CULTURAL RESOURCES REPORT COVER SHEET

Author: Schultze, Carol, and Angus Raff-Tierney

Title of Report: Archaeological Monitoring Report for the Cornet Bay Marina Remediation Project, Whidbey Island, Island County, Washington

Date of Report: August 2014

County(ies): Island Section: 36 Township: 34 Range: 01E

Quad: Deception Pass Acres: <0.1

PDF of report submitted (REQUIRED) ☒ Yes

Historic Property Inventory Forms to be Approved Online? ☐ Yes ☒ No

Archaeological Site(s)/Isolate(s) Found or Amended? ☒ Yes ☐ No

TCP(s) found? ☐ Yes ☒ No

Replace a draft? ☐ Yes ☒ No

Satisfy a DAHP Archaeological Excavation Permit requirement? ☐ Yes # ☒ No

Were Human Remains Found? ☐ Yes DAHP Case # ☒ No

DAHP Archaeological Site #:
45IS333

- 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.

Archaeological Monitoring Report for the Cornet Bay Marina Remediation Project, Whidbey Island, Island County, Washington

Submitted to:
Kennedy Jenks Consultants

Submitted by:
Historical Research Associates, Inc.
Carol Schultze, PhD, RPA
Angus Raff-Tierney, MA

Seattle, Washington
August 2014

Historical Research Associates, Inc.

This report was prepared by HRA Principal Investigator Carol Schultze PhD, RPA, and Angus Raff-Tierney, MA, who meet the Secretary of the Interior's professional qualifications standards for archaeology. This report is intended for the exclusive use of the Client and its representatives. It contains professional conclusions and recommendations concerning the potential for project-related impacts to archaeological resources based on the results of HRA's investigation. It should not be considered to constitute project clearance with regard to the treatment of cultural resources or permission to proceed with the project described in lieu of review by the appropriate reviewing or permitting agency. This report should be submitted to the appropriate state and local review agencies for their comments prior to the commencement of the project.

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1. Introduction

Kennedy Jenks Consultants (KJC) is assisting with investigation and cleanup of environmental contamination at the Cornet Bay Marina. The Cornet Bay Marina Remediation Site is located along the shoreline of Whidbey Island, Washington, in Township 34 North, Range 1 East, Section 36 of the Willamette Meridian (Figure 1-1).

Kennedy Jenks Consultants' investigative work across the project area included excavation of dredge fill and native soil to a maximum depth of 16 feet (ft) (Kennedy Jenks 2013a). KJC contracted with Historical Research Associates, Inc. (HRA), to monitor the excavations in native soil for the potential of buried cultural deposits. This work took place between February and April of 2014.

Archival research showed that an old bulkhead present on site, which was to be removed by this project, was built just over 50 years ago (Kennedy Jenks 2013b). As such, it was recorded as a historic-era archaeological site (45IS333). Phone consultations with Gretchen Kaehler of the Department of Archaeology and Historic Preservation (DAHP) and Ty Schreiner of KJC resulted in an agreement that the bulkhead is not eligible for inclusion in the National Register of Historic Places (NRHP). As such, it was removed after being documented by HRA. Additionally, isolated historic-era bottles and cans were noted, but lacked integrity and were not recorded.

No other archaeological or cultural materials were found during monitoring. No additional cultural resources work is recommended.

