Cultural Resource Consultants, Inc.

TECHNICAL MEMO 1110P-4

DATE: June 20, 2013

TO: Matthew Boyle
Grette Associates

FROM: Glenn Hartmann, Principal Investigator

RE: Cultural Resources Assessment for the Cornet Bay Marina MTCA Cleanup Project, Island County, WA

The attached short report form constitutes our final report for the above referenced project. No cultural resources were identified within the project APE and no further cultural resources investigations are recommended. Please contact the office should you have any questions about our findings and/or recommendations.

435 Ericksen Avenue NE, Suite 103
PO Box 10668, Bainbridge Island, WA 98110
Phone 206 855-9020 - info@crcwa.com

CULTURAL RESOURCES REPORT COVER SHEET

Author: S. Colby Phillips and Glenn D. Hartmann

Title of Report: Cultural Resources Assessment for the Cornet Bay Marina Project, Island County, WA

Date of Report: June 20, 2013

County (ies): Island Section: 25 Township: 34 North Range: 1 East
Quad: Acres: less than 2 acres

CD Submitted? ☒ Yes ☐ No PDF of Report? ☒ Historic Property Export Files? ☐

Does this replace a draft? ☒ Yes ☐ No

Archaeological Sites/Isolates Found or Amended? ☐ Yes ☒ No

TCP(s) found? ☐ Yes ☒ No

Does this report fulfill a DAHP permit requirement? ☐ Yes # ☒ No

DAHP Archaeological Site #:

_____
_____
_____
_____
_____
_____
_____
_____

REPORT CHECK LIST

Report should contain the following items:

- Clear objectives and methods
- A summary of the results of the survey
- A report of where the survey records and data are stored
- A research design that:
  - Details survey objectives
  - Details specific methods
  - Details expected results
  - Details area surveyed including map(s) and legal locational information
  - Details how results will be incorporated into the planning process

Please submit reports unbound. Please be sure that any electronic version of a report submitted to DAHP has all of its figures, graphics, appendices, attachments, correspondence, cover sheet, etc., compiled into one single PDF file. Please check that all digital files display correctly when opened.

Management Summary
Cultural Resource Consultants, Inc. (CRC) conducted a cultural resources assessment for Grette Associates, on behalf of Cornet Bay Marina, as part of their bulkhead replacement and site cleanup project at Cornet Bay Marina, Whidbey Island, Island County, Washington. Fieldwork consisted of pedestrian surface survey and soil exposure examination. The results of the survey were negative; no cultural materials or deposits were identified within the proposed project area. Based upon available information about the geomorphology, history and prehistory of the area, the potential that any intact cultural deposits remain within the proposed project area is high. CRC recommends archaeological monitoring during excavation and other below-fill ground-disturbing project actions.

1. Administrative Data

Report Title: Cultural Resources Assessment for the Cornet Bay Marina MTCA Cleanup Project, Island County, WA

Author (s): S. Colby Phillips and Glenn D. Hartmann

Report Date: June 20, 2013

Location: The project is located at 200 Cornet Bay Road in Island County, Washington

Legal Description: The project is located in Section 25, Township 34 North, Range 1 East, Willamette Meridian (see Figure 1).

USGS 7.5' Topographic Map (s): Deception Pass, WA (1978)

Total Area Involved:

Objective (Research Design): This assessment was developed with the goal of ensuring that no cultural resources are disturbed during construction of the proposed project and to determine 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 Section 106 of NHPA. The Archaeological Sites and Resources Act (RCW 27.53) prohibits knowingly disturbing archaeological sites without a permit from the Washington 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)).

Assessment methods consisted of review of project plans, related reports, historic maps, and field studies, in order to estimate the potential for as-yet unidentified archaeological deposits. 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 effects (APE), as well as other applicable laws, standards, and guidelines (per 36CFR800.4 (b)(1)).

Recorded Cultural Resources Present: Yes [ ] No [x]
No recorded sites are present in the current project APE, though a number of pre-historic and historic cultural resource sites are located within one mile of the project area. Sites 45IS203 and 45IS94 are located 500 feet and 0.3 miles to the north of the project APE respectively; site 45IS203 contained several lithic artifacts and fire-modified rocks, site 34IS94 contained a shell midden with some fire-modified rock. On Ben Ure Island, 0.4 miles to the north of the project area, site 45IS30 contained a shell midden and human remains, and 0.5 miles to the east of the project area on Cornet Bay is shell midden site 45IS31. Sites 45IS93 and 45IS209 are located on Deception Pass approximately one mile to the northwest of the project area and included a shell midden and lithic material respectively. Sites 45SK170 and 45SK238 are the Deception Pass and Canoe Pass bridges about one mile to the northwest of the project APE; the Deception Pass bridge is listed on the Washington Heritage Register (WHR) and National Register of Historic Places (NRHP), the Canoe Pass bridge is listed on the WHR.

Previously Unrecorded Cultural Resources Identified and Recorded: Yes [ ] No [x]
No previously unrecorded archaeological or historic sites were identified within the project.

Project Background: Grette Associates, on behalf of Cornet Bay Marina, is requesting a cultural resources assessment prior to a bulkhead replacement, demolition of a building constructed in the late 1970s, and site cleaning from a diesel fuel leak in underground tanks located at Cornet Bay Marina at 200 Cornet Bay Road on Whidbey Island, Island County, Washington. The project will include drilling holes and trenches and removing soil behind the existing timber bulkhead, removing a building and its concrete foundation, and installing a new steel bulkhead. The maximum depth of soil disturbing activities will be 15 feet.

2. Background Research

Background research conducted in November 2011.

Archival Sources Checked:

DAHP WISAARD	There are no recorded archaeological sites in the project APE. The DAHP files check was conducted in November 2011.
Web Soil Survey	The Web Soil Survey mapped in the APE is beach endoaquents and tidal xerorthents (USDA NRCS 2011).
Library	[x] Various historical, archaeological, and ethnographic references at the Seattle Public Library, and in CRC's library.
Museum	[ ]
Historical Society	[ ]

Context Overview:

Much of the text for the following sections was adapted from recent cultural resources reports for surveys conducted near the project area (e.g. Emerson and McKenney 2001; Hicks 1995; Rinck 2007; Schalk et al. 2011). Other sources are cited where applicable.

