HABITAT TECHNOLOGIES

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City of Lake Forest Park

SENSITIVE AREAS STUDY

Parcels 6152900030 and 6152900033
City of Lake Forest Park, King County, Washington

prepared for

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INTRODUCTION

This *Sensitive Areas Study* document details the culmination of activities and onsite evaluations undertaken to complete an onsite assessment and characterization of sensitive areas (i.e. wetlands, streams, wildlife habitats) to help facilitate future planning and associated potential permitting of two parcels (Parcels 6152900030 and 6152900033) (project site) located at 3035 NE 195th Street within the City of Lake Forest Park, King County, Washington (part of Section 4, Township 26 North, Range 04 East, W.M.) (Figure 1). The evaluation and characterization of onsite and adjacent sensitive areas is a vital element in land use planning. The goal of this approach is to ensure that present and proposed planned site development actions, to include the establishment of protective buffers, do not result in adverse environmental impacts to identified sensitive areas or downstream water quality.

The onsite assessment and evaluation of critical areas within and immediately adjacent to the project site was completed following the methods and procedures defined in the *Corps of Engineers Wetland Delineation Manual* (1987 Manual) with the 2010 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (2010 Supplement); the guidance provided for the *Washington State Wetlands Identification and Delineation Manual* (Wash Manual); the State of Washington Department of Natural Resources (WDNR) Forest Practice Rules (WAC 222-16-030); and the City of Lake Forest Park Chapter 16.16 *Environmentally Sensitive Areas*.

PROJECT SITE DESCRIPTION

The project site was located within a well urbanized, primarily residential area of the City of Lake Forest Park. The project site was composed of two (2) independent parcels of record and totaled approximately 4.7-acres. The project site had been modified by prior land use actions; and was dominated by an existing single family homesite, associated outbuildings, and managed lawn/landscaping generally located within the northwestern portion of the project site. The remainder of the project site had at one time been managed as gardens, a chicken coop, mixed orchards, and a small pasture. However, more recently these areas had become overgrown with often very dense thickets of shrubs.

The project site sloped generally from the northwest to the southeast and was bound on the west, south, and east by existing single family homesites; and on the north by NE 195th Street. The general movement of seasonal surface water within and adjacent to the project site had been greatly modified. Seasonal stormwater from NE 195th Street and the residential areas to the north of NE 195th Street was captured within a public stormwater system and discharged into a constructed ditch leading to the east within the adjacent parcel to the east of the northeastern corner of the project site. Seasonal

stormwater from the residential community to the west was captured within a public system and discharged into a ditch at the very southwestern corner of the project site. A small berm had also been created along the boundary of the two parcels directly to the east of the central portion of the project site. This berm appeared to cause seasonal surface water runoff to be retained onsite and then to eventually leave the project site near the southeastern corner. Seasonal surface water runoff from the project site appeared to continue easterly and enter Lyon Creek, a tributary to McLears Creek and eventually to the northern end of Lake Washington.

Directions to the Project Site: From Bothell Way NE along the northern end of Lake Washington turn northerly onto NE Ballinger Way (SR104). Continue northwesterly on NE Ballinger Way to 35th Avenue NE. Turn northerly onto 35th Avenue NE and continue to NE 195th Street. Turn westerly onto NE 195th Street and continue to project site at 3035 NE 195th Street.

BACKGROUND INFORMATION

NATIONAL WETLAND INVENTORY

The National Wetland Inventory (NWI) mapping completed by the U.S. Fish and Wildlife Service was reviewed as a part of this assessment (Figure 2). This mapping resource did not identify any wetlands or surface water drainages within or immediately adjacent to the project site.

STATE OF WASHINGTON PRIORITY HABITATS AND SPECIES

The State of Washington Priority Habitats and Species (PHS) Mapping was reviewed as a part of this assessment (Figure 3). This mapping resource did not identify any priority habitats or priority species within the project site. This mapping resource did identify Lyon Creek offsite to the east of the project site.

STATE OF WASHINGTON DEPARTMENT OF FISH AND WILDLIFE

The State of Washington Department of Fish and Wildlife (WDFW) mapping was reviewed as a part of this assessment. This mapping resource did not identify any streams within the project site (Figure 4). This mapping resource did identify Lyon Creek offsite to the east of the project site. Lyon Creek in the areas to the east of the project site was further identified to provide documented spawning habitat for coho salmon (*Oncorhynchus kisutch*); and the modeled presence of winter steelhead (*Oncorhynchus mykiss*), fall Chinook salmon (*Oncorhynchus tshawytscha*), and sockeye salmon (*Oncorhynchus nerka*).

STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES

The State of Washington Department of Natural Resources (WDNR) mapping was reviewed as a part of this assessment (Figure 5). This mapping resource did not identify any streams within the project site. This mapping resource did identify Lyon Creek offsite to the east of the project site. Lyon Creek was defined as a Type F Water (fish-bearing).

CITY OF LAKE FOREST PARK MAPPING

The City of Lake Forest Park inventory mapping was reviewed as a part of this assessment (Figure 6). This mapping resource identified a possible wetland within the northeastern portion of the project site. This mapping resource also identified Lyon Creek offsite to the east of the project site.

WASHINGTON STATE NATURAL HERITAGE PROGRAM

The Washington State Natural Heritage Program was reviewed as a part of this assessment. This resource did not identify any high quality, undisturbed wetland or a wetland that supports state Threatened, Endangered, or Sensitive plant species within the Section/Township/Range of the project site.

ONSITE ANALYSIS

CRITERIA FOR CRITICAL AREAS IDENTIFICATION

As defined by the City of Lake Forest Park within Chapter 16 "Sensitive Areas" means erosion hazard areas, landslide hazard areas, seismic hazard areas, steep-slope hazard areas, streams, wetlands, wellhead protection areas, wildlife habitat conservation areas, and flood hazard areas. "Sensitive areas" also means and includes any buffers established by Chapter 16, or any buffer or setback established by state law or other city ordinance that serves to protect sensitive areas. The *Sensitive Areas Assessment* documented below focuses on wetlands, streams, and wildlife habitat conservation areas.

Wetlands: 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 (Cowardin, et al.,

1979). Wetlands are generally defined within land use regulations as "areas that are inundated or saturated by surface or groundwater 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" (1987 Manual). Wetlands do not include those artificial wetlands intentionally created from nonwetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway.

Wetlands exhibit three essential characteristics, all of which must be present for an area to meet the established criteria within the 1987 Manual. These essential characteristics are:

1. **Hydrophytic Vegetation**: A predominance of plants that are typically adapted for life in saturated soils.
2. **Hydric Soil**: A soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper horizons.
3. **Wetland Hydrology**: Permanent or periodic inundation, or soil saturation to the surface, at least seasonally.

As further defined by the City of Lake Forest Park "wetlands" shall be delineated in accordance with the *Washington State Wetland Identification and Delineation Manual* (Department of Ecology Publication No. 96-94). However, with the adoption of the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (2010 Supplement) the Washington State Department of Ecology (WDOE) provided the following guidance: *To maintain consistency between the state and federal delineations of wetlands, Ecology has repealed WAC 173-22-080 (the state delineation manual) and replaced it with a revision of WAC 173-22-035 that states delineations should be done according to the currently approved federal manual and supplements. The changes became effective March 14, 2011.*

Streams: Streams are surface water carried in defined channels or beds, intermittently or perennially, excluding irrigation ditches, canals, storm or surface water runoff devices or other entirely artificial streams, unless used by salmonids or to convey surface water naturally occurring prior to the alteration of the land. A defined channel or bed shall constitute an area which demonstrates clear evidence of the passage of water and includes, but is not limited to, bedrock channels, gravel beds, sand and silt beds, and defined channel swales. A channel or bed need not contain water year-round, but should show evidence of annual intermittent flow to meet the requirements of this definition. The upstream reach of a stream shall end at the most upstream segment of open water channel flow; provided, that segments that have been culverted shall continue to be considered streams for the purpose of this title.

Wildlife Habitat Conservation Areas: These areas are defined as feeding, breeding and nesting sites for priority, endangered or threatened species, regardless of number. These areas are managed for maintaining species in a wild state in suitable habitats within their natural geographic distribution so that isolated subpopulations are not created. "Wildlife habitat conservation areas" include:

1. Priority habitats with priority species;
2. Naturally occurring ponds under 20 acres and their submerged aquatic beds that provide fish or wildlife habitat;
3. Waters of the state;
4. Lakes, ponds, streams and rivers planted with game fish by a governmental or tribal entity; or
5. State natural area preserves and natural resource conservation areas.

"Priority habitats" means a seasonal range or habitat element with which a priority species has a primary association and which, if altered, may reduce the likelihood that the species will maintain and reproduce over the long term. "Priority species" means those species that are listed in the Washington Department of Wildlife Priority and Habitat Species (PHS) list for forested and urban areas.

STUDY METHODS

Habitat Technologies completed an initial onsite assessment during the fall of 2013. As identified during the fall 2013 the project site and surrounding properties had been greatly modified by prior and ongoing land use actions generally associated with residential urbanization. These modifications had included the creation of public and private stormwater utilities, a pattern of roadside ditches to control stormwater, land modifications to divert the seasonal movement of surface water, and the development of adjacent properties. As a result of these land modifications the fall 2013 assessment identified the need to better document onsite hydrology patterns during the first part of the growing season. As such, a series of onsite assessments were completed during between February 2014 and June 2014 to document and characterize hydrology patterns. Onsite activities were completed in accordance with criteria and procedures established in the in the 1987 Manual with the 2010 *Regional Supplement*; the guidance provided for the Wash Manual; the WDNR Forest Practice Rules (WAC 222-16-030); and the City of Lake Forest Park Chapter 16.16 *Environmentally Sensitive Areas.*

FIELD OBSERVATION

The project site was accessed via an existing driveway connection to NE 195th Street. The project site was located within an urban residential area and well served by public and private utilities. The project site and adjacent properties had been modified by prior land use actions (see PHOTOS).

- **Hydrology**

As defined by onsite assessments during the fall of 2013 and winter/spring of 2014 the western and southern portions of the project site appeared to drain moderately well and did not exhibit wetland hydrology patterns. The movement of onsite seasonal surface water was generally from northwest to the southeast and had been greatly modified by onsite and immediately offsite land use actions. These modifications had created a very shallow depression in the northeastern portion of the project site. Hydrology within this shallow depression also appeared to have been greatly influenced by the creation of a berm at the property line for two parcels directly to the east along the east-central boundary of the project site. As a result of this berm seasonal surface water runoff was retained onsite prior to continuing to the south and exiting the project site within a topographic low area near the southeastern corner of the project site.

As noted during the spring of 2014 at representative hydrology monitoring plots initially assessed during the fall of 2013, seasonal surface water runoff from the northwestern portion of the project site and seasonal surface water runoff directed onto the project site from a roadside ditch associated with NE 195th Street created an area of short-term shallow ponding and saturation to the surface during the late winter and early spring of 2014. The field data collected at these representative monitoring plots are provided in Appendix A.

A narrow ditch was also present at the very southwestern corner of the project site. This ditch originated offsite a short distance to the west from a culvert outlet for a residential stormwater system. This ditch continued offsite to the south and was directed into a managed ornamental pond and rock lined ornamental ditch within the parcel directly to the south.

A narrow ditch was also present within the adjacent parcel to the east of the northeastern corner of the project site. This ditch was part of a public stormwater system for NE 195th Street and existing homesites to the north of NE 195th Street. This ditch was located directly to the east of the eastern project site boundary and continued to the east.

- **Soils**

As identified at representative sample plots the northwestern and southern portions of the project site appeared to drain moderately well and did not exhibit field indicators of "hydric" soil characteristics (Appendix B). However, at representative sample plots within the identified shallow depression in the northeastern portion of the project site the soil exhibited a thin duff/organic layer at the surface and an underlying soil that exhibited prominent field indicators of "hydric" soil characteristics. These field indicators

included depleted soil matrix color, concentrated redoximorphic features, a high percentage of organics in the surface soil.

- **Plant Communities**

The plant communities throughout the project site had been modified by prior land use actions. The northwestern and west-central portions of the project site were dominated by an existing single family homesite and associated lawns/landscaping. The plant community within this homesite area was composed of a scattering of retained native trees and a wide variety of ornamental trees, shrubs, and herbs.

The southern portion of the project site had at one time been managed as livestock pasture. This area included a scattering of retained native trees, a variety of domestic fruit trees, a scattering a native and ornamental shrubs, and often very dense thickets of blackberries (*Rubus* spp.). Observed species included Douglas fir (*Pseudotsuga menziesii*), Western hemlock (*Tsuga heterophylla*), red alder (*Alnus rubra*), big leaf maple (*Acer macrophyllum*), cherry (*Prunus* spp.), black cottonwood (*Populus trichocarpa*), hawthorne (*Crataegus* spp.), Himalayan blackberry (*Rubus procera*), evergreen blackberry (*Rubus laciniatus*), Pacific blackberry (*Rubus ursinus*), vine maple (*Acer circinatum*), Indian plum (*Oemleria cerasiformis*), Oregon grape (*Berberis nervosa*), salal (Gaultheria shallon), hazelnut (Corylus cornuta), rose (Rosa spp.), thimbleberry (*Rubus parviflorus*), holly (*Ilex* spp.), Pacific red elderberry (*Sambucus racemosa*), bracken fern (Pteridium aquilium), sword fern (*Polystichum munitum*), bleeding heart (*Dicentra formosa*), nettle (*Urtica dioica*), and Canadian thistle (*Cirsium arvensis*). This plant community was identified as non-hydrophytic in character (i.e. typical of non-wetlands).

The northeastern portion of the project site has also been managed as a part of the single family homesite. This portion of the project site exhibited two primary plant associations – one plant association typically associated with non-wetland characteristics and one plant association typically associated with shallow seasonal ponding and damp to saturated soils well into the growing season. The plant association within the area of non-wetland characteristics was dominated by very dense thickets of blackberries and a scatting of fruit trees, hazelnut, vine maple, holly, hawthorne, and bracken fern. The plant association within the area of shallow seasonal ponding and damp to saturated soils included red alder, black cottonwood, Oregon ash (*Fraxinus latifolia*), Sitka willow (*Salix sitchensis*), Pacific willow (*Salix lasiandra*), crabapple (*Pyrus fusca*),Douglas spiraea (*Spiraea douglasii*), salmonberry (*Rubus spectabilis*), Pacific ninebark (*Physocarpus capitatus*), black twinberry (*Lonicera involucrata*), rose, common lady fern (*Athyrium filix-femina*), buttercup (*Ranunculus repens*), slough sedge (*Carex obnupta*), small fruited bulrush (*Scirpus microcarpus*), water parsley (*Oenanthe sarmentosa*), and skunk cabbage (*Lysichitum americanum*).

The plant communities within the areas immediately adjacent to the project site were dominated by managed lawns and landscaping typical of residential homesites.

- **Wildlife Species and Habitats**

The project site and adjacent parcels had been modified and manipulated for single family homesite utilization. The entire project site had been managed as a single family homesite and associated lawns, landscaping, gardens, orchards, and livestock pastures. The Lyon Creek Corridor was identified offsite to the east. However, this stream corridor was separated from the project site by existing residential developments.

The project site provided habitats for a variety of wildlife species typically associated with residential areas. Wildlife species observed or that would be expected onsite or within the immediate vicinity of the project site based on existing habitats would include tree swallow (*Tachycineta bicolor*), violet green shallow (*Tachycineta thallassina*), song sparrow (*Melospiza melodia*), dark eyed junco (*Junco hyemalis*), American crow (*Corvus brachynchos*), starling (*Sturnus vulgaris*), American robin (*Turdus migratorius*), golden crown kinglet (*Regulus satrapa*), bushtit (*Psaltriparus minimus*), house finch (*Passer domesticus*), Steller's jay (*Cyanocitta stelleri*), black-capped chickadee (*Parus atricapillus*), brown creeper (*Certhia americana*), Northern flicker (*Colaptes auratus*), hairy woodpecker (*Picoides villosus*), American goldfinch (*Carduelis tristis*), purple finch (*Carpodacus purpureus*), coyote (*Canis latrans*), opossum (*Didelphis virginianus*), eastern gray squirrel (*Sciurus carolinensis*), striped skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), eastern cottontail (*Sylvilagus floridanus*), deer mouse (*Peromyscus maniculatus*), shrew (*Sorex* spp.), bats (*Myotis* spp.), Norway rat (Rattus norvegicus), and Pacific treefrogs (*Hyla regilla*). The project site did not provide direct habitats for fish species.

The Lyon Creek Corridor was located offsite to the east and has been documented to provide or potentially provide habitats for salmonid fish species (genius Oncorhynchus).

Movement Corridors: The project site was located within an area of urban residential development and bound by existing residential homesites and public roadways. As such, the project site would provide a very limited movement corridor for mammals. The project site is within the seasonal migratory pathways for a variety of passerine birds.

State Priority Species: Several species identified by the State of Washington as "Priority Species" were observed onsite or potentially may utilize the project site. Priority species require protective measures for their survival due to their population status, sensitivity to habitat alteration, and/or recreational, commercial, or tribal importance.

> **Game Species:** "Game species" are regulated by the State of Washington through recreational hunting bag limits, harvest seasons, and harvest area

restrictions. The project site was not observed to provide critical habitats for State Game species.

State Candidate: State Candidate species are presently under review by the State of Washington Department of Fish and Wildlife (WDFW) for possible listing as endangered, threatened, or sensitive. The project site was not observed to provide critical habitats for State Candidate species.

State Monitored: State Monitored species are native to Washington but require habitat that has limited availability, are indicators of environmental quality, require further assessment, have unresolved taxonomy, may be competing with other species of concern, or have significant popular appeal. The project site was not observed to provide critical habitats for State Monitored species.

State Sensitive: State Sensitive species are native to Washington, are vulnerable to decline, and are likely to become endangered or threatened throughout a significant portion of its range without cooperative management or removal of threats. The project site was not observed to provide critical habitats for State Sensitive species. However, a single State Sensitive species – bald eagle (*Haliaeetus leucocephalus*) – has been documented along the Lake Washington shoreline and a number of larger streams associated with the lake. As such, this species may occasionally overfly the project site.

State Threatened: State Threatened species are species native to the state of Washington and are likely to become an endangered species within the foreseeable future throughout a significant portion of its range within the state without cooperative management or removal of threats. The project site was not observed and has not been documented to provide critical habitats for State Threatened species.

