

January 31, 2022

Rob and Anne McCown 25122 161st Place Southeast Covington, Washington 98042

RE: Critical Areas Designation CADS21-0137, Parcel 132205-9125 Status: Complete

Dear Mr. and Mrs. McCown:

Your property was recently reviewed for a Critical Areas Designation. Our review consisted of a site visit and an in-office review of existing background data. The result of our study is that we have determined that your parcel is host to the critical areas discussed separately below. Specific impacts to development on your parcel are also discussed.

The determinations reported in this letter as to the existence, location, and classification of critical areas and critical area buffers are effective for five years from the date of this letter if there has been no change in site conditions. The Department of Local Services, Permitting Division (Permitting) shall rely on these determinations of the existence, location and classification of critical areas and critical area buffers in its review of complete applications for permits or approvals filed for the subject development site or parcel within five years after the letter is issued. If you do not plan to develop your property soon after receiving this letter, it may be in your interest to contact us to see if any of the conclusions in this letter have changed or are no longer valid.

Wetlands (21A.24.318 to 21A.24.345)

Your parcel contains five Category III wetlands. The buffer width for most of these (which on an undeveloped lot is to remain unaltered native vegetation) is 60 feet. One of these Category III wetlands has a 110' buffer. Structures must honor an additional 15-foot building setback beyond the buffer. Within a currently undeveloped buffer, no development of any kind is usually allowed, including clearing, grading, or any other alteration of the existing vegetation. Within legally developed buffers, maintenance of existing structures and landscaping is allowed as well as limited expansions of some structures.

In your particular case, the wetlands were described in a report (dated March 26, 2021, revised December 2, 2021) by *Beaver Creek Environmental Services Incorporated*. Four of the Category III wetlands feature habitat scores of five points: one is located on the west end of the parcel, two

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others are located in the center of the parcel, and a fourth is located directly south of the parcel. Wetlands such as these are assigned 60-foot buffers if moderate impact projects are proposed. The fifth Category III wetland is located on the northeast corner of the parcel and features a habitat score of 6 points. Wetlands such as these are assigned 110-foot buffers if moderate impact projects are proposed. Wetlands located off site are estimated in this report.

There is an unmapped flood plain (21A.24.230) associated with all of the wetlands. The elevation change between the boundary of the wetland and the proposed development site is less than 10 feet based upon iMap. A minor flood study may be required to demonstrate the proposed development is not located within the flood hazard area.

Aquatic Areas (21A.24.355 to 21A.24.380)

Your parcel contains Type F and Type N aquatic areas. The standard buffer width for Type F aquatic areas (which on an undeveloped lot is to remain unaltered native vegetation) 165 feet. The standard buffer width for Type N aquatic areas is 65-feet. Structures must honor an additional 15-foot building setback beyond the buffer. Within a currently undeveloped buffer, no development of any kind is usually allowed, including clearing, grading, or any other alteration of the existing vegetation. Within legally developed buffers, maintenance of existing structures and landscaping is allowed as well as limited expansions of some structures.

In your particular case, the aquatic areas were described in a report (dated March 26, 2021, revised December 2, 2021) by *Beaver Creek Environmental Services Incorporated*. The Type F aquatic area is a seasonal stream that enters the north property line and flows to the southwest through the parcel and then out of the parcel. Type F aquatic areas are presumed to have habitat for salmonids per Washington Administrative Code 222-16-031. Due to this stream's width and downstream gradients it is presumed to be salmonid habitat. Type F aquatic areas that are located outside of the Urban Growth Area are assigned 165-foot buffers. Another narrower stream enters the northeast corner of the parcel and flows southwestward across the parcel. This stream is a Type N aquatic area since, based on its width, it is *not* presumed to be salmonid habitat. Type N aquatic areas are assigned 65-foot buffers. The location of offsite aquatic areas is estimated on the attached site map.

