

Sharp Electronics Corporation

PRELIMINARY WETLAND AND HABITAT ASSESSMENT

5700 NW Pacific Rim Blvd.
Camas, Washington



Prepared for:

Sharp Electronics Corporation
5700 NW Pacific Rim Blvd.
Camas, WA 98607

Prepared by:

The Resource Company, Inc.
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Vancouver, WA 98660
(360) 693-4555

August 28, 2013



PRELIMINART WETLAND AND HABITAT ASSESSMENT

Project/Applicant: Sharp Electronics Corporation
Location: 5700 NW Pacific Rim Blvd, Camas, WA
Legal Description: SE ¼ of Section 05, T01N, R03E, W. M.; Clark County
Tax ID No.: 125651-000
Zoning: LI/BP
ComPlan: LI/BP
Project Type: Unknown
Assessment by: Kevin Grosz, P.W.S.
Site Visit: August 07& 23, 2013
Report Date: August 28, 2013

INTRODUCTION

This report details the results of a preliminary wetland and habitat assessment conducted for Sharp Electronics Corporation, Camas, Washington. The study site (approx. 118 acres) is located at 5700 NW Pacific Rim Boulevard (Fig. 1). This report identifies the extent of any sensitive lands found within the study area as defined by the City of Camas Critical Areas Ordinance (CCAO – 16.51) – Wetlands (16.53) and Fish and Wildlife Habitat Conservation Area (16.61) and Sensitive Areas and Open Space (SAOS) 18.31.

The study site currently contains two buildings and several parking lots that serve as the Sharp Electronics Corporation campus in the southeast portion of the property. The buildings and parking lots make up approximately one-fourth of the property. The remaining three-fourths of the property exists mostly as urban forestland dominated by big-leaf maple (*Acer macrophyllum*) and red alder (*Alnus rubra*). Blackberry (*Rubus* spp.) occurs throughout the project area. Remnants of an old fruit orchard occur on portions of the property. The property slopes moderately to steeply from south to north as shown in Figure 2. Through the course of the preliminary assessment four potential wetlands were identified within the project area. In addition, the site contains “significant trees” as defined under CMC 18.03.050.

BASELINE CONDITIONS

The project area is located within Water Resources Inventory Area (WRIA) 28. WRIA 28 is located in Southwest Washington, with boundaries that extend to the western margins of the Wind River to the east, the Columbia River to the south, and the East Fork Lewis River to the north. The inventory area includes the south and eastern portions of Clark County and southwestern Skamania County.

The project area is located within the Lacamas Creek watershed. The Lacamas Creek watershed area is approximately 67 square miles in size, its headwaters are located in forestland on private lands and in the Yacolt Burn State Forest. From its headwaters near Larch Mountain, the stream flows southwest for 11.8 miles, then turns and flows in a southeasterly direction for 10.5 miles

until its confluence with the Washougal River. The land use in the watershed consists of a multitude of different uses, including forestry, agriculture, and residential.

WETLANDS (16.530)

The wetland assessment was conducted according to the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region (USACE, 2010) hereafter, referred to as the manual. According to the manual, jurisdictional wetlands are defined as:

Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

The manual uses three parameters in making wetland determinations: hydrophytic vegetation, hydric soils and wetland hydrology. Except in certain situations defined in the manual, evidence of a minimum of one positive indicator from each parameter (hydrology, soil, and vegetation) must be found in order to make a positive wetland determination.

FISH AND WILDLIFE HABITAT CONSERVATION AREAS (16.61)

The habitat assessment was conducted in accordance with the CCAO 16.61. The CCAO was enacted to designate and classify ecologically sensitive and hazardous areas and to protect these areas, their functions and values while allowing for some reasonable use of property. Identified fish and wildlife habitat conservation areas are to be preserved to the greatest extent possible. Any adverse impacts shall be mitigated so that there is no net loss of habitat functions or area. Regulated fish and wildlife habitat conservation areas include:

1. Areas with which State or Federally Designated Endangered, Threatened and Sensitive Species have a Primary Association. Field studies shall be conducted to determine the presence of these species within the study area.
2. State Priority Habitats and Areas Associated with State Priority Species. These areas are identified by Washington Department of Fish and Wildlife. A description of priority species and habitats is outlined in 16.61.010(3) of the CCAO.
3. Locally Important Habitats and Species – specifically Oregon White Oak and Camas Lily. Protection requirements for each of these species are outlined in 16.61.010(3)(a) for Oregon white oak and (b) for Camas lily.
4. Naturally occurring Ponds under 20-acres – these ponds and their submerged aquatic beds provide valuable fish and wildlife habitat.
5. Waters of the State – as defined by WAC 222-16-031
6. Bodies of water planted with game fish by a governmental or tribal entity
7. State Natural Area Preserves and Natural Resource Conservation Areas which are defined, established and managed by the Washington Department of Natural Resources.