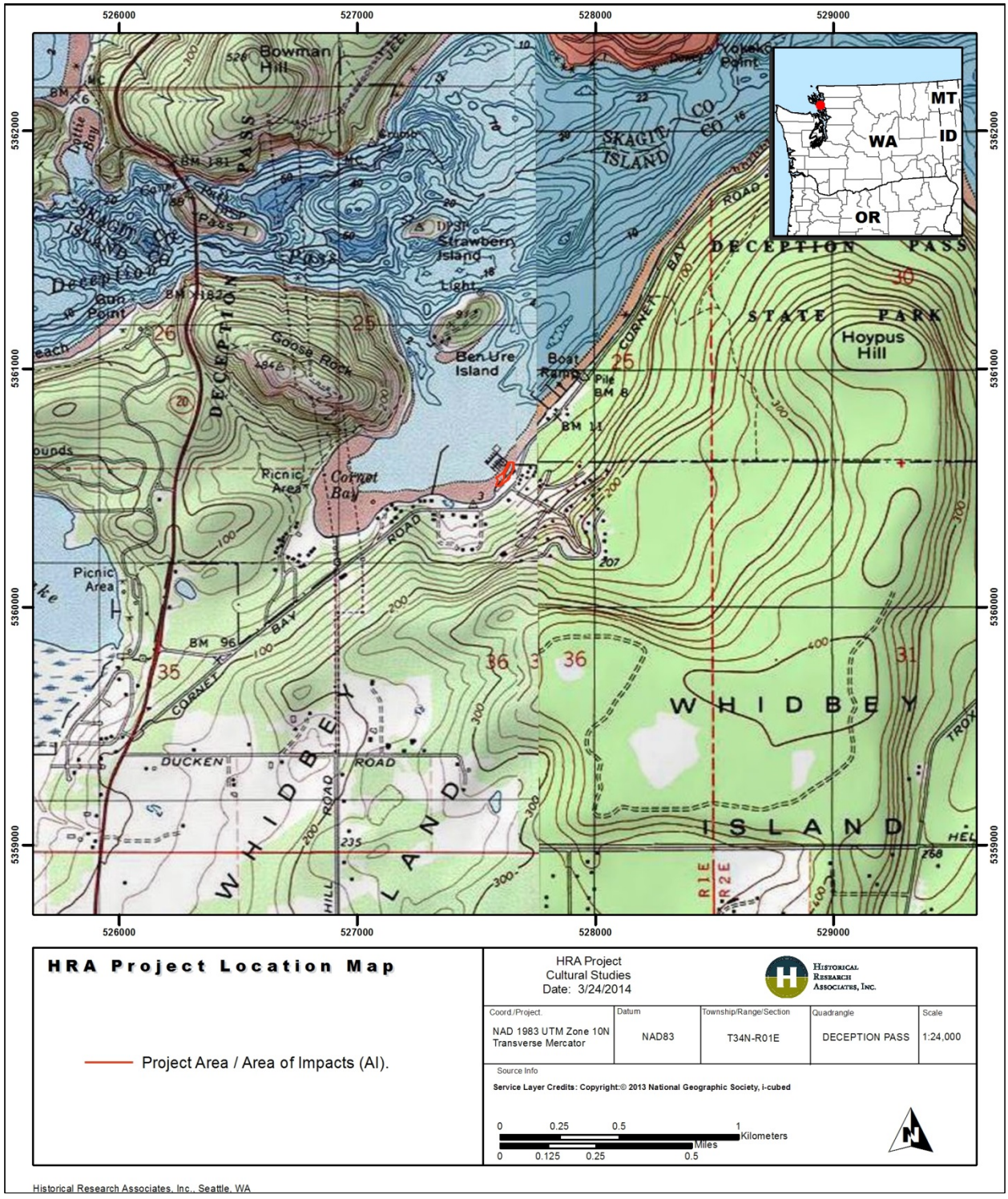


Figure 1-1. Project Location and Area of Impacts

2. Regulatory Context and Area of Impact

2.1 Regulatory Context

This project is being undertaken under Washington State Department of Ecology (DOE) Consent Decree (#93-2-00018-3) and is subject to compliance with the State Environmental Protection Act (SEPA). It is also subject to laws of the State of Washington including the Revised Code of Washington (RCW), particularly RCW 27.44 regarding Indian Graves and Records, RCW 27.53 concerning Archaeological Sites and Resources, and RCW 68.60 regarding Abandoned Historic Cemeteries and Historic Graves.

2.2 Area of Impacts

The Area of Impacts (AI) is defined as the portions of the proposed Project wherein ground disturbing activities could impact human remains or archaeological deposits that are potentially eligible for listing in national, state, or local registers. The project AI is proposed to consist of the entire parcel under investigation, where ground disturbance may occur in previously undisturbed sediments. This area measures approximately 0.89 acres (Figure 2-1). A 1940s map shows the AI in respect to the shoreline prior to the construction of the Marina (Figure 2-2).

Figure 2-1. Area of Impacts (AI).

