 – 12.
- (11) Pursuant to KZC 85.45, the City may require the applicant to 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 the development activity on the subject property which is related to the physical condition of the property (see Attachment 11).

b. Conclusions:

- (1) The recommendations of the geotechnical report should be followed so that the site constraints related to landslide hazards can be mitigated in regards to slope stability.
- (2) Dedicate a Natural Greenbelt Easement (NGPE) that encompasses Tract 998. The NGPE should be shown on the face of the plat documents. The NPGE boundary should correspond with the boundary of Tract 998. All surveys should be located on KCAS or plat bearing system and tied to known monuments.
- (3) As part of the permit applications for all permits, the applicant should submit plans showing implementation of the geotechnical recommendations to mitigate identified impacts, along with a written acknowledgment on the face of the plans signed by the architect, engineer, and/or designer that he/she has reviewed the geotechnical recommendations and incorporated these recommendations into the plans.

- (4) As part of the permit applications for all permits, a note should be placed on all plan sets qualified geotechnical professional be present on-site during land surface modification and foundation installation activities.
- (5) Prior to the issuance of any permits, the applicant should submit a signed and notarized Geologically Hazard Areas agreement for recording.
- (6) Prior to occupancy of any homes, the applicant should submit a final geotechnical report, certifying substantial compliance with the geotechnical recommendations and geotechnical-related permit requirements.

9. Bonds and Securities

a. Facts:

- (1) Municipal Code section 22.32.080 states that in lieu of installing all required improvements and components as part of a plat or short plat, the applicant may propose to post a bond for a period of one year to ensure completion of these requirements within one year of the decision approving the plat or short plat.
- (2) Zoning Code section 175.10.2 establishes the circumstances under which the City may consider the use of a performance security in lieu of completion of certain site work prior to occupancy. The City may consider a performance security only if: the inability to complete work is due to unavoidable circumstances beyond the control of the applicant; there is certainty that the work can be completed in a reasonable period of time; and occupancy prior to completion will not be materially detrimental to the City or properties adjacent to the subject site.

b. Conclusions:

- (1) Site and right-of-way improvements required as a result of the plat should be completed prior to recording, unless a security device to cover the cost of installing the improvements and guaranteeing installation within one year of the date of final plat approval is submitted.
- (2) In order to ensure timely completion of all required site and right-of-way improvements, such improvements should be completed prior to occupancy, unless the applicant can demonstrate compliance with the criteria in Zoning Code section 175.10.2.

**F. COMPREHENSIVE PLAN**

1. Fact: The subject property is located within the Finn Hill neighborhood. The City of Kirkland's Comprehensive Land Use Map designates the subject property as LDR 4, Low Density Residential at 4 lots per acre.
2. Conclusion: The proposed project complies with the Comprehensive Plan's Land Use designation for the subject property.

**G. 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 and appeals and judicial review. Any person wishing to file or respond to an appeal should contact the Planning Department for further procedural information.

**A. APPEALS**

Appeal to City Council:

Section 150.80 of the Zoning Code allows the Hearing Examiner's decision to be appealed by the applicant and any person who submitted written or oral testimony or comments to the Hearing Examiner. 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 Hearing Examiner's decision on the application.

**B. JUDICIAL REVIEW**

Section 150.130 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.

**IV. LAPSE OF APPROVAL**

Under KZC 150.135:

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 150.130, 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.

Under KMC 22.16.010 Final Plat – Submittal – Time limits:

If the Final Plat is not submitted to the City Council within the time limits set forth in RCW 58.17.140 it shall be void.

**V. APPENDICES**

Attachments 1 through 11 are attached.

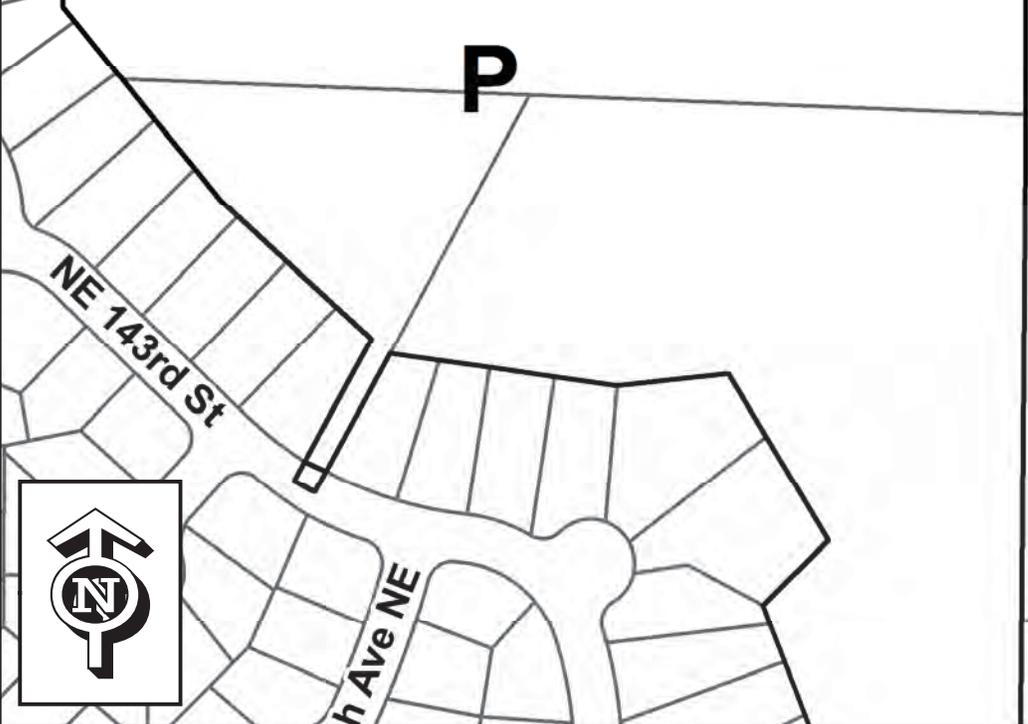
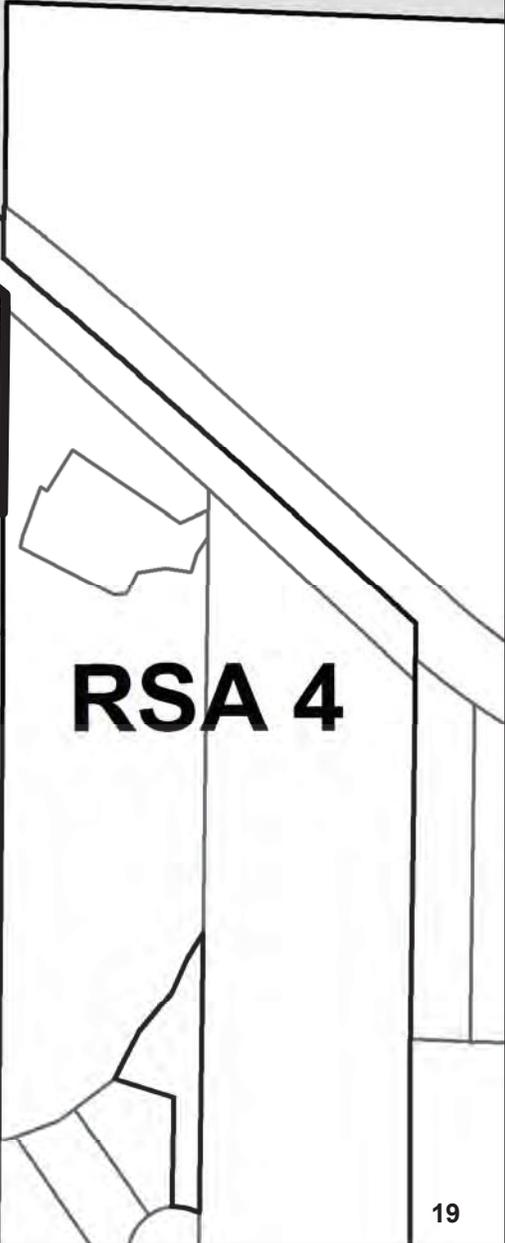
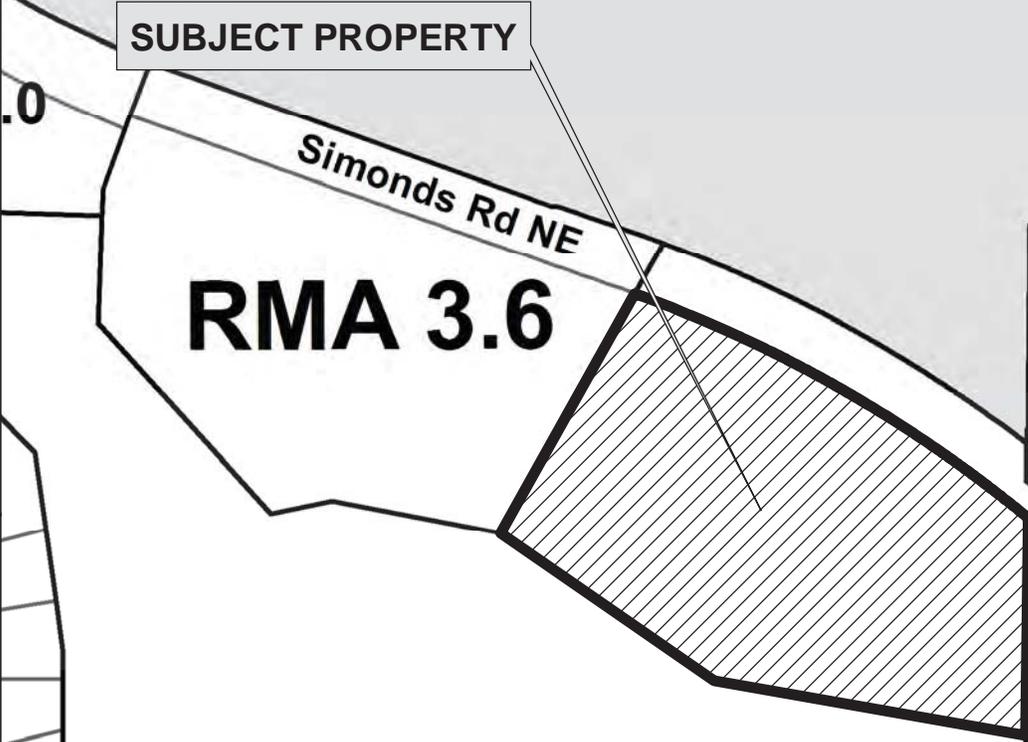
1. Vicinity Map
- 2a. Preliminary Plat Map
- 2b. Civil Plans
3. Development Standards
4. Arborist Report prepared by Creative Landscape Solutions dated October 21, 2016
5. City of Kirkland – Sensitive Area Map with streams
6. Watershed Company Review Letter dated October 14, 2013
7. SEPA Determination (DNS) dated September 7, 2017
8. Save Harmless Agreement – Stream
9. Natural Greenbelt Protective Easement
10. Geotechnical Report prepared by Terra Associates, Inc., dated March 1, 2016
11. Geologically Hazardous Areas Covenant

**VI. PARTIES OF RECORD**

Applicant  
Parties of Record  
Planning and Building Department  
Department of Public Works

A written decision will be issued by the Hearing Examiner within eight calendar days of the date of the open record hearing.

**SIMONDS ROAD PLAT  
SUB16-03082**





LINE TABLE

LINE	BEARING	DISTANCE
L1	N 39°24'19" E	56.05'
L2	N 64°46'02" W	32.28'
L3	N 64°46'02" W	50.90'
L4	N 64°46'02" W	65.86'
L5	N 64°46'02" W	34.71'
L6	N 70°49'49" W	8.24'
L7	N 32°24'19" E	61.84'
L8	N 32°24'19" E	18.65'
L9	N 32°24'19" E	42.19'
L10	N 14°25'10" W	56.62'
L11	N 70°21'23" W	1.80'

CURVE TABLE

CURVE	RADIUS	ARC LENGTH	DELTA ANGLE
C1	16.50'	19.07'	56°02'29"
C2	75.20'	108.54'	82°46'38"
C3	75.90'	47.53'	37°33'40"
C4	72.50'	61.01'	48°12'52"
C5	20.69'	26.50'	72°23'17"
C6	32.69'	29.93'	24°43'26"
C7	20.69'	17.57'	48°39'51"
C8	40.00'	172.44'	247°00'09"
C9	40.00'	67.42'	86°34'10"
C10	40.00'	43.64'	82°30'14"
C11	40.00'	26.34'	37°43'51"
C12	40.00'	28.67'	41°03'37"
C13	40.00'	6.37'	30°17'47"
C14	37.30'	38.14'	82°46'38"
C15	19.50'	18.02'	47°04'58"
C16	1403.10'	48.98'	7°02'28"
C17	1403.10'	13.69'	0°33'19"

FOUND CASED CONC. MON. W/ 2" BRASS DISK & X. DOWN 0.5', FEBRUARY 2014.



LOT 2  
K.C.S.P. 128004OR  
ZONING: RMA 3.6

TRACT 998  
OPEN SPACE/CRITICAL AREA

35' DEDICATION  
14,207 SF

TRACT 999  
DETENTION/ OPEN SPACE  
17,144 SF

**APPLICANT**  
SIMONDS ROAD DEVELOPMENT  
PO BOX 138  
MUKILTEO, WA 98275  
CONTACT: COREY CHRISTENSEN  
(425) 287-9313

**ENGINEER**  
SITE DEVELOPMENT ASSOCIATES  
SCOTT MESSIG, PE  
1724 W. MARINE VIEW DRIVE #140  
EVERETT, WA 98201  
(425) 488-6533 EXT. 103  
SMessig@sdassociates.com

**PLAT DATA**  
EXISTING ZONING: RMA 3.6  
PROPOSED LAND USE: SINGLE FAMILY  
TOTAL AREA 3,522 ACRES (153,432 SF)  
NUMBER OF LOTS PROPOSED: 12

**LEGAL DESCRIPTION**

LOT 2 OF SHORT PLAT NO. 128004OR, ACCORDING TO THE SHORT PLAT RECORDED UNDER KING COUNTY RECORDING NO. B10408288, BEING AN AMENDED SHORT PLAT OF SHORT PLAT RECORDED UNDER RECORDING NO. B102160727.

SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

**LEGEND**

- SET 1/2" X 24" REBAR W/CAP STAMPED "L.S. 37536"
- EXISTING REBAR W/CAP, AS NOTED
- ⊙ FOUND, CONCRETE MONUMENT AS NOTED
- ⊥ RIGHT OF WAY CENTERLINE
- ⊕ STORM DRAIN MANHOLE
- ⊖ INVERT/CULVERT
- ⊡ CATCH BASIN
- ⊕ WATER VALVE
- ⊕ FIRE HYDRANT
- ⊕ SANITARY SEWER MANHOLE
- ⊕ MAILBOX
- ⊕ SIGN POST
- ⊕ UTILITY/POWER POLE
- ⊕ GUY ANCHOR
- ⊕ POWER VAULT
- ⊕ DECID. TREE W/SIZE AND TYPE
- ⊕ CONIF. TREE W/SIZE AND TYPE
- M MAPLE
- C CEDAR
- F FIR
- A ALDER
- DOT. GUYTONWOOD

**EQUIPMENT & PROCEDURES**

METHOD OF SURVEY:  
SURVEY PERFORMED BY FIELD TRAVERSE

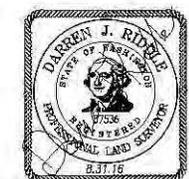
INSTRUMENTATION:  
LEICA TD08 1205 ROBOTIC ELECTRONIC TOTAL STATION

PRECISION:  
MEETS OR EXCEEDS STATE STANDARDS WAC 330-130-090

BASIS OF BEARING:  
THE MONUMENTED CENTERLINE OF 100TH AVE. N.E., AS THE BEARING OF N 00°47'33" E.

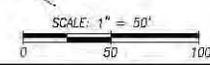
**VERTICAL DATUM**

NAVD 88  
3" BRASS DISK W/ "X", C/L EXTENSION OF SIMONDS ROAD @ BACK OF WALK E. SIDE, 100TH. ELEV. = 200.01'



**Pacific Coast Surveys, Inc.**  
LAND SURVEYING & MAPPING  
P.O. BOX 13619  
MILL CREEK, WA 98082  
PH. 425.508.4951 FAX 425.357.3577  
www.PCSurveys.net

**SIMONDS ROAD PRELIMINARY PLAT**  
NW 1/4, NE1/4, SEC.19, T.26N., R.5E., W.M.  
DRAWN BY DATE DRAWING FILE NAME SCALE JOB NO.  
DP 8.17.17 14729ppm.dwg 1" = 50' 14-739

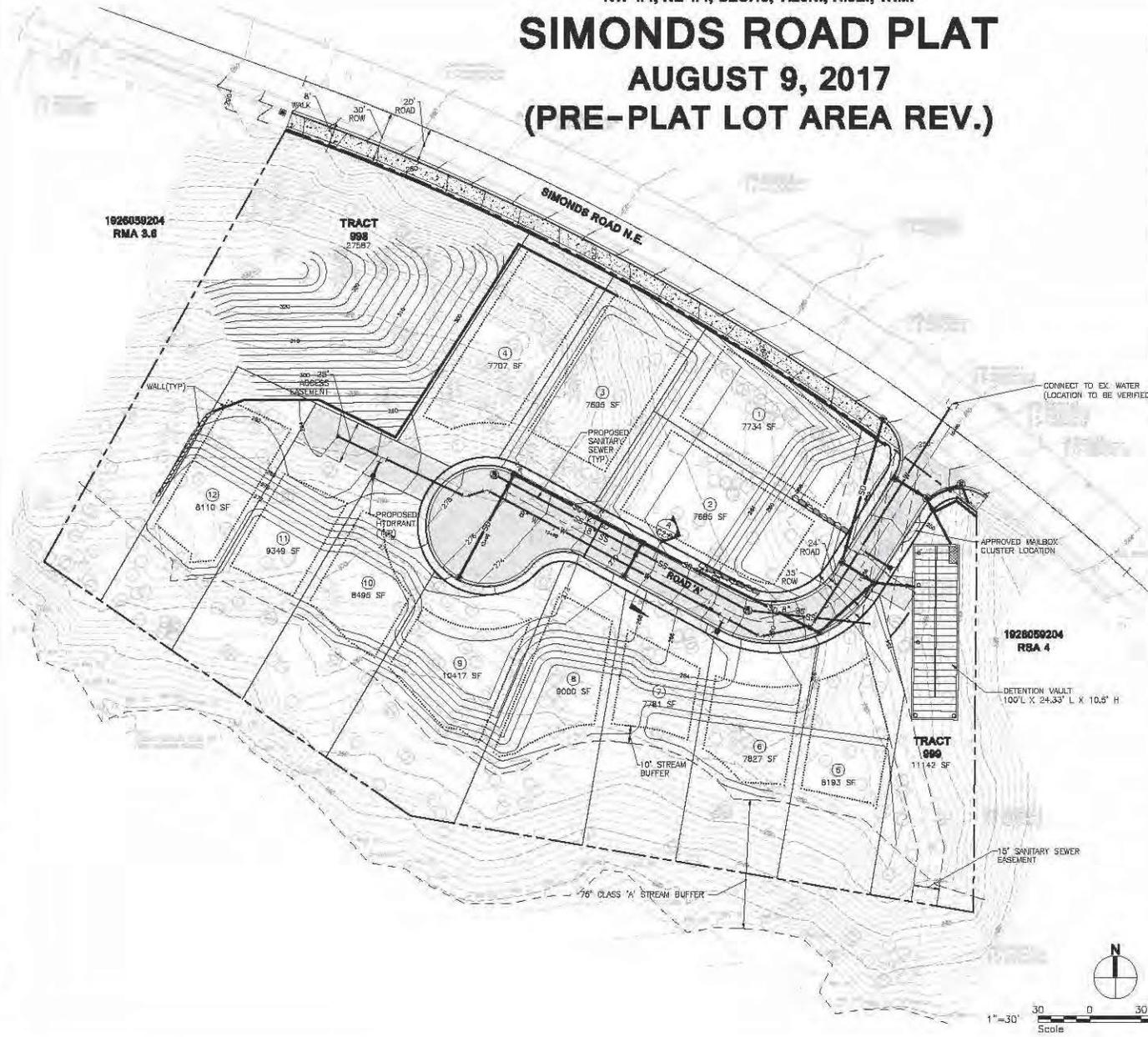


N 00°47'33" E 794.45'  
100TH AVE. N.E.

