

Cultural Resource Consultants, Inc.

TECHNICAL MEMO 1405F-1

DATE:	June 20, 2014
TO:	David Cline Shannon & Wilson, Inc.
FROM:	Margaret Berger, Project Archaeologist Glenn Hartmann, Principal Investigator
RE:	Preliminary Cultural Resources Assessment, Willow Creek Daylighting Project – Park Survey, Edmonds, Snohomish County, WA

The attached short report form constitutes our interim report for the above referenced project. No previously recorded cultural resources are in the project location, but there is potential for archaeological sites to be present. Archaeological monitoring of geotechnical explorations is recommended. Please contact me should you have any questions about our findings and/or recommendations.

CULTURAL RESOURCES REPORT COVER SHEET

Author:	Margaret Berger
Title of Report:	Preliminary Cultural Resources Asessment, Willow Creek Daylighting Project – Park Survey, Edmonds, Snohomish County, WA
Date of Report:	<u>June 20, 2014</u>
County(ies): <u>Snoho</u> i	mish Section: <u>26</u> Township: <u>27 N</u> Range: <u>3 E</u>
	Quad: Edmonds East, WA Acres: ca. 5
PDF of report subm	itted (REQUIRED) 🛛 Yes
Historic Property Inv	ventory Forms to be Approved Online? 🗌 Yes 🛛 No
Archaeological Site	(s)/Isolate(s) Found or Amended? 🗌 Yes 🔀 No
TCP(s) found? 🗌 Y	es 🖂 No
Replace a draft?	Yes 🖂 No
Satisfy a DAHP Arc	haeological Excavation Permit requirement? 🗌 Yes # 🛛 🛛 No
<u>Were Human Rema</u>	ins Found? 🗌 Yes DAHP Case # 🛛 No

DAHP Archaeological Site #:

- Submission of PDFs is required.
- Please be sure that any PDF submitted to DAHP has its cover sheet, figures, graphics, appendices, attachments, correspondence, etc., compiled into one single PDF file.
- Please check that the PDF displays correctly when opened.

Management Summary

On behalf of the City of Edmonds, Shannon & Wilson, Inc. requested that Cultural Resources Consultants, Inc. (CRC) prepare a cultural resources assessment for the Willow Creek Daylighting Project in Edmonds, Snohomish County, Washington. This report addresses potential impacts to cultural resources in the Park Survey portion of the project, where geotechnical testing will be conducted. This assessment was developed to identify any previously recorded archaeological or historic sites and evaluate the potential for the proposed work to affect cultural resources. All previously recorded archaeological and historic sites are located outside the proposed work area, but archaeological deposits may be preserved beneath fill or recent littoral drift deposits. Archaeological monitoring of the proposed geotechnical work is recommended to identify and minimize potential impacts to any as-yet unknown archaeological deposits.

1. Administrative Data

<u>Report Title:</u> Preliminary Cultural Resources Assessment, Willow Creek Daylighting Project – Park Survey, Edmonds, Snohomish County, WA

Author (s): Margaret Berger

Report Date: June 20, 2014

Location: The project is located at Marina Beach Park and the adjacent Off-Leash Dog Park Area on Point Edwards in Edmonds, Washington. This location is in the NW ¹/₄ of Section 26, Township 27 North, Range 3 East, Willamette Meridian (Figure 1).

USGS 7.5' Topographic Map (s): Edmonds East, WA (1981)

Total Area Involved: ca. 5 acres

Objective (Research Design): CRC developed this assessment as a component of preconstruction environmental review with the goal of ensuring that no cultural resources are disturbed during construction of the proposed project by determining the potential for any as yet unrecorded cultural resources within the project area. CRC's work was intended, in part, to assist in addressing state regulations pertaining to the identification and protection of cultural resources (e.g., RCW 27.44, RCW 27.53) and compliance with the National Environmental Policy Act (NEPA); the State Environmental Policy Act (SEPA); and Section 106 of the National Historic Preservation Act (NHPA), as amended, and implementing regulations (36 CFR 800). The Archaeological Sites and Resources Act (RCW 27.53) prohibits knowingly disturbing archaeological sites without a permit from the Washington State Department of Archaeology and Historic Preservation (DAHP), and the Indian Graves and Records Act (RCW 27.44) prohibits knowingly disturbing Native American or historic graves. Under Section 106, agencies involved in a federal undertaking must take into account the undertaking's potential effects to historic properties (36 CFR 800.16(l)(1)). Under SEPA and NEPA, agencies must consider the

environmental consequences of a proposal, including impacts to cultural resources, before taking action.

Assessment methods consisted of review of available project plans and related information provided by Shannon & Wilson, Inc., local environmental and cultural information, and historical maps. CRC also contacted cultural resources staff at Muckleshoot Indian Tribe, Snohomish Tribe, Snoqualmie Nation, Stillaguamish Tribe, Swinomish Tribe, Suquamish Tribe, and Tulalip Tribes to inquire about project-related cultural information or concerns (Attachment A). This assessment utilized a research design that considered previous studies, the magnitude and nature of the undertaking, the nature and extent of potential effects on historic properties, and the likely nature and location of historic properties within the area of potential effect (APE), as well as other applicable laws, standards, and guidelines (per 36CFR800.4 (b)(1)).

<u>Recorded Cultural Resources Present:</u> Yes [] No [x] No archaeological or historic sites have been previously recorded within the project.

<u>Project Background:</u> As a part of its Willow Creek Daylight Final Feasibility Study, the City of Edmonds proposes to conduct geotechnical testing (Figure 2). Two geotechnical exploration borings drilled to a maximum of 40 feet and six test pits excavated to a relatively shallow depth of no greater than 12 feet will be carried out to investigate the subsurface materials and test sediments for contamination in the Marina Beach Park area.

A truck mounted drill rig will drill in the dog-park area using hollow-stem auger techniques just south of the Marina Beach Park parking lot. Borings will collect disturbed samples with a split spoon for geotechnical tests every 2.5 feet range, for the first 20 feet, and then every 5 feet thereafter. The boring width will range from 8 inches to 10 inches wide and be backfilled in accordance with Washington Department of Ecology requirements. The test pits will be excavated with a standard rubber-tire backhoe along proposed nearshore channel alignments and across the beach profile. Pits are expected to be 4 to 12 feet deep and with plan dimensions of about 4 feet wide by 10 feet long. Grab samples of subsurface materials and contaminants testing will be collected from the test pits. Test pits will be backfilled in accordance with Washington

For purposes of this assessment, the area of potential effects (APE) to cultural resources is understood to be the locations of the proposed actions as described above and depicted in Figures 1 and 2. All geotechnical testing will occur within this area.

2. Background Research

Background research was conducted in June 2014.

Archival Sources Checked:	
DAHP WISAARD	Recorded sites are not located in or adjacent to the project location.
Web Soil Survey	Soil unit mapped within the project in Urban Land (USDA NRCS 2014).
Library	Various historical, archaeological, and ethnographic references at the Seattle Public Library and in CRC's library.

Environmental and cultural context information for this project is derived from relevant published reports, articles, and books (e.g., Cameron 2005; Nelson 1990; Suttles and Lane 1990;); historical maps and documents (e.g., USCS 1872; USSG 1860); geological and soils surveys (e.g., USDA NRCS 2014; WA DNR 2014); ethnographic accounts (e.g., Snyder 1968; Waterman ca. 1920, 2001); and archaeological reports (e.g., Bard and McClintock 1996; Shantry et al. 2011) in the local area. The following discussion of project area geology, archaeology, history, and ethnography incorporates context information from CRC's prior work in the Edmonds area by reference (e.g., Kelly 2012).

Environmental Context: The project area is geographically situated within the Willamette-Puget Lowland physiographic province, a province that is characterized by the wide "trough" between the Coast and Cascade Ranges (McKee 1972:290). The project is within the *Tsuga heterophylla* (Western Hemlock) vegetation zone typical of much of lowland western Washington (Franklin and Dyrness 1973). Native plants in this zone include dense forests of western hemlock, western red cedar, and Douglas fir with dense understory of Oregon grape, salal, snowberry, and sword fern. Vegetation on the upland part of the project consists of lawn grass and other plantings; the beach is sandy to cobbly and vegetation includes eelgrass and algae. The project is on the eastern shoreline of Admiralty Inlet. Willow Creek flows through Edmonds Marsh and across the project area through a culvert into Admiralty Inlet.

The geomorphology of the project area was shaped in part by glacial events that took place during the Late Pleistocene following the advance of several glaciations that originated in Canada and extended between the Cascade and Olympic mountain ranges into the Puget Lowland (Downing 1983; Kruckeberg 1991). At the end of the Fraser Glaciation, glacial advance and retreat scoured and compacted underlying geology while meltwaters carved drainage channels and deposited till and outwash over the Puget Lowland (Booth et al. 2003; Thorson 1981). The interplay of Holocene climate change, sea level change, and seismic activity, along with related geomorphic processes such as stream incision, bluff erosion, and alluvial deposition, further shaped the regional landscape. In southern and central Puget Sound, sea levels began to rise rapidly after 8000 BP and then rates of increase slowed in the late Holocene. Sea level was within several meters of modern sea level by about 5000 BP and within one meter by about 1000 BP (Eronen et al. 1987). Stratigraphic markers of subduction-thrust earthquakes and the uplift, subsidence, and deformation that accompany them have been observed at multiple locations on Puget Sound (Troost and Stein 1995).