Environmental Context

Archaeological evidence suggests human occupation in the Pacific Northwest began following the last glacial retreat at the end of the Pleistocene, approximately 14,000 – 10,000 years before present (BP). The environmental changes produced by deglaciation, including alterations to the landscape, climate, and vegetation, significantly influenced the spatial distribution of human activities based on the availability of resources and the suitability of landforms for occupation. The potential distribution of cultural resources in the vicinity of the project area, and the identification of conditions that may have affected contemporaneous preservation of these resources, are informed by understanding changes to the local environment over time.

The local geomorphology of the current project area was shaped 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 (Burns 1985; Kruckeberg 1991). The most recent glacial event in the Puget Sound, the Vashon Stade, is largely responsible for the region's contemporary landscape; glacial advance and retreat scoured and compacted underlying geology while meltwaters carved drainage channels and deposited till and outwash over the Puget Lowland (Downing 1983; Booth et al. 2003; Kruckeberg 1991).

At the north end of Whidbey Island, glacial ice had a maximum thickness of 1200 to 1400 m thick and caused a downwarping of the entire Puget Sound region (Thorsen 1980, 1989). As the ice retreated, the isostatic rebound of 100 to 130 m caused Whidbey Island to emerge above sea level around 11,000 years BP. Variable fluctuations in sea level around the Northwest Coast continued through the Holocene and included a low stand at about 8000 years BP, and a sea level rise of 1 to 3 m within the last 2000 years (Clague et al. 1982; Dethier et al. 1995; Kelsey et al. 2004).

During periods of low sea level, glacial till and outwash sediments were exposed and downcut, and coastal bays and low shore areas were filled with alluvium. The beach area in the current project APE consists of undifferentiated glacial and non-glacial Holocene deposits (Dragovich et al. 2002), and the USGS soil survey categorizes the soil in the immediate project area as beach endoaquents and tidal xerorthents formed on 0 to 5 percent slopes, and composed of 0 to 60 inches of stratified sand to gravel.

Whidbey Island lies within the *Tsuga heterophylla* (Western Hemlock) zone of vegetation characteristic of much of lowland western Washington (Franklin and Dyrness 1973). Native vegetation in this zone includes dense forests of western hemlock, western red cedar, and Douglas fir. Dense understory includes Oregon grape, salal, snowberry, and sword fern. Several microenvironments exist within this generalized environment, including drier areas with prairies and balds where madrona, white oak, and lodgepole pine trees are found, as well as poorly drained bog and wetland areas with cranberry, salmonberry, sedges, and mosses.

A variety of fauna, including large and small terrestrial mammals, marine mammals, waterfowl, fish and shellfish are native to Whidbey Island and have been present in varying abundances from pre-historic through modern periods. Elk, black-tailed deer, and black bear, as well as coyote, raccoon, beaver, river otter, weasel, squirrel, chipmunk were all common resident species prior to Euroamerican settlement of the area (Ingles1965). Marine mammals such as harbor seals, northern sea lions, and orca are present seasonally in Puget Sound, and common fish include salmon, steelhead, cod, rockfish, flounder, and smelt (DeLacy et al. 1972; Miller and Borton 1980). Available shellfish include littleneck and butter clams, cockles, sea urchins, oysters, and mussels (Kozloff 1996). Migratory waterfowl such as ducks, geese, and swans are seasonally present on bays, lakes, and sloughs (Angell and Balcomb 1982).

Archaeological Context

Regional and local studies have provided an archaeological and historical synthesis of approximately the last 10,000 years of human occupation in Puget Sound (e.g. Carlson 1990; Morgan et al. 1999; Nelson 1990). The earliest evidence of a human presence in the region, designated as the Paleoindian period, consists primarily of a few chronologically diagnostic stone tools and flakes and 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). While this period is not well known in western Washington, a Clovis fluted-point artifact was found on Whidbey Island at Penn Cove (Meltzer and Dunnell 1987), one of a handful of Paleoindian sites in Washington State. On the nearby Olympic Peninsula, the Manis Mastodon site (45CA219) contained the remains of a butchered mastodon dated to about 12,000 BP, making it the oldest site in the state (Waters et al. 2011). Late Pleistocene fauna such as now-extinct species of bison are reported from Vancouver Island and the San Juan Islands (Wilson et al. 2009).

The early period of occupation in the Puget Lowlands, from approximately 10,000 to 5000 BP, is best known through sites associated with the Olcott complex, named after a site along the Stillaguamish River in Snohomish County (Kidd 1964). These generally shallow sites are found on glacial outwash surfaces in inland riverine settings and consist of leaf-shaped projectile points, and tools and flakes made from locally available cobbles, primarily local volcanic crystalline rock; they are usually lacking in ground stone artifacts and organic remains (Blukis Onat et al. 2001; Morgan et al. 1999). The Olcott complex is believed to be representative of highly mobile hunter-gatherers who typically did not utilize marine resources (Carlson 1990), though rising sea level may have inundated shoreline sites older than 5000 BP.

After 5000 BP, archaeological evidence suggests a change in settlement patterns in the region through time, with increasing sedentism and intensifying resource exploitation, particularly of marine fish, shellfish and mammals (Carlson 1990; Nelson 1990; Wessen and Stilson 1987). Shell middens containing an abundance of shellfish, fish and mammal remains appear during this time, representing a combined coastal land hunting and littoral gathering subsistence strategy (Nelson 1990). Post holes and the remains of small structures represent intensified utilization of seasonal resources, and items of wealth and status such as copper, beads, and dentalia suggest emerging social stratification among increasingly semi-sedentary populations (Morgan et al. 1999).

Characteristics 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 (Nelson 1990).

By the early historic period, Puget Sound peoples practiced a seasonal subsistence economy that consisted of spring, summer and fall migrations to areas for hunting, fishing, gathering of berries and roots, and procurement of shellfish followed by a more sedentary lifestyle as they returned to longhouse villages as winter approached. Although salmon and other fish were the primary food source, the complexity of the Puget Lowland environment provided a rich subsistence base. River fishing strategies involved the use of complex traps and weirs in addition to netting and spearing while coastal fishing strategies included line and hook, trolling from a canoe with hook, dip netting, and spearing (De Danaan 2002:23).