SENITIVE AREAS AND OPEN SPACE (18.31)

According to Chapter 18.31.080, the City requires that to the extent practical, that existing healthy significant trees or preferably groups of significant trees be retained as undeveloped open space. Significant trees are defined under CMC 18.03.050 (environmental definitions) as: evergreen trees eight inches diameter breast height (dbh), and deciduous trees, other than red alder or cottonwood, 12 inches dbh.

REVIEW OF EXISTING INFORMATION

Prior to the on-site visit, a review was made of any existing information that would assist in conducting the wetland assessment. This included a review of aerial photos, Clark County Environmental Constraints Atlas, Clark County GIS Maps On-Line, National Wetland Inventory, Clark County Soil Survey, and Clark County Drainage maps.

The National Wetland Inventory (NWI) has not identified any wetlands within the study site. However, NWI maps are compiled from aerial photos and soil survey maps, and are not intended to represent the extent of jurisdictional wetlands.

The Clark County Soil Survey (Fig. 3) identifies the following soil mapping units within the subject parcel:

Dollar loam, 0 to 5 percent slopes (DoB). This soil is above the poorly drained McBee, coarse variant, soil and Hockinson and Cove soils, all of which occupy depressions. In a typical profile of Dollar loam, the surface layer is dark-brown loam about 6 inches thick. Below this is a friable heavy loam about 26 inches thick. It is dark reddish brown in the upper part and dark brown in the lower part. This soil is moderately well drained and is classified as a **nonhydryc** soil according to the Clark County hydric soils list.

Olympic clay loam, 3 to 8 percent slopes (OIB). This soil is on ridge tops and benches. It is similar to Olympic clay loam, 8 to 20 percent slopes, except that it is not so steep and the surface layer is generally 1 to 3 inches thicker. This soil is classified as a **nonhydryc** soil according to the Clark County hydric soils list.

Olympic clay loam, 8 to 20 percent slopes (OID). This soil is on rolling, strongly sloping mountain foot slopes and long straight side slopes below ridgetops. In a typical profile, the upper 7 inches is friable, dark reddish-brown clay loam; the next 12 inches is firm, reddish-brown heavy clay loam. This soil is well drained and moderately slowly permeable. This soil is classified as a **nonhydryc** soil according to the Clark County hydric soils list.

Olympic stony clay loam, 3 to 30 percent slopes (OmE). This soil is on ridgetops, on long side slopes, and short slopes along drainageways. It is similar to Olympic clay loam, 8 to 20 percent slopes, except that the surface layer is stony and the slope range is greater. This soil is classified as a **nonhydryc** soil according to the Clark County hydric soils list.

Powell silt loam, 0 to 8 percent slopes (PoB). This soil is on ridge tops, benches, and gently sloping side slopes that lead into valleys in the Prune Hill area. In most places, the surface layer is smooth and convex, and the slope is less than 6 percent. In a typical profile, the surface layer is dark-brown silt loam about 17 inches thick. Below the surface layer is friable, mottled, grayish-brown, and brown silt loam about 6 inches thick. The next layer is brittle and about 22 inches thick. The soil is moderately well drained. The subsoil is slowly permeable. It is classified as a **non-hydric soil** according to the Clark County hydric soils list.

Powell silt loam, 8 to 20 percent slopes (PoD). This soil is on long, smooth side slopes below ridges and at the foot slopes of steep areas. It is similar to Powell silt loam, 0 to 8 percent slopes, except that it is steeper and the surrounding surface layer is 1 to 3 inches thinner. It is classified as a **non-hydric soil** according to the Clark County hydric soils list.