Nineteenth and twentieth century developments have altered the landscape of the project. Historically, Edmonds Marsh was a barrier or pocket estuary marsh with a sand spit (USCS 1872; USGS 1895; USSG 1860). The sand spit had formed due to longshore transport of sediments eroded from bluffs to the south (Downing 1983). Prior to placement of fill to support industrial and commercial development on the Edmonds waterfront, features of the marsh included the sand spit about .25 mile northeast of the project near what is now the central part of the Port of Edmonds Marina, as well as tidal channels, streams, a lagoon, and a wetland. Willow Creek historically meandered through the marsh, and was relocated to its current channel in the 1950s (CH2M HILL 2004:3.41).

The surface geologic unit mapped for the project location is Qf (artificial fill, including modified land) (WA DNR 2014). Minard (1983) maps this location as in an area of modified land, which occurs on the shoreline where land has been modified by cutting, filling, and riprapping, particularly in association with the railroad bed. In the project location, Minard (1983) notes that "the dock area at, and north of, Edwards point has been dredged and filled." The soil unit mapped in the project location is Urban Land (USDA NRCS 2014). This soil unit consists of consists of nearly level to gently sloping areas covered by streets, buildings, parking lots, and other structures that obscure or alter native soils (Debose and Klungland 1983).

Archaeological Context: Regional and local studies have provided an archaeological and historical synthesis of approximately the last 10,000 years of human occupation in western Washington (e.g. Larson and Lewarch 1995; Morgan 1999; Nelson 1990). Similar to other areas throughout the state, chronological land use sequences have been constructed for the northern Puget Sound (see Blukis Onat 1987).

Archaeological evidence suggests human occupation in the Puget Sound occurred following the last glacial retreat at the end of the Pleistocene, approximately 14,000 - 10,000 years ago. Changes to the landscape following deglaciation significantly influenced the spatial distribution of human activities, based on the availability of resources and the suitability of certain landforms for occupation. The earliest evidence of a human presence in the region, consisting primarily of a few chronologically diagnostic stone tools and flakes, indicates that humans colonized the Puget Sound shortly after the retreat of ice from the last glaciation at the end of the Pleistocene (Carlson 1990). Recently, a Paleoindian component was identified in stratified sediments at a site in Redmond on Bear Creek, a tributary of the Sammamish River (Kopperl et al. 2010), approximately 16 miles southeast of the project.

Archaeologists have identified an early period of occupation dated to between 9000 – 5000 BP (before present) based on broad similarities in lithic assemblages. Many of the early sites are associated with the Olcott Complex in Western Washington, which are contemporaneous with similar Cascade Phase sites identified east of the Cascade Mountains. Olcott sites have been defined partly by the shared distribution of laurel-leaf-shaped bifaces and upland or upper river terrace site locations (Miss and Campbell 1991; Morgan and Hartmann 1999; Nelson 1990). These sites are found on or near the ground surface of glacial landforms. The Olcott complex is believed to be representative of highly mobile hunter-gatherers who typically did not utilize marine resources (Carlson 1990), and several Olcott sites have been documented and studied throughout Western Washington and the Olympic Peninsula. Many Olcott sites have been identified in Snohomish County (see Miss and Campbell 1991), including the Olcott type-site (Kidd 1964).

After 5000 BP, archaeological evidence suggests a change in settlement patterns and subsistence economy in the region. From 5000 to 3000 BP an increasing number of tools were manufactured by grinding stone, and more antler and bone material was used for tool production. Living floors with evidence of hearths and structural supports suggesting more long-term site occupation are more common during this period in contrast to the Olcott Complex. On Puget Sound, evidence of task-specific, year-round, broad-based activities, including salmon and clam processing, woodworking, and basket and tool manufacture, date from approximately 4200 BP (Larson and Lewarch 1995).

Characteristic of the ethnographic pattern in Puget Sound, seasonal residence and logistical mobility, occurred from about 3000 BP. Organic materials, including basketry, wood and food stuffs, are more likely to be preserved in sites of this late pre-contact period, both in submerged, anaerobic sites and in sealed storage pits. Sites dating from this period represent specialized seasonal spring and summer fishing and root-gathering campsites and winter village locations. Sites of this type have been identified in the Puget Sound lowlands, typically located adjacent to, or near, rivers or marine transportation routes. Fish weirs and other permanent constructions are often associated with large occupation sites. Common artifact assemblages consist of a range of hunting, fishing and food processing tools, bone and shell implements and midden deposits. Similar economic and occupational trends persisted throughout the Puget Sound region until the arrival of European explorers. Beginning approximately two hundred years ago, relatively rapid social changes occurred under the pressures of acculturation. Contact between peoples of the Puget Sound region and those of Europe and the United States stimulated the local introduction and adoption of new technologies and political organization (Marino 1990; Suttles and Lane 1990).

Ethnographic Context: As previously discussed by Kelly (2012:4), the project is located within lands traditionally used by the Suquamish tribe, a Southern Lushootseed-speaking southern Coast Salish group whose territory centered on Kitsap Peninsula, Bainbridge Island, and Whidbey Island, with fishing, gathering, and other traditional use areas also including marine waters and coastal areas of Puget Sound (Lane 1975a, 1975b; Ruby and Brown 1992:226; Smith 1940; Spier 1936:34; Suttles and Lane 1990:Figure 1). Precontact settlements were often located on major waterways, heads of bays, or inlets, and people practiced a seasonal subsistence economy that included hunting, fishing, and plant food horticulture. In the winter, people lived at large permanent village settlements and they spent the summer hunting, fishing, and gathering at specialized, temporary camps located near food resources. There was an abundance of plant and animal resources available in estuarine and marine environments in the region. A combination of fish, shellfish, marine mammals, waterfowl, game, roots, and berries served as a rich, diverse, and relatively reliable resource base (Suttles and Lane 1990:489).

Ethnographers (Smith 1940, 1941; Snyder 1968; Spier 1936; Waterman ca. 1920, 2001) gathered locations of Suquamish villages and names for resource areas, water bodies, and other landscape features from informants. One ethnographically recorded place name is associated with Point Edwards, *Stu^ubus*, translated as "like a man; face of a man" (Waterman 2001:55). A small creek just north of Edmonds was called S^3baL , "a person undergoing the ministrations of a shaman; a patient" (Waterman 2001:55). Toponyms were also recorded for landforms on the shoreline north and south of Edmonds (Waterman 2001:Map 5.1).

<u>Historic Context:</u> Early Euro-American settlement of Snohomish County began on the heels of the Donation Land Claim Act of 1850. In 1853, the United States organized Washington Territory and appointed Isaac I. Stevens as its governor. Following several years of conflict, the Point Elliot Treaty was signed at Mukilteo on January 22, 1855. The treaty called for cession of lands to the United States and the maintenance of fishing rights and annuities, as well as the concentration of Indian people living in western Washington upon reservation lands (Marino 1990). The Suquamish, the Tulalip, and many other neighboring tribes were forced to abandon most of their Northern Puget Sound villages and relocate to reservations. The treaty dissolved Indian title to their traditional and accustomed lands and by 1855-1856 the federal government used military force to contain Indian people dissatisfied with the poor quality of reservation lands.

The logging industry was attracted to the project area by the great timber potential offered by coastal forests of cedar (Whitfield 1926). Euro-American settlement in the Edmonds area began in the 1860s but remained sparse until the 1880s. The town of Edmonds was platted in 1884 by George Brackett, who was in the logging business and had purchased land there in 1876 (LeWarne 2008). Early commercial and industrial developments were located on the waterfront north of the current project, and included a store, a mill, and a wharf (LeWarne 2008). The railroad corridor that passes east of the project has been in use since the late nineteenth century, with the Great Northern Railroad reaching Edmonds in 1891 (Cameron 2005:106-108; O'Donnell 1993).

By the early twentieth century, three mills were in operation on the Edmonds waterfront north of the project, near the ferry terminal and the north side of the Marina (Sanborn Map Company 1909). The Washington Steel & Bolt Co. and Edmonds Elec. Light & Power Co. were the structures nearest to the project at the time, situated west of the end of Walnut Street between a saltwater pond and rail spur to the east and the shoreline to the west. By 1926, the saltwater pond had been filled and the former Washington Steel & Bolt and Edmonds Elec. Light & Power buildings were vacant (Sanborn Map Company 1926, 1932). The cedar shingle mills yielded to the Union Oil Company of California's fuel terminal as the dominant industrial activity in the area in the middle twentieth century. This period also saw increased commercial development and construction of the Port of Edmonds' Marina north of the project.

