Attachment M Cultural Resources Technical Report



March 2023 Port of Grays Harbor Terminal 4 Expansion and Redevelopment Project



Cultural Resources Technical Report

Prepared for Port of Grays Harbor and Ag Processing, Inc.

March 2023 Port of Grays Harbor Terminal 4 Expansion and Redevelopment Project

Cultural Resources Technical Report

Prepared forPort of Grays Harbor
Ag Processing, Inc.

Prepared byBarbara E. Bundy and Christopher Hetzel
Anchor QEA, LLC

TABLE OF CONTENTS

1	Intr	oductio	on	1
2	Pro	osed A	Action and Alternatives	3
	2.1	Purpo	se and Need	3
	2.2	No Ac	tion Alternative	3
	2.3	Propo	sed Action	3
3	Reg	ulatory	/ Context	7
	3.1	Area c	of Potential Effects	8
	3.2	Consu	ıltation	8
4	Affe	cted E	nvironment	10
	4.1	Enviro	nmental Context	10
	4.2	Cultur	al Context	12
	4.3	Recor	ded Cultural Resources and Studies	18
		4.3.1	Archaeological Sites	18
		4.3.2	Historic Structures	18
		4.3.3	Cultural Resources Studies	20
	4.4	Poten	tial for Unrecorded Cultural Resources	20
5	Envi	ronme	ntal Consequences	22
	5.1	Metho	ods and Approach	22
		5.1.1	Impact Types	22
	5.2	No Ac	tion Alternative	22
	5.3	Propo	sed Action	22
		5.3.1	Construction	22
		5.3.2	Operation	23
	5.4	Cumu	lative Impacts	24
6	Refe	erences	5	25
TΑ	BLE			
	ole 1		Proposed Action Ground Disturbance and Archaeological Potential	23

i

FIGURES

Figure 1	Project Vicinity	2
Figure 2	Elements of the Proposed Action	
Figure 3	Area of Potential Effects	
Figure 4	General Land Office Map	11
Figure 5	1906–1907 Sanborn Fire Insurance Maps	15
Figure 6	U.S. Coast and Geodetic Survey Nautical Charts	17
Figure 7	Elements of the Proposed Action on a 1953 Aerial Photograph	21

APPENDIX

Appendix A Historic Property Inventory Form

ABBREVIATIONS

AGP Ag Processing, Inc.

AGP project Ag Processing, Inc., Operations Expansion at Terminal 4

APE Area of Potential Effects
CFR Code of Federal Regulations

DAHP Department of Archaeology and Historic Preservation

fbs feet below ground surface

federal agencies U.S. Army Corps of Engineers and U.S. Maritime Administration

MARAD U.S. Maritime Administration

NRHP National Register of Historic Places

Port of Grays Harbor

Port project Terminal 4 Expansion and Redevelopment Project

Proposed Action Terminal 4 Expansion and Redevelopment Project and Ag Processing, Inc.,

Operations Expansion at Terminal 4

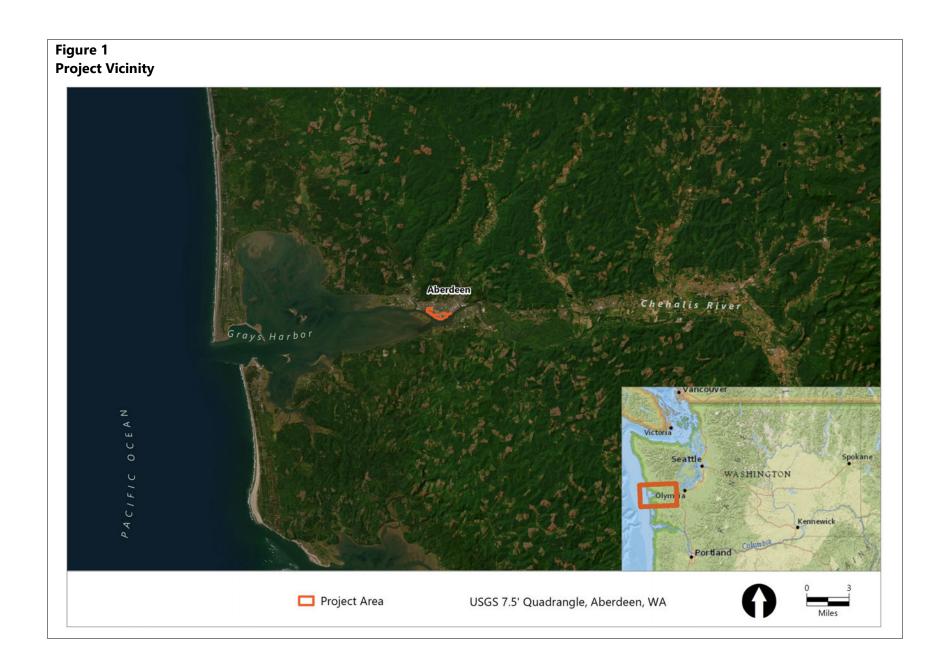
PSAP Puget Sound & Pacific Railroad SHPO State Historic Preservation Officer

USACE U.S. Army Corps of Engineers

1 Introduction

The Port of Grays Harbor (Port) is proposing the Terminal 4 Expansion and Redevelopment Project (Port project) to expand rail and shipping capacity at Terminal 4 at the Port of Grays Harbor located in the cities of Hoquiam and Aberdeen, Washington, to accommodate growth of dry bulk, breakbulk, and roll-on/roll-off cargoes. Ag Processing, Inc. (AGP), is proposing to expand its operations at Terminal 4 (AGP project). Together, the Port and AGP projects are referred to as the Proposed Action (Figure 1).

The Proposed Action requires a permit from the U.S. Army Corps of Engineers (USACE) and will receive funding from the U.S. Maritime Administration (MARAD). USACE and MARAD (federal agencies) must comply with Section 106 of the National Historic Preservation Act. Section 106 requires federal agencies to consider the effects of their undertakings on historic properties. This report assists the federal agencies in fulfilling the requirements of Section 106.



2 Proposed Action and Alternatives

2.1 Purpose and Need

The purpose of the Proposed Action is to improve the operational efficiency of the Port's infrastructure to support increased growth and economic opportunities, including construction of a new AGP export facility at Terminal 4.

The Proposed Action is needed to upgrade the Port's facilities, including expanding the rail loop and upgrading the existing Terminal 4 dock. Terminal 4 currently consists of a 1,400-foot by 100-foot concrete deck supported by concrete piles and pile caps, with three concrete vehicle approaches connecting to the uplands. The Proposed Action will allow AGP, the Port's tenant, to accommodate increased throughput of soybean meal and other bulk commodities to meet market demand. Redevelopment of the casting basin site will allow for continued use of Terminal 4A for breakbulk, roll-on/roll-off, and other cargoes. The casting basin is a large facility at the Port's eastern extent that was previously a log yard and was developed into a pontoon casting basin by the Washington State Department of Transportation in 2011.

2.2 No Action Alternative

Under the No Action Alternative, the Port would not make any improvements to the APE (it would be a No Build Scenario). Thus, the Port would not make any improvements of Terminal 4, Terminal 4 backlands, or the Casting Basin site.

Under the No Action Alternative, it is anticipated that AGP would maximize its operations at the existing Terminal 2 facility. Although the Terminal 2 facility can accommodate some increased cargo volume, it does not have the capacity to meet the level of the intended volume of cargo that could flow through Terminal 4 if redevelopment were to occur. Thus, the No Action Alternative does not have the capacity to meet the purpose and need of the proposed project. Port operation would remain at existing conditions.