Powell silt loam, 20 to 30 percent slopes (PoE). This soil is on long, smooth side slopes. It is similar to Powell silt loam, 0 to 8 percent slopes, except that it is steeper and the surface layer is 1 to 3 inches thinner. In about 10 percent of the acreage, the slope is more than 30 percent. Surface runoff is medium to rapid, and the erosion hazard is moderate to severe if the surface is left bare. It is classified as a **non-hydric soil** according to the Clark County hydric soils list.

RESULTS AND DISCUSSION

Field visits were conducted on August 3 and 23, 2013 to observe soils, vegetation, and hydrology conditions. In addition to the wetland investigation, the site was also inspected for critical areas regulated under CMC 16.61 and SAOS 18.31.080.

Potential Wetland Areas

The study site exists primarily has an urban forestland. Through the course of the preliminary assessment, four potential wetland areas were identified within the study area. Three occur on the northern portion of the property and one in the southwest corner of the site as shown in Figure 4. Descriptions of these areas are found below.

Vegetation in the three wetland areas on the northern portion of the site have an Oregon ash (*Fraxinus latifolia*), black cottonwood (*Populus balsamifera*), and red alder overstory. The shrub layer consists of red-osier dogwood (*Cornus alba*), Scouler willow (*Salix scouleriana*), vine maple (*Acer circinatum*) and rose (*Rosa* spp.). Ground cover is a predominantly blackberry, with small patches of slough sedge (*Carex obnupta*) and stinging nettle (*Urtica dioica*). Vegetation in the wetland area in the southwestern portion of the site consists of bird's-foot trefoil (*Lotus corniculatus*), bentgrass (*Agrostis* spp.), soft rush (*Juncus effusus*), and tall fescue (*Festuca arundinacea*). The soil in these areas was a very dark gray (10YR 3/1) to very dark grayish brown (10YR 3/2) with brightly colored concentrations indicating the movement of water in the soil column. No primary hydrology indicators were observed. Considering that there has been no recordable precipitation since June 20, 2013, the lack of wetland hydrology was expected.

The potential wetlands on this site were not rated according to Ecology's rating system for western Washington. However based on their small size, it is assumed that all four potential wetlands would rate as Category IV wetlands.

Fish & Wildlife Habitat Conservation Areas.

No fish and wildlife habitat areas as defined above were observed in the project area.

Sensitive Areas and Open Space

The site contains numerous coniferous and deciduous trees that meet the definition of significant as outlined in 18.03.050. A tree survey will need to be conducted to identify individual and groups of trees that meet this definition.