State Endangered: State endangered species are species native to the state of Washington and are seriously threatened with extinction throughout all or a significant portion of its range within the state. The project site was not observed and has not been documented to provide critical habitats for State Endangered species.

Federally Listed Species: The project site has not been documented to provide critical habitats for federally listed species. Lyon Creek located offsite to the east of the project site has been documented or may potentially provide habitats for Puget Sound Chinook salmon and Puget Sound steelhead trout – both federally listed threatened species; and for coho salmon – a federally listed species of concern. Bald eagle – a federally listed species of concern – has been documented to use the habitats associated with Lake Washington and a number of the larger streams associated with the lake.

SENSITIVE AREAS DETERMINATION

Onsite assessment identified a single wetland generally located in the northeastern corner of the project site and a single stream located at the very southwestern corner of the project site (see Attached Survey).

WETLAND	CLASSIFICATION	WDOE RATING SCORE	WDOE HABITAT SCORE	CITY CATEGORY	BUFFER WIDTH
A	Slope/Depression	47	15	3	50ft

Wetland A was identified within the topographic depression located in the northeastern portion of the project site. This wetland had been modified by prior onsite and offsite land use actions and exhibited a seasonal hydrology pattern. The plant community was dominated by a mixed deciduous forest/shrub plant association. The soil profile included a surface layer of collected organics and the soil exhibited prominent field indicators of "hydric" soil.

Wetland A was identified as a City of Lake Forest Park Category 3 Wetland as defined following the provisions of Chapter 16 and using the *Washington Department of Ecology Wetland Rating Worksheet* (Appendix C).

Stream A was located at the very southwestern corner of the project site. This surface water drainage originated at the outlet of a residential stormwater system offsite to the west and then continued to the south through an ornamental pond and rock lined stream corridor. This surface water drainage appeared best defined as a City of Lake Forest Park Type 3 Stream.

Wildlife Habitat Conservation Areas: As defined by the City of Lake Forest Park wildlife habitat conservation areas are those areas that provide habitats for feeding, breeding, and nesting sites for priority, endangered, or threatened species, regardless of number. These areas are managed for maintaining species in a wild state in suitable habitats within their natural geographic distribution so that isolated subpopulations are not created. The project site was not identified and has not been documented to provide "priority habitats" or to be used by "priority species."

Both Wetland A and Stream A were identified as "waters of the state." However, neither area would be defined as either a City of Lake Forest Park priority habitat or identified to be used by a City of Lake Forest Park priority species. Protective buffers for these two areas would be defined pursuant to the wetland and stream provisions of the City of Lake Forest Park Chapter 16.16 *Environmentally Sensitive Areas*.

REGULATORY CONSIDERATION

The proposed alteration of lands defined by various federal, state, and local authority rules and regulations as "critical areas" or "sensitive areas" raises environmental concerns that are generally addressed in the development review process. These concerns center on the development's potential adverse impacts to the structure, function, value, and size of these areas. Such adverse impacts may include a reduction in wildlife habitats, reduced surface water quality, reduced water retention, a reduced ground water recharge rate, reduced plant species diversity, and the reduction in the function and value of other associated wetland and non-wetland characteristics.

U.S. ARMY CORPS OF ENGINEERS - Section 404

Section 404 of the Clean Water Act (33 U.S.C. 1344) prohibits the discharge of dredged or fill material into "Waters of the United States" without a permit from the Corps of Engineers (Corps). The Corps has jurisdiction over freshwater systems waterward from the ordinary high water line of a water body or waterward from the upland boundary of the adjacent wetland. The definition of fill materials includes the replacement of aquatic areas with dry land, grading which changes the surface contour of a wetland, and mechanized land clearing in wetlands. For the purposes of Section 404 permitting the Corps makes the final determination as to whether an area meets the wetland definition and would be subject to regulation under the Corps program. Applications to the Corps for permitting actions must follow the 1987 Manual wetland delineation format.

Currently the Corps has two specific types of permits which apply to wetland fill proposals. These two types are a series of specific **Nationwide Permits** and the **Individual Permit**. The Nationwide Permit process identifies specific categories of work that can be undertaken following a set of specific conditions applicable to each Nationwide Permit number. The Corps requires an **Individual Permit** where a proposed activity within an identified jurisdictional wetland area cannot be authorized under one of the Nationwide Permits. Within the Individual Permit process the Corps undertakes a much more in-depth review of the proposed project and the proposed impacts. The Corps must evaluate whether the benefits derived from the project outweigh the foreseeable environmental impacts of the project's completion.

All projects that proceed forward using either one of the Nationwide Permits or the Individual Permit process must also comply with the provisions of the *Endangered Species Act*. As defined by a recent U.S. Supreme Court decisions the Corps of Engineers does **not** typically regulated "isolated" wetlands pursuant to Section 404 of the Clean Water Act. Under this decision "isolated" wetlands do not exhibit a continuous surface water connection to other, downstream aquatic system.

STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

Proposed action undertaken through either of the Corps of Engineers processes (Nationwide, Individual, or isolated) are also subject to the provisions of the Washington State Department of Ecology *Water Quality Certification Process*. Projects that may be exempt from Corps of Engineers Section 404 jurisdiction may still require review by the Washington State Department of Ecology to ensure consistency with State water quality protection provisions.

CITY OF LAKE FOREST PARK SENSITIVE AREAS REGULATIONS

The City of Lake Forest Park regulates activities in and around identified "sensitive areas" pursuant to Chapter 16. Such sensitive areas include erosion, landslide, seismic, volcanic, mine, and flood hazard areas; streams; wetlands; certain fish and wildlife species and habitat; and aquifer recharge areas. The purpose of Chapter 16 is to protect the sensitive areas of the City from the impacts of development and protect development from the impacts of hazard areas by establishing minimum standards for development of sites which contain or are adjacent to identified critical areas and thus promote the public health, safety, and welfare.

- **Wetland Categories**

The City defines wetland categories as:

1. "Category 1" wetlands meet any of the following:
    a. The wetland contains species listed by the federal government as endangered or threatened; or
    b. The wetland is listed by the federal or the state government as containing critical or outstanding actual habitat for endangered or threatened species; or
    c. Wetlands with 40% to 60% permanent open water in dispersed patches with two or more classes of vegetation; or
    d. Wetlands equal to or greater than 10 acres in size and having three or more wetland classes, one of which is open water; or
    e. Wetlands with plant associations of infrequent occurrence that are associated with wetland values and functions.
2. "Category 2" wetlands are not Category 1 wetlands and meet any of the following criteria:
    a. Wetlands greater than one acre in size;
    b. Wetlands equal to or less than one acre in size and having three wetland classes;
    c. Wetlands equal to or less than one acre that have a forested wetland class; or
    d. Wetlands with heron rookeries or raptor nesting trees.

3. "Category 3" wetlands are not Category 1 or 2 wetlands and that are equal to or less than one acre in size with two or fewer wetland classes.

- **Wetland Buffers**

The City has identified a protective buffer shall be established to protect the functions and value of the wetland.

Wetland	Standard Buffer Width (feet)	Minimum Buffer Width with Enhancement (feet)
Category 1	150	105
Category 2	100	70
Category 3	50	35

Buffer width averaging may be allowed by the City only where the applicant demonstrates to the satisfaction of the planning director:

1. That the wetland contains variations in sensitivity because of existing physical characteristics; and
2. That low-intensity land uses would be located adjacent to areas where buffer width is reduced and that such low-intensity land uses are guaranteed in perpetuity by covenant deed restriction, easement or other legally binding mechanism; and
3. That buffer width averaging will not adversely impact the wetland's functional values; and
4. The buffer averaging provides additional protection; and
5. That the total area contained in the buffer on the development proposal site does not decrease, and the buffer is not reduced in any one location to less than the minimum buffer specified by the City.

The City may reduce a standard wetland buffer to not less than the minimum buffer as follows:

1. In accordance with an approved sensitive area study, mitigation plan, and the best available science; provided, that a smaller area is adequate to protect the wetland functions based on site-specific characteristics and the proposal will result in a net improvement of wetland and buffer functions.
2. A plan for mitigating buffer-reduction impacts must be prepared that incorporates from the list below incentive-based mitigation to achieve a buffer no less than the minimum buffer listed by the City. Whenever the reduced

buffer area is degraded, the buffer reduction plan shall provide for revegetation of the degraded area with native plants or other nonnative plants as may be approved by the city and shall provide for a five-year monitoring and maintenance plan. Mitigation options include:

a. Removal of impervious surfaces.
b. Installation of biofiltration/infiltration mechanisms, such as the installation of bioswales, created and/or enhanced wetlands, or ponds.
c. Removal of invasive, nonnative vegetation subject to monitoring (minimum of five years) and continued-removal maintenance of relatively dense stands of invasive, nonnative vegetation from significant portions of the remaining buffer area in conjunction with dense planting of native trees and shrubs or other nonnative plants as may be approved by the city.
d. If not already required under an existing development proposal, installation of oil/water separators for stormwater quality control.
e. Use of pervious material for driveway/road construction.
f. Construction of roofs for on-site buildings built in accordance with the standards of the LEED Green Building Rating System.
g. Removal of significant refuse or sources of toxic material.
h. Revegetation enhancement of degraded buffer outside of the reduced buffer area if the remaining buffer beyond the enhanced buffer reduction area is degraded and a substantial portion of this degraded area is enhanced through revegetation with native plants or other nonnative plants as may be approved by the city subject to a five-year monitoring and maintenance plan.

Increased buffer widths shall be required when necessary to protect wetlands. The criteria used to determine increased buffer widths shall include:

1. The presence of critical drainage areas;
2. Location of hazardous materials;
3. The presence of critical fish and wildlife habitat;
4. The presence of landslide or erosion hazard areas adjacent to wetlands;
5. The presence of groundwater recharge and discharge;
6. The location of trail or utility corridors; and
7. Such other factors as may be adopted by administrative rule.

All buildings or other structures shall have a minimum setback of at least 15 feet from any place on the edge of a wetland buffer. The setback line shall be established by measuring perpendicularly from the edge of a wetland buffer.

- **Stream Type**

The City has identified that streams shall be designated as Type 1, Type 2, and Type 3 according to the following criteria.

1. "Type 1": streams that are used at least seasonally by fish for spawning, rearing or migration. Streams that are fish passable from Lake Washington are presumed to be Type 1. Fish passage should be determined by using a qualified professional. Type 1 streams include streams or parts thereof that are waters of the state according to law.
2. "Type 2": streams that are not fish bearing and that do not go dry any time during a year of normal rainfall (perennial streams); provided, however, Type 2 streams include the intermittent dry portions of the perennial channel below the uppermost point of perennial flow; provided further, that if the uppermost point of perennial flow cannot be identified with simple, nontechnical observations, then the point of perennial flow should be determined by a qualified professional.
3. "Type 3": streams that are not Type 1 or 2. These are seasonal, non-fish-bearing streams in which surface flow is not present for a significant portion of a year of normal rainfall and that are not located downstream from any Type 2 or higher stream.

- **Stream Buffer**

Stream buffers measured from the ordinary high water mark, if such can be identified, otherwise from the top of the bank are established as follows:

Stream Type	Standard Buffer Width (feet)	Minimum Buffer Width with Enhancement (feet)
Type 1	115	70
Type 2	50	35
Type 3	35	25

Buffer width averaging may be allowed if it is demonstrated to the satisfaction of the planning director that averaging will provide additional protection, provided the total area contained in the buffer on the development proposal site does not decrease, and the buffer is not reduced in any one location to less than the minimum buffer listed above.

Reduction of Stream Buffer Widths.

1. The planning director may reduce the standard buffer to no less than the minimum buffer allowed by subsection A of this section, whenever, in the judgment of the planning director, a smaller width is adequate to protect the stream and habitat functions and the development proposal will result in a net improvement of stream and buffer functions.
2. The planning director's decision shall be based upon a sensitive area study. If the planning director determines that mitigation is necessary, such mitigation shall be performed in accordance with LFPMC 16.16.120 through 16.16.130.

3. In addition, a plan for mitigating buffer-reduction impacts must be prepared that incorporates from the list below incentive-based mitigation options to achieve a buffer no less than the minimum buffer listed above. Whenever the reduced buffer area is degraded, the buffer reduction plan shall provide for revegetation of the degraded area with native plants and shall provide for a five-year monitoring and maintenance plan. Mitigation options include:
   a. Removal of impervious surfaces.
   b. Installation of biofiltration/infiltration mechanisms, such as the installation of bioswales, created and/or enhanced wetlands, or ponds supplemental to existing storm drainage and water quality requirements.
   c. Removal of invasive, nonnative vegetation subject to monitoring (minimum of five years) and continued-removal maintenance of relatively dense stands of invasive, nonnative vegetation from significant portions of the remaining buffer area in conjunction with dense planting of native trees and shrubs.
   d. In-stream habitat enhancement, such as log structure placement, bioengineered bank stabilization, culvert removal or replacement, improving fish passage and/or creation of side channel or backwater areas.
   e. If not already required under an existing development proposal, installation of oil/water separators for stormwater quality control.
   f. Use of pervious material for driveway/road construction.
   g. Construction of roofs for on-site buildings in accordance with the standards of the LEED Green Building Rating System.
   h. Removal of significant refuse or sources of toxic material.
   i. Revegetation enhancement of degraded buffer outside of the reduced buffer area if the remaining buffer beyond the enhanced buffer reduction area is degraded and a substantial portion of this degraded area is enhanced through revegetation with native plants and subject to a five-year monitoring and maintenance plan.

All buildings or structures shall have a setback of at least 15 feet from any place on the edge of a stream buffer. The setback line shall be established by measuring perpendicularly from the edge of a stream buffer.

- **Wildlife Habitat Conservation Areas**

The City of Lake Forest Park may require a sensitive area study for a habitat conservation area where onsite assessment has identified a priority habitat or the potential for a priority species. A sensitive area study for a habitat conservation area shall contain the information listed in LFPMC 16.16.110 and an assessment of habitats and potential for priority species including the following site- and proposal-related information.

SELECTED DEVELOPMENT ACTION

The *Selected Development Action* for Parcels **6152900030** and **6152900033** has not need defined. However, it is very likely that such planning would create a new residential community through the combination and division of the existing parcels into new homesite lots suitable for the development of the new single family homesites consistent with the City of Lake Forest Park Comprehensive Plan, local zoning, and Chapter 16. Homesite development may also include the direction of lighting away from retained sensitive areas, the dispersal of surface water runoff from the homesite area prior to entering the retained sensitive areas and associated established buffer areas, a clear identification of the outer boundary of the established buffer adjacent to the new homesite area, and best management practices for dust and erosion during homesite construction.

STANDARD OF CARE

This critical areas assessment has been completed by Habitat Technologies for use by **Mr. Scott M. Missall**. Prior to extensive site planning the findings documented in this document should be reviewed and verified by the City of Lake Forest Park resource personnel. Habitat Technologies has provided professional services that are in accordance with the degree of care and skill generally accepted in the nature of the work accomplished. No other warranties are expressed or implied. Habitat Technologies is not responsible for design costs incurred before this document is approved by the appropriate resource and permitting agencies.

Thomas D. Deming

Bryan W. Peck
Wetland Biologist

Thomas D. Deming, PWS
Habitat Technologies

FIGURES

Figure 1 Site Vicinity

The information included on this map has been compiled by King County staff from a variety of sources and is subject to change without notice. King County makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a survey product. King County shall not be liable for any general, special, indirect, incidental, or consequential damages including, but not limited to, lost revenues or lost profits resulting from the use or misuse of the information contained on this map. Any sale of this map or information on this map is prohibited except by written permission of King County.

Date 7/28/2014 Source: King County iMAP - Sensitive Areas (http://www.metrokc.gov/GIS/iMAP)

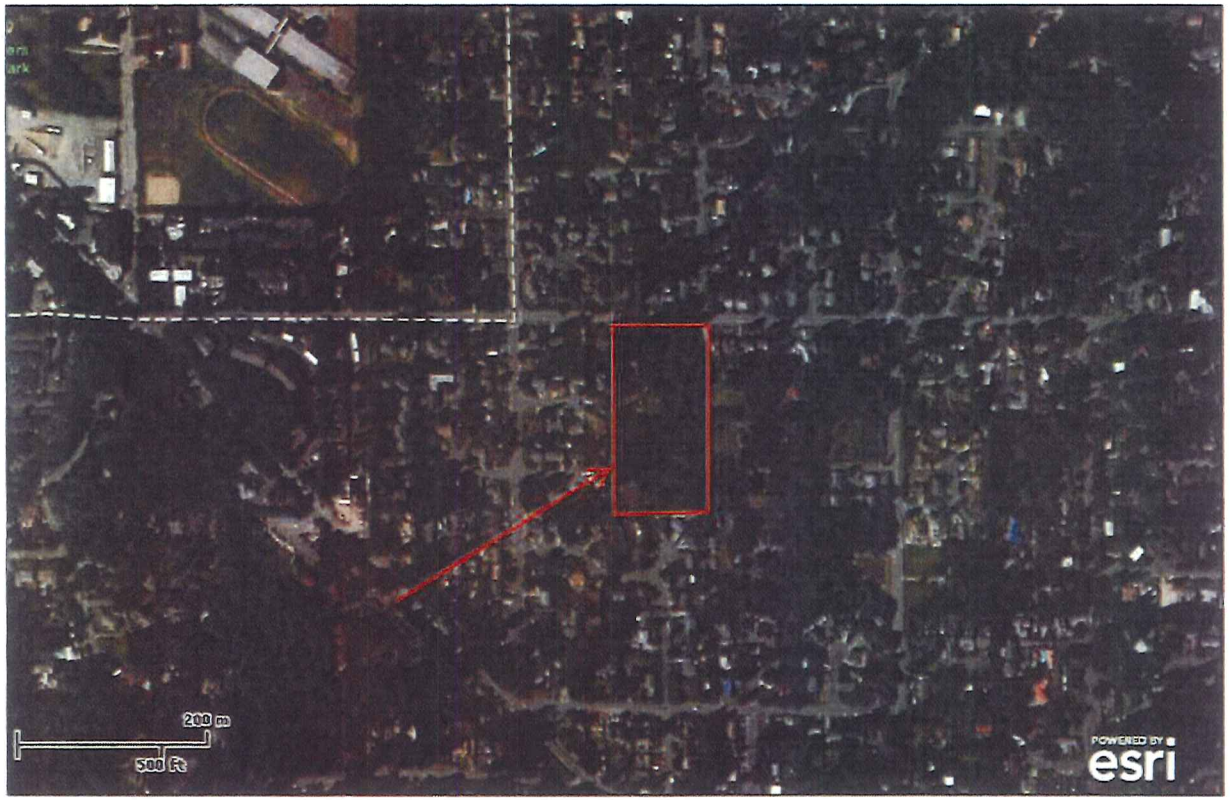
King County

U.S. Fish and Wildlife Service

National Wetlands Inventory

Figure 2 NWI Mapping

Jul 28, 2014



Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:

WASHINGTON DEPARTMENT OF FISH AND WILDLIFE
PRIORITY HABITATS AND SPECIES REPORT

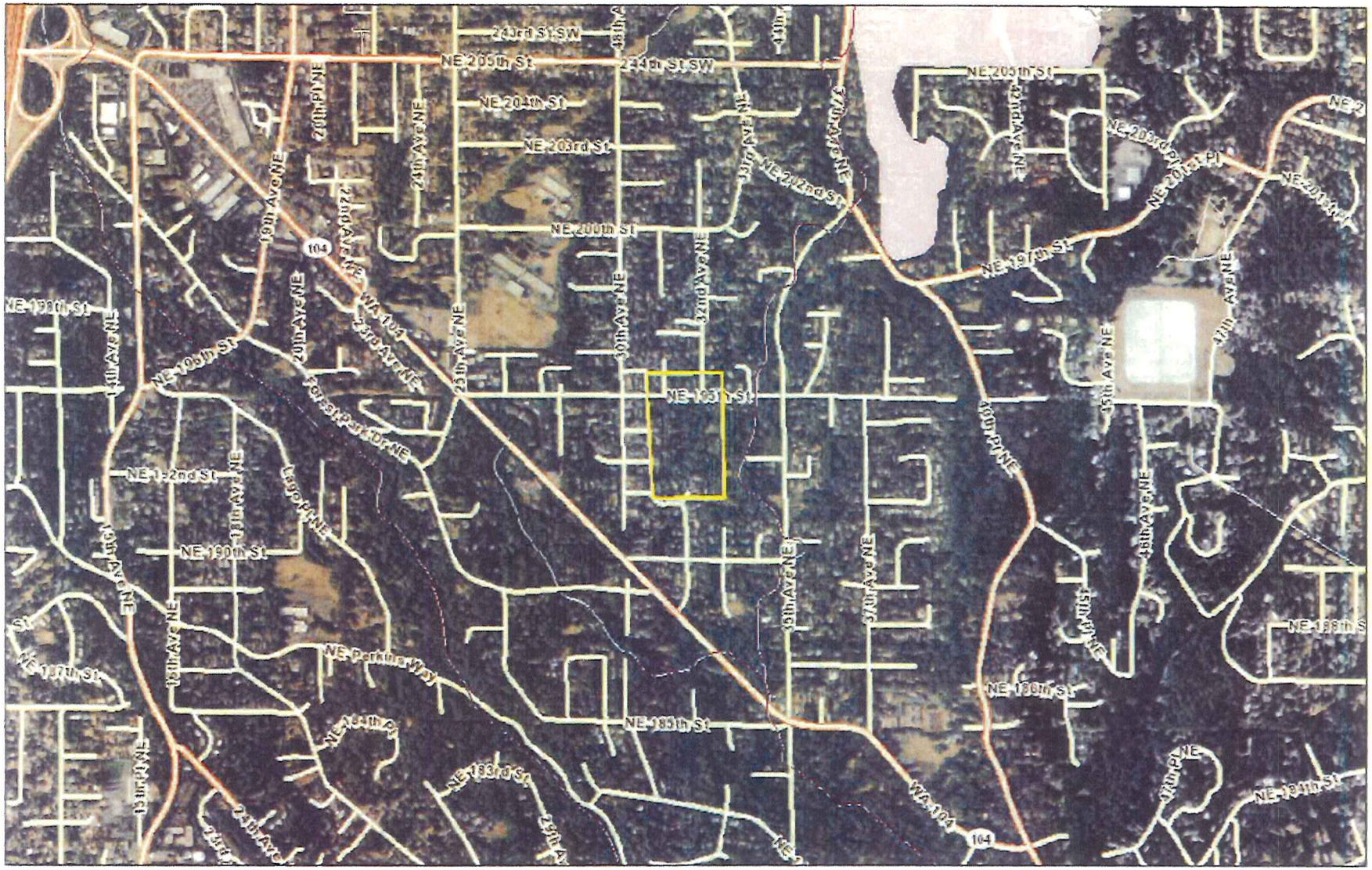
SOURCE DATASET: PHSPlusPublic
REPORT DATE: 07/28/2014 11.12

Query ID: P140728111146

Common Name	Site Name	Priority Area	Accuracy	Federal Status	Sensitive Data	Source Entity
Scientific Name	Source Dataset	Occurrence Type		State Status	Resolution	Geometry Type
	Source Record	More Information (URL)		PHS Listing Status		
Notes	Source Date	Mgmt Recommendations				

DISCLAIMER. This report includes information that the Washington Department of Fish and Wildlife (WDFW) maintains in a central computer database. It is not an attempt to provide you with an official agency response as to the impacts of your project on fish and wildlife. This information only documents the location of fish and wildlife resources to the best of our knowledge. It is not a complete inventory and it is important to note that fish and wildlife resources may occur in areas not currently known to WDFW biologists, or in areas for which comprehensive surveys have not been conducted. Site specific surveys are frequently necesssary to rule out the presence of priority resources. Locations of fish and wildlife resources are subject to vraition caused by disturbance, changes in season and weather, and other factors. WDFW does not recommend using reports more than six months old.

Figure 3 PHS Mapping



July 28, 2014

PHS Report Clip Area

PT

LN

AS MAPPED

SECTION

QTR-TWP

TOWNSHIP

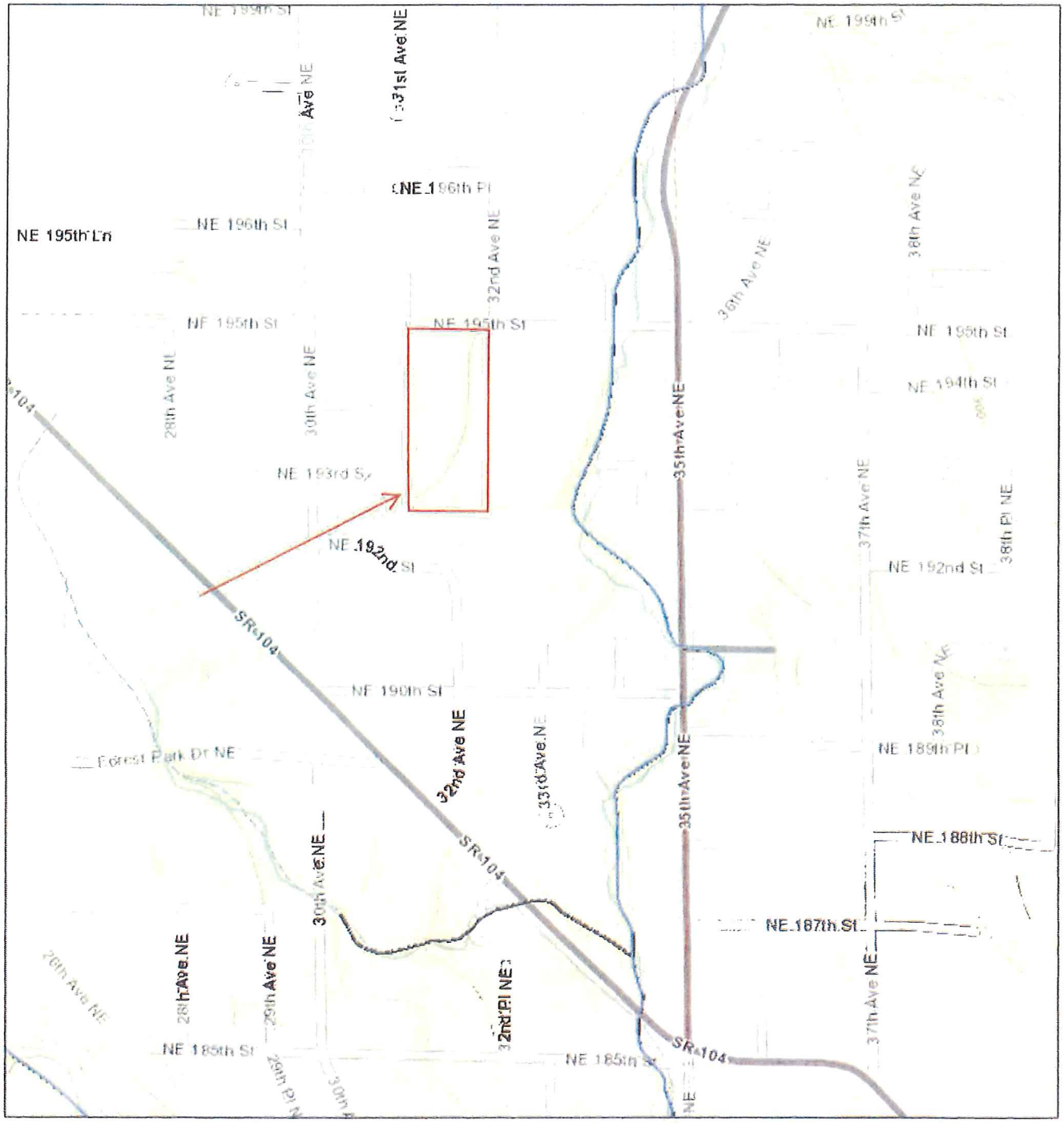
1:19,842

0 0.15 0.3 0.6 mi

0 0.275 0.55 1.1 km

Washington Fish and Wildlife
WDFW

Figure 4 WDFW Salmonscape Mapping



July 28, 2014

1:9,028

0 0.075 0.15 0.3 mi

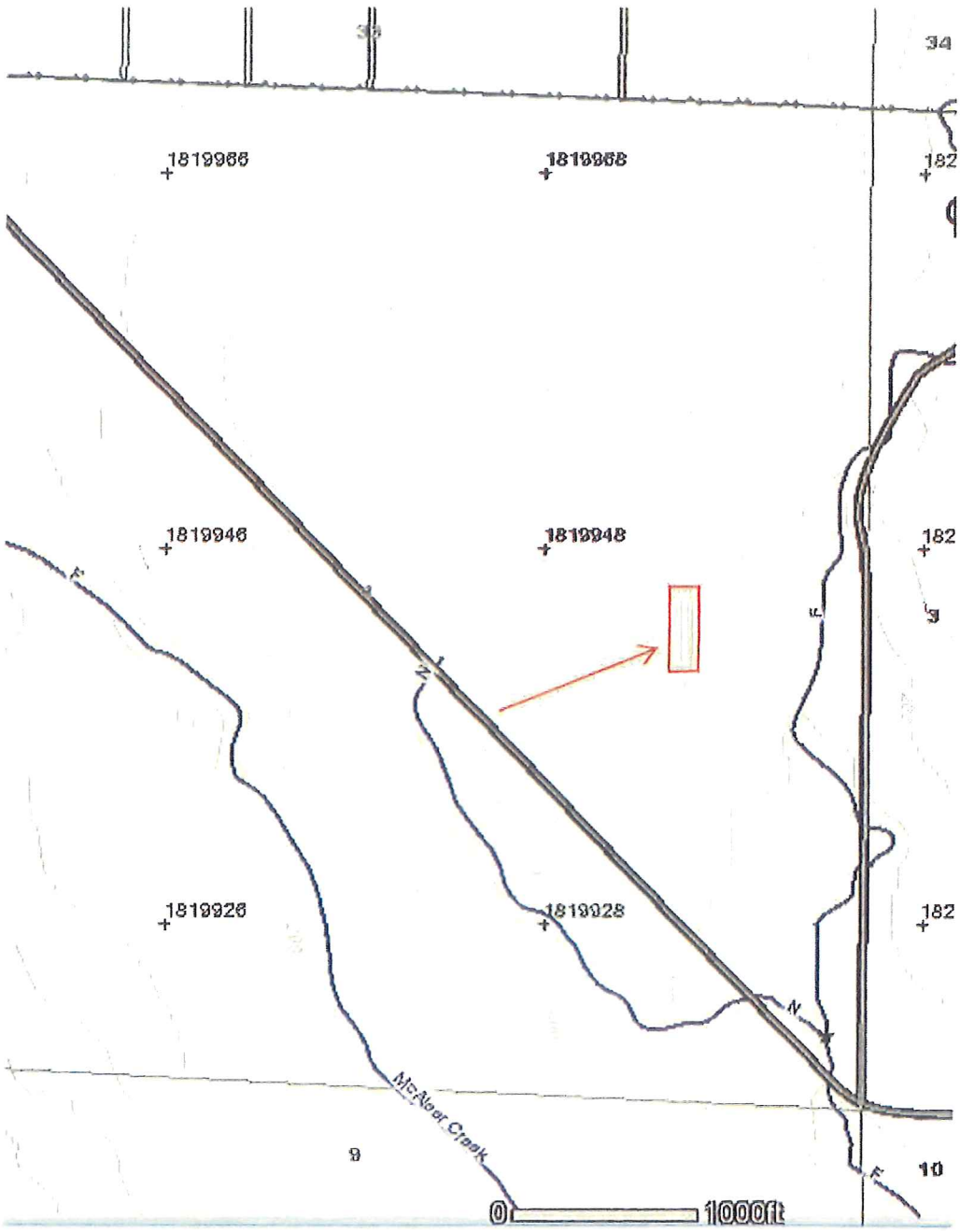
0 0.1 0.2 0.4 km

Township

Section

All SalmonScape Species

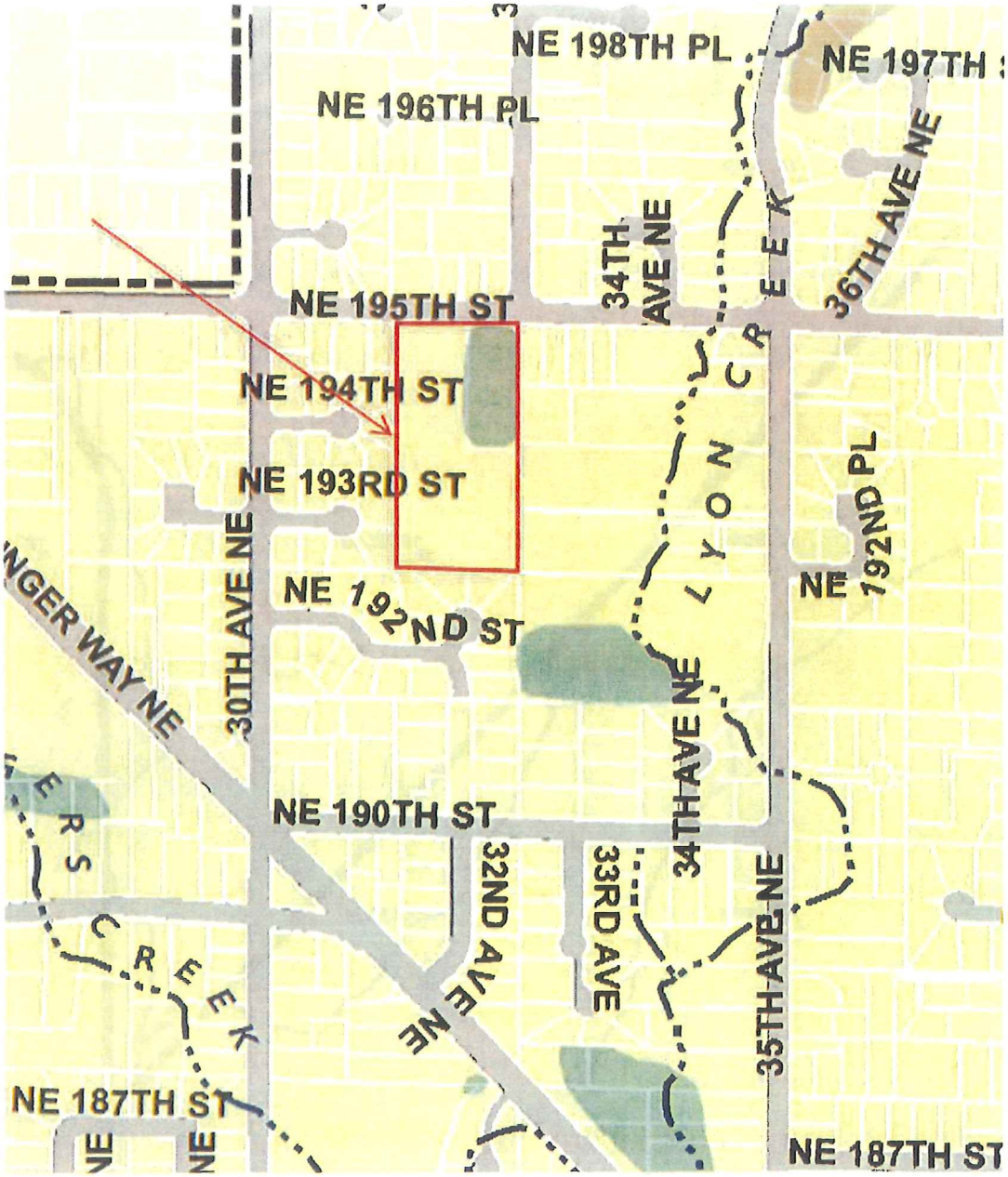
Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community USGS/NHD



HABITAT TECHNOLOGIES

Figure 5

WDNR Mapping



HABITAT TECHNOLOGIES

Figure 6
City of Lake Forest Park Mapping

REFERENCE LIST

Adamus, P.R., E.J. Clairain Jr., R.D. Smith, and R.E. Young. 1987. Wetland Evaluation Technique (WET); Volume II: Methodology, Operational Draft Technical Report Y-87, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.

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Hitchcock, C.L., A. Cronquist. 1977. Flora of the Pacific Northwest. University of Washington Press. Seattle, Washington.

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U.S. Department of Agriculture, Soils Conservation Service. Soils Survey of King County Area Washington, February 1979.

Washington State Department of Ecology. 1997. Washington State Wetlands Identification and Delineation Manual. Publication Number 96-94.

Washington State Department of Fisheries, Catalog of Washington Streams and Salmon Utilization, Volume 1, 1

PHOTOS

Stormwater runoff from NE 195th Street is directed by a roadside ditch to enter the northern boundary of the project site.