Ethnohistoric Context

The current project area was traditionally the territory of the Swinomish and Samish people who utilized the region around Deception Pass and were speakers of different dialects of the diverse Salish language family (Ruby and Brown 1982; Snyder 1981). The Swinomish spoke the Northern Lushootseed dialect of the Salish language and lived at the northern end of Whidbey Island and around the northern end of Skagit Bay, including Guemes, Cypress, and Samish islands. The Samish spoke the Northern Straits dialect, shared by Native American groups on the San Juan Islands and nearby mainland areas (Thompson and Kinkade 1990). They also occupied the northern end of Whidbey Island as well as Fidalgo Island to the west.

Though different varieties of the Salish language were spoken throughout the region, Coast Salish people followed a generalized way of life in regards to social organization, subsistence, and settlement patterns (Smith 1940, 1941; Suttles 1951; Suttles and Lane 1990). Winter settlements along stream confluences near the coast provided access to fresh water, fuel wood, and marine resources. These more or less permanent villages provided a base from which trips were made for hunting, fishing, and gathering seasonally available resources. During the summer people moved about the area to harvest camas bulbs and berries while hunting and fishing. In the fall, particular focus was placed on salmon fishing and processing as a way to store food for the winter months.

The Swinomish were known to have had a stockade village on Swinomish Slough and occupied sites on eastern Fidalgo Island and northern Whidbey Island (Hilbert et al. 2001; Snyder 1981). The Samish occupied areas on Rosario Strait in the San Juan Islands and on Fidalgo Island (Suttles 1951). Several ethnographically-known named places are noted near the current project

area, including *steuds* or "dangerous" for Deception Pass, *dəg^{w}alal* for "houses at inlet" for a site south of Cornet Bay in Dugella Bay, and *peqwe'tcld* at Hoypus Point (Hilbert et al. 2001).

Euroamerican exploration and presence in the region dates to the late 1700s and expeditions led by Manuel Quimper and Francisco Eliza of Spain in 1790-1791, and Captain George Vancouver of Britain who circumnavigated Whidbey Island and named Deception Pass in 1792 (Osmundson 1961; Wagner 1933). Lieutenant Charles Wilkes led the U.S. Exploring Expedition in Puget Sound in 1841, and Isaac Ebey led the first group of American settlers on Whidbey Island under the Land Donation Law of 1850 (Bryan 1954; Kellog 1934). Benjamin Ure settled on an island in Cornet Bay that currently carries his name, as noted on a Government Land Office (GLO) map from 1895 (Figure 3). Due to the pressure of a growing population of Euroamerican settlers in the region on Native American territories, in 1855 the Treaty of Point Elliott designated several reservations as a settlement with Native American tribes around Puget Sound including the Swinomish Reservation which was established on the southeast peninsula of Fidalgo Island (Blukis Onat 1986).

In the late 19th century, parts of northern Whidbey Island and southern Fidalgo Island were established as a U.S. government military reservation, which was ceded to the State of Washington in 1925 and became the core of Deception Pass State Park. Civilian Conservation Corp projects improved the park, and in the 1930s the Deception Pass and Canoe Pass bridges were built providing extended access to Whidbey Island from the mainland.

Previous Archaeological Investigations

Previous archaeological study of the Cornet Bay area of northern Whidbey Island includes excavations conducted in the 1950s as well as more recent cultural resources surveys. A number of University of Washington students surveyed the area around Deception Pass State Park and recorded several sites located near the current project APE including 45IS30 on Ben Ure Island, 45IS31 on Cornet Bay, 45IS93 on Deception Pass, and 45IS94 located less than half a mile north of the current project area (Bryan 1955, 1963; Osmundson 1961). Site 45IS31 was excavated by Bryan in 1954 who described two main strata with an extensive shell midden underlain by chipped stone artifacts and mammal bones (Bryan 1963). Many of these sites were revisited re-surveyed later by Solland and Stenholm (Solland 1963) and Wesson (1988a, 1988b, 1988c, 1988d, 1988e).

Several more recent cultural resources assessments have been conducted near N. Cornet Bay Road in the general vicinity of the project area. In 1995, Hicks recorded site 45IS203 as part of a survey for a proposed fiber optic cable route along Cornet Bay Road within Deception Pass State Park. The site is located 500 feet north of the current project area and contained a number of flakes and fire-modified rocks found on the surface (Hicks 1995). A construction monitoring project associated with the installation of fiber optic cable beneath Cornet Bay Road near sites 45IS94 and 45IS203 did not encounter any significant cultural materials (Piston 2004). An archaeological assessment in conjunction with a proposed sewer pipe upgrade project along Cornet Bay Road included pedestrian survey and shovel probe testing, and also did not observe any cultural resources (Rinck 2007). A cultural resources survey and assessment for the Cornet

Bay-Hoypus Point Improvement Project in Deception Pass State Park to the north of the current project area encountered midden deposits containing shellfish and faunal remains, and lithic artifacts and fire-modified rocks. These cultural materials were associated with sites 45IS94 and 45IS203 which were immediately adjacent to the park project area; recommendations were made to extend the boundaries of those sites (Schalk et al. 2011).

3. Fieldwork

Field investigations were conducted by Glenn Hartmann; notes and photographs are on file at CRC. Subsurface investigations were not possible due to contaminated soils. No archaeological materials – midden deposits, bone, fire-cracked rock – were evident in limited exposures along the shoreline.

Total Area Examined: The entire APE.

Areas not examined: None.

Date(s) of Survey: December 15, 2011

Weather and Surface Visibility: Weather conditions were clear and cold. Most all of the project area is covered with fill.

4. Results

Cultural Resources Identified: None.

Project Recommendations: A limited focused archaeological monitoring plan should be prepared as it was not possible to conduct test excavations.

In the unlikely 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, DAHP and authorized representatives of the concerned Indian Tribes.

No historic properties affected [x]
Historic properties affected [ ]
- No adverse effect to historic properties [ ]
- Adverse effect to historic properties [ ]

Attachments:
Figures [x]
Photographs [x]

5. 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.

6. References

Angell, T., and K.C. Balcomb
1982 *Marine Birds and Mammals of Puget Sound*. Washington Sea Grant Publication, Seattle.

Blukis Onat, A.A.
1986 *Cultural Resources Survey of the Swinomish Channel.* BOAS Research Report No 8602 BOAS, Inc., Seattle.

Booth, D.B., R.A. Haugerud, and K.G.Troost
2003 The Geology of Puget Lowland Rivers. In *Restoration of Puget Sound Rivers*, Chapter 2, edited by David R. Montgomery, Susan Bolton, Derek B. Booth, and Leslie Wall, pp. 14-45. University of Washington Press, Seattle.