Water Service

New development in the rural area must be served by Group A water systems, Group B water systems or individual private wells as provided for in King County Code (KCC) 13.24.138. If potable water is required for development, a Certificate of Water Availability or approval of an alternative water source consistent with the priority order provided in KCC 13.24.138 will be required under KCC 21A. 21A.28.040. Attached is a flow chart summarizing water service requirements and links to additional information. Read the chart by starting in the upper left corner, "Unincorporated King County, Property Location." It appears this property is not in a

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water service area, which should be confirmed by the applicant. It is the applicant's responsibility to verify water availability, in priority order, preceding submittal of an application. If you have questions about these requirements, please contact a Permit Review Coordinator at the Permitting Division.

Closure

When you are applying to the Health Department for septic system design approval or water well site approval, please include a copy of this letter and any attachments with your application to them. Similarly, a copy should be included with any building permit application. This critical area determination is not based on a professional survey of the site. As a result, this CAD may be relied on for the type and general location of critical areas but does not represent a confirmation of the precise boundaries of identified critical areas. Depending on the scope and type of development proposed on the site, a survey may be required with a permit application. If additional critical areas that are not reflected in the CAD become known during permit review, the development would still need to comply with applicable critical areas regulations.

The purpose of this review is to determine the location and classification of critical areas on your site that might affect your proposed development activities and is not an approval of existing or proposed development. Additional reviews, including but not limited to drainage, floodplain, clearing, grading, compliance with critical area codes, and fire flow may occur during the building permit review process.

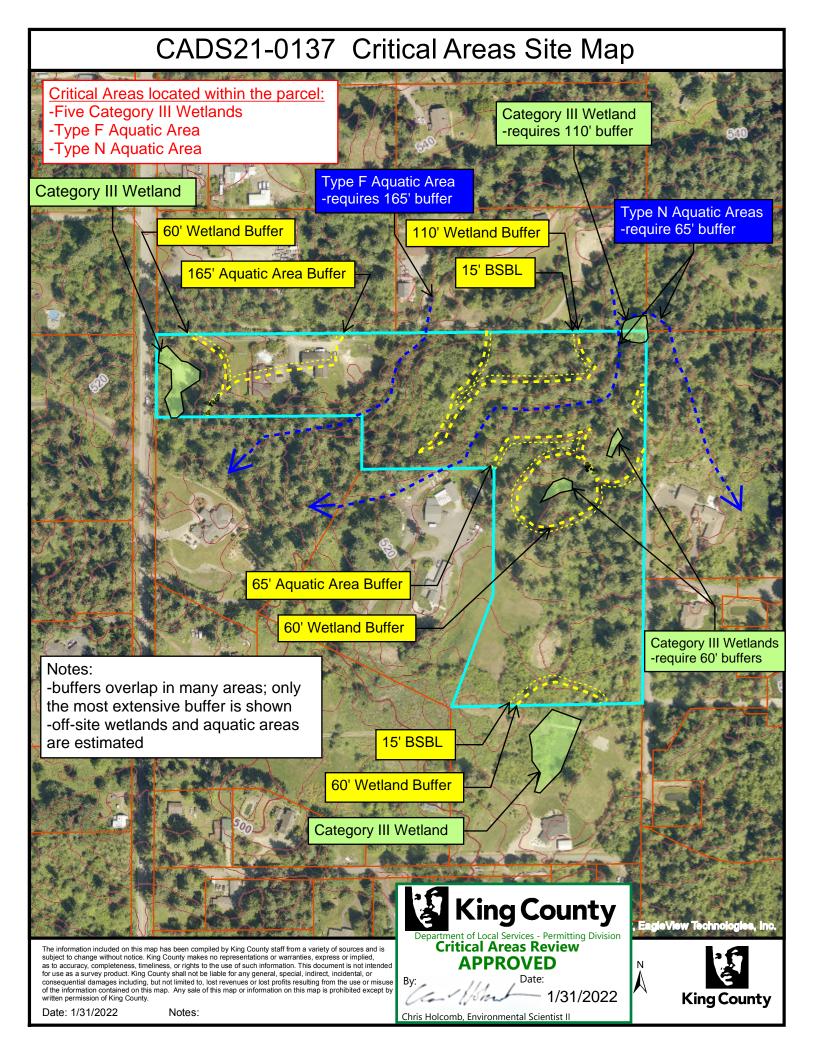
A clearing and grading permit would be required in order to clear land for access to a well site within critical areas prior to obtaining a building permit.

