



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

Proposal Name: Berdan Garage Addition

Proposal Address: 16713 SE 35th St.

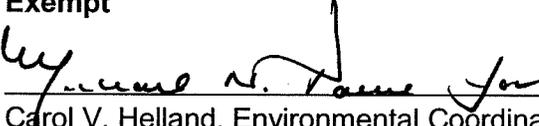
Proposal Description: Land Use review of a Critical Area Land Use Permit proposing a modification of the structure setback from the stream buffer of Vasa Creek in order to construct a garage addition to the existing home and restore an area of the stream buffer with native plants.

File Number: 09-114003-LO

Applicant: Walt Berdan, Property Owner

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

Planner: Reilly Pittman, Land Use Planner

**State Environmental Policy Act
Threshold Determination:** **Exempt**

Carol V. Helland, Environmental Coordinator
Development Services Department

Director's Decision: **Approval with Conditions**
Michael A. Brennan, Director
Development Services Department

By: Carol V. Helland, Land Use Director

Application Date: May 26, 2009
Notice of Application Date: June 18, 2009
Decision Publication Date: July 30, 2009
Project/SEPA Appeal Deadline: August 13, 2009

For information on how to appeal a proposal, visit Development Services Center at City Hall or call (425) 452-6800. Comments on State Environmental Policy Act (SEPA) Determinations can be made with or without appealing the proposal within the noted comment period for a SEPA Determination. Appeal of the Decision must be received in the City's Clerk's Office by 5 PM on the date noted for appeal of the decision.

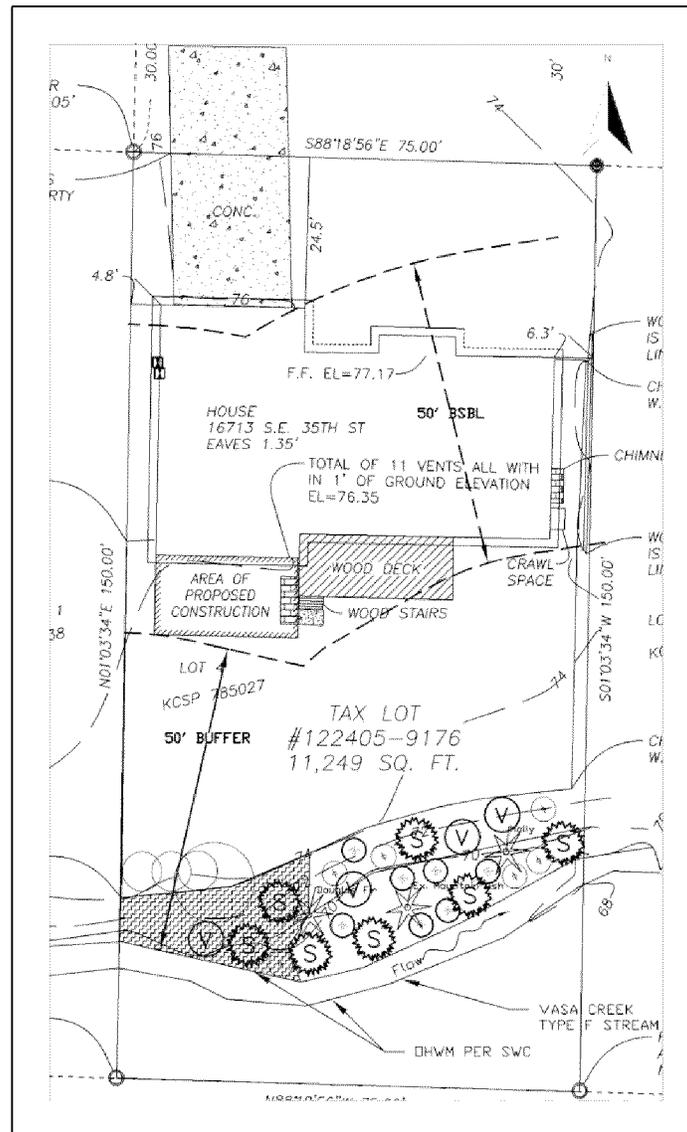
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I. Proposal Description

The applicant proposes to construct an addition that will enlarge an existing garage attached to a single-family residence. The proposed garage addition will extend into the structure setback from the stream buffer of Vasa Creek which is located along the south of the subject site. This Critical Area Land Use Permit application proposes to modify the stream structure setback to allow the garage addition. As mitigation, planting is proposed along the stream bank of Vasa Creek. In addition to the garage addition, repair of the existing garage will occur to address damage sustained from a tree impact. See Figure 1 below for a site plan.

Figure 1



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

A. Site Description

The project site is located at 16713 SE 35th St. in the Eastgate subarea of the City in the SW quadrant of Section 12, Township 24 North, Range 5 East. The site is surrounded by other

single-family zoned property on all sides. The property gains vehicle access from SE 35th St which is along the northern property line. The site is generally flat; the only topographical feature on the site is the small slope that forms the stream bank of Vasa Creek along the southern property line. See figure 2 for existing site condition.

Figure 2



B. Zoning

The property is zoned R-5, single-family residential and is located in the Critical Areas Overlay District. The surrounding properties are also zoned R-5. The proposed work to expand the existing garage is an allowed activity in the R-5 zone but requires approval of a Critical Area Land Use Permit.

C. Land Use Context

The property has a Comprehensive plan Land Use Designation of SF-H (Single Family High Density). Expansion of a garage associated with a residential use is consistent with the residential land use designation for this area.

D. Critical Areas On-Site and Regulations

i. Streams and Riparian Areas

Most of the elements necessary for a healthy aquatic environment rely on processes sustained by dynamic interaction between the stream and the adjacent riparian area (Naiman et al., 1992). Riparian vegetation in floodplains and along stream banks provides a buffer to help mitigate the impacts of urbanization (Finkenbine et al., 2000 in Bolton and Shellberg, 2001). Riparian areas support healthy stream conditions.

Riparian vegetation, particularly forested riparian areas, affect water temperature by providing shade to reduce solar exposure and regulate high ambient air temperatures, slowing or preventing increases in water temperature (Brazier and Brown, 1973; Corbett and Lynch, 1985).

Upland and wetland riparian areas retain sediments, nutrients, pesticides, pathogens, and other pollutants that may be present in runoff, protecting water quality in streams (Ecology, 2001; City of Portland 2001). The roots of riparian plants also hold soil and prevent erosion and sedimentation that may affect spawning success or other behaviors, such as feeding.

Both upland and wetland riparian areas reduce the effects of flood flows. Riparian areas and wetlands reduce and desynchronize peak crests and flow rates of floods (Novitzki, 1979; Verry and Boelter, 1979 in Mitsch and Gosselink, 1993). Upland and wetland areas can infiltrate floodflows, which in turn, are released to the stream as baseflow

Stream riparian areas, or buffers, can be a significant factor in determining the quality of wildlife habitat. For example, buffers comprised of native vegetation with multi- canopy structure, snags, and down logs provide habitat for the greatest range of wildlife species (McMillan, 2000). Vegetated riparian areas also provide a source of large woody debris that helps create and maintain diverse in-stream habitat, as well as create woody debris jams that store sediments and moderate flood velocities.

Sparsely vegetated or vegetated buffers with non-native species may not perform the needed functions of stream buffers. In cases where the buffer is not well vegetated, it is necessary to either increase the buffer width or require that the standard buffer width be restored or revegetated (May 2003). Until the newly planted buffer is established the near term goals for buffer functions may not be attained.