2.3 Proposed Action

As noted in Section 1, the Proposed Action consists of the Port project and the AGP project and includes the following (Figure 2):

- Construction of 50,245 linear feet of new rail at the Port's existing loop track facility
- Terminal 4 dock, fender, and upland and on-dock stormwater upgrades
- Addition of a commodity transload facility at Terminal 4 by AGP
- Cargo yard relocation and expansion
- Construction of secured site access and roadway improvements for the safe, secure, and efficient flow of vehicles into and through the Proposed Action location



- Paving of unpaved access road(s)
- Construction of access roads and fencing to facilitate construction and operation of the other elements of the Proposed Action

Ground disturbance and structure modifications from specific Proposed Action elements are expected as follows:

- **New Rail:** A new Port-owned rail lead track and four new storage tracks would be built. This will require modification of a warehouse, originally constructed in 1994, located at 3000 West 1st Street. Construction staging will occur north of the warehouse. Ground disturbance is expected to be up to 4 feet below ground surface (fbs), with one exception. In one area where sediment has been piled up in previous years, ground disturbance will be up to 7 feet below the existing surface to maintain a level track. This is still considered 4 fbs in reference to the ground surface before stockpiling.
- **Modification of Existing Storage Tracks:** Six existing storage tracks would be extended and aligned with the four new storage tracks, with connections to both Port- and Puget Sound & Pacific Railroad (PSAP)-owned lead tracks. Ground disturbance is expected to be up to 4 fbs.
- **New Security Guard Station:** A security guard station will be built at the easternmost point of entry and would require foundations and utilities connections. Ground disturbance is expected to be up to 6 fbs.

- Crossing Upgrades: A new rail bridge at Fry Creek will replace an existing culvert, and three
 culverts will be extended within the ditch that is parallel to the East Terminal Way, known as
 East Ditch. The existing culvert was constructed in the 1980s and is less than 50 years old.
 Ground disturbance is expected to be up to 40 fbs.
- Terminal 4 Upgrades: Work at this location will involve removing and replacing portions of the existing dock at six locations in Terminal 4 Berth B with new pile-supported foundations, constructing a new pile-support foundation (to be used by the ship loader described below) adjacent to the Terminal 4 dock, and performing site improvements for stormwater conveyance at the Terminal 4 dock. Up to 156 piles would be installed, and up to 207 piles would be removed. No upland ground disturbance is expected. In-water ground disturbance for up to 85 piles is expected to be up to 60 feet below the mudline. The Terminal 4 dock was completed in 1972 and is 50 years old. It will be modified for the Proposed Action. The piling clusters around Terminal 4 are more than 50 years old but have been previously determined not eligible for listing in the National Register of Historic Places (NRHP; Department of Archaeology and Historic Preservation [DAHP] Property ID 717663).
- AGP Commodity Transload Facility: This would include upland and on-dock components. Upland components are a railcar receiving building with two receiving pits served by the new rail described above, bypass tracks on the north and south sides, a bulk scale tower, a landside motor control center building, and a conveyor structure. Utility service upgrades will be completed on water, sewer, and electrical systems. These structures will be on pile-supported foundations, and up to 494 piles are expected to be installed. Ground disturbance for upland facilities is expected to extend up to 60 fbs. On-dock components are a dockside motor control center building and a new three-tower ship loader atop the pile-supported foundation described above. There is no in-water ground disturbance for the on-dock components. As noted above, the Terminal 4 dock is more than 50 years old and will be modified for the Proposed Action.
- Cargo Yard Relocation and Expansion: The former casting basin would be filled and surface treatments and drainage upgraded as necessary to create a cargo laydown yard with a combination of paved and gravel surfaces. Much of the fill would be sourced from the initially excavated material that is stockpiled adjacent to the former casting basin. Ground disturbance is expected to be limited to grading and other surface activities and is expected to extend up to 4 fbs.
- Access Roads and Fencing: A new fence would be installed along the northern boundary of
 the Proposed Action site to separate the PSAP mainline from Port property and tracks. Access
 roads would be constructed alongside the new rail where not already in place. Ground
 disturbance is expected to be up to 6 fbs.

Construction traffic would access the site via Heron Street. Heron Street directly connects to U.S. Route 101 and is classified as a truck route per Aberdeen Municipal Code Chapter 10.60. It currently supports extensive truck traffic to and from the Port.

3 Regulatory Context

Section 106 of the National Historic Preservation Act, and its implementing regulations at 36 *Code of Federal Regulations* (CFR) 800, requires federal agencies to consider the effects of their undertakings on historic properties eligible for listing in the NRHP.

According to 36 CFR 800.16, a historic property is a prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the NRHP. A historic property may also be further identified as a Cultural Landscape or Traditional Cultural Property if it meets specific requirements described in NRHP guidance. When evaluating resources, the NRHP criteria for evaluation of significance of cultural resources properties must be applied. According to the National Register Criteria for Evaluation:

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of significant persons in our past; or
- C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That have yielded or may be likely to yield, information important in history or prehistory.

The following process for implementing Section 106 of the National Historic Preservation Act is described in 36 CFR 800:

- 1. Consult with the State Historic Preservation Officer (SHPO), interested and affected Native American Tribes, interested parties, and the public.
- 2. Determine the undertaking's Area of Potential Effects (APE).
- 3. Determine whether potential historic properties are present in the APE.
- 4. Evaluate whether the properties are NRHP eligible, and if so, whether the undertaking will affect them.
- Mitigate adverse effects to NRHP-eligible historic properties in consultation with SHPO and Native American Tribes.

This report assists the federal agencies in complying with Section 106 of the National Historic Preservation Act by describing the APE, describing known and potential historic properties in the APE, recommending NRHP eligibility, and providing an assessment of project effects.

3.1 Area of Potential Effects

The APE is defined in 36 CFR 800.16(d) as "the geographic area or areas within which an undertaking may directly or indirectly cause alternations in the character or use of historic properties, if any such properties exist." Historic properties are prehistoric or historic districts, sites, structures, or objects eligible for listing in the NRHP.

The Proposed Action has potential direct and indirect effects to historic properties, as follows:

- Direct effects to archaeological resources in areas of ground disturbance
- Direct effects to historic structures where structures are modified, demolished, or compromised by construction or traffic vibration (no changes are expected to the current industrial landscape and setting)
- Direct or indirect effects to Traditional Cultural Properties or Cultural Landscapes by modifying or removing character-defining features, introducing incompatible uses or structures, or other effects identified by a community connected to a Traditional Cultural Property

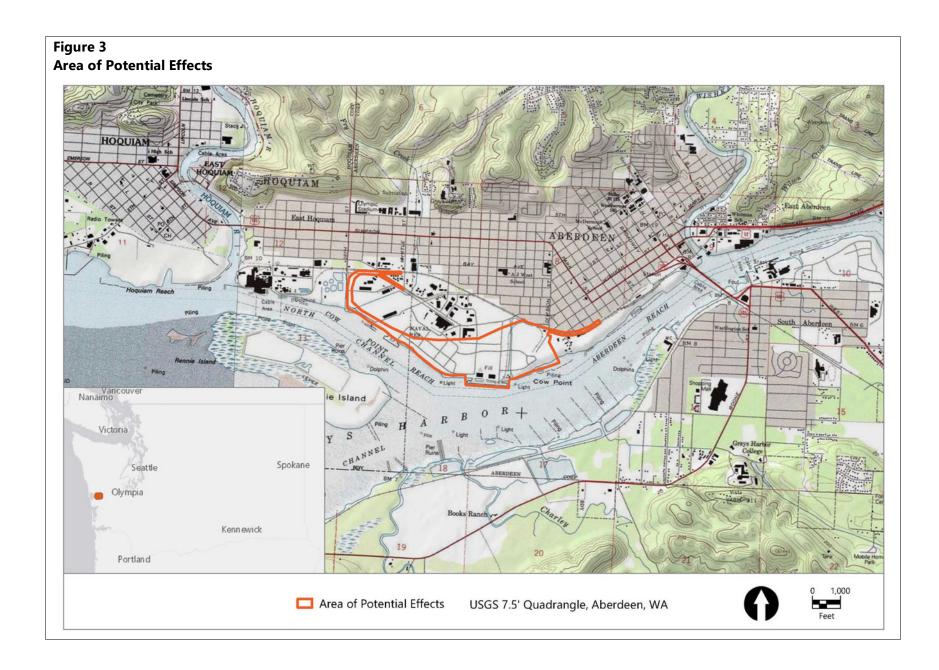
No indirect effects are expected to impact archaeological sites because the Proposed Action would not change patterns of erosion or provide new public access to areas containing archaeological materials. No indirect effects are expected to impact historic structures because there are no expected changes to traffic or circulation that could cause a structure to fall into disrepair.