Bryan, A.L.
1954 *Excavations in Deception Pass State Park, June-August 1954*. Department of Anthropology, University of Washington, Seattle.

1955 *An Intensive Archaeological Reconnaissance in the Northern Puget Sound Region.* Unpublished M.A. Thesis, Department of Anthropology, University of Washington, Seattle.

1963 *An Archaeological Survey of Northern Puget Sound.* Occasional Papers of the Idaho State University Museum No. 11. Pocatello.

Burns, R.
1985 *The Shape and Form of Puget Sound*. Puget Sound Books. Seattle.

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

Clague, J., J.R. Harper, R.J. Hebda, and D.E. Howes
1982 Quaternary Sea Levels and Crustal Movements, Coastal British Columbia. *Canadian Journal of Earth Sciences* 19:597-618.

De Danaan, L.
2002 Ethnographic Background. In *Vashon Island Archaeology: A View from Burton Acres Shell Midden*, edited by Julie K. Stein and Laura S. Philips, pp. 17-36. Burke Museum of Natural History and Culture, Research Report No. 8, Seattle, Washington.

DeLacy, A.C., B.S. Miller, and S.F. Borton
1972 *Checklist of Puget Sound Fishes*. Washington Sea Grant Publication, WSG-72-3. Division of Marine Resources, University of Washington, Seattle.

Dethier, D.P., F. Pessl, Jr., F.F. Keuler, M.A. Balzarini, and D.R. Pevear.
1995 Late Wisconsinan Glaciomarine Deposition and Isostatic Rebound, Northern Puget Lowland, Washington. *Geological Society of America Bulletin* 107:1288-1303.

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

Dragovich, J.D., R.L. Logan, H.W. Schasse, T.J. Walsh, W.S. Lingley,
Jr., D.K. Norman, W.J. Gerstel, T.J. Lapen, J.E. Shuster and K.D. Meyers
2002 Geologic Map of Washington-Northwest Quadrant. Geologic Map GM-50. Washington Division of Geology and Earth Resources, Olympia, Washington.

Franklin, Jerry F. and C.T. Dyrness
1973 *Natural Vegetation of Oregon and Washington*. U.S. Forest Service, Pacific Northwest Forest and Range Experiment Station, Portland, Oregon

Hicks, B.A.
1995 *Archaeological Survey of a Proposed Fiber Optic Route Through Deception Pass State Park, Island County, Washington*. Submitted to GTE Northwest, Inc. BOAS Research Report No. 9503. BOAS, Inc., Seattle.

Hilbert, V., J. Miller, and Z. Zahir (editors)
2001 *Puget Sound Geography*. Original manuscript by T.T. Waterman, ca. 1920. Edited with additional material by V. Hilbert, J. Miller, and Z. Zahir. Lushootseed Press, Federal Way, Washington.

Ingles, L.
1965 *Mammals of the Pacific States: California, Oregon, Washington.* Stanford University Press, Stanford, California.

Kelsey, H., B. Sherrod, S. Johnson, and S. Dadisman
2004 Land-level Changes from a Late Holocene Earthquake in the Northern Puget Lowland, Washington. *Geology* 32:469-472.

Kellogg, G.A.
1934 A *History of Whidbey Island.* Island County Historical Society, Coupeville, Washington.

Kozloff, E.N.
1996 *Marine Invertebrates* of *the Pacific Northwest.* University of Washington Press, Seattle, Washington.

Kruckeberg, A. R.
1991 *The Natural History of Puget Sound Country*. University of Washington Press. Seattle.

Meltzer, D.J. and R.C. Dunnell
1987 Fluted Points from the Pacific Northwest. *Current Research in the Pleistocene* 4:64-67.

Miller, B.S. And S.F. Borton
1980 *Geographical Distribution* of *Puget Sound Fishes: Maps and data Source Sheets.* Washington Sea Grant, Seattle, Washington.

Morgan, V.E., Holstine, C. and Gundy, B.J.
1999 *The SR-101 Sequim Bypass Archaeological Project: Mid to Late Holocene Occupations on the Northern Olympic Peninsula, Clallam County, Washington*. Volume 1. Prepared for the Washington State Department of Transportation. Archaeological and Historical Services, Eastern Washington University, Cheney.

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

Osmundson, J.
1961 Camano Island - Succession of Occupation from Prehistoric to Present Time. *Washington Archaeologist* 5(4):2-18.

Piston, V.
2004 *Letter report to Ik Icard RE: Monitoring During Comcast Fiber Optic Cable Installation Along Cornet Bay Road*. Submitted to Icard Consulting Services, LLC, Kingston, WA by Northwest Archaeological Associates, Inc., Seattle.

Rinck, B.A.
2007 *Cultural Resources Assessment of the Cornet Bay Sewer Improvements Project, Island County, Washington, Deception Pass State Park*. Prepared for Gray and Osborne, Inc. NWAA Report Number WA 07-099. Northwest Archaeological Associates, Seattle.

Ruby, R.H. and J.A. Brown
1992 *A Guide to the Indian Tribes of the Pacific Northwest.* Revised Edition. University of Oklahoma Press, Norman.

Schalk, R., M. Nelson, J. Boersema, A. Cagle, and M. Wolverton
2011 *Archaeological Survey for the Cornet Bay-Hoypus Point Improvement Project, Deception Pass State Park, Island County, Washington*. Report prepared for the Washington State Parks and Recreation Commission. Cascadia Archaeology, Seattle.

Smith, M.W.
1940 *The Puyallup-Nisqually*. Columbia University Contributions to Anthropology 32. New York.
1941 The Coast Salish of Puget Sound. *American Anthropologist* 43:197-211.

Solland, S O.
1963 *Archaeological Survey of Western Washington State Parks.* Report on file, Office of Archaeology and Histone Preservation, Olympia

Suttles, W.
1951 *Economic Life of the Coast Salish of Haro and Rosario Straights.* Ph.D. dissertation, Department of Anthropology, University of Washington, Seattle.

Suttles, W. and B. Lane
1990 Southern Coast Salish. In Handbook of North American Indians, Volume 7: *Northwest Coast*, edited by Wayne Suttles, pp. 485-502. William C. Sturtevant, series editor. Smithsonian Institution, Washington, D.C.