Riparian areas often have shallow groundwater tables, as well as areas where groundwater and surface waters interact. Groundwater flows out of riparian wetlands, seeps, and springs to support stream baseflows. Surface water that flows in to riparian areas during floods or as direct precipitation infiltrates into groundwater in riparian areas and is stored for later discharge to the stream (Ecology, 2001; City of Portland, 2001).

ii. Critical Areas Overlay District/Critical Area Land Use Permit

A Critical Area Land Use Permit (CALUP) is required as the applicant is requesting to modify the structure setback from the stream buffer of Vasa Creek which flows across the site along the southern property line.

III. Consistency with Land Use Code Requirements:

A. Zoning District Dimensional Requirements:

The R-5 zoning dimensional requirements found in LUC 20.20.010 apply to this garage addition. The proposed addition and site in general appear to meet the requirements found in LUC 20.20.010, conformance with dimensional requirements will be confirmed at time of building permit application.

The existing house may have a nonconforming side setback as the combined dimension of both side-yard setbacks is required to be at least 15 feet. The current combined dimension of both side setbacks appears to be 10 feet. Remodeling of a nonconforming structure is allowed, provided the fair market value of the remodel does not exceed 100 percent of the replacement value of the structure over any three-year period. If remodeling costs exceed 100 percent of the replacement value in three-year period the structure is required to be brought into conformance with existing code requirements.

The proposed construction of a small garage addition will most likely not exceed 100 percent of the replacement value of the residence and therefore any nonconformance will not be addressed under this review. If the cost of the garage addition and any other development within a three-year period exceeds 100 percent of the replacement value of the residence, the residence will be required to address any nonconforming development standards including meeting the required side-yard setbacks. At time of building permit, the applicant may be required to submit documentation demonstrating the replacement value of the residence is not exceeded.

B. Critical Areas Requirements LUC 20.25H:

The City of Bellevue Land Use Code Critical Areas Overlay District (LUC 20.25H) establishes performance standards and procedures that apply to development on any site which contains in whole or in part any portion designated as critical area, critical area buffer or structure setback from a critical area or buffer. The project area is within the structure setback from the 50-foot stream buffer of Vasa Creek and is subject to the performance standards found in LUC 20.25H as specified in the table below

Critical Area	Geologic Hazard- Steep Slopes
Performance Standards	20.25H.230 20.25H.080.A

i. Consistency With LUC 20.25H.230

Modification of a structure setback from a stream buffer requires a critical areas report as part of the application for a Critical Area Land Use Permit. The critical areas report is intended to provide flexibility for sites where the expected critical area functions and values are not present due to degraded conditions or other unique site characteristics, or for proposals providing unique design or protection of critical area functions and values not anticipated by this part. Generally, the critical areas report must demonstrate that the proposal with the requested modifications leads to equivalent or better protection of critical area functions and values than would result from the application of the standard requirements. This is a proposal to reduce structure setback from the 50-foot stream buffer of Vasa Creek. The applicant has obtained the services of a qualified specialist to study the site and document the observed conditions. Staff has reviewed the following documents:

- Critical Areas and Wildlife Habitat Assessment dated January 20, 2009 prepared by Sewall Wetland Consulting, Inc.
- Critical Area Conceptual Mitigation Plan dated April 13, 2009 prepared by Sewall Wetland Consulting, Inc.

This analysis indicates that the area proposed for development is currently landscaped lawn and ornamental planting immediately adjacent to the existing residence. The existing residence is already located within the 50-foot structure setback from the stream buffer. The proposed addition to the garage will fully reduce the structure setback in the

location of the proposed addition but will not modify the 50-foot stream buffer. The proposal will not disturb vegetation that is valuable as habitat and is affecting already developed portions of the site. As critical area reports are required to demonstrate an increase in the critical area functions and values resulting from the proposed development. An enhancement planting plan of the stream buffer is proposed as mitigation in order to provide an increase in critical area functions and values on the site. See Conditions of Approval in Section IX of this report.

ii. Consistency With LUC 20.25H.080

Development on sites with a type S or F stream or associated critical area buffer shall incorporate the following performance standards in design of the development, as applicable:

1. Lights shall be directed away from the stream.

No exterior light is depicted on the plans. Any exterior light will be directed away from the stream. See Conditions of Approval in Section IX of this report.

2. Activity that generates noise such as parking lots, generators, and residential uses shall be located away from the stream or any noise shall be minimized through use of design and insulation techniques.

No noise impacts are expected from the proposed garage addition being placed in the structure setback above the noise levels currently generated by the existing single-family residence.

3. Toxic runoff from new impervious area shall be routed away from the stream.

No direct discharge to the stream is depicted on the plans from the roof of the residence to the stream. Water must first cross the lawn and planting area before entering the stream.

4. Treated water may be allowed to enter the stream critical area buffer.

No direct discharge to the stream is depicted on the plans from the roof of the residence to the stream. Water must first cross the lawn and planting area before entering the stream.

5. The outer edge of the stream critical area buffer shall be planted with dense vegetation to limit pet or human use.

The stream bank is proposed to be planted with dense vegetation and is separated from the property by a fence which will limit use of this area by pets and humans.

6. Use of pesticides, insecticides and fertilizers within 150 feet of the edge of the stream critical area buffer shall be in accordance with the City of Bellevue's "Environmental Best Management Practices," now or as hereafter amended.

As a condition of approval the site will be required to abide by the Environmental

Best Management Practices concerning the use of pesticides, insecticides, and fertilizers. See Conditions of Approval in Section IX of this report.

IV. Public Notice and Comment

Application Date:	May 26, 2009
Public Notice (500 feet):	June 18, 2009
Minimum Comment Period:	July 2, 2009

The Notice of Application for this project was published the City of Bellevue weekly permit bulletin on June 18, 2009. It was mailed to property owners within 500 feet of the project site. No comments were received.

V. Summary of Technical Reviews

A. Clearing and Grading

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

VI. Changes to Proposal Due to Staff Review

The notice of application for this project stated in the project description that the 50-foot stream buffer was also proposed to be slightly modified. Staff asked the applicant for further clarification on the plans to determine if the stream buffer would be modified as part of the proposal. In addition staff recommended that the proposed planting area be placed along the stream bank to replace the invasive species and to locate the mitigation planting below the existing fence on the site to limit disturbance to the new plants. Staff also required the planting area to meet requirements for plant spacing and density found in the City's Critical Areas Handbook. The applicant revised the plans to confirm that the proposed modification was for the stream structure setback only and revised the planting area to be along the stream bank and to have plant spacing and density consistent with the Critical Areas Handbook.

VII. Decision Criteria

A. 20.25H.255 Critical Areas Report – Decision Criteria – General

The Director may approve, or approve with modifications, the proposed modification where the applicant demonstrates:

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

The performance standards related to streams identified in section III of this report above are being met by this proposal. No critical area or critical area buffer is

proposed for modification by development. Planting within the stream buffer along the stream bank is the only work proposed in a buffer and will improve the riparian habitat on the property by replacing invasive species with planting.

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

The mitigation and monitoring plan contained in the submitted mitigation plan requires monitoring of the planting area for a 5-year period. The applicant shall adhere to the monitoring program. Once the planting area is installed an inspection by Land Use staff is required. If the planting is healthy and established after three years monitoring may be discontinued, subject to inspection by Land Use staff. See Conditions of Approval in Section IX of this report.