Please feel free to contact me at 206-477-3721 or <u>cholcomb@kingcounty.gov</u> if you have any questions regarding critical areas.

Sincerely,

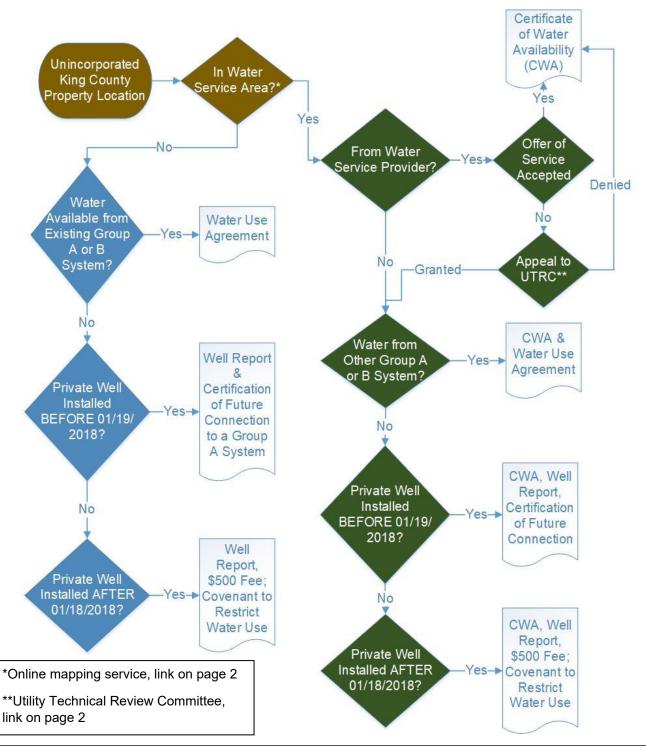
Chris Holcomb, MES Environmental Scientist II-Ecologist

Attachments: Critical Areas Site Map Water Service Requirements Flow Chart





Water Service Requirements



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206-296-6600 TTY Relay: 711 www.kingcounty.gov

Water Service Requirements, continued

Water Service Area Provider Notes:

If the water service area provider is not willing or able to provide a Certificate of Water Availability (CWA) that indicates water is not presently available at a property, a letter or email to that effect from the water service area provider will be sufficient in lieu of the CWA.

If the water service area provider is not willing to sign the Certification of Future Water Connection, an email or letter to that effect from the water service area provider will be sufficient and the applicant can record the certification with the email or letter as an attachment, in lieu of the water district signature.

The certification of future connection for properties not located in a water service area need only to be signed by the owner.

If you feel the offer of water availability from the water service provider is not timely and/or reasonable, you can appeal their determination of water availability to the Utility Technical Review Committee (UTRC), King County Department of Natural Resources and Parks. The link to their appeal procedures and application requirements are included below.

Resources:

Parcel Located in King County, Check Jurisdiction and Zoning

* Interactive Water Service Area Maps

Water Availability; Certificate of Availability

Dept. of Ecology, Well Construction & Licensing and Well Notice of Intent

Water Connection; Certification of Future Water Connection

Water Connection; Certification of Future Water Connection to a Group A System

Water Usage, Recording Document; Covenant Form

Groundwater Maps and Reports

Public Health, Private Wells, Plumbing, Gas Piping and Onsite-Sewage Systems

** Utility Technical Review Committee (UTRC) - Water Service Appeal Procedures and Forms

December 2, 2021

M. Rob McCown 25122 161st Place SE Covington, WA 98042

Subject: Critical Area Designation Report: Wetland Delineation and Aquatic Area Analysis, King County parcel # 1322059125 23212 172nd Avenue SE; Outside UGA. Revised based on King County Review comments of October 7, 2021

Mr. McCown,

As requested, we have evaluated your property for jurisdictional wetlands, streams, and required buffers. The CAD wetland delineation encompassed the entire site, and offsite to 315 ft. of the periphery of the parcel.