FOUND CASED CONC. MON. W/ INVERTED NAIL, DOWN 0.5', FEBRUARY 2014.



NW 1/4, NE 1/4, SEC.19, T.28N., R.5E., W.M.  
**SIMONDS ROAD PLAT**  
 AUGUST 9, 2017  
 (PRE-PLAT LOT AREA REV.)



**APPLICANT**  
 SIMONDS ROAD DEVELOPMENT  
 PO BOX 138  
 MUKILTEO, WA 98275  
 CONTACT: COREY CHRISTENSEN  
 (425) 297-9313

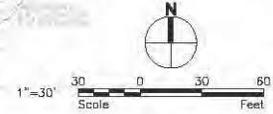
**ENGINEER**  
 SITE DEVELOPMENT ASSOCIATES  
 SCOTT MESS, PE  
 1724 W. MARINE VIEW DRIVE #140  
 EVERETT, WA 98201  
 (425) 486-6533 EXT. 103  
 3Mess@sdassociates.com

**SURVEYOR**  
 PACIFIC COAST SURVEYS, INC.  
 PO BOX 13619  
 MILL CREEK, WA 98082  
 DARREN J. RIDDLE, PLS  
 (425) 508-4951  
 DARREN@PCSURVEYS.NET

**LEGAL DESCRIPTION**  
 LOT 2 OF SHORT PLAT NO. 128004OR, ACCORDING TO THE SHORT PLAT RECORDED UNDER KING COUNTY RECORDING NO. 8104000286, BEING AN AMENDED SHORT PLAT OF SHORT PLAT RECORDED UNDER RECORDING NO. 8102180727;  
 SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

**VERTICAL DATUM**  
 NAVD 88  
 3" BRASS DISK W/7", C/L EXTENSION OF SIMONDS ROAD @ BACK OF WALK E. SIDE, 100TH. ELEV. = 220.91'

SHEET INDEX	
SHEET NUMBER	SHEET TITLE
C1.0	COMPOSITE UTILITY & CIVIL PLAN
C1.1	SITE PLAN
C2.0	ROAD PROFILE
C3.0	TREE RETENTION PLAN
C3.1	TREE RETENTION NOTES
C3.2	TREE RETENTION NOTES
C3.3	TREE RETENTION NOTES
C3.4	TREE RETENTION NOTES
L1	LANDSCAPE PLAN
L2	LANDSCAPE PLAN



DATE	REVISED BY	DESCRIPTION
8/2/17	SDA	PRE-PLAT LOT AREA REV.
8/16/17	SDA	PRE-PLAT SITE PLAN
8/16/17	SDA	PRE-PLAT SITE PLAN
8/25/17	SDA	PRE-PLAT PROFILES
8/27/17	SDA	PRE-PLAT CIVIL/C&E
8/27/17	SDA	PRE-PLAT CIVIL/C&E
8/27/17	SDA	PRE-PLAT CIVIL/C&E

**SDA**  
 CIVIL ENGINEERING  
 PROJECT MANAGEMENT  
 1724 W. Marine View Drive, Suite 140, Everett, Washington 98201  
 OFFICE: 425.486.6533 FAX: 425.486.6533 WWW.SDAENGINEERS.COM

**Client:** SIMONDS ROAD DEVELOPMENT  
 PO BOX 138  
 MUKILTEO, WA 98275  
 (425) 297-9313

**Designer:** COREY CHRISTENSEN

**SIMONDS ROAD PLAT**  
**COMPOSITE UTILITY & CIVIL PLAN**  
**C1.0**

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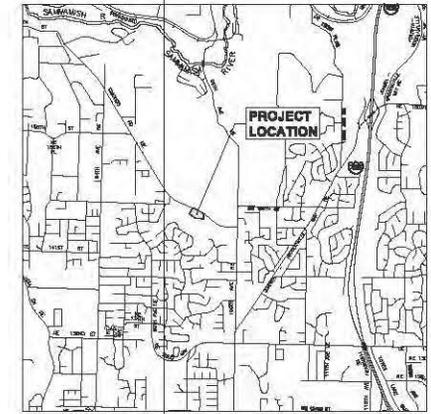
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NW 1/4, NE 1/4, SEC.19, T.28N., R.5E., W.M.

# SIMONDS ROAD PLAT

## AUGUST 21, 2017

### (PRE-PLAT LOT AREA REV.)



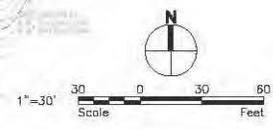
**APPLICANT**  
 SIMONDS ROAD DEVELOPMENT  
 PO BOX 138  
 MUKILTEO, WA 98275  
 CONTACT: COREY CHRISTENSEN  
 (425) 297-9313

**ENGINEER**  
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 SCOTT MESS, PE  
 1724 W. MARINE VIEW DRIVE #140  
 EVRETT, WA 98201  
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 PO BOX 13619  
 MILL CREEK, WA 98082  
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**LEGAL DESCRIPTION**  
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 SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

**VERTICAL DATUM**  
 NAVD 88  
 3" BRASS DISK W/7/8" C/L EXTENSION OF SIMONDS ROAD @ BACK OF WALK E. SIDE, 100TH. ELEV. = 200.91'



REV	DATE	DESCRIPTION
1	8/21/17	PRE-PLAT LOT AREA REV.
2	8/21/17	PRE-PLAT LOT AREA REV.
3	8/21/17	PRE-PLAT LOT AREA REV.
4	8/21/17	PRE-PLAT LOT AREA REV.
5	8/21/17	PRE-PLAT LOT AREA REV.
6	8/21/17	PRE-PLAT LOT AREA REV.
7	8/21/17	PRE-PLAT LOT AREA REV.
8	8/21/17	PRE-PLAT LOT AREA REV.
9	8/21/17	PRE-PLAT LOT AREA REV.
10	8/21/17	PRE-PLAT LOT AREA REV.
11	8/21/17	PRE-PLAT LOT AREA REV.
12	8/21/17	PRE-PLAT LOT AREA REV.
13	8/21/17	PRE-PLAT LOT AREA REV.

**SEAL**

STATE OF WASHINGTON  
 PROFESSIONAL ENGINEER  
 SCOTT MESS, PE  
 LICENSE NO. 1000000000

**SDA**  
 CIVIL ENGINEERING  
 PROJECT MANAGEMENT  
 1724 W. MARINE VIEW DRIVE, SUITE 140, EVRETT, WASHINGTON 98201  
 OFFICE: 425.486.6533 FAX: 425.486.6533 WWW.SDAENGINEERS.COM

**CLIENT**  
 SIMONDS ROAD DEVELOPMENT  
 PO BOX 138  
 MUKILTEO, WA 98275  
 (425) 297-9313

**DATE**  
 AUGUST 21, 2017

**PROJECT**  
 SIMONDS ROAD PLAT

**SIMONDS ROAD PLAT**

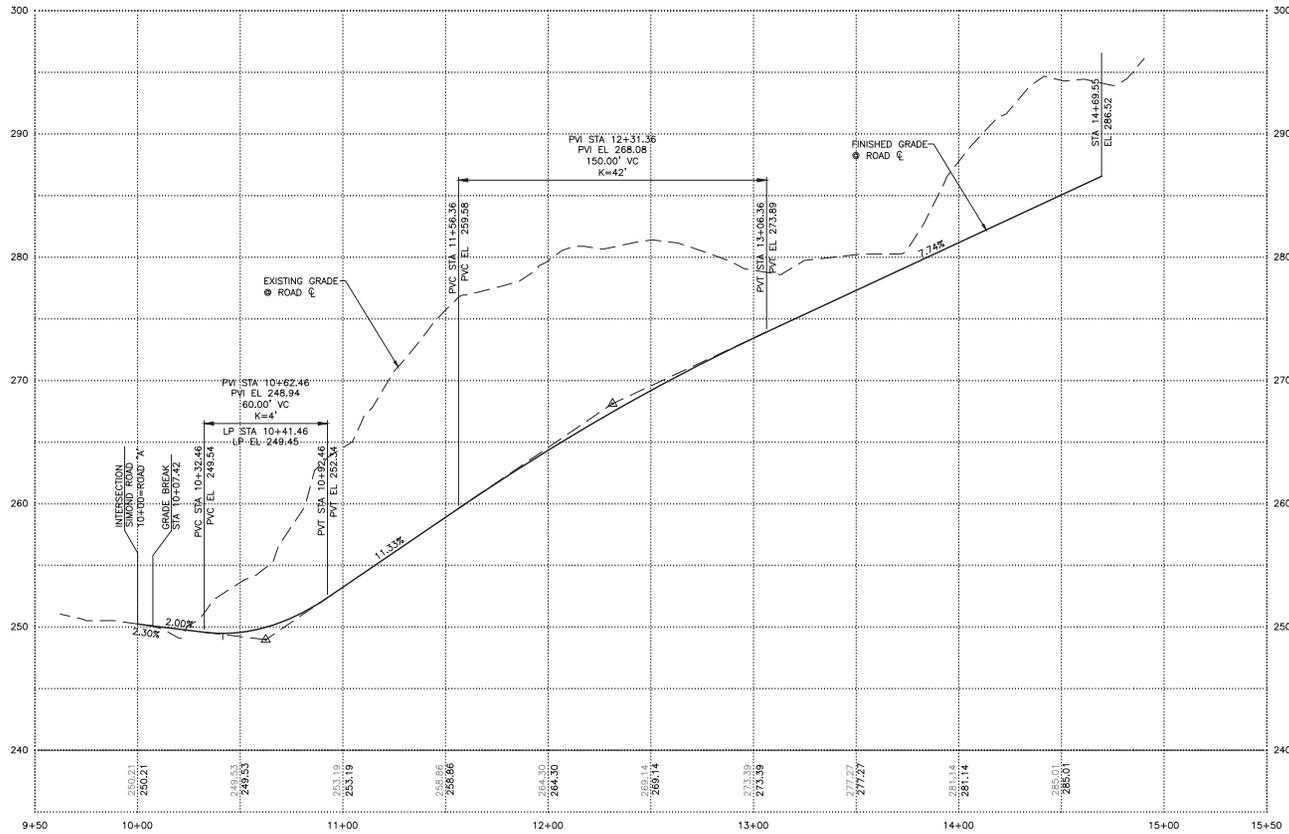
**SITE PLAN**

**C1.1**

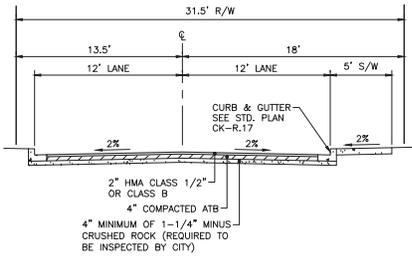
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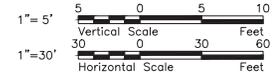
NW 1/4, NE 1/4, SEC.19, T.26N., R.5E., W.M.



PROFILE - ROAD 'A'



ROAD 'A' CROSS SECTION



No.	Description	Date
1	PRE-PLAT	12/23/16
2	PRE-PLAT	12/23/16
3	PRE-PLAT	12/23/16
4	PRE-PLAT	12/23/16
5	PRE-PLAT	12/23/16
6	PRE-PLAT	12/23/16
7	PRE-PLAT	12/23/16
8	PRE-PLAT	12/23/16

GER	Drawn By	Checked By	Date
288-001-15	SAM	SAM	02/07/17
	WPH	WPH	02/07/17

1"=30'	Horizontal Scale
1"=5'	Vertical Scale



**S D A**  
 Saratoga Design Associates  
 1724 N. MacArthur View Drive, Suite 100, Everett, Washington 98203  
 Phone: 425.841.4252 Fax: 425.841.4258 www.saratoga.com

Client: SIMONDS ROAD DEVELOPMENT  
 141 ALLEED, WA 98275  
 (425) 297-8313

Contractor: COBRY CHRISTENSEN

**SIMONDS ROAD PLAT**

**ROAD PROFILE**

**C2.0**







NW 1/4, NE 1/4, SEC.19, T.26N., R.5E., W.M.

252 10394	Red Alder	5	14	Open	Muddy slash	1	14	14	14	1	
257 10311	Red Alder	20	23	Open	Low tree crown 100% - 50% mud slash	1	11	12	11	12	1
252 10311	Red Alder	1	12	Open	Low tree crown 100% - 50% mud slash	1	12	12	12	1	1
275 10311	Red Alder	8	22	Open	Low tree crown 100% - 50% mud slash	1	12	12	12	1	1
302 10419	Baldpate maple	13	24	Open	Wounded trunk, dead topping, previous forest track closure	1	14	16	14	16	13
211 10313	Cottonwood	27	10	Open	No leaves: dead wood, broken branches, dead twigs, abnormal canopy, shading back, symptoms only	1	14	10	10	15	4.5
252 10321	Cottonwood	20	22	Open	Previous top loss 12" - 16" above, removed top 10' the low crown top - 20'	1	17	12	11	22	1
013 10421	Cottonwood	8	10	Open	Enclosed base 42 inches 1' or 20' previous top loss, symptoms: canopy for 100%, 200% - 250% density	1	10	12	10	14	1
254 10322	Baldpate maple	23	28	Open	Typical of species	1	18	18	18	23.5	4.5
240 10321	Cottonwood	15	20	Open	Abnormal trunk, dead wood, broken branches, cured bark with abnormal color, dead twigs, abnormal top loss	1	18	20	18	24	3.5
252 10321	Cottonwood	20	24	Open	Previous top loss, abnormal canopy (a weak dead wood, broken branches)	1	18	18	18	18	3
251 10329	Baldpate maple	20	27	Open	Abnormal canopy (weak), typical of species	1	21	21	21	23.5	4.5
258 10326	Cottonwood	23	22	Open	Abnormal trunk, dead wood, dead twigs, moss and fungi, typical of species	1	22	22	22	23.5	4.5
051 10327	Baldpate maple	18	20	Open	Typical of species, moss and dead twigs	1	20	20	20	20	4
240 10328	Red Alder	8	11	Open	Dead	1	8	8	8	8	0
274 10329	Baldpate maple	15	24	Open	Abnormal canopy, very dense crown	1	24	24	24	24	1
257 10326	Red Alder	5	8	Open	Typical of species	1	8	8	8	8	1
237 10311	Red Alder	10	12	Open	Typical of species	1	8	8	8	8	0
274 10322	Baldpate maple	12	14	Open	Low tree crown 100% - 50%	1	14	14	14	14	2
274 10323	Baldpate maple	8	14	Open	Abnormal top loss, moss and fungi	1	14	14	14	14	1
274 10324	Red Alder	11	16	Open	Wounded top, moss and fungi	1	16	16	16	16	1.5
277 10325	Red Alder	6	8	Open	Muddy slash	1	8	8	8	8	0
278 10326	Red Alder	8	9	Open	Muddy slash	1	8	8	8	8	0
175 10317	Baldpate maple	40	30	Open	Canopy 10' tall crown 10' or more, dead 10' tall crown 10' or more, dead wood, dead twigs, moss and fungus, abnormal canopy	1	30	30	30	30	14
285 10330	Baldpate maple	10	30	Open	Moss and fungus, moss, abnormal canopy, dead wood, 42" dbh top, dead wood canopy	1	30	30	30	30	11
411 10325	Baldpate maple	10	30	Open	Wounded trunk, typical of species, moss, twigs, dead wood	1	30	30	30	30	4.5
051 10320	Red Alder	11	17	Open	TYPICAL OF SPECIES, moss to dead	1	17	17	17	17	1.5
274 10341	Red Alder	11	10	Open	Typical of species	1	10	10	10	10	1.5
254 10343	Red Alder	7	10	Open	Typical of species	1	10	10	10	10	1
258 10343	Red Alder	8	10	Open	Typical of species, low crown top	1	10	10	10	10	1
258 10344	Baldpate maple	10	15	Open	Canopy 10' tall crown 10' or more, dead 10' tall crown 10' or more, dead wood, dead twigs, moss and fungus, abnormal canopy	1	15	15	15	15	1
281 10445	Cottonwood	16	24	Open	Previous top loss, dead wood, possible abnormal canopy	1	16	24	16	16	14
051 10448	Cottonwood	22	22	Open	Previous top loss, low tree crown 100% - 50%, abnormal canopy to west	1	12	12	12	12	7
051 10451	Cottonwood	10	10	Open	Red crown, dead wood, broken to a tree, low canopy, possible abnormal canopy	1	10	10	10	10	3.5
270 10448	Cottonwood	12	9	Open	Abnormal trunk, gapping bark, previous top loss, dead wood to floor	1	9	9	9	9	2
251 10449	Baldpate maple	42	34	Open	Wounded trunk (broken, cane or more), dead wood, dead wood	1	34	34	34	34	17
270 10500	Cottonwood	8	14	Open	Previous top loss, moss, fungi	1	14	14	14	14	1
270 10501	Cottonwood	8	9	Open	Previous top loss, moss, fungi	1	9	9	9	9	1
254 10327	Cottonwood	20	17	Open	Canopy 10' tall crown 10' or more, dead 10' tall crown 10' or more, dead wood, dead twigs, moss and fungus, abnormal canopy	1	17	17	17	17	10
270 10511	Baldpate maple	10	12	Open	Previous top loss, dead wood	1	12	12	12	12	3
246 10344	Cottonwood	11	14	Open	Canopy 10' tall crown 10' or more, dead 10' tall crown 10' or more, dead wood, dead twigs, moss and fungus, abnormal canopy	1	14	14	14	14	11.5
277 10351	Compressed	21	26	Open	Typical of species	1	24	24	24	24	6.5
246 10358	Cottonwood	17	24	Open	Typical of species	1	24	24	24	24	6.5
271 10357	Baldpate maple	22	21	Open	Canopy of decay on north 10' low crown 10' or more, dead wood, moss	1	22	22	22	22	6.5
240 10358	Baldpate maple	17	22	Open	Typical of species, moss and fungi, dead wood, broken branches, dead twigs	1	22	22	22	22	17.5
271 10359	Baldpate maple	14	19	Open	Canopy of decay on dead 10' crown top 10' or more, dead wood, moss and fungus, abnormal canopy	1	19	19	19	19	3
051 10365	Baldpate maple	13	14	Open	Canopy 10' tall crown 10' or more, dead 10' tall crown 10' or more, dead wood, dead twigs, moss and fungus, abnormal canopy	1	14	14	14	14	12.5
051 10362	Red Alder	8	12	Open	Typical of species	1	12	12	12	12	1
051 10363	Red Alder	8	10	Open	Typical of species, moss to 10' - 12' crown 10' or more, abnormal canopy	1	10	10	10	10	1
240 10377	Baldpate maple	22	16	Open	Canopy 10' tall crown 10' or more, dead 10' tall crown 10' or more, dead wood, dead twigs, moss and fungus, abnormal canopy	1	16	16	16	16	7