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

The proposed area of the expansion is currently a maintained yard with lawn and ornamental planting. No critical area or buffer is proposed to be modified by the development. The stream buffer will be improved from its existing condition by having invasive species removed and the stream bank replanted with appropriate plants for a riparian area.

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

Expansion of a garage is consistent with single-family uses adjacent to the site.

B. 20.30P.140 Critical Area Land Use Permit Decision Criteria – Decision Criteria

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

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

The applicant must obtain a building permit to construct the garage addition. See Conditions of Approval in Section IX of this report.

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

The garage addition is limited to modifying on the structure setback and will not modify the stream buffer. Mitigation planting is proposed along the stream bank which will improve the buffer above its existing condition.

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

As discussed in Section III of this report, the applicable performance standards of LUC Section 20.25H are being met.

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

The proposed activity will not affect public services or facilities.

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

The mitigation proposed is sufficient and consistent with LUC 20.25H.210.

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

As discussed in this report, the proposal complies with all other applicable requirements of the Land Use Code.

VIII. **Conclusion and Decision**

After conducting the various administrative reviews associated with this proposal, including Land Use Code consistency, City Code and Standard compliance reviews, the Director of the Development Services Department does hereby **approve with conditions** the modification of the structure setback from the 50-foot buffer of Vasa Creek to allow the construction of an addition to the existing garage. **Approval of this Critical Areas Land Use Permit does not constitute a permit for construction. A building permit is required and all plans are subject to review for compliance with applicable City of Bellevue codes and standards.**

Note- Expiration of Approval: In accordance with LUC 20.30P.150 a Critical Areas Land Use Permit automatically expires and is void if the applicant fails to file for a building permit or other necessary development permits within one year of the effective date of the approval.

IX. **Conditions of Approval**

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

<u>Applicable Ordinances</u>	<u>Contact Person</u>
Clearing and Grading Code- BCC 23.76	Janney Gwo, 425-452-6190
Land Use Code- BCC Title 20	Reilly Pittman, 425-452-4350
Noise Control- BCC 9.18	Reilly Pittman, 425-452-2973

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

- 1. Disturbance Limit:** The structure setback modification approved is limited to the new approximately 300 square foot garage addition depicted on the approved site plan. Any future development proposals in the structure setback area or stream buffer may require a Critical Area Land Use Permit approval.

Authority: Land Use Code 20.30P.120
Reviewer: Reilly Pittman, Development Services Department

- 2. Exterior Lighting:** Any exterior lighting shall not be directed toward the stream.

Authority: Land Use Code 20.25H.080
Reviewer: Reilly Pittman, Development Services Department

- 3. Use of Pesticide, Insecticide, and Fertilizers:** The use of pesticide, insecticide, and fertilizer shall be consistent with the City of Bellevue's Environmental Best Management Practices.

Authority: Land Use Code 20.25H.080
Reviewer: Reilly Pittman, Development Services Department

- 4. Building Permit Required:** Approval of this Critical Areas Land Use Permit does not constitute an approval of a building permit. Application for a building permit must be submitted and approved. Plans submitted as part of a building permit application shall be consistent with the activity permitted under this approval.

Authority: Land Use Code 20.30P.140
Reviewer: Reilly Pittman, Development Services Department

- 5. Mitigation, Maintenance, and Monitoring:** The proposed mitigation planting is approved. Maintenance and monitoring of the planting shall be carried out as detailed in the Mitigation Plan dated April 13, 2009 prepared by Sewall Wetland Consulting, Inc. If mitigation planting is demonstrated to be healthy and established after three years of monitoring the monitoring may be discontinued, subject to inspection of the planting by Land Use staff.

Authority: Land Use Code 20.30P.140
Reviewer: Reilly Pittman, Development Services Department

- 6. Noise Control:** Noise related to construction is exempt from the provisions of BCC 9.18 between the hours of 7 am to 6 pm Monday through Friday and 9 am to 6 pm on Saturdays, except for Federal holidays and as further defined by the Bellevue City Code. Noise emanating from construction is prohibited on Sundays or legal holidays unless

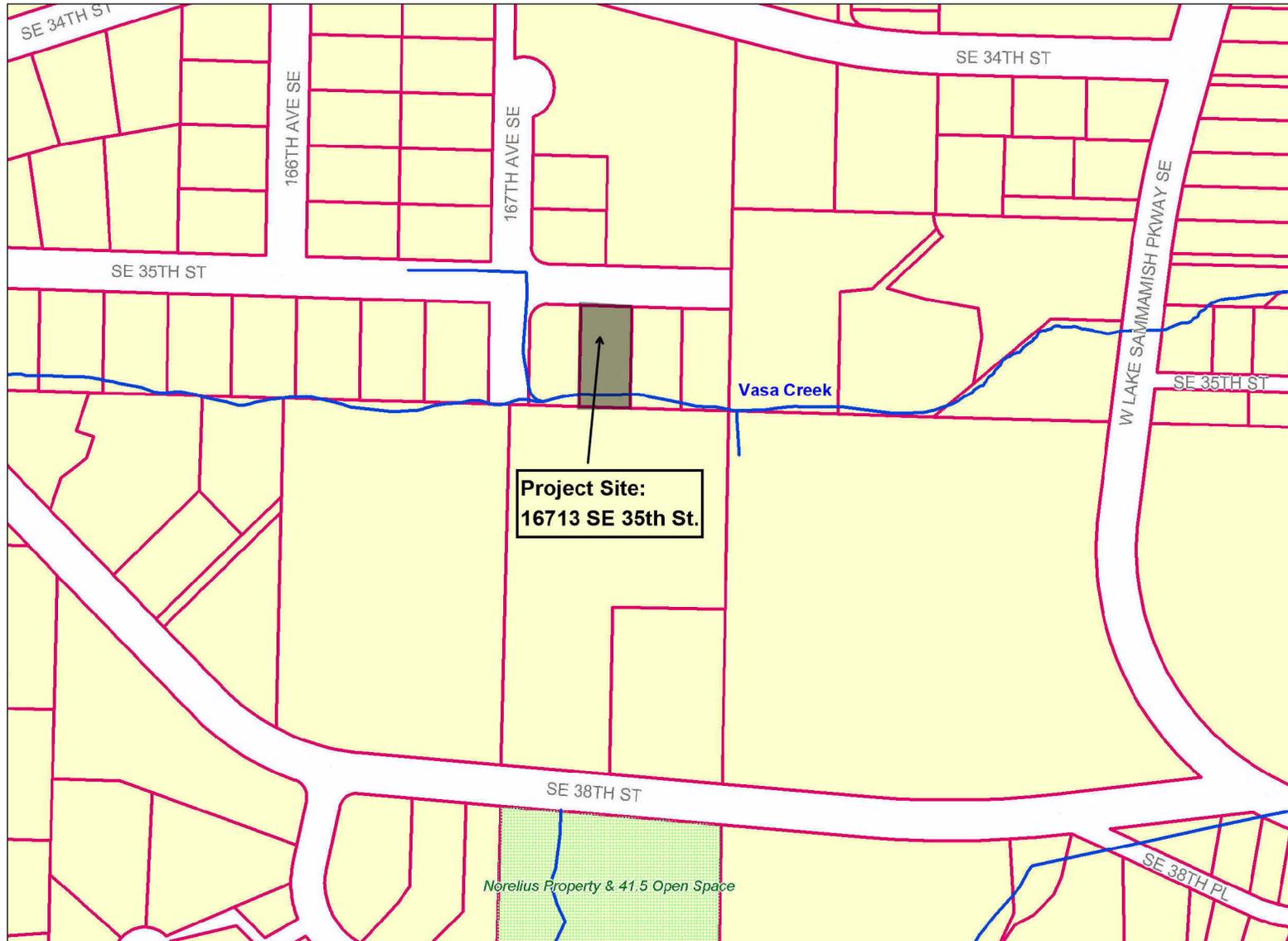
expanded hours of operation are specifically authorized in advance. Requests for construction hour extension must be done in advance with submittal of a construction noise expanded exempt hours permit.