Regional stormwater runoff is release into a ditch along the northeastern boundary of the project site to continue to the east.

Above and Below: Seasonal wetland hydrology patterns were monitored using open holes to a depth of approximately 20 inches. The level of free water within the monitoring holes was documented from late February 2014 through May 2014.

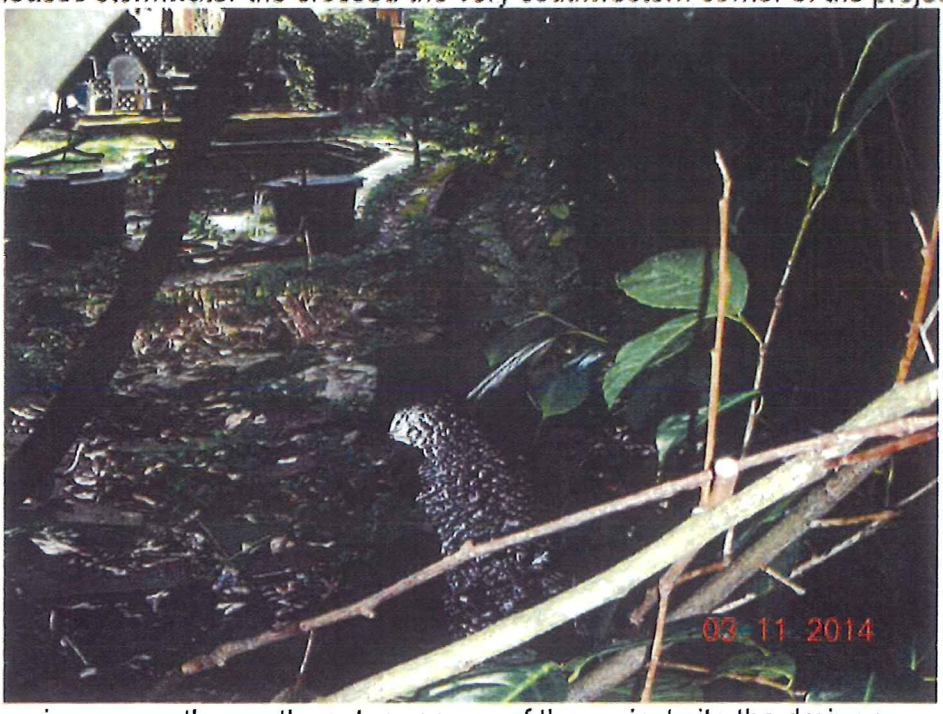
Shallow seasonal ponding was observed within at the southern end of the identified wetland.

The onsite wetland was dominated by a mixed deciduous forest/shrub plant community bound by dense thickets of blackberries.

The southern portion of the project site was once managed a pasture and is presently dominated by dense thickets of blackberries.

A berm along the eastern side of the project site (left side of photo) has modified the onsite movement of seasonal surface water.

A stormwater outlet associated with the residential community to the west of the project site releases stormwater the crossed the very southwestern corner of the project site.



After passing across the southwestern corner of the project site the drainage continues to the south into a residential area of ornamental ponds and ditches.

APPENDIX A – HYDROLOGY MONITORING DATA

SPRING 2010 HYDROLOGY MONITORING DATA
DEPTH OF FREE WATER IN TUBE MEASURED IN INCHES FROM GROUND SURFACE

PLOT	FEB 22	FEB 27	MAR 2	MAR 6	MAR 12	MAR 15	MAR 21	MAR 26
A1	surface	surface	-4.5	-9.5	-11.5	-12.0	-12.0	-10.5
A2	-5.5	-8.0	-6.5	-10.0	-13.5	-13.0	-15.0	-13.5
2	+2.5	+2.0	+2.0	+2.0	+1.75	+2.0	+1.5	+1.5
4	-4.5	-6.0	-7.5	-10.0	-14.0	-13.5	-15.5	-15.0
5	+2.75	+2.75	+2.75	+2.75	+2.5	+1.5	+1.5	+1.5
5A	-7.5	-7.0	-9.5	-13.0	-14.0	-14.5	-16.5	-16.0
7	+1.5	+1.5	+1.5	+2.0	+2.0	+1.0	+1.5	+0.5
7A	-5.5	-6.0	-11.5	-13.5	-13.0	-15.5	-15.5	-16.5
9	+0.5	surface	surface	+0.5	surface	surface	-0.5	surface
9A	-5.5	-6.0	-11.5	-13.5	-13.0	-15.5	-15.5	-16.5
14	surface	surface	+0.5	+0.5	surface	surface	+0.5	surface
14A	-8.5	-9.0	-12.5	-12.0	-11.0	-13.5	-13.5	-14.0

PLOT	APR 4	APR 9	APR 14	APR 19	ARP 25	MAY 7	MAY 17	MAY 28
A1	-13.5	-13.0	-15.0	-11.5	-12.5	-14.0	-16.5	-17.0
A2	-15.5	-15.0	-15.0	-16.5	-15.5	-15.0	dry	-18.0
2	+0.75	surface	surface	surface	-1.0	-1.0	-2.0	-3.75
4	-15.5	-14.0	-12.5	-13.0	-15.0	-17.5	dry	dry
5	+2.75	+2.75	+2.75	+2.75	+2.5	+1.5	+1.5	+1.5
5A	-15.5	-16.0	-17.5	-17.0	dry	dry	dry	dry
7	+0.5	surface	surface	surface	surface	surface	surface	-1.0
7A	dry	-15.0	-15.5	-17.0	dry	dry	dry	dry
9	-0.5	-1.0	-2.5	-2.5	-3.0	-5.5	-5.5	-6.0
9A	-15.5	-17.0	-16.5	-16.5	dry	dry	dry	dry
14	-0.5	-1.0	-1.0	-2.5	-3.0	-7.0	-8.5	-11.0
14A	-17.5	dry	-16.5	-17.5	dry	dry	-17.5	dry

APPENDIX B – FIELD DATA SHEETS

Check we don't have to edit

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: NE 195th Street City/County: Lake Forest Park, King County Sampling Date: 25 APR 2014

Applicant/Owner: State: WA Sampling Point: SP-1A

Investigator(s): Habitat Technologies Section, Township, Range: S4, T26N, R04E

Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Slope (%):

Subregion (LRR): A Lat: Long: Datum:

Soil Map Unit Name: NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐ No ☒	**Is the Sampled Area within a Wetland?** Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	

Remarks: located at very northern edge of identified wetland

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15ft radius)			
1.			
2. Rubus procera	100	yes	FACU
3.			
4.			
5.			
	100	= Total Cover	
Herb Stratum (Plot size: 15ft radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
		= Total Cover	
Woody Vine Stratum (Plot size: 15ft radius)			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☐ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks: dense thicket of blackberries

SOIL

all sheets

Sampling Point: SP-1A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/1						GL	
8-18	10YR 4/3	95	10YR 4/6	5			GL	Sandy Silt loam ? clay

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: soil appears mixed by prior land uses

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☐ Depth (inches): _____

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: MONITORING OF EARLY GROWING SEASON HYDROLOGY PATTERNS FROM LATE FEB 2014 TO MAY 2014 SHOWED THAT PLOT DID NOT MEET THE WETLAND CRITERIA.

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: NE 195th Street City/County: Lake Forest Park, King County Sampling Date: 25 APR 2014

Applicant/Owner: _____ State: WA Sampling Point: SP-2

Investigator(s): Habitat Technologies Section, Township, Range: S4, T26N, R04E

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____

Subregion (LRR): A Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No ☐ Hydric Soil Present? Yes ☒ No ☐ Wetland Hydrology Present? Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** Yes ☒ No ☐

Remarks: located in very northern edge of identified wetland

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rubra	15%	no yes	FAC
2. Salix sitchensis	25%	yes	FACW
3.			
4.			
	40% 30%	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15ft radius)			
1. Salix sitchensis	25	yes	FACW
2. Rubus procera	60	yes	FACU
3.			
4.			
5.			
	85 75%	= Total Cover	
Herb Stratum (Plot size: 15ft radius)			
1. Ranunculus repens	35%	yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	35%	= Total Cover	
Woody Vine Stratum (Plot size: 15ft radius)			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☑ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks: dense shrubs

SOIL

Sampling Point: SP-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/1						GL	
8-18	10YR 4/1	95	10YR 4/6	30	C	PL/M	GL	

10YR not gley colors

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☒ ~~Loamy Gleyed Matrix (P2)~~
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ☒ No ☐

Remarks: soil appears mixed by prior land uses

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☒ Surface Water (A1)
- ☐ High Water Table (A2)
- ☒ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☒ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☒ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☑ No ☐ Depth (inches): 1

Water Table Present? Yes ☐ No ☑ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ☑ No ☐ Depth (inches): ?

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: MONITORING OF EARLY GROWING SEASON HYDROLOGY PATTERNS FROM LATE FEB 2014 TO MAY 2014 SHOWED THAT PLOT MET THE WETLAND CRITERIA.

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: NE 195th Street City/County: Lake Forest Park, King County Sampling Date: 25 APR 2014

Applicant/Owner: State: WA Sampling Point: SP-2A

Investigator(s): Habitat Technologies Section, Township, Range: S4, T26N, R04E

Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Slope (%):

Subregion (LRR): A Lat: Long: Datum:

Soil Map Unit Name: NWI classification: MA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No ☐ Hydric Soil Present? Yes ☐ No ☒ Wetland Hydrology Present? Yes ☐ No ☒	**Is the Sampled Area within a Wetland?** Yes ☐ No ☒

Remarks: located at very northwestern edge of identified wetland

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rubra	40%	yes	FAC
2.			
3.			
4.			
	40%	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15ft radius)			
1. Salix sitchensis	35%	yes	FACW
2. Rubus procera	100	yes	FACU
3.			
4.			
5.			
	135 / 100	= Total Cover	
Herb Stratum (Plot size: 15ft radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
		= Total Cover	
Woody Vine Stratum (Plot size: 15ft radius)			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☑ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks: dense thicket of blackberries

SOIL

Sampling Point: SP-2A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/1						GL	
4-12	10YR 3/3	75	10YR 4/6	5			GL	
12-18	10YR 4/3	75%	10YR 4/6	10%			GL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: soil appears mixed by prior land uses

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☐ Depth (inches): _____

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: MONITORING OF EARLY GROWING SEASON HYDROLOGY PATTERNS FROM LATE FEB 2014 TO MAY 2014 SHOWED THAT PLOT DID NOT MEET THE WETLAND CRITERIA.

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: NE 195th Street City/County: Lake Forest Park, King County Sampling Date: 25 APR 2014

Applicant/Owner: State: WA Sampling Point: SP-3A

Investigator(s): Habitat Technologies Section, Township, Range: S4, T26N, R04E

Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Slope (%):

Subregion (LRR): A Lat: Long: Datum:

Soil Map Unit Name: NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No ☐ Hydric Soil Present? Yes ☐ No ☒ Wetland Hydrology Present? Yes ☐ No ☒	**Is the Sampled Area within a Wetland?** Yes ☐ No ☒

Remarks: located at very northwestern edge of identified wetland

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rubra	25%	yes	FAC
2. Populus trichocarpa	25%	yes	FAC
3.			
4.			
	50 40%	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15ft radius)			
1. Salix sitchensis	35%	yes	FACW
2. Rubus procera	75	yes	FACU
3. Ilex spp.	<5	no	UPL
4. Oemleria cerasiformis	10	no	FACU
5. Corylus cornuta	10	no	FACU
	100	= Total Cover	
Herb Stratum (Plot size: 15ft radius)			
1. Ploystichum munitum	10	no yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	10	= Total Cover	
Woody Vine Stratum (Plot size: 15ft radius)			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75% 60% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☑ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks: dense thicket of blackberries

SOIL

Sampling Point: SP-3A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 3/1						GL ?	clay loam ?
2-8	10YR 3/3	80%	10YR 4/6	<5			GL	
8-18	10YR 4/3	75%	10YR 4/6	<10%			GL	

Missing %.

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: soil appears mixed by prior land uses

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☐ Depth (inches): _____

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: MONITORING OF EARLY GROWING SEASON HYDROLOGY PATTERNS FROM LATE FEB 2014 TO MAY 2014 SHOWED THAT PLOT DID NOT MEET THE WETLAND CRITERIA.

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: NE 195th Street City/County: Lake Forest Park, King County Sampling Date: 25 APR 2014

Applicant/Owner: State: WA Sampling Point: SP-4

Investigator(s): Habitat Technologies Section, Township, Range: S4, T26N, R04E

Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Slope (%):

Subregion (LRR): A Lat: Long: Datum:

Soil Map Unit Name: NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☐ No ☒ Hydric Soil Present? Yes ☐ No ☒ Wetland Hydrology Present? Yes ☐ No ☒	**Is the Sampled Area within a Wetland?** Yes ☐ No ☒
Remarks: located at very northwestern edge of identified wetland	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Crataegus monogyna	45%	yes	FACU
2. Pyrus fusca	30%	yes	FACW
3. Alnus rubra	10%	no	FAC
4.			
	85 100%	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15ft radius)			
1.			
2. Rubus procera	100	yes	FACU
3.			
4.			
5.			
	100	= Total Cover	
Herb Stratum (Plot size: 15ft radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	50%	= Total Cover	
Woody Vine Stratum (Plot size: 15ft radius)			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☐ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks: dense shrubs understory

SOIL

Sampling Point: SP-4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/2	100%					GL	
					missing			
5-18	10YR 3/3	75%	10YR 4/6	20%	5% ?		GL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: soil appears mixed by prior land uses

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☐ Depth (inches): _____

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: MONITORING OF EARLY GROWING SEASON HYDROLOGY PATTERNS FROM LATE FEB 2014 TO MAY 2014 SHOWED THAT PLOT DID NOT MEET THE WETLAND CRITERIA.

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: NE 195th Street City/County: Lake Forest Park, King County Sampling Date: 25 APR 2014

Applicant/Owner: State: WA Sampling Point: SP-5

Investigator(s): Habitat Technologies Section, Township, Range: S4, T26N, R04E

Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Slope (%):

Subregion (LRR): A Lat: Long: Datum:

Soil Map Unit Name: NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No ☐ Hydric Soil Present? Yes ☒ No ☐ Wetland Hydrology Present? Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** Yes ☒ No ☐

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rubra	10%	no yes	FAC
2. Salix lasiandra	25%	yes	FACW
3. Fraxinus latifolia	20%	yes	FACW
4.			
	55 50%	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15ft radius)			
1. Salix sitchensis	5	no yes	FACW
2. Rubus procera	35	yes	FACU
3.			
4.			
5.			
	40 75%	= Total Cover	
Herb Stratum (Plot size: 15ft radius)			
1. Ranunculus repens	35%	yes	FACW
2. Oenanthe sarmentosa	35%	yes	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	70 55%	= Total Cover	
Woody Vine Stratum (Plot size: 15ft radius)			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☑ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

SOIL

Sampling Point: SP-5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 3/1						GL	
7-18	10YR 4/1	90	10YR 4/6	25	?		GL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
- ☒ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks: soil appears mixed by prior land uses

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☒ Surface Water (A1)
- ☐ High Water Table (A2)
- ☒ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☒ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☒ Sparsely Vegetated Concave Surface (B8)
- ☒ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☑ No ☐ Depth (inches): ?

Water Table Present? Yes ☐ No ☑ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☑ No ☐ Depth (inches): ?

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: MONITORING OF EARLY GROWING SEASON HYDROLOGY PATTERNS FROM LATE FEB 2014 TO MAY 2014 SHOWED THAT PLOT MET THE WETLAND CRITERIA.

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: NE 195th Street City/County: Lake Forest Park, King County Sampling Date: 25 APR 2014

Applicant/Owner: State: WA Sampling Point: SP-5A

Investigator(s): Habitat Technologies Section, Township, Range: S4, T26N, R04E

Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Slope (%):

Subregion (LRR): A Lat: Long: Datum:

Soil Map Unit Name: NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐ No ☒	**Is the Sampled Area within a Wetland?** Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	

Remarks: located at very northwestern edge of identified wetland

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rubra	50%	yes	FAC
2. Populus trichocarpa	50%	yes	FAC
3.			
4.			
	80%	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15ft radius)			
1.			
2. Rubus procera	75	yes	FACU
3. Ilex spp.	<15	no	UPL
4. Oemleria cerasiformis	25	yes	FACU
5. Corylus cornuta	20	yes	FACU
	100	= Total Cover	
Herb Stratum (Plot size: 15ft radius)			
1. Ploystichum munitum	10	no yes	FACU
2. Dicentra formosa	35	yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	40%	= Total Cover	
Woody Vine Stratum (Plot size: 15ft radius)			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☐ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks: dense shrubs understory

SOIL

Sampling Point: SP-5A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/2						GL	
4-11	10YR 3/3	80%	10YR 4/6	<5		missing? 15-25%	GL	
11-18	10YR 4/3	75%	10YR 4/6	<5%			GL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: soil appears mixed by prior land uses

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☐ Depth (inches): _____

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: MONITORING OF EARLY GROWING SEASON HYDROLOGY PATTERNS FROM LATE FEB 2014 TO MAY 2014 SHOWED THAT PLOT DID NOT MEET THE WETLAND CRITERIA.

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: NE 195th Street City/County: Lake Forest Park, King County Sampling Date: 25 APR 2014

Applicant/Owner: State: WA Sampling Point: SP-6

Investigator(s): Habitat Technologies Section, Township, Range: S4, T26N, R04E

Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Slope (%):

Subregion (LRR): A Lat: Long: Datum:

Soil Map Unit Name: NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rubra	20%	yes	FAC
2. Salix lasiandra	trace	no	FACW
3. Fraxinus latifolia	35%	yes	FACW
4. Populus trichorcarpa	<20%	no	FAC
	75%	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15ft radius)			
1. Salix sitchensis	5	no yes	FACW
2. Rubus procera	35	yes	FACU
3. Rubus spectabilis	<20	no yes	FAC
4.			
5.			
	75%	= Total Cover	
Herb Stratum (Plot size: 15ft radius)			
1. Ranunculus repens	35%	yes	FACW
2. Oenanthe sarmentosa	25%	yes	OBL
3. Carex obnupta	trace	no	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	55%	= Total Cover	
Woody Vine Stratum (Plot size: 15ft radius)			
1.			
2.			
		= Total Cover	

50/20 Rule

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4/6 (A)

Total Number of Dominant Species Across All Strata: 5/7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80% 86% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☑ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

SOIL

Sampling Point: SP-6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 3/1						GL	
7-18	10YR 4/1	90	10YR 4/6	25	C?		GL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☒ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ☒ No ☐

Remarks: soil appears mixed by prior land uses

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☒ Surface Water (A1)
- ☐ High Water Table (A2)
- ☒ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☒ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☒ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☑ No ☐ Depth (inches): ?