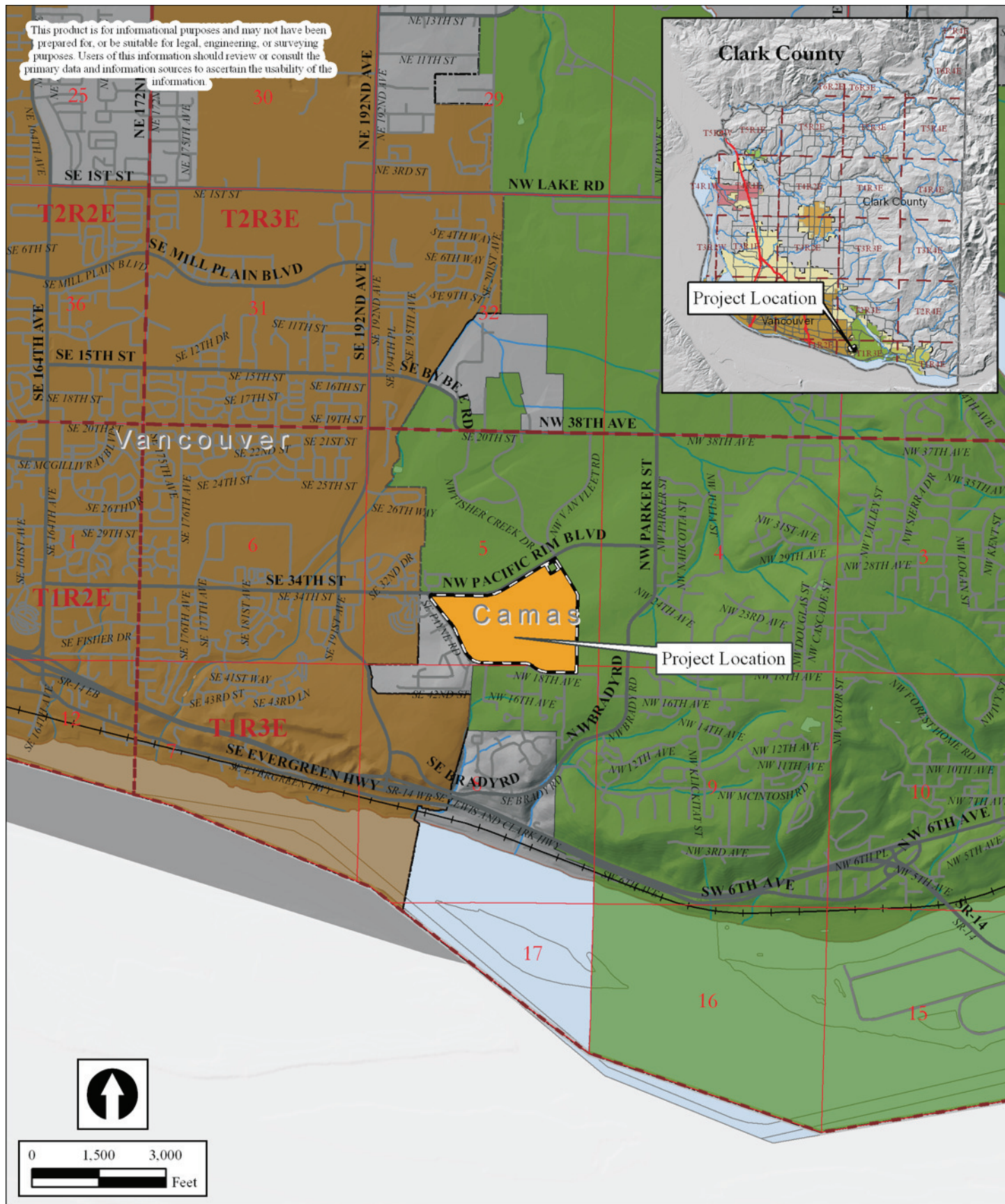
Upland Areas

The southern one-third on the property is predominantly open grassland that appears to be maintained on a regular basis. Blackberry thickets occur throughout this portion of the site. Portions of the study are remnant orchard areas that contain fruit trees (plums, apples, pears). The remainder of the site is forested. Vegetation in the forested portions of the site is dominated by big-leaf maple and red alder. Other trees that occur include black cottonwood, black locust, Douglas-fir (*Pseudotsuga menziesii*) and western red cedar (*Thuja plicata*). Shrubs consist of vine maple, hazelnut (*Corylus cornuta*), snowberry (*Symphoricarpos occidentalis*), osoberry (*Oemleria cerasiformis*), and hawthorne (*Crataegus monogyna*). Ground cover consists of blackberry, swordfern (*Polystichum munitum*) and stinging nettle.

REGULATORY ISSUES

Four potential wetlands and numerous significant trees occur on the property that are regulated under the City's CAO and SAOP. The wetlands appear to meet the criteria of Category IV wetlands which have a buffer width of 50 feet under high intensity land use. A ditch has been dug along the northern edge of the property that parallels Pacific Rim Boulevard. The portion of the ditch on the western edge of the site originates from a catch basin along SE Payne Road and directs water to the western culvert shown in Figure 4. The portion of the ditch east of this culvert intercepts surface water and diverts it to this culvert (Fig. 4). These ditches were not dug in wetlands and do not appear to drain wetlands, therefore they were not considered jurisdictional wetlands. More detailed studies will be needed to delineate and rate the wetlands and to identify the locations of the significant trees.

This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.



APPLICANT:
Mr. Casey O'Dell
Sharp Electronics Corporation
5700 NW Pacific Rim Blvd.
Camas, WA 98607