Land Use History: Nineteenth century maps reviewed in this assessment did not reveal the locations of any buildings, trails, villages, or other cultural features within or adjacent to the project (USCS 1872; USGS 1895, 1897; USSG 1860). The General Land Office (GLO) conducted its cadastral survey of the area in the late 1850s (United States Surveyor General [USSG] 1860). This early map of the project area shows a stream flowing west through Edmonds Marsh and curving to the north-northeast before draining into Admiralty Inlet about .25 mile northeast of the project location (USSG 1860) (Figure 3). The Coast Survey chart from the early 1870s shows the project location as predominantly on tideflats with the eastern edge in saltwater marsh (USCS 1872) (Figure 4). A spit was present at the mouth of the stream on the shoreline northeast of the project. According to an online search of GLO land records on file at the Bureau of Land Management, land in the Marina Beach Park vicinity was deeded to James C. Purcell

(Accession/Serial No. WAOAA 076459, Homestead Entry patent, 79 acres in $N\frac{1}{2}$ of $NW\frac{1}{4}$ and $NW\frac{1}{4}$ of $NE\frac{1}{4}$, S. 26, T. 27 N., R. 3 E., November 20, 1880) (BLM 2014).

Early USGS maps show the project location among "cut areas, not restocking," indicating that it had already been logged (USGS 1897). By 1910, lands containing the project were owned by F. R. Atkins, with smaller tracts to the north owned by Island Lime Company, Invincible Rail Joint Co., and the Edmonds Chamber of Commerce (Anderson Map Company 1910). Sanborn maps were reviewed but did not include coverage of the project location (Sanborn Map company 1909, 1926, 1932).

Unocal operated its Edmonds fuel station from 1923 to 1991, with fuel arriving via a "fuel dock that was located underneath the south parking lot at today's Edmonds Marina Beach Park" (Shannon & Wilson 2013:7). By 1934, Union Oil Co. of California had acquired the project location (Kroll Map Company 1934). A 1936 map shows portions of the project as still owned by Union Oil Co. of California and one parcel owned by N. Alhadeft (Metsker 1936). A few years later, C. J. Burton owned the northern part of the project location and Union Oil owned the southern part, with property lines roughly corresponding to the border between Marina Beach Park and the Off-Leash Dog Area (Kroll Map Company 1943). By 1960, the Port of Edmonds had acquired the northern part of the project and Union Oil still owned the southern part (Kroll Map Company 1960).

Review of twentieth century topographic maps (USGS 1944, 1955, 1958, 1969, 1976) shows that configuration of the shoreline in Edmonds has been altered significantly since the mid-twentieth century, primarily through development of the Port of Edmonds Marina north of the project and the Unocal Pier, formerly within the project location. Historical aerial imagery of the project location shows that sediments accumulated on the nearshore in the project location between the former Unocal Pier and the Marina after the latter was constructed; prior to 1967, only a few shoals or sand bars appear to be present (Washington State Department of Ecology 2012).

<u>Prior Investigations:</u> Nine cultural resource studies within one mile from the current project are on file at DAHP (2014) (Table 1). The majority of recent investigations have been related to proposed transportation improvements including the Edmonds Crossing project (e.g., Bard and McClintock 1996; Juell 2006; Shantry et al. 2011). Assessment methods have included pedestrian surveys, documentation of historic structures, subsurface testing, and monitoring of construction excavations. None of these investigations have identified any cultural resources that would be affected by the current project.

One prior investigation included two test trenches in the Marina Beach Park area (Bard and McClintock 1996). Test trenches 15A and 15B were located south of the former Unocal Pier, which was evaluated for potential relocation of the Edmonds Ferry Terminal (Bard and McClintock 1996:Figure 2). Trench 15A encountered a thin layer of dark sand with roots from surface vegetation, unsorted sand and gravel from 1 to 6 ft below surface, a thin layer of fine sand, and coarse sand with decomposing wood and plant debris to the bottom of the pit at 7 ft below surface. Trench 15B contained coarse brown sand and gravel from 0 to 6 ft, a layer of fine sand from 6 to 7 ft, coarse sand from 7 to 8.5 ft, and peat from 8.5 to 9 ft (Bard and McClintock 1996:Appendix B). Excavation halted in the test trenches when sidewalls collapsed or they

became inundated with groundwater. In general, thick fill deposits were present. All of the test trenches were negative for archaeological material (Bard and McClintock 1996:18-19).

Only two archaeological sites have been recorded within a distance of one mile from the project (Table 2). Site 45SN310, located near the Deer Creek Hatchery access road, was identified as finely crushed mussel, barnacle and cockle shell that is visible in patches at the ground surface (Bard and McClintock 1996:6). Subsurface testing has not been conducted at this site and its significance has not been evaluated. Site 45SN574 was identified as a fill layer containing historic-era artifacts associated with the Great Northern Railroad's section foreman's house, water tower, and cabin. This site was discovered in test pits excavated by backhoe during an archaeological survey for proposed storm drain improvements at the Edmonds Rail Station (Shantry et al. 2011:1). Archaeological monitoring and testing were conducted to collect samples of archaeological material and document site stratigraphy. Based upon the results of these investigations, site 45SN574 was recommended eligible for the NRHP because it was considered to have the potential to provide significant information about the past, namely details about working class life on the Edmonds waterfront in the early twentieth century (Shantry et al. 2011:39).

Nine historic sites within approximately one mile from the project have been listed on the National Register of Historic Places (NRHP), Washington Heritage Register (WHR), and Edmonds Register of Historic Places (ERHP) (Table 3). The historic site nearest to the project is Brackett's Landing, located .7 mile northeast of the project. None of these historic properties would be affected by the proposed project.

<u>Archaeological Expectations:</u> The DAHP statewide predictive model uses environmental data about the locations of known archaeological sites to identify where previously unknown archaeological sites are more likely to be found. The model correlates locations of known archaeological to environmental data "to determine the probability that, under a particular set of environmental conditions, another location would be expected to contain an archaeological site (Kauhi and Markert 2009:2-3). Environmental data categories included in the model are elevation, slope, aspect, distance to water, geology, soils, and landforms. The model classifies the portion of the project waterward of the historical shoreline "Survey Contingent Upon Project Parameters: Low Risk," with the remainder of the project described as "Survey Highly Advised: Very High Risk" (DAHP 2014). Local archaeological and ethnographic contexts generally support these rankings.

Based on existing archaeological data for this area, the types of precontact archaeological materials that might be present here could potentially include lithic scatters, fire-cracked rock concentrations, shell middens, or other processing features, which could reflect a range of domestic, subsistence, and ceremonial activities. Habitation sites in region tend to be located on protected bays and on lakes and prairies from which year-round food resources and fresh water were accessible (Blukis Onat 1987). The project area was likely used for hunting, fishing, and collection of shellfish and plant resources. Camping or other occupation sites would be expected to occur on dry terrain elevated above the historical estuary. Historic-period archaeological deposits would likely be related to logging, milling, railroad, and oil terminal operations.

Geological and soils information for the project area suggest a lower potential for significant archaeological resources to be present as a result of historic-era alterations to the landscape (Minard 1983; Shannon & Wilson 2013; USDA NRCS 2014; WA DNR 2014). Dredging and filling associated with development of the Marina, railroad, and former Unocal facilities may have obscured, removed, or deeply buried archaeological deposits. Archaeological material could be preserved below the depth of recent littoral drift deposits, fill, or other historical modifications. Based upon the results of subsurface testing conducted previously in the eastern part of the project (Bard and McClintock 1996), fill deposits are expected to be up to 6 to 7 feet thick.

3. Results and Recommendations

Cultural Resources Identified: None.

<u>Project Conclusions, Findings and Recommendations:</u> Background research has not identified any archaeological or historic sites in the project location. However, the project location has the potential to contain as-yet unknown archaeological sites. Subsurface testing has not been conducted using had shovel and auger methods due to the anticipated thickness of fill. It is therefore recommended that archaeological monitoring be conducted during the proposed geotechnical borings and test pits. A monitoring and inadvertent discovery protocol is attached (Attachment B), outlining monitoring procedures and steps to follow in the event that cultural resources are found.

In the event that ground disturbing or other activities do result in the inadvertent discovery of archaeological deposits, work should be halted in the immediate area and contact made with the State Department of Archaeology and Historic Preservation (DAHP) in Olympia. Work should be halted until such time as further investigation and appropriate consultation is concluded. In the unlikely event of the inadvertent discovery of human remains, work should be immediately halted in the area, the discovery covered and secured against further disturbance, and contact effected with law enforcement personnel.

Attachments:

Figures Photographs

Other

graphs[x][x] Copies of project correspondence between CRC and cultural resources staff at
the Muckleshoot Indian Tribe, Snohomish Tribe, Snoqualmie Nation,
Stillaguamish Tribe, Swinomish Tribe, Suquamish Tribe, and Tulalip Tribes.
[x] Proposed monitoring and inadvertent discovery protocol.

4. References Cited

 $[\mathbf{X}]$

Anderson Map Company

1910 Snohomish County Township Atlas. Anderson Map Company, Seattle.

Blukis Onat, Astrida R.

1987 *Resource Protection Planning Process Identification of Prehistoric Archaeological Resources in the Northern Puget Sound Study Unit.* Submitted to the Washington Office of Archaeology and Historic Preservation, Olympia, Washington. BOAS, Inc., Seattle.