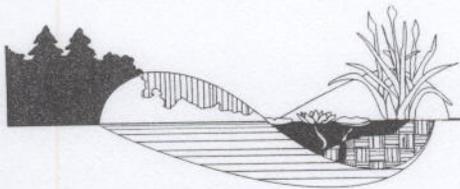
Authority: Bellevue City Code 9.18
Reviewer: Reilly Pittman, Development Services Department

X. Attachments:

1. Critical Areas and Wildlife Habitat Assessment – Enclosed
2. Critical Area Conceptual Mitigation Plan – Enclosed
3. Stream Buffer Enhancement Planting Plan – Enclosed
4. Project Documentation and Information – In File

Berdan Garage Addition Vicinity Map





January 20, 2009

Walt Berdan
16713 SE 35th Street
Bellevue, Washington 98008

RE: Critical Areas and Wildlife Habitat Assessment – Berdan Property
SWC Job#A8-236

1.0 INTRODUCTION

This report describes our observations in regards to critical areas on the Berdan property as defined in City of Bellevue Land Use Code (LUC) Chapter 20.25H. Specifically, the site is a, 11,249sf single family Parcel (Parcel #122405-9176) located at 16713 SE 35th Street in the City of Bellevue, Washington (the “site”). The site is located along the south side of SE 35th Street in the NW ¼ of the SW ¼ of Section 12, Township 24 North, Range 5 East of the Willamette Meridian in King County, Washington.

The site contains a single critical area known as Vasa Creek, a fish bearing stream, located along its south boundary. The proposed project is a 13’ extension/addition to the existing garage on the north end of the site.

2.0 METHODOLOGY

The City of Bellevue requires a Critical Areas Report “to provide flexibility for sites where the expected critical area functions and values are not present due to degraded conditions or other unique site characteristics” (LUC 2.25H.230 & .250). In addition, a “Habitat Assessment” is required to evaluate a site for the potential presence or absence of designated species of local importance or habitat for species of local importance. As required by the City, a critical areas report for habitat for species of local importance shall contain an assessment of habitats, including the following site and proposal-related information at a minimum;

- 1. Detailed description of the site.*

2. *Identification of any species of local importance that have a primary association with habitat on or adjacent to the site, and an assessment of potential project impacts to the use of the site by the species.*
3. *A discussion of federal, state and local special management recommendations to include WDFW recommendations of species or habitats on or adjacent to the site.*
4. *A detailed discussion of the direct and indirect potential impacts on habitat by the project, including water quality.*
5. *A discussion of measures of avoidance, minimization and mitigation for impacts.*
6. *A discussion of ongoing management practices that will protect habitat after the site has been developed.*

3.0 OBSERVATIONS

3.1 Existing conditions.

The site is nearly 100% developed with an existing landscaped lawn, a driveway, a single family home and attached garage, and a fenced landscaped lawn in the rear of the home. With the exception of the south end of the site, there is no habitat, natural vegetation or undeveloped area on the site.

The southern end of the site contains a fish bearing stream known as "Vasa Creek". The ordinary high water mark of the creek was flagged with white/blue dot flagging labeled OHWM N1-OHWM N5. Vasa Creek is a small tributary stream to Lake Sammamish and is known to contain several species of salmonids including coho salmon, late run kokanee and resident cutthroat trout (*see attached City of Bellevue Vasa Creek Basin Sheet*). The creek is characterized by a relatively natural, meandering channel with an average width of approximately 8' between OHWM. Substrate within the reach on-site is comprised of sand and gravel and approximately 6" of flow was present during our site visit. Banks of the creek are relatively stable vertical sides approximately 12" high bordering a small flat meander width. The sides of the 8' meander area are characterized by a 2:1 slope of apparent natural grades with scattered native and non-native vegetation. Species observed along the narrowly vegetated north stream bank include black cottonwood (*Populus balsamifera*), a small western red cedar (*Thuja plicata*), vine maple (*Acer circinatum*), salmonberry (*Rubus spectabilis*) and in some areas, a dense groundcover of invasive English ivy (*Hedera helix*). A few small logs were found along the channel. Fences and disturbed stream channel and buffer are evident up and downstream of the site.

The north side buffer bordering the developed portion of the site consist of an area ranging from 10'-15' of a mix of natural and landscaped vegetated area. A chain-link fence parallels the stream along the north bank and divides the natural and landscaped vegetated area. The

landscaped portion is almost entirely moss covered lawn but also includes several large vine maples with a manicured understory.



Above: Photograph looking east along Vasa Creek on the south side of the site.

Based upon LUC 20.25H.075C, Vasa creek meets the criteria of a Type F stream due to the presence of fish habitat. Typically, Type F streams on a "Developed site" have a 50' buffer or the buffer established with the existing NGPE/NGPA, whichever is greater. The existing 50' buffer passes through the entire lawn and includes portions of the existing structure. These features were developed prior to any regulation of the critical areas or buffers.

In addition to the 50' standard buffer of the Type F stream on a developed site, a 50' structure setback is measured from the edge of the critical area buffer on a developed site (LUC 20.25H.075.D.2.ii).

3.2 Wildlife Habitat

This wildlife study is an inventory of available habitat as well as observations of wildlife using the site. Significant habitat features (snags, downed logs, large trees etc.) were also noted during our November 15, 2008, field reconnaissance. General observations were also made of species utilizing or likely to utilize the site.

Habitat cover types were inspected for tree, shrub and herb species as well as significant habitat features such as snags, caves old growth forest, large woody debris, cliffs and other habitats considered "Priority Habitats" by Washington Department of Fish and Wildlife.

A review of the existing data on file with Washington State Department of Natural Resources Natural Heritage Program and the Washington Department of Wildlife Nongame Data Systems was also conducted to identify any sensitive species or habitats known to be on or near the site.

3.2.1 Threatened and Endangered Species

Washington Department of Fish and Wildlife Priority Habitats Data Search

A search of the data on file with the State of Washington Department of Wildlife (WDFW) Non-game Data Systems revealed no priority species using the site. Vasa Creek is noted as containing "priority resident fish species" referring to use by late run Kokanee salmon

Lake Sammamish, located approximately 1,200 east of the site is noted as containing priority fish presence.

Washington Department of Natural Resources Natural Heritage Sites

A review of the WADNR Natural Heritage Data base reveals the site is not listed as a Natural heritage site. Natural heritage sites are sites are noted for rare or unusual plant species, communities or associations.

As previously described, the site is almost entirely developed with the exception of the narrow forested band bordering Vasa Creek on the south side of the site. The area has numerous single family homes and roads in and around Vasa Creek limiting its use to wildlife species conditioned to the presence of human intrusion.

One very small snags is present in the southern forested area as well as numerous large and small downed logs in the stream area off-site to the west. No unique or unusual or high quality habitats or habitat features were noted on or near the site.

