

**Port of Seattle
North Bay Project DEIS**

Historic and Cultural Resources



BOLA Architecture + Planning
320 Terry Avenue North
Seattle, Washington 98109
(206) 447-4749

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April 5, 2005

CONTENTS

1.1	Introduction	1
1.2	Regulatory Framework	3
1.3	Historic Context Statement	6
1.4	Inventory	30
1.5	Analysis of Historic Resources	58
1.6	Assessment of Archaeological Resources	61
1.7	Bibliography	68

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Cover: Aerial photo view looking southeast at portions of the North Bay site and the city center beyond, June 17, 1977 (Port of Seattle)

BOLA Architecture + Planning
320 Terry Avenue North
Seattle, Washington 98109
(206) 447-4749

Northwest Archaeological Associates, Inc.
5418 - 20th Avenue Northwest, Suite 200
Seattle, WA 98107
(206) 781.1909

HISTORIC AND ARCHAEOLOGICAL RESOURCES

April 5, 2005

1.1 INTRODUCTION

This section is organized with the following subsections:

- 1.1 This introduction which includes a description of the research methodology
- 1.2 The regulatory framework for evaluating historic and archaeological resources
- 1.3 A historic context statement with an overview of geologic and ethnographic history, ethnic history, and historic development, and a description of industrial building typology
- 1.4 A summary of the three areas that contain extant buildings and structures -- Areas 1, 2 and 5 -- and individual inventory sheets with additional historic information and a brief description of each building or structure and summary of its physical integrity, and a contemporary photo
- 1.5 An historic resources analysis of each property's historic and architectural significance, evaluating each in one of four categories
- 1.6 The archaeological report with a summary of land uses, description of previous research and current methods, discussion of potential impacts and recommendations
- 1.7 A bibliography with references and sources

Research Methodology

The scope of work was resolved in October 2004 and research was undertaken in November 2004 through January 2005. Historic and architectural research was undertaken by architect Susan Boyle and architectural historian Beth Dodrill, of BOLA Architecture + Planning, and archaeological research was undertaken by Charles Hodges, of Northwest Archaeological Associations (NWAA).

Historic documents from the following repositories were reviewed:

- Port of Seattle, for photos dating from 1967 through 1978, and archival drawings and maps
- State Regional Archives, Puget Sound Branch, for King County Tax Assessor records
- City of Seattle Department of Planning and Development, for permit and drawing records
- The federal Northwest Archives and Records Center, for information on Navy facilities

Digitized historic photos came from the Seattle Municipal Archives, UW Suzzallo Libraries Special Collections, and the Museum of History and Industry. Additional site information was provided by a property survey prepared by David Evans Associates, and from NBBJ. The architectural research included several site visits to review and document the existing property, buildings and structures. The research did not include reviews of the tank farm area, as it will be decommissioned and removed as part of a separate action in 2005.

As the research was undertaken, several themes emerged, including the following which are described in the Historic Context section of this report:

- The setting and geography of the property
- Ethnography and ethnohistory, including settlement of the salt marshes
- The development of Smith Cove and Interbay, including early settlement, the role of pioneer Henry Smith, and the railroad era
- Early industrial development and the history of Terminal 90 and 91 and Piers 90 and 91
- Impacts of World War I, the Depression and Hooverville, and labor strikes in the 1930s, and development of bridges Queen Anne Hill and Magnolia
- World War II and Navy development
- The post war era and the Port of Seattle after its acquisition of the property in the 1970s

1.2 REGULATORY FRAMEWORK

The National Register of Historic Places

Designated landmarks are those properties that have been recognized locally, regionally or nationally as important resources to the community, city, state or nation. Historic recognition may be provided by listing a property in the State or National Register of Historic Places through a nomination process managed by the Washington State Office of Archaeology and Historic Preservation (OAHP). Such nominations require a review by the State Advisory Council and, in the case of the National Register, certification by OAHP staff and acceptance by the Keeper of the Register.

The National Register of Historic Places is the official federal list of districts, sites, buildings, structures and objects significant in American history, architecture, archaeology, engineering and culture. The National Park Service administers the register. Nomination to the National Register may come from state and federal preservation offices.

Individuals, organizations and local governments may also initiate the nomination process. The Washington State Advisory Council, which is organized and staffed by OAHP, considers each National Register nomination and makes a recommendation on its eligibility.

Properties listed in the National Register must possess historic significance and integrity. Generally, the property must typically be 50 years old to be considered, and must be significant when evaluated in relationship to major trends of history in the community, state, or nation.

The criteria for listing in the National Register include the following:

- A. The property is associated with events that have made a significant contribution to the broad patterns of our history.
- B. The property is associated with the lives of persons significant in our past.
- C. The property embodies the distinctive characteristics of a type, period or method of construction or represents the work of a master, or possesses high artistic values, or presents a significant and distinguishable entity whose components lack individual distinction.
- D. The property has yielded, or is likely to yield, information important in prehistory or history.

City of Seattle Historic Landmark Process

Local historic recognition in Seattle is provided through the process of designation of the property as a landmark. The City of Seattle's landmark process is a multi-part proceeding of three sequential steps undertaken by the Landmarks Preservation Board:

1. Submission of a nomination and its review and approval by the Landmarks Board
2. A designation by the Board
3. Negotiation of controls and incentives by the property owner and the Board staff, the City's Historic Preservation Officer

A final step in this process is action by the City Council, with passage of designation ordinance. All of these steps occur with public hearings for input from the owner and/or applicant, members of the public, and other interested parties. Seattle's landmark process is quasi-judicial, with the Board making a ruling, rather than serving in an advisory capacity.

There is no city ordinance that requires an owner to nominate its property, or to preserve, maintain or restore it if it is designated. However, the city's ordinance recognizes that changes may be made to a property. The Board provides design reviews of proposed changes to the property's designated features through the Certificate of Approval (COA) process.

Under its ordinance more than 250 individual properties have become designated landmarks in the City of Seattle. Several hundred other properties are designated by their presence within one of the city's six special review districts or historic districts. Designated landmark properties in Seattle include individual buildings and structures, building assemblies, landscapes, and objects.

In contrast to the National Register or landmark designation in some other jurisdictions, Seattle's process does not require owner consent. A local landmark nomination may be prepared by a property owner, the city's Historic Preservation Office or by an interested party or individual. The ordinance requires that the Board consider a nomination if it provides adequate information and documentation.

The City's Preservation Ordinance No. SMC 25.12 has threshold requirements that a potential landmark must meet. The ordinance requires a property to be more than 25 years old and "have significant character, interest or value, as part of the development, heritage or cultural characteristics of the City, State or Nation." Thus a property's significance must be greater than at the neighborhood or community level. The term, "significant character" is typically understood as referring to physical integrity, a term used to indicate that sufficient original building fabric is present to convey the historic and architectural significance of the property.

Seattle's landmark ordinance also requires a property meet one or more of its six designation criteria:

- | | |
|--------------|---|
| Criterion A | It is associated in a significant way with an historic event, which has had a significant effect on the community, city, state or nation. |
| Criterion B | It is associated in a significant way with the life of a person important in the history of the city, state, or nation. |
| Criterion C. | It is associated in a significant way with a significant aspect of the cultural, political or economic heritage of the community, city, state or nation. |
| Criterion D. | It embodies the distinctive visible characteristics of an architectural style, period or method of construction. |
| Criterion E. | It is an outstanding work of a designer or builder. |
| Criterion F. | It is an easily identifiable feature of its neighborhood or the city due to the prominence of its spatial location; contrasts of siting, age or scale; and it contributes to the distinctive quality or identity of its neighborhood or the city. |

SEPA and Cultural Resource Regulations

The assessment of the potential for the presence of prehistoric and historical archaeological materials in the proposed project supports the Port of Seattle's SEPA review and provides documentation in support of the Port's SEPA Environmental Impact Statement (EIS).

The work performed by the archaeological consultant, NWAA, was designed to address the following items:

- Identify places or objects on or adjacent to the project that are listed or proposed for listing on a historic register;
- Identify places or objects on or adjacent to the project that are of archaeological, scientific, or cultural importance, and;
- Indicate appropriate mitigation measures for historic or cultural resources.

Since a portion of the site falls within 200 feet of the U.S. Government meander line, the following report adheres to the guidelines set out in the City of Seattle Department of Planning and Development (DPD) Director's Rule 2-98 (SMC). This ruling describes how the city environmental guidelines mesh with those implemented under SEPA.

Director's Rule 2-98 states that many of Seattle's existing and former shoreline areas may be sites of potential archaeological significance due to settlement patterns of Native Americans and early European settlements along Puget Sound. Areas where sites or resources of potential archaeological significance could be found include freshwater and saltwater confluences, river confluences and their vicinity, and historical sources of certain kinds of geological formations. Additionally, the City recognizes that there is a possibility that new resources may be discovered during construction in other areas.

1.3 HISTORIC CONTEXT STATEMENT

Setting

Archaeological evidence indicates that the Pacific Northwest was occupied by humans soon after land emerged following the end of last glacial advance about 10,000 to 12,000 years ago. Following retreat of the continental ice sheet, changes induced by geomorphology, geology, and climate continued to shape the landscape and influence the people who resided in the Puget Lowland. Large-scale natural processes, such as sea level rise, climate changes, and earthquakes, affected the distribution of potential resources and contributed to the creation of landforms suitable for human occupation. These same processes have also been responsible for altering the physical character of the archaeological record itself by selectively preserving or destroying sites that contain evidence for how people lived.

Geology and Geomorphology

The study area is located in a low-lying area known as Smith Cove at the northern end of Elliott Bay. The neighborhood of Queen Anne lies to the east and the Magnolia neighborhood bounds the area to the west. Formerly, the area was an elongated low-lying trough characterized by tide flats, estuarine marshes, and wetlands that extended from Elliott Bay northward to Salmon Bay. The mostly level topography that now characterizes the study area is the result of extensive modification associated with urban and industrial development. Most of the surface is underlain by fill capped by parking lots or buildings and structures with small areas of landscaping.

The topography and surficial geology of the Puget Sound region is a result of widespread multiple continental glaciations that extended southward from Canada through the Puget Lowland and along the western flanks of the Cascade Range. Originating in southwestern British Columbia, thick lobes of ice advanced southward several times during the Pleistocene Epoch, between 2.4 million years ago and the beginning of the Holocene about 10,000 years ago. The latest glacial maximum, known in this region as the Vashon Stade of the Fraser glaciation, began about 17,000 -18,000 years ago and ended abruptly with the onset of climatic warming about 14,000 years ago (Easterbrook, 1993). The ice sheet advanced rapidly, reaching its maximum extent about 15,000 years ago near the present town of Centralia. After remaining stationary for about 1,000 years, the ice sheet began to retreat rapidly northward, reaching Seattle by about 13,600 years ago (Borden and Troost 2001; Porter and Swanson 1998). At its maximum advance, the surface elevation of the ice over the study area was about 1,500 feet above present-day sea level (Dethier, et al., 1995).

As a result of glaciation, the geomorphology of the Seattle area is dominated by north-trending ridges and extensive drift uplands on which numerous surface depressions, now occupied by small lakes and peat bogs, were created as the ice retreated. Although some streams have carved short, steep-sided canyons along the margins of the glacial drift uplands, much of the surface of the Vashon drift has been only slightly modified by post-glacial erosion. The uplands are separated by large glacial troughs now filled with the waters of Puget Sound or occupied by large freshwater lakes such as Lakes Sammamish and Washington (Galster and Laprade, 1991; Liesch, et al., 1963; Yount, et al., 1993).

The low-lying area connecting Smith Cove and Salmon Bay to the north (known as the neighborhood of Interbay) is probably a small channel formed during the Vashon glaciation and now filled with sediments. Magnolia Hill to the west and Queen Anne Hill to the east are mantled with glacial drift deposits.

Around 1,000 to 1,100 years ago a large earthquake occurred along the Seattle Fault Zone just south of the study area. Subsidence along the northern margins of the fault zone during this event lowered the headland known as West Point by approximately three feet. A sand layer, from one to four centimeters thick, drapes older deposits and the origin of the sand was proposed by Atwater and Moore (1992) to have been deposited by a tsunami generated by the earthquake. During its travel from the earthquake epicenter, the tsunami wave picked up beach sands and deposited them over low-lying coastal areas in its path (Troost and Stein, 1995).

Biogeography

Climate and Vegetation

Northwest Washington is characterized by a temperate maritime climate regime characterized by warm summers and moderate winters. Summer average temperatures are about 61°F; during the winter temperatures average about 40°F. Rainfall is typically light during summers so that several weeks can pass without precipitation. Winters experience frequent rains with the highest amounts of precipitation occurring late in fall and in winter.

Like most of the northwest coast of North America, prior to modern land alteration and the introduction of exotic species, the Puget Lowland was covered with extensive stands of coniferous forest belonging to the *Tsuga heterophylla* (western hemlock) vegetation zone. Western hemlock, western red cedar, and Douglas fir are typical components of that vegetation zone, with Douglas fir being the dominant species. Old-growth forest understories are typically dense, consisting of shrubs and herbaceous plants dominated by sword fern, salal, Oregon grape, ocean spray, blackberry, red huckleberry, and red elderberry (Franklin and Dyrness 1973). Bigleaf maple and red alder are common in moist areas subject to disturbance, while stream courses and flood plains are dominated by red alder, black cottonwood, bigleaf maple, and other riparian plants. Wetlands are common in river valleys and typically support willow, alder, cranberry, cattail, reeds, wapato, nettle, and skunk cabbage (Frenkel and Heinritz, 1987).

At the time the first Euroamerican settlers arrived at Seattle in 1852, the region was thickly forested. The dominant trees were Douglas fir, red cedar, and western hemlock with much less common spruce and fir. The trees were large, often 6 to 8 feet in diameter, and reached heights of 300 feet. Red alder and cottonwood were the only abundant deciduous trees and were limited to river flood plains and disturbed land (Davis, 1973).

Fauna

Puget Sound is a rich marine ecosystem that has played an important role in prehistoric and contemporary cultures. The open waters of the sound support squid, shrimp, jellyfish, sea mammals, and sockeye and chinook salmon, and steelhead trout. Although salmon and steelhead trout may be the best known of Puget Sound fishes, there are over 200 species of fish indigenous to Puget Sound including ling cod, flounder, sole, and rockfish. The area is also blessed with numerous invertebrate species such as clams, sea cucumbers, crabs, starfish, and octopus. Intertidal zone invertebrates include crabs, shrimp, clams, oysters, mussels, sea anemones, sea stars, sponges, ribbon worms, round worms, chitons, barnacles, sea urchins, and sand dollars (Kruckeberg, 1991).

Fewer species of terrestrial mammals inhabit the western coastal forests due to the pervasive canopy cover and the dominance of the forest vegetation by coniferous species. In spite of this, deer and elk, along with black and grizzly bears, are present. Predators include bald eagle, owls, wolves, coyotes, and lynx. Smaller mammals living in the forests include beaver, marten, mink, raccoon, porcupine, and snowshoe hares. Small kettle lakes and the shorelines of the larger freshwater lakes and Puget

Sound also host several species of ducks, geese, and various shorebirds (Kozloff, 1976; Kruckeberg, 1991).

Past Climates and Vegetation

Regional pollen data recovered from cores in lakes and wetlands around Puget Sound show substantial shifts in the composition and distribution of regional vegetation since the end of the Pleistocene (Tsukada, 1982; Whitlock, 1992). As land emerged from under the ice sheets at the end of the Fraser glaciation, the Puget Lowland was colonized by pioneer species such as lodgepole pine, bracken fern, and red alder, followed by Douglas fir a few centuries later (Barnosky, 1985). As the climate continued to warm with commencement of the Holocene, grasslands and oak/hazel woodlands became established.

After a brief period of suppression, Douglas fir became the dominant tree species between 10,500 and 7,000 years ago. At the height of postglacial warming, between 10,000 and 5,000 years ago, effective moisture decreased and precipitation patterns were markedly seasonal with increased levels of summer drought. During this period, fires were common and local prairies in the central Puget Lowland and San Juan Islands expanded their ranges. After about 7,000 years ago, cedar and hemlock began to increase and continued to do so until reaching a peak about 5,000 years ago. The modern climate regime was established by 5,000 to 4,000 years ago when cool, moist conditions began to prevail, and closed canopy cedar and hemlock climax forests came to predominate the landscape (Tsukada 1982; Whitlock, 1992). The climate since then has been marked by small-scale changes fluctuating between warmer/drier and cooler/moist conditions (Leopold, et al., 1982).