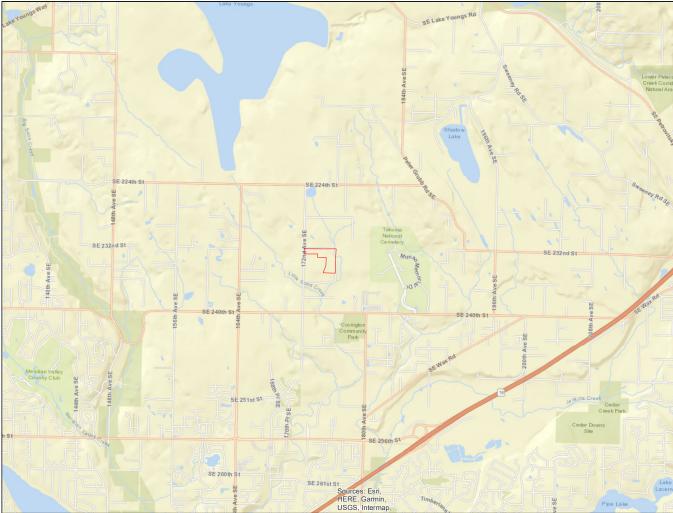


Figure 1. Site Vicinity

----- P. O. Box 731695 • Puyallup WA 98373 -----(253) 732-6515 MHeckert@Q.com

Location and Existing Conditions

The property is located to the east of 172nd Avenue SE, and north of SE 236th Place (parcel # 1322059125) in unincorporated King County, Washington, outside the Urban Growth Boundary. This property is an irregularly shaped 652,674 Sq. Ft. (14.98-acre) site. Currently the site is defined by a mixed forest located in the northeast, while the west portion of the site is dominated by a single-family house with managed and maintained lawn and landscaping. An unnamed tributary of Little Soos Creek occurs east of the northeast corner.



Figure 2. Existing Condition

<u>Methodology</u>

The site visit was conducted on May 13, 2020 and October 12, 2021. A combination of field indicators, including: soils, vegetation, and hydrology, were used to determine whether wetlands were present. Onsite assessment followed the established criteria and methods as defined within the *Corps of Engineers (CoE) Wetland Delineation Manual - 2010 Western Mountains, Valleys, and Coast (WMVC) Regional Supplement*, Revised Washington State Wetland Rating System (WSWRS), and King County Code 21A-24 Critical Areas.

Wetlands are transitional areas between aquatic and upland habitats. In general terms, wetlands are lands where the extent and duration of saturation with water is the primary factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface (FGDC 2013). Wetlands are generally defined as *"those areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions."* (King County Code 21A-24).

Wetlands exhibit three (3) essential characteristics, all of which must be present for an area to meet the established criteria within the Wash. Manual and the CoE Manual. These essential characteristics are:

Hydrophytic Vegetation: Meaning a predominance of plants that are typically adapted for life in saturated soils,

Hydric Soil: Meaning soil's that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper horizons, and **Wetland Hydrology:** Meaning permanent or periodic inundation, or soil saturation to the surface, at least seasonally.

Streams are delineated by identification of the Ordinary High-Water Mark (OHWM). The definition of the OHWM as defined by the Washington State Department of Ecology as a part of the Shoreline Management Act is,

"the mark on all lakes, streams, and tidal water that will be found by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland, in respect to vegetation as that condition exists on June 1, 1971, as it may naturally change thereafter, or as it may change thereafter in accordance with permits issued by a local government or the department: Provided, That in any area where the ordinary high water mark cannot be found, the ordinary high water mark adjoining salt water shall be the line of mean higher high tide and the ordinary high water mark adjoining fresh water shall be the line of mean high water".

Wetlands were flagged red/white and labeled consecutively. Sample data points were flagged red/white and marked SP# []. Culverts were also flagged red/white pink.

Existing Documentation

National Wetland Inventory (NWI) data (Fig.2) identified Little Soos Creek as a tributary of the Green River and containing the following Salmonids (*Oncorhynchus spp.*), Chinook (*O. tshawytscha*) and Coho (*O. kisutch*) Salmon. NWI identifies a wetland a small wetland to the northeast of the project site.