**REVISIONS**

No.	Description	Date
1	PRE-PAT 100% - 50% - 100%	8/23/17
2	PRE-PAT 100% - 50% - 100%	8/23/17
3	PRE-PAT 100% - 50% - 100%	8/23/17
4	PRE-PAT 100% - 50% - 100%	8/23/17
5	PRE-PAT 100% - 50% - 100%	8/23/17
6	PRE-PAT 100% - 50% - 100%	8/23/17
7	PRE-PAT 100% - 50% - 100%	8/23/17
8	PRE-PAT 100% - 50% - 100%	8/23/17
9	PRE-PAT 100% - 50% - 100%	8/23/17
10	PRE-PAT 100% - 50% - 100%	8/23/17

Drawn By: **BAM**

Designed By: **BAM**

Checked By: **BAM**

Approved By: **BAM**

Date: 8/23/17

Date: 8/23/17

Date: 8/23/17

Date: 8/23/17

Scale: **1" = 40'**

Project No: **100-005-16**

Scale: **1" = 40'**

Project No: **100-005-16**

**SDA**

Civil Engineering  
Management  
Planning

1724 W. Monroe View Drive, Suite 140, Everett, Washington 98201

Office: 425.684.6333 Fax: 425.848.6393 www.sdaengineering.com

Client: **SIMONDS ROAD DEVELOPMENT**

PO BOX 116  
165 NW 8828  
403 347-8118

Contractor: **COBBY CHRISTENSEN**

Contract

**SIMONDS ROAD PLAT**

**TREE RETENTION NOTES**

**C3.3**

Aug 21, 2017 10:44AM Local Coord By: jbramante

**OFFSITE TREE'S NW 1/4, NE 1/4, SEC.19, T.28N., R.5E., W.M.**

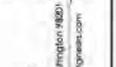
#	Tree No.	Species	DBH (in)	Crown Spread (ft)	Height (ft)	Health	Comments/Condition	Proposed Action		1:427764222 Radius Foot			
								Prune	Remove	R	A	S	C
1	1267	Douglas fir	17	17	14	Fair	Asymmetric canopy, healthy, epicormic growth (conifers) obscuring canopy, repeated dieback	1		14	14	14	14
2	1268	Western Red Cedar	36	36	19	OK	Typical of species, repeated dieback	1		15	15	15	15
3	1269	Red Alder	11	11	11	OK	Low live crown ratio - 10%, typical of species	1		11	11	11	11
4	1270	Red Alder	8	8	11	OK	Lean to south, asymmetric canopy to south, low live crown ratio - 10%	1		11	11	11	11
5	1225	Douglas fir	23	23	18	Fair	Minor asymmetric canopy, repeated dieback, to-dieback of branches with associated bark & 1/2 to 3/4 decay in location	1		18	18	18	18
6	1536	Western Red Cedar	15	15	18	OK	Typical of species, slight lean	1		18	18	18	18
7	1533	Red Alder	10/12	10	14	Poor	Asymmetric canopy, lean to SW, epicormic growth, dead wood, soil soil flat, eroding	1		14	14	14	14
8	1535	Red Alder	10	10	10	Poor	Asymmetric canopy to south, lean to SW, thin canopy, eroding bank	1		10	10	10	10
9	1538	Western Red Cedar	16	16	24	Fair	Typical of species, thin and dense, OS in spring	1		24	24	24	24
10	1739	Western Red Cedar	23	23	30	Fair	Typical of species, thin and dense, OS in spring	1		30	30	30	30
11	1740	Western Red Cedar	13	13	13	Fair	Typical of species, thin and dense, OS in spring	1		13	13	13	13
12	1785	Red Alder	24	24	20	Fair	Minor, wet soil, okay	1		20	20	20	20
13	1786	Western Red Cedar	10	10	24	Poor	Minor, wet soil, okay	1		24	24	24	24

**CREDIT CALCULATION**

Credit Calculation	
Total number of trees	24
Total number of trees retained	18
Total number of tree credits required to SPDR	108
Total number of tree credits obtained	97
ADifference	-11

REVISIONS	
1	PRE-PAT 1/17/17
2	PRE-PAT 1/17/17
3	PRE-PAT 1/17/17
4	PRE-PAT 1/17/17
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94	PRE-PAT 1/17/17
95	PRE-PAT 1/17/17
96	PRE-PAT 1/17/17
97	PRE-PAT 1/17/17
98	PRE-PAT 1/17/17
99	PRE-PAT 1/17/17
100	PRE-PAT 1/17/17

CREDIT	
Drawn By	SAM
Designed By	SAM
Checked By	SAM
Approved By	SAM
Date	1/17/17



**SDA**  
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**SIMONDS ROAD PLAT**  
EMERGE ROAD DEVELOPMENT  
PO BOX 150  
Everett, WA 98275  
(425) 320-2513

**C3.4**  
**TREE RETENTION NOTES**  
CONLEY CHRISTENSEN  
Consultant

Aug 21, 2017 10:26AM J:\2017\1025\11E\3\Simonds\_Road\Drawings\Final\CR-TR-01.dwg 34x22



**CITY OF KIRKLAND**  
**Planning and Building Department**  
 123 5th Avenue, Kirkland, WA 98033  
 425.587.3600 ~ [www.kirklandwa.gov](http://www.kirklandwa.gov)

## DEVELOPMENT STANDARDS LIST

File: SUB16-03082, Simonds Road Subdivision

### SUBDIVISION STANDARDS

**22.28.030 Lot Size.** Unless otherwise approved in the preliminary subdivision or short subdivision approval, all lots within a subdivision must meet the minimum size requirements established for the property in the Kirkland zoning code or other land use regulatory document.

**22.28.050 Lot Dimensions.** For lots smaller than 5,000 square feet in low density zones, the lot width at the back of the required front yard shall not be less than 50 feet unless the garage is located at the rear of the lot or the lot is a flag lot.

**22.28.130 Vehicular Access Easements.** The applicant shall comply with the requirements found in the Zoning Code for vehicular access easements or tracts.

**22.28.190 Subdivisions on the Shoreline.** Subdivisions adjacent to Lake Washington must comply with the provisions of Kirkland's Shoreline Master Program regarding open space and public access along the waterfront.

**22.28.210 Significant Trees.**

A Tree Retention Plan was submitted with the short plat. During the review of the short plat, all proposed improvements were unknown. Therefore KZC Section 95.30 (6)(a) – Phased Review applies in regards to tree retention. There are 328 significant trees on the site, of which 88 are viable. These trees have been assessed by the City's Urban Forester. They are identified by number in the following chart.

Revisions Required: Yes  No  (KZC 95.30) If yes, why: I suggest having three trees (#1557, 1787 and 1788) which appear in the plans but are not listed nor characterized in the tree table; these trees should be indicated in the arborist table prior to the LSM submittal.

Requested revisions should be returned/reviewed by UF: Yes  No

Significant Trees:	High Retention Value	Moderate Retention Value	Low Retention Value (V) – viable (NV) – not viable
1267*		X	
1503	X		
1504			NV
1505			NV
1506			NV

1507			NV
1508	X		
1509		X	
1510			NV
1511			NV
1512			NV
1513			NV
1514			NV
1515			NV
1516			NV
1517	X		
1518			NV
1519	X		
1520		X	
1521	X		
1522			
1523			NV
1524			NV
1525			NV
1526			NV
1527			NV
1528			NV
1542	X		
1544			NV
1545			NV
1547			NV
1548			NV
1549			NV
1550			NV
1551			NV
1552			NV
1553			NV
1556			NV
1557 (not on arborist table)	X		
1558		X	
1561			NV
1569			NV
1570	X		
1573			NV
1574			NV
1575			NV

1576			NV
1577			NV
1579			NV
1580		X	
1581			NV
1582			NV
1583			NV
1584			NV
1585			NV
1586			NV
1587			NV
1588			NV
1589			NV
1590			NV
1591			NV
1592			NV
1593			NV
1594			NV
1595			NV
1596		X	
1597			NV
1598			NV
1599			NV
1600			NV
1601			NV
1602		X	
1603			NV
1604			NV
1605			NV
1606			NV
1607			NV
1608			NV
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1611			NV
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1615			NV
1616			NV
1617			NV
1618			NV

1619			NV
1620			NV
1621			NV
1622			NV
1623			NV
1624			NV
1625		X	
1626			NV
1627			NV
1628			NV
1629			NV
1630			NV
1631			NV
1632			NV
1633			NV
1634			NV
1635			NV
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1647			NV
1648			NV
1649			NV
1650			NV
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1652			NV
1653			NV
1654			NV
1655			NV
1656			NV
1657			NV
1658			NV
1659			NV
1660		X	

1661			NV
1662			NV
1663			NV
1664			NV
1665			NV
1666			NV
1667			NV
1668			NV
1669			NV
1670			NV
1671			NV
1672			NV
1673			NV
1674			NV
1675			NV
1676			NV
1677			NV
1678			NV
1679			NV
1680			NV
1681			NV
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1686			NV
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1688			NV
1689			NV
1690			NV
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1706			NV
1707			NV
1708			NV
1709			NV
1710			NV
1711		X	
1712			NV
1713			NV
1714			NV
1715		X	
1716			NV
1717			NV
1718			NV
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1721			NV
1722			NV
1723	X		
1724			NV
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1726	X		
1727			NV
1728	X		
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1733		X	
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1736			NV
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1747	X		
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1769			NV
1770			NV
1771			NV
1772			NV
1773			NV
1774			NV
1775			NV
1776			NV
1777			NV
1778			NV
1779			NV
1780			NV
1781			NV
1782			NV
1783			NV
1784	X		
1787 (not on arborist table)	X		
1788 (not on arborist table)	X		
1793			NV
1794			NV
1795			NV
1796			NV
1797			NV
1798			NV

1799			NV
1801			NV
1802			NV
1803			NV
1804			NV
1805			NV
1806			NV
1807			NV
1808			NV
1809			NV
1810			NV
1811		X	
1812			NV
1813			NV
1814			NV
1815			NV
1816			NV
1817			NV
1818			NV
1819			NV
1820			NV
1821			NV
1822		X	
1823			NV
1824			NV
1825			NV
1826			NV
1827			NV
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1862			NV
1877			NV
1878			NV
1879			NV
1880			NV
1881			NV
1882			NV
1883			NV
1884			NV
1885			NV
1886			NV
1887			NV
1888			NV
1889			NV
1890			NV
1891		X	
1892			NV
1893			NV
1894		X	
1895			NV
1896			NV
1897			NV

1898			NV
1899			NV
1900			NV

Subject Property:

Existing on-site grove: Yes  No  Five trees at the northwest portion of the site form a grove and consist of trees #1503, 1508, 1517, 1519 and 1521

Conflicts between trees and utilities: Yes  No  If yes, tree #'s: access will require the removal of approximately 39 trees and site grading as proposed would require removal of approximately 115 trees.

Acceptable Tree Protection Fencing Shown on plans: Yes  No

The arborist report is a brief update on the previous arborist report. It includes an unconfirmed but still reasonable suspicion of laminated root rot along with a positive for bore beetle infestation. Unfortunately the report does not specifically identify the species of borer; the flatheaded fir borer (*Melanophila drummondii*) would be of particular concern because it has been reported to have killed trees while other Douglas fir borers are minor pests which typically cause branches and twigs to die.

During my site visit I did confirm that the majority of trees on-site are in early senescence and have developed as a low co-dominant canopy. This condition is not conducive to very many trees being retained because of health, condition and windfirmness concerns.

High Retention Value Trees

Trees #1503, 1508, 1517, 1519, 1521, 1542, 1557, 1570, 1723, 1726, 1728, 1747, 1748, 1784, 1787 and 1788 are high retention value trees.

Moderate Retention Value Trees

See table above for moderate retention value trees

Low Retention Value Trees

See table above for low retention value trees.

Adjacent Property:

Right-of-way or parks trees impacted: Yes  No  Discuss:

Trees on adjoining property impacted: Yes  No  Discuss:



*Image 1: stream buffer looking west near tree #1784, note extent of blackberry understory*



*Image 2: stream buffer looking east near tree #1784, again note extent of blackberry understory*



*Image 3: tree #1775, typical low canopy ration of forest grown tree which would be unstable if some or part of the grove is removed because it has not developed a root zone to withstand new wind forces if nearby trees are removed*

No trees are to be removed with an approved short plat or subdivision permit. Based on the approved Tree Retention Plan, the applicant shall retain and protect all viable trees throughout the development of each single family lot except for those trees allowed to be removed for the installation of the plat infrastructure improvements with an approved Land Surface Modification permit. Subsequent approval for tree removal is granted for the construction of the house and other associated site improvements with a required Building Permit. The Planning Official is authorized to require site plan alterations to retain High Retention value trees at each stage of the project. In addition to retaining viable trees, new trees may be required to meet the minimum tree density per KZC Section 95.33.

**22.32.010 Utility System Improvements.** All utility system improvements must be designed and installed in accordance with all standards of the applicable serving utility.

**22.32.030 Stormwater Control System.** The applicant shall comply with the construction phase and permanent stormwater control requirements of the Municipal Code.

**22.32.050 Transmission Line Undergrounding.** The applicant shall comply with the utility lines and appurtenances requirements of the Zoning Code.

**22.32.060 Utility Easements.** Except in unusual circumstances, easements for utilities should be at least ten feet in width.

***Prior to Recording:***

**22.16.030 Final Plat - Lot Corners.** The exterior plat boundary, and all interior lot corners shall be set by a registered land surveyor.

**22.16.040 Final Plat - Title Report.** The applicant shall submit a title company certification which is not more than 30 calendar days old verifying ownership of the subject property on the date that the property owner(s) (as indicated in the report) sign(s) the subdivision documents; containing a legal description of the entire parcel to be subdivided; describing any easements or restrictions affecting the property with a description, purpose and reference by auditor's file number and/or recording number; any encumbrances on the property; and any delinquent taxes or assessments on the property.

**22.16.150 Final Plat - Improvements.** The owner shall complete or bond all required right-of-way, easement, utility and other similar improvements.

**22.26.700 Plat Vacation - Improvements.** The owner shall complete or bond all required right-of-way, easement, utility, and other similar improvements.

**22.28.050 Lot Dimensions.** The owner of the property shall sign a covenant to ensure that the garage will be located at the rear of any lot which is smaller than 5,000 square feet in a low density zone, has a lot width at the back of the required front yard less than 50 feet, and is not a flag lot.

**22.32.020 Water System.** The applicant shall install a system to provide potable water, adequate fire flow and all required fire-fighting infrastructure and appurtenances to each lot created.

**22.32.040 Sanitary Sewer System.** The developer shall install a sanitary sewer system to serve each lot created.

**22.32.080 Performance Bonds.** In lieu of installing all required improvements and components as part of a plat or short plat, the applicant may propose to post a bond, or submit evidence that an adequate security device has been submitted and accepted by the service provider (City of Kirkland and/or Northshore Utility District), for a period of one year to ensure completion of these requirements within one year of plat/short plat approval.

***Prior to occupancy:***

**22.32.020 Water System.** The applicant shall install a system to provide potable water, adequate fire flow and all required fire-fighting infrastructure and appurtenances to each lot

created.

**22.32.040 Sanitary Sewer System.** The developer shall install a sanitary sewer system to serve each lot created.

**22.32.090 Maintenance Bonds.** A two-year maintenance bond may be required for any of the improvements or landscaping installed or maintained under this title. A maintenance bond will be required for @.

## **ZONING CODE STANDARDS**

**20.10-60.187 Required Yards for Multi-family Development:** The side yard may be reduced to zero feet if the side of the dwelling unit is attached to a dwelling unit on an adjoining lot. If one side of a dwelling unit is so attached and the opposite side is not, the side that is not attached must provide a minimum side yard of five feet. The rear yard may be reduced to zero feet if the rear of the dwelling unit is attached to a dwelling unit on an adjoining lot.

**85.25.1 Geotechnical Report Recommendations.** The geotechnical recommendations contained in the report by Terra Associates dated March 1, 2016 shall be implemented.

**85.25.3 Geotechnical Professional On-Site.** A qualified geotechnical professional shall be present on site during land surface modification and foundation installation activities.

**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 to 4 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 to 4 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.

**95.44 Parking Area Landscape Islands.** Landscape islands must be included in parking areas as provided in this section.

**95.45 Parking Area Landscape Buffers.** Applicant shall buffer all parking areas and driveways from the right-of-way and from adjacent property with a 5-foot wide strip as provided in this section. If located in a design district a low hedge or masonry or concrete wall may be approved as an alternative through design review.

**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.

**100.25 Sign Permits.** Separate sign permit(s) are required. In JBD and CBD cabinet signs are prohibited.

**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 a paved area greater than 10 feet in width must be screened from any adjacent property that does not receive access from it. 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.

**105.32 Bicycle Parking.** All uses, except single family dwelling units and duplex structures with 6 or more vehicle parking spaces must provide covered bicycle parking within 50 feet of an entrance to the building at a ratio of one bicycle space for each twelve motor vehicle parking spaces. Check with Planner to determine the number of bike racks required and location.