Prehistory

Archaeological sites and isolated finds attest to the presence of people in coastal western Washington and southern British Columbia by at least 11,000 years ago (Carlson, 1990; Matson and Coupland, 1995). The people who lived in North America during this period are referred to as Paleoindian. Archaeological evidence of these earliest groups of people consists of a highly distinctive projectile point style, the Clovis point, notable for fluting at the base of the point. The earliest radiocarbon ages associated with Clovis points in the West are about 12,000 years ago. Several of these points have been found west of the Cascade Mountains in Washington state, including a basalt fluted point on Whidbey Island (Shong and Miss, 2002); a fluted point fashioned from chert recovered from peat deposits near Maple Valley south of Seattle (Meltzer and Dunnell, 1987); and other finds near Olympia in the southern Puget Lowland and in the Chehalis River valley (Morgan, 1999; Schalk, 1988). The people who fashioned the Clovis points are believed to have been big-game hunters whose economy focused on hunting megafauna, such as the mammoth, that became extinct soon after the end of the last glaciation.

Early Holocene archaeological sites in western North America contain projectile points of other types – such as large stemmed, shouldered, and lanceolate styles -- that closely follow, or are contemporaneous with, the Clovis points. In western Washington, the regional manifestation of early Holocene economies has been termed the Ollcott Phase (Kidd, 1964; also see discussion in Morgan, 1999), and is characterized by highly weathered artifact assemblages dominated by heavy cobble spalls, scrapers and choppers at sites in upland settings on glacial till. The assemblages also contain smaller amounts of stemmed and willow-leaf shaped points, finished knife blades, cores, and flakes (Matson & Coupland, 1995; Nelson, 1990).

The period between about 9,000 and 4,000 years ago marks the emergence of economies devoted to utilizing resources from a broader range of environments. Archaeological sites from this period

contain artifact assemblages consisting of medium-sized triangular-shaped points with notched bases and contracting stems. Ground stone tools, including ground slate points, and some stone carvings begin to appear toward the end of the period, along with evidence for new fishing, sea mammal hunting, and shellfish procurement technologies (Matson and Coupland 1995).

After about 5,000 years ago, the number of sites comprising the archaeological record dramatically increases. Archaeological evidence indicates that between 5,000 and 2,500 years ago, population expanded accompanied by increasing levels of socio-economic complexity. There was increasing use of resources available from prairies and salmon-bearing streams indicating that the subsistence base was expanding to include a broader spectrum of locally available resources. These new additional resources included large and small mammals, shellfish, fish, berries, roots and bulbs (Ames and Maschener, 1999).

As hunting of terrestrial mammals and the use of riverine resources became established, the latest prehistoric period beginning about 2,500 years ago witnessed the emergence of a semi-sedentary settlement pattern focused on movement between a central village and dispersed, highly specialized seasonal camps. This settlement pattern is accompanied by increasingly sophisticated use of storage technology and facilities, increased population with more seasonal aggregation, and emergence of ranked societies. The final 1,000 years of coastal prehistory are characterized by the development of permanent houses in central villages, a salmon-based subsistence economy, and ascribed social status (Ames and Maschener 1999; Matson and Coupland 1995; Morgan 1999).

Ethnography and Ethnohistory

The study area is in the traditional area of several groups collectively known as the Duwamish (Miller, 2004). These people were Puget Salish or Lushootseed speakers who lived in villages on the shores of Elliott Bay, Shilshole Bay, Lake Washington, Lake Union, and Salmon Bay; and on the banks of the Duwamish, Black, and Cedar Rivers (Lane 1975; Miller 2004). Other groups of people living next to the Duwamish hunted and fished within the Duwamish area in virtue of marital ties or had access granted by permission of the local group (Miller 2004). The Suquamish, who lived on the west side of Puget Sound, were closely related to Duwamish through marriage and shared a similar salmon-based economy. To the east were the Snoqualmie, and to the southeast and south were the Green River people (who now live on the Muckleshoot Reservation along with some Duwamish) and the Puyallup. Though the economy of these latter people was more oriented toward riverine resources, they traveled to Elliott Bay to harvest fish and collect food from the shellfish beds.

Distinct communities lived in towns, villages, and hamlets along rivers or at places along the shore typically where rivers and streams entered Puget Sound. These groups interacted extensively with their neighbors and shared an overall settlement and subsistence pattern consisting of permanent residences from which people seasonally traveled to small temporary camps to collect resources during the spring, summer, and fall months (Lewarch, et al., 1996; Miller, 2004). Spawning runs of chinook, coho, chum, pink, and steelhead entering the rivers were taken in quantities for immediate consumption as well as for processing and curing for storage and trade. Herring, smelt, cod, halibut, and other marine fishes were also caught and processed. Freshwater fish, including sturgeon and trout, were taken from rivers, lakes, and streams. Shellfish, such as clams and crabs, were collected from local beaches and were eaten after harvesting, transported to upriver villages and camps, preserved for later use, or used as travel provisions or for trade. Plant resources, such as roots and berries, were also important in the Duwamish diet (Lewarch et al. 1996). Ducks and other waterfowl were hunted, as were sea mammals, especially seals. Although terrestrial game was included in the diet, land mammals comprised a larger share of the resources utilized by people who lived upriver on

the Green and Snoqualmie Rivers (See also Buerge, 1984; Lane, 1975; Smith 1940; Waterman, 2001).

Representatives of the Duwamish who lived along the Duwamish River and the surrounding area signed the Treaty of Point Elliott in 1855. The Duwamish agreed to exchange their lands with the United State government in return for payments, education, medical services, and the guarantee of fishing and hunting rights in off-reservation areas. Although the treaty mandated removal to a treaty, many Duwamish families and small communities continued to live along the Black River and in the Seattle area. As Seattle grew into a major urban center in the late nineteenth century, Duwamish were forced to renounce their tribal affiliations or leave town; as a result, many settled among the communities at the Port Madison Indian Reservation, the Muckleshoot Indian Tribe, and the Suquamish Tribe (Miller 2004; Ruby and Brown 1992).

Under terms of the Treaty of Port Elliott, the Duwamish were to be settled initially on a reservation near Port Madison on Kitsap Peninsula. This proposal was pointed out as impractical by the local Indian agent at the time, but the agent's recommendation that a reservation be set aside solely for the Duwamish was never acted upon after the end of the hostilities of 1855 - 1856 (Lane, 1975).

Although some Duwamish ended up moving to other reservations, descendants of those who lived at the confluence of the Black and Cedar Rivers in Renton have maintained their tribal identity and still live in the Seattle area. Since the signing of the Treaty of Point Elliott, the Duwamish Tribe has petitioned the federal government for a reservation and federal recognition. The tribe briefly was recognized in 2000 by the federal government, but recognition was rescinded by the Bush administration in 2001 (Lane 1975; Miller 2004).

No contact-era or early historic Native American villages were recorded in the immediate area of Smith Cove by early ethnographers; however, the University of Washington ethnologist T. T. Waterman lists several place names in and near the project area (Waterman 2001). At Smith Cove was a place called Silaqwotsid (translated as "talking") that referred to the mouth of a creek draining into Smith Cove (#20). T³E'kEp (refers to an aerial net for snaring ducks) was a creek that entered Elliott Bay south of Smith Cove where people camped while snaring ducks flying from Lake Union to Elliott Bay through the low spot between Queen Anne Hill and Denny Hill (#21). Waterman also recorded place names in Salmon Bay that included the spit at the entrance to Salmon Bay, the mouth of the bay, and Salmon Bay itself. A village was located on the north side of Salmon Bay in what is now Ballard (Waterman 2001). Waterman also recorded names of several creeks entering Salmon Bay near the Fremont bridge and descending down the bluff below Fort Lawton.

In her memoirs, Sophie Bass (1937) recalled visiting an Indian encampment on the southeast flank of Queen Anne Hill near the shore of Lake Union when she was a child in the late nineteenth century. The camp as she remembers it had a cedar house and its inhabitants engaged in such activities as drying and smoking shellfish and fish, basket weaving, gambling, and tool making.

Pioneer Settlement of Smith Cove and the Interbay Area

The Denny Party, which included the city of Seattle founding members David and Arthur Denny and William Bell, first arrived at Alki Point in 1851. By December of 1852 the group had ventured around Elliott Bay and explored the Interbay tidelands area. Tidelands and salt flats were located between two prominent hills to the east and west (Magnolia and Queen Anne Hill) and situated between Salmon Bay and Elliott Bay to the north and south.

This area was viewed as a good place for development because the flat terrain seemed useful for some farming and the adjacent hillsides provided views for residential development. By the following spring settlers began staking claims in the area and began logging the land for timber and clearing it for farming. One of the earliest and most prominent of these settlers was Dr. Henry A. Smith (1830 - 1915), for whom Smith's Cove took its name.

Smith had come to the northwest from Ohio by wagon train and brought his wife, mother and sister with him. He claimed land near Salmon Bay, recognizing that its possibilities as a location for docks, and anticipating the coming of the railroad and the canal. His mother claimed the land to the north. During the Indian War of 1855 - 1856, Smith accumulated additional properties in what would become Interbay and along the south cove by purchasing claim deeds from neighbors moving out to safer environs (Wooten, 2000, p. 32 - 33).

Smith established a medical practice at Grand Boulevard (later Dravus Street), where the center of the community of Boulevard would soon develop. He also farmed his land and became a friend with the natives to whom he gave medical care. Smith is credited for translating Chief Seattle's famous speech of 1854, which is believed to have been given during treaty meetings with the Territorial Governor of Washington. The speech has become one of the best known of all Native American oratories, although recent scholars have criticized the authenticity of Smith's translation (Ibid; also History.Link, "Seattle Neighborhoods: Interbay -- Thumbnail History").

In 1884 the Seattle, Lake Shore and Eastern Railroad (SLSER) built a line from Lake Washington to the shoreline of Elliott Bay, and then north, through Interbay and Ballard. The railroad purchased all but 50 acres of Smith's 9, 600 acres of landholdings for its operations. The rail line was intended to connect Seattle with the Canadian border and to service coal and lumber freight from the region's earliest productive industries, then located north of the city. Piers at the railroad's terminal in Seattle served to transport these goods to California ports.

Although the SLSER did not build its terminals at Smith Cove as Smith had hoped, the train stopped on Grand Boulevard Street where it intersected Gilman and Thorndyke Avenues. (Wooten, 2000, p. 197) This action spurred early commercial development, and the blue-collar village of Boulevard soon developed at this location in the lowlands between Smith's Cove and Salmon Bay. The community's first post office opened in 1891. That same year, the village of Boulevard, along with all of Magnolia, was annexed by the city of Seattle. By 1894, the area officially became known as Interbay with the re-naming of the post office to reflect its new identity (History.Link, "Seattle Beginnings: Boulevard (Interbay) Post Office opens on February 27, 1891").

Arrival of the Transcontinental Railway

Henry Smith's dreams for Interbay were finally realized when the Great Northern Railway built a depot and the first piers at Smith's Cove in 1892. These structures, which no longer exist, were known as Piers 38 and 39. They were located to the east of the current Piers 90 and 91. James J. Hill purchased 600 acres for this development. The depot served as the terminus for Hill's transcontinental railway. The piers hosted cargo ships that transported goods from Asia, which were then transported across the country via the railway. In 1896 Hill and his railroad contracted for shipping services with the Nippon Yusen Kaisha steamship line of Tokyo, establishing the first regular steamship service between the Orient and the Pacific Coast (Burke, 1976, p. 11).

The most lucrative commodity transported from the Orient was raw silk. The Asian silk and tea trade was important to Seattle's early economic development and remained a vital activity up until the

Depression era. The Maritime Strike of 1934 put a final end to the trade when the leading shipping firms moved their already beleaguered operations to the Port of Los Angeles.

Formation of the Port Commission and Waterfront Development of Interbay

The Port of Seattle was formed in 1911. That same year the Seattle Municipal Plans Commission had proposed a comprehensive city development plan by engineer Virgil Bogue, which became known as the Bogue Plan. This plan included schemes for various harbor development projects, including the development of Salmon Bay for commercial use. Although the Bogue Plan was rejected by a citizen's vote in 1912, a similar plan for Salmon Bay was developed by the Port Commission in conjunction with the planned development of the Lake Washington Ship Canal.

Funding for the canal had been allotted by a Congressional Act in 1910. Prior to that, a southern canal had been considered. For several decades a north canal project had been anticipated, but various political and economic issues had forestalled its funding and development. In the meantime, whether the route of the canal should connect to the Sound via Shilshole Bay or Smith's Cove remained a subject for debate. The Shilshole Bay route was adopted plan at the time of funding, but the development of the canal nonetheless impacted the future of Smith's Cove and all of Interbay ("Historic Property Inventory Form: Historic Fisherman's Terminal –South Bulkhead Wall," State of Washington, OAHF).

Construction of the Lake Washington Ship Canal along Salmon Bay occurred between 1911 and 1916. Upon its completion, it dramatically lowered the level of water in Lake Washington to that of Lake Union, and also resulted in a dramatic change of the tidelands areas on both the north and south shores of Interbay. The tidelands were "reclaimed" with fill from the canal dredging. About 150 acres of tidelands were filled in the Smith Cove Waterway (Phleps, 1978, p. 63). Some tideland areas were also reclaimed as sanitary fill. In 1911 there were city dumpsites located in Interbay at 16th Avenue West and Gilman Avenue, and at 22nd Avenue West and West Garfield Street (Phelps, 1978, p. 208).

The Port Commission undertook development of the Smith's Cove Waterway as part of its first wave of harbor development planning projects. It purchased the docks, and approximately 20 acres of land (at a cost of \$150,000) at Smith's Cove from the Great Northern Railway. The plan included the development of two new piers, including the largest pier on the Pacific Coast, to serve as loading docks for coal and lumber shipments. Pier 41, was thought to be the world's largest concrete pier at the time. These Port projects fell under the supervision of Paul Whitham as Chief Engineer. Whitham had worked with Bogue on the Municipal Planning Commission, and thus many of the Port's early projects were influenced by the waterfront development schemes that had been proposed in the Bogue Plan.

The Port's development of the Smith Cove Waterway and Fisherman's Terminal spurred the growth of both new and existing industries in the area. Early industries included a rope factory (Portland Cordage), Rudd Paint Manufacturing, Berquist's Vinegar Works, and the Chicago Junk Company. The Chicago Junk Company, later Tsubota Steel and Pipe Company, was established in 1937 by Moriji Tsubota, who had previously worked for the Chicago Junk Company at this site. Tsubota Steel and Pipe Company remained until ca. 2000 (Burke, 1976, p. 43).

Early commercial and industrial development in Interbay was accompanied by an influx of immigrants who came for the work. They included a large number of Fins who established a community in the area. Many Finnish immigrants lived along the western side of Interbay at the

foot of Magnolia, and along the foot of Queen Anne Hill near 15th Avenue West. The Finns were considered Slavic as Finland was under the control of czarist Russia at the time. With a strong maritime heritage they were drawn to Interbay for its fishing industries.

A building that originally served as the Finnish Brotherhood Hall stood until its recent demolition on 15th Avenue West. However, a group of houses on 14th Avenue West, which was designated a Seattle City Landmark in 1979, remain. These houses are noted for their Victorian architecture, and for their cultural significance as the center of Seattle's early Slavic community.) Other ethnic groups represented in the Interbay community included Poles, Russians, Germans, Austrians, and Scots (Sheridan, 1997).

Development of Bridges Across Interbay

Several trestles crossed Interbay prior to 1930 to access the Magnolia neighborhood. The earliest trestle connecting Magnolia and Queen Anne was built along Grand Boulevard (West Dravus Street) to crossover the railroad tracks in the tide flats below. A roadway and a trestle for the Seattle-Fort Lawton street trolley line were built at this location over the north-south Seattle, Lake Shore and Eastern rail lines around the turn-of-the-century. The earliest plans for the Garfield Street Bridge across Smith's Cove to Magnolia (later known as the Magnolia Bridge) are dated 1910 and an early wooden trestle existed there by 1912 (Wooten, 2000, p. 198). Other trestles included the 23rd Avenue West trestle and the South Shore trestle, both of which served as western extensions of the West Garfield Street Bridge.