Therefore, the horizontal extent of the APE is the area where ground disturbance is planned or structures more than 50 years old could be modified or demolished. The vertical extent is the depth of ground disturbance as described in Section 2.3.

The APE is shown in Figure 3.

3.2 Consultation

The Port has coordinated with the Quinault Indian Nation and the Confederated Tribes of the Chehalis Reservation. MARAD will consult with Native American Tribes and SHPO under Section 106.



4 Affected Environment

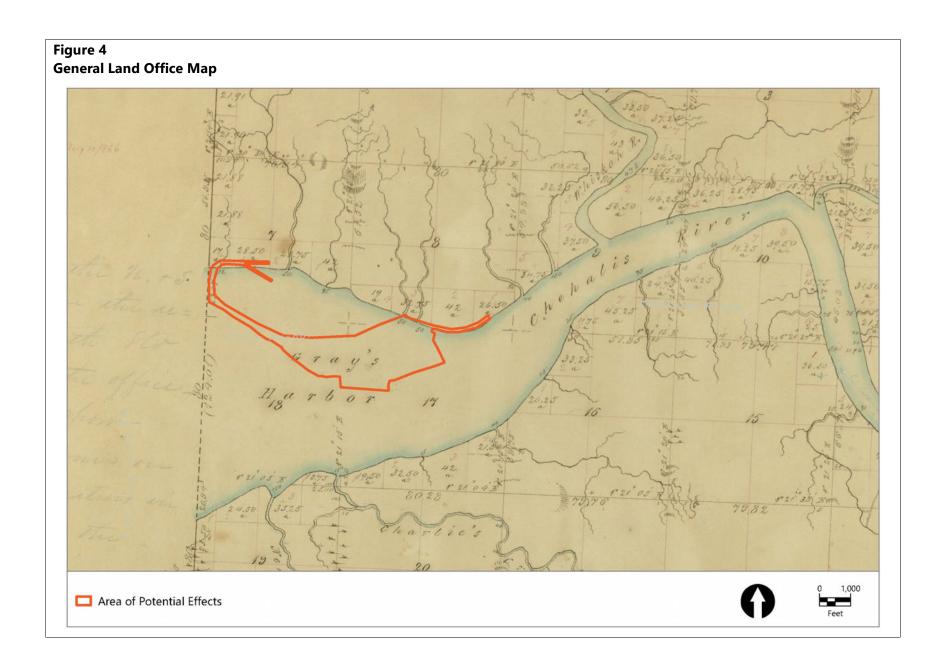
The environmental and cultural context of the Proposed Action area has been described in detail for several recent cultural resource studies and is summarized here from the following documents:

- Archaeological Monitoring Results for the BHP Billiton Canada, Inc., Proposed Grays Harbor Potash Export Facility Mitigation Area, IDD No. 1 and Historic Context for Mitigation Area, POGH Terminal 4 (Switzer et al. 2019)
- A Cultural Resources Assessment and Survey of the Westway Grays Harbor Terminal Expansion Project, Grays Harbor County, Washington (Boersma 2013)
- Archaeological Monitoring Report, State Route 520 Bridge Replacement and High Occupancy Vehicle Program Pontoon Construction Project – Aberdeen Log Yard (Perkins et al. 2012)
- SR 520 Pontoon Construction Project Draft Environmental Impact Statement Cultural Resources Discipline Report (Schneyder et al. 2010)
- Cultural Resources Assessment for Port of Grays Harbor Port Industrial Road Improvement Project, Aberdeen and Hoquiam, Washington (Shaw et al. 2009)

4.1 Environmental Context

The Proposed Action is located in the Olympic Peninsula physiographic province, which consists of a core of mountains surrounded by low foothills and level lowlands (Franklin and Dyrness 1973, p. 9). The region was glaciated during the last maximum, with lower elevation areas emerging by around 17,000 years ago (Wegmann et al. 2012). Post-glacial sea levels in Puget Sound are complex because they are "the integrated result of eustasy, isostasy, and tectonism" (Booth et al. 2005, p. 30). A detailed sea level study has been conducted for the northern Olympic Peninsula about 80 miles north of the APE and in a similar setting of lowlands at the foot of the Olympic Range. The study found that sea level about 13,300 years ago was more than 40 meters above modern sea level because the crust was depressed from the weight of recently receded ice; by about 10,700 years ago, it was about 60 meters below modern sea level due to isostatic rebound. In the Grays Harbor area, sea level steadily rose about 100 meters between 13,000 and 6,000 years ago (Peterson and Phipps 1992). In addition to sea level rise, subsidence occurred with seismic events, with eight known subsidence events in the Grays Harbor area in the last 5,500 years. This history indicates that previous Holocene shorelines and uplands would now be below sea level.

The general Proposed Action vicinity—Grays Harbor and adjacent uplands—would have likely been available for human settlement throughout the Holocene. Prior to Euroamerican contact, coastal and riverine waters in the Proposed Action vicinity would have hosted salmon and other fish and shellfish, and the uplands a variety of edible plants and game. Prior to historic and modern land modifications, the Proposed Action area was almost entirely intertidal or subtidal, crossing into the uplands near the existing rail alignment north of the Port (Figure 4).



Subsurface testing for archaeological and geoarchaeological purposes reflects this environmental history. At the Fry Creek Bridge replacement location, geotechnical testing completed in September 2022 revealed pavement or gravel surface over two general soil units: fill material and native alluvium (GeoEngineers 2022). A boring in the uplands adjacent to Terminal 4, about 500 feet from the proposed rail receiving building, revealed 8 feet of fill over alluvium, with saturated soil present from 5 feet below the surface (AES 2006).

Mechanical trenching for the casting basin project revealed across the site a common "profile of angular gravels, underlain by wood fragments, underlain by pushed and/or hydraulic fill, underlain by mudflat deposits" (Schneyder et al. 2010, pp. 6–22). The fill, wood waste, and hydraulic fill was generally about 10 feet thick (Schneyder et al. 2010). Monitoring of construction confirmed this stratigraphy (Perkins et al. 2012).

4.2 Cultural Context

The earliest recorded archaeological sites in western Washington date to the late Pleistocene (Ames and Maschner 1999). These sites are typically sparse stone tool assemblages found in upland areas. The Manis Mastodon site, one of the earliest dated sites in Washington, is approximately 85 miles northeast of the Proposed Action area. The site, which includes a bone point embedded in a mastodon rib, has been radiocarbon dated to about 12,000 before present (Gustafson and Manis 1984). The Manis Mastodon site would have been upland, located far from the shoreline in the late Pleistocene. A handful of other sites in the Puget Sound region also date to the late Pleistocene/early Holocene (Kopperl 2016).