Tracks of common wildlife such as raccoon, mule deer and coyote were noted along the stream corridor. The south end of the site and the surrounding riparian area undoubtedly supports numerous human-tolerant species typically found in the area including raccoon (*Procyon lotor*), opossum (*Didelphis virginiana*), common crow (*Corvus caurinus*), Norway rat (*Rattus norvegicus*), house mouse (*Mus musculus*), European starling (*Sturnus vulgaris*), barn swallows (*Hirundo rustica*), coyote (*Canis lutris*), garter snake (*Thamnophis sirtalis*), house sparrow (*Passer domesticus*) and mule deer.

The site is surrounded by residential development and the riparian area provides refuge for the few wildlife species found in this area. However, the wildlife most likely move in and out of this area at night or dusk and dawn when human encounters are at their lowest possibility. The stream corridor is the major feature on-site that appears to attract wildlife due to the presence of a perennial water source. Wildlife are restricted to the riparian corridor through the site by the presence of a chain link fence along its length.

Other than that previously described, the sites habitat quality is minimal due to its existing developed condition. Although some stream shading and cover is provided by the narrow band of vegetation along the south end of the site.

Additionally, several moderately large cottonwoods are found on along the south edge of the site. No nests of any type were noted in these trees nor were any birds observed perching on these trees. With the generally close proximity to Lake Sammamish, these trees could potentially be used as perch trees for large raptors in the area to include red-tailed hawk, bald eagle, sharp shinned hawks and possibly osprey. It should be noted that none of these species were noted on or near the site, but the potential for these trees to be used as perch trees exists.

The site has no known recorded rare plant communities or listed plants according to a data search we had conducted by the Washington Department of Natural Resources Natural Heritage Program. In addition, there are no known identified or documented uses of the site by any state or federally listed threatened or endangered species based upon our site observations as well as a data search we had conducted by WDFW Priority Habitats Program. We did not observe any rare, threatened or endangered state or federally listed species during our fieldwork on the site.

4.0 PROPOSED PROJECT

The proposed project is the construction of a 13' addition onto the existing garage by extending the structure 13' to the south. This area is currently a small landscaped garden area along the edge of the structure, and the rest of the area is lawn. The proposed structure addition will not be located within the existing 50' buffer. However, the entire existing structure as well as the proposed addition is within the existing 50' structure setback. According to LUC

20.25H.075.D.4, structure setback modifications on developed sites may be modified only through an approved critical areas report.

As described in LUC 20.25H.255, the director may approve modifications where the following are demonstrated;

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

The proposed work within the 50' structure setback is entirely within existing developed portions of the site. Since the entire structure is within this structure setback there would be no way to enlarge the structure without impacting this setback or other required setbacks.

The majority of the buffer along Vasa Creek abutting the structure setback is also heavily degraded lawn area with little function other than of filtering and slowing runoff to the creek from the developed portion of the site. No vegetation or habitat features will be disturbed by this project, only redevelopment of existing developed portions of the site. The total impact within the structure setback is 300sf. The creation of the addition to the existing garage will not impact any of the existing functions of this creek. However, to increase the functions of the buffer and provide additional protection of the buffer in the vicinity of the proposed addition, we are proposing providing some stream buffer enhancement along the north side of the stream (see attached Concept Buffer Enhancement Plan). The purpose of the enhancement will be to provide additional native vegetation in a currently degraded buffer, remove exotic English ivy, and increase the shading function as well as the recruitment of woody debris to the channel. The addition of native trees and shrubs will provide additional future shading to the channel which will in turn keep stream waters cooler and oxygen levels higher which benefit resident salmonids. The woody vegetation will also provide a source of woody debris which will enhance streamside habitat for microinvertebrates which are the primary food for salmonids.

The proposed mitigation area will be monitored for 5 years to insure success of the mitigation site.

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

The owner has adequate resources to ensure completion of this project.

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

The proposed reduced structure setback will not impact any of the functions of the critical area or critical area buffer. As previously described, all work is within existing developed area. The proposed enhancement of the existing degraded buffer will result in a buffer with higher function and protection of Vasa Creek than currently exists.

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

The proposed addition is similar to other developments and home expansions that are found in and around the site and this section of Vasa Creek. The property to the west extends further towards the creek and encroaches more into the buffer and structure setback than this proposal. The proposed addition does not change the character or the use of the site, only increases the size of the structure within existing developed area but a small amount.

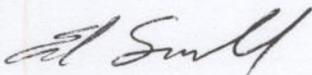
5.0 CONCLUSION

No state or federally listed threatened or endangered plant or wildlife species were observed on the site, nor are they known to use either the site according to WDNR & WDFW data records. Streams such as Vasa Creek are considered Priority Habitats by WDFW. No high quality habitats exist on or in close proximity to the site.

The proposed small addition to the existing structure within existing developed area and the "structure setback" will not be detrimental to Vasa Creek or its buffer functions. The proposed conceptual buffer enhancement plan will increase the functions of the buffer by increasing natural vegetation, cover for wildlife utilizing the riparian corridor, increasing shading of the creek, as well as increasing a source of woody debris recruitment to the stream channel and buffer as the vegetation matures. Once this concept plan is approved a final detailed plan will be prepared for review and approval.

If you have any questions in regards to this report or need additional information, please feel free to contact me at (253) 859-0515 or esewall@sewallwc.com.

Sincerely,
Sewall Wetland Consulting, Inc.



Ed Sewall
Senior Biologist

**BIRDS OBSERVED OR POTENTIALLY USING
THE BERDAN SITE**

ACCIPITRADAЕ:	Sharp-shinned Hawk Cooper's Hawk Red-tailed Hawk	<i>Accipiter striatus</i> <i>Accipiter cooperii</i> <i>Buteo jamaicensis</i>
COLUMBIDAE:	Mourning Dove	<i>Zenaidura macroura</i>
STRIGIDAE:	Great Horned Owl Barn Owl	<i>Bubo virginianus</i> <i>Tyto alba</i>
PICIDAE:	Red-breasted Sapsucker Hairy Woodpecker Northern Flicker Downy Woodpecker Pileated Woodpecker	<i>Sphyrapicus varius</i> <i>Picoides villosus</i> <i>Colaptes auratus</i> <i>Picoides pubescens</i> <i>Dryocopus pileatus</i>
TYRANNIDAE:	Olive-sided Flycatcher Western Wood-pewee Western Flycatcher	<i>Nuttallornis borealis</i> <i>Contopus sordidulus</i> <i>Empidonax difficilis</i>
HIRUNDINIDAE:	Violet-green Swallow Barn swallow	<i>Tachycinata thalassina</i> <i>Hirundo rustica</i>
CORVIDAE:	Stellar's Jay Crow	<i>Cyanocitta stelleri</i> <i>Corvus caurinus</i>
PARIDAE:	Black-capped Chickadee	<i>Parus atricapillus</i>
SITTIDAE:	Red-breasted Nuthatch	<i>Sitta canadensis</i>
CERTHIIDAE:	Brown Creeper	<i>Certhia familiaris</i>
TROGLODYTIDAE:	Winter Wren House Wren	<i>Troglodytes troglodytes</i> <i>Troglodytes aëdon</i>
TURDIDAE:	Hermit Thrush American Robin Varied Thrush	<i>Catharus guttatus</i> <i>Turdus migratorius</i> <i>Ixoreus naevius</i>