The Wheeler Street Bridge consisted of four trestles. They included the Wheeler Street West trestle, which extended from 15th Avenue West to Thorndyke Avenue West; the Lawton Way trestle, which intersected the Wheeler Street trestle at a diagonal and extended from 15th Avenue West at the foot of Queen Anne Hill to the Magnolia bluffs via trestle extensions at both 20th Avenue West and Halliday Street (Wooten, 2000, p. 198 - 199).

The early wood trestle at Garfield Street was replaced by a concrete structure in 1930. Later improvements were made in 1957 to provide a grade separation to allow traffic from Elliott Avenue West to connect directly to the bridge (Phelps, 1978, p. 36 - 37). In 1960 this structure was renamed the Magnolia Bridge as a result of community efforts by Magnolia residents.

The Battle of Smith Cove and Interbay's Hooverville

During the Maritime Strike of 1934, Smith Cove was the site of a 30-day standoff between striking longshoremen and police officers that were determined to break the strike. "The Battle of Smith Cove" consisted of daily skirmishes between police, longshoremen, and strikebreakers. With the support of the Teamster's Union, whose members refused to cross picket lines, the strikers kept most rail and truck traffic out of Smith's Cove. Incidents became more violent with intensified beatings of strikers by the police, and strikebreakers by the longshoremen. Several fatal bombings and shootings around the city were associated with the strike. The final battle took place on July 20, 1934 when the Mayor led police armed with tear gas and clubs against 2,000 longshoremen. Five days later an agreement was signed between the Union and the National Longshoremen's Board (Burke, 1976, p. 91 - 92).

During the Depression, Interbay was the site of one of the city's three "Hooverville's." The small community of tarpaper shacks was located at the Interbay dump near 16th Avenue West and Gilman

Avenue. Just prior to World War II, the city had evicted the remaining few residents who had not voluntarily left once the pre-war economy hit an upswing due to an influx of jobs in various industrial manufacturing areas. The Interbay Dump was closed to public dumping in 1967 and the site was redeveloped as a nine-hole golf course and a driving range in the 1990s.

World War II and the Naval Station at Smith's Cove

Beginning in 1939, the war in Europe led to an increase in maritime activities and a boom in Puget Sound's shipbuilding industry. As the war escalated over the next two years and the United States prepared to enter the war, military activity on the Sound also increased. In anticipation of its entry into the war, the Navy proceeded to take over the Smith Cove piers in March 1941. After initially beginning condemnation proceedings to acquire them without compensation, the Navy ultimately gave in to objections from the Port and paid more than \$3,000,000 for the piers and their facilities (Burke, 1976, p. 99). Piers 40 and 41 became piers 90 and 91 when the Port renamed all the Seattle piers in 1944.

The Navy spent \$20,000,000 in total to purchase land from both the Port and private owners in order to develop the area north of the piers for use as a supply depot and a receiving station. These facilities served to support its operations in the Pacific Theater and Alaska. The piers hosted warships, personnel transport vessels, and cargo vessels both during and after the war.

The Naval Station consisted of 253 acres of developed land, including 53 acres of covered storage space and 22.5 acres of uncovered storage for the Naval Supply Depot operations. These included several cold storage facilities. The Naval Receiving Station included 20 barracks for enlisted men, two barracks for WAVES, separate mess halls, recreation halls, an indoor swimming pool, recreation field, a hospital and a cafeteria for civilian workers, among other facilities (Strachon, 1946).

Post World War II Activities

Although activity at the Naval Station was dramatically scaled-back after World War II, the Naval Supply Depot continued to operate in various capacities in support of all military service branches. During the Korean War and Vietnam Wars supply freight movement increased again with cargo shipment activity during the Vietnam War reaching its highest since World War II. After the Naval Supply Center was established in Bremerton, the Navy transferred most of these operations to the new facility and in March of 1970 the closure of the facilities at Piers 90/91 was announced. Although the property was reported as surplus for disposal within a year, negotiations with the Port of Seattle for the purchase of the largest portion of the property, including the piers, took four years. In the meantime, the Port of Seattle and other parties leased buildings and facilities at the terminals for various activities.

The Coast Guard operated facilities for their sea-going vessels at Pier 91 for many years up until 1973, when the Port negotiated a lease for the Coast Guard to establish a base at the Port's facilities at Piers 36 and 37. This enabled the Port to include plans for purchase and development of Pier 91 in their negotiations for acquisition of the Naval Base. In 1974 the Port paid the federal government \$10,300,000 for 198 acres of the Navy Base, including the piers.

The triangular area just north of Armory Way (then Lawton Way) and east of 15th Avenue West was sold and developed as the Northwest Industries for the Retarded, but the Navy retained most of the area east of the railroad tracks and south of Lawton Way. This area was the former Naval receiving

Station, where the barracks, laundry, mess hall and other personnel facilities had been located. Beginning in 1973, a large portion of this area was leased to the Washington State National Guard for the development of the Armory. The land and facilities were purchased by the organization in 1989. The Navy retained their correctional facilities in this area and operated them there until at least 1977. The Port acquired the area south of the Armory some time later.

Port of Seattle Development on the Project Site

In the mid-1970s many facilities were used by both public and private interests to provide production and support for the Alaska pipeline project. Other activities include continued use of the oil processing facilities. Chempro was the first private interest to operate these facilities after the Navy left.

After re-acquiring the terminal facilities at Piers 90 and 91, the Port renewed their focus on trade with Asian markets at Smith's Cove. This time, rather than silk, tea and lumber, Japanese automobiles and seafood delicacies became the commodities of interest. The Datsun / Nissan shipping and distribution center was located at the site from 1974 until 2001. Presently a portion of the 150-acre North Bay Uplands (Area 2), previously used for this purpose, provides a service yard and maintenance facility for school buses.

Cold storage facilities were expanded during the early re-development of the area immediately north of the Magnolia Bridge to accommodate seafood processing industries. These industries currently include a multi-million dollar trade in fish eggs (roe) to supply the product to Asian markets. Tenants on site, who are associated with the seafood processing industries, include CityIce, Trident Seafoods and Surefish Independent Inspection laboratories.

Historic Overview of the Port of Seattle

The history of the Port of Seattle begins with the early development of the Seattle waterfront and the impact of national railroad interests in the city in the late nineteenth century. In 1873 Seattle was vying with Tacoma and other northwest cities to serve as the terminus of the first transcontinental railroad. The Northern Pacific had been granted the land rights by the U.S. Congress to build such a railroad. Although Seattle had been successful in developing maritime trade with San Francisco, Hawaii and the Pacific Rim -- through its steady supply of timber and growing fish industries -- the railroad was needed to ensure its long-term economic future as the center of trade. Such a future could be achieved through the expansion of markets to and from the Far East and the East Coast via the railroad.

Seattle residents were disappointed by the news in 1873 that Tacoma would become the railroad terminus. In response, they began developing local railroads with the goal of connecting with the larger railways to the east and north. For the next twenty years Seattle struggled to build a successful link between its burgeoning maritime trade and the vital rail transport markets. In the process, control of the city's waterfront was ceded to the hands of private eastern rail interests. An early lesson was learned by the city due to the impact of private ownership of its waterfront. The lesson set the stage for the city to later retake control of its harbors for its own economic interests. Despite the difficulties, Seattle focused sufficient energy on its harbor development to establish a foothold on future trade routes.

The vital link and economic boom that the city had sought finally arrived with another transcontinental railroad developer. James Hill brought the Great Northern Railroad to Seattle in 1893, establishing a terminus at Smith Cove. In 1896 Hill built two of the world's largest cargo carriers and established trade agreements for a regular shipping line to Tokyo. This action helped establish Seattle as one of the major ports in the nation. With the advent of the Alaska Gold Rush in 1897, Seattle was poised to become a major, world-renowned port (Port of Seattle, 1981, p. 7).

Rights to the development of the city's tidelands and management of its ports had been the subject of legal debate as early as 1889 during the Washington State Constitutional Convention. At that time a Harbor Lines Commission was appointed, and attempts were made to put private tidelands into public ownership. For the next several years the debate over the management and development of harbors was caught up in legal battles, and economic and political struggles.

During this time, development of the "North Canal" (Lake Washington Ship Canal) was a major public issue. Other concerns were with the condition of Seattle's harbor facilities, and more modern facilities in other cities. Seattle anticipated competition with cities, such as San Francisco, for lucrative new trade routes with the opening of the Panama Canal. Public management of its harbors and port facilities seemed the surest route to success. City leaders and engineers offered the successful examples of world ports that they had studied, such as Antwerp and London, where resources were managed under a unified public agency (Port of Seattle, 1981, p. 11 - 12).

By 1911, the Populist movement had gained a foothold in the political arena and civic leaders were able to push through state legislation to create public port districts. On September 5th, 1911, King County residents voted to approve the creation of the Port of Seattle. With the railroad and other private interests no longer in control of the harbors, development could be managed in the public interest, and achieved through public bond financing.

The Port Commission, under the direction of General Hiram Chittenden, immediately undertook development of a comprehensive plan for harbor development. Chittenden had come to Seattle as the engineer for the construction of the Lake Washington Ship Canal. Development of the canal, Salmon Bay, and Smith Cove, and the development of the East Waterway and Harbor Island terminals were early efforts of the Commission. These and other development projects helped Seattle to become the West Coast's leading port by 1916 in terms of the dollar value of goods shipped. By 1918, Seattle was the second largest port in the country (Port of Seattle, Web site).

The Port's management of Fisherman's Terminal at Salmon Bay and its continued development of terminals and piers at Smith's Cove to accommodate expansion of trade with Asia. These activities helped establish Seattle as a leading force before and after World War I, in both the North Pacific fishing industry and in trade with the Pacific Rim. During the 1920s trade with Asia was vital to the economic stability of Seattle and to the prosperity of the Port itself. The Port's successful management of this trade after the general economic shifts at the end of the First World War demonstrated its ability to meet the challenges and its mission (Burke, 1976, p.72).

During the economic Depression, hardships were intensified by losses in the maritime industry, and impacts on the city during the Pacific Coast waterfront strike of 1934. During the strike the city suffered the additional loss of the silk trade, when the last remaining shipping company moved its operations to the Port of Los Angeles. By the end of the 1930s, the Port of Seattle had lost its prominence as a major shipping port on the West Coast.

With the advent of World War II, the military began absorbing Port property to support naval operations on the Pacific Coast. With the growth of the Navy base at Smith Cove, the Port focused

on development at Harbor Island. Its efforts included the East Waterway Dock, expansion of grain elevator facilities at Hanford Street, and development of Pier 42. The most significant Port undertaking at that time was the development of the Seattle-Tacoma International Airport, or “Sea-Tac,” which began in 1943 (Burke, 1976, p. 99).

After World War II, the Port became more profitable, but the Port Commission was scrutinized for its inability to regain control of the Asian market and loss in competition with other Pacific Coast ports. By the end of the decade, the Port Commissioner Thomas McManus requested the resignation of the entire Commission to make way for re-organization (Burke, 1976, p.111). In the 1960s Seattle became one of the first ports in the country to develop facilities specifically geared for the revolutionary new “containerization” method of shipping goods. This bold move by the Port led to resurgence in trade. The Port and Seattle eventually became one of the busiest container ports in the world (Ibid, p.113). After this time, the Port began a steady rise in success.

In the 1970s the Port re-acquired the land and piers at Smith’s Cove from the U.S. Navy. Significant trade with Asia was resumed at this location with a major contract for Terminals 90 and 91 to serve as the port of entry for Datsun automobiles. During the economic difficulties suffered by Seattle in the early 1970s, from the near collapse of the Boeing Company, the stability and vitality of the Port elevated its role as economic benefactor to the region (Burke, 1976, p. 124).

By the 1990s, the Port had become a major player in the passenger cruise industry. This activity continues to bring in millions of dollars in revenue with over 140 port calls annually to Seattle’s downtown. Presently the Port of Seattle contributes to the city’s economic leadership as a major port of trade, transportation, and tourism (Port of Seattle, Web site).

Overview of Historic Industrial Building Design

In evaluating industrial buildings, such as those on the North Bay site, architectural styles alone cannot serve as the basis for considering architectural significance. These structures are often simple and vernacular in appearance, featuring repetitive and unadorned elements. They may be designed by a builder or an engineer to address a functional problem, rather than designed by an architect with an aesthetic goal. An understanding of industrial building forms, and construction materials and technology are important as they may express a building’s history and original functions.

The industrial shed is the most typical form of buildings evident in Areas 1 and 2 of the project site. The shed is very straightforward and inherently flexible form, used for warehousing and for cold storage functions. The shed is typically a single-story, single-volume undivided space, usually rectangular, whose main structural members span the shorter dimension in repetitive bays. This form of framing allows for seemingly unlimited expansion by building additions. Early pier sheds may be two stories in height, and in many older warehouses there may be a mezzanine at the ends or center, but in both of these forms the floors remain open and adaptable.

In the case of warehousing, vehicular access within the building, and linkage to other transportation, such as railcars, is important. The building interiors are linear and open, and thus easily adaptable to assembly lines and other manufacturing uses. Changes in use or function often occurs with the installation or rearrangement of new equipment, or small scale additions within the overall space rather than partitioning or creation of separate specific rooms.

Early sheds used shaped roof configurations to draw daylight into the interior and accommodate natural ventilation from operable clerestories and roof-top skylights. The degree to which these

buildings are lit and vented depended upon their function, particularly when it was labor intensive. As new technologies and systems emerged, artificial lighting and mechanical ventilation became more common, and roofs became less articulated. A central roof monitor with operable clerestory windows, for example, is a typical form in an older building, while more contemporary industrial buildings are simpler forms, with flat roofs and walls free of fenestration.

Industrial building forms closely follow their functions, and they also trace the evolution of different structural materials and construction technologies. Acceptance of these advancements has often occurred more quickly than in commercial or residential construction because of economic considerations, as well as lessened "stylistic" expectations.

In Seattle certain industries have been prominent in the city's economic development. Initially they were based on resource-extraction, such as lumber mills and canneries, and on transportation and port activities. A chronology of structural types made up by framing and perimeter walls served these industries. The industrial buildings constructed in and after the nineteenth century up through the 1920s typically were heavy timber frame sheds with wood or metal siding, followed by heavy timber or welded or riveted frames with bearing brick walls.

In the early twentieth century there are also steel sheds with steel siding, and poured-in-place concrete sheds with timber, wood truss, steel or concrete framing. Steel or concrete frames and wood trusses with reinforced concrete block perimeter walls are common in the mid to late twentieth century. Late twentieth century types include pre-engineered steel sheds.

For some specific manufacturing industries, such as welding, steel fabrication, etc., functional requirements for fire resistance required steel framing and open or metal cladding. Events influenced material selection and framing types also. During the Depression, construction techniques were often simple and labor-intensive, in an effort to employ and train workers. During World War II most sheds were constructed of wood framing to conserve metal for military use (Boyle and Deines, 1979, p. 4 - 9).