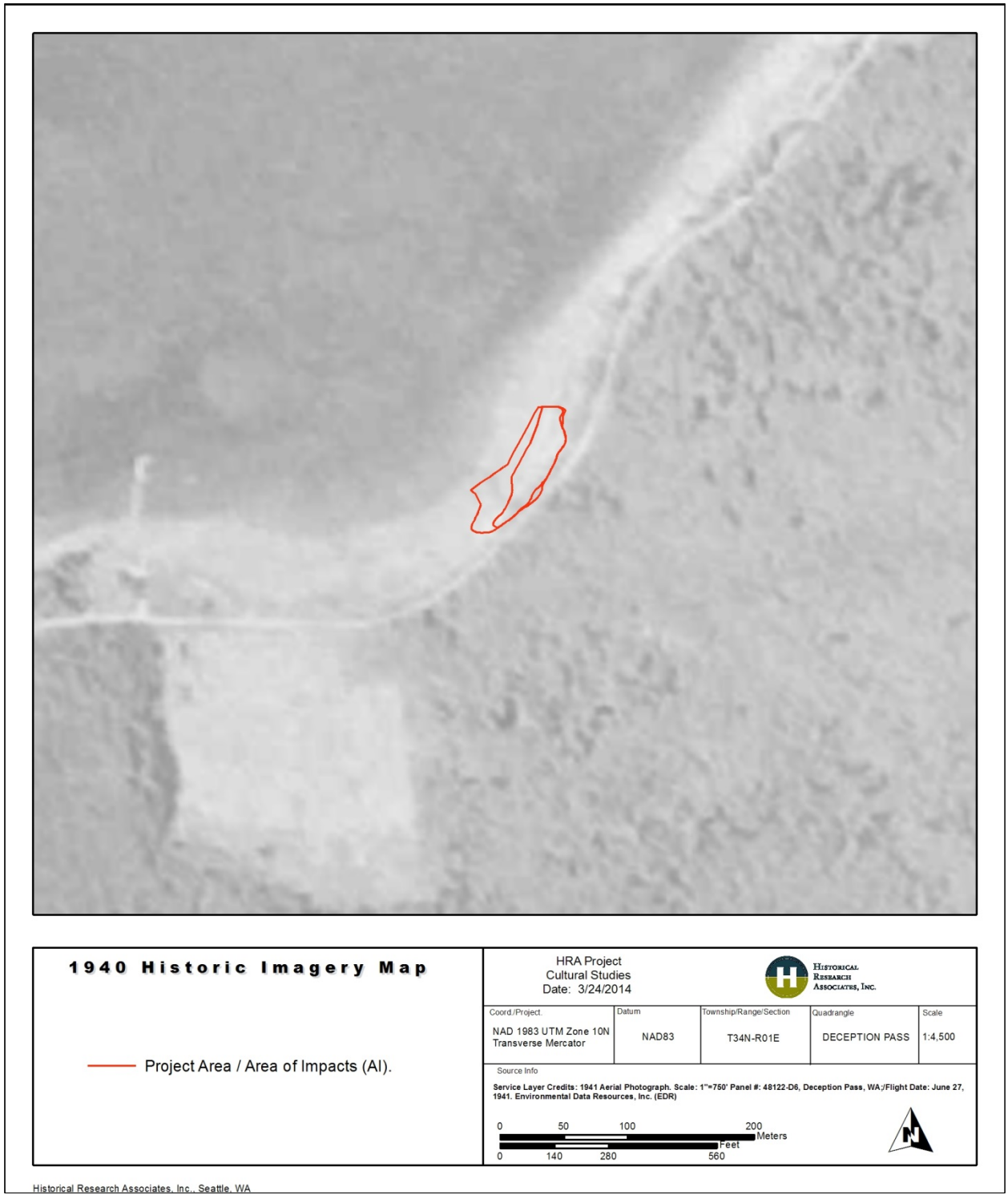


Figure 2-2. Area of Impacts plotted on a 1940s aerial photograph (source: Kennedy Jenks 2013a).

3. Procedures for Archaeological Monitoring and the Treatment of Archaeological Resources

The State of Washington requires oversight of all cultural resources related activities to be overseen by a Professional Archaeologist who meets the Secretary of the Interior's qualifications (36 CFR part 61; RCW 27.53.030.8). Due to the contamination of the soils at the Cornet Bay Marina project AI, the monitors were also required to hold a current 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) certification. HRA archaeologists Angus Raff-Tierney, Colin Lothrup, and Jennifer Gilpin followed a monitoring protocol based on the Inadvertent Discovery Plan (IDP) that had been developed by Cultural Resource Consultants, Inc. (CRC) (Hartman 2013a, 2013b).

Much of the marina was constructed of dredge fill material. An archaeological monitor from HRA was present on site during ground disturbing activities that went below this fill level into native soils. The monitor followed all safety regulations and wore personal protective equipment that included a hard hat, safety glasses, steel-toed boots, and a high visibility vest. HRA personnel additionally stayed away from all unsecured ledges and pits over 5 ft deep. Daily notes were recorded on a notebook, transcribed to HRA's standard monitoring form, and submitted for the HRA Supervisor's review. These notes recorded the depth, location, and description of soil strata, finds, and debris not considered significant. Photographs were taken daily, including overviews of specific construction areas, soil profiles, cultural materials, and work in progress.

During excavation, the archaeological monitor stood in proximity to construction equipment in order to view subsurface deposits as they were exposed, and maintained close communication with equipment operators to ensure adequate opportunity for observation and documentation, as well as safety. The monitor sought to identify potential buried surfaces, anthropogenic sediments, and archaeological features such as shell middens, hearths, or artifact-bearing strata. The monitor inspected project excavations and recovered sediments to examine for indications of such archaeological resources. The monitor was provided the opportunity to screen excavated sediments and soil matrix samples when this was judged useful to the identification process. Modern fill (e.g., imported culturally-sterile construction fill) or glacial till sediments were not included in screening activities. Excavated spoils were examined in the course of monitoring. If cultural materials were

observed in spoils piles, it was expected that these would be removed for examination and that the opportunity to screen spoil sediments was available.