Water Table Present? Yes ☐ No ☑ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ☑ No ☐ Depth (inches): ?

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: MONITORING OF EARLY GROWING SEASON HYDROLOGY PATTERNS FROM LATE FEB 2014 TO MAY 2014 SHOWED THAT PLOT MET THE WETLAND CRITERIA.

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: NE 195th Street City/County: Lake Forest Park, King County Sampling Date: 25 APR 2014

Applicant/Owner: State: WA Sampling Point: SP-7

Investigator(s): Habitat Technologies Section, Township, Range: S4, T26N, R04E

Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Slope (%):

Subregion (LRR): A Lat: Long: Datum:

Soil Map Unit Name: NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rubra	40%	yes	FAC
2. Salix lasiandra	trace	no	FACW
3. Fraxinus latifolia	<5%	no	FACW
4. Populus trichorcarpa	<20%	no yes	FAC
	50%	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15ft radius)			
1. Salix sitchensis	25	yes	FACW
2. Rubus procera	35	yes	FACU
3. Rubus spectabilis	<20	no	FAC
4.			
5.			
	75%	= Total Cover	
Herb Stratum (Plot size: 15ft radius)			
1. Ranunculus repens	55%	yes	FACW
2. Oenanthe sarmentosa	25%	yes	OBL
3. Carex obnupta	trace	no	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.	80 75%	= Total Cover	
Woody Vine Stratum (Plot size: 15ft radius)			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 5 (A)

Total Number of Dominant Species Across All Strata: 5 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80% 83% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☑ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

SOIL

Sampling Point: SP-7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/1						GL	
5-18	10YR 4/1	90	10YR 4/6	55	C	M ?	GL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☒ Loamy Gleyed Matrix (F2) ?
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks: soil appears mixed by prior land uses

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☒ Surface Water (A1)
- ☐ High Water Table (A2)
- ☒ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☒ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☒ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☑ No ☐ Depth (inches): ?

Water Table Present? Yes ☐ No ☑ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☑ No ☐ Depth (inches): ?

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: MONITORING OF EARLY GROWING SEASON HYDROLOGY PATTERNS FROM LATE FEB 2014 TO MAY 2014 SHOWED THAT PLOT MET THE WETLAND CRITERIA.

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: NE 195th Street City/County: Lake Forest Park, King County Sampling Date: 25 APR 2014

Applicant/Owner: State: WA Sampling Point: SP-7A

Investigator(s): Habitat Technologies Section, Township, Range: S4, T26N, R04E

Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Slope (%):

Subregion (LRR): A Lat: Long: Datum:

Soil Map Unit Name: NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐ No ☒	**Is the Sampled Area within a Wetland?** Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	

Remarks: located at very northwestern edge of identified wetland

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rubra	50%	yes	FAC
2. Populus trichocarpa	20%	yes	FAC
3. Pseudotsuga menziesii	40%	yes	FACU
4.			
	100%	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15ft radius)	110		
1. Acer circinatum	25	yes	FAC
2. Rubus procera	75	yes	FACU
3. Ilex spp.	<10	no	UPL
4. Oemleria cerasiformis	20	yes	FACU
5. Corylus cornuta	20	yes	FACU
	100	= Total Cover	
Herb Stratum (Plot size: 15ft radius)			
1. Ploystichum munitum	10	no	FACU
2. Dicentra formosa	55	yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	50%	= Total Cover	
Woody Vine Stratum (Plot size: 15ft radius)	65		
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 37.5% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☐ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks: dense shrubs understory

SOIL

Sampling Point: SP-7A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/2						GL	
6-18	10YR 3/4	80%	10YR 4/6	<5			GL	
							GL	

MISSING ~15%

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: soil appears mixed by prior land uses

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☐ Depth (inches): _____

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: MONITORING OF EARLY GROWING SEASON HYDROLOGY PATTERNS FROM LATE FEB 2014 TO MAY 2014 SHOWED THAT PLOT DID NOT MEET THE WETLAND CRITERIA.

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: NE 195th Street City/County: Lake Forest Park, King County Sampling Date: 25 APR 2014

Applicant/Owner: State: WA Sampling Point: SP-8

Investigator(s): Habitat Technologies Section, Township, Range: S4, T26N, R04E

Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Slope (%):

Subregion (LRR): A Lat: Long: Datum:

Soil Map Unit Name: NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No ☐ Hydric Soil Present? Yes ☒ No ☐ Wetland Hydrology Present? Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** Yes ☒ No ☐
Remarks:	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rubra	40%	yes	FAC
2. Crataegus monogyna	20%	no yes	FACU
3. Fraxinus latifolia	25%	yes	FACW
4. Populus trichorcarpa	<20%	no	FAC
	100%	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15ft radius)			
1. Salix sitchensis	<5	yes	FACW
2. Rubus procera	25	yes	FACU
3. Rubus spectabilis	25	yes	FAC
4. Lonicera involucrata	<20	no	FAC
5.			
	60% ?	= Total Cover	
Herb Stratum (Plot size: 15ft radius)			
1. Ranunculus repens	35%	yes	FACW
2. Oenanthe sarmentosa	45%	yes	OBL
3. Carex obnupta	trace	no	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	75%	= Total Cover	
Woody Vine Stratum (Plot size: 15ft radius) 80			
1.			
2.			
		= Total Cover	
% Bare Ground in Herb Stratum ____			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 7 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 86% 75% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☑ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: NE 195th Street City/County: Lake Forest Park, King County Sampling Date: 25 APR 2014

Applicant/Owner: State: WA Sampling Point: SP-9A

Investigator(s): Habitat Technologies Section, Township, Range: S4, T26N, R04E

Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Slope (%):

Subregion (LRR): A Lat: Long: Datum:

Soil Map Unit Name: NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☐ No ☒ Hydric Soil Present? Yes ☐ No ☒ Wetland Hydrology Present? Yes ☐ No ☒	**Is the Sampled Area within a Wetland?** Yes ☐ No ☒

Remarks: located at very northwestern edge of identified wetland

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rubra	50%	yes	FAC
2. Populus trichocarpa	<10%	no	FAC
3. Pseudotsuga menziesii	10%	no	FACU
4.			
	100%	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15ft radius)			
1. Acer circinatum	<10	no	FAC
2. Rubus procera	85	yes	FACU
3. Ilex spp.	<10	no	UPL
4. Oemleria cerasiformis	35	yes	FACU
5. Corylus cornuta	20	yes	FACU
	100	= Total Cover	
Herb Stratum (Plot size: 15ft radius)			
1. Ploystichum munitum	10	~~no~~ yes	FACU
2. Dicentra formosa	15	~~no~~ yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	50%	= Total Cover	
Woody Vine Stratum (Plot size: 15ft radius)			
1.			
2.			
		= Total Cover	

50/20 Rule

% Bare Ground in Herb Stratum ____

Remarks: dense shrubs understory

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: ~~4~~ 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ~~25%~~ 17% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☐ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

SOIL

Sampling Point: SP-9A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/3						GL	
5-18	10YR 4/4	75%	10YR 4/6	<5			GL	mixed subsoil

missing soil.

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: soil appears mixed by prior land uses

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☐ Depth (inches): _____

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: MONITORING OF EARLY GROWING SEASON HYDROLOGY PATTERNS FROM LATE FEB 2014 TO MAY 2014 SHOWED THAT PLOT DID NOT MEET THE WETLAND CRITERIA.

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: NE 195th Street City/County: Lake Forest Park, King County Sampling Date: 25 APR 2014

Applicant/Owner: State: WA Sampling Point: SP-10

Investigator(s): Habitat Technologies Section, Township, Range: S4, T26N, R04E

Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Slope (%):

Subregion (LRR): A Lat: Long: Datum:

Soil Map Unit Name: NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☐ No ☒ Hydric Soil Present? Yes ☐ No ☒ Wetland Hydrology Present? Yes ☐ No ☒	**Is the Sampled Area within a Wetland?** Yes ☐ No ☒

Remarks: located at very northwestern edge of identified wetland

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rubra	<10%	no	FAC
2. domestic apple	<10%	no	-
3. Pseudotsuga menziesii	25%	yes	FACU
4. Crataegus monogyna	55%	yes	FACU
	70%	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15ft radius)			
1. Acer circinatum	<10	no	FAC
2. Rubus procera	95	yes	FACU
3. Ilex spp.	<10	no	UPL
4. Oemleria cerasiformis	<20	no	FACU
5. Corylus cornuta	<20	no	FACU
	100	= Total Cover	
Herb Stratum (Plot size: 15ft radius)			
1. Ploystichum munitum	10	no 4os	FACU
2. Dicentra formosa	15	no 4os	FACU
3. Pteridium aquilium	10	no 4os	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	50%	= Total Cover	
Woody Vine Stratum (Plot size: 15ft radius) 35			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☐ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks: dense shrubs understory

SOIL

Sampling Point: SP-10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/2						GL	
5-18	10YR 4/3	80% ≥90%.	10YR 4/6	<10			GL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ☐ No ☒

Remarks: soil appears mixed by prior land uses

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☐ Depth (inches): _____

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: MONITORING OF EARLY GROWING SEASON HYDROLOGY PATTERNS FROM LATE FEB 2014 TO MAY 2014 SHOWED THAT PLOT DID NOT MEET THE WETLAND CRITERIA.

Remarks: dry on April 25, 2014

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: NE 195th Street City/County: Lake Forest Park, King County Sampling Date: 25 APR 2014

Applicant/Owner: State: WA Sampling Point: SP-11

Investigator(s): Habitat Technologies Section, Township, Range: S4, T26N, R04E

Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Slope (%):

Subregion (LRR): A Lat: Long: Datum:

Soil Map Unit Name: NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No ☐ Hydric Soil Present? Yes ☒ No ☐ Wetland Hydrology Present? Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** Yes ☒ No ☐

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rubra	trace	no	FAC
2. Crataegus monogyna	40%	yes	FACU
3. Fraxinus latifolia	trace	no	FACW
4. Populus trichocarpa	<20%	no yes	FAC
	40%	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15ft radius)			
1. Salix sitchensis	25	yes	FACW
2. Rubus procera	trace	no	FACU
3. Rubus spectabilis	25	yes	FAC
4. Lonicera involucrata	25%	yes	FAC
5. Pyrus fusca	45%	yes	FACW
	120 90%	= Total Cover	
Herb Stratum (Plot size: 15ft radius)			
1. Ranunculus repens	20%	yes	FACW
2. Oenanthe sarmentosa	20%	yes	OBL
3. Carex obnupta	trace	no	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	40 75%	= Total Cover	
Woody Vine Stratum (Plot size: 15ft radius)			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 8 7 (A)

Total Number of Dominant Species Across All Strata: 7 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 87% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☑ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

SOIL

Sampling Point: SP-11

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 2/1						GL	
6-18	10YR 4/2	80	10YR 4/6	30%			GL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☒ ~~Loamy Gleyed Matrix (F2)~~
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks: soil appears mixed by prior land uses

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☒ Surface Water (A1)
- ☐ High Water Table (A2)
- ☒ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☒ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☒ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☑ No ☐ Depth (inches): ?

Water Table Present? Yes ☐ No ☑ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☑ No ☐ Depth (inches): ?

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: MONITORING OF EARLY GROWING SEASON HYDROLOGY PATTERNS FROM LATE FEB 2014 TO MAY 2014 SHOWED THAT PLOT MET THE WETLAND CRITERIA.

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: NE 195th Street City/County: Lake Forest Park, King County Sampling Date: 25 APR 2014

Applicant/Owner: _____ State: WA Sampling Point: SP-12

Investigator(s): Habitat Technologies Section, Township, Range: S4, T26N, R04E

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____

Subregion (LRR): A Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No ☐ Hydric Soil Present? Yes ☒ No ☐ Wetland Hydrology Present? Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** Yes ☒ No ☐

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rubra	trace	no	FAC
2. Pyrus fusca	75%	yes	FACU
3.			
4.			
	75%	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15ft radius)			
1.			
2. Rubus procera	trace	no	FACU
3. Rubus spectabilis	trace	no	FAC
4.			
5.			
		= Total Cover	
Herb Stratum (Plot size: 15ft radius)			
1. Ranunculus repens	75%	yes	FACW
2. Oenanthe sarmentosa	40%	yes	OBL
3. Carex obnupta	trace	no	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	100%	= Total Cover	
Woody Vine Stratum (Plot size: 15ft radius)			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A) — 2

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B) — 67

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☑ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

SOIL

Sampling Point: SP-12

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/1						GL	
5 -18	10YR 4/2	80	10YR 4/6	30%			GL	
				110%.				

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☒ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ☒ No ☐

Remarks: soil appears mixed by prior land uses

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☒ Surface Water (A1)
- ☐ High Water Table (A2)
- ☒ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☒ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☒ Sparsely Vegetated Concave Surface (B8)
- ☒ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☑ No ☐ Depth (inches): 1.

Water Table Present? Yes ☐ No ☑ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ☑ No ☐ Depth (inches): 2

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: MONITORING OF EARLY GROWING SEASON HYDROLOGY PATTERNS FROM LATE FEB 2014 TO MAY 2014 SHOWED THAT PLOT MET THE WETLAND CRITERIA.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: NE 195th Street City/County: Lake Forest Park, King County Sampling Date: 25 APR 2014

Applicant/Owner: State: WA Sampling Point: SP-13

Investigator(s): Habitat Technologies Section, Township, Range: S4, T26N, R04E

Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Slope (%):

Subregion (LRR): A Lat: Long: Datum:

Soil Map Unit Name: NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No ☐ Hydric Soil Present? Yes ☒ No ☐ Wetland Hydrology Present? Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** Yes ☒ No ☐
Remarks:	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rubra	trace	no	FAC
2. Pyrus fusca	75%	yes	FACU
3. Crataegus monogyna	<20%	no	FACU
4.			
	75%	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15ft radius)			
1.			
2. Rubus procera	trace	no	FACU
3. Rubus spectabilis	trace	no	FAC
4.			
5.			
		= Total Cover	
Herb Stratum (Plot size: 15ft radius)			
1. Ranunculus repens	80%	yes	FACW
2. Oenanthe sarmentosa	40%	yes	OBL
3. Carex obnupta	trace	no	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	100%	= Total Cover	
Woody Vine Stratum (Plot size: 15ft radius)			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

SOIL

Sampling Point: SP-13

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 3/1						GL	
7 -18	10YR 4/2	70	10YR 4/6	40%			GL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☒ ~~Loamy Gleyed Matrix (F2)~~
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks: soil appears mixed by prior land uses

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☒ Surface Water (A1)
- ☐ High Water Table (A2)
- ☒ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☒ Algal Mat or Crust (B4)
- ☒ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☒ Sparsely Vegetated Concave Surface (B8)
- ☒ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☑ No ☐ Depth (inches): ?

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☑ No ☐ Depth (inches): ?

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: MONITORING OF EARLY GROWING SEASON HYDROLOGY PATTERNS FROM LATE FEB 2014 TO MAY 2014 SHOWED THAT PLOT MET THE WETLAND CRITERIA.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: NE 195th Street City/County: Lake Forest Park, King County Sampling Date: 25 APR 2014

Applicant/Owner: State: WA Sampling Point: SP-14

Investigator(s): Habitat Technologies Section, Township, Range: S4, T26N, R04E

Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Slope (%):

Subregion (LRR): A Lat: Long: Datum:

Soil Map Unit Name: NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No ☐ Hydric Soil Present? Yes ☒ No ☐ Wetland Hydrology Present? Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** Yes ☒ No ☐
Remarks:	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rubra	30%	yes	FAC
2. Pyrus fusca	75%	yes	FACU
3. Crataegus monogyna	<10%	no	FACU
4. domestic apple	<5%	no	-
	>100%	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15ft radius)			
1.			
2. Rubus procera	trace	no	FACU
3.			
4.			
5.			
		= Total Cover	
Herb Stratum (Plot size: 15ft radius)			
1. Ranunculus repens	100%	yes	FACW
2. Oenanthe sarmentosa	20%	yes	OBL
3. Carex obnupta	trace	no	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	120 100%	= Total Cover	
Woody Vine Stratum (Plot size: 15ft radius)			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% 75 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☑ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

SOIL

Sampling Point: SP-14

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/1						GL	top 2" duff layer
8 -18	10YR 4/2	80	10YR 4/6	<30%			GL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☒ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ☒ No ☐

Remarks: soil appears mixed by prior land uses

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☒ Surface Water (A1)
- ☐ High Water Table (A2)
- ☒ Saturation (A3)
- ☒ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☒ Algal Mat or Crust (B4)
- ☒ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☒ Sparsely Vegetated Concave Surface (B8)
- ☒ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☑ No ☐ Depth (inches): ?

Water Table Present? Yes ☐ No ☑ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ☑ No ☐ Depth (inches): ?