Snyder, S.
1981 Swinomish, Upper Skagit, and Sauk-Suiattle. In *Inventory of Native American Religious Use, Practices, Localities and Resources: Study Area on the Mt. Baker-Snoqualmie National Forest, Washington State*, edited by Astrida R. Blukis Onat and Jan L. Hollenbeck. Report Prepared for Mt. Baker-Snoqualmie National Forest, Everett, Washington.

Thompson, L.C. and M.D. Kinkade
1990 Languages. In Handbook of North American Indians, Volume 7: *Northwest Coast*, edited by Wayne Suttles, pp 30-51. William C. Sturtevant, series editor. Smithsonian Institution, Washington, D.C.

Thorson, R.M.
1980 Ice-Sheet Glaciation of the Puget Lowland, Washington, during the Vashon Stade (Late Pleistocene). *Quaternary Research* 13:303-321.

1989 Glacioisostatic Response of the Puget Sound Area, Washington. *Geological Society of America Bulletin* 101:1163-1174.

Wagner, H R.
1933 *Spanish Exploration to the Northwest.* Fine Arts Press, Santa Anna.

Waters, M.R., T.W. Stafford, Jr., H.G. MacDonald, C. Gustafson, M. Rasmussen, E. Cappellini, J.V. Olsen, D. Szklarczyk, L.J. Jensen, M.T.P. Gilbert, and E. Willerslev
2011 Pre-Clovis Mastodon Hunting 13,800 Years Ago at the Manis Site, Washington. *Science*, 334: 351-353.

Wessen, G.C.
1988a *Prehistoric Cultural Resources of Island County, Washington*. A report prepared for the OAHP by Wessen & Associates.
1988b Archaeological Site Inventory Form for 451S31. Site *record* on file with the Washington State Office of Archaeology and Historic Preservation. Olympia.
1988c Archaeological Site Inventory Form for 45S193, Site record on file with the Washington State Office of Archaeology and Historic Preservation. Olympia.
1988d Archaeological Site Inventory Form for 451S94. Site record on file with the Washington State Office of Archaeology and Historic Preservation. Olympia.
1988e Archaeological Site Inventory Form for 451S203. Site record on file with the Washington State Office of Archaeology and Historic Preservation. Olympia.

Wilson, M.C., S.M. Kenady, and R.F. Schalk
2000 Late Pleistocene *Bison antiquus* from Orcas Island, Washington, and the Biogeographic Importance of an Early Postglacial Land Mammal Dispersal Corridor from the Mainland to Vancouver Island. *Quaternary Research* 71: 49-61.

7. Figures

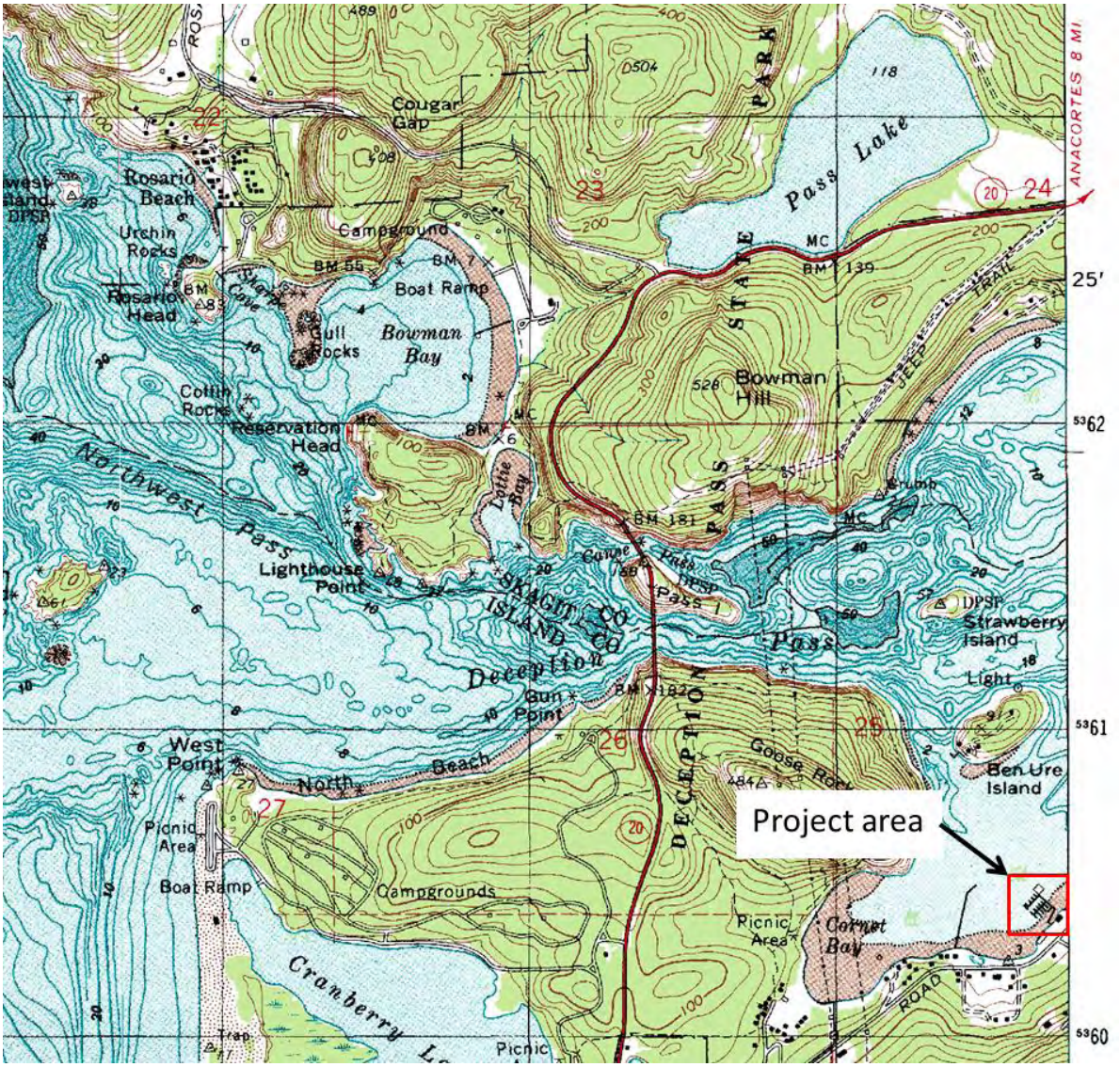

Figure 1. General location of project area on USGS 7.5' topographic map (Deception Pass, WA 1978).