Figure 3. NWI Map

King County Sensitive Area, National Wetland Inventory (NWI), Washington Department(s) of Natural resources, and Fish and Wildlife all identified Little Soos Creek as a tributary of the Green River and containing the following Salmonids (*Oncorhynchus spp.*), Chinook (*O. tshawytscha*) and Coho (*O. kisutch*) Salmon. King County and NWI both identify a wetland to the west and a smaller wetland to the northeast of the project site.

King County Sensitive Area data (fig. 4) identified Little Soos Creek as a tributary of the Green River and containing the following Salmonids (*Oncorhynchus spp.*), Chinook (*O. tshawytscha*) and Coho (*O. kisutch*) Salmon.

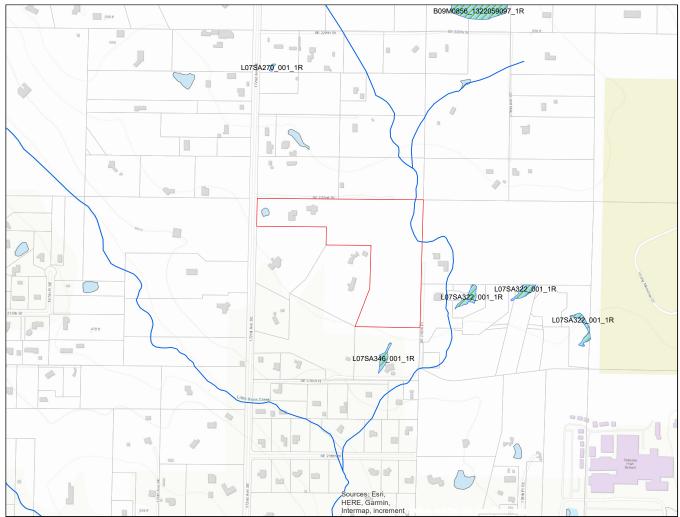
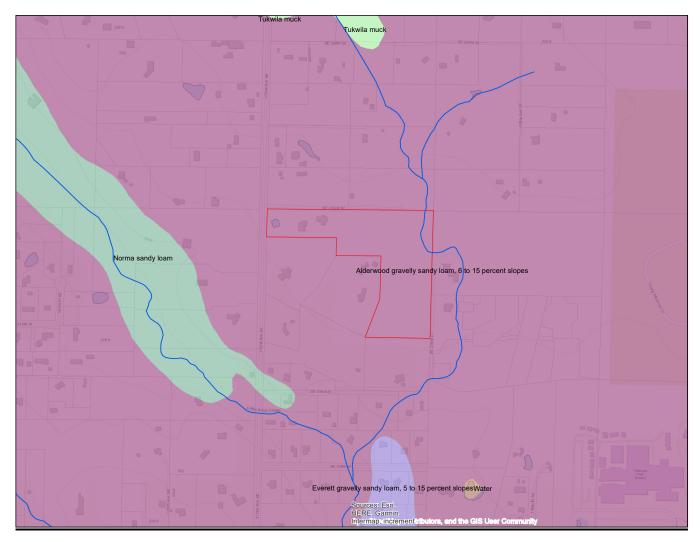


Figure 4. King County Wetland Data

NRCS soils data describes the entire site as Alderwood gravelly sandy loam. This soil is not listed as hydric in King county.



Field Observations

Upland Areas

The McCown project site contains two primary upland habitat areas. **Vegetation**: The forested northern and eastern portion of the site are dominated by Douglas Fir (*Pseudotsuga menziesii*), Big leaf Maple (*Acer macrophyllum*), Red Alder (*Alnus rubra*), and English Holly (*llex aquifolium*). While the mid-to-southern and western portion of the site is a mosaic of open pasture and scrubshrubs with a few trees. Major plant species include Scotch Broom (*Cytisus scoparius*), mixed grasses Orchard (*Dactylis glomerata*) and Redtop (*Agrostis alba*), Himalayan blackberry (*Rubus procera*), and Domestic Apple (*Pyrus spp*.).