By the mid-Holocene, larger populations began to organize in complex ways to exploit a wide range of terrestrial and littoral resources including salmon and shellfish; land mammals; and plant resources such as berries, roots, and bulbs. Cultures around Puget Sound and northward show "an unequivocal adaptation to coastal resources," though classic Northwest coast developments such as sizeable longhouses and large-scale storage are still absent (Matson and Coupland 1995, p. 97).

Over time, populations grew and began to reside in large semisedentary cedar plank house villages located at river mouths and confluences and on protected shorelines. The artifact toolkits became increasingly complex and specialized, allowing for large takes of resources, which were processed and stored for year-long consumption (Ames and Maschner 1999). These late Holocene cultures correlate with ethnographically described Southern Coast Salish peoples.

The Proposed Action area is in the traditional territory of the Humptulips people (Ruby and Brown 1986; Olson 1936), a Southwestern Coast Salishan group speaking a dialect of the Lower Chehalis language that is closely related to the Quinault language. Humptulips communities had close ties

with other Tribes in the region, including the Upper Chehalis, Quinault, and Shoalwater Bay peoples (James 2007).

Historically, Southwestern Coast Salishan villages were occupied part of the year, largely in winter. Residents made seasonal journeys to camps near resource gathering areas. Subsistence relied on fish caught with various weirs and traps, as well as shellfish and sea mammals (Hajda 1990; Smith 1940). Weir and trap use is noted in Grays Harbor in intertidal distributaries, as well as spearfishing, driftnetting from canoes, and hook-and-line fishing. In particular, fish traps were reportedly used at the outlet of O'Leary Creek, and remains of a large fish trap complex were found in the intertidal at Newskah Creek; both are along the south shore of Grays Harbor (James and Martino 1986; Schalk and Burtchard 2001). The primary food sources of salmon, other fish, and shellfish were supplemented by various upland game, berries, roots, nuts, and bulbs including camas (Hajda 1990).

Use of the Proposed Action vicinity is reflected in Salishan placenames, including the following:

- Ho-kwa-im-its, for the Hoquiam River and an associated village (Gibbs 1853–1856)
- Xwa'qwayamc, also for the Hoquiam River; this reportedly means something like "hungry for wood" due to the amount of driftwood in the river (Kinkade 1991)

The location known as Cow Point, which now hosts Terminal 4, was reportedly an active fishing and camping location, which may have also hosted a weir and possibly longer-term occupation (Miller 2009).

The earliest documented contacts between Tribal communities and Euroamericans were in the 1770s. In 1775, Spaniards Bruno de Heceta and Juan Francisco de la Bodega y Quadra landed at Point Haynisisoos (Point Grenville) near Culvert Site 8. Bodega y Quadra sent a landing party ashore, who were killed by Native Americans (James and Chubby 2015). Heceta named the point Punta de los Martires (Point of Martyrs) after the event (QIN 2020). Contact increased quickly, with regular trade occurring by the time the Lewis and Clark expedition met Lower Chehalis-speaking people on the Lower Columbia River in 1805 to 1806 (Hayes 1999; Hajda 1990). American settlement of the Olympic Peninsula began along the coast, with a trading post established at Neah Bay and a settler community at Port Angeles in 1857 (Oldham 2005).

As Euroamerican presence in the area increased in the late 1800s in pursuit of timber, Tribes suffered epidemics of smallpox, cholera, and malaria (Hajda 1990). As Euroamerican economic interests in timber and agriculture grew, Tribes were pressured to sign treaties and relinquish traditional lands. Quinault leaders signed the Quinault River Treaty in 1855, which assigned signatories to reservations. Humptulips leaders did not sign a treaty but interacted with the Quinault Agency and later received allotments from the U.S. government—many of which were quickly sold to timber companies (Wilma 2006; Ruby and Brown 1986). Lower Chehalis people continued to live in and use the north shore of Grays Harbor, particularly around the mouth of the Humptulips River and around what is

now Burrows Road to the west of the river mouth (Bundy 2022). These occupations, part of a seasonal round, were both a continuation of traditional lifeways and an expression of the desire to secure lands in their traditional territory.

Lumber mills sprung up around western Washington in the mid to late 1800s, driving immigration and settlement. Homesteading occurred after the Donation Land Claim Act of 1850, which issued acreage to white and partially Native American men, provided they "proved up" the claim by working it for 4 years. Initial settlement occurred on the south shore of Grays Harbor, with the first recorded homestead in 1848 near O'Leary Creek and the town of Cosmopolis founded in the early 1850s. Homesteading began in the Hoquiam area in 1857, and what is now within city limits was mostly claimed within 10 years.

Timber drove the economy in western Washington in the nineteenth century. Major players included the Pope and Talbot Lumber Company, Polson Logging Company, and Weyerhaeuser, although hundreds of logging interests have existed on the Olympic Peninsula. The area's first sawmill, founded in 1852 on the Chehalis River, served local homesteaders' lumber needs. The first export lumber mills in Hoquiam and Aberdeen appeared in the 1880s. These included the North Western Lumber Company (Simpson-Emerson) sawmill, E.K. Wood sawmill, and the Hoquiam Lumber and Shingle Company in Hoquiam and A.J. West's sawmill, Anderson-Middleton Mill, American Mill, and Wilson Brothers Mill in Aberdeen. None of these were located within or adjacent to the APE, which was still intertidal.

Transportation was a major issue, with most areas accessible only by water or overland trails (Ficken 1987). Advancing rail into timber areas became a priority for communities and logging interests. The Puget Sound & Grays Harbor Railroad from Shelton to Montesano was built by the owners of the Port Blakely Mill company in 1889. Within 2 years, the Northern Pacific Railway owned the portion of the railroad west of Elma, and the next year they expanded it to the southern shores of Grays Harbor (Davidson 2001). The City of Aberdeen financed an extension into town, which was completed in 1895. Northern Pacific became part of what is now BNSF Railway Company in 1970. The rail line serving the Port is the PSAP, which is owned by Genesee & Wyoming, Inc.

Industrial development came relatively late to the APE. The Panel and Folding Box Company's veneer box factory is shown in a 1902 Sanborn Fire Insurance map on the east bank of the Hoquiam River about 0.75 mile west of the APE (Figure 5). Just 5 years later, the box factory had significantly expanded and a Polson Shingle Company Mill was located between the box factory and the western extent of the APE. The shingle mill became the Eureka Cedar Lumber Company by 1916, with the Corts Shingle Mill on an adjacent dock. The APE was still shown as tide flats.

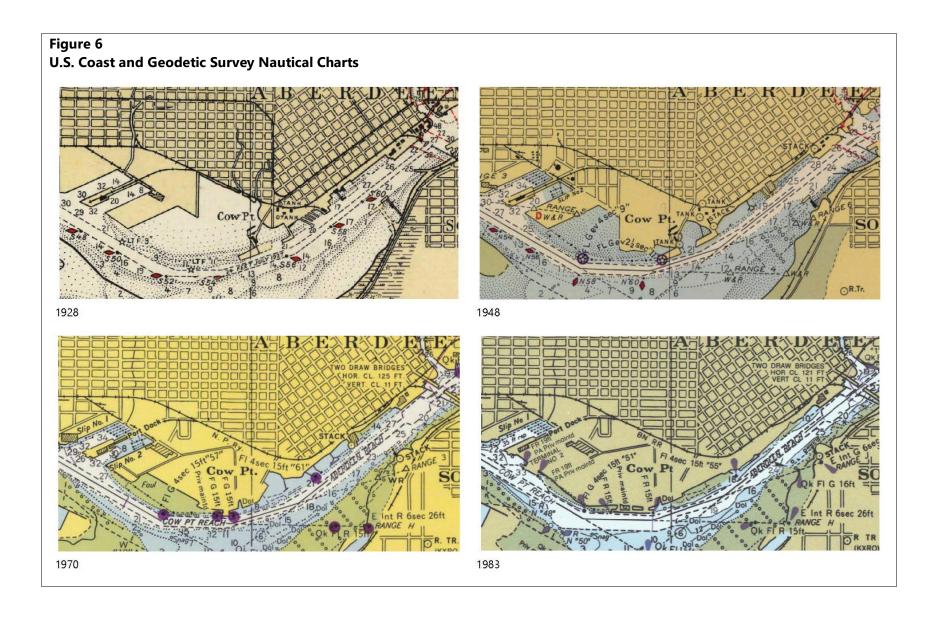


The first commercial construction in the APE was a sawmill that would become the Hart-Wood Lumber Company. The mill was purchased by Fred Hart and W.H. Wood in 1905; the date of construction and ownership before that point is unclear. The mill extended over the water on pile-supported structures at what is now the eastern end of the casting basin (Figure 5). It was purchased by investors in 1909 and operated as the Federal Mill, then sold to Edward Hulbert in 1916 and operated as the Hulbert Mill (later American Mill B).