Figure 2. General location of project area on aerial photograph (Google Earth 2011).

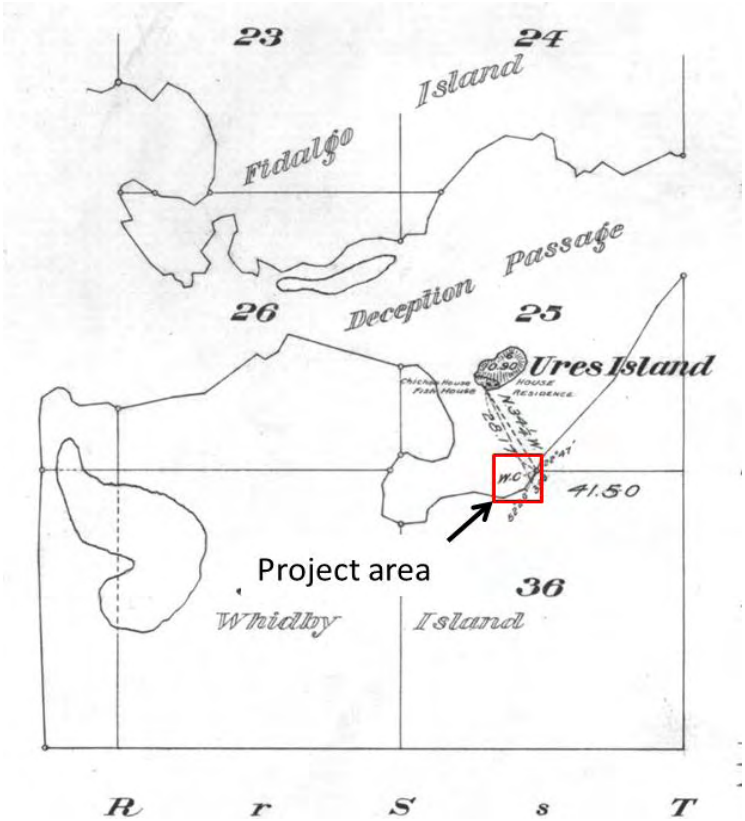

Figure 3. Portion of 1895 GLO map depicting general location of project area.

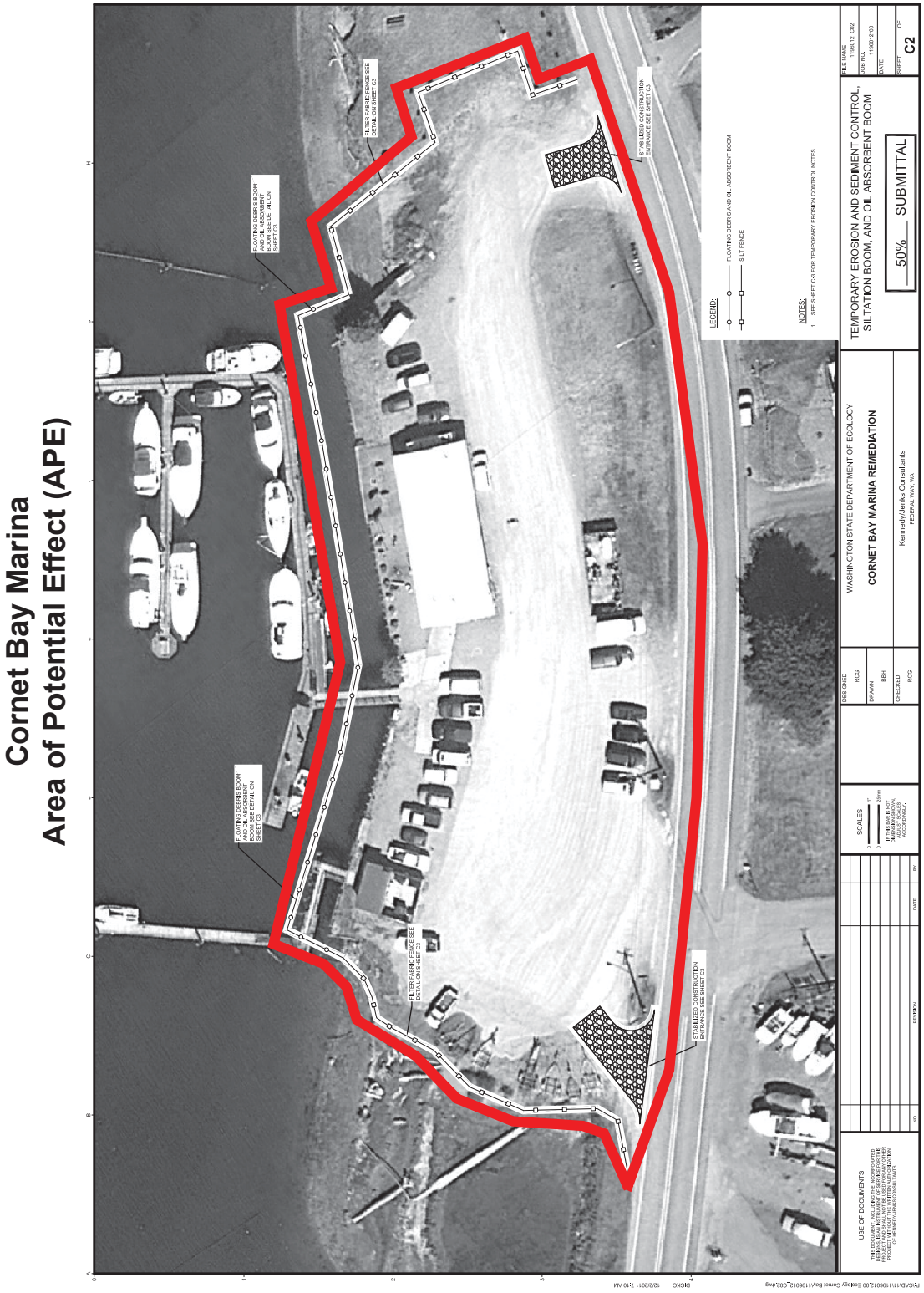

Figure 4. Cornet Bay Marina Area of Potential Effects.