Soils: The soils throughout the project area consist of Alderwood Gravelly Sandy Loam (AgC). This soil parent material is basalt till with some volcanic ash and is moderately well drained. The

soils in the forested areas of the project site appear to be relatively undisturbed with soils remaining non-compacted. The soils in the pasture scrub-shrub area have been compacted by years of animal grazing, plowing and grading for agricultural maintenance. Soil plot data for forested areas was 0-12 in. 10YR2/2 and 12-18 in. 10YR3/3 with no hydric soil indicators. Soil plot data for the pasture areas was 0-12 in. 10YR3/6 and 12-16 in. 10YR4/2 with no hydric soil indicators.

Hydrology: The site has been altered considerably to capture and direct flow coming onto the site. Two substantial ditches have been constructed in the north of the site to re-route flow and direct stormwater away from the house in the northwest. Surface flow through the site is generally directed by topography from the northeast to the southwest. A ditch system located in the central and northern portion of the site acts a collection basin for surface water flowing across the site and will be discussed below. The active maintenance and change in surface grade and compaction of soils acts to speed ground water flow across and out of the project site. The forested areas still appear to retain a great capacity to store and slow surface and ground water. It appears that the stream has been ditched and redirected to the east as it no longer flows through the property. Short term ponding in micro depressions throughout the upland areas is evident.

<u>Wetlands</u>

Five wetlands were identified (Delineated and designated as Wetland A, Wetland X, Wetland Y, Wetland XP, and offsite wetland OS) with red/white flagging. Wetland A is located in the east corner of the property. Wetland X is located in the northeast corner of the site, continuing offsite to the north and east. Wetland Y is in the central portion of the property, and Wetland XP is at the northwest corner of the site. Wetland OS is located offsite of the south boundary of the site in the east portion.

Wetland A is an atypical depressional Palustrine, scrub-shrub, seasonally flooded (PSSC) wetland. This wetland appears to have been created. The wetland is contained within a small depression defined by the road to the east and the natural topographic rise to the northwest. The wetland edge was delineated along a distinct change in vegetation, topography, and soil conditions.

Vegetation: found in this wetland included Willow (*Salix spp.*), Red Alder, Western Red Cedar (*Thuja plicata*), Nootka Rose (*Rose nutkana*), and Reed Canary Grass (*Phalaris arundinacea*).

Soils: The soils found within the wetland area exhibited hydric soil indicators. The soil profile included a two-inch duff layer of drying and decaying plant material, the A Horizon was found to be 2-4 inches of fine sandy loam, over a B Horizon of 4-16+ inches of Gravelly Sandy Loam. Hydric soil indicators included a depleted matrix with *Many* and *Prominent Redox concretions*. Soil plot data for the wetland area was O 0-2 inches, A 2-4 inches 10YR2/2, and B 10YR4/2 with greater than 20 percent Redox concretions of 10YR4/6 to 10YR6/8 in color. The soil was dry on the day of observation but is clearly inundated for a great part of the growing season.

Hydrology: Surface flow provides the majority of the water reaching this wetland. The flow through the site is generally directed by topography from the northwest to the south. A ditch

carries flow from the northeast corner through the site. I believe the wetland receives hydrology from the ditch, although no connection is found. I also presume the flow continues east to the stream, though no surface connection is found.

This series of ditches and culverts are now the normal condition for the stream. This wetland appears to be ponded for extend periods during the winter and early spring. Maximum depth of ponding is estimated to be 24 inches. An exit culvert was not located during investigation.

Wetland **A** appears to meet the King County criteria for designation as a **Category 3** Wetland. Category 3 wetlands typically require a 60 ft. buffer.

Wetland X is a depressional Palustrine, scrub-shrub, seasonally flooded (PSSC) wetland. This wetland is located in the northeast corner of the site and continues offsite to the north and east. This wetland appears at the eastern end of the central ditch transecting the site southwest to northeast.