The industry collapsed during the Great Depression in the 1930s. The industry did not immediately recover as the Great Depression ended and a World War II building boom began, largely because forests were not recovering from unmanaged logging. Forester Henry Steer, working with Quinault forestry employees, attempted to restore forest health in Olympic Peninsula forests by intentional replanting. He established an experimental station in 1929 to test various replanting regimes, ultimately achieving a high success rate with a mix of local seedlings and nursery stock (Neumann et al. 1997). Despite improvements in forest practices, the timber industry faced headwinds from global economic factors throughout the twentieth century and never regained its early importance.

Construction of Terminal 4 began in 1966 with the first portion of what is now the Terminal 4 dock. The Terminal 4 dock was built in three stages between 1966 and 1973, starting with its easternmost section. Construction proceeded from east to west, with the additional center and westernmost sections completed in 1972 to 1973. The 1,400-foot-long dock structure provided two deep-water marine berths equipped with on-dock railway access and two movable port cranes used to load cargo to and from berthed vessels. These cranes were rail mounted on two parallel tracks that extended the dock's full length.

The Port pursued further development of its facilities in the late 1970s and 1980s, including the construction of Marine Terminal No. 2 in 1979. There are three existing Terminal 4 warehouses located onshore and adjacent to the Terminal 4 dock. Building T4-A was constructed in 1991 to 1992, Building T4-B was constructed in 1990 to 1991, and Building T4-C was constructed in 1996 to 1997. They appear to be the first standing structures built on the site, which was otherwise utilized as a paved storage yard. Development included filling of the tidelands in stages, as shown on Figure 6. Filling, presumably using some combination of dredged material and upland fills, began in the early 1900s and reached its current extent in the early 1980s.



4.3 Recorded Cultural Resources and Studies

4.3.1 Archaeological Sites



4.3.2 Historic Structures

The Terminal 4 dock dates to 1966 to 1973 and consists of a large commercial shipping dock at Terminal 4 of the Port of Grays Harbor. A concrete-pile overwater structure, it has a linear, rectangular configuration with an east-west orientation parallel to the shoreline. The dock is approximately 1,400 feet long and 100 feet wide, and its length can accommodate two berthed vessels. Several hundred octagonal poured concrete piles support a poured concrete dock structure

with raised curbs at its edges. Steel mooring ballards and vessel dock bumpers made from timber piles and lumber line the structure's east, west, and south edges. A series of pedestrian staircases and walkways made of steel provide access from the dock to the waterline and adjacent water-mounted mast type light poles.

The Terminal 4 dock was originally built in three sections, each of which is accessed from the shoreline by a wide overwater platform that represents a continuation of the dock structure with similar construction. The easternmost access platform is wide and rectangular shaped, while the central and westernmost platforms are narrower with angled corners at their connection points. The dock's decking is constructed of poured concrete throughout.

A railway spur extends from the shoreline onto the dock at its easternmost section and splits into two rail lines that span the dock's full length. An additional set of two parallel tracks also extends across the dock's full length at its southern half. These tracks originally facilitated the movement across the dock of two rail-mounted port cranes. The cranes were removed from the dock in 2006 to 2007. The steel components of the rail system were manufactured by Nelson Iron Works in Seattle.

The Terminal 4 dock was evaluated to determine its eligibility for listing in the NRHP, and a DAHP Historic Property Inventory Form is provided in Appendix A. The Terminal 4 dock is associated with the commercial and industrial development of Grays Harbor, and specifically with the Port. However, it does not appear that the Terminal 4 dock was primarily important in any of these areas or that these associations are important enough to justify NRHP eligibility. The timber and shipping industries were significant to the development of the Grays Harbor area throughout the twentieth century, and they facilitated the early growth and development of the cities of Aberdeen and Hoquiam, Washington. However, the height of productivity for these industries primarily occurred from approximately 1900 to 1920. Unlike this earlier period, and although associated with postwar economic growth, the construction and operation of the Terminal 4 dock does not appear to have made a significant contribution to the development of Grays Harbor or Washington State.

Under NRHP Criteria A and B, the property is not known to be associated with events that have made a significant contribution to the broad patterns of history, nor with the lives of persons significant in our past, and there does not appear to be an intact historic district to which the structure could contribute.

Under NRHP Criterion C, the Terminal 4 dock embodies the characteristics of a typical overwater dock structure. However, the dock has no distinctive architectural characteristics that differentiate it from other similar structures in the region, and there is nothing about the design or construction of this particular example that appears to warrant special recognition. Furthermore, there is no evidence to suggest that it is associated with a significant designer or craftsman.

Finally, there are no known archaeological resources related to the Terminal 4 dock, and the structure is not considered a source of information that would itself expand our understanding of the history of Grays Harbor or Washington State under NRHP Criterion D.

The integrity of the Terminal 4 dock is considered good. However, the removal of the port cranes has somewhat diminished its integrity of feeling and association. The Terminal 4 dock is recommended not eligible for listing in the NRHP.

No other structures more than 50 years old have been identified in the APE.

4.3.3 Cultural Resources Studies

Five cultural resources studies have been conducted in the APE. Three of these studies included subsurface testing in or very near the APE. Two are related to the construction of the casting basin: the initial survey (Schneyder et al. 2010) and the subsequent archaeological monitoring of construction (Perkins et al. 2012). Results of these studies are discussed in Section 4.2.

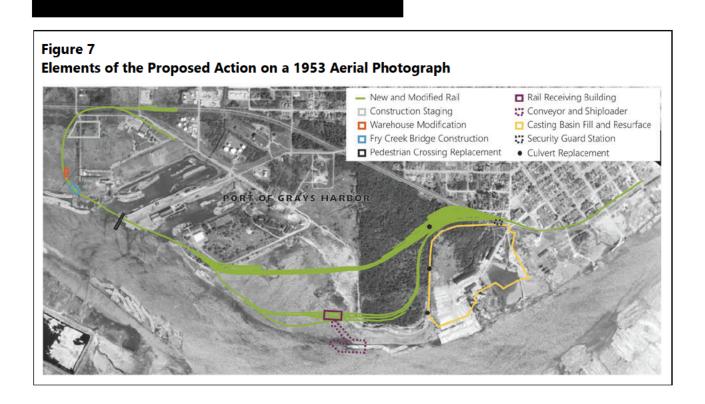
A survey for work along the Port Industrial Road included shovel probing in a limited area along the northwestern portion of the current Proposed Action APE. It revealed about 1.5 to 2 feet of fill over what was identified as tidal mudflat sediment (Shaw et al. 2009).

The remaining studies did not include subsurface testing within the APE. One such study did identify piling clusters 1, 2, and 3 around Terminal 4 (Switzer et al. 2019). These were determined not NRHP eligible.