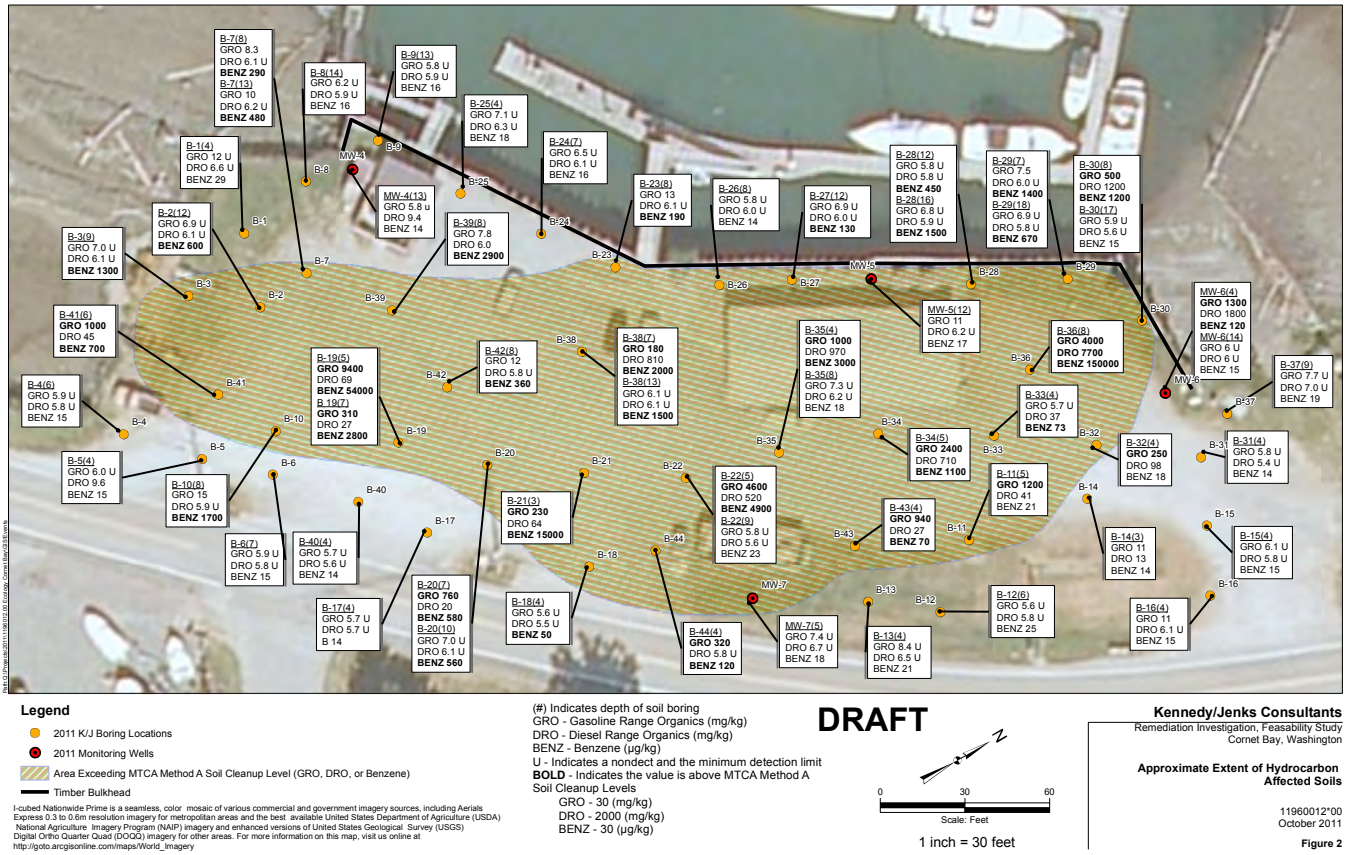

Figure 5. Current locations from Kennedy/Jenks Consultants showing remediation investigations of project area.