Vegetation: found in this wetland included Willow (*Salix spp.*), Red Alder, Salmonberry, Slough sedge, and Soft Rush (*Juncus effuses*).

Soils: The soil found within this wetland area and buffer have been changed and impacted by active management of the pasture. Hydric soil indicators included oxidized root channels in the upper 12 inches. Soil plot data for was an O Horizon 0-2 inches of decaying leaf material, an A Horizon 2-4 inches 10YR2/2 over a B Horizon of 4-16+ inches 10YR4/2 of Gravelly Sandy Loam. Hydric soil indicators included a depleted matrix with *Many* and *Prominent Redox concretions* of 10YR4/6 to 10YR6/8 in color. The soil was dry on the day of observation but is clearly inundated for a great part of the growing season.

Hydrology: Surface flow and annual rain fall provides the majority of the water reaching this wetland. The flow through the site is generally directed by topography from the northeast to the south. The surface flow has been changed due to the active maintenance and grading of the wetland and buffers resulting in the collection of water in the swale. This wetland appears to flow toward the southwest on the surface and then infiltrates the ground and flows off site subsurface. The ditching and redirecting of the off-site streams to the east, north and west have likely reduced the normal level of hydrology over many years. This wetland appears to be ponded for extend periods during the winter and early spring. Maximum depth of ponding is estimated to be less than 12 inches.

Wetland X appears to meet the King County criteria for designation as a **Category 3** Wetland. Category 3 wetlands typically require a 60 ft. buffer. It may be possible to reduce this buffer through an approved Rural Stewardship Plan.

Wetland Y is a disturbed depressional Palustrine, scrub-shrub, seasonally flooded (PSSC) wetland. This wetland is located in the central portion of the site and is located in a natural swale oriented from north to south. Past grading, plowing, mowing and grazing have been conducted within the central portion of the wetland and its buffers. The wetland edge was delineated along a line defined by change in vegetation, topography, and soil conditions.

Vegetation: found in this wetland included Willow (*Salix spp.*), Red Alder, Western Red Cedar, Redtop Bent Grass, Reed Canary Grass (*Phalaris arundinacea*), Wooly Sedge (*Scirpus cyperinus*), and Soft Rush (*Juncus effuses*).

Soils: The soil found within this wetland area and buffer have been changed and impacted by active management of the pasture. Hydric soil indicators included oxidized root channels in the upper 12 inches. Soil plot data for was an O Horizon 0-2 inches of decaying leaf material, an A Horizon 2-4 inches 10YR2/2 over a B Horizon of 4-16+ inches 10YR4/2 of Gravelly Sandy Loam. Hydric soil indicators included a depleted matrix with *Many* and *Prominent Redox concretions* of 10YR4/6 to 10YR6/8 in color. The soil was dry on the day of observation but is clearly inundated for a great part of the growing season.

Hydrology: Surface flow and annual rain fall provides the majority of the water reaching this wetland. The flow through the site is generally directed by topography from the northeast to the south. The surface flow has been changed due to the active maintenance and grading of the wetland and buffers resulting in the collection of water in the swale. This wetland appears to flow toward the southwest on the surface and then infiltrates the ground and flows off site subsurface. The ditching and redirecting of the off-site streams to the east, north and west have likely reduced the normal level of hydrology over many years. This wetland appears to be ponded for extend periods during the winter and early spring. Maximum depth of ponding is estimated to be less than 12 inches.

Wetland **Y** appears to meet the King County criteria for designation as a **Category 3** Wetland. Category 3 wetlands typically require a 60 ft. buffer. It may be possible to reduce this buffer through an approved Rural Stewardship Plan.

Wetland XP is a disturbed depressional Palustrine, scrub-shrub, seasonally flooded (PSSC) wetland. This wetland is located in the west end of the site and appeared to be constructed as a house amenity. This wetland has an open water component.

Vegetation: found in this wetland included Willow (*Salix spp.*), Red Alder, Reed Canary Grass (*Phalaris arundinacea*), Wooly Sedge (*Scirpus cyperinus*), and Soft Rush (*Juncus effuses*).