4.4 Potential for Unrecorded Cultural Resources



Archaeological and geotechnical testing has not identified intact archaeological materials or buried surfaces. Precontact archaeological potential is low to moderate in native intertidal sediments. Potential is particularly low where the intertidal zone was filled after 1948; aerial photographs show little in the vicinity (Figure 7).



5 Environmental Consequences

5.1 Methods and Approach

Under Section 106 of the National Historic Preservation Act, adverse effects occur when "when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association" (36 CFR 800.5[a][1]).

5.1.1 Impact Types

Direct effects to archaeological sites occur when ground disturbance impacts significant site deposits. Indirect effects to archaeological sites occur when development increases site exposure to erosion or impacts from public access. Effects to archaeological sites were assessed by comparing the extent of potential direct and indirect impacts to the extent of recorded resources and areas of elevated archaeological probability.

Direct effects to historic structures occur when NRHP-eligible structures are demolished or modified; changes occur to the structure's historic use, setting, or landscape; or the structure is damaged by noise or vibration. Indirect effects to historic structures occur when changes to access or circulation, or the introduction of noise or visual obstructions, reduce the use of a property or cause it to fall into disrepair. No NRHP-eligible historic structures are present in the APE, and no impacts will occur to historic structures.

5.2 No Action Alternative

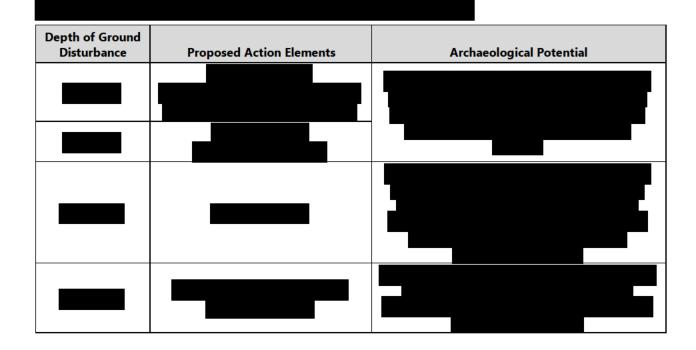
No major infrastructure improvements would occur, so no significant ground disturbance or modification of structures would be expected beyond changes expected to occur regardless of what is constructed at Terminal 4 (see Section 5.4). No impacts are expected under the No Action Alternative.

5.3 Proposed Action

5.3.1 Construction

No NRHP-eligible historic structures have been identified in the APE, and no impacts to such structures are expected during construction.

Although no NRHP-eligible archaeological resources have been identified, there is some remaining potential to encounter such resources during construction. Archaeological potential by Proposed Action element is shown in Table 1.





The deepest ground disturbance (for crossing upgrades, pile-supported foundations for commodity transload infrastructure, and in-water piling on Terminal 4) will occur in areas that were filled after 1948 and have minimal potential for archaeological resources. Therefore, no impacts to intact, significant archaeological deposits are expected, and no further testing is recommended.

Some archaeological materials may be encountered in fill and require evaluation. An Inadvertent Discovery Plan has been prepared for the Proposed Action to guide evaluation and, if needed, treatment of significant resources. Precontact artifacts, or items related to Tribal use in the historic period, may be important to Tribes regardless of their NRHP eligibility, and the Inadvertent Discovery Plan includes requirements for Tribal consultation and coordination.

5.3.2 Operation

Operation of the facility is not expected to involve additional ground disturbance or modifications to any structures. No impacts are expected from operation.

5.4 Cumulative Impacts

Past actions in the APE have resulted in disturbances to the site, including the placement of fill and the construction of structures. These actions have not resulted in any impacts to known cultural resources, although changes to the landscape have altered the historic context over the years. Reasonably foreseeable future actions in the APE have the potential to impact cultural resources. However, the Proposed Action is not anticipated to result in adverse effects, and future potential impacts would be discussed on a project-by-project basis through consultation with SHPO and Native American Tribes as required under Section 106 of the National Historic Preservation Act or state or local laws. This process would help to minimize and address potential adverse effects. Therefore, the Proposed Action, in combination with reasonably foreseeable future actions, would have a low potential to contribute to cumulatively substantial impacts on cultural resources.

6 References

- AES (Associated Earth Sciences), 2006. Subsurface Exploration, Geologic Hazard, and Preliminary Geotechnical Engineering Report, Port of Aberdeen Terminal 4 Bulk Storage Facility. On file at the Port of Grays Harbor, Aberdeen, Washington.
- Ames, K.M., and H.D.G. Maschner, 1999. *Peoples of the Northwest Coast: Their Archaeology and Prehistory*. London, England: Thames and Hudson Ltd.
- Boersma, J., 2013. A Cultural Resources Assessment and Survey of the Westway Grays Harbor Terminal Expansion Project, Grays Harbor County, Washington. On file at the Department of Archaeology and Historic Preservation, Olympia, Washington.
- Booth, D.B., K.G. Troost, J.J. Claque, and R.B. Waitt, 2005. "The Cordilleran Ice Sheet." *Developments in Quaternary Science* 1:17–43.
- Blukis Onat, A., and L.B. Lykowski, 2007. Archaeological Site Form 45GH130. On file at the Department of Archaeology and Historic Preservation, Olympia, Washington.
- Bundy, B.E., 2022. *US 101/SR 109 Fish Barrier Removal Project, Cultural Resources Survey Report, Bundle 4*. On file at the Department of Archaeology and Historic Preservation, Olympia, Washington.
- Davidson, M., 2001. "The Railroads of Grays Harbor, 1880–1900." Accessed September 2022. Available at: http://www.wagenweb.org/graysharbor/railroads/ghrr.html.
- Ficken, R.E., 1987. *The Forested Land: A History of Lumbering in Western Washington.*Seattle, Washington: University of Washington Press.
- Franklin, J.F., and C.T. Dyrness, 1973. *Natural Vegetation of Oregon and Washington*. USDA Forest Service General Technical Report PNW-8. Washington, DC.
- GeoEngineers, 2022. Geotechnical Engineering Services Report, Port of Grays Harbor Fry Creek and Rail Crossing Improvements, Grays Harbor County, Washington. On file at the Port of Grays Harbor, Aberdeen, Washington.
- Gibbs, G., 1853–1856. *Indian Nomenclature of Localities in Washington and Oregon Territories*. American Ethnology Manuscript 714. National Anthropological Archives, Smithsonian Institution, Washington, DC.
- Gustafson, C.E., and C. Manis, 1984. *The Manis Mastodon Site: An Adventure in Prehistory*. Sequim, Washington: Manis Enterprises.