Booth, Derek B., Ralph A. Haugerud, and Kathy Goetz Troost

2003 The Geology of Puget Lowland Rivers. In *Restoration of Puget Sound Rivers*, edited by David R. Montgomery, Susan Bolton, Derek B. Booth, and Leslie Wall, pp. 14-45. University of Washington Press, Seattle.

Boyle, S.

2004 A Historic Survey of Downtown Edmonds. Prepared for the City of Edmonds & the Washington State Office of Archaeology and Historic Preservation, Olympia. BOLA Architecture + Planning, Seattle.

Bucknam, Robert C., Elizabeth Hemphill-Haley, and Estella B. Leopold

1992 Abrupt Uplift Within the Past 1700 Years at Southern Puget Sound, Washington. *Science* 258:1611-1614.

Bureau of Land Management (BLM)

2014 Land Patent Search – BLM GLO Records. Electronic resource, http://www.glorecords.blm.gov/PatentSearch, accessed June 18, 2014.

Cameron, David A. (editor)

2005 Snohomish County: An Illustrated History. Kelcema Books, LLC, Index, Washington

Carlson, R. L.

1990 Cultural Antecedents. In *Handbook of North American Indians, Volume 7: Northwest Coast*, pp. 60-69. Smithsonian Institution Press, Washington, D.C.

CH2M HILL

2004 SR 104, Edmonds Crossing, City of Edmonds, Snohomish County, Washington, Final Environmental Impact Statement and Final Section 4(f) Evaluation. Prepared for U.S. Department of Transportation Federal Highway Administration, Federal Transit Administration, Washington State Department of Transportation, and City of Edmonds. CH2M HILL, Bellevue, Washington.

Debose, Alfonso, and Michael W. Klungland

1983 *Soil Survey of Snohomish County Area, Washington.* United States Department of Agriculture, Soil Conservation Service, Washington, D.C. In cooperation with Washington State Department of Natural Resources and Washington State University Agriculture Research Center, Pullman, Washington.

Downing, John

1983 The Coast of Puget Sound. University of Washington Press, Seattle.

Eronen, Matti, Tuovi Kankainen, and Matsuo Tsukada

1987 Late Holocene Sea Level Record in a Core from the Puget Lowland, Washington. *Quaternary Research* 27:147-159.

Fox, Matt

2009 Google Earth Library, Historical T-Sheets. Electronic resource, http://www.gelib.com/wp-content/uploads/2009/tsheets_nl.kml, accessed June 17, 2014.

Franklin, Jerry F., and C. T. Dyrness

1973 *Natural Vegetation of Oregon and Washington*. USDA Forest Service, Pacific Northwest Forest and Range Experiment Station, General Technical Report PNW-8.

Google Inc.

2013 Google Earth (Version 7.1.2.2041) [Software] Available from http://www.google.com/earth/index.html, accessed June 17, 2014.

Johnson, L. E.

2011 City of Edmonds Historic Resources Survey 2011. Prepared for the City of Edmonds & the Washington State Department of Archaeology and Historic Preservation, Olympia. The Johnson Partnership, Seattle.

Juell, K. E.

2006 Archaeological Site Assessment of Sound Transit's Sounder: Everett-to-Seattle Commuter Rail System, King and Snohomish Counties, Washington. Prepared for Herrera Environmental Consultants, Seattle, and Sound Transit, Seattle. Northwest Archaeological Associates, Inc., Seattle.

Kelly, K. M.

2012 Cultural Resources Assessment for the 76th Avenue W and 212th Street SW Intersection Improvement Project, Edmonds, WA. Prepared for David Evans and Associates, Inc. Cultural Resource Consultants, Inc., Bainbridge Island, Washington.

Kidd, Robert S.

1964 A Synthesis of Western Washington Prehistory from the Perspective of Three Occupation Sites. Unpublished Master's thesis. Department of Anthropology, University of Washington, Seattle.

Kroll Map Company

- 1934 Atlas of Snohomish County. Kroll Map Company, Seattle.
- 1960 Atlas of Snohomish County. Kroll Map Company, Seattle.

Kruckeberg, Arthur R.

1991 The Natural History of Puget Sound County. University of Washington Press, Seattle.

Lane, B.

- 1975a *Identity, Treaty Status and Fisheries of the Tulalip Tribe of Indians*. Report prepared for the U.S. Department of the Interior and the Snoqualmie Tribe of Indians.
- 1975b *Identity and Treaty Status of the Duwamish Tribe of Indians*. Report prepared for the U.S. Department of the Interior and the Duwamish Tribe of Indians.

Larson, Lynn L., and Dennis E. Lewarch (editors)

1995 The Archaeology of West Point, Seattle, Washington: 4,000 Years of Hunter-Fisher-Gatherer Land Use in Southern Puget Sound. Larson Anthropological/Archaeological Services, Gig Harbor, Washington.

LeWarne, C.

2008 Brackett, George (1842-1927). Electronic resource, http://www.historylink.org/index.cfm?DisplayPage=output.cfm&file_id=8475, accessed June 18, 2014.

Marino, Cesare

1990 History of Western Washington Since 1846. *In Handbook of North American Indians, Vol. 7: Northwest Coast*, edited by Wayne Suttles, pp. 169-179. Smithsonian Institution Press, Washington, D.C.

McKee, Bates

1972 *Cascadia: The Geologic Evolution of the Pacific Northwest.* McGraw Hill Book Company, New York.

Metsker, Charles F.

1936 Metsker's Atlas of Snohomish County, Washington. Metsker Map Company, Tacoma, Washington.

Minard, J. P.

1983 Geologic map of the Edmonds East and part of the Edmonds West quadrangles, Washington. 1:24,000. Miscellaneous Field Studies Map MF-1541. USGS, Washington, D.C.

Miss, C. J., and S. K. Campbell

1991 Prehistoric Cultural Resources of Snohomish County, Washington. Submitted to Washington Office of Archaeology and Historic Preservation, Olympia. Northwest Archaeological Associates, Inc., Seattle.

Morgan, Vera E. (editor)

1999 The SR-101 Sequim Bypass Archaeological Project: Mid- to Late-Holocene Occupations on the Northern Olympic Peninsula, Clallam County, Washington. Eastern Washington University Reports in Archaeology and History 100-108. Archaeological and Historical Services, Eastern Washington University, Cheney, Washington. National Register of Historic Places (NRHP)

- 2002 How to Apply the National Register Criteria for Evaluation. *National Register Bulletin No. 15.* U.S. Department of the Interior, National Park Service, Washington, D.C. Electronic resource, http://www.nps.gov/history/nr/publications/ bulletins/nrb15/, accessed June 5, 2013.
- Nelson, Alan R., Samuel Y. Johnson, Ray E. Wells, Silvio K. Pezzopane, Harvey M. Kelsey, Brian L. Sherrod, Lee-Ann Bradley, Rich D. Koehler III, Robert C. Bucknam, Ralph Haugerud, and William T. Laprade
 - 2002 Field and Laboratory Data from an Earthquake History Study of the Toe Jam Hill Fault, Bainbridge Island, Washington. Open-File Report 02-0060. U.S. Geological Survey, Washington, D.C.

Nelson, Charles M.

1990 Prehistory of the Puget Sound Region. In *Northwest Coast, Handbook of North American Indians*, Volume 7, edited by W. Suttles, pp. 481-484. Smithsonian Institution, Washington, D.C.

Office of Archaeology and Historic Preservation (OAHP)

n.d. *Washington Heritage Register*. Publication on file at Washington State Department of Archaeology and Historic Preservation, Olympia.

Ruby, Robert H., and John A. Brown

1992 *A Guide to the Indian Tribes of the Pacific Northwest*. University of Oklahoma Press, Norman.

Sanborn Map Company

- 1909 Insurance Maps of Edmonds, Washington. Sanborn Map Company, New York.
- 1926 Insurance Maps of Edmonds, Washington. Sanborn Map Company, New York.
- 1932 Insurance Maps of Edmonds, Washington. Sanborn Map Company, New York.

Shannon & Wilson

2013 Willow Creek Daylighting Early Feasibility Study, Edmonds, Washington. Prepared for City of Edmonds Stormwater Engineering Program. Shannon & Wilson, Inc., Seattle.

Spier, Leslie

1936 *Tribal Distribution in Washington*. General Series in Anthropology, Number 3. George Banta Publishing, Menasha, Wisconsin.

Suttles, Wayne, and Barbara Lane

1990 Southern Coast Salish. In *Northwest Coast, Handbook of North American Indians*, Volume 7, edited by W. Suttles, pp. 485-502. Smithsonian Institution, Washington, D.C.

Swanton, John R.

1969 The Indian Tribes of North America. Smithsonian Institution Press, Washington, D.C.

Thorson, Robert M.

1981 Isostatic effects of the last glaciation in the Puget Lowland, Washington. U.S. Geological Survey, Open-file Report 81-370.