**105.18 Entrance Walkways.** All uses, except single family dwellings and duplex structures, must provide pedestrian walkways between the principal entrances to all businesses, uses, and/or buildings on the subject property.

**105.18 Overhead Weather Protection.** All uses, except single family dwellings, multifamily, and industrial uses, must provide overhead weather protection along any portion of the building, which is adjacent to a pedestrian walkway.

**105.18.2 Walkway Standards.** Pedestrian walkways must be at least 5' wide; must be distinguishable from traffic lanes by pavement texture or elevation; must have adequate lighting for security and safety. Lights must be non-glare and mounted no more than 20' above the ground.

**105.18.2 Overhead Weather Protection Standards.** Overhead weather protection must be provided along any portion of the building adjacent to a pedestrian walkway or sidewalk; over the primary exterior entrance to all buildings. May be composed of awnings, marquees, canopies

or building overhangs; must cover at least 5' of the width of the adjacent walkway; and must be at least 8 feet above the ground immediately below it. In design districts, translucent awnings may not be backlit; see section for the percent of property frontage or building facade.

**105.19 Public Pedestrian Walkways.** The height of solid (blocking visibility) fences along pedestrian pathways that are not 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 a design district, see section and Plate 34 for through block pathways standards.

**105.20 Required Parking.** 2 parking spaces per dwelling unit are required for this use.

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

**105.60.2 Parking Area Driveways.** Driveways which are not driving aisles within a parking area shall be a minimum width of 20 feet.

**105.60.3 Wheelstops.** Parking areas must be constructed so that car wheels are kept at least 2' from pedestrian and landscape areas.

**105.60.4 Parking Lot Walkways.** All parking lots which contain more than 25 stalls must include pedestrian walkways through the parking lot to the main building entrance or a central location. Lots with more than 25,000 sq. ft. of paved area must provide pedestrian routes for every 3 aisles to the main entrance.

**105.77 Parking Area Curbing.** All parking areas and driveways, for uses other than detached dwelling units must be surrounded by a 6" high vertical concrete curb.

**105.96 Drive Through Facilities.** See section for design criteria for approving drive through facilities.

**110.52 Sidewalks and Public Improvements in Design Districts.** See section, Plate 34 and public works approved plans manual for sidewalk standards and decorative lighting design applicable to design districts.

**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 sidewalks 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 or 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 Rockerries 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 appurtenances 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.

**150.22.2 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 recording:***

**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 (see Attachment ). It is a violation to pave or cover the landscape strip with impervious material or to park motor vehicles on this strip.

**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.

***Prior to issuance of a grading or building permit:***

**85.25.1 Geotechnical Report Recommendations.** A written acknowledgment must be added to the face of the plans signed by the architect, engineer, and/or designer that he/she has reviewed the geotechnical recommendations and incorporated these recommendations into the plans.

**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 7).

**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 to 4 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 to 4 foot tall split rail fence, or 2) permanent planting of equal barrier value.

**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 7).

**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:***

**85.25.3 Geotechnical Professional On-Site.** The geotechnical engineer shall submit a final report certifying substantial compliance with the geotechnical recommendations and geotechnical related permit requirements.

**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.

**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 and Building 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 (see Attachment @). It is a violation to pave or cover the landscape strip with impervious material or to park motor vehicles on this strip.

**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.



# DEVELOPMENT STANDARDS

## SUB16-03082

### FIRE DEPARTMENT

#### FIRE DEPARTMENT COMMENTS

Contact: Grace Steuart at 425-587-3660; or [gsteuart@kirklandwa.gov](mailto:gsteuart@kirklandwa.gov)

#### ACCESS

Access as shown (which includes a fire department turnaround) is acceptable.

#### HYDRANTS AND FIRE FLOW

Fire flow requirement for this project is 1,000 gpm. The project is in Northshore Utility District. A certificate of water availability shall be provided from NUD.

The two on-site hydrants as well as the existing hydrant on Simonds Road shall be equipped with a 5" Storz fitting.

#### SPRINKLER THRESHOLD

Per Kirkland Municipal Code, all new buildings which are 5,000 gross square feet or larger require fire sprinklers. Included are single family homes, duplexes, and zero lot line townhouses where the aggregate area of all connected townhouses is greater than 5,000 square feet.; garages, porches, covered decks, etc, are included in the gross square footage. (This comment is included in the short plat conditions for informational purposes only.)

### PUBLIC WORKS DEPARTMENT

#### PUBLIC WORKS CONDITIONS

##### Public Works Staff Contacts

Land Use and Pre-Submittal Process:

Building and Land Surface Modification (Grading) Permit Process:

John Burkhalter, Development Engineer Supervisor

Phone: 425-587-3846 Fax: 425-587-3807

E-mail: [jb Burkhalter@kirklandwa.gov](mailto:jb Burkhalter@kirklandwa.gov)

##### 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.kirklandwa.gov](http://www.kirklandwa.gov).
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 review the City of Kirkland web site at [www.kirklandwa.gov](http://www.kirklandwa.gov) The applicant should anticipate the following fees:
  - o Surface Water Connection Fees (paid with the issuance of a Building Permit)
  - o Water Meter Fee (paid with the issuance of a Building Permit)
  - o Right-of-way Fee
  - o Review and Inspection Fee (for utilities and street improvements).
  - o 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

SUB16-03082

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Permit(s). Any existing buildings within this project which are demolished will receive a Traffic Impact Fee credit, Park Impact Fee Credit and School Impact Fee Credit. This credit will be applied to the first Building Permits that are applied for within the project. The credit amount for each demolished building will be equal to the most currently adopted Fee schedule.

3. All street and utility improvements shall be permitted by obtaining a Land Surface Modification (LSM) Permit.
4. Submittal of Building Permits within a subdivision prior to recording:
  - Submittal of a Building Permit with an existing parcel number prior to subdivision recording: A Building Permit can be submitted prior to recording of the subdivision for each existing parcel number in the subject project, however in order for the Building Permit to be deemed a complete application, all of the utility and street improvements for the new home must be submitted with application. However, the Building Permit will not be eligible for issuance until after the Land Surface Modification Permit is submitted, reviewed, and approved to ensure the comprehensive storm water design required by the subdivision approval is reviewed and approved, and then shown correctly on the Building Permit plans to match the Land Surface Modification Permit.
  - Submittal of Building Permits within an Integrated Development Plan (IDP): If this subdivision is using the IDP process, the Building Permits for the new homes can only be applied for after the Land Surface Modification Permit has been submitted, reviewed, and approved.
  - Submittal of a Building Permit within a standard subdivision (non IDP): If this subdivision is not using the IDP process, the Building Permits for the new houses can be applied for after the subdivision is recorded and the Land Surface Modification permit has been submitted, reviewed, and approved.
  - Review of Expedited or Green Building Permits: A new single family home Building Permit within a subdivision can only be review on an expedited or green building fast track if submitted electronically through MBP and the Land Surface Modification permit has been submitted, reviewed, and approved.
5. Subdivision Performance and Maintenance Securities:
  - The subdivision can be recorded in advance of installing all the required street and utility improvements by posting a performance security equal to 130% of the value of work. This security amount will be determined by using the City of Kirkland's Improvement Evaluation Packet. Contact the Development Engineer assigned to this project to assist with this process.
  - If the Developer will be installing the improvements prior to recording of the subdivision, there is a standard right of way restoration security ranging from \$10,000.00 to 30,000.00 (value determined based on amount of right-of-way disruption). This security will be held until the project has been completed.
  - Once the subdivision has been completed there will be a condition of the permit to establish a two year Maintenance security.
6. This project is exempt from concurrency review.
7. 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.
8. 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 engineers stamp.
9. 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).
10. A completeness check meeting is required prior to submittal of any Building Permit applications.
11. The required tree plan shall include any significant tree in the public right-of-way along the property frontage.
12. All subdivision recording documents shall include the following language:

**Utility Maintenance:** Each property owner shall be responsible for maintenance of the sanitary sewer, storm water stub, rain garden, permeable pavement, or any infiltration facilities (known as Low Impact Development) 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, surface water stub, rain garden, permeable pavement, or any infiltration facilities, 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 all property owners within this subdivision, including their heirs, successors and assigns.

If the lots have on-site private storm water facilities, include this language on the subdivision recording document:

**Maintenance of On-site Private Stormwater Facilities:** Each Lot within the Subdivision has a stormwater facility (infiltration trench, dry wells, dispersion systems, rain garden, and permeable pavement) which is designed to aid storm water flow control for the development. The stormwater facility within the property shall be owned, operated and maintained by the Owner. The City of Kirkland shall have the right to ingress and egress the Property for inspection of and to reasonable monitoring of the performance, operational flows, or defects of the stormwater/flow control facility.

If the City of Kirkland determines related maintenance or repair work of the stormwater facility is required, the City of Kirkland shall give notice to the Owner of the specific maintenance and/or repair work required. If the above required maintenance or repair is not completed within the time set by the City of Kirkland, the City of Kirkland may perform the required maintenance or repair, or contract with a private company capable of performing the stormwater facility maintenance or repair and the Owner will be required to reimburse the City for any such work performed.

The Owner is required to obtain written approval from the City of Kirkland prior to replacing, altering, modifying or maintaining the storm water facility.

**Sanitary Sewer and Water Conditions:**

1. Northshore Utility District approval required for water and sewer service. A letter of sewer/water availability is required; call N.U.D at 425-398-4400.

**Surface Water Conditions:**

1. Provide temporary and permanent storm water control per the 2009 King County Surface Water Design Manual and the Kirkland Addendum (Policy D-10). 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.

- Full Drainage Review

A full drainage review is required for any proposed project, new or redevelopment, that will:

Adds 5,000ft<sup>2</sup> or more of new impervious surface area or 10,000ft<sup>2</sup> or more of new plus replaced impervious surface area,

Propose 7,000ft<sup>2</sup> or more of land disturbing activity, or,

Be a redevelopment project on a single or multiple parcel site in which the total of new plus replaced impervious surface area is 5,000ft<sup>2</sup> or more and whose valuation of proposed improvements (including interior improvements but excluding required mitigation and frontage improvements) exceeds 50% of the assessed value of the existing site improvements.

2.

A preliminary drainage report (Technical Information Report) must be submitted with the subdivision application. This must include a downstream analysis for all projects (except small project Type 1) within the Holmes Point Overlay Zone.

3. 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 or L-2 (depending on drainage review) for more information on this requirement.

4. Because this project site is one acre or greater, the following conditions apply:

- Amended soil requirements (per Ecology BMP T5.13) must be used in all landscaped areas.
- If the project meets minimum criteria for water quality treatment (5,000ft<sup>2</sup> pollution generating impervious surface area), the enhanced level of treatment is required if the project is multi-family residential, commercial, or industrial. Enhanced treatment targets the removal of metals such as copper and zinc.
- The applicant is responsible to apply for a Construction Stormwater General Permit from Washington State Department of Ecology. Provide the City with a copy of the Notice of Intent for the permit. Permit Information can be found at the following website: <http://www.ecy.wa.gov/programs/wq/stormwater/construction/>
  - o Among other requirements, this permit requires the applicant to prepare a Storm Water Pollution Prevention Plan (SWPPP) and identify a Certified Erosion and Sediment Control Lead (CESCL) prior to the start of construction. The CESCL shall attend the City of Kirkland PW Dept. pre-construction meeting with a completed SWPPP.
- Turbidity monitoring by the developer/contractor is required if a project contains a lake, stream, or wetland.
- A Stormwater Pollution Prevention and Spill (SWPPS) Plan must be kept on site during all phases of construction and shall address construction-related pollution generating activities. Follow the guidelines in the 2009 King County Surface Water Design Manual for plan preparation.

5. This project is creating or replacing more than 5000 square feet of new impervious area that will be used by vehicles (PGIS - pollution generating impervious surface). Provide storm water quality treatment per the 2009 King County Surface Water Design Manual. The enhanced treatment level is encouraged when feasible for multi-family residential, commercial, and industrial projects less than 1 acre in size.

6. Provide a level one off-site analysis (based on the King County Surface Water Design Manual, core requirement #2).

7. It doesn't appear that any work within an existing ditch will be required, however the developer has been given notice that the Army Corps of Engineers (COE) has asserted jurisdiction over upland ditches draining to streams. Either an existing Nationwide COE permit or an Individual COE permit may be necessary for work within ditches, depending on the project activities.

Applicants should obtain the applicable COE permit; information about COE permits can be found at: U.S. Army Corps of Engineers, Seattle District Regulatory Branch <http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits.aspx>

Specific questions can be directed to: Seattle District, Corps of Engineers, Regulatory Branch, CENWS-OD-RG, Post Office Box 3755, Seattle, WA 98124-3755, Phone: (206) 764-3495

8. A Hydraulic Project Approval (HPA) from WA State Department of Fish and Wildlife (WDFW) may be required for this project. Contact WDFW at 425-313-5683 or [larry.fisher@dfw.wa.gov](mailto:larry.fisher@dfw.wa.gov) for determination, obtain an HPA if required, and submit a copy to COK. If an HPA is not required, the applicant may be required to provide written documentation from WDFW as verification. More information on HPAs can be found at the following website: <http://wdfw.wa.gov/licensing/hpa/>

9. Provide an erosion control report and plan with Building or Land Surface Modification Permit application. The plan shall be in accordance with the 2009 King County Surface Water Design Manual.

10. 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 and weather conditions. Exposed soils shall be stabilized at the end of the workday prior to a weekend, holiday, or predicted rain event.

11. Provide collection and conveyance of right-of-way storm drainage
12. Provide a separate storm drainage connection for each lot. All roof and driveway drainage must be tight-lined to the storm drainage system or utilize low impact development techniques. The tight line connections shall be installed with the individual new houses.

Street and Pedestrian Improvement Conditions:

1. The subject property abuts Simonds Road (an Arterial type street) and a new access road (a Neighborhood Access type street). Zoning Code sections 110.10 and 110.25 require the applicant to make half-street improvements in rights-of-way abutting the subject property. Section 110.30-110.50 establishes that this street must be improved with the following:

Simonds Road NE

- A. Widen the street to 20 ft. from centerline to face of curb.
- B. Install storm drainage, curb and gutter, and an 8 ft. sidewalk with 4x6 tree wells and street trees 30 ft. on-center.
- C. Provide ADA ramps across the new plat road.
- D. Does not appear a right-of-way dedication is needed for the proposed road section, dedication required if necessary.

New Access Street:

- A. The proposed road is longer than 200 ft. in length and therefore shall provide a cul-de-sac 70 ft. in diameter curb to curb inside an 80 ft. diameter dedication.
  - B. The proposed road is less than 300 ft. in length therefore sidewalks are not required.
  - C. Install and R-24 street (24 ft. curb to curb width) including storm drainage, curb and gutter, and a 4.5 ft. planter strip with street trees 30 ft. on-center.
2. When three or more utility trench crossings occur within 150 lineal ft. of street length or where utility trenches parallel the street centerline, the street shall be overlaid with new asphalt or the existing asphalt shall be removed and replaced.
    - Existing streets with 4-inches or more of existing asphalt shall receive a 2-inch (minimum thickness) asphalt overlay. Grinding of the existing asphalt to blend in the overlay will be required along all match lines.
    - Existing streets with 3-inches or less of existing asphalt shall have the existing asphalt removed and replaced with an asphalt thickness equal or greater than the existing asphalt provided however that no asphalt shall be less than 2-inches thick and the subgrade shall be compacted to 95% density.
  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 (20 ft. min.). No driveway access shall be allowed from Simonds Road.
  4. Prior to the final of the building or grading permit, pay for the installation of stop and street signs at the new intersections.
  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 by 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 Simonds Road is not feasible at this time and 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

SUB16-03082

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the following note:

Local Improvement District (LID) Waiver Agreement. Chapter 110.60.7.b of the Kirkland Zoning Code requires all overhead utility lines along the frontage of the subject property to be converted to underground unless the Public Works Director determines that it is infeasible to do so at the time of the subdivision recording. If it is determined to be infeasible, then the property owner shall consent to the formation of a Local Improvement District, hereafter formed by the City or other property owners. During review of this subdivision it was determined that it was infeasible to convert the overhead utility lines to underground along the frontage of this subdivision on Simonds Road. Therefore, in consideration of deferring the requirement to underground the overhead utility lines at the time of the subdivision recording, the property owner and all future property owners of lots within this subdivision hereby consent to the formation of a Local Improvement District hereafter formed by the City or other property owners

8. New street lights may be required per Puget Power design and Public Works approval. Contact the INTO Light Division at PSE for a lighting analysis. If lighting is necessary, design must be submitted prior to issuance of a grading or building permit.
9. Street lights within the project along the new access street require a lighting district with serving utility district
10. A striping plan for the street must be submitted with the building or grading permit.



October 31, 2016

Corey Christenson  
Simonds Road Preliminary Plat  
PO Box 158  
Mukilteo, WA 98275

Site: TPN: 1926059070  
3.6 Acre site; 30 tree credits/ acre = 108 tree credits for the site

Dear Corey:

Thank you for requesting my services. On March 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup>, 2016 I visited the site located above in Kirkland, WA to perform a Visual Risk Assessment (VRA) for all significant trees onsite as well as, those offsite trees with driplines that might extend over the site. The information gathered is included in this report and is necessary to apply for a short plat.

In summary:

Credit Calculation	
Total number of trees	328
Total number of significant trees	88
Total number of tree credits required 3.6*30=	108
Total number of tree credits obtained	87
Mitigation	21

I have included a detailed report of my findings. If you have any questions, please call me. I can be reached on my cell phone: 425.890.3808 or by email: [sprince202@aol.com](mailto:sprince202@aol.com).

Warm regards,



Susan Prince  
Creative Landscape Solutions  
ISA Certified Arborist: PN 1418A  
TRACE Qualified Arborist  
17518 NE 119<sup>th</sup> Way  
Redmond, WA 98052  
[Sprince202@aol.com](mailto:Sprince202@aol.com)  
425.890.3808

\* Per city of Kirkland Municipal Code, a significant tree is one whose Diameter at Breast Height (DBH) is 6" or greater

### **Personal qualifications, scope of work and methodology**

My examination was limited to a visual one, and did not involve any root excavation, trunk or limb coring, or any soil testing. To evaluate the trees and prepare the report, I drew on my formal college education in botany, preparation and training used to obtain my ISA certification in addition to my certification as a Tree Risk Assessor. I have been an ISA Certified Arborist for over fifteen years and have been TRACE/TRAQ certified for four years.

I followed protocol delineated by the International Society of Arboriculture (ISA) for Visual Risk Assessment (VRA). By doing so, I am examining each tree independently as well as collectively as groups or stands of trees provide stability and can lower risk of independent tree failure. This scientific process examines tree health (e.g. size, vigor, insect and disease process) as well as site conditions (soil moisture and composition, amount of impervious surfaces surrounding the tree etc.)