PURPOSE: Preliminary Wetland/Habitat Assessment

Project Location Map Sharp Electronics Corporation Camas, Washington

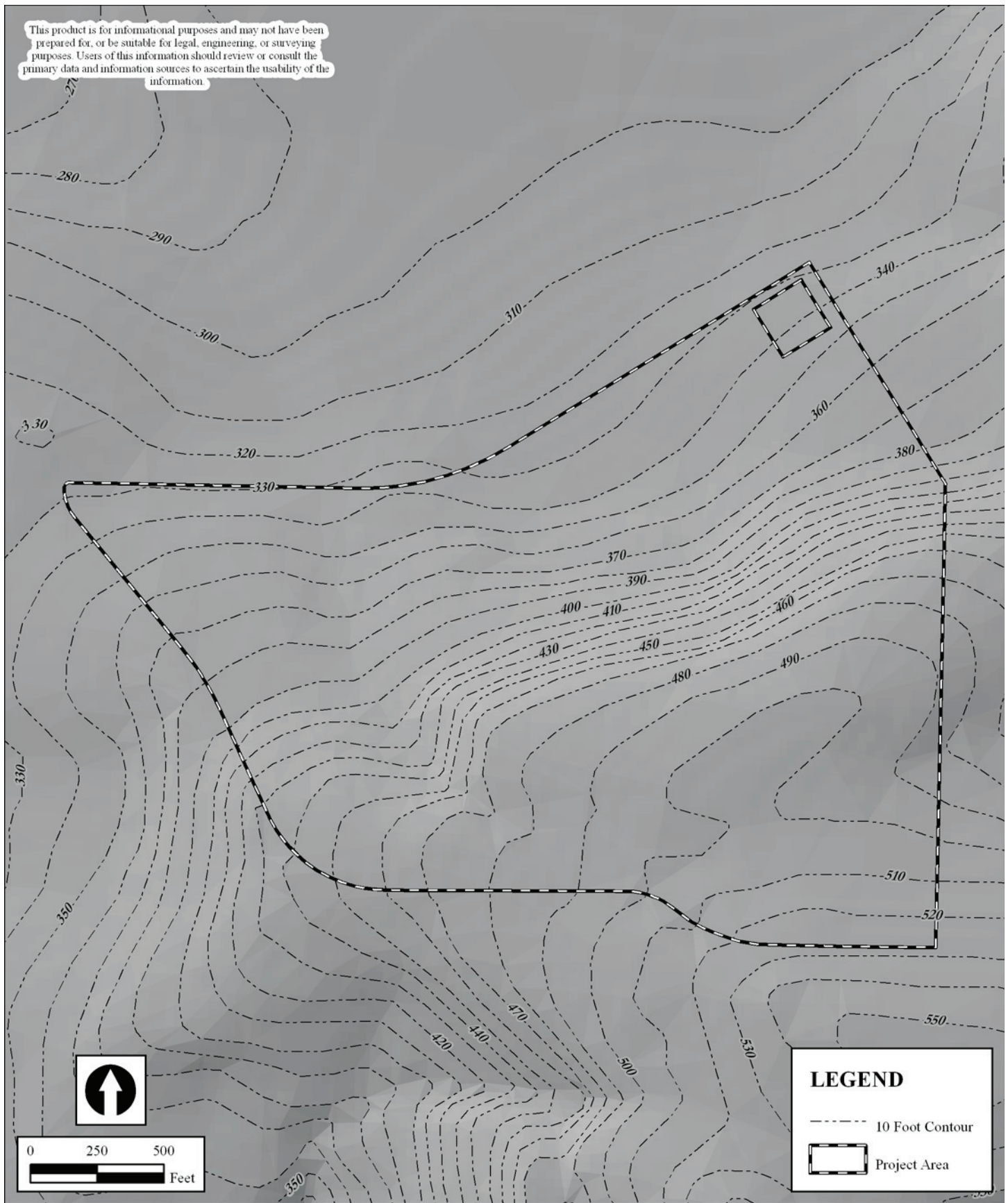


The Resource Company, Inc.
ENVIRONMENTAL SERVICES • GIS • HABITAT RESTORATION

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PROPOSED ACTIVITIES IN:
Lacamas Creek Watershed
LEGAL: S ½ of Section 5, T1N, R3E, W. M.,
NEAR: Camas, Washington
COUNTY: Clark County
DATE: August 28, 2013
Figure 1

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APPLICANT:
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PURPOSE: Preliminary Wetland/Habitat Assessment