- Hajda, Y.P., 1990. "Southwestern Coast Salish." *Northwest Coast. Handbook of North American Indians*, Vol. 7. Editor, W. Suttles. Washington, DC: Smithsonian Institution; pp. 503–517.
- Hayes, D., 1999. Historical Atlas of the Pacific Northwest. Seattle, Washington: Sasquatch Books.
- James, J.E., and L.A. Chubby, 2015. "Quinault." *Native Peoples of the Olympic Peninsula: Who We Are.* Editor, J. Wray. Norman, Oklahoma: University of Oklahoma Press; pp. 99–118.
- James, K., 2007. Appendix B: The Hoquiam Indians. Cultural Resource Study Report of the Grays
 Harbor Industrial Development District Parcel No. 1, Pontoon Construction Project, SR 520
 Bridge Replacement and HOV Program. On file at the Department of Archaeology and
 Historic Preservation, Olympia, Washington.
- James, K., and V. Martino, 1986. *Grays Harbor and Native Americans*. On file at the U.S. Army Corps of Engineers Seattle District, Seattle, Washington.
- Kinkade, M.D., 1991. *Upper Chehalis Dictionary*. University of Montana Occasional Papers in Linguistics No. 7. University of Montana, Missoula.
- Kopperl, R.E., editor, 2016. *Results of Data Recovery at the Bear Creek Site (45Kl839), King County, Washington*. On file at the Department of Archaeology and Historic Preservation, Olympia, Washington.
- Matson, R.G., and G. Coupland, 1995. *The Prehistory of the Northwest Coast.* London, England: Academic Press.
- Miller, J., 2009. Ethnography Technical Memorandum, Pontoon Construction Project, SR 520 Bridge Replacement and HOV Program. On file at the Department of Archaeology and Historic Preservation, Olympia, Washington.
- Nuemann, H., C. Thomsen, and J.F. Schuttler, 1997. *The Forests of the Quinault Indian Nation Forest Management on the Quinault Indian Reservation 1855–1996*. Missoula, Montana: Heritage Research Center, Ltd.
- Oldham, K., 2005. "Clallam County, Thumbnail History." Accessed March 2022. Available at: https://www.historylink.org/File/7576.
- Olson, R.L., 1936. "The Quinault Indians." *University of Washington Publications in Anthropology* 6(1):1–190.

- Perkins, K., A. Stevenson, J.T. Elder, and S. Schneyder, 2012. *Archaeological Monitoring Report, State Route 520 Bridge Replacement and High Occupancy Vehicle Program Pontoon Construction Project Aberdeen Log Yard.* On file at the Department of Archaeology and Historic Preservation, Olympia, Washington.
- Peterson, C.D., and J.B. Phipps, 1992. "Holocene Sedimentary Framework of Grays Harbor Basin, Washington, USA." *Quaternary Coasts of the United States: Marine and Lacustrine Systems*. Special Publication 48. Editors, C.H. Fletcher III and J. Wehlmiller. Tulsa, Oklahoma: Society of Sedimentary Geology; pp. 273–285.
- QIN (Quinault Indian Nation), 2020. "Emerging Concepts for Point Haynisisoos." Accessed September 2022. Available at: https://planning-org-uploaded-media.s3.amazonaws.com/publication/download_pdf/Point-Haynisisoos-QIN-CPAT-Final-Report.pdf.
- Ruby, R.H., and J.A. Brown, 1986. *A Guide to the Indian Tribes of the Pacific Northwest*. Norman, Oklahoma: University of Oklahoma Press.
- Schalk, R.F., and G. Burtchard, 2001. *The Newskah Creek Fish Trap Complex, Grays Harbor, Washington*. On file at the U.S. Army Corps of Engineers Seattle District, Seattle, Washington.
- Schneyder, S., C. Hetzel, and T. Barrett, 2010. SR 520 Pontoon Construction Project Draft
 Environmental Impact Statement Cultural Resources Discipline Report. On file at the
 Department of Archaeology and Historic Preservation, Olympia, Washington.
- Shaw, D., N. Perrin, J. Gilpin, and B. Hicks, 2009. *Cultural Resources Assessment for Port of Grays Harbor Port Industrial Road Improvement Project, Aberdeen and Hoquiam, Washington*. On file at the Department of Archaeology and Historic Preservation, Olympia, Washington.
- Smith, M.W., 1940. The Puyallup-Nisqually. New York, New York: Columbia University Press.
- Switzer, L., J.M. Tavel, and A. Dumovich, 2019. *Archaeological Monitoring Results for the BHP Billiton Canada, Inc., Proposed Grays Harbor Potash Export Facility Mitigation Area, IDD No. 1 and Historic Context for Mitigation Area, POGH Terminal 4.* On file at the Department of Archaeology and Historic Preservation, Olympia, Washington.
- Wegmann, K.W., D.R. OneSteel, J.D. Bowman, J.A. Homburg, J.D. Windingstad, and D. Beery, 2012. "Assessing Coastal Landscape Change for Archaeological Purposes: Integrating Shallow Geophysics, Historical Archives and Geomorphology at Port Angeles, Washington, USA." Archaeological Prospection 19(4):229–252.

Wilma, D., 2006. "Washington Territorial Legislature Creates Sawamish (Mason) County on April 15, 1854." Accessed March 2022. Available at: https://www.historylink.org/File/7731.

Appendix A Historic Property Inventory Form



Resource Name: Port of Grays Harbor Terminal 4 Dock Property ID: 729618

Location





Address: Port of Grays Harbor

Geographic Areas: ABERDEEN Quadrangle, Aberdeen Certified Local Government, Grays Harbor County

Information

Number of stories: N/A

Construction Dates:

Construction Type	Year	Circa	
Built Date	1966		
Addition	1972		
Addition	1973		

Historic Use:

Category	Subcategory
Transportation	Transportation - Water-Related
Commerce/Trade	
Industry/Processing/Extraction	
Transportation	Transportation - Water-Related
Commerce/Trade	
Industry/Processing/Extraction	



Redevelopment

Historic Property Report

Resource Name: Port of Grays Harbor Terminal 4 Dock Property ID: 729618

Historic Context: Category Maritime - Trade and Commerce Architect/Engineer: Category Name or Company Thematics: **Local Registers and Districts** Name **Date Listed** Notes **Project History Project Number, Organization,** Resource Inventory SHPO Determination SHPO Determined By, **Project Name Determined Date** 2022-12-08017, , Port of Grays Survey/Inventory Harbor: Terminal 4 Expansion &



Resource Name: Port of Grays Harbor Terminal 4 Dock Property ID: 729618

Photos



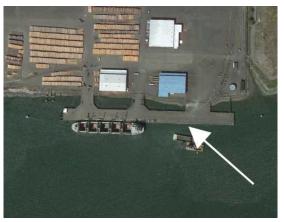
Dock, Looking East



1974 Aerial



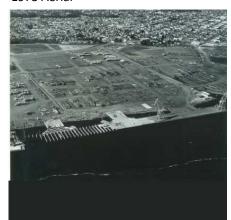
1973 Aerial



Aerial Photo



1973 Aerial



1972 Aerial



Resource Name: Port of Grays Harbor Terminal 4 Dock Property ID: 729618



1972 Aerial



1965 Aerial



Dock, Looking East



1966 Aerial



Detail of steel work at rail tracks.



Detail of Curb and Bumpers at south edge.



Resource Name: Port of Grays Harbor Terminal 4 Dock Property ID: 729618



Dock, Looking East









Dock, Looking East **Detail of Steel Catwalk**







View of Dock's North Edge, Looking West Dock, Looking Northeast



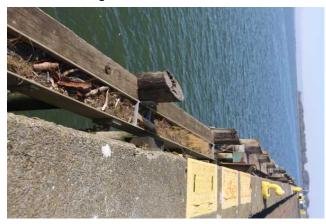
Resource Name: Port of Grays Harbor Terminal 4 Dock Property ID: 729618



Detail of Mooring Ballard



Detail of Dock's South Edge, Looking East



Detail of Dock's South Edge, Looking West



Dock, Western Section, Looking West



Resource Name: Port of Grays Harbor Terminal 4 Dock Property ID: 729618

Inventory Details - 12/7/2022

Common name:

Date recorded: 12/7/2022

Field Recorder: Christopher Hetzel

Field Site number:
SHPO Determination

Detail Information

Characteristics:

Category	Item	
Foundation	Concrete - Poured	
Form Type	Utilitarian	
Structural System	Masonry - Poured Concrete	
Plan	Rectangle	
Styles:		
Period	Style Details	
No Style	No Style	

Surveyor Opinion

Significance narrative:

The Terminal 4 dock at the Port of Grays Harbor, located on Port Industrial Road in Aberdeen, Grays Harbor County, Washington, was evaluated at a reconnaissance level for a cultural resources assessment conducted on behalf of the Port of Grays Harbor for the Port's proposed Terminal 4 Expansion & Redevelopment Project. The structure is located in the project's Area of Potential Effects.