Troost, Kathy A. and Julie K. Stein

- 1995 Geology and Geoarchaeology of West Point. In *The Archaeology of West Point, Seattle, Washington: 4000 Years of Hunter-Fisher-Gatherer Land Use in Southern Puget Sound,* edited by L. L. Larson and D. E. Lewarch, pp. 2.1-2.77. Prepared for King County Department for Metropolitan Services. Larson Anthropological /Archaeological Services, Seattle, Washington.
- United States Coast Survey (USCS)
 - 1872 *Topographic Sheet 1389b, Admiralty Inlet, Possession Sound to Pt. Edmund, Wash. Ter.* 1:10,000 scale. J. S. Lawson, surveyor. U.S. Coast Survey, Washington, D.C.
- United States Department of Agriculture Natural Resources Conservation Service (USDA NRCS)
 - 2014 Web Soil Survey, Snohomish County Area, Washington. Electronic resource, http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx, accessed June 18, 2014.

United States Geological Survey (USGS)

- 1895 Snohomish. Washington 1:125,000 topographic quadrangles. USGS, Washington, D.C. On file at University of Washington Libraries, Map Collection.
- 1897 *Land Classification Sheet, Seattle Quadrangle, 1:125,000.* USGS, Washington, D.C. On file at University of Washington Libraries, Map Collection.
- 1944 Edmonds, Washington. 1:62,500. 15-x-15-Minute Series. USGS, Washington, D.C.
- 1955 Edmonds East Quadrangle, Washington. 1:24,000. 7.5-Minute Series. USGS, Washington, D.C.
- 1958 Edmonds, Washington. 1:62,500. 15-x-15-Minute Series. USGS, Washington, D.C.
- 1969 *Edmonds East Quadrangle, Washington.* 1:24,000. 7.5-Minute Series. USGS, Washington, D.C.
- 1976 Edmonds East Quadrangle, Washington. 1:24,000. 7.5-Minute Series. USGS, Washington, D.C.
- 1981 Edmonds East Quadrangle, Washington. 1:24,000. 7.5-Minute Series. USGS, Washington, D.C.
- 2011 US Topo *Edmonds East Quadrangle, Washington.* 1:24,000. 7.5-Minute Series. USGS, Washington, D.C.

United States Surveyor General (USSG)

1860 General Land Office Map, Township 27 North, Range 4 East, Willamette Meridian. Electronic document, http://www.blm.gov/or/landrecords/survey/yPlatView1_2.php?path=PWA&name=t270n 030e 001.jpg, accessed June 18, 2014. Washington State Department of Archaeology and Historic Preservation (DAHP)

- 2013 Survey and Inventory Standards: Washington State Standards for Cultural Resource Reporting. Electronic document, http://www.dahp.wa.gov/sites/default/files/External%20FINAL_0.pdf, accessed August 23, 2013.
- 2014 The Washington Information System for Architectural and Archaeological Records Data. Electronic resource, https://secureaccess.wa.gov/dahp/wisaard/, accessed June 13, 2014.

Washington State Department of Ecology

2012 Unocal Edmonds Bulk Fuel Terminal - Historic Air Photos. Electronic resource, https://fortress.wa.gov/ecy/gsp/DocViewer.ashx?did=6149, accessed June 18, 2014.

Washington State Department of Natural Resources (WA DNR)

2014 Washington Interactive Geologic Map. Division of Geology and Earth Resources – Washington's Geological Survey. Electronic resource, https://fortress.wa.gov/dnr/geology/, accessed June 18, 2014.

Waterman, T. T.

- ca. 1920 *Puget Sound Geography*. Manuscript No. 1864, National Anthropological Archives, Washington, D.C.
- 2001 *sda?da?* g^wel dibel lešucid ?acaciltalbix^w Puget Sound Geography. Vi Hilbert, Jay Miller, and Zalmai Zahir, contributing editors. Lushootseed Press, Federal Way, Washington.

Whitfield, William

1926 History of Snohomish County, Washington. Vol. 1. Pioneer Historical Publishing Company, Seattle

6. Limitations of this Assessment

No cultural resources study can wholly eliminate uncertainty regarding the potential for prehistoric sites, historic properties or traditional cultural properties to be associated with a project. The information presented in this report is based on professional opinions derived from our analysis and interpretation of available documents, records, literature, and information identified in this report, and on our field investigation and observations as described herein. Conclusions and recommendations presented apply to project conditions existing at the time of our study and those reasonably foreseeable. The data, conclusions, and interpretations in this report should not be construed as a warranty of subsurface conditions described in this report. They cannot necessarily apply to site changes of which CRC is not aware and has not had the opportunity to evaluate.

7. Figures and Tables

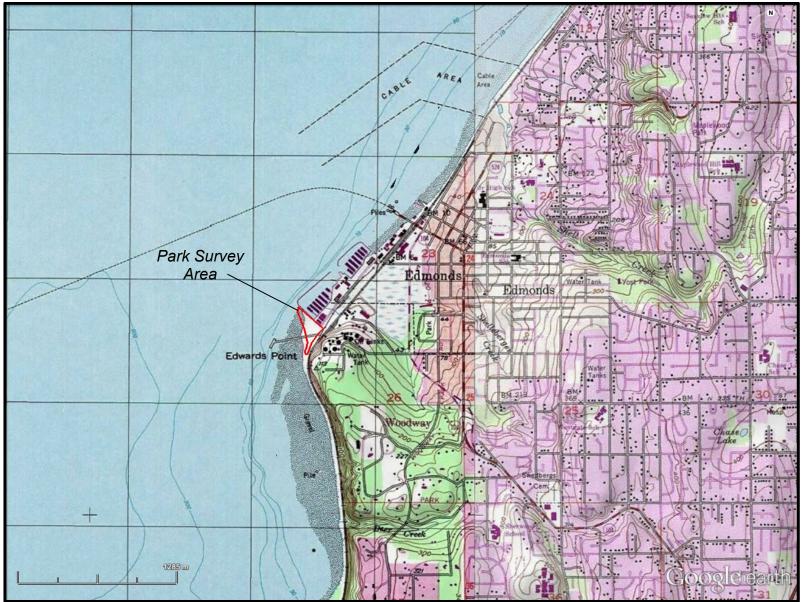


Figure 1. Project location marked on portion of Edmonds East, WA (USGS 1981) topographic quadrangle.

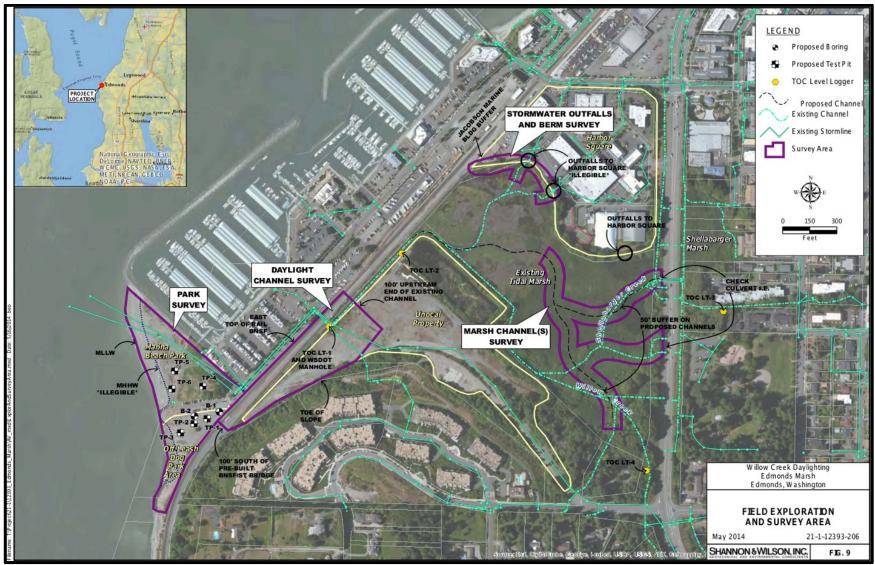


Figure 2. Project map provided by Shannon & Wilson. The area labeled "Park Survey" is addressed in this report.

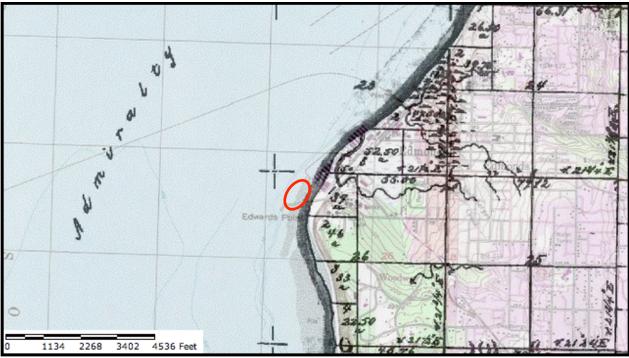


Figure 3. Project location marked on georeferenced cadastral survey map (DAHP 2014; USSG 1860).