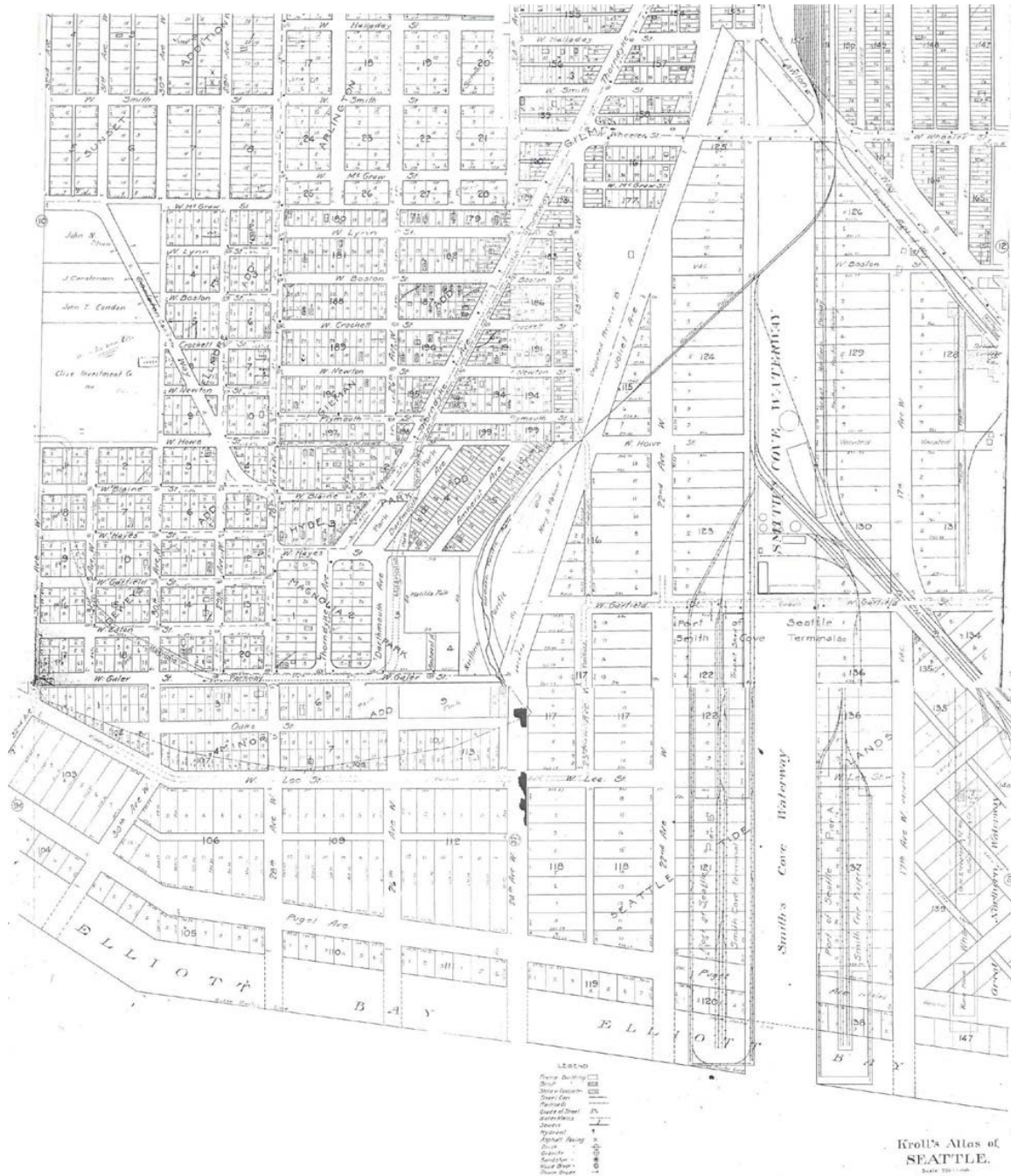


Figure 1. This partial map of the area shows the western portion of the North Bay site in 1912 - 1920. The Magnolia neighborhood, to the west (left) was developed sparsely. This map predates construction of the Garfield Street / Magnolia Bridge (Kroll Map Company).

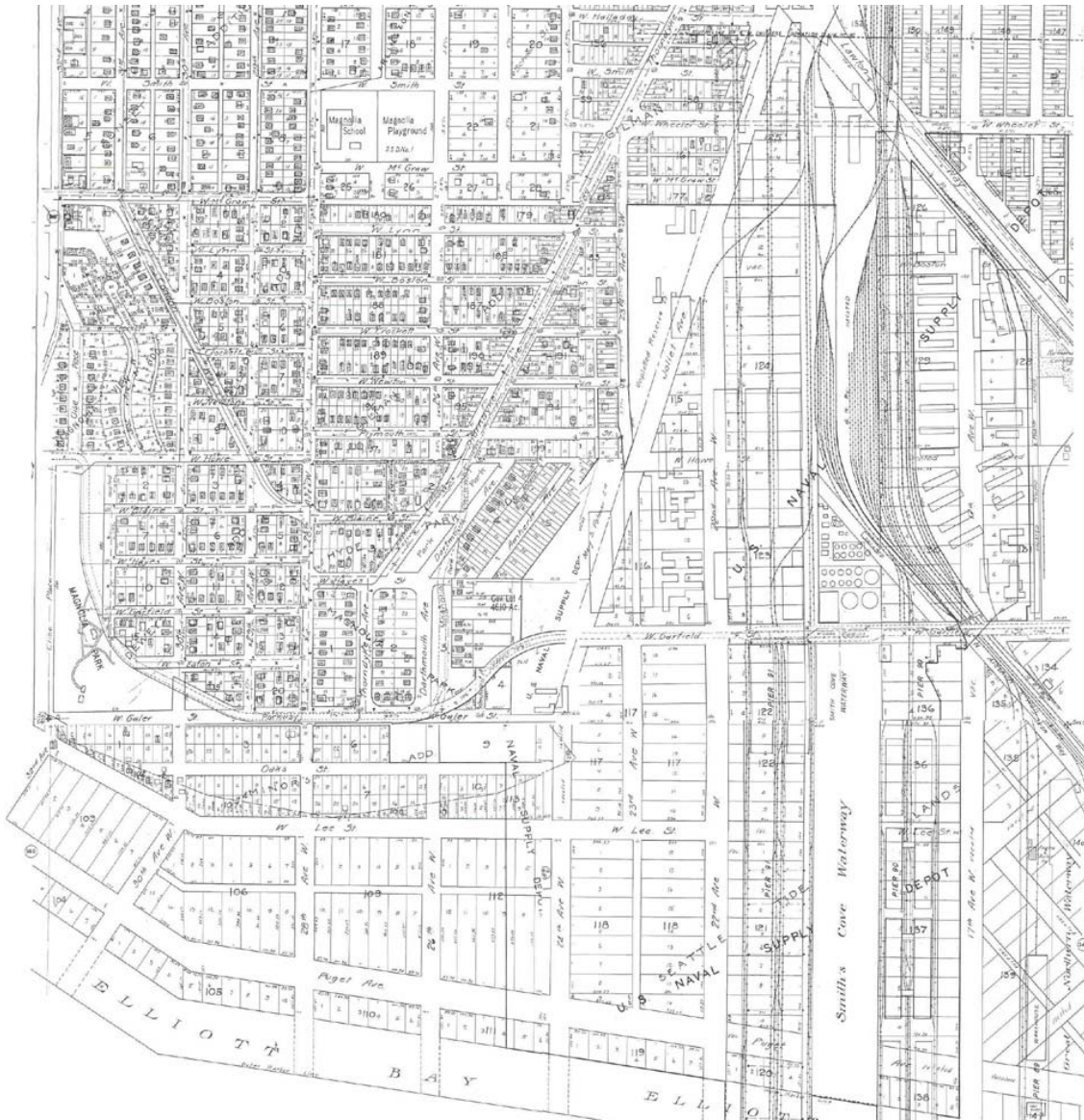


Figure 2. Additional development is evident in this partial map which dates from 1940 - 1960. Existing plats, buildings, and structures at that time are outlined (Kroll Map Company).



Figure 3. Above, an aerial photo of the North Bay property, viewed from the north, in May 14, 1970 (Port of Seattle).



Figure 4. An aerial photo from May 28, 1970, viewed from the west, showing the Navy Station in the background above the rail tracks, in the current Area 5. The tank farm site in Area 1 is to the middle right (Port of Seattle).



Figure 5. An aerial photo view from the east shows the tank farm site in Area 1 to the right foreground, with southern portions of Area 2 and the eastern edge of Magnolia Bluff in the background. This photo dates from February 13, 1975 (Port of Seattle).



Figure 6. An aerial photo view from the southwest on June 17, 1977 shows the North Bay and Terminals 90 and 91 after the Port had cleared the land for new uses (Port of Seattle).

FIGURES



Figure 7. Section of the 1863 GLO map showing the Smith and Smithers claims north of Smith Cove. The westernmost point of land is West Point.

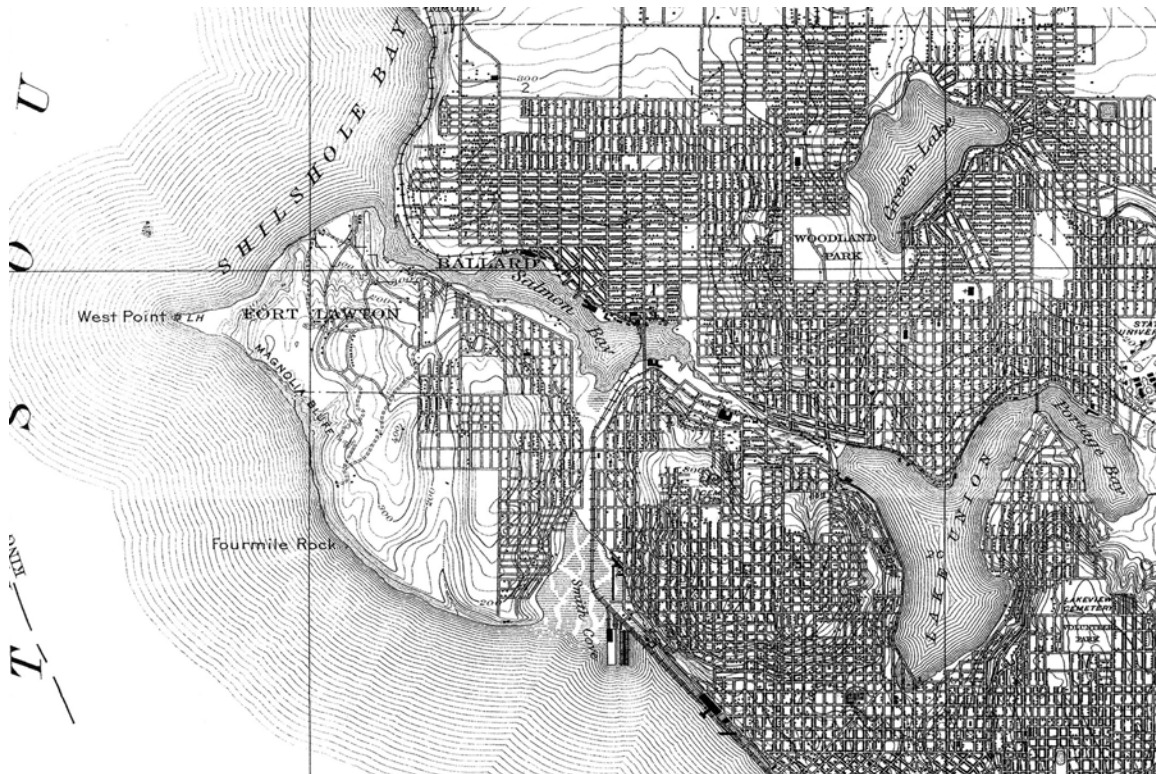


Figure 8. 1909 map of Seattle showing the location of the Great Northern Railroad line and piers.

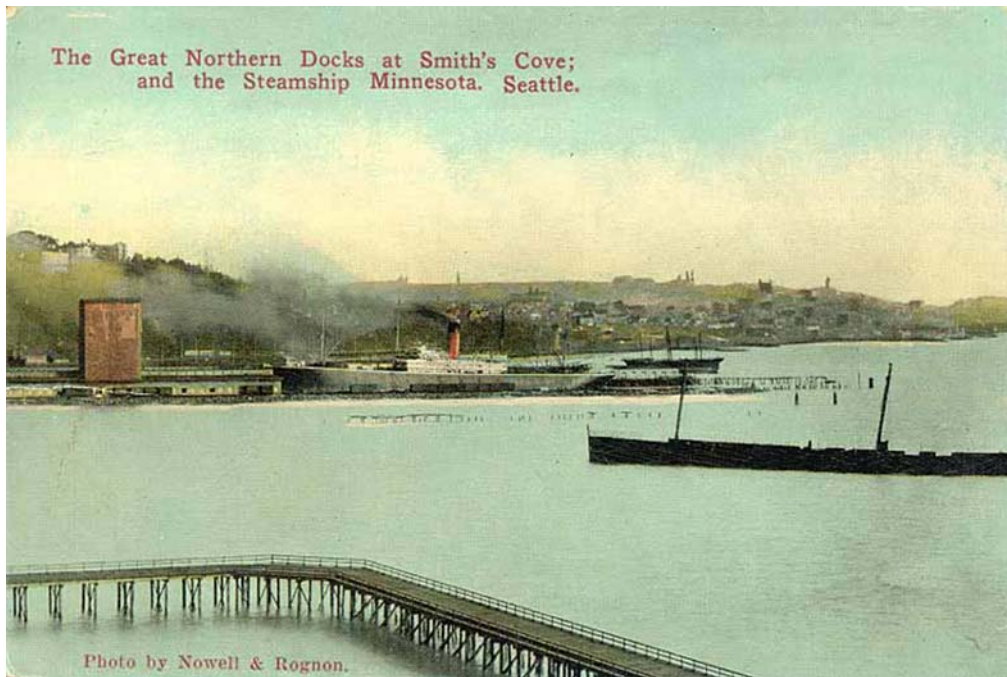


Figure 9. Postcard showing view south of the GN docks sometime before the first Denny Regrade (Item SEA2159, University of Washington Libraries, Special Collections Division).



Figure 10. View north of the Smith Cove piers about 1917 (Item SHS7421, Museum of History and Industry).



Figure 11. View east from Magnolia showing the Smith Cover piers in 1931 (Item 1983.10.4369.1, Museum of History and Industry Photograph Collection).



Figure 12. Aerial view north of Smith Cove in 1934. Piers 90 and 91 are to the left (Item 1983.10.17649.3, Museum of History and Industry Photograph Collection).



Figure 13. Oblique aerial view to the northwest of Smith Cove in 1947 (Item SEA0688, University of Washington Libraries, Special Collections Division).



Figure 14. Aerial view of Smith Cove showing current land use in 2004 (Courtesy NBBJ).