4. Monitoring Results

Archaeological monitoring was conducted by HRA archaeologists Angus Raff-Tierney, MA, Colin Lothrup, BA, Jennifer Gilpin, MA, and supervised by Carol Schultze, PhD, RPA. Excavation was conducted by Glacier Construction Services using Deere 350G and 200D excavators, and overseen by KJC. An archaeological monitor was present during all days that included disturbance of native soils. These dates include February 3, 5–7, 12, 13, 17–19, and 26, and March 3, 5, 6, 10, 11, 14, 17, and 27 of 2014.

4.1 Sediment Types

Four types of sediment were observed in the AI: terrestrial fill, dredged marine fill, native sediments, and glacial deposits (Figure 4-1). Terrestrial fill covered the AI to depths ranging from 2 to 4 ft below surface, or 10 to 12 ft above mean sea level (amsl). It consisted of brown compact sandy silt with 40 percent subround gravel and pebbles. Beneath this upper stratum was a deposit of dredged marine fill. This deposit varied in depth from 4 to 6 ft along the road/historic shoreline to 12 ft nearer to the bay. The marine dredge fill consisted of blue loose sandy clay with sparse shell fragments. The thickness of the dredge fill deposit varied throughout the AI but was generally thicker towards the bay and thinner along the road.

The intact native surface was observed across the AI beneath the terrestrial and dredge fill deposits. Along the south side, toward the historic shoreline, the native surface was shallowest and contained more organic debris, including wood. Towards the bay on the north side of the AI, the native surface gradually increased in depth and the woody organic debris was absent.

On the southern side of the AI, the native surface was 4 to 6 ft beneath the present surface level (Figure 4-1). In this area, the native surface was between 2 and 10 inches in thickness and consisted of black sandy silt with rootlets and decaying wood. Wood fragment density in this layer increased to the east becoming peat. This layer graded into glacial till with increasing depth below surface. The glacial till was dense blue clay with 20 to 40 percent unsorted subround pebbles and gravels.

Figure 4-1 Southeastern AI showing layered terrestrial fill on top, marine fill dredge, and native peat on bottom, view south.

On the bay-side, north of the AI, native soil was present 11.5 ft deep (2.5 ft amsl) and included two strata (Figure 4-2). The upper stratum was gray blue sandy clay with sparse bands of rounded gravel and bands of browner grey. This contained a few small whole and crushed shells. Some of the shells were in their natural position (vertical), indicating an intact ground surface; however, others were lying flat, indicating some disturbance. This top stratum is about 13 inches thick, the same color as the fill above, and could be distinguished from the fill by merit of being free of clam fragments and gravels. Shells in this area were predominantly mud clam (*Macoma nasuta*), a native bivalve adapted to silty marine sediments. The lower native stratum consisted of greenish grey-brown silty sand with many whole mud clams in natural position, and fewer gravels. There were also a few rounded pebbles. The boundary between these two native strata is abrupt and can be clearly seen as a distinct change in hue. The lower boundary of these native strata is indistinct; however, they graded into a

deposit of glacial till as depth increased. The glacial till consists of dense blue clay with some pebbles and gravels.

Figure 4-2 Northwestern AI, view north. The native surface can be seen as a straight horizontal color change from lighter to darker grey to the right of the log.

4.2 Archaeological Site 45IS333

Removal of the terrestrial and marine fill sediments uncovered a creosote-treated wood bulkhead that extends along the northern bay edge of the project AI. This was recorded as a historic-era site (45IS333) prior to its removal (Schultze 2014). The bulkhead is approximately 400 ft long and 10 ft deep with two right angles extending the bulkhead south (Figure 4-3). It was built in the early 1960s, prior to the opening of the marina in 1963. Upon submission of the site record and through phone

consultation on the part of KJC, DAHP rendered an opinion that this historic site (45IS333) was not eligible for inclusion in the NRHP and allowed it to be removed.

Figure 4-3 Overview of the southwestern extent of the bulkhead, view north. Goose rock can be seen in the background.

Throughout the AI there are anchor logs and pilings. These features were used to support the bulkhead wall with 1-inch steel cables wrapped between the bulkhead and the anchor logs and pilings. Two sets of anchor logs, 2 to 3 ft wide and lying horizontally, ran the length of the project area from east to west, parallel to the shoreline. The anchor logs were found just above the native surface between 8 and 12 ft deep. Pilings with a 10 inch diameter ran along both sides of the anchor logs at 9 to 11 ft intervals.

Another historic-era artifact in the southeastern AI was found in dredge fill 6 ft deep and 25 ft north of the road. The artifact is a clear glass liquor bottle with the Owens-Illinois company logo and the

following script embossed on the bottom and sides, "D90, 57-52", "4/5 Quart", and, "FEDERAL LAW PROHIBITS SALE OR RE-USE OF THIS BOTTLE." The bottle is 11 inches long with a 3 inch diameter base, and a 1 1/16 inch diameter stopper top (Figure 4-4). All liquor bottles were required to have the federal law statement imprinted from 1935 and 1964 (Lindsey 2014). While having this date range makes the bottle historic, it was found in a secondary context in the fill and as such was not recorded.