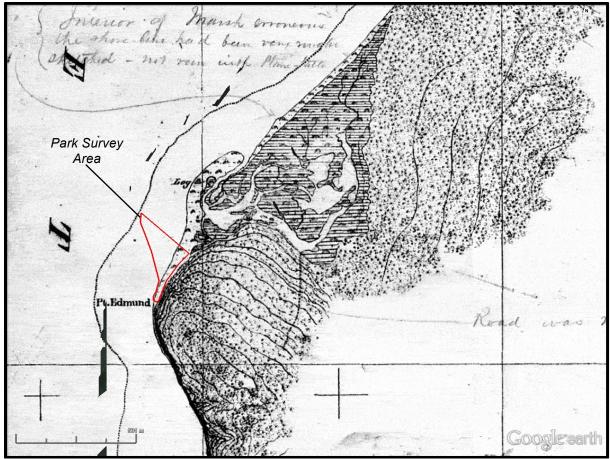


Figure 4. Project area marked on georeferenced historical topographic sheet (Fox 2009; USCS 1872).

Author	Date	resource surveys within one mi	Distance	Results
Tuthor	Datt	Thic	from Project	
Bard and McClintock		Edmonds Crossing Discipline Report Supplement, Presence Absence Testing for Archaeological Resources	Overlaps eastern end of project.	Pedestrian survey identified archaeological site 45SN310 at Deer Creek Fish Hatchery, east of the project. Subsurface testing north and east of the project did not identify any archaeological material, but archaeological monitoring recommended for construction in these areas.
Cox and Bard	1996	Draft The Unocal Edmonds Bulk Fuel Terminal A Determination of National Register Eligibility	Adjacent to east.	Conducted background research and field documentation to evaluate the former fuel terminal for NRHP eligibility. The site was considered representative of historical trends but was recommended not eligible because did not play a significant role, nor did it retain integrity adequate to convey any historical significance.
Demuth	1998	Historic, Cultural, and Archaeological Resources Assessment for Everett-to- Seattle Commuter Rail Project Environmental Impact Statement	Adjacent to east.	Provided cultural resources overview of rail corridor and station locations between Everett and Seattle, and evaluated commuter rail project alternatives for potential impacts to cultural resources. No archaeological or historic sites identified in the location of the current project.
Boyle	2004	A Historic Survey of Downtown Edmonds	Encompasses project.	Presented a historical overview of the City of Edmonds. Inventoried 83 historic buildings in the City of Edmonds. No historic sites inventoried in the current project. The nearest inventoried property was the Railroad Station at 201 Railroad Avenue.
Juell	2006	Archaeological Site Assessment of Sound Transit's Sounder: Everett-to- Seattle Commuter Rail System, King and Snohomish Counties, Washington	Adjacent to east.	Survey identified many areas of thick fill deposits, ballast, and steep side slopes; no further work recommended in these areas. Subsurface testing and/or monitoring of trench excavation were recommended in select locations where construction would reach native soils.
Rinck		Archaeological Investigations at the Edmonds Commuter Rail Station	.6 mile NE	Background research and subsurface testing were conducted to determine whether archaeological deposits would be affected by improvements to the rail station. Fill was present to a mean depth of 5.4 ft. Historic-era (ca. 1900-1957) archaeological material was found in a discrete layer in three test pits and later recorded as site 45SN574. Further testing was recommended to evaluate this deposit for potential NRHP eligibility.
Shong and Miss	2010	Results of Archaeological Monitoring for the Deer Creek Culvert Extension Project, Snohomish County, Washington	.5 mile S	Archaeological monitoring was conducted during construction of drainage improvements. Excavated trenches and sediments were examined but no archaeological material was found. Sediments encountered consisted of displaced glaciolacustrine material (i.e. landslide deposits) and dredge spoils. No further work recommended.

Table 1. Prior cultural resource surveys within one mile from the Marina Beach Park testing area.

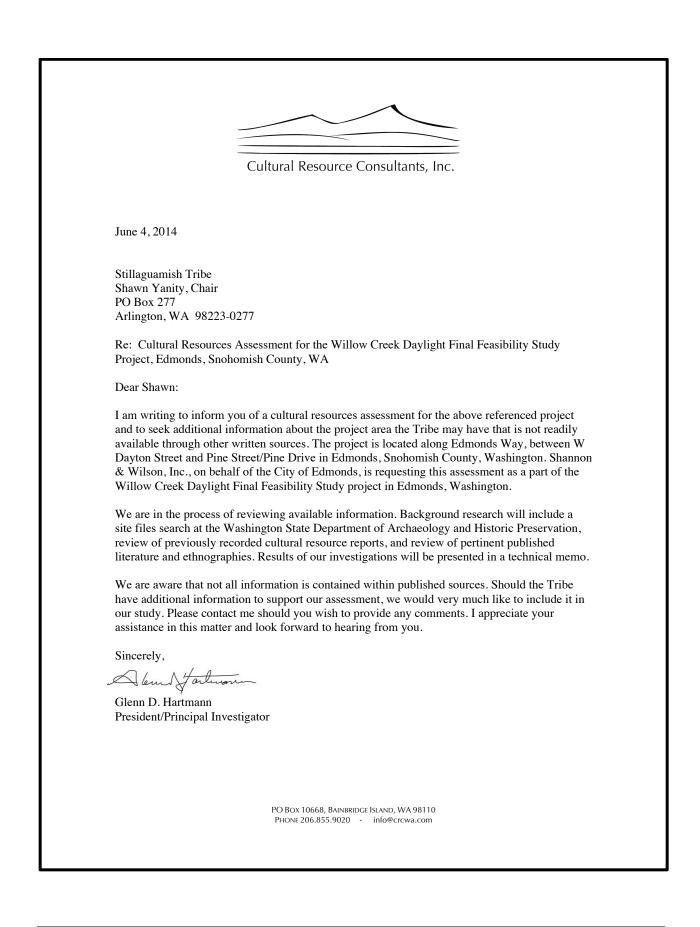
Author	Date	Title	Distance	Results
			from Project	
Johnson		City of Edmonds Historic Resources Survey – 2011		Conducted a supplemental survey of historic structures in Edmonds. Inventoried 122 properties and made recommendations for further research about 42 properties meeting local landmark criteria.
Shantry et al.		Archaeological Monitoring and Testing at the Edmonds Commuter Rail Station, Snohomish County, Washington	.6 mile NE	Background research and archaeological sampling were conducted to evaluate site 45SN574 for NRHP eligibility. Sediment samples were collected from a trench excavated to accommodate new stormwater facilities. The density of artifacts in the vicinity of the foreman's house was considered to have potential for providing significant information about its occupants' work and domestic lives.

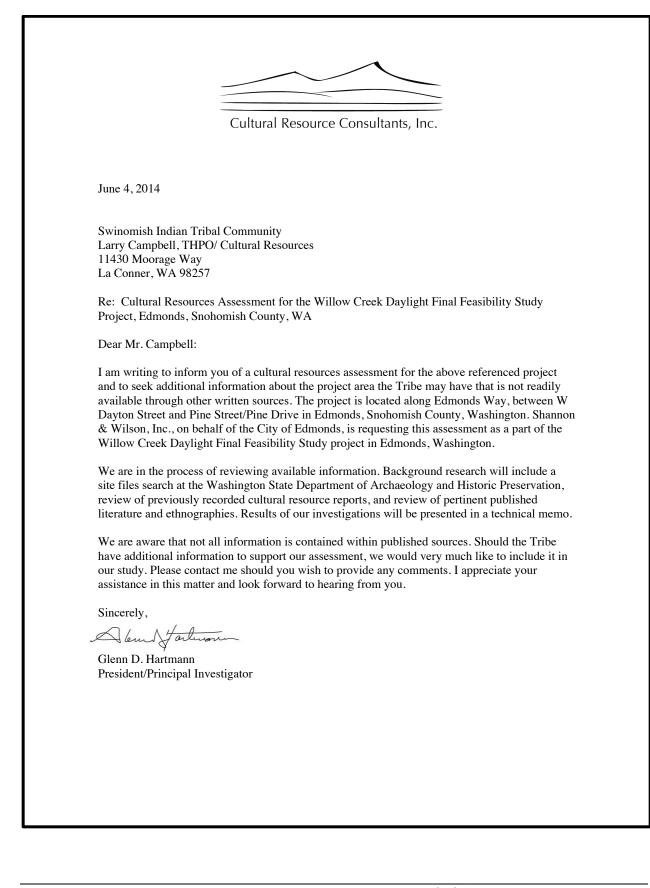
Table 2. Archaeologica	l cites recorded	within one	mile from	the project
I AUIC Z. AICHACOIUSICA	11 SHES IECOIUEU			

Site Number	Site Name	Site Type	Distance from APE	NRHP/WHR Status	Potential Project Effects
	Deer Creek Hatchery Shell Scatter	Precontact shell midden	.5 mile E	Unevaluated.	None.
45SN574	Edmonds Station	Historic debris scatter/concentration, historic structure unknown		Recommended eligible for NRHP.	None.