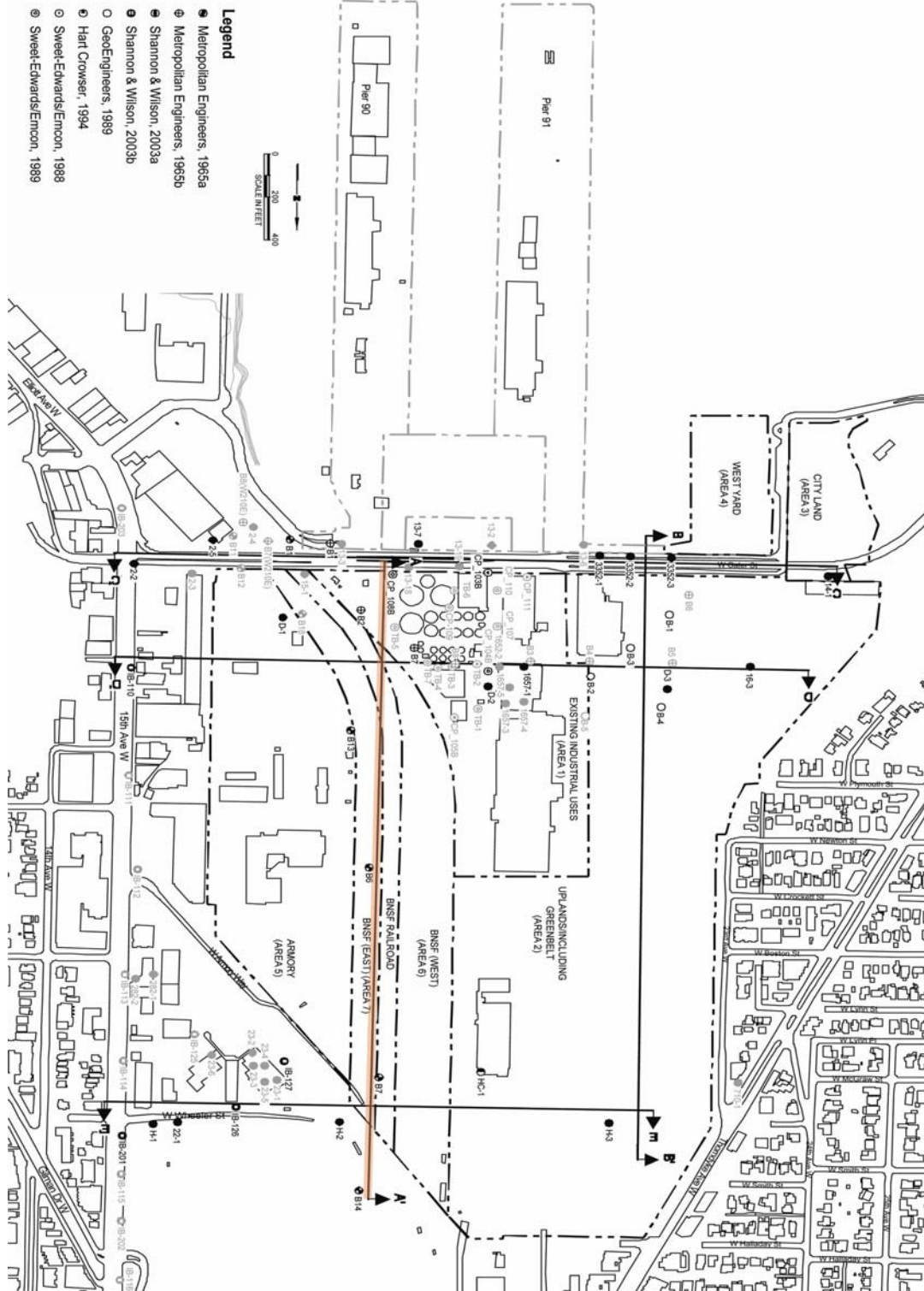
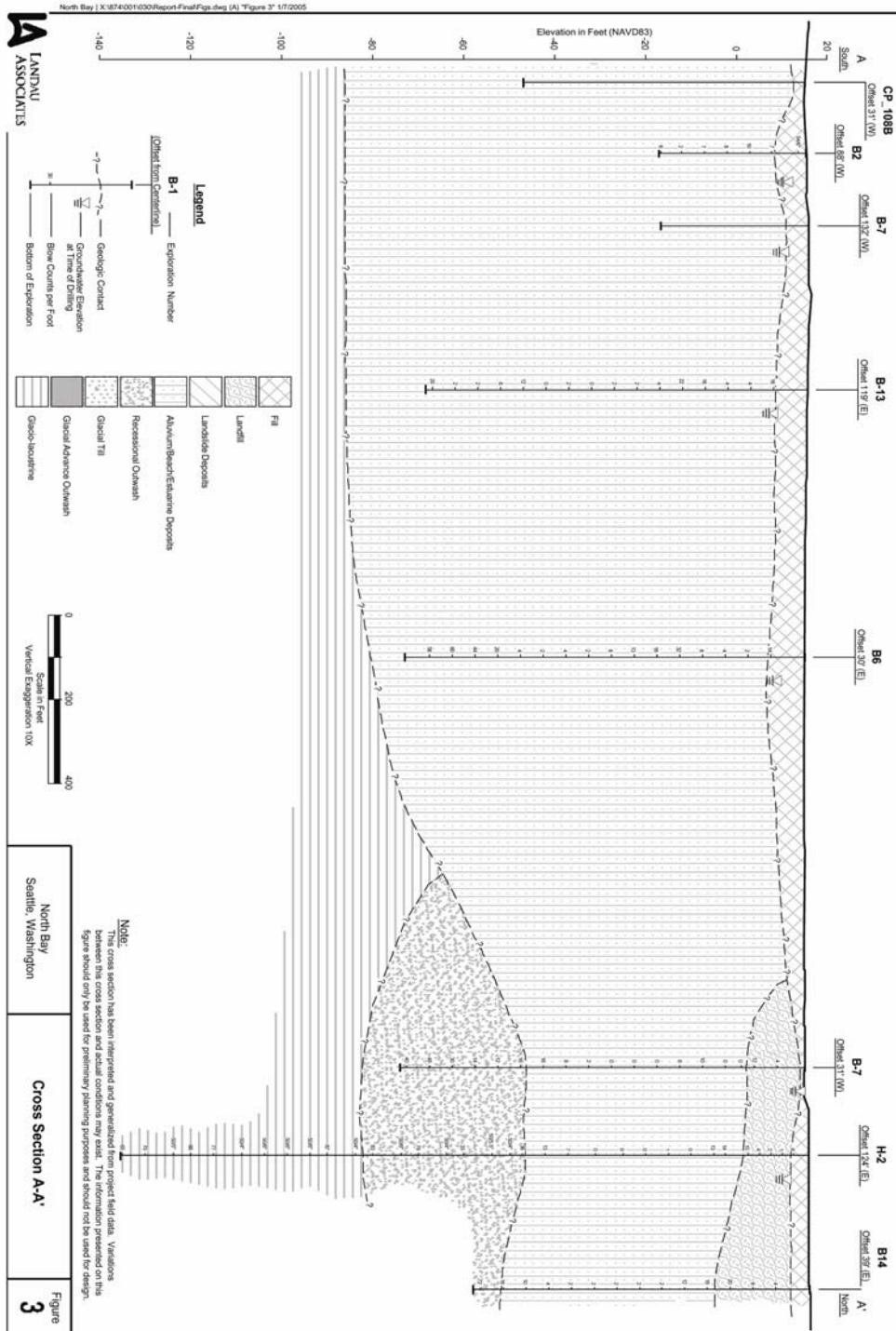


Figure 15. Geotechnical borehole distribution map (Landau Associates, 2004). Cross section A-A' (highlighted in red) is shown in Figure 16.



1.4 INVENTORY

A brief summary of each of the three areas -- Area 1, 2 and 5 -- which are part of the North Bay Project site is provided in this section, each followed by individual survey inventory forms. (The buildings are identified on the map on page 31.)

The thickness of the fill varies across these and other areas. It reaches up to about 15 or 16 feet below the current grade in the Uplands (Area 2) and thins considerably towards the margins, closer to the former shoreline of Smith Cove in the West Yard (Area 4). (Section 3.1 and Appendix A discuss the character of the fill in greater detail.) The Armory property (Area 5) includes fills from ca. 1942.

EXISTING INDUSTRIAL AREA (AREA 1), 2100 GARFIELD AVENUE

This area includes an existing tank farm and associated support buildings that were originally developed in the late 1920s and the 1930s. Construction of these facilities was closely associated to the development of the piers and rail shipping and transport facilities. At this time the Port of Seattle owned the property. Two petroleum corporations leased land and facilities for their operations at this location. The Texas Oil Company leased what remains as the existing tank farm facilities. An additional tank farm facility was originally located immediately to the west, across what was then 20th Avenue. This latter facility was leased and operated by the Richland Oil Company.

The Richland facilities were demolished when the Naval Station was developed, but the Naval Supply Depot made use of the facilities previously occupied by the Texas Oil Company. At least four existing buildings date from this era. These include an industrial warehouse, a pump house, a laboratory building, and a former garage building.

When the Naval Station Supply Depot was developed, beginning in 1942, facilities for storage and supply operations were expanded on Piers 90 and 91, and in Area 1 north of what was then the Garfield Street Bridge. At least four large storage buildings were constructed in this particular area, including at least one cold storage facility, presently known as Building #39, which is still extant. This was the first cold storage facility constructed at Terminals 90 / 91.

A total of eight industrial buildings in this Area are associated with these two periods of development. Seven date from the early 1920s, while one (Building #39) dates from 1942. Most of those from 1920s appear somewhat similar as they are steel framed and clad, but Buildings #26, 28 and #308 have bearing brick walls, and #26 and #28 originally featured more exterior details. In contrast the building from 1942 is a very straightforward concrete frame structure. (Several of the surveyed buildings may be included within the Tank Farm site rather than Area 1. Area 1 also contains a gas station from this era, located east of the existing oil tanks, which is not included in the survey.) Surveys are provided for the following:

- Building #19 - Tank Farm Boiler/Shop Building
- Building #24 - Tank Farm Office
- Building #25 - Power / Switch House
- Building #26 - Fuel Pump House
- Building #28 - Garage / Seafood Processing Building
- Building #127 - Lube Oil Pump House
- Building #308 - Storage (also identified as Building #18 on historic records)
- Building # 39 - Cold Storage Building /CityIce

Area 1, Building #19 - Tank Farm Boiler/Shop Building

Original /Current Occupant: Texas Oil Company/Snider Petroleum

Original/Current Use: Flammable Materials Warehouse/Shop-Tank Farm Boiler

Date of Construction: 1925

Architectural Style: Industrial Vernacular

Area: 16,103 sf

Description of Physical Appearance: The one-story steel frame building, with steel post and beams, characterized by its unusual wedge shaped footprint, and scissor-truss sawtooth roof profile. The building is clad with corrugated metal sheets, and set on a raised reinforced concrete foundation with a concrete slab and loading dock over a crawl space. Fans are provided at top of each roof ridge.



Oblique view of the south and east facades of Building #19.

Historical Associations/ Building History: This building is one of several existing buildings originally constructed to support operations of the petroleum processing facilities operated by the Texas Oil Company (a subsidiary of the California Petroleum Corporation) during the late 1920's through the 1930's. At that time it was owned by the Port of Seattle, but leased to the Texas Company.

When the Navy was operating the tank farm this building was still in use as a flammable materials warehouse. In the early 1980's the Northern Oil Company used it as a shop and office. In the late 1980's, Chempro Incorporated was recycling oil in the tank farm facilities and used newly added space in this building for offices. It is still in use as a support facility for operations of the petroleum processing currently managed by Snider Petroleum.

Documented alterations include interior alteration in 1981 for use as office and shop for Pacific Northern Oil Company (per DPD), and office additions on the west side loading dock constructed in 1986 for Chempro Inc. (DPD permit #626014).

Area 1, Building #19 - Tank Farm Boiler/Shop Building, con't



These two photos of the Texas Oil Company Tank Farm site, are from the King County Tax Assessment form, and date from 1937. Portions of Building #19 are visible in the background.

Area 1, Building #24 - Tank Farm Office

Original /Current Occupant: California Petroleum Corporation—Texas Oil Company / Snider Petroleum

Original/Current Use: Maintenance Shop/Office

Date of Construction: 1925

Architectural Style: Industrial Vernacular

Area: 520 sf

Description of Physical Appearance: Steel frame shed with gable roof, clad with corrugated steel roofing and siding, and set on a concrete foundation. There are not windows, and door openings are limited to the wall area below the roofline.



Building #24 (Tank Farm Office) is shown to the rear (left) of Building #26. This view shows the north facades of both buildings.

Historical Associations/Building History: This building is one of several existing support buildings originally constructed for use in petroleum tank farm operations. The California Petroleum Corporation/Texas Oil Company operated the facilities under a lease agreement with the Port of Seattle during the 1920s and 1930s. The United States Navy took over the facilities in 1942 and continued operating the fuel processing facilities for use in Navy operations.

This shed structure has been in continuous use as a tank farm facilities support building since its original construction. It has served over the years as a maintenance shop/tool house, locker room, and/or office.

Area 1, Building #25 - Power / Switch House

Original /Current Occupant: California Petroleum Corporation / Texas Oil Co / Snider Petroleum

Original/Current Use: Switch House for Fuel Pumps / Same

Date of Construction: 1925

Architectural Style: Industrial Vernacular

Area: 205 sf

Description of Physical Appearance: One-story, small, bearing brick construction with a steel framed roof truss, set on a concrete foundation, and clad with metal sheeting. A transformer bank is located in the fence enclosure that surrounds this structure, immediately to the west, in front of the building.



Building #25 (Power /Switch House) is the small structure in the foreground, north of Building #26. Only the roof of the subject is visible behind the fence enclosure.

Historical Associations/Building History: This is one of several existing buildings originally constructed as support and maintenance facilities for the operation of the petroleum tank farm. The Texas Company under lease from the Port of Seattle operated the petroleum processing facilities and tank farm during the 1920s and 1930s. This building still functions in its original use as switch house for the fuel pumps located in the shed immediately south of it (Building #26).

Area 1, Building #26 - Fuel Pump House

Original /Current Occupant: California Petroleum Corporation / Texas Oil Co. / Snider Petroleum

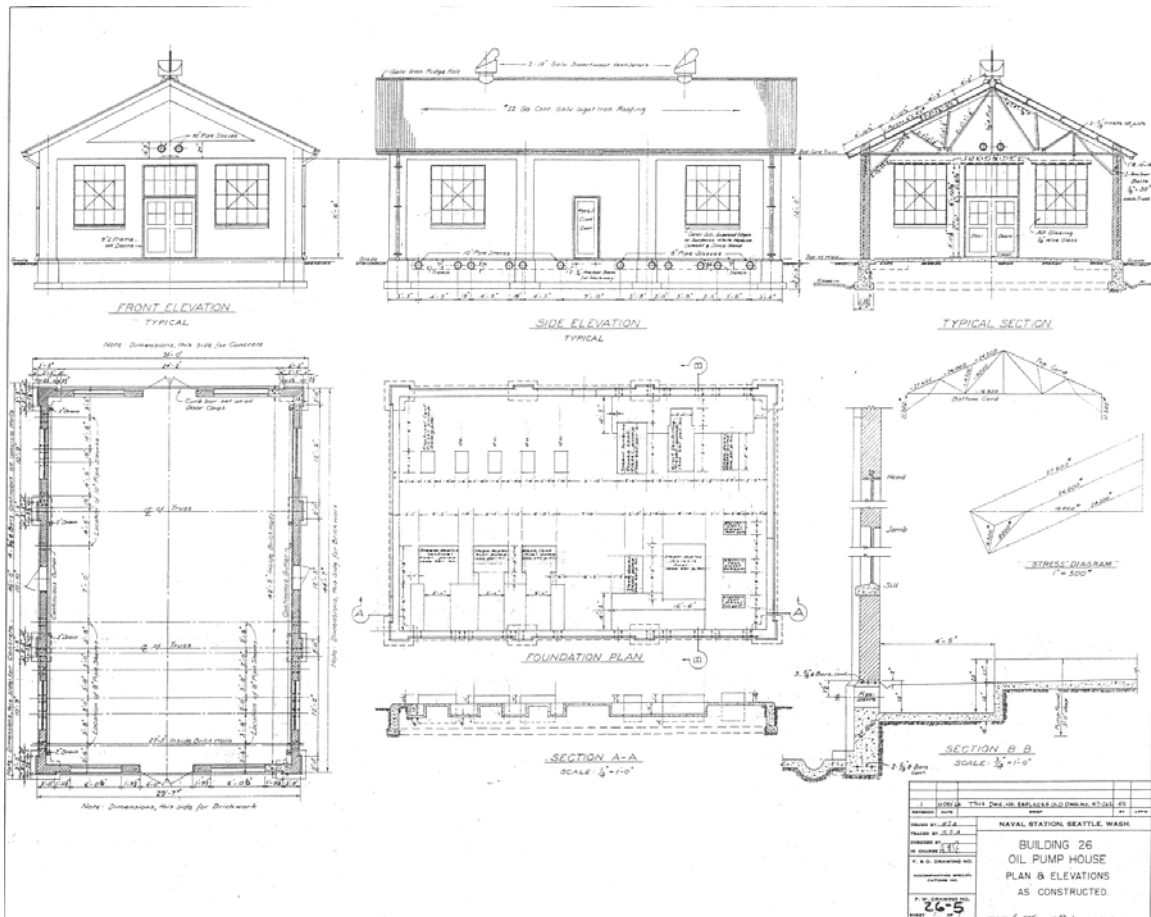
Original/Current Use: Fuel Pump House/Same

Date of Construction: c.1925

Architectural Style: Industrial

Area: 1,346 sf

Description of Physical Appearance: This steel frame building is characterized by its bearing brick exterior walls, detailed with corbelling in the gable roof end, and corrugated steel roof clad gable roof. The interior is an open span with no finishes, with exposed steel truss roof framing. Small circular penetrations in the primary (west) façade originally allowed for pipe penetrations. The sides are made up with three visible bays, each with two large steel industrial sash windows and center door. The front (west) façade also provides a large assembly with a pair of steel doors and industrial sash transom, and similar large side window. The simplicity of the design is a defining feature of late nineteenth century and early twentieth century industrial sheds.