Soils: The soil found within this wetland area and buffer have been changed and impacted by active management of the pasture. Hydric soil indicators included oxidized root channels in the upper 12 inches. Soil plot data for was an O Horizon 0-2 inches of decaying leaf material, an A Horizon 2-4 inches 10YR2/2 over a B Horizon of 4-16+ inches 10YR4/2 of Gravelly Sandy Loam. Hydric soil indicators included a depleted matrix with *Many* and *Prominent Redox concretions* of 10YR4/6 to 10YR6/8 in color. The soil was dry on the day of observation but is clearly inundated for a great part of the growing season.

Hydrology: Surface flow and annual rain fall provides the majority of the water reaching this wetland. The flow through the site is generally directed by topography from the north to the south. The wetland may receive flow from the roadside ditch to the west. This wetland appears to be ponded for extend periods during the winter and early spring. Maximum depth of ponding is estimated to be less than 24 inches.

Wetland **XP** appears to meet the King County criteria for designation as a **Category 3** Wetland. Category 3 wetlands typically require a 60 ft. buffer. It may be possible to reduce this buffer through an approved Rural Stewardship Plan.

Wetland OS is a disturbed depressional Palustrine, scrub-shrub, seasonally flooded (PSSC) wetland. This wetland is located offsite of the south boundary of the site. The wetland appears to have been cleared recently. The wetland edge was delineated by offsite technique.

Vegetation: found in this wetland included Willow (*Salix spp.*), Redtop Bent Grass, Reed Canary Grass (*Phalaris arundinacea*), and Soft Rush (*Juncus effuses*).

Soils: No soil data obtained (offsite)

Hydrology: Surface flow and annual rain fall provides the majority of the water reaching this wetland. The flow through the site is generally directed by topography from the northeast to the south. The surface flow has been changed due to the active maintenance and grading of the wetland and buffers resulting in the collection of water in the swale. This wetland appears to flow toward the southwest on the surface and then infiltrates the ground and flows off site subsurface. The ditching and redirecting of the off-site streams to the east, north and west have likely reduced the normal level of hydrology over many years. This wetland appears to be ponded for extend periods during the winter and early spring. Maximum depth of ponding is estimated to be less than 12 inches.

Wetland **OS** appears to meet the King County criteria for designation as a **Category 3** Wetland. Category 3 wetlands typically require a 60 ft. buffer. It may be possible to reduce this buffer through an approved Rural Stewardship Plan.

Unnamed Drainages

A created ditch (flagged CLJ) east of the house appears to carry stormwater runoff from the house offsite. This ditch appears to have been created from a stream channel which was redirected. This stream apparently confluences with Little Soos Creek 2,000 ft. below the project site. This feature meets criteria for designation as a Type N stream. Type N streams require a 65 ft. buffer.

A drainage channel (flagged SS) occurs in the northeast corner of the site. This feature continues southwest though the site to origin offsite at the clearing boundary of a single-family house. This feature appears to be a remnant stream channel of the unnamed tributary of Little Soos Creek that flows south east of the project site. It appears the stream has been redirected around the parcel and around the single-family house to the east. This stream apparently confluences with Little Soos Creek 3,000 ft. below the project site.

This feature appears to meet the King County criteria for designation as a Type N (Non-Fish) intermittently flowing stream.

Type N Streams typically require a 65 ft. buffer.

Off Site

A regulated stream flows (SS) from the northeast corner of the site south along the east boundary of the project site.

This feature appears to meet the King County criteria for designation as a **Type N stream**, and is an extension of the SS stream on the project site. Type N streams require a 65 ft. buffer. The buffer extends onto the site at the northeast corner.

Proposed Site Development

The proposed land use development desired is the segregation of the site into two parcels by the creation of a boundary east-west through the center of the site. The parcel segregation will not impact the on-site regulated wetlands and buffers.

If you have questions or need additional information please contact myself at 253.732.6515 or by email at mheckert@q.com.

Respectfully Submitted, Mark Heckert, President

Att. Wetland Delineation Map Revised WA State Wetland Rating System Forms WL A, X, XP, Y, OS Sample Plot forms WA PHS Data