Figure 4-4 Liquor bottle embossed with, "FEDERAL LAW PROHIBITS SALE OR RE-USE OF THIS BOTTLE" from fill levels.

A few modern artifacts, including cans and glass, were observed scattered throughout the AI. In the southeastern area, there was a localized refuse dump associated with the native surface (Figure 4-5). Although this refuse was associated with the native surface, it did not contain any diagnostic characteristics and was therefore was not recorded.

Figure 4-5. Modern artifacts associated with native peat deposits in the southeastern excavation limits.

In the southwestern area, modern, as well as historic-era, artifacts were observed separately in fill materials. These included a brown beer bottle, a glass Coca-Cola bottle, and a tire and rim. The beer bottle was found 15 ft west of the bulkhead. The manufacturing mark used was the Owens-Illinois mark from after 1954 (Whitten 2014). The Coca-Cola bottle was 7 3/4 inches long with a 2 3/8 inch base. Raised text on the body reads "Punca city, OKLA," and "Pat d-105529." This patent number was printed on Coca-Cola bottles from 1937 to 1951 (Lockhart and Porter 2010). While some of these artifacts are older than 50 years, they were not recorded because they were found in fill deposits that lack integrity.

5. Conclusions

HRA archaeologists monitored all ground disturbing activities into intact native sediments in the AI during the remediation excavation conducted by KJC at the Cornet Bay Marina. During monitoring, one historic-era bulkhead was identified and recorded as Site 45IS333. This was a bulkhead built prior to 1963 (Kennedy Jenks 2013b). DAHP concurred that this site was not eligible for inclusion in the NRHP and allowed it to be removed.

KJC completed planned excavations in April 2014 and it is anticipated that no further ground disturbing activity will occur in native soils at the project AI. Unless there are changes and additions to the planned ground disturbing activities, no further cultural resources work is recommended.

6. References

Hartman, Glenn

2013a *Proposed Plan for Archaeological Monitoring and Inadvertent Discovery Protocol, for the Cornet Bay Marina MTCA Cleanup Project, Island County, Washington.* Submitted to Kennedy Jenks Consultants, Seattle, Washington.

2013b *Cultural Resources Assessment for the Cornet Bay Marina MTCA Cleanup Project, Island County, WA.* Submitted to Kennedy Jenks Consultants, Seattle, Washington.

Kennedy Jenks Consultants

2013a *Remedial Investigation/ Feasibility Study Report: Cornet Bay Marina, Whidbey Island, Washington.* Prepared for Washington State Department of Ecology Toxics Cleanup Program, Olympia.

2013b *Engineering Design Report Cornet Bay Marina, Whidbey Island, Washington.* Prepared for Washington State Department of Ecology Toxics Cleanup Program, Olympia.

Lindsey, Bill

2014 Bottle Typing/Diagnostic Shapes. Liquor/Spritis Bottles. Electronic document, http://www.sha.org/bottle/liquor.htm, accessed April 8, 2014.

Lockhart, Bill, and Bill Porter

2010 The Dating Game: Tracking the Hobble-Skirt Coca-Cola Bottle. *Bottles and Extras.* September-October. Electronic document, http://www.sha.org/bottle/pdffiles/coca-cola.pdf, accessed March 20, 2014.

Schultze, Carol

2014 *State of Washington Archaeological Site Inventory Form, Cornet Bay Marina Bulkhead, HRA2186-1.* On file at the Department of Archaeology and Historic Preservation, Olympia, Washington.

Whitten, David

2014 Glass Bottle Marks: Owens-Illinois Glass Company. Electronic document, http://www.glassbottlemarks.com/owens-illinois-glass-company-bottle-container-marks/, accessed March 20, 2014.

Appendix A. Site Record for 45IS333

STATE OF WASHINGTON
ARCHAEOLOGICAL SITE INVENTORY FORM

Smithsonian Number:
45IS333
***County:** Island County

***Date:** 02/18/2014 ***Compiler:** C. Schultze

Location Information Restrictions *(Yes/No/Unknown)***:** Yes

SITE DESIGNATION

Site Name: Cornet Bay Bulk Head

Field/ Temporary ID: HRA-2186-1

Site Type** *(Refer to the DAHP Survey and Inventory Guidelines Page 19):** Historic Water Structure

SITE LOCATION

***USGS Quad Map Name:** Deception Pass

***Legal Description: T**34N **R** 01E **Section(s):** 25

Quarter Section(s): SE, SW

***UTM: Zone** 10T **Easting** 527600 **Northing** 5360548

Latitude: **Longitude:** **Elevation (ft/m):** 30 ft amsl

Other Maps: **Type:**

Scale: **Source:**

Drainage, Major: on shoreline **Drainage, Minor:** **River Mile:**

Aspect: north facing **Slope:** 0

Location Description** *(General to Specific):** The site is located on the north end of Whidbey Island in Island County, Washington, directly southeast of Deception Pass (Figure 1). The bulkhead is situated within tidal lands, surrounding historic and modern fill on the south-southeast shore of Cornet Bay, Washington.