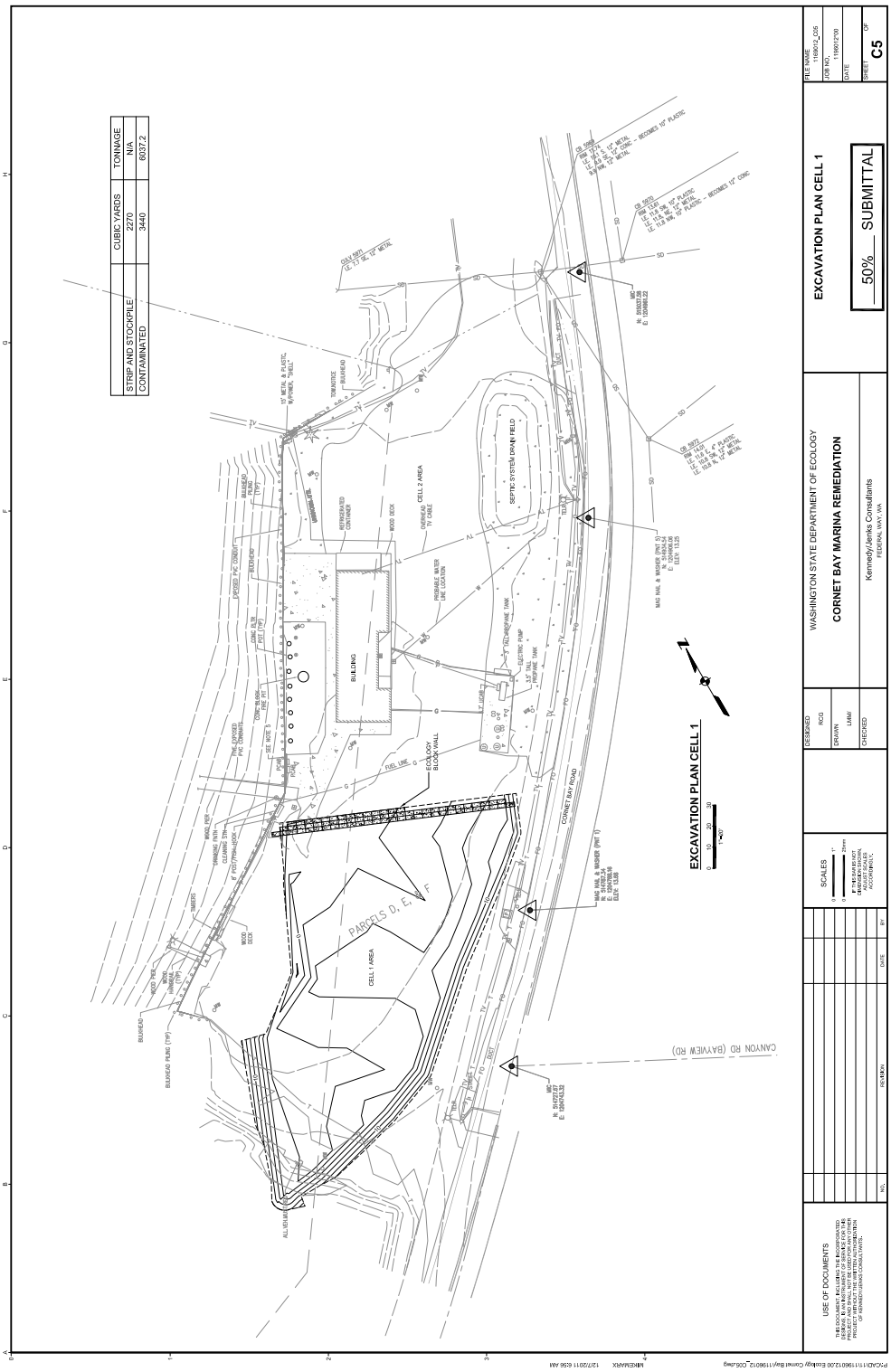

Figure 6. Excavation plans for cell 1.

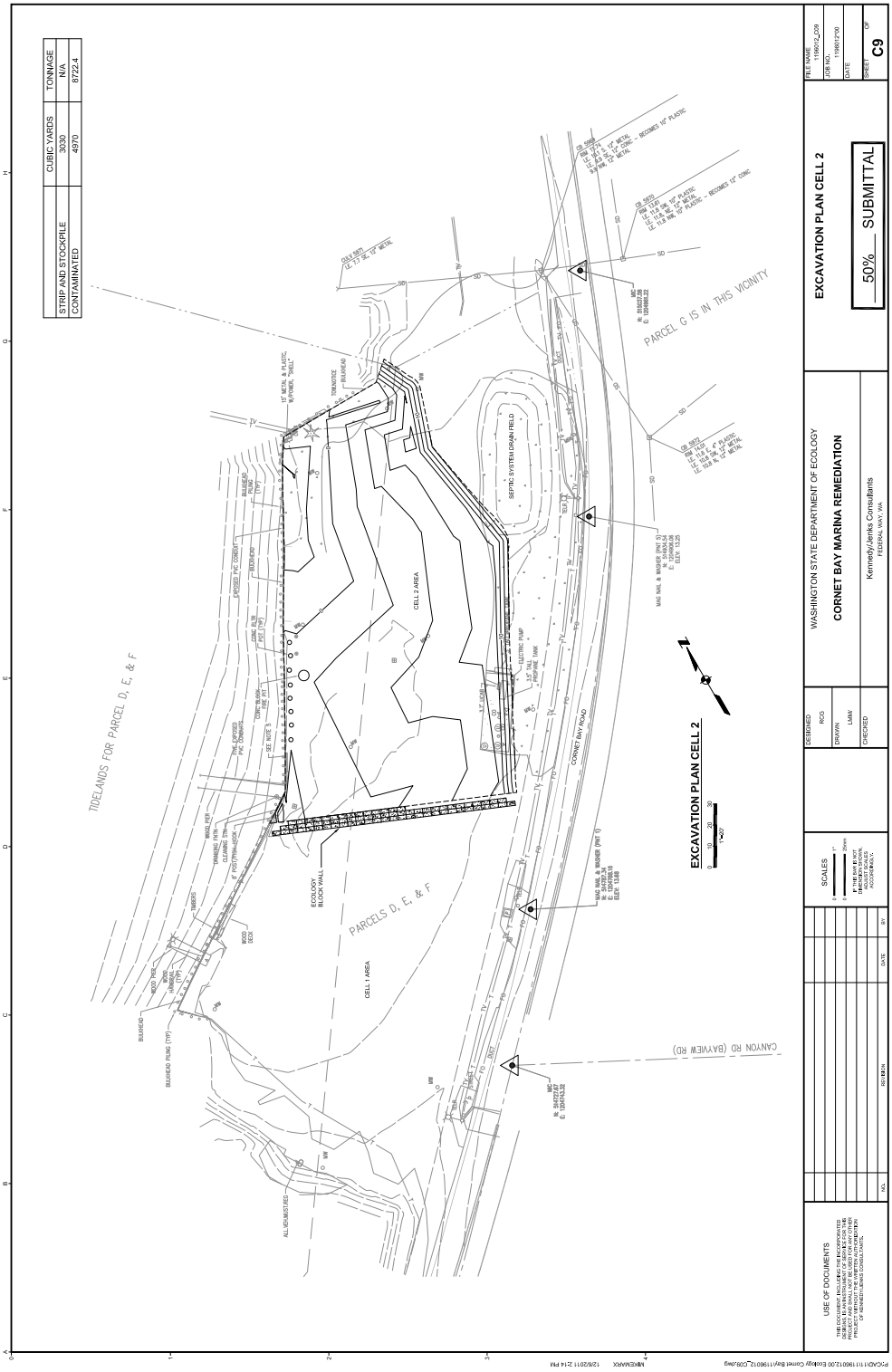

Figure 7. Excavation plans for cell 2.

Table 1. Cultural resource sites recorded within one mile of the APE.

Site Number	Site Name	DAHP Site Type	NRHP/WHR Status	Distance from APE	Potential Project Impacts
45IS30	Ben Ure Island	Pre-contact burial, lithic material, rock alignment, shell midden	Inventory	0.4 miles	None
45IS31	Cornet Bay	Pre-contact camp, shell midden	Inventory	0.5 miles	None
45IS93		Pre-contact camp, shell midden	Inventory	1 mile	None
45IS94		Pre-contact camp, shell midden	Inventory	0.3 miles	None
45IS203	Davis	Pre-contact camp, lithic material, shell midden	Inventory	< 500 ft.	None
45IS209		Pre-contact lithic material	Inventory	1 mile	None
45SK170	Deception Pass Bridge	Bridge	Listed WHR/NRHP	1 mile	None
45SK238	Canoe Pass Bridge	Bridge	Listed WHR	1 mile	None