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: MONITORING OF EARLY GROWING SEASON HYDROLOGY PATTERNS FROM LATE FEB 2014 TO MAY 2014 SHOWED THAT PLOT MET THE WETLAND CRITERIA.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: NE 195th Street City/County: Lake Forest Park, King County Sampling Date: 25 APR 2014

Applicant/Owner: State: WA Sampling Point: SP-14A

Investigator(s): Habitat Technologies Section, Township, Range: S4, T26N, R04E

Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Slope (%):

Subregion (LRR): A Lat: Long: Datum:

Soil Map Unit Name: NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☐ No ☒ Hydric Soil Present? Yes ☐ No ☒ Wetland Hydrology Present? Yes ☐ No ☒	**Is the Sampled Area within a Wetland?** Yes ☐ No ☒

Remarks: located at very northwestern edge of identified wetland

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 15ft radius)			
1. Alnus rubra	<20%	no	FAC
2. Populus trichocarpa	<10%	no	FAC
3. Pseudotsuga menziesii	<5%	no	FACU
4. Crataegus monogyna	75%	yes	FACU
	100%	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15ft radius)			
1. Acer circinatum	<10	no	FAC
2. Rubus procera	75	yes	FACU
3. Ilex spp.	<10	no	UPL
4. Oemleria cerasiformis	<20	no	FACU
5. Corylus cornuta	<20	no	FACU
	100	= Total Cover	
Herb Stratum (Plot size: 15ft radius)			
1. Ploystichum munitum	10	no yes	FACU
2. Dicentra formosa	15	no yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	25 50%	= Total Cover	
Woody Vine Stratum (Plot size: 15ft radius)			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☐ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

SOIL

Sampling Point: SP-14A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 3/3						GL	
7-18	10YR 4/4	90%	10YR 4/6	<5			GL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: soil appears mixed by prior land uses

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☐ Depth (inches): _____

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: MONITORING OF EARLY GROWING SEASON HYDROLOGY PATTERNS FROM LATE FEB 2014 TO MAY 2014 SHOWED THAT PLOT DID NOT MEET THE WETLAND CRITERIA.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: NE 195th Street City/County: Lake Forest Park, King County Sampling Date: 25 APR 2014

Applicant/Owner: State: WA Sampling Point: SP-22

Investigator(s): Habitat Technologies Section, Township, Range: S4, T26N, R04E

Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Slope (%):

Subregion (LRR): A Lat: Long: Datum:

Soil Map Unit Name: NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☐ No ☒ Hydric Soil Present? Yes ☐ No ☒ Wetland Hydrology Present? Yes ☐ No ☒	**Is the Sampled Area within a Wetland?** Yes ☐ No ☒

Remarks: located at very northwestern edge of identified wetland

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2. domestic apple	<10%	no	-
3. Pseudotsuga menziesii	25%	yes	FACU
4. Crataegus monogyna	55%	yes	FACU
	70%	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15ft radius)			
1.			
2. Rubus procera	95	yes	FACU
3. Ilex spp.	trace	no	UPL
4. Oemleria cerasiformis	trace	no	FACU
5. Corylus cornuta	<20	no	FACU
	100	= Total Cover	
Herb Stratum (Plot size: 15ft radius)			
1. Ploystichum munitum	10	no	FACU
2. Dicentra formosa	15	no	FACU
3. Pteridium aquilium	10	no	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	50%	= Total Cover	
Woody Vine Stratum (Plot size: 15ft radius) 35			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☐ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

SOIL

Sampling Point: SP-22

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/3	100%					GL	
3-9	10YR 3/3	~~80%~~ 90%	10YR 4/6	<10			GL	
9-18	10YR 4/4	~~80%~~ 100%	none				GL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: soil appears mixed by prior land uses

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☐ Depth (inches): _____

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: MONITORING OF EARLY GROWING SEASON HYDROLOGY PATTERNS FROM LATE FEB 2014 TO MAY 2014 SHOWED THAT PLOT DID NOT MEET THE WETLAND CRITERIA.

APPENDIX C – WETLAND RATING WORKSHEET

Wetland name or number A

WETLAND RATING FORM – WESTERN WASHINGTON

Version 2 - Updated July 2006 to increase accuracy and reproducibility among users
Updated Oct 2008 with the new WDFW definitions for priority habitats

Name of wetland (if known): Parcel 6152900030/ -033 Date of site visit: 25 APR 2014

Rated by Habitat Technologies Trained by Ecology? Yes x No___ Date of training 2006

SEC: 02 TWNSHP: 26 RNGE: 4E Is S/T/R in Appendix D? Yes___ No x

Map of wetland unit: Figure ____ Estimated size 0.7 Acres

Rated using aerial photos, existing data, and site visit.

SUMMARY OF RATING

Category based on FUNCTIONS provided by wetland

I___ II___ III x IV___

Category I = Score >=70
Category II = Score 51-69
Category III = Score 30-50
Category IV = Score < 30

Score for Water Quality Functions	18
Score for Hydrologic Functions	14
Score for Habitat Functions	15
TOTAL score for Functions	47

Category based on SPECIAL CHARACTERISTICS of wetland

I___ II___ Does not Apply x

Final Category (choose the "highest" category from above) 3

Summary of basic information about the wetland unit

Wetland Unit has Special Characteristics		Wetland HGM Class used for Rating	
Estuarine		Depressional	x
Natural Heritage Wetland		Riverine	
Bog		Lake-fringe	
Mature Forest		Slope	x
Old Growth Forest		Flats	
Coastal Lagoon		Freshwater Tidal	
Interdunal			
None of the above	x	Check if unit has multiple HGM classes present	x

Wetland name or number A

Does the wetland unit being rated meet any of the criteria below?

If you answer YES to any of the questions below you will need to protect the wetland according to the regulations regarding the special characteristics found in the wetland.

Check List for Wetlands That May Need Additional Protection (in addition to the protection recommended for its category)	YES	NO
SP1. *Has the wetland unit been documented as a habitat for any Federally listed Threatened or Endangered **animal or plant** species (T/E species)?* For the purposes of this rating system, "documented" means the wetland is on the appropriate state or federal database.		x
SP2. *Has the wetland unit been documented as habitat for any State listed Threatened or Endangered **animal** species?* For the purposes of this rating system, "documented" means the wetland is on the appropriate state database. Note: Wetlands with State listed plant species are categorized as Category I Natural Heritage Wetlands (see p. 19 of data form).		x
SP3. *Does the wetland unit contain individuals of Priority species listed by the WDFW for the state?*	x	
SP4. *Does the wetland unit have a local significance in addition to its functions*? For example, the wetland has been identified in the Shoreline Master Program, the Critical Areas Ordinance, or in a local management plan as having special significance.		x

SP3: Game species, Pileated woodpecker

To complete the next part of the data sheet you will need to determine the Hydrogeomorphic Class of the wetland being rated.

The hydrogeomorphic classification groups wetlands into those that function in similar ways. This simplifies the questions needed to answer how well the wetland functions. The Hydrogeomorphic Class of a wetland can be determined using the key below. See p. 24 for more detailed instructions on classifying wetlands.

Wetland name or number A

Classification of Wetland Units in Western Washington

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in questions 1-7 apply, and go to Question 8.

1. Are the water levels in the entire unit usually controlled by tides (i.e. except during floods)?

NO – go to 2 **YES** – the wetland class is **Tidal Fringe**

If yes, is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)? **YES – Freshwater Tidal Fringe NO – Saltwater Tidal Fringe (Estuarine)**

*If your wetland can be classified as a Freshwater Tidal Fringe use the forms for **Riverine** wetlands. If it is Saltwater Tidal Fringe it is rated as an **Estuarine** wetland.* Wetlands that were called estuarine in the first and second editions of the rating system are called Salt Water Tidal Fringe in the Hydrogeomorphic Classification. Estuarine wetlands were categorized separately in the earlier editions, and this separation is being kept in this revision. To maintain consistency between editions, the term "Estuarine" wetland is kept. Please note, however, that the characteristics that define Category I and II estuarine wetlands have changed (see p.).

2. The entire wetland unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit.

NO – go to 3 **YES** – The wetland class is **Flats**

If your wetland can be classified as a "Flats" wetland, use the form for **Depressional** wetlands.

3. Does the entire wetland unit **meet both** of the following criteria?

___The vegetated part of the wetland is on the shores of a body of permanent open water (without any vegetation on the surface) at least 20 acres (8 ha) in size;

___At least 30% of the open water area is deeper than 6.6 ft (2 m)?

NO – go to 4 **YES** – The wetland class is **Lake-fringe (Lacustrine Fringe)**

4. Does the entire wetland unit **meet all** of the following criteria?

____The wetland is on a slope (*slope can be very gradual*),

____The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks.

____The water leaves the wetland **without being impounded**?

NOTE: *Surface water does not pond in these type of wetlands except occasionally in very small and shallow depressions or behind hummocks (depressions are usually <3ft diameter and less than 1 foot deep).*

NO - go to 5 **YES** – The wetland class is **Slope**

Wetland name or number A

5. Does the entire wetland unit **meet all** of the following criteria?

____ The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river

____ The overbank flooding occurs at least once every two years.

NOTE: The riverine unit can contain depressions that are filled with water when the river is not flooding.

NO - go to 6 **YES** – The wetland class is **Riverine**

6. Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the surface, at some time during the year. *This means that any outlet, if present, is higher than the interior of the wetland.*

NO – go to 7 **YES** – The wetland class is **Depressional**

7. Is the entire wetland unit located in a very flat area with no obvious depression and no overbank flooding. The unit does not pond surface water more than a few inches. The unit seems to be maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8 **YES** – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM clases. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within your wetland. NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area.

HGM Classes within the wetland unit being rated	*HGM Class to Use in Rating*
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake-fringe	Lake-fringe
Depressional + Riverine along stream within boundary	Depressional
Depressional + Lake-fringe	Depressional
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as ESTUARINE under wetlands with special characteristics

If you are unable still to determine which of the above criteria apply to your wetland, or if you have more than 2 HGM classes within a wetland boundary, classify the wetland as **Depressional** for the rating.

Wetland name or number A

D	**Depressional and Flats Wetlands** **WATER QUALITY FUNCTIONS** - Indicators that the wetland unit functions to improve water quality	**Points** (only 1 score per box)
D	**D 1. Does the wetland unit have the potential to improve water quality?**	*(see p.38)*
D	D 1.1 Characteristics of surface water flows out of the wetland: Unit is a depression with no surface water leaving it (no outlet) points = 3 Unit has an intermittently flowing, OR highly constricted permanently flowing outlet points = 2 Unit has an unconstricted, or slightly constricted, surface outlet (*permanently flowing*) points = 1 Unit is a "flat" depression (Q. 7 on key), or in the Flats class, with permanent surface outflow **and no obvious natural outlet** and/or outlet is a man-made ditch points = 1 *(If ditch is not permanently flowing treat unit as "intermittently flowing")* Provide photo or drawing	Figure ___ 2
D	S 1.2 The soil 2 inches below the surface (or duff layer) is clay or organic *(use NRCS definitions)* YES points = 4 NO points = 0	0
D	D 1.3 Characteristics of persistent vegetation (emergent, shrub, and/or forest Cowardin class) Wetland has persistent, ungrazed, vegetation > = 95% of area points = 5 Wetland has persistent, ungrazed, vegetation > = 1/2 of area points = 3 Wetland has persistent, ungrazed vegetation > = 1/10 of area points = 1 Wetland has persistent, ungrazed vegetation <1/10 of area points = 0 Map of Cowardin vegetation classes	Figure ___ 5
D	D1.4 Characteristics of seasonal ponding or inundation. *This is the area of the wetland unit that is ponded for at least 2 months, but dries out sometime during the year. Do not count the area that is permanently ponded. Estimate area as the average condition 5 out of 10 yrs.* Area seasonally ponded is > ½ total area of wetland points = 4 Area seasonally ponded is > ¼ total area of wetland points = 2 Area seasonally ponded is < ¼ total area of wetland points = 0 Map of Hydroperiods	Figure ___ 2
D	**Total for D 1** *Add the points in the boxes above*	9
D	**D 2. Does the wetland unit have the opportunity to improve water quality?** Answer YES if you know or believe there are pollutants in groundwater or surface water coming into the wetland that would otherwise reduce water quality in streams, lakes or groundwater downgradient from the wetland. *Note which of the following conditions provide the sources of pollutants. A unit may have pollutants coming from several sources, but any single source would qualify as opportunity.* — Grazing in the wetland or within 150 ft X Untreated stormwater discharges to wetland — Tilled fields or orchards within 150 ft of wetland — A stream or culvert discharges into wetland that drains developed areas, residential areas, farmed fields, roads, or clear-cut logging X Residential, urban areas, golf courses are within 150 ft of wetland — Wetland is fed by groundwater high in phosphorus or nitrogen — Other_____ **YES** multiplier is **2** **NO** multiplier is **1**	*(see p. 44)* multiplier 2
D	**TOTAL - Water Quality Functions** Multiply the score from D1 by D2 ***Add score to table on p. 1***	18

Wetland name or number A

H 2. Does the wetland unit have the opportunity to provide habitat for many species?	
H 2.1 Buffers *(see p. 80)* *Choose the description that best represents condition of buffer of wetland unit. The highest scoring criterion that applies to the wetland is to be used in the rating. See text for definition of "undisturbed."* — 100 m (330ft) of relatively undisturbed vegetated areas, rocky areas, or open water >95% of circumference. No structures are within the undisturbed part of buffer. (relatively undisturbed also means no-grazing, no landscaping, no daily human use) **Points = 5** — 100 m (330 ft) of relatively undisturbed vegetated areas, rocky areas, or open water > 50% circumference. **Points = 4** — 50 m (170ft) of relatively undisturbed vegetated areas, rocky areas, or open water >95% circumference. **Points = 4** — 100 m (330ft) of relatively undisturbed vegetated areas, rocky areas, or open water > 25% circumference, . **Points = 3** — 50 m (170ft) of relatively undisturbed vegetated areas, rocky areas, or open water for > 50% circumference. **Points = 3** **If buffer does not meet any of the criteria above** — No paved areas (except paved trails) or buildings within 25 m (80ft) of wetland > 95% circumference. Light to moderate grazing, or lawns are OK. **Points = 2** — No paved areas or buildings within 50m of wetland for >50% circumference. Light to moderate grazing, or lawns are OK. **Points = 2** — Heavy grazing in buffer. **Points = 1** — Vegetated buffers are <2m wide (6.6ft) for more than 95% of the circumference (e.g. tilled fields, paving, basalt bedrock extend to edge of wetland **Points = 0.** — Buffer does not meet any of the criteria above. **Points = 1** Aerial photo showing buffers	Figure ___ 2
H 2.2 Corridors and Connections *(see p. 81)* H 2.2.1 Is the wetland part of a relatively undisturbed and unbroken vegetated corridor (either riparian or upland) that is at least 150 ft wide, has at least 30% cover of shrubs, forest or native undisturbed prairie, that connects to estuaries, other wetlands or undisturbed uplands that are at least 250 acres in size? (*dams in riparian corridors, heavily used gravel roads, paved roads, are considered breaks in the corridor*). YES = **4 points** (*go to H 2.3*) NO = go to H 2.2.2 H 2.2.2 Is the wetland part of a relatively undisturbed and unbroken vegetated corridor (either riparian or upland) that is at least 50ft wide, has at least 30% cover of shrubs or forest, and connects to estuaries, other wetlands or undisturbed uplands that are at least 25 acres in size? **OR** a **Lake-fringe** wetland, if it does not have an undisturbed corridor as in the question above? YES = **2 points** (*go to H 2.3*) NO = H 2.2.3 H 2.2.3 Is the wetland: within 5 mi (8km) of a brackish or salt water estuary OR within 3 mi of a large field or pasture (>40 acres) OR within 1 mi of a lake greater than 20 acres? YES = **1 point** NO = **0 points**	1

Total for page 3

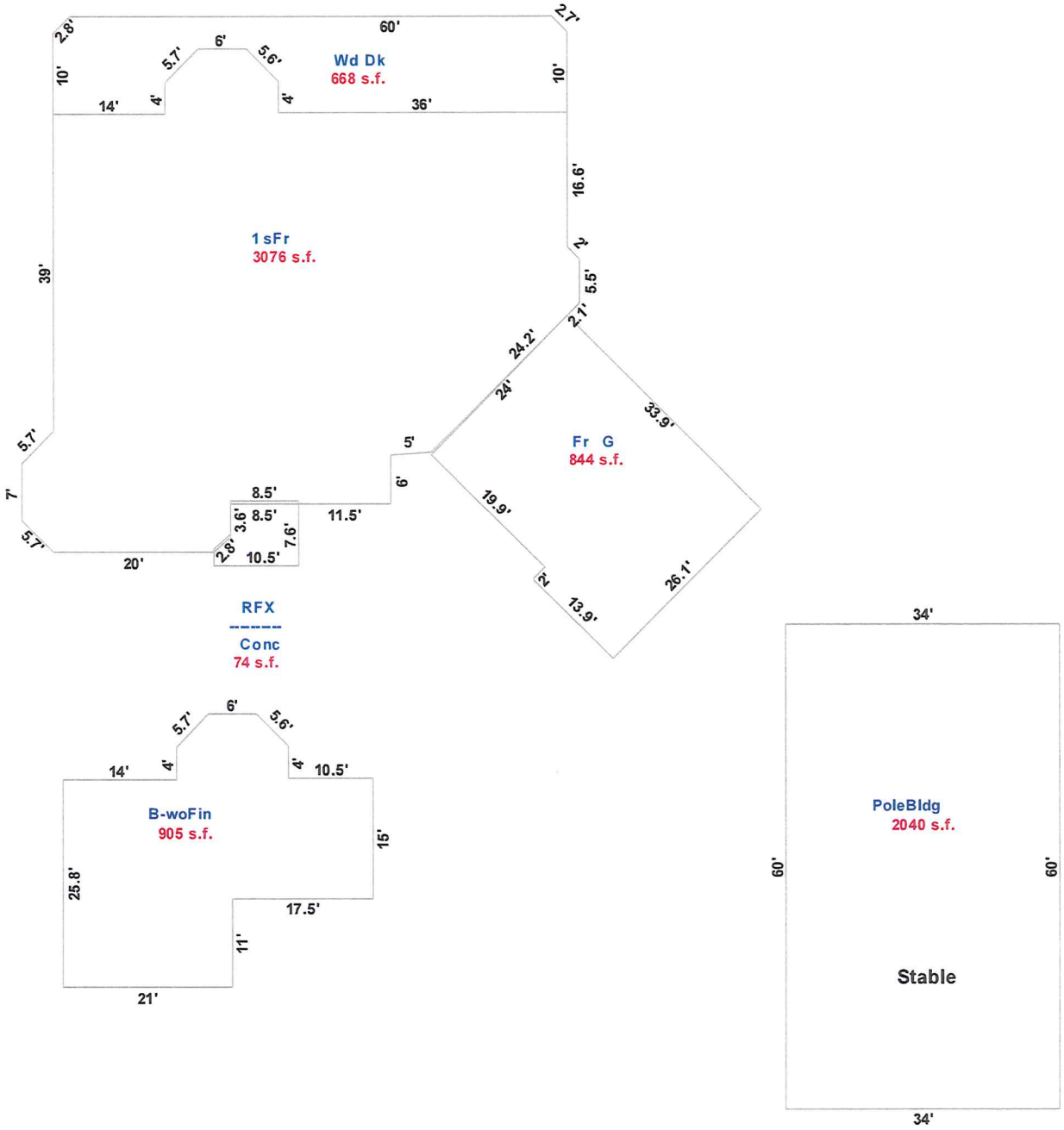
Wetland name or number A

H 2.3 Near or adjacent to other priority habitats listed by WDFW *(see new and complete descriptions of WDFW priority habitats, and the counties in which they can be found, in the PHS report http://wdfw.wa.gov/hab/phslist.htm)* Which of the following priority habitats are within 330ft (100m) of the wetland unit? *NOTE: the connections do not have to be relatively undisturbed.* ____**Aspen Stands:** Pure or mixed stands of aspen greater than 0.4 ha (1 acre). ____**Biodiversity Areas and Corridors**: Areas of habitat that are relatively important to various species of native fish and wildlife (*full descriptions in WDFW PHS report p. 152*). ____**Herbaceous Balds:** Variable size patches of grass and forbs on shallow soils over bedrock. ____**Old-growth/Mature forests:** (Old-growth west of Cascade crest) Stands of at least 2 tree species, forming a multi-layered canopy with occasional small openings; with at least 20 trees/ha (8 trees/acre) > 81 cm (32 in) dbh or > 200 years of age. (Mature forests) Stands with average diameters exceeding 53 cm (21 in) dbh; crown cover may be less that 100%; crown cover may be less that 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80 - 200 years old west of the Cascade crest. ____**Oregon white Oak:** Woodlands Stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (*full descriptions in WDFW PHS report p. 158*). X **Riparian**: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other. ____**Westside Prairies:** Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (*full descriptions in WDFW PHS report p. 161*). ____**Instream:** The combination of physical, biological, and chemical processes and conditions that interact to provide functional life history requirements for instream fish and wildlife resources. ____ **Nearshore**: Relatively undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and Puget Sound Nearshore. (*full descriptions of habitats and the definition of relatively undisturbed are in WDFW report: pp. 167-169 and glossary in Appendix A).* ____**Caves:** A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human. ____**Cliffs:** Greater than 7.6 m (25 ft) high and occurring below 5000 ft. ____**Talus:** Homogenous areas of rock rubble ranging in average size 0.15 - 2.0 m (0.5 - 6.5 ft), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs. ____**Snags and Logs:** Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 51 cm (20 in) in western Washington and are > 2 m (6.5 ft) in height. Priority logs are > 30 cm (12 in) in diameter at the largest end, and > 6 m (20 ft) long. If wetland has **3 or more** priority habitats = **4 points** If wetland has **2** priority habitats = **3 points** If wetland has **1** priority habitat = **1 point** No habitats = 0 points *Note: All vegetated wetlands are by definition a priority habitat but are not included in this list. Nearby wetlands are addressed in question H 2.4)*	1