SYLVIIDAE:	Golden-crowned Kinglet Ruby-crowned Kinglet	<i>Regulus satrapa</i> <i>Regulus calendula</i>
BOMBYCILLIDAE:	Cedar Waxwing	<i>Bombycilla cedrorum</i>
STURNIDAE:	European Starling	<i>Sturnus vulgaris</i>
VIREONIDAE:	Solitary Vireo Hutton's Vireo Warbling Vireo	<i>Vireo solitarius</i> <i>Vireo huttoni</i> <i>Vireo gilvis</i>
PLOCEIDAE:	House Sparrow	<i>Passer domesticus</i>
ICTERIDAE:	Brown-headed Cowbird	<i>Molothrus ater</i>
THRAUPIDAE:	Western Tanager	<i>Piranga ludoviciana</i>
FRINGILLIDAE:	Cassin's Finch Evening Grosbeak House Finch American Gold Finch Lincoln Sparrow Chipping Sparrow Fox Sparrow Song Sparrow Rufous sided towhee Dark-eyed Junco	<i>Carpoolacus cassinii</i> <i>Hesperiphona vespertina</i> <i>Carpodacus mexicanus</i> <i>Spinis tristis</i> <i>Melospiza lincolnii</i> <i>Spizella passerina</i> <i>Passerella iliaca</i> <i>Melospiza melodia</i> <i>Pipilo erythrophthalmus</i> <i>Junco hyemalis</i>

**MAMMALS OBSERVED OR POTENTIALLY USING THE
THE BERDAN SITE**

MARSUPIALS:	Common Opossum	<i>Didelphis virginiana</i>
INSECTIVORES:	Masked Shrew	<i>Sorex cinereus</i>
	Pacific Mole	<i>Scapanus orarius</i>
BATS:	Little Brown Myotis	<i>Myotis lucifugus</i>
	Hoary Bat	<i>Lasiurus cinereus</i>
RODENTS:	Deer Mouse	<i>Peromyscus maniculatus</i>
	House Mouse	<i>Mus musculus</i>
	Bushy-tailed Wood Rat	<i>Neotoma cinera</i>
	White footed mouse	<i>Peromyscus leucopus</i>
	Norway rat	<i>Rattus norvegus</i>
CARNIVORES:	Raccoon	<i>Procyon lotor</i>
	Short-tail Weasel	<i>Mustela erminea</i>
	Coyote	<i>Canis lutris</i>
UNGULATES:	Mule Deer	<i>Odocoileus hemionus</i>

**REPTILES, AMPHIBIANS, AND FISH OBSERVED OR POTENTIALLY USING
THE BERDAN SITE**

SNAKES:	Common Garter Snake	<i>Thamnophis sirtalis</i>
FROGS AND TOADS:	Pacific Tree Frog	<i>Hyla regilla</i>
SALAMANDERS:	Ensatina	<i>Ensatina eschscholtzi</i>
	Red-backed Salamander	<i>Plethodon vehicul</i>



Above: Photograph looking west along the "buffer" of Vasa Creek. Vasa Creek is not visible but is to the left of the photograph. The proposed extension of the garage is just west of the barbecue visible on the right.



Above: Looking south from the southwest corner of the existing structure through the lawn/buffer area.



Above: Looking easterly along the south side of the garage in the area of the proposed 13' addition into the "structure setback". Note area is entirely lawn and landscaped area.

Below: Looking southerly towards proposed buffer enhancement area from south edge of proposed addition.





Above: looking northerly towards garage and proposed addition area from the north bank of Vasa Creek.

Below: looking easterly along north bank of Vasa Creek. This area is proposed to have enhancement plantings of willow slips to stabilize the stream bank and provide shade and organic matter to the creek.





Above: Looking westerly along edge of existing landscaped native vegetation in the buffer of Vasa Creek. Proposed enhancement plantings would be in upper right side of this area.

Vasa Creek Basin

Basin Areas: 1,104 Total Acres
 City 860 Acres
 King County 244 Acres
 Drainage Jurisdictions: Bellevue,
 DOT (I-90)
 % Impervious 40%
 Basin Relief 795 ft
 Basin Energy 0.7
 Basin Length 2.4 mi
 Average Basin Width 0.7 mi

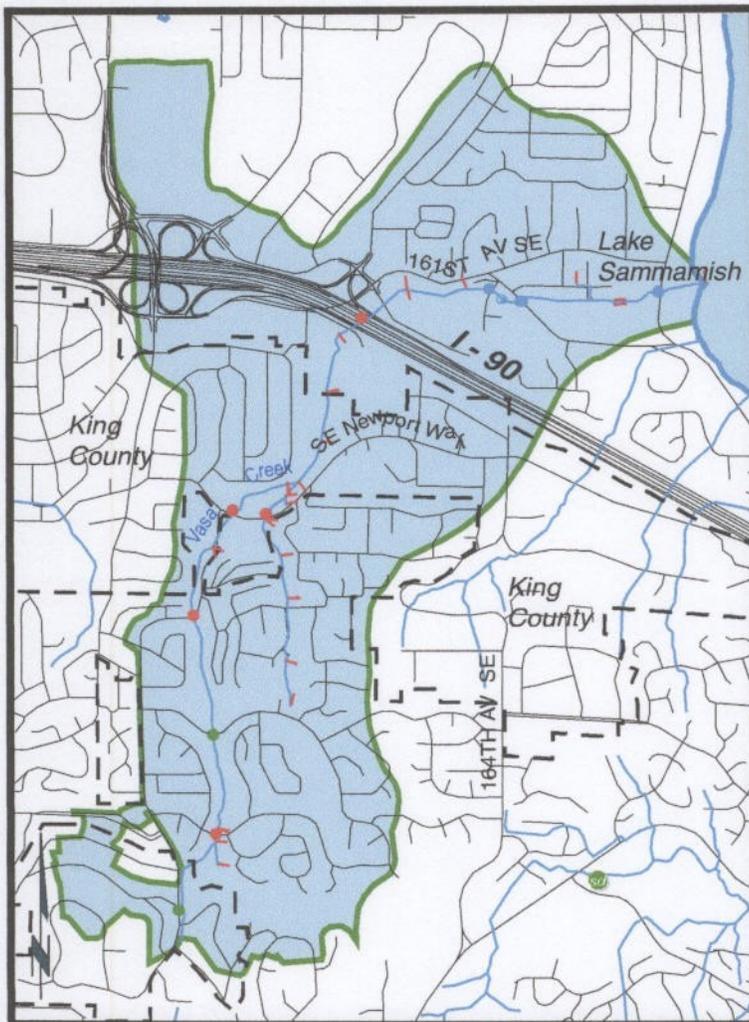
Total Length of Open Channel 14,384 ft

Lake Sammamish Watershed

City Basin Population (2000): 3,810

Land Use Within the City Area

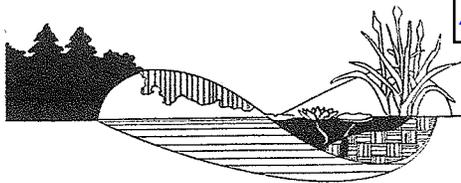
Single family residential	41%
Multi-family residential	5%
Commercial/Office	5%
Industrial	2%
Institutional/Government	6%
Open Space/Park	4%
Mixed use/Misc.	0%
Public streets	37%



SCALE 1" = 2400'

Fish Use: According to Washington Department of Fish and Wildlife information (Downen 2000), the reaches of Vasa Creek (08-0156) nearest to Lake Sammamish contain cutthroat trout and late run kokanee, as well as coho and sockeye salmon. The first small tributary is entirely within the influence of the main channel and presumed to have similar fish use. The other small tributary flows through a restored corridor along 167th Avenue SE. Numerous juvenile cutthroat trout were visible in the downstream pools in the summer of 2001. However, several installed weirs with 18-inch plunges possibly hinder upstream migration. The survey effort did not discover any fish in the upper portion of this tributary, located in a ditch parallel to SE 35th Street.