Approach *(For Relocation Purposes)***:** From Mt. Vernon, take Washington SR-536 northwest to SR-20 west. Go over Deception Pass Bridge and turn left on W Cornet Bay Road, heading east. The Marina is located on the left side at 200 Cornet Bay Road in Oak Harbor, WA 98277.

SITE DESCRIPTION

***Narrative Description:**

The creosote-treated wood bulkhead was observed during archaeological monitoring at the Cornet Bay Marina Remediation Project (project). The northwestern length and portions of the southwest and northeast lengths of the bulkhead were exposed prior to the remediation, and are shown on project plans (Figure 2). An unanticipated section of the bulkhead, located in the southwestern portion of the project area, was recorded during monitoring (Figure 3).

The exact date of bulkhead construction is uncertain. The hardware store owner at Deception Pass Marina reported that the grand opening for the marina was in 1963, making the construction just over 50 years ago (personal communication with "Dundee"). The Site History section of the project's Remedial Investigation/Feasibility Study (RIFS) Report states that construction of the marina "was completed in the early 1960s" (Kennedy Jenks 2013:3-1). The RIFS also states that "four USTs [underground storage tanks] were installed in 1964 (Kennedy Jenks 2013:3-1)," which suggests that the future marina may have been filled by this date.

Site Type** *(Refer to the DAHP Survey and Inventory Guidelines Page 19):** Historic Water Structure

***Site Dimensions**

***Length:** 1,000 ft ***Direction:** NE-SW x ***Width:** 100 ft ***Direction:** NW-SE

***Method of Horizontal Measurement:** Trimble points

***Depth:** 10 ft * **Method of Vertical Measurement:** Extent of excavation

Vegetation** *(On Site):** None

Local: Western Hemlock/Fir community **Regional:** Same

Landforms *(On Site)***:** Bay **Local:** Hills to south

Water Resources *(Type)***:** Puget Sound **Distance:** Adjacent **Permanence:** Year-round

CULTURAL MATERIALS AND FEATURES

***Narrative Description:**

A wooden bulkhead stretching across the length of the marina was exposed during the removal of fill sediments. The previously exposed portions of the bulkhead measure approximately 300 total feet in length. Another approximately 80 foot section was exposed during archaeological monitoring of contaminated fill removal in the southwest portion of the project area during archaeological monitoring (Figure 2).

The bulkhead appears to have a fairly standard method of construction, consisting of tightly-spaced vertical boards braced with three horizontal boards and supported by vertical pilings lashed with 1-inch metal cable (Figures 4, 5). The wood has been creosote-treated. Vertical boards measure approximately 3.5 inches thick by 1 foot wide. Vertical boards removed during project activities measured 8 to 10 feet in length (Figure 6), although the total length of all vertical boards is uncertain. At the far southern end of this section, approaching the historic shoreline, shorter vertical boards were required (measuring 3 feet, 1 inch), and they were braced by a single length of horizontally oriented boards.

Horizontal braces tended to be thicker, measuring approximately 4 inches, and ranging between 8 inches and 1 foot wide. Horizontal braces were nailed to vertical boards approximately 3 feet apart along the outer face of the bulkhead. Observed pilings range in diameter between 1 foot and 18 inches, and the upper cable is lashed approximately 8 inches below the upper surface of the pilings (Figure 7).

***Method of Collection(s):** No artifacts were collected

Location of Artifacts** *(Temporary/Permanent):** N/A

SITE AGE

***Component:** Historic ***Dates:** circa 1960-1965 ***Dating Method:** Texts, oral history

Phase: Twentieth century **Basis for Phase Designation:** Materials and technology

SITE RECORDERS

Observed by: Angus Tierney, MA, and Jennifer Gilpin, MA **Address:** HRA (see below)

***Date Recorded:** 2/18/2014

Recorded by** *(Professional Archaeologist):** Jennifer Gilpin

***Affiliation:** Historical Research Associates, Inc. (HRA)

***Affiliation Phone Number:** 206-343-0226

***Affiliation Address:** 1904 3rd Ave, Seattle, WA 98101

***Affiliation E-mail:** jgilpin@hrassoc.com

Date Revisited: **Revisited By:**

SITE HISTORY

Previous Work *(Done on Archaeological Site)***:**

In 2013, Cultural Resource Consultants, Inc., performed a cultural resources assessment ahead of the proposed remediation project. Due to the levels of soil contamination in the project area, no subsurface survey was performed. Although the technical memorandum mentions the wooden bulkhead, no date of construction is provided, and the bulkhead was not recorded as a resource (Hartmann 2013).