### **Introduction:**

Identifying and managing the risks associated with trees is still largely a subjective process. Since the exact nature of tree failures remains largely unknown, our ability as scientists and arborists to predict which trees will fail and in what fashion remains limited. As currently practiced, the science of hazard tree evaluation involves examining a tree for structural defects, including genetic problems, those caused by the local environmental that the tree grows in and those attributed to man (pruning etc.).

The assessment process involves evaluating three components: 1) a tree with the potential to fail, 2) an environment that may contribute to that failure, and 3) a person or object that would be injured or damaged (the target). By definition a defective tree cannot be considered hazardous without the presence of a target.

All trees have a finite life-span though it is not pre-programmed internally in the same manner as annual plantings. As trees age they are less able to compartmentalize structural damage following injury from insects, disease or pruning. Trees in urban settings have a shorter life span than trees grown in an undisturbed habitat.

Different species of trees grow differently. Evergreen trees have a "reputation" of growing slowly and defensively. These trees allocate a high proportion of their resources to defending themselves from pathogens, parasites and wounds. As a rule, trees with this type of growth tend to be long lived.

Though like all other living things, they have a fairly predictable life span. Examples of this type of tree include the northwest *Pseudotsuga menziesii* - Douglas fir, and *Thuja plicata* - Western red cedar.

Deciduous trees are trees that annually shed leaves or needles. These trees have a tendency to grow quickly and try to "outgrow" problems associated with insects, disease and wounds. They allocate a relatively small portion of their internal resources to defense and rely instead upon an ability to grow more quickly than the pathogens which infect them. However, as these trees age, their growth rate declines and the normal problems associated with decay begins to catch up and compromise the tree's structural integrity. Examples of this type of tree include *Salix*, *Populus* and *Alnus*.

Knowledge of the growth and failure patterns of individual tree species is critical to effective hazard analysis. Species vary widely in their rates of failure. The hazard tree evaluation rating system used by most arborists was developed by the Colorado Urban Forest Council and recognizes this variation in species failure and includes a species component as part of the overall hazard evaluation.

**Site Observations:**

The 3.6 acre site is located south of Simonds Road NE, and west of 100<sup>th</sup> Ave NE in Kirkland. There is a creek offsite to the south. The undeveloped property is constrained by uneven topography – a hill on the northwest portion and a slope to the east.

**Method’s used to determine tree location and tree health:**

Trees were identified previously by numbered aluminum tags attached to the western side of the tree. All of the trees on site were examined using the Matheny and Clark<sup>1</sup> criteria for determining the potential hazard of trees in an urban environment as well as the Tree Risk Assessment in Urban Areas and The Urban/Rural Interface by Julian Dunster<sup>2</sup>.

Tree diameters were measured at DSH (diameter standard height – 4.5’ above ground) using a logger’s tape. Tree driplines were measured using a PRO Laser Rangefinder<sup>TM</sup>.

**Spreadsheet Legend:**

1. Tree tag #: Numbered aluminum tags attached to the trees in the field\*<sup>1</sup>
2. Species: The Latin and common name five a tree
3. Species: Species ID: Spreadsheet contains common names of trees which correspond to scientific names as follows:
 

<ul style="list-style-type: none"> <li>• Apple: <i>Malus sp.</i></li> <li>• American sycamore: <i>Plantanus occidentalis</i></li> <li>• Austrian pine: <i>Pinus nigra</i></li> <li>• Bigleaf maple: <i>Acer macrophyllum</i></li> <li>• Birch: <i>Betula nigra</i></li> <li>• Bitter Cherry: <i>Prunus emarginata</i></li> <li>• Blue atlas cedar: <i>Cedrus atlantica ‘Glauca’</i></li> <li>• Cedar: <i>Thuja plicata</i></li> <li>• Cherry: <i>Prunus sp.</i></li> <li>• Dawn redwood: <i>Chamaecyparis nootkatensis</i></li> <li>• Deodora cedar: <i>Cedrus deodara</i></li> <li>• Colorado blue spruce: <i>Picea pungens</i></li> <li>• Cottonwood: <i>Populus trichocarpa</i></li> <li>• Dogwood: <i>Cornus nuttallii</i></li> <li>• Douglas fir: <i>Pseudotsuga menziesii</i></li> <li>• English laurel: <i>Prunus laurocerasus</i></li> <li>• Filbert: <i>Corylus avellana var.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Grand fir: <i>Abies grandis</i></li> <li>• Hemlock: <i>Tsuga heterophylla</i></li> <li>• Holly: <i>Ilex aquifolium</i></li> <li>• Japanese maple: <i>Acer palmatum</i></li> <li>• Leylandii cypress: <i>Cupressocyparis leylandii</i></li> <li>• Lodgepole pine: <i>Pinus contorta</i></li> <li>• Mountain ash: <i>Sorbus americana</i></li> <li>• Nobel fir: <i>Abies procera</i></li> <li>• Pear: <i>Pyrus sp.</i></li> <li>• Plum: <i>Prunus</i></li> <li>• Red Alder: <i>Alnus rubra</i></li> <li>• Red maple: <i>Acer rubrum</i></li> <li>• Walnut: <i>Juglans sp.</i></li> <li>• Western red cedar: <i>Thuja plicata</i></li> <li>• Weeping Alaska cedar: <i>Metasequoia glyptostrobides</i></li> <li>• White fir: <i>Abies concolor</i></li> <li>• White pine: <i>Pinus strobus</i></li> </ul>
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4. DBH: Diameter of the tree measured at 42" above grade
5. Adjusted Diameter of the tree: Calculated equivalent for multi-stemmed tree
6. Dripline Radius: Measurement in feet of the tree canopy from tree trunk to outermost branch tip
7. Health: A measurement of overall tree vigor and vitality rated as excellent, good, and fair or poor based on an assessment of crown density, leaf color and size, active callusing, shoot growth rate, extent of crown dieback, cambium layer health, and tree age
  - Excellent: Tree is an ideal specimen for the species with no obvious flaws
  - Good: Tree has minimal structural or situational defects
  - OK: Tree has minimal structural defects AND minimal environmental concerns
  - Fair: Tree has structural or health issues that predispose it to failure if further stressed; however sometimes the tree can be retained for years if protected in a grove
  - Poor: Tree has significant structural and/or health issues. It is exempt from total tree count.

8. Defects/Concerns: A measure of the tree's structural stability and failure potential and rated as good, fair or poor based on assessment of specific structural features, eg., decay, conks, co- dominant trunks, included bark, abnormal lean, one-sided canopy, history of failure, prior construction impact, pruning history, etc..
9. Proposed action:
  - Retain
  - Remove due to viability
  - Remove due to planned development (tree is otherwise healthy)
10. Limits of disturbance: The area surrounding the tree that defines the area that surrounds the trunk that cannot be encroached upon during construction. This may be a multiple of the trunk diameter (1 -1.5 times the trunk diameter converted to feet.) or it may be related to the width of the canopy. It is always determined by tree species and environment and is up to the discretion of the ISA Certified Arborist to determine
11. Value: The value the municipality assigns a tree with the specific DBH, species or location of the assessed tree
12. Tree Density Requirement (Kirkland): 30 tree credits per acre, excludes trees in the city easement (street trees)

**Kirkland: Tree Density for Existing Significant  
Trees (Credits per minimum diameter  
– DBH)**

DBH	Tree Credits	DBH	Tree Credits	DBH	Tree Credits
3 – 5"	0.5				
6 – 10"	1	24"	8	38"	15
12"	2	26"	9	40"	16
14"	3	28"	10	42"	17
16"	4	30"	11	44"	18
18"	5	32"	12	46"	19
20"	6	34"	13	48"	20
22"	7	36"	14	50"	21

Example: a 7,200-square-foot lot would need five (5) tree credits ( $7,200/43,560 = 0.165 \times 30 = (4.9)$  or five (5)). The density for the lot could be met with one (1) existing 16-inch tree and one (1) existing 6-inch tree on site.

**Specific Onsite Tree Observations:**

1	2	3	5	6	7	8	9			10				11	12	13
#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
1	1503	Douglas fir	27	22	OK	Asymmetric canopy to north, low live crown ratio - 20%, popping bark, broken branches, no taper	1			22	22	22	22	9.5	9.5	9.5
2	1504	Douglas fir	13	10	Poor	Shedding bark, abnormal bark, low live crown ratio - 10%, previous top loss, dead wood, laminated root rot?		1		10	10	10	10	2.5		
3	1505	Douglas fir	20	18	Fair	Laminated root rot?, abnormal bark, shedding bark, broken branches, low live crown ratio - 10%, dead wood, dead twigs		1		18	18	18	18	6		
4	1506	Douglas fir	14	11	Fair	Serpentine trunk w/damage @ 18', epicormic branch formation, low live crown ratio - 10%, lean 10° to north, moss and lichen		1		11	11	11	11	3		
5	1507	Douglas fir	28	26	Poor	Abnormal bark, shedding bark, popping bark, dead wood, broken branches, dead twigs, probable laminated root rot		1		26	26	26	26	10		

1	2	3	5	6	7	8	9			10				11	12	13
#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
6	1508	Bigleaf maple	20	24	OK	Lean to north @ 10°, typical of species, dead wood, broken branches	1			24	24	24	24	6	6	6
7	1509	Bigleaf maple	40	44	Fair	Co-dominant leaders with included bark x2 @ 4', co-dominant leaders with included bark x2 @ 7', typical of species, dead wood, exposed roots		1		44	44	44	44	16		
8	1510	Douglas fir	32	12	Fair	Reaction wood @ root crown to 6' on south, typical of species, low live crown ratio - 20%, dead wood, broken branches		1		12	12	12	12	12		
9	1511	Douglas fir	18	14	Poor	Previous top loss, asymmetric canopy to south, abnormal bark, shedding bark, decay @ root crown, probable laminated root rot		1		14	14	14	14	5		
10	1512	Douglas fir	10	12	Poor	Previous top loss, healed wound @ root crown to 3' on east, asymmetric canopy to south, wound @ 3' on south, girdling wound		1		12	12	12	12	1		
11	1513	Douglas fir	20	18	Poor	Horizontal crack @ root crown to 1', abnormal bark, shedding bark, asymmetric canopy to south, previous		1		18	18	18	18	6		

1	2	3	5	6	7	8	9			10				11	12	13
#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
						top loss										
12	1514	Red Alder	16	18	Poor	Previous top loss, woodpecker activity @ top, carpenter ants		1		18	18	18	18	4		
13	1515	Douglas fir	18	18	Fair	Abnormal bark, shedding bark, co-dominant leaders with included bark x2 reduced to 1 @ 25', dead wood, broken branches, popping bark		1		18	18	18	18	5		
14	1516	Douglas fir	8	10	Poor	Previous top loss, dead wood, broken branches		1		10	10	10	10	1		
15	1517	Bigleaf maple	21	28	OK	Exposed roots, dead wood, broken branches, typical of species, moss and lichen, exposed roots	1			28	28	28	28	6.5	6.5	6.5
16	1518	Douglas fir	21	16	Fair	Self-corrected lean to south, abnormal bark, shedding bark, carpenter ants, asymmetric canopy to south, bulge @ 3', serpentine trunk		1		16	16	16	16	6.5		
17	1519	Douglas fir	29	20	OK	Co-dominant leaders with included bark x2 @ 50', typical of species	1			20	20	20	20	10.5	10.5	10.5

1	2	3	5	6	7	8	9			10				11	12	13
#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
18	1520	Douglas fir	10	9	Fair	Suppressed canopy, bent south		1		9	9	9	9	1		
19	1521	Bigleaf maple	16	30	OK	Suppressed canopy, typical of species	1			30	30	30	30	4	4	4
20	1522	Red Alder	15	17	Poor	Moss and lichen, typical of species, wound @ 5' on south, cavity on west		1		17	17	17	17	3.5		
21	1523	Red Alder	15	13	Fair	Co-dominant leaders with included bark x2 @ 2', typical of species		1		13	13	13	13	3.5		
22	1524	Red Alder	28	20	Fair	Typical of species, cavity on west, carpenter ants, column of decay on south @ 6' to 9', nurse tree		1		20	20	20	20	10		
23	1525	Bitter Cherry	10	0	Poor	Co-dominant leaders with included bark x2 @ 10', gummosis, mostly dead		1		0	0	0	0	1		
24	1526	Bigleaf maple	23	30	Poor	Dead top, dead wood, broken branches, area of soil failure		1		30	30	30	30	7.5		
25	1527	Red Alder	10	13	Fair	Typical of species, low live crown ratio - 20%		1		13	13	13	13	1		
26	1528	Douglas fir	34	24	Fair	Serpentine trunk, exposed roots, dead wood, broken branches, abnormal bark, popping bark, soil failure?		1		24	24	24	24	13		

1	2	3	5	6	7	8	9			10				11	12	13
#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
27	1529	Douglas fir	23	18	Fair	Co-dominant leaders with included bark x4 @ 20' reduced to 1 dead, serpentine trunk, self-corrected lean to south, exposed roots, hanger		1		18	18	18	18	7.5		
28	1542	Bigleaf maple	11	12	OK	Typical of species			1	12	12	12	12	1.5	1.5	
29	1544	Bigleaf maple	46	9	OK	Co-dominant leaders with included bark x2 @ 6', typical of species, dead wood, dead scaffold			1	9	9	9	9	19	19	
30	1545	Red Alder	9	38	OK	Low live crown ratio - 5%, OK with cedar			1	38	38	38	38	1	1	
31	1547	Red Alder	8	10	Poor	Failed @ 6'		1		10	10	10	10	1		
32	1548	Red Alder	10	0	Poor	Failing to south		1		0	0	0	0	1		
33	1549	Red Alder	6	6	Poor	Failed @ root crown		1		6	6	6	6	1		
34	1550	Red Alder	10	12	Poor	Typical of species, ivy to 20', failures on south		1		12	12	12	12	1		
35	1551	Red Alder	7	12	Fair	Typical of species, asymmetric canopy to south		1		12	12	12	12	1		
36	1552	Red Alder	7	7	Fair	Typical of species		1		7	7	7	7	1		
37	1553	Red Alder	6	9	Fair	Typical of species, asymmetric canopy to south		1		9	9	9	9	1		
38	1556	Red Alder	11	16	Poor	Failed @ 20'		1		16	16	16	16	1.5		

1	2	3	5	6	7	8	9			10				11	12	13
#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
39	1558	Red Alder	10	16	OK	Typical of species	1			16	16	16	16	1	1	1
40	1561	Bigleaf maple	36	38	OK	Typical of species, moss and lichen, ferns, hangers			1	38	38	38	38	14	14	
41	1569	Red Alder	7	8	Poor	Failed @ 20'		1		8	8	8	8	1		
42	1570	Red Alder	6	12	OK	Typical of species, low live crown ratio - 5%	1			12	12	12	12	1	1	1
43	1573	Bigleaf maple	38	38	OK	Co-dominant leaders with included bark x 4 @ 2', typical of species, dead wood, dead scaffold			1	38	38	38	38	15	15	
44	1574	Red Alder	9	12	Fair	Typical of species, low live crown ratio - 5%		1		12	12	12	12	1		
45	1575	Douglas fir	23	20	OK	Serpentine trunk, wound @ root crown to 1' on south, dead wood, dead twigs			1	20	20	20	20	7.5	7.5	
46	1576	Red Alder	7	9	Poor	Mostly dead		1		9	9	9	9	1		
47	1577	Red Alder	16	20	Fair	Typical of species, lean to south		1		20	20	20	20	4		
48	1579	Bigleaf maple	33	29	Fair	Co-dominant leaders with included bark x2 @ 3', cavity @ root crown, carpenter ants, dead scaffold, cavity of decay on west @ 3', dead wood		1		29	29	29	29	12.5		

1	2	3	5	6	7	8	9			10				11	12	13
#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
49	1580	Bigleaf maple	8	13	Fair	Decay @ root crown, lean to north, low live crown ratio - 5%		1		13	13	13	13	1		
50	1581	Bigleaf maple	11	24	Fair	Healed wound @ 4' to 9' on south, lean to north		1		24	24	24	24	1.5		
51	1582	Bigleaf maple	13	22	Fair	Lean to north, low live crown ratio - 10%		1		22	22	22	22	2.5		
52	1583	Bigleaf maple	16	24	Fair	Exposed roots, lean to north, asymmetric canopy to north, typical of species		1		24	24	24	24	5		
53	1584	Bigleaf maple	13	18	Fair	Lean to north, dead wood, broken branches, asymmetric canopy to north, decay @ root crown		1		18	18	18	18	2.5		
54	1585	Bigleaf maple	18	26	Fair	Lean to north, dead wood, broken branches, asymmetric canopy to north, decay @ root crown		1		26	26	26	26	5		
55	1586	Bigleaf maple	13	18	Fair	Lean to north, dead wood, broken branches, asymmetric canopy to north, decay @ root crown		1		18	18	18	18	2.5		
56	1587	Bigleaf maple	14	22	Fair	Lean to north, dead wood, broken branches, asymmetric canopy to north, decay @ root crown		1		22	22	22	22	3		

1	2	3	5	6	7	8	9			10				11	12	13
#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
57	1588	Douglas fir	22	20	Poor	Abnormal bark, shedding bark, carpenter ants, moss and lichen, decay @ root crown on north, compressed bark on north @ root crown		1		20	20	20	20	7		
58	1589	Douglas fir	6	6	Poor	Previous top loss, mostly dead		1		6	6	6	6	1		
59	1590	Douglas fir	29	26	Poor	Exposed roots, decay @ root crown on north, free flowing sap, probable crack, abnormal bark, popping bark, previous top loss, elongated branch		1		26	26	26	26	10.5		
60	1591	Bigleaf maple	41	42	Fair	Co-dominant leaders with included bark x5 @ root crown, 2 are dead, decay in scaffolds, hanger, exposed roots		1		42	42	42	42	16.5		
61	1592	Douglas fir	14	14	Poor	Mostly dead, recent failure		1		14	14	14	14	3		
62	1593	Bigleaf maple	16	16	OK	Co-dominant leaders with included bark x2 @ 20', dead wood, broken branches, spur mostly dead, narrow canopy			1	16	16	16	16	4	4	
63	1594	Bigleaf maple	13	15	Poor	Multi failures @ 20'		1		15	15	15	15	2.5		
64	1595	Bigleaf maple	19	20	Fair	Crack in scaffold on east		1		20	20	20	20	5.5		
65	1596	Bigleaf maple	16	16	OK	Typical of species			1	16	16	16	16	4	4	