The reach, located above an impassible fish barrier at I-90, consists of a sedimentation pond and a gravel-filled channel that lacks perennial surface flow. Surface flow was observed both upstream and downstream of this segment and thus, flow must go sub-surface through a thick gravelly substrate during summer months. Although no fish were present in the sedimentation pond, the possibility of a resident population in Eastgate, outside of City limits, cannot be ruled out without field verification.



April 13, 2009

Walt Berdan
16713 SE 35th Street
Bellevue, Washington 98008

RE: Critical Areas Conceptual Mitigation Plan – Berdan Property
SWC Job#A8-236

1.0 INTRODUCTION

This report describes our proposed mitigation for encroachment into the 50' Building Setback of the 50' buffer of Vasa Creek on the Berdan property. Specifically, the site is a, 11,249sf single family Parcel (Parcel #122405-9176) located at 16713 SE 35th Street in the City of Bellevue, Washington (the "site").

The site contains a single critical area known as Vasa Creek, a fish bearing stream, located along its south boundary.

The proposed project is the construction of a 13' addition onto the existing garage by extending the structure 13' to the south. This area is currently a small landscaped garden area along the edge of the structure, and the rest of the area is lawn. The proposed structure addition will not be located within the existing 50' buffer. However, the entire existing structure as well as the proposed addition is within the existing 50' structure setback. According to LUC 20.25H.075.D.4, structure setback modifications on developed sites may be modified only through an approved critical areas report.

As described in LUC 20.25H.255, the director may approve modifications where the following are demonstrated;

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

The proposed work within the 50' structure setback is entirely within existing developed portions of the site. Since the entire structure is within this structure setback there would

RECEIVED

MAY 26 2009

PERMIT PROCESSING

be no way to enlarge the structure without impacting this setback or other required setbacks.

The majority of the buffer along Vasa Creek abutting the structure setback is also heavily degraded lawn area with little function other than of filtering and slowing runoff to the creek from the developed portion of the site. No vegetation or habitat features will be disturbed by this project, only redevelopment of existing developed portions of the site. The total impact within the structure setback is 300sf. The creation of the addition to the existing garage will not impact any of the existing functions of this creek. However, to increase the functions of the buffer and provide additional protection of the buffer in the vicinity of the proposed addition, we are proposing providing some stream buffer enhancement along the north side of the stream (see attached Concept Buffer Enhancement Plan). The purpose of the enhancement will be to provide additional native vegetation in a currently degraded buffer, remove exotic English ivy, and increase the shading function as well as the recruitment of woody debris to the channel. The addition of native trees and shrubs will provide additional future shading to the channel which will in turn keep stream waters cooler and oxygen levels higher which benefit resident salmonids. The woody vegetation will also provide a source of woody debris which will enhance streamside habitat for microinvertebrates which are the primary food for salmonids.

The proposed mitigation area will be monitored for 5 years to insure success of the mitigation site.

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

The owner has adequate resources to ensure completion of this project.

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

The proposed reduced structure setback will not impact any of the functions of the critical area or critical area buffer. As previously described, all work is within existing developed area. The proposed enhancement of the existing degraded buffer will result in a buffer with higher function and protection of Vasa Creek than currently exists.

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

The proposed addition is similar to other developments and home expansions that are found in and around the site and this section of Vasa Creek. The property to the west

extends further towards the creek and encroaches more into the buffer and structure setback than this proposal. The proposed addition does not change the character or the use of the site, only increases the size of the structure within existing developed area but a small amount.

The proposed small addition to the existing structure within existing developed area and the "structure setback" will not be detrimental to Vasa Creek or its buffer functions. The proposed conceptual buffer enhancement plan will increase the functions of the buffer by increasing natural vegetation, cover for wildlife utilizing the riparian corridor, increasing shading of the creek, as well as increasing a source of woody debris recruitment to the stream channel and buffer as the vegetation matures. Once this concept plan is approved a final detailed plan will be prepared for review and approval.

1.0 ENHANCEMENT CONCEPT AND GOALS

The Berdan project includes enhancement of 560sf of existing lawn located in close proximity to Vasa Creek.

The enhanced buffer area will be monitored 5 times over a 5 year period.

1.2. ENHANCEMENT GOALS

1.2.1 Enhance disturbed stream buffer area through replanting with native trees and shrubs.

2.0 CONSTRUCTION SEQUENCE

The construction sequence of this project will be implemented as follows:

- 2.1 Pre-construction meeting
- 2.2 Plant material installation
- 2.3 Construction inspection and silt fence removal
- 2.4 Agency approval
- 2.5 Monitoring inspection and reporting
- 2.6 Project completion

2.1 Pre-construction Meeting

A pre-construction meeting will be held on-site prior to commencement of construction, to include the Owner's biologist, the contractor, the Owner and the City Biologist. The approved plans and specifications will be reviewed to ensure that all parties involved understand the intent of the construction documents, specifications, site environmental constraints, sequences, and inspection requirements.

2.2 Plant Material Installation

All plant material will be planted by hand per detail and Construction and Planting Notes. The Enhancement Plan specifies the required size, species, quantity, and location of plant materials to be installed. The contractor will re-seed or over-seed all hydroseeded areas disturbed during the planting process. Plant substitutions or modifications to locations shall be approved in writing, by the Owner's biologist prior to installation.

2.3 Construction Inspection

Upon completion of installation, the Owner's biologist will conduct an inspection to confirm proper implementation of the Enhancement Plan. Any corrections, substitutions or missing items will be identified in a "punch list". Items of particular importance will be soils in pits, pit size, plant species, plant size, and mulch around pits.

Upon completion of planting, if installation or materials vary significantly from the Enhancement Plan, the contractor will submit a reproducible "as-built" drawing to the Owner.

2.4 Agency Approval

Following acceptance of the installation by the Owner's biologist, a letter will be prepared to the City Biologist requesting approval of the installation.

2.5 Monitoring Inspection and Reporting

The monitoring program will begin in the first growing season (approximately one year) following installation approval by the City Biologist. The subsequent monitoring inspections will be conducted in accordance with the approved Monitoring Program.

3.0 PLANT AND HABITAT MATERIALS

3.1.1 All plant materials will be as specified in the plant schedule. Only vigorous plants free of defects, diseases and infestation are acceptable for installation.

3.1.2 All plant materials stored on-site longer than two (2) weeks will be organized in rows and maintained by the contractor at no additional cost to the owner. Plant materials temporarily stored will be subject to inspection and approval prior to installation.

3.1.3 All plant materials will be dug, packed, transported and handled with care to ensure protection from injury. All plant materials to be stored on site more than 24 hours will be heeled into topsoil or sawdust. Precautionary measures shall be taken to ensure plant materials do not dry out before planting. Plants will be shaded and saturated until time of installation. Immediately after installation the enhancement planting area will be saturated to avoid capillary stress.

3.1.4 All plant materials will be placed as shown on the approved enhancement plan. If the final installation varies from the approved enhancement plan, the contractor will provide a reproducible mylar as-built of the installed conditions. All plant material will be flagged by the contractor.