LAND OWNERSHIP

***Owner:** Deception Pass Marina, Inc.

***Address:** 200 Cornet Bay Rd, Oak Harbor, WA 98277-9756

***Tax Lot/ Parcel No:** R13436-506-2420

RESEARCH REFERENCES

Items/Documents Used In Research** *(Specify):**

Hartmann, Glenn (2013) *Cultural Resources Assessment for the Cornet Bay Marina MTCA Cleanup Project, Island County, Washington*. Cultural Resources Consultants, Inc. Technical Memo 1110P-4. Prepared for Grette Associates.

Kennedy Jenks (2013) *Draft Engineering Design Report. Cornet Bay Marina, Whidbey Island, Washington*. Prepared for Washington State Department of Ecology.

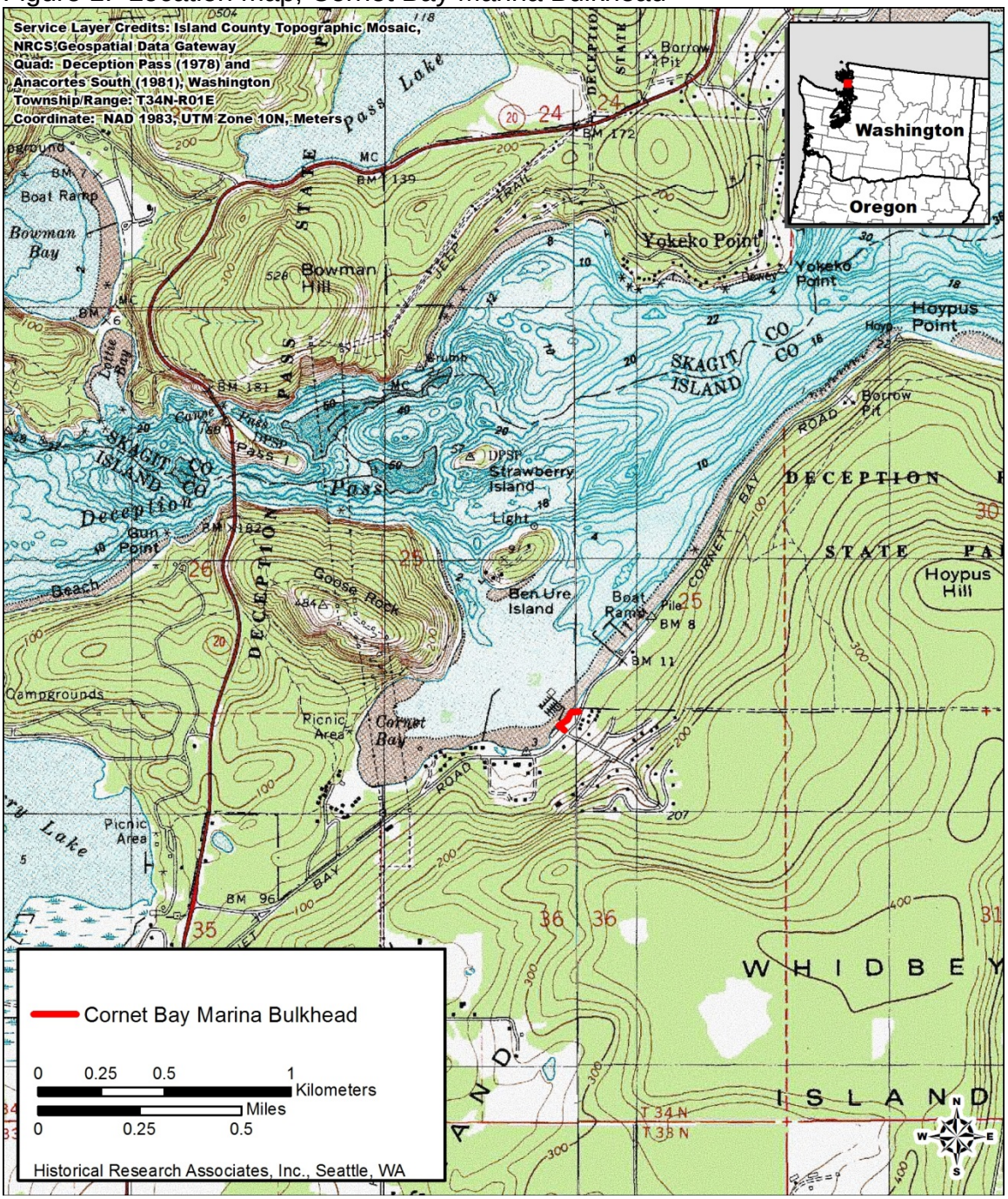
USGS MAP

*__Quad Name:__ Deception Pass

__*Series:__ 7.5 min

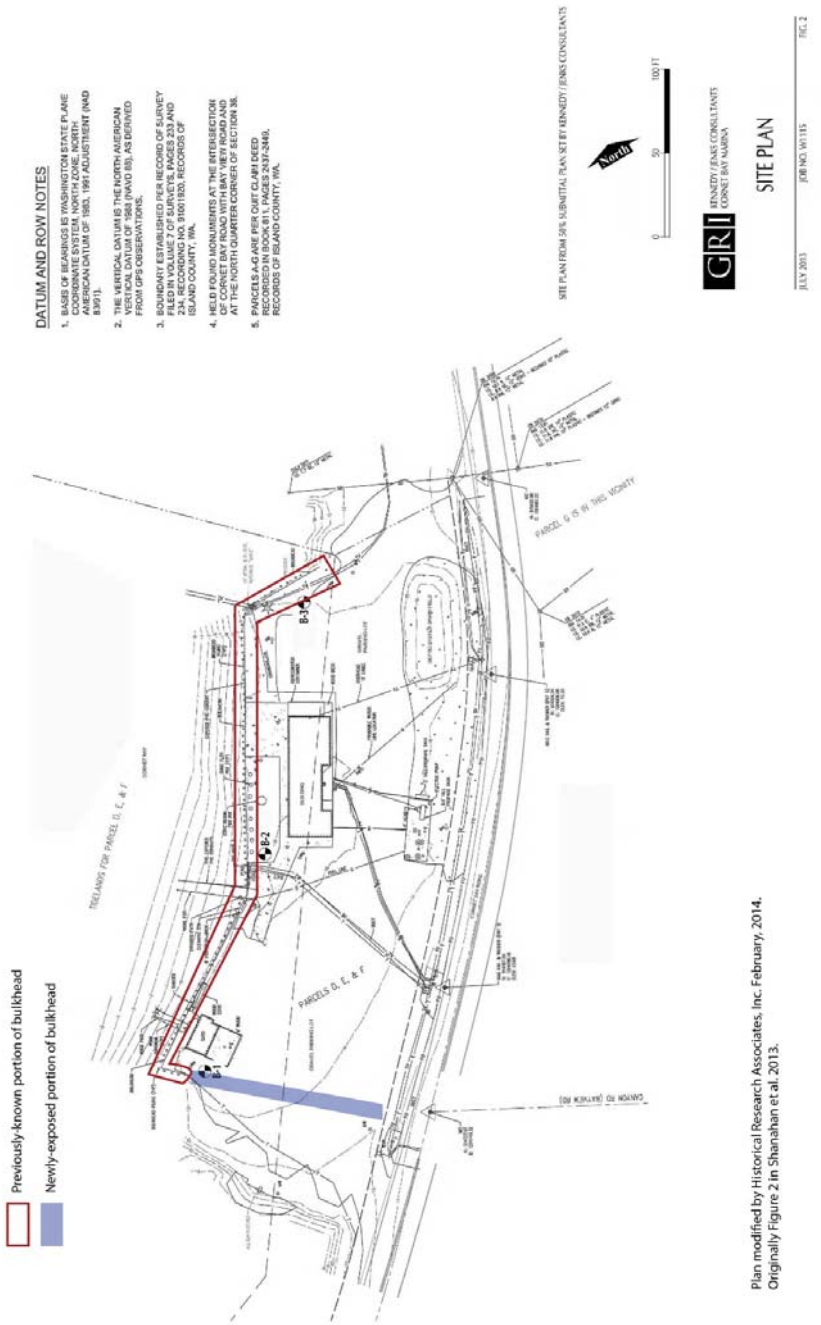
__*Date:__ 1978

Figure 1: Location map, Cornet Bay Marina Bulkhead



SKETCH MAP

***Sketch Map Description:** Figure 2:
Project plans (Kennedy Jenks 2013) showing location of previously known and discovered portions of the bulkhead



Plan modified by Historical Research Associates, Inc. February, 2014.
Originally Figure 2 in Shanahan et al. 2013.

PHOTOGRAPH(S)

***Photograph Description(s):**

Figure 3: Overview of east side exposed southwest section of the bulkhead (view to northwest).

PHOTOGRAPH(S)

Figure 4: Overview of exposed portion of southwest section of bulkhead, southwest face, along the middle portion of the bulkhead. Note vertical boards, horizontal braces, and cable-wound piles (view to east).

PHOTOGRAPH(S)

Figure 5: Same section of bulkhead as Figure 4, closer view (tape at 2 feet and view to east).

PHOTOGRAPH(S)

Figure 6: Overview of removed portions of the bulkhead, showing variable lengths and widths of creosote-treated components to the bulkhead (view to north).

PHOTOGRAPH(S)

Figure 7: Overview of upper portion of a cable-wound support pile, showing diameter and size of cable (view to southeast).

CONTINUATION/ ADDENDUM SHEET

Label all additional pages by corresponding headings.

(e.g. Site Description, Site History, Research References)