1	2	3	5	6	7	8	9			10				11	12	13
#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
66	1597	Bigleaf maple	8	13	Poor	Mostly dead, moss and lichen		1		13	13	13	13	1		
67	1598	Bigleaf maple	10	28	OK	Narrow canopy, dead wood, broken branches			1	28	28	28	28	1	1	
68	1599	Bigleaf maple	21	13	OK	Moss and lichen, typical of species, dead wood			1	13	13	13	13	6.5	6.5	
69	1600	Red Alder	8	0	Poor	Dead		1		0	0	0	0	1		
70	1601	Bigleaf maple	12	18	OK	Typical of species, dead wood, broken branches, moss and lichen			1	18	18	18	18	2	2	
71	1602	Bigleaf maple	19	26	OK	Typical of species			1	26	26	26	26	5.5	5.5	
72	1604	Douglas fir	29	26	Fair	Serpentine trunk @ 15', epicormic branch formation, badly damaged, asymmetric canopy to south, dead wood, broken branches, dead twigs, dead spur @ root crown		1		26	26	26	26	10.5		
73	1605	Douglas fir	19	18	Fair	Abnormal bark, shedding bark, carpenter ants, dead wood, broken branches, asymmetric canopy to north, reaction wood on NW		1		18	18	18	18	5.5		
74	1606	Bigleaf maple	5	10	Poor	Typical of species, mostly dead on north		1		10	10	10	10	0		

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#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
75	1607	Red Alder	7	12	Fair	Typical of species, dead wood, broken branches, wound @ root crown on east		1		12	12	12	12	1		
76	1608	Douglas fir	23	24	OK	No taper, serpentine trunk, free flowing sap on north @ 8' to 12', asymmetric canopy to NE			1	24	24	24	24	7.5	7.5	
77	1609	Douglas fir	28	26	OK	Low live crown ratio - 15%, dead wood, broken branches			1	26	26	26	26	10	10	
78	1610	Douglas fir	15	12	OK	No taper, elongated branch, dead wood, broken branches, suppressed canopy			1	12	12	12	12	3.5	3.5	
79	1611	Douglas fir	15	14	OK	No taper, low live crown ratio - 10%, dead wood, broken branches, OK in grove			1	14	14	14	14	3.5	3.5	
80	1612	Douglas fir	26	20	OK	Asymmetric canopy to south, dead wood, broken branches, exposed roots, epicormic branch formation @ 6' on north			1	20	20	20	20	9	9	
81	1613	Bigleaf maple	38	42	Fair	Large failure on east, typical of species, dead scaffold, dead wood		1		42	42	42	42	15		

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#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
82	1614	Douglas fir	32	20	OK	Large hangers, wound on south @ 4' to 11', asymmetric canopy to east, dead wood, broken branches, dead twigs			1	20	20	20	20	12	12	
83	1615	Douglas fir	33	24	OK	Wound @ 6' on west, abnormal bark, shedding bark, broken branches, dead wood, carpenter ants bark only, hanger, dead twigs			1	24	24	24	24	12.5	12.5	
84	1616	Red Alder	9	0	Poor	Dead		1		0	0	0	0	0		
85	1617	Red Alder	16	0	Poor	Dead		1		0	0	0	0	0		
86	1618	Red Alder	10	12	Fair	Wound @ 1' on east, dead wood, hanger, lean to north		1		12	12	12	12	1		
87	1619	Red Alder	13	16	Fair	Lean to north, dead wood, broken branches, typical of species		1		16	16	16	16	2.5		
88	1620	Red Alder	11	16	Poor	Failing to east		1		16	16	16	16	1.5		
89	1621	Red Alder	14	22	OK	Dead wood, broken branches, typical of species			1	22	22	22	22	3	3	
90	1622	Red Alder	5	7	Poor	Dead wood, previous top loss		1		7	7	7	7	0		
91	1623	Red Alder	8	18	OK	Typical of species, dead wood, broken branches			1	18	18	18	18	1	1	

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#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
92	1624	Red Alder	9	12	Poor	Dead		1		12	12	12	12	1		
93	1625	Red Alder	10	12	OK	Typical of species			1	12	12	12	12	1	1	
94	1626	Red Alder	5	8	Fair	Lean to south, dead wood		1		8	8	8	8	0		
95	1627	Red Alder	7	13	Fair	Lean to south, low live crown ratio - 10%, typical of species		1		13	13	13	13	1		
96	1628	Red Alder	7	12	Fair	Typical of species, dead wood		1		12	12	12	12	1		
97	1629	Red Alder	11	20	OK	Typical of species, asymmetric canopy to south			1	20	20	20	20	1.5	1.5	
98	1630	Red Alder	10	16	Fair	Ivy @ root crown to 20', dead wood, broken branches, typical of species		1		16	16	16	16	1		
99	1631	Red Alder	8	13	Fair	Column of decay on SW, asymmetric canopy to north		1		13	13	13	13	1		
100	1632	Red Alder	12	14	Fair	Ivy @ root crown to 30', typical of species, co-dominant leaders with included bark x2 @ root crown		1		14	14	14	14	2		
101	1633	Red Alder	7	9	Poor	Failing to east, soil failure		1		9	9	9	9	1		
102	1634	Red Alder	15	18	Fair	Co-dominant leaders with included bark x2 @ root crown, typical of species		1		18	18	18	18	3.5		
103	1635	Red Alder	10	8	Fair	Ivy to 30', typical of species		1		8	8	8	8	1		

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#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
104	1636	Red Alder	10	12	Fair	Typical of species, ivy to 30'		1		12	12	12	12	1		
105	1637	Red Alder	12	17	Fair	Typical of species, ivy to 30'		1		17	17	17	17	2		
106	1638	Red Alder	9	18	Fair	Typical of species, ivy to 30'		1		18	18	18	18	1		
107	1639	Red Alder	9	17	Fair	Typical of species, ivy to 30'		1		17	17	17	17	1		
108	1640	Red Alder	10	16	Fair	Typical of species, ivy to 30'		1		16	16	16	16	1		
109	1641	Red Alder	5	12	Fair	Typical of species, ivy to 30'		1		12	12	12	12	0		
110	1642	Red Alder	6	16	Fair	Typical of species, ivy to 30'		1		16	16	16	16	1		
111	1643	Red Alder	9	16	Fair	Typical of species, ivy to 30'		1		16	16	16	16	1		
112	1644	Red Alder	5	12	Fair	Typical of species, ivy to 30'		1		12	12	12	12	0		
113	1645	Red Alder	11	22	OK	Typical of species, dead wood, broken branches, lean to north			1	22	22	22	22	1.5	1.5	
114	1646	Red Alder	7	14	OK	Typical of species, moss and lichen, 5° lean to north			1	14	14	14	14	1	1	
115	1647	Red Alder	5	14	OK	Previous top loss, typical of species, dead wood			1	14	14	14	14	0	0	
116	1648	Red Alder	6	11	Fair	Typical of species, asymmetric canopy to north		1		11	11	11	11	1		
117	1649	Red Alder	11	16	OK	Lean to north, typical of species, broken branches			1	16	16	16	16	1.5	1.5	

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#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
118	1650	Red Alder	7	16	OK	Moss and lichen, typical of species, 10° lean to north, previous top loss			1	16	16	16	16	1	1	
119	1651	Red Alder	6	13	OK	Low live crown ratio - 10%, 10° lean to north, typical of species			1	13	13	13	13	1	1	
120	1652	Red Alder	6	11	Fair	10° lean to north, previous top loss, low live crown ratio		1		11	11	11	11	1		
121	1653	Red Alder	8	14	Poor	Asymmetric canopy to east, lean to north		1		14	14	14	14	1		
122	1654	Red Alder	6	10	Fair	Typical of species, ivy to 30'		1		10	10	10	10	1		
123	1655	Bigleaf maple	8	20	Poor	Exposed roots, asymmetric canopy to north, ivy @ root crown to 25'		1		20	20	20	20	1		
124	1656	Red Alder	9	13	Fair	Dead wood, broken branches, typical of species, low live crown ratio - 10%		1		13	13	13	13	1		
125	1657	Bigleaf maple	39	43	OK	Co-dominant leaders with included bark x2 @ 4', typical of species, moss and lichen, dead wood, dead scaffold			1	43	43	43	43	15.5	15.5	
126	1658	Bigleaf maple	38	20	Fair	Co-dominant leaders with included bark x2 @ 4', cavity on west @ root crown to 4', carpenter ants		1		20	20	20	20	15		

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#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
127	1659	Bigleaf maple	27	34	OK	Co-dominant leaders with included bark x2 @ root crown, typical of species, dead wood, dead scaffold			1	34	34	34	34	9.5	9.5	
128	1660	Bigleaf maple	12	16	OK	Typical of species, moss and lichen			1	16	16	16	16	2	2	
129	1661	Bigleaf maple	38	48	OK	Typical of species, dead wood, dead scaffold			1	48	48	48	48	15	15	
130	1662	Red Alder	13	16	Poor	Co-dominant leaders with included bark x2 @ root crown, large wound on east		1		16	16	16	16	2.5		
131	1663	Red Alder	6	11	OK	Low live crown ratio - 10%, typical of species, dead wood			1	11	11	11	11	1	1	
132	1664	Red Alder	6	12	Fair	25% lean on east, low live crown ratio, typical of species		1		12	12	12	12	1		
133	1665	Red Alder	11	20	OK	5% lean on south, wound @ 6' on east, moss and lichen, typical of species			1	20	20	20	20	1.5	1.5	
134	1667	Red Alder	7	11	Fair	Typical of species, ivy to 30'		1		11	11	11	11	1	1	
135	1668	Red Alder	6	10	Fair	Typical of species, ivy to 30'		1		10	10	10	10	1		
136	1669	Red Alder	12	14	Fair	Typical of species, ivy to 30'		1		14	14	14	14	2		
137	1670	Red Alder	12	14	Poor	Ivy to 40'		1		14	14	14	14	2		
138	1671	Red Alder	11	8	Poor	Failing to NE		1		8	8	8	8	1.5		
139	1672	Red Alder	6	9	Fair	Ivy to 35'		1		9	9	9	9	1		

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#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
140	1673	Red Alder	11	12	Poor	Ivy to 40'		1		12	12	12	12	1.5		
141	1674	Red Alder	6	6	Poor	Typical of species, ivy to 35'		1		6	6	6	6	1		
142	1675	Red Alder	8	11	Poor	Low live crown ratio, ivy to 35'		1		11	11	11	11	1		
143	1676	Red Alder	11	14	Poor	Failing to north		1		14	14	14	14	1.5		
144	1677	Red Alder	14	16	Poor	Typical of species, dead wood, broken branches, ivy @ root crown to 35'		1		16	16	16	16	3		
145	1678	Red Alder	8	12	Fair	Suppressed canopy, low live crown ratio - 10%, dead wood, broken branches, cavity on west @ root crown to 3', vertical cracks		1		12	12	12	12	1		
146	1679	Red Alder	12	18	Fair	Suppressed canopy, low live crown ratio - 10%, dead wood, broken branches, cavity on west @ root crown to 3', vertical cracks		1		18	18	18	18	2		
147	1680	Western red cedar	25	16	OK	Co-dominant leaders with included bark x2 @ 3', column of decay on east @ root crown to 8', carpenter ants, ivy to 30'			1	16	16	16	16	8.5	8.5	
148	1681	Red Alder	6	9	Poor	Ivy @ root crown to 35', failing to north, vertical cracks		1		9	9	9	9	1		

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#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
149	1682	Red Alder	11	14	Poor	Ivy @ root crown to 35', failing to north, vertical cracks		1		14	14	14	14	1.5		
150	1683	Red Alder	10	16	Poor	Co-dominant leaders with included bark x2 @ root crown, low live crown ratio, ivy @ root crown to 20'		1		16	16	16	16	1		
151	1684	Red Alder	8	18	Poor	Ivy @ root crown to 25', lean to south		1		18	18	18	18	1		
152	1685	Red Alder	9	18	Fair	Typical of species, ivy @ root crown to 35', lean to south		1		18	18	18	18	1		
153	1686	Red Alder	10	14	Poor	Typical of species, ivy to 35'		1		14	14	14	14	1		
154	1687	Red Alder	7	10	Poor	Typical of species, ivy to 35'		1		10	10	10	10	1		
155	1688	Red Alder	6	12	Fair	Asymmetric canopy to west, lean to west, ivy @ root crown to 20'		1		12	12	12	12	1		
156	1689	Red Alder	9	18	Fair	Wound @ 3' on west, dead wood, broken branches, typical of species		1		18	18	18	18	1		
157	1690	Bigleaf maple	27	44	OK	Ivy @ root crown to 25', typical of species, dead wood, dead scaffold			1	44	44	44	44	9.5	9.5	
158	1693	Red Alder	10	13	Poor	Ivy ropes to 35'		1		13	13	13	13	1		
159	1694	Red Alder	8	12	Poor	Lean to west, ivy to 20', typical of species		1		12	12	12	12	1		
160	1696	Red Alder	6	12	Poor	Ivy to 20', lean to east		1		12	12	12	12	1		

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#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
161	1697	Holly	7	13	OK	Typical of species			1	13	13	13	13	1	1	
162	1697	Red Alder	11	13	Poor	Ivy to 20', lean to east		1		13	13	13	13	1.5		
163	1698	Horse-chestnut	12	13	Poor	Mostly dead		1		13	13	13	13	2		
164	1699	Bitter-cherry	13	22	Poor	Ivy to 25', lean to west, failing to west, broken branches, dead wood		1		22	22	22	22	2.5		
165	1700	Red Alder	12	16	OK	Typical of species, ivy to 35'			1	16	16	16	16	2	2	
166	1701	Red Alder	16	22	OK	Typical of species, ivy to 35', dead spur @ root crown			1	22	22	22	22	4	4	
167	1702	Red Alder	7	12	Fair	Self-corrected lean to west, ivy to 35', typical of species		1		12	12	12	12	1		
168	1703	Bigleaf maple	19	34	Fair	Typical of species, ivy to 30', dead wood, broken branches		1		34	34	34	34	5.5		
169	1704	Red Alder	11	0	Fair	Typical of species, ivy to 30'		1		0	0	0	0	1.5		
170	1705	Red Alder	6	7	Fair	Low live crown ratio - 5%, ivy to 30'		1		7	7	7	7	1		
171	1706	Bigleaf maple	34	48	Fair	Ivy ropes @ root crown to 30'		1		48	48	48	48	13		
172	1707	Bigleaf maple	50	50	Fair	Co-dominant leaders with included bark x2 @ 7', ivy @ root crown to 30', dead wood, broken branches		1		50	50	50	50	21		
173	1708	Bigleaf maple	27	38	Fair	Typical of species, dead wood, dead scaffold		1		38	38	38	38	9.5		

1	2	3	5	6	7	8	9			10				11	12	13
#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
174	1709	Red Alder	6	14	Poor	Mostly dead		1		14	14	14	14	1		
175	1710	Red Alder	9	16	Fair	Ivy to 40', typical of species, asymmetric canopy to south		1		16	16	16	16	1		
176	1711	Red Alder	7	12	OK	Hanger, broken branches, dead wood, typical of species			1	12	12	12	12	1	1	
177	1712	Bigleaf maple	35	46	OK	Moss and lichen, typical of species, dead scaffold, dead wood			1	46	46	46	46	3.5	3.5	
178	1713	Red Alder	6	11	Poor	Mostly dead		1		11	11	11	11	1		
179	1714	Bigleaf maple	28	36	OK	Moss and lichen, typical of species, co-dominant leaders with included bark x2 @ 10', cavity on south, carpenter ants, dead wood, dead scaffold			1	36	36	36	36	10	10	
180	1715	Bigleaf maple	23	32	OK	Typical of species, dead wood, moss and lichen			1	32	32	32	32	7.5	7.5	
181	1716	Red Alder	11	14	Fair	Co-dominant leaders with included bark x2 @ root crown, moss and lichen, lean to south		1		14	14	14	14	1.5		
182	1717	Red Alder	8	10	Fair	Co-dominant leaders with included bark x2 @ root crown, moss and lichen, lean to south		1		10	10	10	10	1		

1	2	3	5	6	7	8	9			10				11	12	13
#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
183	1718	Red Alder	7	9	Fair	Asymmetric canopy to south, OK in grove		1		9	9	9	9	1		
184	1719	Red Alder	9	14	Fair	Typical of species, OK in grove		1		14	14	14	14	1		
185	1720	Red Alder	6	11	Fair	Low live crown ratio - 5%, lean to south, OK in grove	1			11	11	11	11	1	1	1
186	1721	Red Alder	7	11	OK	Low live crown ratio, typical of species, 15% lean on east			1	11	11	11	11	1	1	
187	1722	Red Alder	11	18	OK	Exposed roots, typical of species, dead wood, moss and lichen			1	18	18	18	18	1.5	1.5	
188	1723	Douglas fir	37	26	OK	Woodpecker activity, carpenter ants, abnormal bark, wound @ 5' on west, dead spur @ 20' on south, dead wood, broken branches, hanger, red ring rot, typical of species	1			26	26	26	26	14.5	14.5	14.5
189	1724	Red Alder	11	10	OK	Exposed roots, typical of species, moss and lichen, OK in grove	1			10	10	10	10	1.5	1	1
190	1725	Red Alder	7	10	Fair	Typical of species, lean to west, OK in grove		1		10	10	10	10	1		
191	1726	Red Alder	13	15	OK	Lean to south, typical of species, OK in grove	1			15	15	15	15	2.5	2.5	2.5
192	1727	Red Alder	6	11	Poor	Previous top loss, mostly dead		1		11	11	11	11	1		

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#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
193	1728	Bigleaf maple	39	48	OK	Typical of species	1			48	48	48	48	15.5	15.5	15.5
194	1729	Bigleaf maple	20	24	OK	Moss and lichen, cavity on west @ root crown to 4', typical of species, very wet area			1	24	24	24	24	6	6	
195	1730	Bigleaf maple	12	42	Poor	Mostly dead		1		42	42	42	42	2		
196	1731	Bigleaf maple	23	38	OK	Typical of species, cavity on west @ root crown to 2', dead spur @ 3'			1	38	38	38	38	7.5	7.5	
197	1732	Bigleaf maple	15	22	Fair	Large wound on west @ 3' to 6', carpenter ants, woodpecker activity		1		22	22	22	22	4.5		
198	1733	Red Alder	8	16	Fair	Typical of species, dead wood, broken branches		1		16	16	16	16	1		
199	1734	Red Alder	11	16	Fair	Typical of species, self-corrected lean to east		1		16	16	16	16	1.5		
200	1735	Douglas fir	29	22	Poor	Large wound on west @ root crown to 3', large wound on north @ 7', carpenter ants, woodpecker activity, free flowing sap		1		22	22	22	22	10.5		
201	1736	Red Alder	10	12	Fair	Co-dominant leaders with included bark x2 @ root crown, woodpecker activity @ 12'		1		12	12	12	12	1		
202	1737	Bigleaf maple	26	48	OK	Typical of species, dead scaffold, dead wood, moss and			1	48	48	48	48	20	20	