3.1.5 A fall-winter installation schedule (October 1st - March 15th) is preferred for lower mortality rates of new plantings. If plant installation occurs during the spring or summer (March 15th - Oct. 1st) the plantings will be irrigated by hand for 15 minutes every day until fall rains can provide adequate moisture to support plant materials.

3.1.6 The installer will warrant all plant materials to remain healthy and alive for a period of one year after final acceptance. The installer will replace all dead or unhealthy plant materials per the approved plans and specifications.

4.0 MONITORING PROGRAM

4.1 SAMPLING METHODOLOGY

The enhanced buffer area will be monitored five times over a five year period. Monitoring will be conducted using the techniques and procedures described below to quantify the survival, relative health and growth of plant material. A monitoring report submitted following each monitoring visit will describe and quantify the status of the enhancement at that time.

4.1.1 Vegetation

The vegetation monitoring consists of inspection of the planted material to determine the health and vigor of the installation. All the planted material in the buffer will be inspected during each monitoring visit to determine the level of survival of the installation.

5.2 STANDARDS OF SUCCESS

1. Evaluation of the success of the enhancement project will be based upon an 80% survival of all planted woody vegetation at the end of year 5.
2. Volunteer native, non-invasive species will be included as acceptable components of the enhancement.
3. Not more than 10% non-native invasive species within the enhancement area.

5.3 CONTINGENCY PLAN

A contingency plan can be implemented if necessary. Contingency plans can include additional plant installation, and plant substitutions including type, size, and location.

If the monitoring results indicate that any of the performance standards are not being met, it may be necessary to implement all or part of the contingency plan. Careful attention to maintenance is essential in ensuring that problems do not arise. Should any of the site fail to meet the success criteria, a contingency plan will be developed and implemented with the City approval. Such plans are prepared on a case-by-case basis to reflect the failed enhancement characteristics.

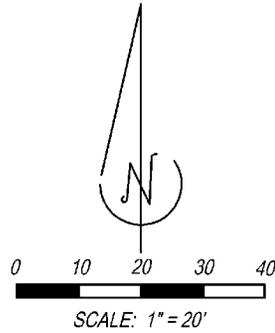
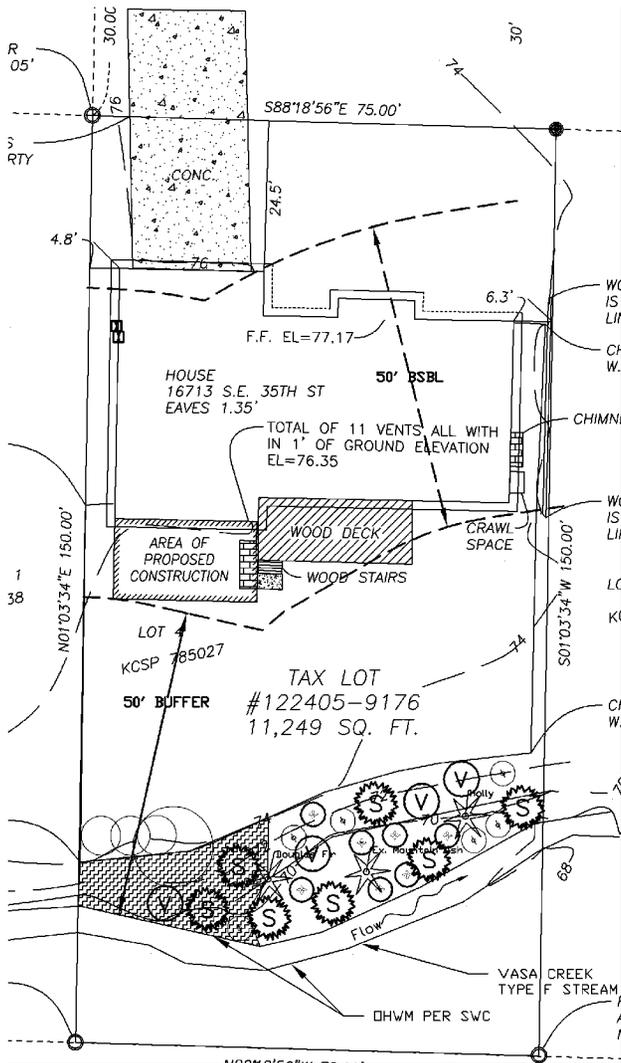
Contingency/maintenance activities will include, but are not limited to:

- Replacing all plants lost to vandalism, drought, or disease, as necessary.
- Replacing any plant species with a 20 percent or greater mortality rate with the same species or similar species approved by the City Biologist.
- Irrigating the enhancement area only as necessary during dry weather if plants appear to be too dry, with a minimal quantity of water.
- Removing all trash or undesirable debris from buffer areas as necessary per 4.0 Maintenance Program.

Sincerely,
Sewall Wetland Consulting, Inc.

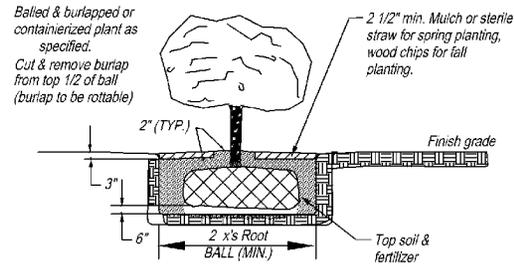
Ed Sewall
Senior Wetland Ecologist

Attachment 3



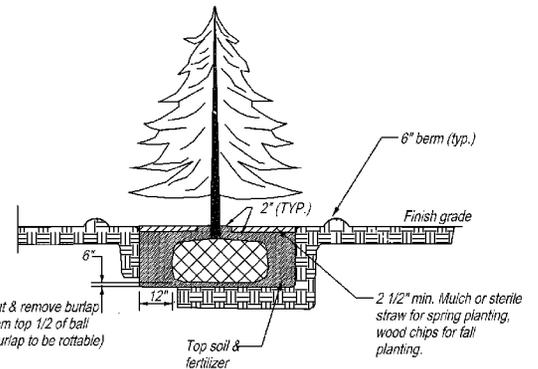
PLANTING LIST

	QNTY	PLANT NAME	SIZE	SPACING
S	5	Sitka spruce <i>Picea sitchensis</i>	1 gal.	as shown
V	4	Vine Maple <i>Acer circinatum</i>	1 gal.	as shown
+	6	Red-flowering Currant <i>Ribes sanguineum</i>	1 gal.	as shown
*	7	Clustered Rose <i>Rosa pisocarpa</i>	1 gal.	as shown
■	80	Salal <i>Gaultheria shallon</i>	4" Pot	2' O.C.
■	80	Sword Fern <i>Polystichum munitum</i>	4" Pot	2' O.C.



SHRUB PLANTING DETAIL

NOT TO SCALE



CONIFEROUS TREE PLANTING DETAIL

NOT TO SCALE

NOTE: BASE DRAWING PROVIDED BY CRAMER NW, INC.

Sewall Wetland Consulting, Inc.
Ecological Services
27641 Covington Wy SE #2
Covington, wa 98042
253-859-0515 Fax 253-852-4732



JOB# A8-236 DATE: JAN. 2009
DRAWN BY: CML SCALE: 1"=20'
REVISED: JULY 2009 DESIGNER: ES

**BERDAN PROPERTY
STREAM BUFFER
ENHANCEMENT PLANTING PLAN**