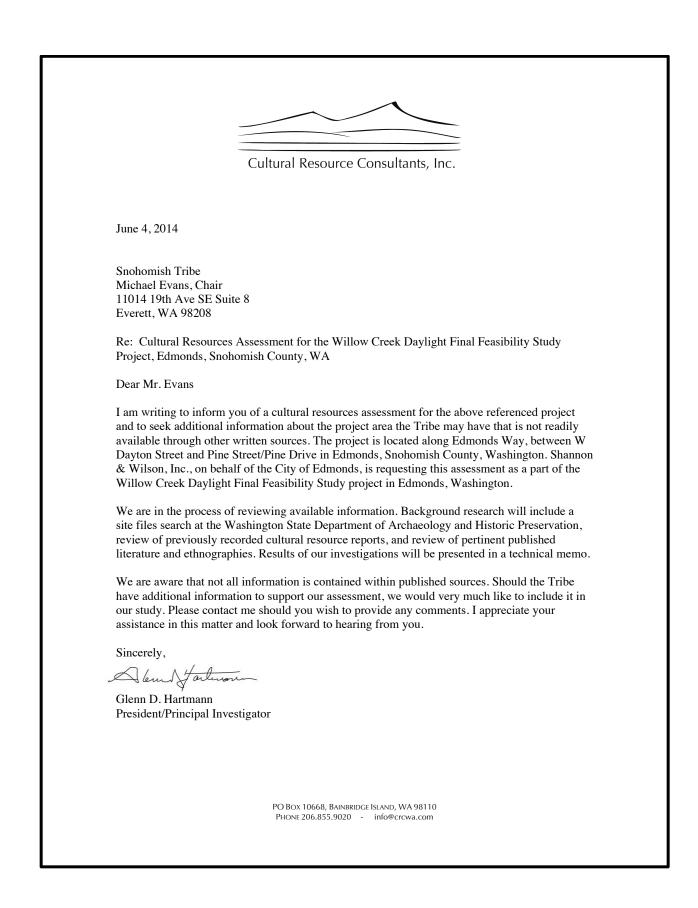
Register Name	Address	Date	Historic Register Status	Potential Project Effects
Brackett's Landing	Waterfront at foot of Main Street	1870	Listed on WHR in 1970.	None.
Edmonds Carnegie Library	118 Fifth Avenue North	1910	Listed on WHR and NRHP in 1973; listed on ERHP in 2004.	None.
Edmonds High School	410 4th Avenue North	1909- 1939	Listed on WHR in1986.	None.
Ganahl-Hanley Log Cabin	120 5th Avenue North	1930	Listed on WHR in 1999; listed on ERHP in 2009.	None.
IOOF Cemetery	North of Edmonds Way & 100th Street	1894	Listed on WHR in 1972.	None.
IOOF (Oddfellows) Hall	542 Main Street	1894	Listed on WHR in 1972; listed on ERHP in 2008.	None.
Olympic View Hotel	Second Avenue & Bell Street	1894	Listed on WHR in 1972; listed on ERHP in 2009.	None.
Site of First School in District No. 15	233 Third Ave N	1884	Listed on WHR in 1972; listed on ERHP in 2008.	None.
Wells House	120 Edmonds Street	1891	Listed on WHR in 1975.	None.

Attachment A: Project correspondence between CRC and cultural resources staff at Muckleshoot Indian Tribe, Snohomish Tribe, Snoqualmie Nation, Stillaguamish Tribe, Suquamish Tribe, Swinomish Tribe, and Tulalip Tribes.

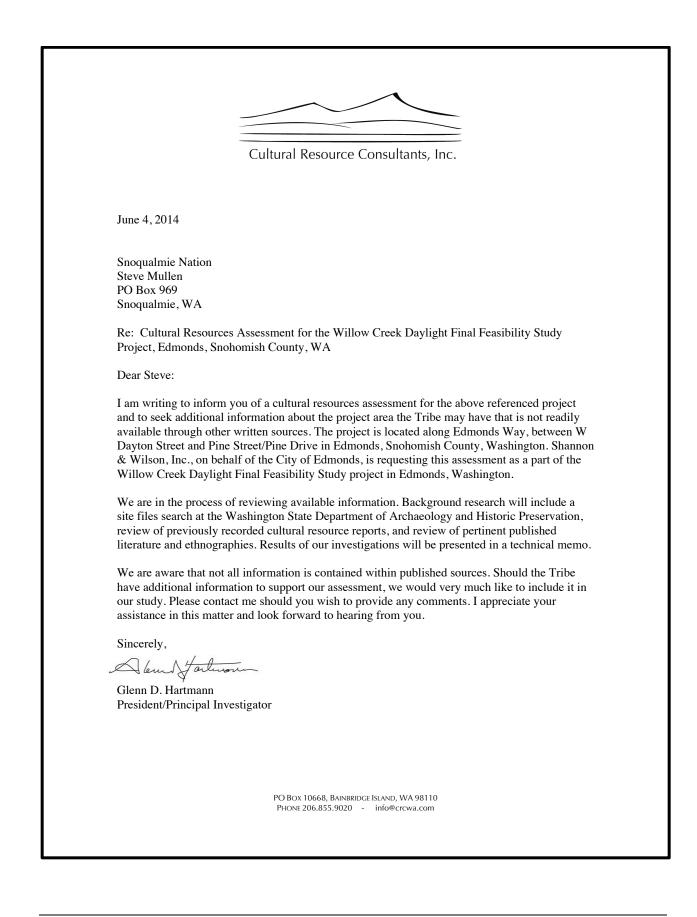




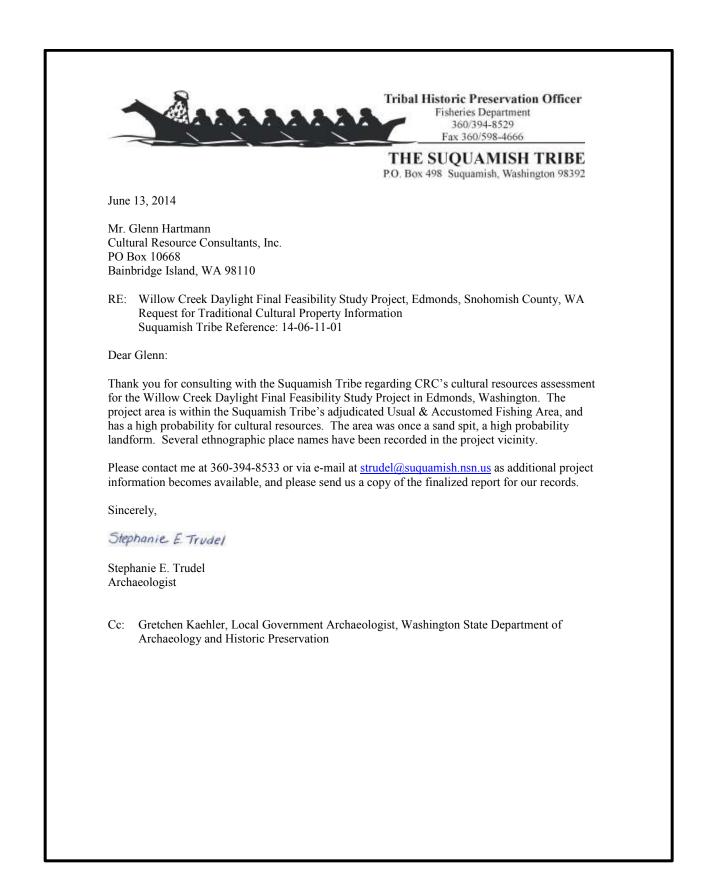
	Cultural Resource Consultants, Inc.
June 4, 2014	
Tulalip Tribes Richard Young, Cultura 6410 23 rd Ave NE Tulalip, WA 98271	al Resources
Re: Cultural Resources Project, Edmonds, Snol	s Assessment for the Willow Creek Daylight Final Feasibility Study nomish County, WA
Dear Mr. Young:	
and to seek additional is available through other Dayton Street and Pine & Wilson, Inc., on beha	you of a cultural resources assessment for the above referenced project nformation about the project area the Tribe may have that is not readily written sources. The project is located along Edmonds Way, between W Street/Pine Drive in Edmonds, Snohomish County, Washington. Shanno alf of the City of Edmonds, is requesting this assessment as a part of the Final Feasibility Study project in Edmonds, Washington.
site files search at the V review of previously re-	f reviewing available information. Background research will include a Vashington State Department of Archaeology and Historic Preservation, corded cultural resource reports, and review of pertinent published ohies. Results of our investigations will be presented in a technical memory
have additional information our study. Please contact	Il information is contained within published sources. Should the Tribe ation to support our assessment, we would very much like to include it in ct me should you wish to provide any comments. I appreciate your and look forward to hearing from you.
Sincerely, Leur Jarlino	
Glenn D. Hartmann President/Principal Inve	estigator



	Cultural Resource Consultants, Inc.
June 4, 2014	
Muckleshoot Indian T Laura Murphy, Archa 39015 172nd Ave SE Auburn, WA 98092	ribe eologist/Cultural Resources
Re: Cultural Resourc Project, Edmonds, Sn	es Assessment for the Willow Creek Daylight Final Feasibility Study ohomish County, WA
Dear Laura:	
and to seek additional available through othe Dayton Street and Pin & Wilson, Inc., on be	n you of a cultural resources assessment for the above referenced project information about the project area the Tribe may have that is not readily er written sources. The project is located along Edmonds Way, between W e Street/Pine Drive in Edmonds, Snohomish County, Washington. Shann half of the City of Edmonds, is requesting this assessment as a part of the ht Final Feasibility Study project in Edmonds, Washington.
site files search at the review of previously	of reviewing available information. Background research will include a Washington State Department of Archaeology and Historic Preservation, recorded cultural resource reports, and review of pertinent published aphies. Results of our investigations will be presented in a technical mem-
have additional inform our study. Please cont	all information is contained within published sources. Should the Tribe nation to support our assessment, we would very much like to include it in act me should you wish to provide any comments. I appreciate your er and look forward to hearing from you.
Sincerely,	
A lem Starter	on
Glenn D. Hartmann President/Principal In	vestigator
ľ	
	PO Box 10668, Bainbridge Island, WA 98110 Phone 206.855.9020 - info@crcwa.com







Attachment B. Archaeological Monitoring Plan and Inadvertent Discovery Protocol

Introduction

The proposed Willow Creek Daylight Project-Park Survey entails geotechnical explorations as a part of the Willow Creek Daylighting Final Feasibility Study. Two geotechnical borings and six test pits will be conducted at Marina Beach Park and the Off-Leash Dog Park Area, located in the City of Edmonds in the NW¹/₄ of Section 26, Township 27 North, Range 3 East, Willamette Meridian.