Above, a record drawing of Building 26, cited as P.W. Drawing No. 26 - 5, Naval Station, Seattle, Wash., and dated 5 Nov. 1947.



Oblique view of the northwest corner of Building #26 (Fuel Pump House)

Historical Associations/Building History: This is the original pump house associated with the tank farm operations facilities. It is one of several existing buildings originally constructed for tank farm maintenance and support operations during the 1920s and 1930s for use by the California Petroleum Corporation/Texas Oil Company. The tank farm was owned by the Port of Seattle but operated under lease by the Texas Company, a subsidiary of the California Petroleum Corporation.

At the time it was assessed as federal real property surplus for the Port's purchase from the Navy (1974), it housed five pumps. Three were steam pumps and two were electric. One pump served to circulate oil to fire boilers in the boiler plant and the rest served to fill and drain the tanks.

This building has been in continuous use as housing for fuel pumps used in tank farm operations since it was constructed around 1925 or 1926. A half-ton monorail was installed in this building in 1947 according to Port of Seattle archival drawings.

Area 1, Building#28 - Garage / Seafood Processing Building

Original /Current Occupant: California Petroleum Corporation (Olympic Calpet Refining Co) / Texas Oil Co. /CityIce

Original/Current Use: Garage / Seafood Processing, Engine Room, Food Production Facility

Date of Construction: 1925

Architectural Style: Industrial

Area: 19,167 sf

Description of Physical Appearance: This is a one story building of bearing brick construction, with a steel post and beams, and steel roof trusses, set on concrete foundation. Trusses support a truncated gable roof and a wide clear span. The original building was freestanding, but is presently abutted on the east and most of the north side by a more recent Tank Farm structure. The two remaining primary facades once featured large window openings with industrial steel sash, many of which have been replaced. Presently the are bays feature masonry pilasters and corbelling, and a variety of infill.



Oblique views Building #28 (Seafood Processing Building): Above, looking southeast at the west facade. The present Magnolia Bridge (West Garfield Street Bridge) is visible in the background. Below, looking west at the south facade.



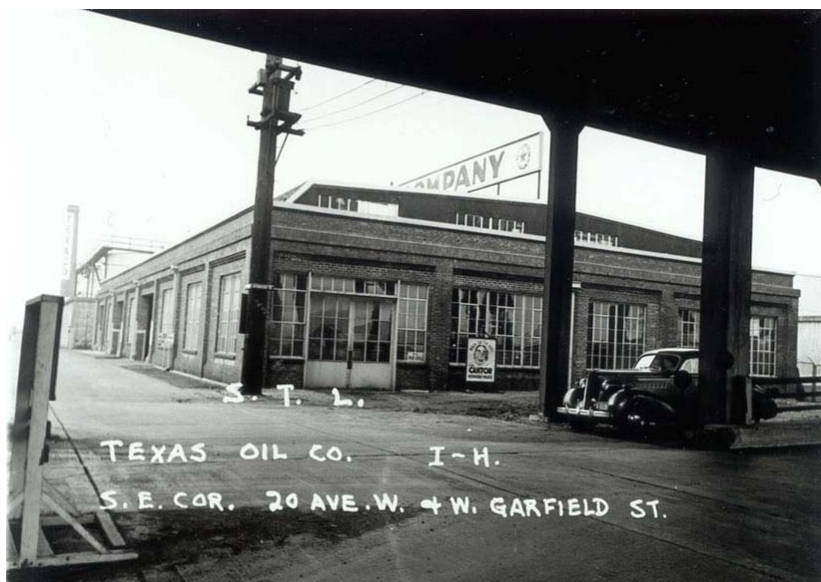
Area 1, Building#28 - Garage / Seafood Processing Building, con't

Historical Associations/Building History: This building was constructed as a garage during the early development of the site as an oil refinery. At that time it consisted of two large bays, which were identified as a "Machine Shop" and a "Wash Rack" on pre-1942 plan drawings. The machine shop included a mechanic's pit in the floor. The Navy took possession of the building in 1942. In 1944 there was an upper level mezzanine, of approximately 54' by 32', which supported an office, locker room, lavatory and lunchroom. It is unclear whether this was an addition or original to the structure.

The building has undergone many changes. In 1944 an addition was constructed on the east side for use as a fork lift battery charging shop. This addition ran the entire length, 159'-6", of the east wall and shared the outer east wall of the original building as a party wall. The south-facing entrance façade of this addition was 33' across. In 1947 another mezzanine, of 31'-6" by 34'-4", was added to the mid-section of the original garage. In 1954 a spray paint booth was installed in the southwest corner of the garage for use as a paint shop facility. In 1957 the building was in use as an electric shop for the fork lift trucks and also as storage for dock equipment.

In 1960 an addition was constructed in the rear, north end of the building for additional forklift charging stations. The entire battery shop could then accommodate a total of 75 parked forklifts at battery charger stations. The garage area was used as a repair shop in the central open area, with six small outer bays accommodating a trailer shop, office, welding shop, the paint spray room, a washing bay, and a parts room with a small tune-up shop.

At the time of the Port's acquisition from the Navy, in 1974, the central garage had been used as an equipment storage building, while the battery charging facility appears to have been in use up until that time. In 1974 the Port renovated a portion of the building for use as a USDA meat inspection facility in 1974. These alterations involved the southeast corner of the building, including a portion of the original garage and a portion of the northeast corner of the battery charging facility.



This 1937 era photo, from a 1937 King County Tax Assessment form, shows the original south and west facades of Building #28, which featured large window openings with industrial steel sash glazing, and a large glazed steel garage door.

Area 1, Building #127 - Lube Oil Pump House

Original /Current Occupant: California Petroleum Corporation—Texas Oil Co/ Snider Petroleum

Original/Current Use: Lube Oil Pumphouse /Same

Date of Construction: 1920 (according to King County Tax Assessment form)

Architectural Style: Industrial Vernacular

Area: 549 sf

Description of Physical Appearance: This small one-story shed structure features steel post and beam and steel truss framing, a steep gable roof, and was originally clad with corrugated iron siding and roofing. It is located to the rear of the tank farm on the east side. Documents note different sizes for this building. (Its size is noted differently on documents -- as 398 sf per a 1983 map, revised 1988, from DPD; as 437 sf and 26' by 16' according to King County's excess real property report; and as 520 sf in the 1937 Tax Assessment form.



This current oblique view of Building #127 shows the north and east facades.

Historical Associations/Building History: This building houses lube oil pumps used for the petroleum tank farm operations. It is the original building associated with the initial development of the tank farm facilities operated by the California Petroleum Corporation/Texas Oil Company during the 1920's and 1930's. The building is still functioning in its original intended design and use. Although some minor alterations may have occurred, no records of significant alterations have been documented in the research.

Area 1, Building #308 - Storage
(Identified as Building #18 on many historic records)

Original /Current Occupant: California Petroleum Corp. / Texas Oil Co. / Snider Petroleum, Inc.

Original/Current Use: Laboratory/Storage

Date of Construction: 1925

Architectural Style: Industrial Vernacular

Area: 418 sf

Description of Physical Appearance: This two-story gable roofed bearing brick building has a steel roof frame and is set on concrete foundation. It is approximately 16' x 16'. Openings at each floor are aligned, and contain steel doors and steel frame industrial sash windows. Originally this simple building was unpainted. The current paint finish diminishes any expressive quality of the masonry walls.



Left, the current east facade and right, a view dating from 1937.

Historical Associations/Building History: This building is one of several existing buildings originally constructed as operations support/maintenance buildings for the oil refinery operated by the Texas Company during the 1920s and 1930s. It was originally constructed as a laboratory facility and was still identified as an “oil laboratory” on a Navy facilities maps dating from 1946. A Navy map dating from 1962 identified it as a “lunchroom and head (latrine).” At the time the building was assessed for sale as excess real property, in 1974, it was identified as a locker room and latrine on the first floor and a lunchroom on the second floor. It has most recently been used as a storage facility.

Area 1, Cold Storage Building #39 - CityIce

Original /Current Occupant: US Navy/ CityIce (Sleeping Giant-sublease)

Original/Current Use: Cold Storage/Same

Original Designer: The Austin Company-Engineers and Builders

Date of Construction: 1942

Architectural Style: Industrial

Area: 89,094 (per NBBJ)

Description of Physical Appearance: This building is a flat roofed, poured-in-place reinforced concrete structure with concrete foundation, and floor and roof slabs. It provides three levels with a ramp connecting the third level to the Magnolia Bridge. Reinforced concrete columns support each floor. Exterior facades are characterized by a rhythm of concrete pilasters. There is a covered loading dock attached to the east side. Truck loading dock on the west side has been expanded and enclosed.

The building is a rectangle of 280'-8" x 120'-8" made up 20' modular bays formed by the structural concrete posts. It consists of twelve 20' wide bays and two bays at 20'-4" that run north-south, and four 20' bays and two bays at 20'-4" that run east-west. The central east-west bay serves as an access corridor and contains the elevator shaft. Elevators and stairwells are located at each end. The exterior pilasters express the interior configuration.



Current oblique view of the east side/northeast corner of Building #39.

Historical Associations/Building History: This cold storage facility was constructed by the Navy as part of the early development of the Naval Supply Depot. Although there was an existing cold storage facility located on Pier 41 (Pier 91), it was not deemed sufficient to store the quantity of materials expected to be handled by the depot and the construction of this facility was the first priority for development north of the Garfield Street Bridge. Although most buildings associated with the Naval Station at this location were designed and built by the Navy's Department of Public Works, the original plan drawings for this building were executed by the Austin Company, Engineers and Builders.

Area 1, Cold Storage Building #39 - CityIce, con't

The Austin Company also provided design services for the construction of building #30 and building # 136. Building #30 was a cafeteria built in 1942 just north of the Garfield Street Bridge and just west of building #39 --the cold storage facility. Building #136 was the Labor and Transportation building, which was located in the North Yard area.

The building's modular interior spaces were partitioned to create individual storage rooms with cork insulation boards coated with mastic cement stucco. Typical cork insulation thickness was six inches, including floor and ceiling insulation throughout. Individual storage rooms were climatically controlled according to their contents. A schedule of materials stored in 1947 shows the majority of space was dedicated to frozen meats, with chilled fruits and vegetables taking up the next largest portion of space and butter, cheese and eggs and a small amount of cured meats rounding out the list of goods.

The modular configuration allowed for the re-configuration of storage room facilities by the removal and reinstallation of cork partition boards. This relatively simple process of adapting to new space needs was carried out periodically over the years. By the time the facility was assessed for sale as excess property, all partitions had been removed from the first and second floors.

A 1947 plan drawing reveals over 4,700 square feet of space at the north end of the first floor was used to house the compressor units for the refrigeration components. The rest of the first floor consisted of several very large storage rooms and a few smaller storage rooms, a small office, lavatory, and cafeteria. A shipping and receiving area was located in the wide central corridor accessed via recessed entry vestibules located at both the east and west ends where loading platforms were located. A third entry vestibule was located at the south end of the building facing onto a loading dock the ran across the front of the building. Another wide corridor running north-south connected this entry to the receiving area at the center, which was adjacent to the elevator shafts.

The second and third floors consisted mostly of large storage rooms. The third floor also had a small office and an entry vestibule at the south end opening onto a loading platform that connected directly to the Garfield Street viaduct. From 1945 until 1960, there was an additional small office (41'x15') located on the front of the building at the viaduct level along the west side of the loading platform. When it was built in 1945 it protruded from the front of the original building and was wrapped in mullioned windows on all sides. It was removed in 1960.

A number of additional changes have been noted. In 1951 a "checkers office" was added to the southeast corner of the building. This was a small 10'x15' two-story structure (18' high) built along the existing east wall and set back slightly from the south façade. The second story was accessible from a ramp, which extended from the loading platform at the lower level on the south end (no longer extant).

In 1957 and 1958 two small exterior additions were made to the rear northeast corner of the building. A 16'x26' emergency diesel generator building was attached to the north wall near the east corner of the building in 1957 and the following year a platform of a similar size was added just west of the diesel generator structure to support the installation of evaporative condenser units. In 1960 an office space on the third floor was converted to a radio equipment room for use as the port radio control room. In 1962 a new vestibule door entry was added to the east side just south of the existing entry. The plan drawing dictated that one vestibule would serve as an entry door while the other served as an exit.

Area 1, Cold Storage Building #39 - CityIce, con't

Over the years the loading platforms on all sides were upgraded, extended in length or expanded. Originally the loading docks were served by active rail lines, and freight was loaded and unloaded from railcars. The loading platforms are currently served by trucks. After the Navy closed operations at this facility, CityIce was the first private tenant and remains the current primary tenant.

The Original Designer: The Austin Company played a prominent role in building manufacturing facilities during World War I, including an aircraft assembly plant in Buffalo, New York for the Curtiss Company. The company had initiated and developed a method for standardized industrial buildings and had shipped prefabricated parts to France for numerous buildings -- the first such modularized structures to have been designed and built in this manner.

The Austin Company became an international leader in automotive and aviation facilities construction in the 1920s. They performed research and development of pioneering steel-fabricating technology and built the world's first all-welded structural steel frame building in 1928 in Cleveland.

The company and its methods had been successful in meeting the demand of providing fast efficient building plans and materials for industrial facilities during World War I. At the beginning of World War II, Austin was busy constructing aircraft-assembly plants, military airports, Air Force training stations and naval facilities. Their "fast-track" method (the so-called "Austin Method") was copyrighted by the company and its logo appears on the original drawings for this building. This construction method was appropriate to meet the schedule needs of the Navy during wartime. In Seattle, the company designed also many commercial buildings, such as the third addition to the Metropolitan/Richmond Laundry in the Cascade area, a designated Seattle landmark, and warehouse and manufacturing facilities for the Boeing Company and the US Army.

Today the Austin Company continues to operate offices worldwide and works on international design, planning and engineering projects in a variety of markets. The Seattle office continues a long-standing partnership with the Boeing Company on aviation and aerospace industry facility projects.

UPLANDS (AREA 2)

Some of Area No. 2 remained as tideland prior to the era of naval development. The Navy developed the north end of this area as open storage yard. Rail spurs were laid to run from the piers and other storage areas to converge in the north yard, where additional sheds and support buildings were built. (None of these structures remain.)

The south portion of this area had numerous warehouse, storage and office facilities. Most of the Navy buildings were demolished in the mid to late 1970s, and others in the 1990s. Surveys are provided for two remaining 1942 era buildings:

Surfish/Independent Packers Corporation Building #40 (a cold-storage facility)
Northwest Harvest Warehouse #50

Beginning in the late 1970s, the Port of Seattle cleared and graded the property and redeveloped the north yard area as an auto import and storage center for the Datsun Company.

Two relatively recent buildings date from the Port's construction in the 1990s: the First Student Bus Maintenance Shop, Building #154 and the nearby First Student Office Building, a modular structure. These buildings may serve as examples of contemporary construction technologies for inexpensive warehouse structures, but they are not included in the surveys because of their recent construction dates.

Other structures and objects located in Area 2 include an electrical service equipment structure at the north end, and several small sheds, each of less than 100 square feet. These are utilitarian structures and have not been surveyed.

Area 2, Warehouse Building #40 - Surefish/Independent Packers Corp

Original /Current Occupant: US Navy/Trident sublease to Surefish-Independent Packers Corp.

Original/Current Use: Warehouse/ Same

Date of Construction: 1942 / 1944 expansion

Architectural Style: Industrial - Vernacular

Area: 48,130 sf footprint, 81,395 sf total

Description of Physical Appearance: This large L-shaped shed is a tall, single story volume with a series of shallow pitched gable built roofs which are supported by wooden trusses at 18' intervals. It combines wood framing, poured-in-place concrete, and concrete block construction, with a concrete foundation and wood framed and planked wood floors, and concrete slab floors. The original plan was 90' deep, and made up by a number of wide bays, with fire-resistant brick (later concrete block) side walls that projected above the roofline as raised fire walls. Continuous loading docks and a post-supported canopy are located along portions of the east facade, along with wood framed clerestory windows with divided lites. Older portions of the building, such as the south facade, are finished with painted wood siding, while the newer facades are clad with painted T&G siding. Fixed, divided lite wood windows, of 34" by 53" sash, were placed in groups to serve as clerestories in the roof gable ends.