Located west of downtown Aberdeen and adjacent to Cow Point, Terminal 4 is presently the Port's main general cargo terminal. It consists of a complex of several resources, built on an area of reclaimed tidal flats. These resources include the Terminal 4 dock, three recently constructed warehouses, two railway loops with on-dock rail access, and approximately 120 acres of paved cargo yard.

The Port of Grays Harbor was first established following the passage of the Washington Port District Act in March 1911. Prior to the Act's passage, the Port's facilities largely consisted of docks and piers built by private mill companies in Aberdeen, Hoquiam, and other communities, for their own use. Many of these mills were located along the shorelines of Grays Harbor or the Chehalis or Wishkah Rivers. These locations more easily accommodated the processing of timber, which were rafted down rivers from logging camps, and the subsequent export of milled lumber on ocean-going ships to distant markets.

Passage of the Port District Act provided the basis for and helped initiate a number of large-scale infrastructure projects and comprehensive planning efforts across Washington State, which fostered increased economic development in Washington's



Resource Name: Port of Grays Harbor Terminal 4 Dock Property ID: 729618

port cities. It was influenced by the construction of the Panama Canal in 1904-1914, which provided strong incentives to help ensure the Port of Grays Harbor could handle the large cargo vessels that would utilize this new transportation route. Grays Harbor was considered to be an advantageous location for port facilities, in comparison to ports in California and the Puget Sound at the time, as it was the only deep-water port on the United States' west coast north of San Francisco and was much closer to Asian markets.

The Port of Grays Harbor constructed its first public terminal facility, Marine Terminal No. 1, at Cow Point in 1921–1922. Further development of the Port continued through the 1920s as the Port's lumber exports increased and shipping from the Panama Canal reached its full potential. Lumber exports grew each year, and the Port celebrated its billionth board foot on December 21, 1924. Thereafter, exports surpassed a billion feet annually until the onset of the Great Depression, making the Port of Grays Harbor the largest lumber-exporting port in the world during this period.

The Great Depression abruptly ended the region's lumber boom, and the Port of Grays Harbor struggled to maintain its facilities during the 1930s. Once recovered, however, lumber exports continued to be the mainstay of the Port's operations into the 1980s.

In the 1960s, the Port of Grays Harbor established several newly formed Industrial Development Districts to capitalize on postwar economic growth and to attract new commercial and industrial industries to the area. This effort included the construction of new warehouses, manufacturing plants, and other facilities, including the cargo yard and dock facilities at Terminal 4.

Construction of Terminal 4 began in 1966 with the first portion of what is now the Terminal 4 dock. The Terminal 4 dock was built in three stages between 1966 and 1973, starting with its easternmost section. Construction proceeded from east to west, with the additional center and westernmost sections completed in 1972-1973. The 1,400 footlong dock structure provided two deep-water marine berths equipped with on-dock railway access and equipped with two movable port cranes, used to load cargo to/from berthed vessels. These cranes were rail mounted on two parallel tracks that extended the dock's full length.

The Port pursued further development of its facilities in the late 1970s and 1980s, including the construction of Marine Terminal No. 2 in 1979. The existing Terminal 4 warehouses, located onshore and adjacent to the Terminal 4 dock, were constructed in the 1990s or early 2000s. They appear to be the first standing structures built on the site, which was otherwise utilized as a paved storage yard.

The Terminal 4 dock was evaluated to determine its eligibility for listing in the National Register of Historic Places (NRHP). The Terminal 4 dock is associated with the commercial and industrial development of Grays Harbor, and specifically with the Port of Grays Harbor. However, it does not appear that the Terminal 4 dock was primarily important in any of these areas, or that these associations are important enough to justify an NRHP-eligible determination. The timber and shipping industries were significant to the development of the Grays Harbor area throughout the twentieth century, and they facilitated the early growth and development of the cities of Aberdeen and Hoquiam, Washington. However, the height of productivity for these industries primarily occurred from approximately 1900 to 1920. Unlike this earlier period, and although associated with postwar economic growth, the construction and operation of the Terminal 4 dock does not appear to have made a significant contribution to the development of Grays



Resource Name: Port of Grays Harbor Terminal 4 Dock Property ID: 729618

Harbor or Washington State.

Under NRHP Criteria A and B, the property is not known to be associated with events that have made a significant contribution to the broad patterns of history, nor with the lives of persons significant in our past, and there does not appear to be an intact historic district to which the structure could contribute.

Under NRHP Criterion C, the Terminal 4 dock embodies the characteristics of a typical overwater dock structure. However, the dock has no distinctive architectural characteristics that differentiate it from other similar structures in the region, and there is nothing about the design or construction of this particular example that appears to warrant special recognition. Furthermore, there is no evidence to suggest that it is associated with a significant designer or craftsman.

Finally, there are no known archaeological resources related to the Terminal 4 dock, and the structure is not considered a source of information that would itself expand our understanding of the history of Grays Harbor or Washington State under NRHP Criterion D.

Physical description:

The resource consists of a large commercial shipping dock at Terminal 4 of the Port of Grays Harbor. A concrete-pile over-water structure, it has a linear, rectangular configuration with an east-west orientation, parallel to the shoreline. The dock is approximately 1,400 feet long and 100 feet wide, and its length can accommodate two berthed vessels. Several hundred octagonal poured concrete piles support a poured concrete dock structure with raised curbs and its edges. Steel mooring ballards and vessel dock bumpers made from timber piles and lumber line the structure's east, west, and south edges. A series of pedestrian staircases and walkways made of steel provide access from the dock to the waterline and adjacent water-mounted mast type light poles

The Terminal 4 dock was originally built in three sections of nearly equal size over the course of six years, from 1966 to 1972. Each section is accessed from the shoreline by a wide overwater platform that represents a continuation of the dock structure with similar construction. The easternmost access platform is wide and rectangular shaped, while the central and westernmost platforms are narrower with angled corners at their connection points. The dock's decking is constructed of poured concrete throughout.

A railway spur extends from the shoreline onto the dock at its easternmost section and splits into two rail lines that span the dock's full length. An additional set of two parallel tracks also extend across the dock's full length at its southern half. These tracks originally facilitated the movement across the dock of two rail-mounted port cranes. The cranes appear to have been removed from the dock sometime in the 1980s. The steel components of the rail system were manufactured by the Nelson Iron Works in Seattle.

A small one-story rectangular, shed-roofed, modular structure stands at the dock's northwest corner. It appears to have been added to the structure following the removal of the port cranes in the 1980s.

The integrity of the Terminal 4 dock is considered good. However, the removal of the port cranes has somewhat diminished its integrity of feeling and association.



Resource Name: Port of Grays Harbor Terminal 4 Dock Property ID: 729618

Bibliography:

Hetzel, Christopher. "Westway and Imperium Expansion Projects: Cultural Resources Technical Report. Prepared for the City of Hoquiam, Washington, and the Washington State Department of Ecology by ICF International. August 2015.

ICF Jones & Stokes. SR520 Pontoon Construction Project Draft Environmental Impact Statement: Cultural Resources Discipline Report. Washington State Department of Transportation and Federally Highway Administration. August 2010. On-file at the Washington State Department of Archaeology and Historic Preservation.

Switzer, Lauran R., January M. Tavel, and Andrea Dumovich. "Archaeological Monitoring Results for the BHP Billiton Canada, Inc. Proposed Grays Harbor Potash Export Facility Mitigation Area, IDD No. 1 and Historic Context for Mitigation Area, POGH Terminal 4. On-file at the Washington State Department of Archaeology and Historic Preservation.