Shannon & Wilson, Inc., retained Cultural Resource Consultants, Inc. (CRC) to prepare a cultural resources assessment. CRC's cultural resources investigations for the project have included background research to identify any recorded archaeological sites within the project location and to assess the potential for as-yet unknown archaeological resources to be present. Based upon the results of this work, the project location retains the potential to contain archaeological sites. Archaeological deposits, if present, would be buried beneath the depth of fill and other prior landscape modifications, likely beyond depths accessible with hand tools. CRC has, therefore, recommended that an archaeologist monitor the proposed geotechnical work.

Archaeological Monitoring

Archaeological monitoring would entail having an archaeologist present during geotechnical explorations to observe subsurface conditions and identify any buried archaeological materials that may be encountered. Monitoring will be performed either by a "professional archaeologist" (RCW 27.53.030 (8)) or under the supervision of a professional archaeologist.

The monitoring archaeologist would stand in close proximity to testing equipment in order to view subsurface deposits as they are exposed, and would be in close communication with equipment operators to ensure adequate opportunity for observation and documentation. Archaeological monitoring of geotechnical testing will seek to identify potential buried surfaces, anthropogenic sediments, and archaeological features such as shell middens, hearths, or artifactbearing strata. The monitoring archaeologist will inspect the geotechnical test locations and the recovered sediments for indications of such archaeological resources.

The archaeologist will be provided the opportunity to screen excavated sediments and matrix samples when this is judged useful to the identification process. It is not expected that fill (e.g., imported culturally-sterile construction fill) or glacial sediments would be included in screening procedures. Excavated spoils may be examined in the course of monitoring. If cultural materials are observed in spoils piles, it is expected that these would be removed for examination and that the opportunity to screen spoil sediments would be available.

Archaeological monitoring of construction will proceed until it can be determined with a greater level of confidence that cultural resources will not be impacted by construction. The archaeologist will conduct monitoring until native and fill deposits can be confidently isolated and identified based on observed sedimentary exposures. Recommendations for additional monitoring (i.e. during construction) will depend on several factors, including, but not limited to, stratigraphy of deposits observed during monitoring efforts, spatial distribution of exposures across the project, and representation of the exposures in context of the project. Upon completion of the monitoring, the archaeologist will prepare a report on the methods and results of the work, and recommendations for any necessary additional archaeological investigations, illustrated with maps, drawings, and photographs as appropriate.

The following protocols outline procedures to follow, in accordance with state and federal laws, if archaeological materials or human remains are discovered.

Protocols for Discovery of Archaeological Resources

The Archaeological Sites and Resources Act (RCW 27.53) prohibits knowingly disturbing archaeological sites without a permit from the Washington State Department of Archaeology and Historic Preservation (DAHP), and the Indian Graves and Records Act (RCW 27.44) prohibits knowingly disturbing Native American or historic graves.

In the event that archaeological resources are encountered during project implementation, the following actions will be taken:

In work areas, all ground disturbing activity at the location will stop, and the work supervisor will be notified immediately. The work site will be secured from any additional impacts and the supervisor will be informed.

The project proponent will immediately contact the agencies with jurisdiction over the lands where the discovery is located, if appropriate. The appropriate agency archaeologist or the proponent's contracting archaeologist will determine the size of the work stoppage zone or discovery location in order to sufficiently protect the resource until further decisions can be made regarding the work site.

The project proponent will consult with DAHP regarding the evaluation of the discovery and the appropriate protection measures, if applicable. Once the consultation has been completed, and if the site is determined to be NRHP-eligible, the project proponent will request written concurrence that the agency or tribe(s) concurs that the protection and mitigation measures have been fulfilled. Upon notification of concurrence from the appropriate parties, the project proponent will proceed with the project.

Within six months after completion of the above steps, the project proponent will prepare a final written report of the discovery. The report will include a description of the contents of the discovery, a summary of consultation, and a description of the treatment or mitigation measures.

Protocols for Discovery of Human Remains

If human remains are found within the project area, the project proponent, its contractors or permit-holders, the following actions will be taken, consistent with Washington State RCWs 68.50.645, 27.44.055, and 68.60.055:

If ground-disturbing activities encounter human skeletal remains, then all activity will cease that may cause further disturbance to those remains. The area of the find will be secured and protected from further disturbance. The project proponent will prepare a plan for securing and

protecting exposed human remains and retain consultants to perform these services. The finding of human skeletal remains will be reported to the county medical examiner/coroner and local law enforcement in the most expeditious manner possible. The remains will not be touched, moved, or further disturbed. The county medical examiner/coroner will assume jurisdiction over the human skeletal remains and make a determination of whether those remains are forensic or nonforensic. If the county medical examiner/coroner determines the remains are non-forensic, then they will report that finding to DAHP, which will then take jurisdiction over the remains. DAHP will notify any appropriate cemeteries and all affected tribes of the find. The State Physical Anthropologist will make a determination of whether the remains are Indian or Non-Indian and report that finding to any appropriate cemeteries and the affected tribes. DAHP will then handle all consultation with the affected parties as to the future preservation, excavation, and disposition of the remains.

Contact Information

City of Edmonds Public Works Department, Engineering Division

121 5th Ave N., Edmonds, WA 98020 Primary Contact: Jerry Shuster, Stormwater Engineering Program Manager, 425-771-0220 ext. 1323

Shannon & Wilson, Inc.

400 N 34th Street, Suite 100, Seattle, WA 98103 Primary Contact: David Cline, 206-695-6885

Edmonds Police Department

250 5th Ave N., Edmonds, WA 98020 Lead Representative: Al Compaan, Chief of Police, 425-771-0200

Snohomish County Medical Examiner's Office

9509 29th Ave. West, M/S 203, Everett, WA 98204 Lead Representative: Norman Thiersch, M.D., Chief Medical Examiner, 425-438-6200

Washington State Department of Archaeology and Historic Preservation (WA DAHP)

P.O. Box 48343, Olympia, WA 98504-8343
Lead Representative: Allyson Brooks, State Historic Preservation Officer, 360-586-3066
Primary Contact: Rob Whitlam, Ph.D., State Archaeologist, 360-586-3080
Primary Contact for Human Remains: Guy Tasa, State Physical Anthropologist, 360-586-3534

Muckleshoot Indian Tribe

39015 172nd Ave SE, Auburn, WA 98092 Lead Representative: Virginia Cross, Chair, 253-939-3311 ext 3194 Primary Contact: Laura Murphy, Cultural Resources, 253-876-3272

Snohomish Tribe

11014 19th Ave. SE, Suite #8, PMB #1, Everett, WA 98208 Lead Representative and Primary Contact: Michael didahalqid Evans, Chair, 425-744-1855

Snoqualmie Nation

8130 Railroad Ave, Suite 103; PO Box 969, Snoqualmie, WA 98065 Lead Representative: Carolyn Lubenau, Chair, 425-888-6551 Primary Contact: Steven Mullen-Moses, Cultural Resources, 425-888-6551

Stillaguamish Tribe

3310 Smokey Point Drive, PO Box 277, Arlington, WA 98223-0277 Lead Representative: Shawn Yanity, Chair, 360-652-7362 Primary Contact: John Miller, Cultural Resources, 360-652-7362

Suquamish Tribe

15838 Sandy Hook Rd; POB 498, Suquamish, WA 98392-0498 Lead Representative: Leonard Forsman, Chair, 360-394-8461 Primary Contact: Dennis Lewarch, Cultural Resources 360-394-8529

Swinomish Tribe

11404 Moorage Way, LaConner, WA 98257 Lead Representative: Brian Cladoosby, Chair, 360-466-7205 Primary Contact: Larry Campbell, Cultural Resources, 360-466-7352

Tulalip Tribes

6406 Marine Dive NW, Tulalip, WA 98271 Lead Representative: Melvin Sheldon, Jr., Chair, 360-651-4500 Primary Contact: Richard Young, Cultural Resources, 360-716-2652