Wetland name or number A

H 2.4 Wetland Landscape *(choose the **one** description of the landscape around the wetland that best fits)* ***(see p. 84)*** There are at least 3 other wetlands within ½ mile, and the connections between them are relatively undisturbed (light grazing between wetlands OK, as is lake shore with some boating, but connections should NOT be bisected by paved roads, fill, fields, or other development. points = 5 The wetland is Lake-fringe on a lake with little disturbance and there are 3 other lake-fringe wetlands within ½ mile points = 5 There are at least 3 other wetlands within ½ mile, BUT the connections between them are disturbed points = 3 The wetland is Lake-fringe on a lake **with** disturbance and there are 3 other lake-fringe wetland within ½ mile points = 3 There is at least 1 wetland within ½ mile. points = 2 There are no wetlands within ½ mile. points = 0	3
H 2. TOTAL Score - opportunity for providing habitat *Add the scores from H2.1,H2.2, H2.3, H2.4*	7
TOTAL for H 1 from page 14	8
Total Score for Habitat Functions – add the points for H 1, H 2 and record the result on p. 1	15

ATTACHMENT – SITE SURVEY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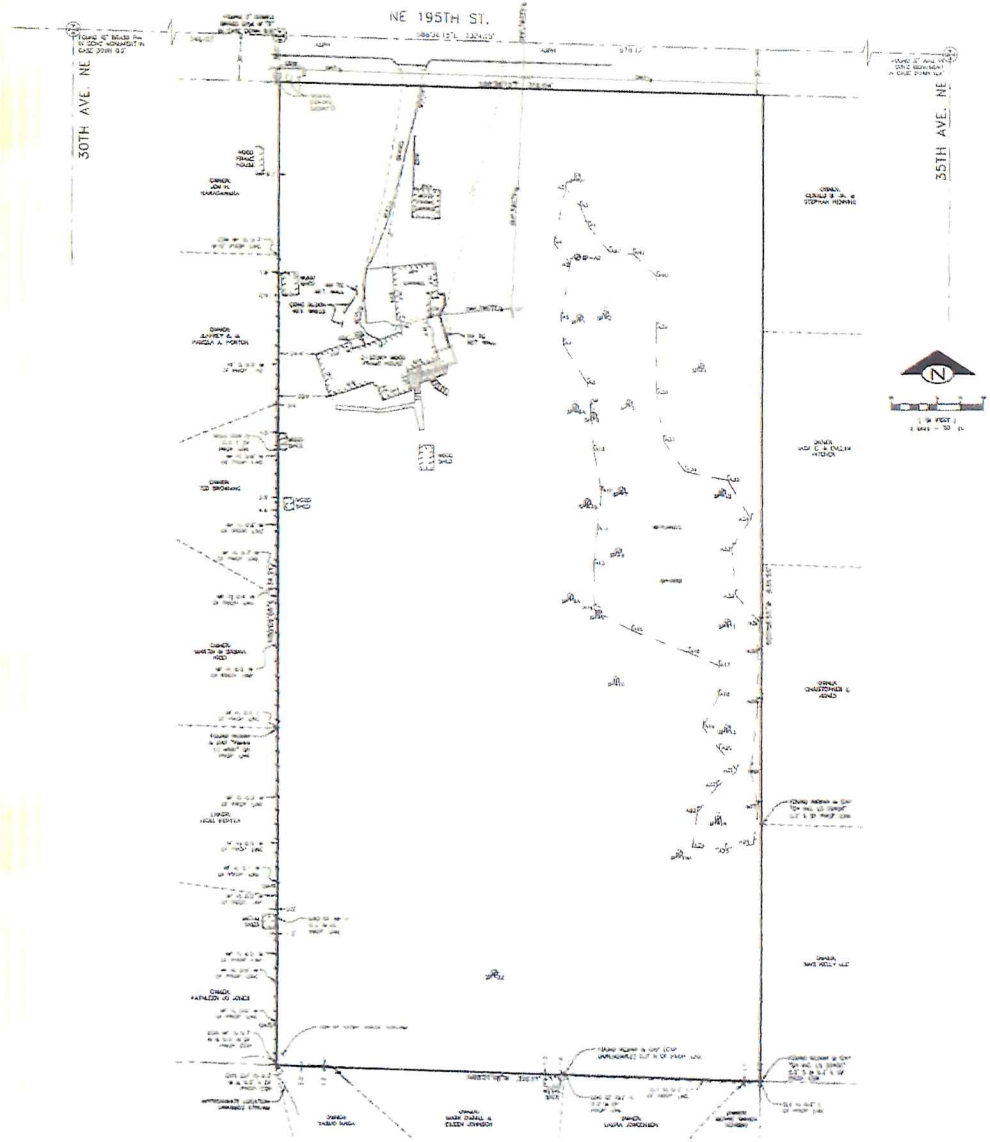
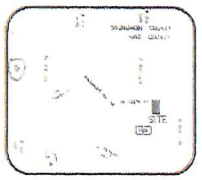
3076 s.f.
Fr G
844 s.f.
RFX
Conc
74 s.f.
B-woFin
905 s.f.
PoleBldg
2040 s.f.
Stable
60'
2.7'
2.8'
10'
5.7'
6'
5.6'
4'
14'
4'
36'
10'
16.6'
2'
5.5'
2.7'
24.2'
24'
33.9'
39'
5.7'
5'
6'
7'
8.5'
11.5'
3.6'
8.5'
7.6'
5.7'
2.8'
10.5'
20'
19.9'
2'
13.9'
26.1'
34'
60'
60'
34'
6'
5.7'
5.6'
14'
4'
4'
10.5'
15'
25.8'
17.5'
11'
21'

SE 1/4, SECTION 4, TOWNSHIP 26 NORTH, RANGE 4 EAST, W.M.





VICINITY MAP

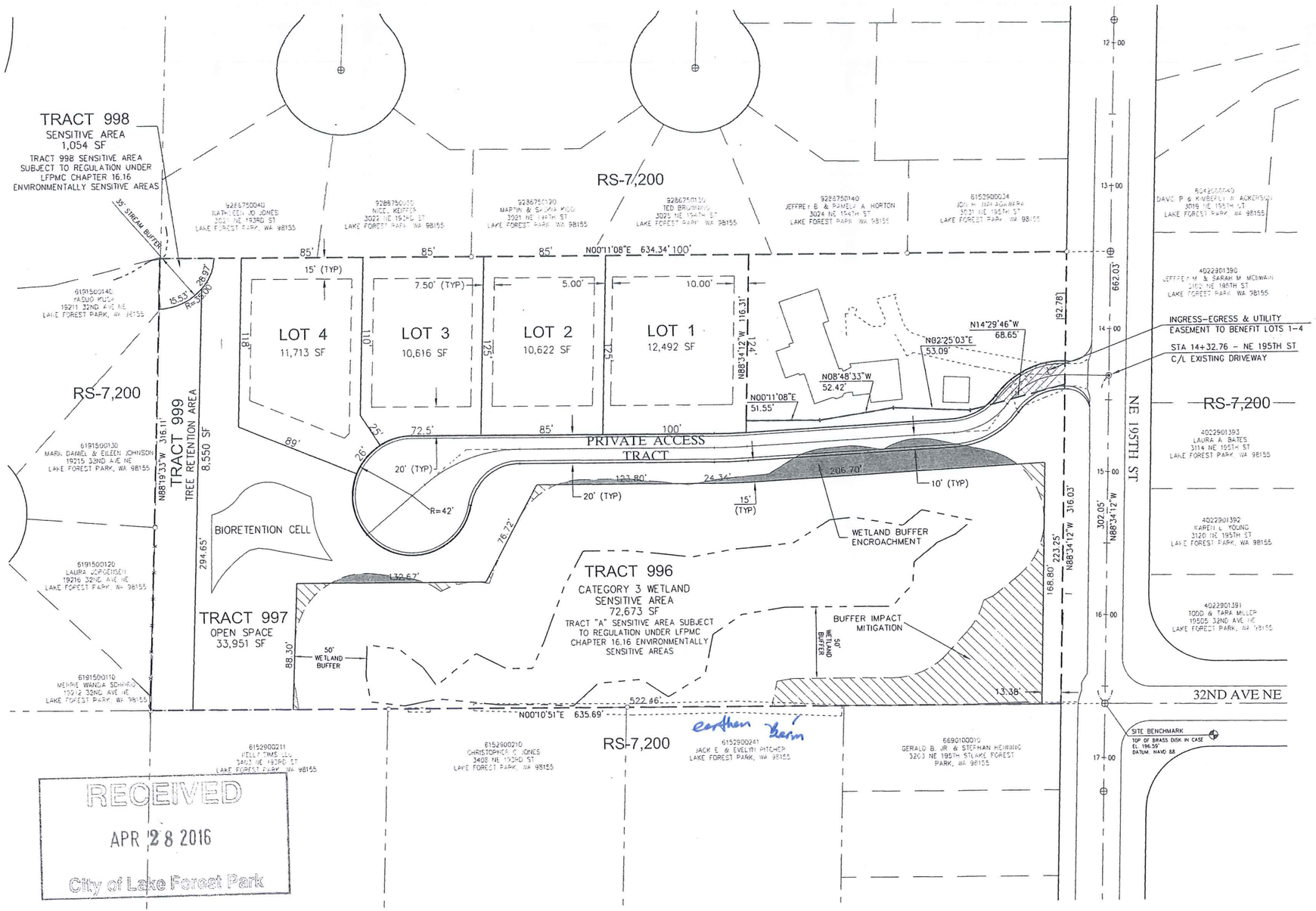
LEGEND

BUSH, ROED & HITCHINGS, INC.
CIVIL ENGINEERS & LAND SURVEYORS

ALTA/ACSM LAND TITLE SURVEY
SUZANNE EBLING
3035 N 195TH STREET

DRAWN BY: FWH	CHECKED BY: JJW
SCALE: 1" = 30'	DATE: 6/18/14
JOB NO. 2014096.00	

A PORTION OF THE SE 1/4 OF SECTION 4, T 26 N, R 4 E, WM



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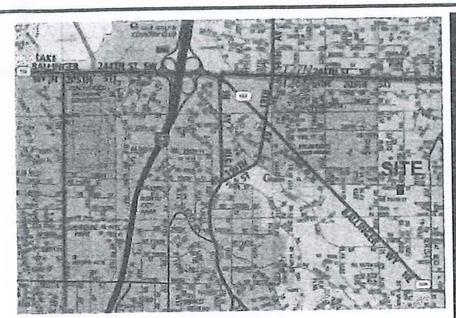
City of Lake Forest Park



VICINITY MAP
SCALE: 1" = 2500'

NORTH
0 20 40 80
1"=40'

LEGAL DESCRIPTION:

PARCEL A OF LAKE FOREST PARK BOUNDARY LINE ADJUSTMENT NUMBER 2015-LL-0004, AS RECORDED IN KING COUNTY UNDER AFN 20151029900014, IN BOOK 332 OF SURVEYS AT PAGE 119, RECORDS OF KING COUNTY, WASHINGTON.

DEVELOPMENT DATA:

OWNER / APPLICANT

PLATS FINANCIAL GROUP, LLC
720 CEDAR AVE SUITE C
MARYSVILLE, WASHINGTON 98270
CONTACT: TAGE NICKERSON
PH: 425.508.3317
E-MAIL: tage@platsplus.com

ENGINEER / SURVEYOR

DAVID EVANS & ASSOCIATES INC
1620 W MARINE VIEW DRIVE SUITE 200
EVERETT, WASHINGTON 98201
CONTACT: JACK MOLVER, PE
PH: 425.405.1504
E-MAIL: jnm@deainc.com

PRELIMINARY PLAT DATA:

SITE ADDRESS:	3035 NE 195TH STREET LAKE FOREST PARK, WA 98155
TAX LOT NUMBER:	6152900033-05 6152900033-08
EXISTING ZONING:	R 7.2
PROPOSED ZONING:	R 7.2
TOTAL SITE AREA:	176,376 SF (4.05 AC)
LOTS PROPOSED:	4
AVERAGE LOT SIZE:	11,470 SF (0.26 AC)
SMALLEST LOT SIZE:	10,622 SF (0.24 AC)

SERVICES:

WATER:	NORTH CITY WATER DISTRICT
SANITARY SEWER:	CITY OF LAKE FOREST PARK
PUBLIC SCHOOLS:	SHORELINE #412
FIRE PROTECTION:	KING COUNTY DISTRICT NO. 16

TRACT DESIGNATIONS:

TRACT 996:	72,673 SF	SENSITIVE AREA
TRACT 997:	33,951 SF	OPEN SPACE
TRACT 998:	1,054 SF	SENSITIVE AREA
TRACT 999:	8,550 SF	TREE RETENTION AREA

TRACT OWNERSHIP & MAINTENANCE:

OWNERSHIP OF TRACTS 996, 997, 998 & 999 SHALL BE GRANTED AND CONVEYED TOGETHER WITH ALL MAINTENANCE OBLIGATIONS, TO THE PALMER PLACE HOMEOWNERS ASSOCIATION UPON RECORDING OF THE PLAT.

LOT DENSITY CALCULATIONS:

NET AREA = GROSS PLAT AREA LESS ROADS AND CRITICAL AREAS.

GROSS PLAT AREA	= 176,376 SF (4.05 AC)
LESS:	
ROAD AREA	= 14,704 SF
CRITICAL AREA	= 22,079 SF
NET AREA	= 139,593 SF (3.20 AC)

NET DENSITY = 4 LOTS / 3.20 AC = 1.25 LOTS/ACRE
GROSS DENSITY = 4 LOTS / 4.05 AC = 0.99 LOTS/ACRE

SITE VEGETATION:

EXISTING CONDITIONS:
FOREST OF DECIDUOUS & EVERGREEN TREES WITH UNDERBRUSH AND GROUND COVER.

DEVELOPED CONDITIONS:
RESIDENTIAL LOTS & OPEN SPACE AREAS SHALL BE LANDSCAPED WITH LAWN, TREES & SHRUBS.

BUFFER AVERAGING CALCULATIONS

BUFFER ADDED	= 8,249 SF
BUFFER SUBTRACTED	= 3,544 SF

VERTICAL DATUM:

NAVD 88

HORIZONTAL DATUM:

NAD 83/96

BENCHMARK:

MONUMENT AT THE INTERSECTION OF NE 195TH ST AND 32ND AVE NE
ELEVATION: 196.59'

SHEET INDEX:

PR1	PRELIMINARY SHORT PLAT
PR2	EXISTING CONDITIONS
PR3	DRAINAGE AND GRADING PLAN
PR4	PRELIMINARY ACCESS ROAD PLAN & PROFILE

PRELIMINARY SHORT PLAT

LABOSIERRE SHORT PLAT

PLATS FINANCIAL GROUP
KING COUNTY, WASHINGTON

DAVID EVANS AND ASSOCIATES INC.
1620 W. Marine View Drive, Suite 200
Everett Washington 98201
Phone: 425.259.4099

REVISIONS:	APPD.