Current partial view, looking northwest, of the east facade of Warehouse #40.

Historical Associations/Building History: The Navy constructed this building for use as an oil and paint storehouse as part of the Naval Supply Depot. The original building was approximately 240' by 90'. The east and west facades were made up of three large bays approximately 80' wide each and 90' long. Each bay had a large cargo door facing onto the loading platforms adjacent to rail spurs. These spurs served to move freight to the storage facilities from the pier to the south or to transfer goods, via the rail yards to the north, to the railroad lines.

In 1944 a large addition was constructed to the north that doubled the original storage capacity of the building. The 72' by 240' and 162' by 180' addition wrapped around the existing building on the west and north and extended 72' beyond the original west wall to form an L-shaped structure. It

Area 2, Warehouse Building #40 - Surefish/Independent Packers Corp, con't

was configured with nine bays. Along the east facade two loading doors were opened onto the existing railroad loading platform, which was extended along the front of the new addition. The west facade was configured with 12 bays and three loading doors that opened onto a new truck-loading platform. It was still used as an oil and paint storehouse at the time of the addition. In 1947 storage capacity data listed the gross square footage as 49, 951 sf and the usable storage space as 30,322 sf.

At the time that the Navy properties were listed as surplus, the Military Tariff Management Commission was using this facility for O.C.P. Cargo. It is currently used as a warehouse under primary lease by Trident Seafoods, and sub-leased to Surefish/Independent Packers/CityIce.

Additional documented alterations include the enclosure of the existing canopy 120' across (west side loading dock) in 1953 and a 1988 addition on north side/2nd story (Thomas Sconzo, Arch., DPD permit #639176).



The south end of the west façade and portions of the building roof form are visible in this Port of Seattle photo dating from March 12, 1974.

Area 2, Warehouse #50 - Navy Depot Warehouse / Northwest Harvest Warehouse

Original /Current Occupant: US Navy/Northwest Harvest

Original/Current Use: Warehouse/Same

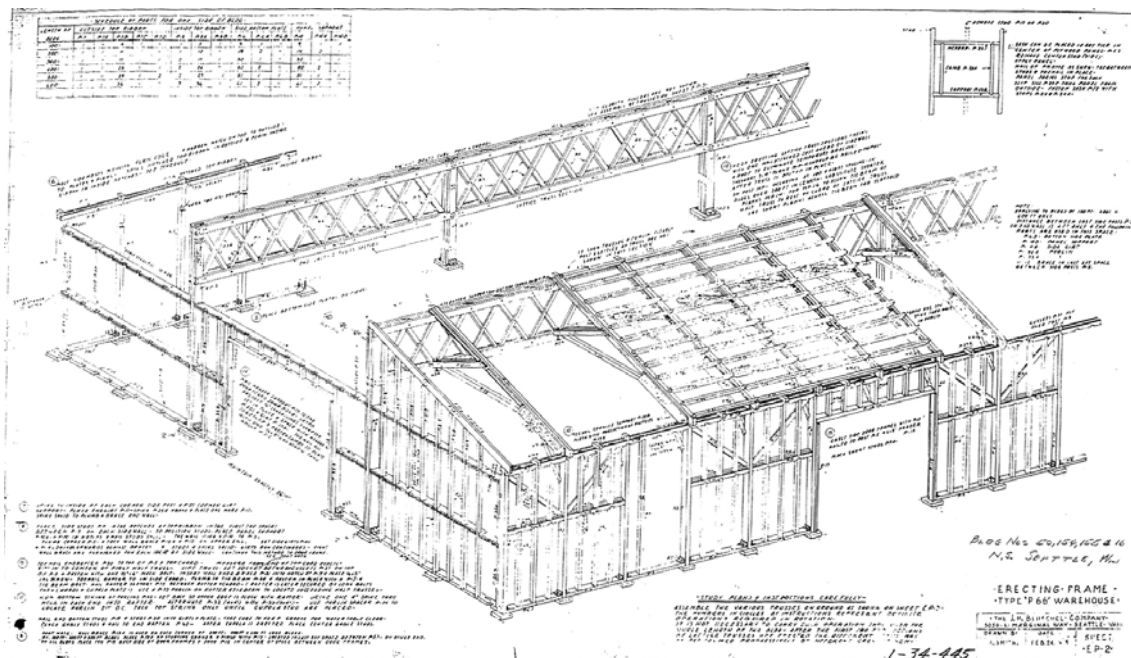
Date of Construction: 1945

Architectural Style: Industrial (Prefabricated)

Area: 16,300

Description of Physical Appearance: Although it dates from the mid-twentieth century, this is a single story, traditional shed form, and wood framed warehouse. It was made of prefabricated elements, which were provided along with on-site instructions, as a package purchased by the Navy for wartime construction. Its features a gable roof and gable roof monitor, or continuous cupola, which contains small wood frame clerestory windows. A series of windows are provided at the ground level in the primary gable ended east façade, which was framed for large garage openings as well. Besides open warehouse storage space, the building contained a small office, lavatories and lunchroom located at the east end. Other than the clerestory windows along the monitor roof, the only other windows were those provided on the east where the personnel facilities were located.

The building plan provides for three long bays, with a center 25' wide aisle and two 18' clear side aisle, and is set on a poured-in-place concrete footings. A description from 1974 noted that it then had an asphalt floor. The building form is rectangular with overall dimensions of 66' by 300'. The design was a simple one, with repetitive details and small framing members provided for easy on-site construction by relatively unskilled crews.



Original design drawings, such as this one, included material lists, and details that identified each of the building elements, along with step-by-step instructions for assembly of all parts.

Area 2, Warehouse #50 - Navy Depot Warehouse / NW Harvest Warehouse, con't



Above, a current oblique view of Warehouse #50, east and secondary north facades. Below the interior in a historic Port photo dating from 1974.



Historical Associations/Building History: The Navy developed this warehouse for the Naval Base and Supply Depot Operations. The structure was manufactured and supplied by the J. H. Bluechel Company, Seattle. The building plans and materials for Warehouse # 50 are from the “Loctwall Warehouse” series of building designs. This design was designated as a “Type P 66 Warehouse.” At least three other warehouses, Buildings #154, 155 and #167, were built during this time at the Naval Supply Depot using the same “Type P 66” design. Buildings #157 and #158 were also from the

Loctwall Warehouse series, but were a smaller plan type, designated as "Type W 40 x 100 A," which provided modular units for a 40' by 100' structure. (None of the other "Type P" warehouses remain on the site.) Plan and detail drawings, material lists, and assembly instructions for both buildings in this series, all ranging in dates from 1943 thru 1945, indicate "A. Smith" as the designer for the J. H. Bluechel Company, then located at 5050 East Marginal Way, Seattle.

During active use by the Navy, this warehouse and the adjacent yard immediately to the north of it provided salvage storage for the entire 13th Naval District. Salvage materials included all surplus materials from office supplies to auto parts to construction materials. Some materials were processed here and then shipped to a facility in California for restoration. In 1946 the existing mezzanine floor at the east end was extended by an additional 49' to provide additional storage space. In 1963, the exterior was re-sided in asbestos siding over the existing plywood siding. At this time, the large (16' x 14') sliding warehouse door in the west facade and two similar doors located on the south facade were removed and the openings infilled with siding. Two similar doors remained on the north facade.

In 1974 Norpac, a cargo packaging and shipping company, was the tenant of the building and yard and used the facility for its offices and operations. Some alterations and upgrades were made to the building at that time for the company's offices. The warehouse currently is leased by Northwest Harvest, a non-profit food collection and distribution agency.

NATIONAL GUARD ARMORY SITE (AREA 5), 1600 WEST ARMORNY WAY

Aerial photos from the 1930s show this area as part of the Smith Cove Waterway. Prior to the development of the US Naval Station / Naval Supply Depot (13th Naval District), the area was a tideland that had not yet been filled. It was filled and developed as part of the Naval Station / Supply Depot beginning in 1942.

Area 5 was originally part of the Naval Receiving Station portion, which included barracks for enlisted men, stockade buildings, a mess hall, administration building, laundry, and storehouses. Additional recreation and training facilities were located to the north across Armory Way (then known as Lawton Way), on property which is owned currently by the Northwest Center for the Retarded. (The Northwest Center property is outside of the boundary of the North Bay site).

Historic photos show the site filled with buildings, arranged in different row. Four extant buildings and one large shed, and several small utilitarian structures on the site appear to date from the 1940s era of Navy development. These include two stockade buildings, a mess hall along with a shed structure that covers it, and a transfer shed. Other existing structures located in Area 5 include one open, three-sided concrete structure, and three small sheds. The sheds are small (each less than 150 square feet), wood or metal framed, gable roof structures, with wood or metal cladding. Identified on property surveys and maps as "Shed" or Haz Mat (shed)," these structures are utilitarian and appear to be of temporary nature. Port of Seattle photos from 1977 indicate that the remaining structures were demolished in the late 1970s.

The site was developed for the Washington State National Guard Armory in 1973. Buildings associated with this development include the current Armory Building, a shop, warehouse, and an office. These buildings are examples of post-1970 construction. The shop, warehouse and office appear to be examples of engineered or modular designs dating from the 1980s, while the poured-in-place concrete Armory Building presents some characteristics of the Brutalist style. These structures are noted only in this introduction, as they are not associated with the history of the site.

The surveyed buildings in Area 5 include the following that date from the era of the Naval Station / Naval Supply Depot:

- Baggage Shed, Building #207
- West Stockades, Building #216
- Mess Hall and Shed Structure, Buildings #218 and #275
- East Stockade, Building #220

Area 5, Building #207 - Baggage Building

Original /Current Occupant: United State Navy/ Vacant

Original/Current Use: Baggage Building/ None (storage)

Date of Construction: c. 1942

Architectural Style: Vernacular

Area: 2,287 sf (per NBBJ)

Description of Physical Appearance: This simple storage and transfer building is a wood framed and clad structure with a raised floor over a tall crawl space and discontinuous loading docks accessed by steps on the east facade. It has a very low sloping shed roof, and large wood door and window opening set at regular intervals on its long east and west sides. The floor height served to access rail cars to the west.



Current view of the northeast corner of Building #207

Historical Associations/Building History: This building was constructed as part of the Receiving Station for the Naval Base at the onset of World War II. It originally served as a baggage facility for the receiving station and was identified as such on maps dated as late as 1964. In 1945, an assembly shed (Building #274) was constructed over the building to create a covered assembly yard between this building and the adjacent post office/barracks building (Building #205) which was then located immediately to the east. (Building #205 is not extant.) Later uses of the building are unknown.

Area 5 - Building #216 East Stockade Building

Original /Current Occupant: United States Navy / Vacant

Original/Current Use: Navy Stockade or "Brig"/ None

Date of Construction: c. 1942 - 1944

Architectural Style: Vernacular

Area: 7,462 sf

Description of Physical Appearance: The building is a two-story rectangular wood-frame structure painted stucco cladding. The low sloped gable roof features a raised center monitor with single wood frame windows. Exterior facades are unembellished. Wood sash windows of a variety of sizes are placed at each level of both the north and south facades. The windows are barred with security grates that indicate its original use as a Navy brig in the 1940s. Present conditions are poor.



Current view of the south facade of Building #216

Historical Associations/Building History: The building is associated with the development of the Naval Station at the onset of World War II. This building served as the original Navy brig facilities for the base. In 1944, Building #216 contained thirteen cells on the first floor and ten cells plus two isolation chambers on the second floor. Each cell accommodated three prisoners. Other rooms provided for recreational space, storage, offices, showers, etc.

In March 1960 alterations were made to this and other Buildings #218 and #220 to accommodate more prisoners. Recreational rooms at the west end of the second floor were converted for use as a chapel, and other minor interior alterations were made. At that time, Building #216 was converted to served as the facility for the maximum-security prisoners.

By 1978, Building #216 consisted of a first floor with cells, recreational rooms, showers, an office, lobby and lockers and storage. Additional cells, showers, storage, and an infirmary and doctor's office (which had not been provided previously) were on the second floor, and the former chapel had become a workshop. This facility was in operation as part of the 13th Naval District Brig compound up until at least 1982, at which time alterations/upgrades were made to the lavatories/showers on both floors.

Area 5, Buildings #218 and #275 - Mess Hall & Assembly Shed

Original /Current Occupant: United States Navy/ Vacant

Original/Current Use: Cook's Quarters / None

Date of Construction: c.1942 - 1944

Architectural Style: Vernacular

Area: 3,409 sf

Description of Physical Appearance: The so-called Mess Hall is a small one story building, gable roof, rectangular wood frame structure with compositional shingle roofing and single wood frame windows. It is sheltered below a large, open shed, structured of composite wood lumber with a low sloping shed roof. Presently the two buildings are enclosed within a tall chain link fence.



View of the southeast corner of Building #218 (Mess Hall) below Building #275 (Assembly Shed)

Historical Associations/Building History: The building is associated with the Naval Receiving Station developed at this location at the onset of World War II. This building has been altered several times for changes in use. It originally served as quarters for the base cooks, conveniently located directly south of a large mess hall structure, no longer extant, which served the majority of personnel at the Receiving Station.

In 1945, the Cook's Quarters were relocated to another building #228 (a storage facility) and the subject Building #218 was used as office space. It also contained a small armory room for use by the marines. At this time the shed roof, noted as an "assembly shed" on plan drawings, was built, presumably to shelter assembled troops from weather.

1953 changed the building use to serve as a visiting room facility for prisoners. As such it was remodeled to contain a detention retaining cell and brig officer's office. The retaining cell was added to the west side in 1953 to accommodate for this use. In 1960 the building and other related buildings were altered for expansion of the Brig Complex. Building #218 was converted for use as a mess hall for the Brig Complex. Scullery (kitchen) equipment was salvaged from the larger mess hall

Area 5, Buildings #218 and #275 - Mess Hall / Assembly Shed," con't

to the north (Building #222) and relocated into this building. Bars and security screens were also salvaged from Building #228 (a storage building) and installed.

In 1970 a new wing was added to the south side, adjacent to the 26' wide mid-section of the building. This wing consisted of a loading dock, storage room, and freeze and chill boxes. The freeze and chill boxes were salvaged from the mess facilities that had been located in a former cafeteria, Building # 32, which was once a part of the Supply Depot portion of the Naval base.

Area 5, Building #220 - West Stockade Building

Original /Current Occupant: United State Navy/ Vacant

Original/Current Use: Multi-purpose facility / None

Date of Construction: c. 1942 / 1944

Architectural Style: Vernacular

Area: 7,422 sf

Description of Physical Appearance: The building is a two-story rectangular wood-frame structure with a very low sloped gable roof, and painted stucco cladding. The exterior facades are plane and unembellished. Large six-panel industrial steel sash windows are provided across each level of both the east and west facades. The windows are all barred with security grates that indicate its use as a military brig in the 1960s. A small single-story addition is attached to the south end. Other changes are apparent at the south façade, which has infill areas. Present conditions are poor, with peeling and flaking exterior paint, and stained and cracking evident on the exterior stucco.



Current view of the southeast corner of Building #220 (West Stockade/Brig)

Historical Associations/Building History: This building is associated with the activities of the Naval Receiving Station, which were first developed in this location at the onset of World War II. It served as one of several buildings that made up the Navy correctional facilities section of the Naval Base. The Navy operated these facilities as a support facility for the 13th Naval District at least until 1982, although the Naval Base itself had been closed officially in 1970 and most of its operations had been transferred to the Naval station at Bremerton at that time.

This building originally served as a multi-purpose facility, which provided spaces for recreation, library, dining and scullery (kitchen) and visitation room as well as an administrative office. It also contained a medical facility and a “sobering cell.”

In 1952 the building was altered to accommodate new uses as a barracks for the Armed Forces Police Detachment. An open dorm area was provided for sixty men. A first floor addition of 36’-8” by 20’

Area 5, Building #220 - West Stockade Building, con't

was constructed on the south end of the building to provide washroom facilities. According to drawings, small bay window was added at that time to an office, which served as a radio operations room on the first floor, east side near the southern end of the building. This bay has since been removed.