Clark County LiDAR Topography
Sharp Electronics Corporation
Camas, Washington

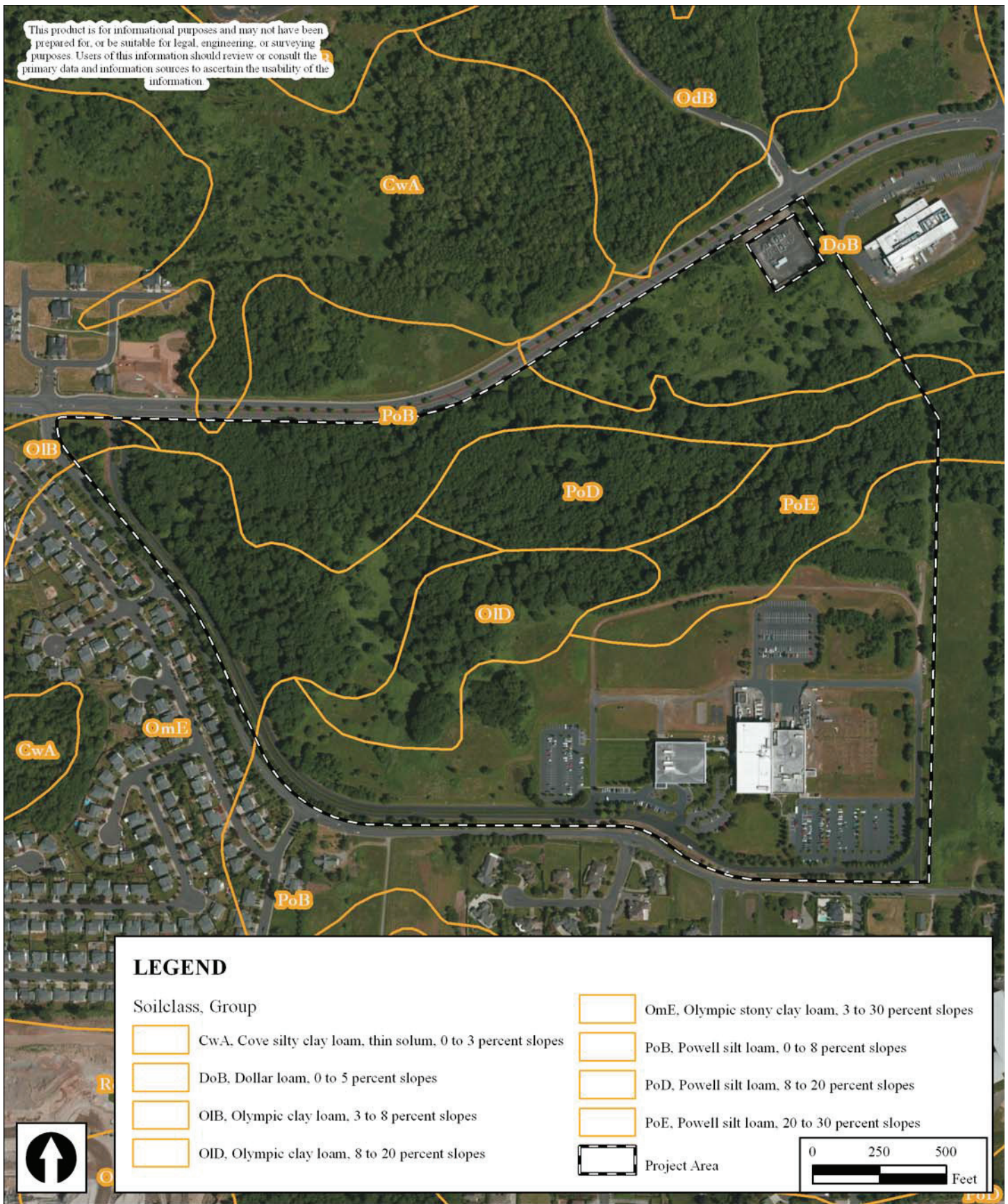


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Figure 2

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APPLICANT:
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PURPOSE: Preliminary Wetland/Habitat Assessment

Clark County Soil Survey Map Sharp Electronics Corporation Camas, Washington





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Figure 3

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LEGEND

-  Approximate Culvert Location
-  Approximate Ditch Location
-  Approximate Wetland Boundaries
-  Project Area

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Approximate Environmental Constraints
Sharp Electronics Corporation
Camas, Washington



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Figure 4



APPLICANT:
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PURPOSE: Preliminary Wetland/Habitat
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Project Photographs
Sharp Electronics Corporation
Camas, Washington



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Photo Sheet 1



APPLICANT:
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Project Photographs Sharp Corp. Project Camas, Washington



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Photo Sheet 2