DATE: APRIL, 2016
DESIGN: JNM
DRAWN: CLK
CHECKED: JNM
REVISION NUMBER:

SCALE: 1"=40'

PROJECT NUMBER: PLFG00000002

DRAWING FILE: Ec-PR-001-PLFG0002.dwg

SHEET NO. PR1 OF 4

Plot Date: 4/20/2016 8:48 AM By: April Coleman
Save Date: 4/20/2016 8:33 AM By: Apdc File: P:\PP\LFG\00000002\0400CAD\EC\SHEETS\Ec-PR-001-PLFG0002.dwg

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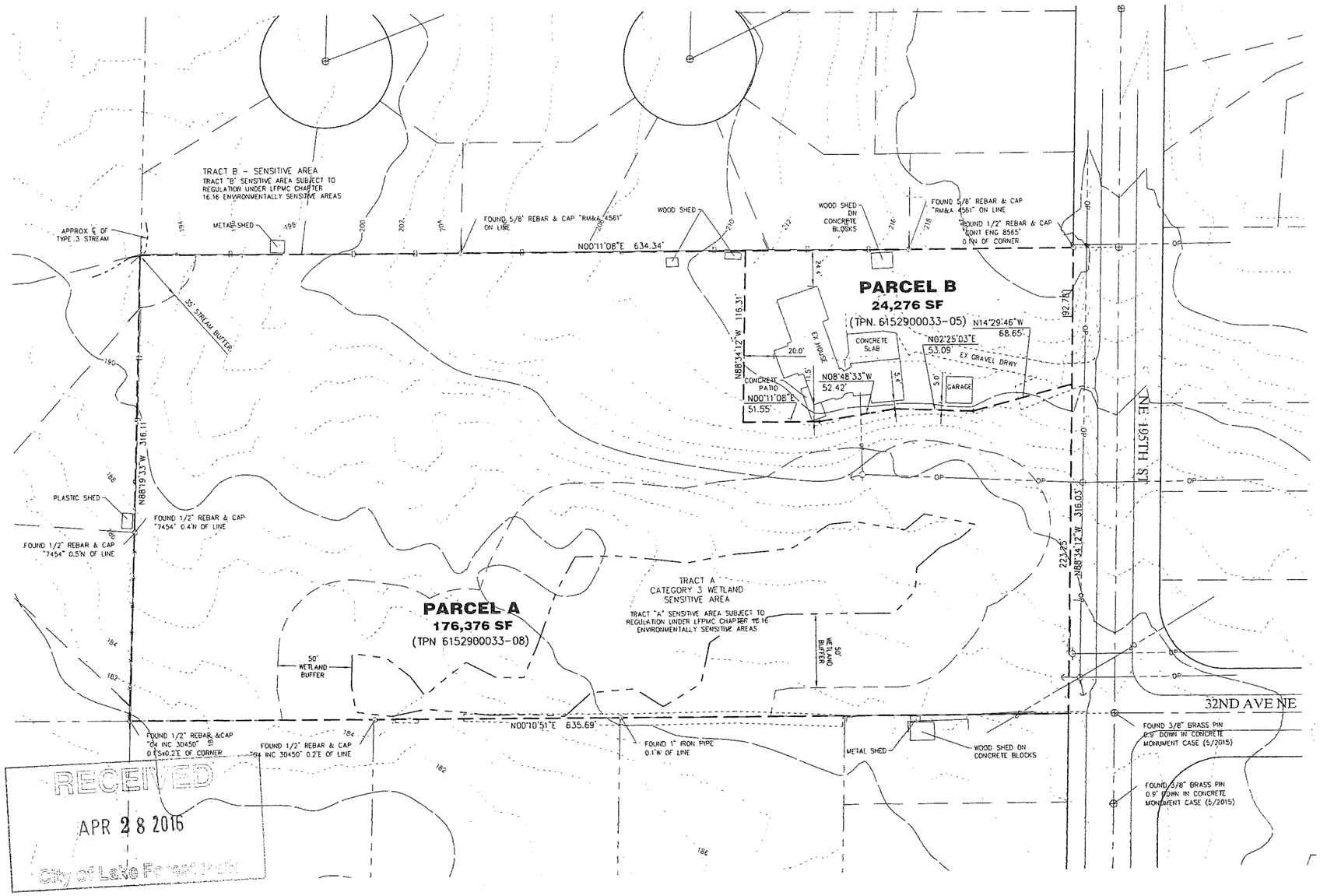

RECEIVED
APR 28 2016
City of Lake Forest Park

NORTH

0 20 40 80

1"=40'

LEGAL DESCRIPTION:

PARCEL A OF LAKE FOREST PARK BOUNDARY LINE ADJUSTMENT NUMBER 2015-LL-0004, AS RECORDED IN KING COUNTY UNDER AFN 20151029000014, IN BOOK 332 OF SURVEYS AT PAGE 119, RECORDS OF KING COUNTY, WASHINGTON.

DEVELOPMENT DATA:

OWNER / APPLICANT

PLATS FINANCIAL GROUP, LLC
720 CEDAR AVE SUITE C
MARYSVILLE, WASHINGTON 98270
CONTACT: TAGE NICKERSON
PH: 425.508.3317
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ENGINEER / SURVEYOR

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EVERETT, WASHINGTON 98201
CONTACT: JACK MOLVER, PE
PH: 425.405.1504
E-MAIL: jnm@deainc.com

EXISTING CONDITIONS

LABOSIERRE SHORT PLAT

PLATS FINANCIAL GROUP
KING COUNTY, WASHINGTON

DAVID EVANS AND ASSOCIATES INC.
1620 W. Marine View Drive, Suite 200
Everett Washington 98201
Phone: 425.259.4099

REVISIONS: APPD.

DATE: APRIL, 2016
DESIGN: JNM
DRAWN: CLK
CHECKED: JNM
REVISION NUMBER:

SCALE: 1"=40'

PROJECT NUMBER:
PLFG00000002

DRAWING FILE:
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SHEET NO.
PR2
OF 4

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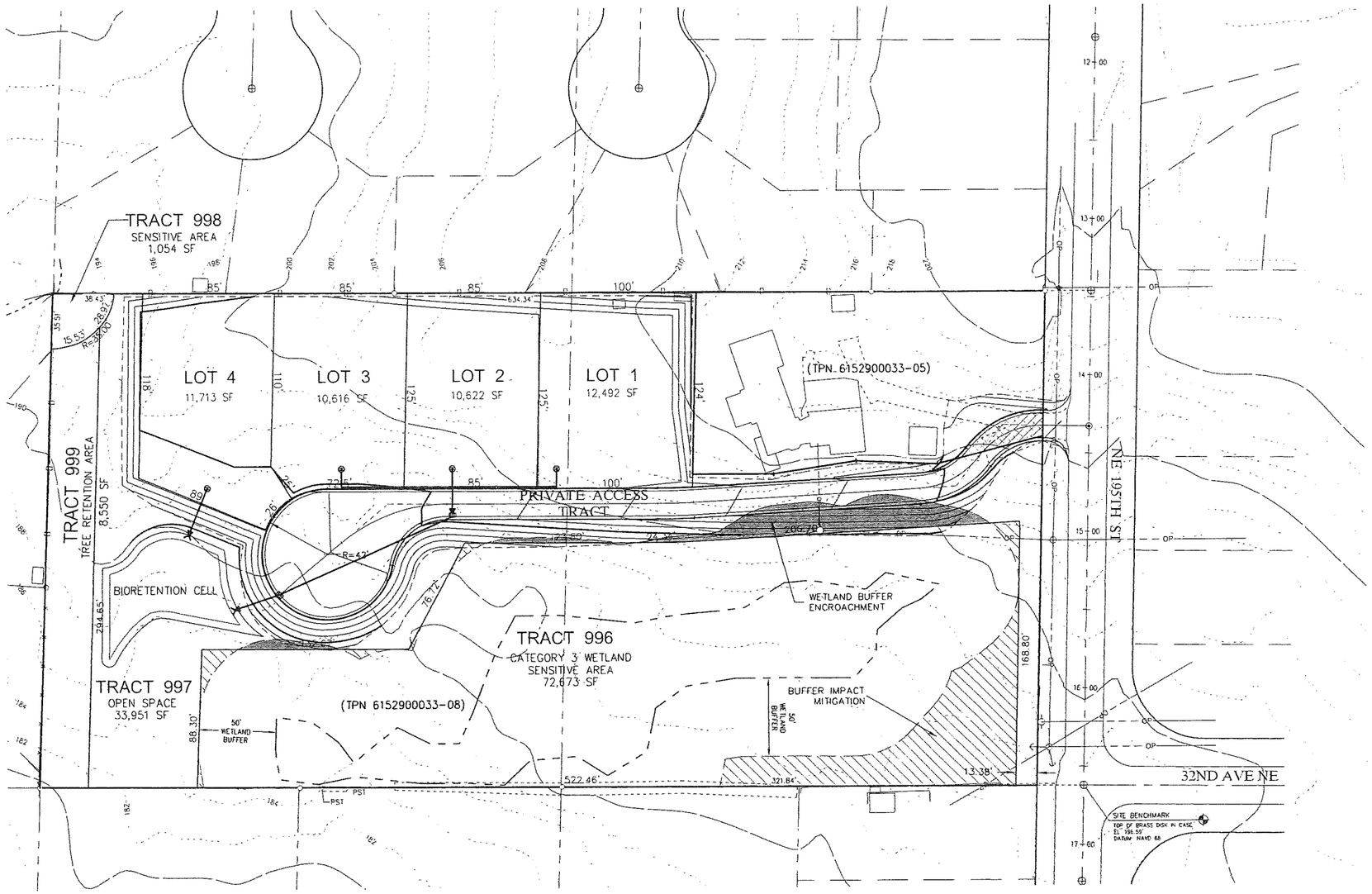
Save Date: 4/14/2016 3:58 PM By: April File: P:\PP\PLFG00000002\04400\CAD\EC\SHEETS\ec-PR-002-PLFG0002.dwg

A PORTION OF THE SE 1/4 OF SECTION 4, T 26 N, R 4 E, WM



NORTH

0 20 40 80

1"=40'

LEGAL DESCRIPTION:

PARCEL A OF LAKE FOREST PARK BOUNDARY LINE ADJUSTMENT NUMBER 2015-LL-0004, AS RECORDED IN KING COUNTY UNDER AFN 2015102900014, IN BOOK 332 OF SURVEYS AT PAGE 119, RECORDS OF KING COUNTY, WASHINGTON.

DEVELOPMENT DATA:

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EVERETT, WASHINGTON 98201
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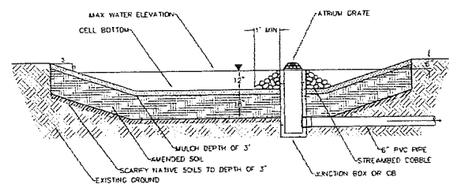
PH: 425.405.1504
E-MAIL: jnm@deainc.com

BUFFER AVERAGING CALCULATIONS

BUFFER ADDED = 8,249 SF
BUFFER SUBTRACTED = 3,544 SF



SECTION – TYPICAL BIORETENTION CELL

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APR 28 2016
City of Lake Forest Park

GRADING AND DRAINAGE PLAN

LABOSIERRE SHORT PLAT

PLATS FINANCIAL GROUP
KING COUNTY, WASHINGTON

DAVID EVANS AND ASSOCIATES INC.
1620 W. Marine View Drive, Suite 200
Everett Washington 98201
Phone: 425.259.4099

REVISIONS: APPD.

DATE: APRIL, 2016
DESIGN: JNM
DRAWN: CLK
CHECKED: JNM
REVISION NUMBER:

SCALE: 1"=40'

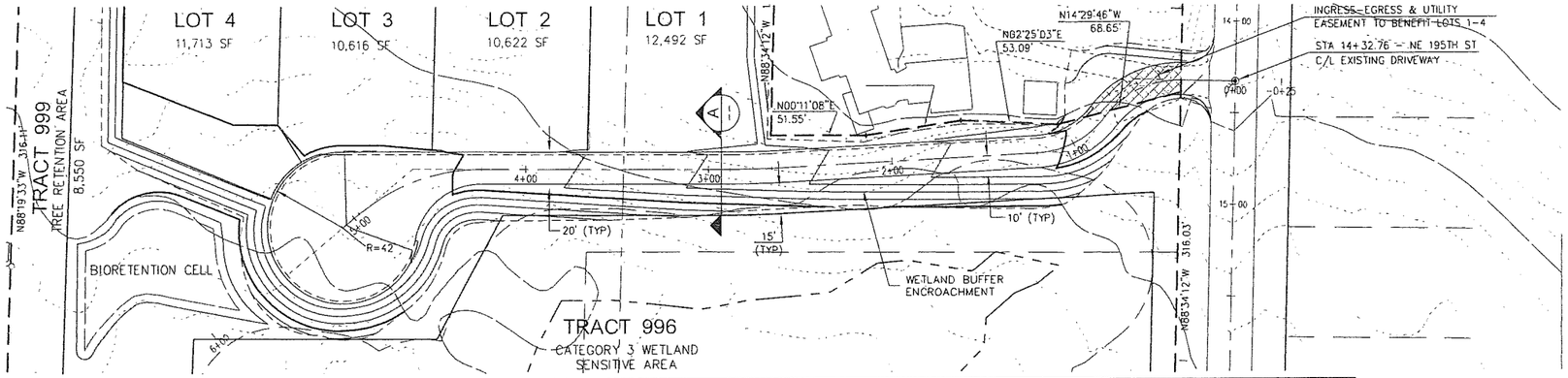
PROJECT NUMBER:
PLFG00000002

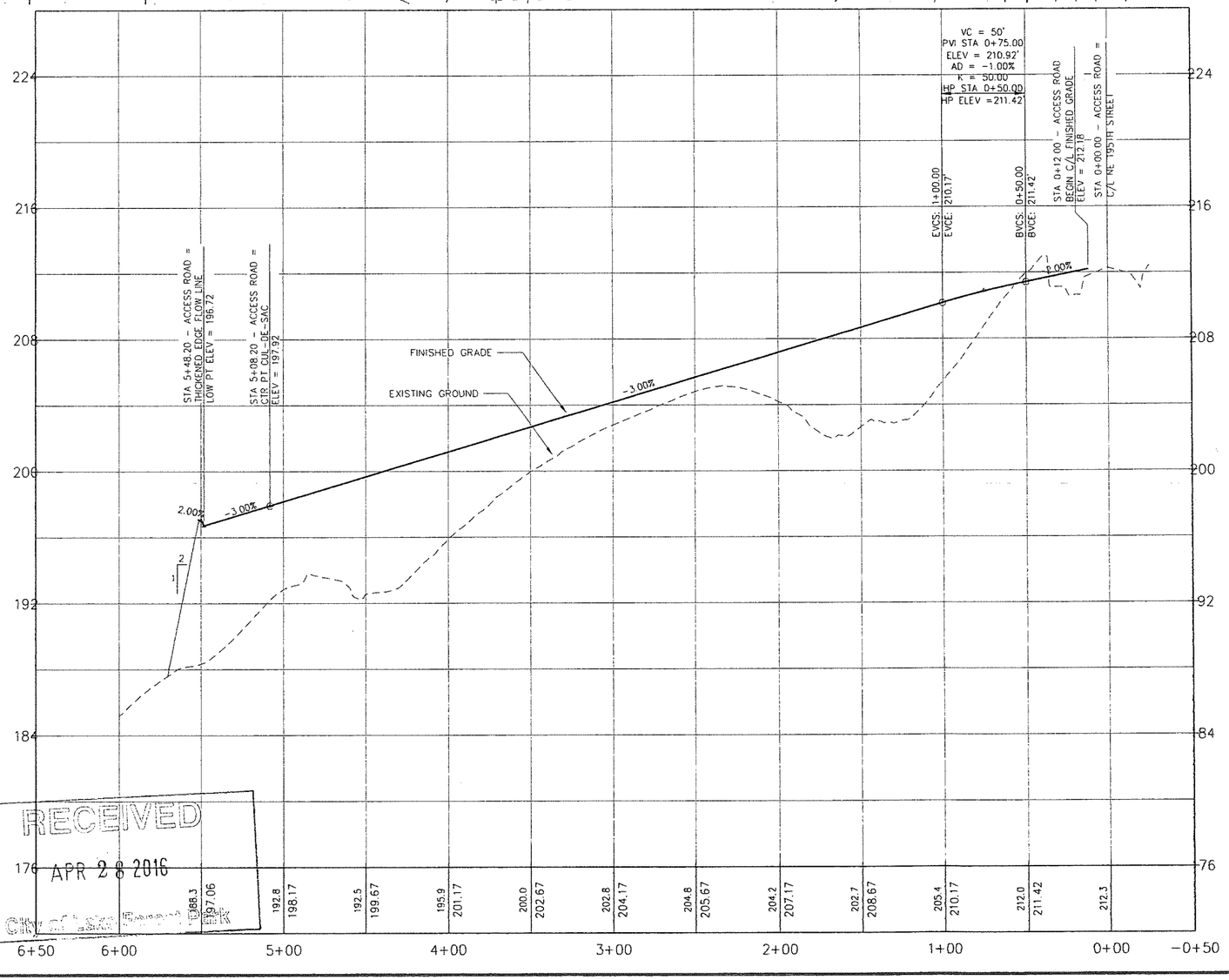
DRAWING FILE:
Ec-PR-003-PLFG0002.dwg

SHEET NO.
PR3
OF 4

Plot Date: 4/19/2016 4:30 PM By: April Coleman
Save Date: 4/14/2016 3:58 PM By: Apdc File: P:\PLFG00000002\0400CAD\EC\SHEETS\ec-PR-003-PLFG0002.dwg

A PORTION OF THE SE 1/4 OF SECTION 4, T 26 N, R 4 E, WM





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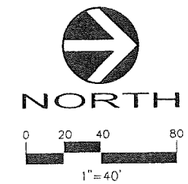
APR 28 2016
City of Lake Forest Park



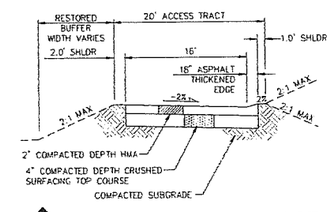
DEVELOPMENT DATA:

OWNER / APPLICANT

PLATS FINANCIAL GROUP, LLC
720 CEDAR AVE SUITE C
MARYSVILLE, WASHINGTON 98270
CONTACT: TAGE NICKERSON
PH: 425.508.3317
E-MAIL: tage@platsplus.com

ENGINEER / SURVEYOR

DAVID EVANS & ASSOCIATES INC
1620 W MARINE VIEW DRIVE SUITE 200
EVERETT, WASHINGTON 98201
CONTACT: JACK MOLVER, PE
PH: 425.405.1504
E-MAIL: jnm@deainc.com



A PRIVATE ACCESS TRACT
NO SCALE

PRELIMINARY ACCESS ROAD PLAN & PROFILE

LABOSIERRE SHORT PLAT

PLATS FINANCIAL GROUP
KING COUNTY, WASHINGTON

DAVID EVANS AND ASSOCIATES INC.
1620 W. Marine View Drive, Suite 200
Everett Washington 98201
Phone: 425.259.4099

REVISIONS: APPD.

DATE: APRIL, 2016
DESIGN: JNM
DRAWN: CLK
CHECKED: JNS
REVISION NUMBER:

SCALE: 1"=40'

PROJECT NUMBER:
PLFG00000002

DRAWING FILE:
Ec-PR-004-PLFG0002.dwg

SHEET NO.
PR4
OF 4

Plot Date: 4/19/2016 4:31 PM By: April Coleman
Save Date: 4/14/2016 3:58 PM By: Apdc File: P:\PLFG00000002\0400CAD\EC\SHEETS\ec-PR-004-PLFG0002.dwg