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#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
						lichen, ferns										
203	1742	Red Alder	16	12	Fair	Typical of species, moss and lichen, OK in grove		1		12	12	12	12	2		
204	1743	Red Alder	10	13	Fair	Typical of species, moss and lichen, OK in grove		1		13	13	13	13	2.5		
205	1744	Red Alder	7	11	Fair	Typical of species, moss and lichen, OK in grove		1		11	11	11	11	1.5		
206	1745	Bigleaf maple	35	38	OK	Typical of species, dead spur @ root crown on south, dead scaffold			1	38	38	38	38	15	15	
207	1748	Red Alder	9	13	OK	Exposed roots, asymmetric canopy to south, typical of species, OK in grove	1			13	13	13	13	1	1	1
208	1749	Red Alder	10	14	Poor	Soil failure on east		1		14	14	14	14	3		
209	1750	Red Alder	10	14	Poor	Co-dominant leaders with included bark x2 @ root crown, 1 side dead, lean to east		1		14	14	14	14	3		
210	1751	Red Alder	11	18	Fair	Exposed roots, typical of species, moss and lichen, OK in grove		1		18	18	18	18	5		
211	1752	Red Alder	9	14	Fair	Exposed roots, asymmetric canopy to south, typical of species, OK in grove		1		14	14	14	14	3		
212	1753	Red Alder	6	14	Fair	Typical of species, moss and lichen, OK in grove		1		14	14	14	14	3		

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#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
213	1754	Red Alder	7	12	Fair	Asymmetric canopy to south, column of decay on east, OK in grove		1		12	12	12	12	2		
214	1755	Red Alder	6	14	Poor	Soil failure on south		1		14	14	14	14	3		
215	1756	Red Alder	11	11	Fair	Lean to south		1		11	11	11	11	1.5		
216	1757	Red Alder	6	12	Poor	Soil failure, dead		1		12	12	12	12	2		
217	1758	Red Alder	12	18	Poor	Carpenter ants, woodpecker activity		1		18	18	18	18	5		
218	1759	Red Alder	9	12	Poor	Failing to south, soil failure		1		12	12	12	12	2		
219	1760	Red Alder	10	12	Poor	Failing to east, soil failure		1		12	12	12	12	2		
220	1761	Red Alder	18	16	Poor	Failing to south		1		16	16	16	16	4		
221	1762	Red Alder	9	14	Poor	Mostly dead		1		14	14	14	14	3		
222	1763	Red Alder	10	9	Poor	Mostly dead		1		9	9	9	9	1		
223	1764	Red Alder	7	11	Fair	Typical of species, low live crown ratio - 5%, OK in grove		1		11	11	11	11	1.5		
224	1765	Red Alder	7	15	Fair	Typical of species, lean to south, OK in grove		1		15	15	15	15	3.5		
225	1766	Red Alder	16	18	Fair	Exposed roots, woodpecker activity, typical of species, OK in grove		1		18	18	18	18	5		
226	1767	Red Alder	10	16	Fair	Typical of species, small cavity @ 1' on south		1		16	16	16	16	4		

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#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
227	1768	Bigleaf maple	28	38	OK	Serpentine trunk, dead wood, dead scaffold			1	38	38	38	38	15	15	
228	1769	Red Alder	7	13	Fair	Typical of species, low live crown ratio, OK in grove		1		13	13	13	13	2.5		
229	1770	Red Alder	6	10	Poor	Wound @ 6' on north, typical of species		1		10	10	10	10	1		
230	1771	Red Alder	11	9	Fair	Typical of species, OK in grove		1		9	9	9	9	1.5		
231	1772	Red Alder	7	0	Fair	Previous top loss, OK in grove		1		0	0	0	0	1		
232	1773	Red Alder	7	12	Poor	Dead, root failure		1		12	12	12	12	1		
233	1774	Red Alder	7	16	Fair	Exposed roots, lean to south, typical of species		1		16	16	16	16	1		
234	1775	Red Alder	10	9	Poor	Typical of species, asymmetric canopy to south, exposed roots, soil failure, failing to south		1		9	9	9	9	1		
235	1776	Red Alder	6	12	Fair	Typical of species, moss and lichen, exposed roots, soil failure in this area		1		12	12	12	12	1		
236	1784	Bitter Cherry	34	40	OK	Typical of species - decay in crotch of scaffold, gumosis	1			40	40	40	40	13	13	13
237	1793	Red Alder	9	12	Fair	Bow to south, dead wood, typical of species		1		12	12	12	12	1		
238	1794	Red Alder	7	10	Fair	Suppressed canopy, low live crown ratio - 10%		1		10	10	10	10	1		

1	2	3	5	6	7	8	9			10				11	12	13
#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
239	1795	Red Alder	9	12	Fair	Asymmetric canopy to south		1		12	12	12	12	1		
240	1796	Red Alder	12	14	OK	Bow to south, typical of species			1	14	14	14	14	2	2	
241	1797	Red Alder	11	10	Fair	Typical of species, bow to north, low live crown ratio - 10%		1		10	10	10	10	1.5		
242	1798	Red Alder	10	12	Fair	Lean to south, typical of species		1		12	12	12	12	1		
243	1799	Red Alder	8	10	Fair	Asymmetric canopy to south, typical of species, previous top loss, low live crown ratio - 5%		1		10	10	10	10	1		
244	1801	Red Alder	10	16	Poor	Dead, failed @ 12'		1		16	16	16	16	1		
245	1802	Red Alder	10	12	Fair	Typical of species, low live crown ratio - 10%		1		12	12	12	12	1		
246	1803	Red Alder	7	10	Fair	Typical of species, lean, low live crown ratio - 10%		1		10	10	10	10	1		
247	1805	Red Alder	9	12	Fair	Serpentine trunk, low live crown ratio - 10%, exposed roots		1		12	12	12	12	1		
248	1806	Red Alder	8	10	Poor	Large cavity of decay on east		1		10	10	10	10	1		
249	1807	Red Alder	9	14	Poor	Column of decay on SW @ 3'		1		14	14	14	14	1		
250	1808	Red Alder	9	14	Poor	Failing to south		1		14	14	14	14	1		
251	1809	Red Alder	8	8	Poor	Totally dead		1		8	8	8	8	1		
252	1810	Cottonwood	36	40	Fair	Typical of species		1		40	40	40	40	14		

1	2	3	5	6	7	8	9			10				11	12	13
#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
253	1811	Bigleaf maple	12	16	OK	Typical of species, dead wood, broken branches			1	16	16	16	16	2	2	
254	1812	Cottonwood	19	36	Fair	Typical of species, exposed roots, broken branches, dead wood		1		36	36	36	36	5.5		
255	1813	Cottonwood	27	38	Fair	Typical of species, exposed roots, dead wood, broken branches		1		38	38	38	38	9.5		
256	1814	Red Alder	9	14	Poor	Mostly dead		1		14	14	14	14	1		
257	1815	Red Alder	10	12	Fair	Low live crown ratio - 5%, moss and lichen		1		12	12	12	12	1		
258	1816	Red Alder	7	12	Fair	Low live crown ratio - 5%, moss and lichen		1		12	12	12	12	1		
259	1817	Red Alder	8	12	Fair	Low live crown ratio - 5%, moss and lichen		1		12	12	12	12	1		
260	1818	Bigleaf maple	35	26	Poor	Exposed roots, dead scaffold, previous large trunk failures		1		26	26	26	26	13.5		
261	1819	Douglas fir	17	16	Fair	No taper, dead wood, broken branches, dead twigs, abnormal bark, shedding bark, carpenter ants		1		16	16	16	16	4.5		
262	1820	Douglas fir	10	12	Poor	Previous top loss @ 20', no taper, laminated root rot?, low live crown ratio - 10%		1		12	12	12	12	1		

1	2	3	5	6	7	8	9			10				11	12	13
#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
263	1821	Douglas fir	9	10	Poor	Co-dominant leaders with included bark x2 reduced to 1 @ 20', previous top loss, asymmetric canopy to south, stress, sap, blisters		1		10	10	10	10	1		
264	1822	Bigleaf maple	13	16	OK	Typical of species			1	16	16	16	16	2.5	2.5	
265	1823	Douglas fir	25	20	Fair	Serpentine trunk, dead wood, broken branches, nurse tree with laminated root rot, dead twigs, laminated root rot?		1		20	20	20	20	8.5		
266	1824	Douglas fir	18	14	Fair	Previous top loss, asymmetric canopy to south, dead wood, broken branches		1		14	14	14	14	5		
267	1825	Bigleaf maple	19	23	OK	Asymmetric canopy to west, typical of species			1	23	23	23	23	5.5	5.5	
268	1826	Douglas fir	21	22	OK	Serpentine trunk, dead wood, dead twigs, moss and lichen, typical of species			1	22	22	22	22	6.5	6.5	
269	1827	Bigleaf maple	16	20	OK	Typical of species, dead wood, dead scaffold			1	20	20	20	20	4	4	
270	1828	Red Alder	9	0	Poor	Dead		1		0	0	0	0	0		
271	1829	Bigleaf maple	10	24	Poor	Suppressed canopy, very little canopy		1		24	24	24	24	1		
272	1830	Holly	6	8	OK	Typical of species			1	8	8	8	8	1	1	
273	1831	Red	10	0	Poor	Mostly dead		1		0	0	0	0	0		

1	2	3	5	6	7	8	9			10				11	12	13
#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
		Alder														
274	1832	Bitter-cherry	12	14	Fair	Low live crown ratio - 5%		1		14	14	14	14	2		
275	1833	Bigleaf maple	8	16	Fair	Bending to west, typical of species		1		16	16	16	16	1		
276	1834	Red Alder	11	16	Poor	Heaved soil, leans to south		1		16	16	16	16	1.5		
277	1835	Red Alder	6	6	Poor	Mostly dead		1		6	6	6	6	0		
278	1836	Red Alder	8	9	Poor	Mostly dead		1		9	9	9	9	0		
279	1837	Bigleaf maple	40	38	OK	Cavity @ root crown to 6' on north, spur @ root crown on north, dead wood, dead scaffold, typical of species, exposed roots			1	38	38	38	38	16	16	
280	1838	Bigleaf maple	30	30	Fair	Moss and lichen, ferns, co-dominant leaders with included bark x2 @ 3', not much live canopy		1		30	30	30	30	11		
281	1839	Bigleaf maple	50	39	OK	Exposed roots, typical of species, dead scaffold, dead wood			1	39	39	39	39	21	21	
282	1840	Red Alder	11	12	Fair	Typical of species, lean to south		1		12	12	12	12	1.5		
283	1841	Red Alder	11	10	OK	Typical of species			1	10	10	10	10	1.5	1.5	
284	1842	Red Alder	7	0	Poor	Failed @ 20'		1		0	0	0	0	1		
285	1843	Red Alder	7	9	OK	Typical of species, low live crown ratio			1	9	9	9	9	1	1	

1	2	3	5	6	7	8	9			10				11	12	13
#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
286	1844	Bigleaf maple	30	30	Fair	Cavity of decay on south @ 2' to 4', dead scaffold, dead wood		1		30	30	30	30	11		
287	1845	Douglas fir	36	26	Poor	Previous top loss, dead wood, probable laminated root rot		1		26	26	26	26	14		
288	1846	Douglas fir	22	12	Poor	Previous top loss, low live crown ratio - 10%, asymmetric canopy to east		1		12	12	12	12	7		
289	1847	Douglas fir	25	16	Fair	Top dying, dead wood, broken branches, thin canopy, probable laminated root rot		1		16	16	16	16	8.5		
290	1848	Douglas fir	12	9	Poor	Abnormal bark, popping bark, previous top loss, dead wood, no taper		1		9	9	9	9	2		
291	1849	Bigleaf maple	42	34	Poor	Recent large trunk failure, cavity on north, dead scaffold, dead wood		1		34	34	34	34	17		
292	1850	Douglas fir	9	14	Poor	Previous top loss, mostly dead		1		14	14	14	14	1		
293	1851	Douglas fir	9	9	Poor	Previous top loss, mostly dead		1		9	9	9	9	1		
294	1852	Douglas fir	28	17	Poor	Conks, woodpecker activity, abnormal bark, shedding bark, carpenter ants		1		17	17	17	17	10		
295	1853	Bigleaf maple	10	12	Fair	Previous top loss, lean to south		1		12	12	12	12	1		

1	2	3	5	6	7	8	9			10				11	12	13
#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
296	1854	Douglas fir	31	28	Fair	Thin canopy, dead wood, broken branches, scraping wound @ 40' to 55', asymmetric canopy to east		1		28	28	28	28	11.5		
297	1855	Cottonwood	21	26	OK	Typical of species, exposed roots, asymmetric canopy to south			1	26	26	26	26	6.5	6.5	
298	1856	Cottonwood	27	34	OK	Typical of species			1	34	34	34	34	9.5	9.5	
299	1857	Bigleaf maple	27	22	Poor	Cavity of decay on north @ root crown to 4', failing to east, mostly dead		1		22	22	22	22	9.5		
300	1858	Bigleaf maple	43	32	OK	Typical of species, moss and lichen, dead wood, broken branches, dead scaffold			1	32	32	32	32	17.5	17.5	
301	1859	Bigleaf maple	26	19	Poor	Cavity of decay on east @ root crown to 10', co-dominant leaders with included bark x2 @ 20'		1		19	19	19	19	9		
302	1860	Bigleaf maple	33	36	Poor	Ferns, lean to east, cavity on west, dead scaffold, exposed roots, failing to east, soil failure		1		36	36	36	36	12.5		
303	1861	Red Alder	9	12	Poor	Failing to east		1		12	12	12	12	1		
304	1862	Red Alder	8	10	Fair	Typical of species, lean to east		1		10	10	10	10	1		

1	2	3	5	6	7	8	9			10				11	12	13
#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
305	1877	Bigleaf maple	22	36	Poor	Co-dominant leaders with included bark x4 @ root crown, severe undermined roots		1		36	36	36	36	7		
306	1878	Douglas fir	36	24	Fair	Hatchet wound on north @ 6' with free flowing sap, healed wound @ 7' to 10' on south, serpentine trunk, asymmetric canopy to south, dead wood, broken branches, OK in grove		1		24	24	24	24	14		
307	1879	Douglas fir	28	18	Fair	No taper, bulge @ 4', previous top loss, asymmetric canopy to east, dead wood, broken branches, self-corrected lean to east, OK in grove		1		18	18	18	18	10		
308	1880	Douglas fir	26	18	OK	Healed wound @ root crown on east, typical of species, low live crown ratio - 10%, woodpecker activity, OK in grove			1	18	18	18	18	9	9	
309	1882	Douglas fir	13	11	Fair	Suppressed canopy, serpentine trunk, free flowing sap, previous top loss, dead wood, broken branches		1		11	11	11	11	2.5		
310	1883	Douglas fir	20	18	Poor	Abnormal bark, suppressed canopy, previous top loss @ 40'		1		18	18	18	18	6		

1	2	3	5	6	7	8	9			10				11	12	13
#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
311	1884	Douglas fir	20	18	OK	Broken branches, dead wood, suppressed canopy, abnormal bark			1	18	18	18	18	6	6	
312	1885	Douglas fir	15	14	OK	Serpentine trunk, abnormal bark, carpenter ants bark only, low live crown ratio - 5%, dead wood, dead twigs, suppressed canopy, healed wound @ 6' to 9' on east, OK in grove			1	14	14	14	14	4.5	4.5	
313	1886	Bigleaf maple	7	15	Poor	Co-dominant leaders with included bark x2 reduced to 1 @ 25', mostly dead		1		15	15	15	15	1		
314	1887	Douglas fir	28	18	Poor	Abnormal bark, shedding bark, carpenter ants, woodpecker activity, self-corrected lean to south, low live crown ratio - 10%		1		18	18	18	18	10		
315	1888	Douglas fir	9	12	Fair	Suppressed canopy, previous top loss, dead wood, broken branches		1		12	12	12	12	1		
316	1889	Douglas fir	14	14	Fair	Previous top loss, asymmetric canopy to south, dead wood, broken branches, typical of species		1		14	14	14	14	3		

1	2	3	5	6	7	8	9			10				11	12	13
#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
317	1890	Bigleaf maple	44	40	OK	Co-dominant leaders with included bark x2 @ 4', hanger, dead wood, typical of species			1	40	40	40	40	18	18	
318	1891	Bigleaf maple	12	20	Fair	Suppressed canopy		1		20	20	20	20	2		
319	1892	Douglas fir	10	12	Fair	Suppressed canopy, thin canopy, gall @ 10' on east		1		12	12	12	12	1		
320	1893	Douglas fir	8	11	Fair	Co-dominant leaders with included bark x2 reduced to 1 @ 20', previous top loss, suppressed canopy		1		11	11	11	11	1		
321	1894	Douglas fir	22	20	OK	Typical of species, dead wood, dead twigs, broken branches			1	20	20	20	20	7	7	
322	1895	Douglas fir	21	24	OK	Co-dominant leaders with included bark x2 reduced to 1 @ 10' on north, asymmetric canopy to north, dead wood, broken branches, dead twigs			1	24	24	24	24	6.5	6.5	
323	1896	Douglas fir	14	18	Fair	Abnormal bark, dead wood, broken branches, previous top loss, suppressed canopy		1		18	18	18	18	3		
324	1897	Douglas fir	18	26	Fair	Abnormal bark, reaction wood, exposed roots, horizontal crack @ 8', dead wood, broken branches, dead twigs		1		26	26	26	26	4		

1	2	3	5	6	7	8	9			10				11	12	13
#	Tree Tag #	Species ID	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD				Value	Value for Viable trees	Proposed retention
							Retained	Non-viable	Removed	Radius in feet						
										N	W	E	S			
325	1898	Bigleaf maple	13	24	OK	Asymmetric canopy to north, typical of species			1	24	24	24	24	2.5	2.5	
326	1881	Western red cedar	32	18	OK	Carpenter ants, woodpecker activity, cavity on north @ root crown, typical of species			1	18	18	18	18	12	12	
327	1746/1747	Bigleaf maple	38	40	OK	Typical of species, cavity on south, carpenter ants			1	40	40	40	40	15	15	
328	1267	Douglas fir	16	14	Fair	Reaction wood on north, co-dominant leaders with included bark x2 reduced to 1 @ 18', asymmetric canopy to east, suppressed canopy, no taper		1		14	14	14	14	4		

Offsite Trees:

1	2	3	4	5	6	7	8	9			10			
#	Tree Tag #	Species ID	DBH inches	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD Radius feet			
								Viable	Non-viable	Remove	N	W	E	S
1	1267*	Douglas fir	17	17	14	Fair	Asymmetric canopy south, epicormic branch formation, suppressed canopy serpentine trunk, exposed roots,		1		14	14	14	14
2	1268	Bigleaf maple	36	36	15	OK	Typical of species, exposed roots	1			15	15	15	15
3	1269	Red Alder	11	11	11	OK	Low live crown ratio - 10%, typical of species	1			11	11	11	11
4	1270	Red Alder	9	9	11	OK	Lean to south, asymmetric canopy to south, low live crown ratio - 10%	1			11	11	11	11
5	1529	Douglas fir	23	23	18	Fair	Minor asymmetric canopy, exposed roots, co-dominant leaders with included bark X 4 @ 20', decay in scaffold		1		18	18	18	18
6	1530	Bigleaf maple	15	15	18	OK	Typical of species, slight lean		1		18	18	18	18
7	1533	Red Alder	6/8/12/11	19	14	Poor	Asymmetric canopy, lean, SW, exposed roots, dead wood, soft soil not windfirm		1		14	14	14	14
8	1538	Red Alder	10	10	10	Poor	asymmetric canopy to south, lean to SW, thin canopy, exposed roots,		1		10	10	10	10
9	1738	Bigleaf maple	16	16	24	Fair	Typical of species, moss and lichen, OK in grove		1		24	24	24	24
10	1739	Bigleaf maple	25	25	30	Fair	Typical of species, moss and lichen, OK in grove		1		30	30	30	30
11	1740	Bigleaf maple	12	12	13	Fair	Typical of species, moss and lichen, OK in grove		1		13	13	13	13

1	2	3	4	5	6	7	8	9			10			
#	Tree Tag #	Species ID	DBH inches	Adj. DBH inches	Drip-line Radius feet	Health	Defects/Comments	Proposed Action			CRZ/TPZ/LOD Radius feet			
								Viable	Non-viable	Remove	N	W	E	S
12	1785	Bigleaf maple	24	24	20	Fair	Moss, wet soil, decay		1		20	20	20	20
13	1786	Bigleaf maple	36	36	34	Poor	Moss, wet soil, decay		1		34	34	34	34

\* Tagged in field as 1881; shown on map as 1267

Site map: (see site architect or civil plans):



**Discussion/Calculations/Conclusion:**

I was contacted to perform a Visual Tree Assessment for all of the significant trees on site; it was concluded prior to deciduous trees leafing out so it was difficult to locate among the deciduous trees those whose branches created a continuous canopy. Brian Gilles of Gilles Consulting had performed a VTA approximately two years prior to my assessment; at that time he tagged all of the site trees and determined that the property contained 396 trees. We assessed 328 trees; so in the intervening two year period between his visit and ours, the site lost 68 trees. Although we located over a dozen trees that had fallen, the remaining difference in the tree numbers can be attributed to diseased and dying trees having died.

The trees located on the southern side of the property are almost exclusively young red alders, since Mr. Gilles' assessment many had failed primarily from soil failures – the soil is very wet, and the particles very fine so that when squeezed together it held its shape. In most of the area along the creek, there was a low quantity of organic material- the lack of which causes the ground to harden during the summer months as clay has little water holding capacity. The soil conditions create a hardship for most tree and shrub species. The larger trees in this area were mostly Bigleaf maples, covered in moss at the bases from the wet soil and high humidity created by the creek. The trees suffered from a high quantity of decay which is not uncommon to the species but after I examined the small amount of new growth and the large amount of decay, many of the trees were clearly succumbing to the soil conditions.

The trees growing on the hill (north and west portion of the property) were primarily conifers.

Composition of tree species		
Species	No. of trees	% of Trees
Red Alder	176	54%
Bigleaf maple	75	23%
Douglas fir	63	19%
Cottonwood	5	2%
Bitter Cherry	4	1%
Holly	2	1%
Western red cedar	2	1%
Horsechestnut	1	0%

Succession is the gradual replacement of one plant species by another over time. Forests are dynamic or always changing. The understanding of forest succession is a valuable tool to determine the relative maturity of a forest as well as a tool to understand species specific diseases or how environmental impacts affect the forest.

Pioneer species trees, are tolerant of direct sunlight. They produce a large quantity of seed and are first to establish themselves after a disturbance. They grow quickly; have few abilities to defend against damage from insects or disease and have a short lifespan. These trees provide shade for the seeds that are not tolerant of direct sunlight (most conifers).

The slower growing conifers eventually grow to overtake the pioneer species and create shade which negatively impacts the pioneer species and over time these short lived trees die and decay helping to add organic material to the soil making it more hospitable for further conifer development. The slower growing tree species devote more energy into defending themselves from insects and disease; they are referred to as the climax species.

Lack of disturbance leads to less biodiversity and less stability in the forest; often times an insect (for example bore beetle) or a disease (like laminated root rot) overtakes a forest that has developed as a single population. Thus, as the climax species die, the pioneer species proliferate and the forest

succession continues.

On this site there is a heavy prevalence of Red alder located on the southern side of the site. These are young trees of small diameter and 85% of them are in poor condition or not suitable for retention due to a lack of wind firmness.

% of Species Found to be Non-viable					
Species	Number			Total on site	%
	Fair	Poor	Total		
Red alder	86	63	149	176	85%
Douglas fir	25	21	46	63	73%
Bigleaf maple	24	14	38	75	51%
Bitter cherry	1	2	3	4	75%
Horsechestnut	0	1	1	1	100%
Cottonwood	3	0	3	5	60%

As Mr. Gilles noted in his report, and I confirm as well, these 176 trees form a low co-dominant canopy. Collectively, the soil conditions, and the competitive nature of their close growing conditions have left them struggling for resources, they have little taper and appear to be failing in wind.

In a similar manner the Douglas fir trees (a climax species) growing on the hill to the north has become a nearly single species forest. 73% of those trees are infested with bark beetles; and many are now showing signs of fungal root rot.

I sent several samples of Douglas firs root crown cambium and bark to "Plant and Soil Laboratory" in Anaheim, CA to confirm a diagnosis of laminated root rot (*Phellinus sulphurascens*); because the trees were declining and the sample taking is invasive to the root crown, I kept my samples small size small – which resulted in a diagnosis of "unconfirmed" for root rot due to small quantity of tissue, but positive for bore beetle infestation.

As a result of the high quantity of trees in poor condition it was difficult to locate and conserve groves of trees. Only 27%, eighty-eight (88) trees out of 328 are viable.

In addition, the large change of grade that needs to occur for site improvements to occur does not allow many of the trees to be retained. I worked closely with the civil engineers to meet code requirements for access etc., and incorporate tree retention and have come to the understanding that retaining fourteen (14) viable trees, that I know will be viable long term, creating a space that includes necessary housing and considers set back from critical wetland is a win-win for the public and the spirit of the law.

The trees onsite are currently (collectively) in decline. I have recommended that the applicant hire a Landscape architect to create a plan that will allow the site to be developed to a Low Density Residential development within the comprehensive plan (less than required by law).

Ultimately, the site is best redeveloped and the trees mitigated. In doing so it will reduce the transient population (evidenced by tents, small fire rings and sleeping bags), recognize the Growth Management Act that the public has affirmed; and move the stagnant diseased and dying canopy of trees to a healthy viable forest surrounding a small development.

I have worked closely with the Landscape Architect to recreate and maintain a native appearance to the site so as to retain its native character, though with trees that are not susceptible to the observed insect and diseases that are crippling the site.

I am available to meet on site as a team to discuss the future of the site. Please do not hesitate to recommend a time.

**Tree Protection Fencing:** Tree Protection fencing should be erected prior to any site grading

First, protect roots that lie in the path of construction. Approximately 90 to 95 percent of a tree's root system is in the top three feet of soil, and more than half is in the top one foot. Construction activities should be avoided in this area. Protect as much of the area beyond the tree's dripline as possible. Some healthy trees survive after losing half of their roots. However, other species are extremely sensitive to root damage even outside the dripline.

Do not disturb the Critical Root Zone (CRZ). The CRZ is defined by its "critical root radius." It is more accurate than the dripline for determining the CRZ of trees growing in forests or that have narrow growth habits. To calculate critical root radius, measure the tree's diameter (DBH) in inches, 4.5 feet above the ground. For each inch, allow for 1 to 1.5 feet of critical root radius. If a tree's DBH is ten inches, its critical root radius is 10 to 15 feet.

In addition to the CRZ, it is important to determine the Limits of Disturbance (LOD) for preserved trees. Generally, this approximates the CRZ however in previously excavated areas around the dripline the LOD may be smaller, or in the case of a tree situated on a slope the LOD may be larger. The determination of LOD is also subject to the particular tree species. Some tree species do better than others after root disturbance.

Tree protection is advised throughout the duration of any construction activities whenever the critical root zone or leaf canopy may be encroached upon by such activities.

The Critical Root Zone (CRZ) or LOD should be protected with fencing adequate to hinder access to people vehicles and equipment. Fencing detail is provided. It should consist of continuous 4 ft. high temporary chain-link fencing with posts set at 10' on center or polyethylene laminar safety fencing or similar. The fencing must contain fencing signage detailing that the tree protection area cannot be trespassed on.

Soil compaction is one of the most common killers of urban trees. Stockpiled materials, heavy machinery and excessive foot traffic damage soil structure and reduce soil pore space. The effected tree roots suffocate. When construction takes place close to the protected CRZ, cover the site with 4 inches of bark to reduce soil compaction

Tree Protection fencing must be erected prior to soil excavation, boring, grading or fill operations. It is erected at the LOD. If it is necessary to run utilities within the LOD, the utilities should be combined into one cut, as practical. Trenching is not allowed in the LOD. In these areas boring or tunneling techniques should be used. In the event that roots greater than 1" diameter near the LOD are damaged or torn, it is necessary to hand trim them to a clean cut. Any roots that are exposed during construction should be covered with soil as soon as possible.

During drought conditions, trees must be adequately watered. Site should be visited regularly by a qualified ISA Certified Arborist to ensure the health of the trees. Tree protection fencing is the last item to be removed from the site after construction is completed.

After construction has been completed, evaluate the remaining trees. Look for signs and symptoms of damage or stress. It may take several years for severe problems to appear.

In the event that fencing around portions of the CRZ of a tree to be retained are not practical to erect due to construction or obstacles, tree protection fencing should be placed three feet laterally from the obstruction (ex. three feet back of a curb, building, or other existing or planned permanent infrastructure).

Tree trunk protection is required where CRZ fencing is not practical. Tree trunks should be wrapped in pine 2X4's and accessible critical structural root zones covered with wooden pallets.

**Glossary:**

ANSI A300: American National Standards Institute (ANSI) standards for tree care  
Chlorotic: discoloration caused by lack of chlorophyll in the foliage

Conifer: A tree that bears cones and has evergreen needles or scales

Crown: the above ground portion of the tree comprised of branches and their foliage

Crown raise pruning: a pruning technique where the lower branches are removed, thus raising the overall height of the crown from the ground

DBH or DSH: diameter at breast or standard height; the diameter of the trunk measured 54 inches (4.5 feet) above grade

Deciduous: tree or other plant that loses its leaves annually and remains leafless generally during the cold season

Epicormic: arising from latent or adventitious buds

Evergreen: tree or plant that keeps its needles or leaves year round; this means for more than one growing season

Increment: the amount of new wood fiber added to a tree in a given period, normally one year.

ISA: International Society of Arboriculture

Landscape function: the environmental, aesthetic, or architectural functions that a plant can have

Lateral: secondary or subordinate branch

Limits of disturbance: The boundary of minimum protection around a tree, the area that cannot be encroached upon without possible permanent damage to the tree. It is a distance determined by a qualified professional and is based on the age of the tree, its health, the tree species tolerance to disruption and the type of disturbance. It also considers soil and environmental condition and previous impacts. It is unique to each tree in its location.

Limited visual assessment: a visual assessment from a specified perspective such as foot, vehicle, or aerial (airborne) patrol of an individual tree or a population of trees near specified targets to identify specified conditions or obvious defects (ISA 2013)

Live crown ratio: the percentage of living tissue in the canopy versus the tree's height. It is a good indicator of overall tree health and the trees growing conditions. Trees with less than a 30% Crown ratio often lack the necessary quantity of photosynthetic material necessary to sustain the roots; consequently, the tree may exhibit low vigor and poor health.

Monitoring: keeping a close watch; performing regular checks or inspections

Owner/manager: the person or entity responsible for tree management or the controlling authority that regulates tree management

Pathogen: causal agent of disease

Phototropic growth: growth toward light source or stimulant

ROW: Right-of-way; generally referring to a tree that is located offsite on a city easement

Reaction wood: Specialized secondary xylem which develops in response to a lean or similar mechanical stress, it serves to help restore the stem to a vertical position

Self-corrected lean: a tree whose trunk is at an angle to the grade but whose trunk and canopy changes to become upright/vertical

Senescence: The condition or process of deterioration with age; loss of a cell's power of division and growth

Significant tree: a tree measuring a specific diameter determined by the municipality the tree grows in. Some municipalities deem that only healthy trees can be significant, other municipalities consider both healthy and unhealthy trees of a determined diameter to be significant

Snag: a tree left partially standing for the primary purpose of providing habitat for wildlife  
Soil structure: the size of particles and their arrangement; considers the soil, water, and air space

Sounding: process of striking a tree with a mallet or other appropriate tool and listening for tones that indicate dead bark, a thin layer of wood outside a cavity, or cracks in wood

Structural defects: flaws, decay, or other faults in the trunk, branches, or root collar of a tree, which may lead to failure; may be genetic, or environmental

Tree credit: A number assigned to a tree by a municipality that may be equal to the diameter of the tree or a numerical count of the tree, or related to diameter by a factor conveyed in a table of the municipal code

Trunk area: the cross-sectional area of the trunk based upon measurement at 54 inches (4.5 ft.) above grade

Visual Tree Assessment (VTA): method of evaluating structural defects and stability in trees by noting the pattern of growth. Developed by Claus Mattheck (Harris, et al 1999) detailed visual inspection of a tree and surrounding site that may include the use of simple tools. It requires that a tree risk assessor walk completely around the tree trunk looking at the site, aboveground roots, trunk, and branches (ISA2013)

## References:

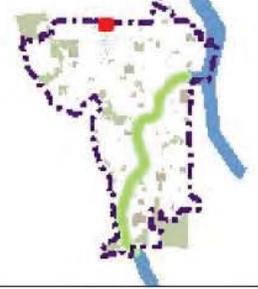
- ANSI A300 (Pat 1) – 2008 American National Standards Institute. American National standard for Tree Care Operations: Tree, Shrub and Other Woody Plant Maintenance: Standard Practices (Pruning). New York: Tree Care Industry Association, 2008.
- Coder, Dr. Kim D. Construction Damage Assessments: Tree and Sites. University of Georgia. October 1996.
- Dirr, Michael A. Manual of Woody Landscape Plants, Their Identification, Ornamental Characteristics, Culture, Propagation, and Uses. Champaign: Stipes Publishing Company, 1990.
- Dunster & Associates Environmental Consultants Ltd. Assessing Trees in Urban Areas and the Urban- Rural Interface. US Release 1.0. Silverton: Pacific Northwest Chapter ISA, 2006.
- Dunster, J. A. 2003. Preliminary Species Profiles for Tree Failure Assessment. Bowen Island: Dunster & Associates Environmental Consultants Ltd.
- Dunster, Julian A., E. Thomas Smiley, Nelda Matheny and Sharon Lilly. Tree Risk Assessment Manual. Champaign, Illinois: International Society of Arboriculture, 2013.
- Harris, Richard W, James Clark, and Nelda Matheny. Arboriculture, Integrated Management of Landscape Trees, Shrubs, and Vines. 4th ed. Upper Saddle River: Prentice Hall, 2004.
- Lilly, Sharon. Arborists' Certification Study Guide. Champaign, IL: The International Society of Arboriculture, 2001.
- Matheny, Nelda and Clark, James R. A Photographic Guide to the Evaluation of Hazard Trees in Urban Areas. Second Edition. Champaign, IL: The International Society of Arboriculture, 1994.
- Matheny, Nelda and Clark, James R. Trees and Development: A Technical Guide to Preservation of Trees during Land Development. Champaign, IL: The International Society of Arboriculture, 1998.
- Mattheck, Claus and Breloer, Helge. The Body Language of Trees: A Handbook for Failure Analysis. London: HMSO, 1994
- Schwarze, Francis W.M.R. Diagnosis and Prognosis of the Development of Wood Decay in Urban Trees. Australia: ENSPEC Pty Ltd. 2008
- Sinclair, Wayne A., Lyon, Howard H., and Johnson, Warren T. Diseases of Trees and Shrubs. Ithaca, New York: Cornell University Press, 1987.
- Smiley, E. Thomas, Nelda Matheny, and Sharon Lilly, Tree Risk Assessment Best Management Practices, ANSI A300 Part 9: Tree, Shrub, and Other Woody Plant Management—Standard Practices (Tree Risk Assessment: Tree Structure Assessment). The International Society of Arboriculture Press. Champaign. IL. 2011.
- Thies, Walter G. and Sturrock, Rona N. Laminated root rot in Western North American. United States Department of Agriculture. Pacific Northwest. Resource Bulletin PNW-GTR-349. April 1995.

### Assumptions and Limiting Conditions

1. Any legal description provided to the consultant/appraiser is assumed to be correct. Any titles and ownerships to any property are assumed to be good and marketable. No responsibility is assumed for matters legal in character. Any and all property is appraised or evaluated as thou free and clear, under responsible ownership and competent management.
2. It is assumed that any property is not in violation of any applicable codes, ordinances, statutes or other governmental regulations.
3. Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the consultant/appraiser can neither guarantee nor be responsible for the accuracy of information provided by others.
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10. Unless expressed otherwise: 1) information contained in this report covers only those items that were examined and reflects the condition of those items at the time of inspection; and 2: the inspection is limited to visual examination of accessible items without dissection, excavation, probing or coring. There is not warranty or guarantee, expressed or implied, that problems or deficiencies of the plants or property in question may not arise in the future.



# SIMONDS ROAD SUBDIVISION - STREAMS



### Legend

- Streams**
  - Open
  - Pipe
- Landslide**
  - High
  - Moderate
- Wetlands**
- Seismic**
- Address**
  - Other Address
  - Current Address
  - Current ADU
  - Pending Address
- City Limits**
- Grid**
- QQ Grid**
- Cross Kirkland Corridor**
- Regional Rail Corridor**
- Streets**
- Parcels**
- Buildings**
- Lakes**
- Parks**
- Schools**
- Olympic Pipeline Corridor**

1: 1,906



### Notes

0.1 0 0.03 0.1 Miles

NAD\_1983\_StatePlane\_Washington\_North\_FIPS\_4601\_Feet

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