In 1960, alterations were made to this and related facilities for a reorganization and expansion of the Navy Brig Facilities. Building #220 was to serve as a dormitory for minimum-security prisoners. As such it was planned for a large, open dorm room on the second floor and recreational activity room, offices, storage and other facilities on the first floor. Minor interior alterations were made. New security doors and screens were added which had been salvaged from Building #228, a former storage building.

In 1982 other minor interior alterations were made to the lavatory facilities on the first floor. By that time the drawings showed the addition of a bay window on the first floor, at north end of the east façade. Also by that time the former shower facilities on the first floor south end were serving as a laundry facility.



Detail view of Building #220, west facade. Conditions at Building #216 are similar.

1.5 ANALYSIS OF HISTORIC RESOURCES

Existing buildings and structures within Areas 1, 2, and 5 of the North Bay site have been reviewed in the field, and their dates of construction and original ownership have been determined through historic research.

There are no buildings in Areas 3, 4, 6, and 7, with the exception of two small sheds in Area 6, which together total less than 2,000 square feet, and which are not included in the survey.

As a result of the field survey and initial research, fourteen buildings and one structure were selected for further study. Additional research was undertaken. The survey inventory forms, provided in Section 1.4, describe the architectural characteristics and historic associations of each of the following:

Area 1 - Property associated with early oil industries and the tank farm development

Tank Farm Boiler / Shop Building, #19, 1925
Tank Farm Office, Building #14, 1925
Power / Switch House, Building #25, 1925
Fuel Pump House, Building #26, 1925
Garage / Seafood Processing Building, #28, ca. 1925
Lube Oil Pump House, Building #127, 1925
Storage Building #308, ca. 1925
Cold Storage Building /CityIce, Building #39, 1942

Area 2 - Warehouses dating from the 13th Naval Supply Depot era

Surfish / Independent Packers Corporation Building #40, 1945
Northwest Harvest Warehouse #50, 1942

Area 5 - Remaining buildings from the 13th Navy Supply Depot / Naval Station

Baggage Shed, Building #207, 1942
West Stockades, Building #216, 1942
Mess Hall and Shed Structure, Buildings #218 and #275, 1942
East Stockade, Building #220, 1942

For purposes of this report, these buildings are categorized in one of four groups, according to their potential eligibility to meet historic criteria:

Category 1: Properties that are designated landmarks or properties that appear to meet National Register Criteria or Local Landmark Criteria.

Category 2: Properties with potential to meet the National Register listing or city designation criteria, for which further review is recommended.

Category 3: Properties: Buildings of some community value, but which are unlikely to meet national or local landmark criteria.

Category 4: Properties: Buildings of no apparent historic or architectural significance and value that are unlikely to meet national or local landmark criteria

Categories 1 and 2

Properties that are designated landmarks or properties that appear to meet National Register Criteria or Local Landmark Criteria; or

Properties with potential to meet the National Register listing or city designation criteria, for which further review is recommended.

As previously noted, there are no current designated landmarks within the project area. The surveyed buildings and structure on the North Bay site were all originally constructed from the early 1920s to the mid 1940s. Thus they meet the threshold age standards of 50 years for listing on the National Register and 25 years for designation as City of Seattle landmarks. However, the city's ordinance also requires that a property also "have significant character, interest or value, as part of the development, heritage or cultural characteristics of the City, State or Nation."

Based on the research and documentation presented in this report, it appears that none of the properties have sufficient individual historic and architectural significance to meet the threshold standards for listing or designation, and thus they do not meet the eligibility requirements of Category 1 or 2.

Category 3 Properties:

Buildings of some community value, but which are unlikely to meet national or local landmark criteria.

Buildings in Area 1, which are associated with the oil tank farm, appear to lack sufficient individual distinction as required to meet National Register listing or the city designation criteria. There are seven buildings in this area that together embody some architectural features of an early twentieth century industrial complex. (Building #39 is a nearby industrial building, is evaluated in Category 4.)

The most expressive of the older buildings are the bearing brick masonry structures, #26, #28 and #308. However, changes have been made to each of these three buildings over time that have resulted in a loss of their historic integrity. The remaining buildings, #19, #24, #25, #127, are utilitarian and have little architectural significance. Each has been changed over the last 80 years in response to functional needs and operational changes at the tank farm.

The history of the tank farm is associated in only a general way with the development of the oil industry, and its development on this site is not noteworthy. Furthermore, the context for the buildings has been changed through the addition of newer structures as part of the tank farm, and through changes such as the Garfield / Magnolia Bridge, which has changed the physical setting and site access, and visibility of the tank farm buildings.

It does not appear that any of the tank farm buildings meet National Register listing or city designation criteria. Some elements of the buildings may provide visual design character to the area, however, or may serve as a design reference to future development, and thus they may be of some value to the community. The buildings in Area 1 -- #24, #25, #26, #28, #127 and #308 thus are placed in Category 3. Development of the North Bay site does not impact the historic resources in Area 1.

Similarly, there are four buildings and one structure within Area 5 -- #207, #216, #218 and #275, and #220 --which are generally associated historically with Navy development of the North Bay property. Changes to the Navy property have resulted in removal of 90% of the buildings that dated from the era of wartime development of the 1940s. Changes made to the surveyed buildings have resulted in loss of character and historic integrity. In addition, several building -- #216 and #220 -- appear to be in poor condition. The buildings in Area 5 appear to have little historic or architectural significance. Because they may have some community value as remnants of the war era, they are placed in Category 3. Development of the North Bay site does not impact historic resources in Area 5.

Building #50, in Area 2, is an interesting example of World War II era construction that used modular manufactured building elements for easy on-site assembly, and its form embodies some similar characteristics as traditional heavy timber warehouses of the early twentieth century. The building is made of conventional lumber, however, and its architectural qualities are typical of many industrial sheds. Thus it has limited architectural significance. Because of this, it is placed in Category 3. Development of the North Bay site does not impact historic resources in Area 2.

Category 4 Properties:

Buildings of no apparent historic or architectural significance and value that are unlikely to meet national or local landmark criteria

The remaining surveyed buildings include industrial warehouses in Areas 1 and 2, Buildings #39 and #40. These two warehouses represent different construction technologies, but they have little historic or architectural significance. They do not represent specific industrial building typologies, such as the wood framed traditional warehouses, or concrete frame cold storage facilities. A well known national firm designed building #39, but it does not appear to represent any specific innovation for its time, and is not an outstanding work of the original designers. Additions, interior remodeling, changes to cladding in the case of Building #40, and changes in physical context in the case of Building #39 have impacted these two buildings, and reduced their original character.

These two buildings are placed in Category 4. Development of the North Bay will have no impact on historic resources as these buildings have no apparent historic or architectural significance.

1.6 ASSESSMENT OF ARCHAEOLOGICAL RESOURCES

This section assesses the potential for the presence of significant archaeological resources in the study area in light of historical land use practices. The discussion begins with an outline of land use activities in Smith Cove from the mid-nineteenth century up to the present day followed by the results of previous archaeological studies that have been conducted in or near the proposed project.

Historical Land Use

The following is summarized from the historic context statement presented in Section 1.3 above, but the focus here is on land use practices employed during historical developments in Smith Cove that may have affected preservation of prehistoric and early historical archaeological materials within the study area.

Early Euroamerican settlement in the study area began in the mid-1850s with the land claims of Dr. Henry Smith and E. M. Smithers in the low-lying area between the north end of Smith Cove and Salmon Bay to the north (Figure 7). Smith, after whom the cove is named, was a skilled surgeon and became one of the prominent citizens of Seattle. Smith was also responsible for translating Chief Seattle's speech of 1854 (Bagley 1929; Dorpat 1984).

In 1884 the Seattle, Lake Shore and Eastern Railroad (SLSE) completed a section of line that ran north from Elliott Bay north to Interbay and across Salmon Bay to Ballard (Robertson, 1995). The SLSE did not build facilities in Smith Cove, but did maintain a stop on Grand Boulevard (now Dravus Street) at the intersection of Gilman and Thorndyke Avenues. This was the catalyst for early economic development in Interbay and the small village of Boulevard grew up around the rail stop. Boulevard, along with Magnolia, was annexed by the City of Seattle in 1891 and renamed Interbay in 1894.

The transcontinental railroad arrived in 1892 when the Great Northern Railway built a depot and the first piers at Smith's Cove (Robertson 1995) east of the current Piers 90 and 91 (Figure 8). The depot served as the terminus for the Great Northern and also served as a transshipment center for the railroad's steamship line, which plied a lucrative trade in raw silk and tea, and later in lumber and other goods (Figure 9).

During construction of the Lake Washington Ship Canal, completed in 1916, dredge spoils from the construction of the canal were used to reclaim tideflats and marshes at the north and south ends of Interbay; as a result, about 150 acres of tidelands were filled in Smith Cove. Some tidelands were also reclaimed by landfill. By 1911 city dumps had been established at 16th Avenue West and Gilman Avenue, and at 22nd Avenue West and West Garfield Street (Phelps 1978).

Since Smith Cove provided good marine access and offered potential for industrial development, one of the early projects undertaken by the Port of Seattle after its commissioning in 1911 was development of Smith Cove. The Port purchased land and the Great Northern docks and began construction of Piers 90 and 91. When completed in 1917 the piers extended into Elliott Bay for one-half mile and were the longest earth-filled piers in the world (Dorpat 1984) (Figure 10).

Construction of Piers 90 and 91, along with development of Fisherman's Terminal in Salmon Bay, spurred development of new and existing industries in the area. Economic development also saw the construction of numerous wharves, buildings, and structures on the fringes of the tide flats, along the shore of Smith Cove and along the base of the piers (Figures 11 and 12).

At the start of World War II, the Navy took over control of the Smith Cove piers. More than 500 ships were outfitted and the Navy maintained a workforce that numbered 2,500 civilians at the height of the war. By 1947, the rest of the Smith Cove tideflats had been filled and brought up to their present grade, and Terminal 91 had assumed its present configuration (Figure 7). The Navy continued to operate the terminal through the early 1970s to supply the Pacific fleet; the terminal was used during the Korean and Vietnam Wars.

The Navy closed Terminal 91 in 1970 after the Naval Supply Center was established in Bremerton. The Port of Seattle bought the piers and an additional 198 acres from the Navy. Since then the Port has focused on developing facilities for expanding trade with Asian markets. For example, the Datsun / Nissan shipping and distribution center was in Area 2 of the North Bay site from 1974 to 2001 and existing cold storage facilities were expanded to accommodate sea food processing, including a major trade in roe (fish eggs) (Figure 13).

Previous Archaeological Research

The review of previous archaeological research is used to document locations and contents of known sites in the project vicinity. These previous studies provide information regarding stratigraphy, geomorphology, site types, artifacts, age, and conditions of discovery that can be extrapolated to nearby areas to estimate the probability for discovery of additional, unrecorded archaeological resources.

Nine archaeological studies have been carried out in the vicinity of Smith Cove (Table 1); of these, three studies were focused on assessments of areas in or adjacent to North Bay. A literature search and a field inspection for historic and prehistoric archaeological materials were carried out at Piers 90 and 91 in 1984 by BOAS, Inc. (Abbott and Larson, 1984). Although no archaeological materials were found during the field survey, the authors concluded there was potential for prehistoric resources to be found under the fill used to reclaim the Smith Cove wetlands.

The second archaeological study was conducted in 1992 as part of a larger cultural resources inventory of Navy properties (Kreutzer, et al., 1992). The project included a literature search and field survey of the Pier 90 Quarters west of Piers 90 and 91. The field survey did not find archaeological materials from the prehistoric or ethnohistoric periods.

The third archaeological study to include Smith Cove was part of a larger cultural resources assessment carried out along the proposed Seattle Monorail Project Green Line alignment (Lewarch et al., 2003). Although the results of literature search and limited fieldwork indicated no significant archaeological resources were along the proposed route, Smith Cove was considered to have high potential for harboring prehistoric and ethnohistoric period archaeological materials.

Table 1. Previous Archaeological Studies Conducted within One Mile of Smith Cove (arranged in chronological order).

AUTHOR	TITLE OF REPORT	TYPE OF INVESTIGATION	CULTURAL RESOURCES IDENTIFIED
Billat, 2004	Request for Consultation and Concurrence Regarding a Proposed Collocation of A Wireless Telecommunications Service Facility	Cultural Resource Assessment	One building recorded near Kinneer Park
Lewarch et al. 2004	South Lake Union CSO Phase II Project, Archaeological Resources and Historic Building Monitoring	Archaeological Resources Monitoring	No new resources recorded
Lewarch et al. 2003	Seattle Monorail Project Green Line, King County, Washington: Archaeological and Traditional Cultural Places Assessment	Cultural Resource Assessment	No new resources recorded in vicinity of North Bay project
Roedel et al., 2003	Denny Way/Lake Union Combined Sewer Overflow Control Project	Archaeological Resources Monitoring	None
Lewarch 2001	Denny Way/Lake Union CSO Control Project Construction Monitoring Archaeological Monitoring and Additional Sidescan Sonar at Marine Outfalls	Construction and Archaeological Monitoring; Sidescan Sonar	No new resources recorded
Lewarch et al. 1999	Denny Way/Lake Union Combined Sewer Overflow Control Project	Archaeological Resources Treatment and Monitoring Plans	Synthesis of previously identified resources
Forsman et al., 1997	Denny Way/Lake Union Combined Sewer Overflow Control Project	Cultural Resource Assessment	Synthesis of previously identified resources
Kreutzer et al. 1992	Cultural Resources Inventory of the Naval Station Puget Sound, Sand Point, Magnolia Family Housing, Pier 90 Quarters, Pacific Beach Facility, Brier, and Paine Field Properties	Cultural Resource Assessment	None in vicinity of North Bay Project
Abbot and Larson 1984	Archaeological and Historical Cultural Resources Survey of the Pier 90 and 91 Terminals at Smith Cove	Cultural Resource Assessment	None

Other archaeological studies in the vicinity of Smith Cove have been done in association with development of various infrastructure improvement projects in the Seattle metro area. The closest of these projects to Smith Cove was an extensive archaeological excavation carried out at the West Point Site Complex during construction of the Seattle Metro sewer treatment plant (Larson and Lewarch 1995). The site complex is on a sand spit at the base of Magnolia Bluff where archaeological evidence for early occupations were found dating between about 4200 before present (B.P.) and 2700 B.P. A wide variety of subsistence remains and artifact types suggest that initial use of the landform was for base camps that were part of a larger settlement system tied to a foraging economic system. After 2700 B.P., occupations characterized by special purpose areas suggest use of the landform had shifted to seasonal short-term stays, probably during the spring and summer.

Farther away, in the south downtown area, monitoring for the Central Link Light Rail Maintenance Base north of the Spokane Street viaduct resulted in identification of the historical archaeological site 45-KI-688. This site is a historic-period landfill near the Bayview Brewery (now the Rainier complex) in the vicinity of the block bounded by Airport Way South, Sixth Avenue South, South Forest Street, and South Hinds Street. Stratigraphy observed at the site consisted of imported fill overlying intact Holocene estuarine and beach deposits (LeTourneau, et al., 2003).

Two additional historic archaeological sites (45-KI-529 and 45-KI-530) were recorded during monitoring of construction excavations along South Spokane Street Viaduct. The archaeological site 45-KI-530, located at South Spokane Street and Colorado Avenue South, contained a deposit of bottles, shoes, a barrel hoop, and domestic porcelain, which were found below 14 feet of fill. The site appears to represent a single dumping event that rests directly on the tideflat surface and may date from as early as 1890 to the 1910s (Cole 2002).

The second historic archaeological site, 45-KI-529, is located at South Spokane Street and Second Avenue South. This site is a 4-to-6-foot-thick deposit of refuse beginning at about eight feet below the surface. Artifacts included numerous bottles, glass, light bulbs, bricks, ceramics, leather, fabric, wood, paper, metal, a 1910s penny, butter clam and Pacific or Japanese oyster shells, pieces of concrete, bovid and chicken bones, fuses, shoes, cast iron, and pages from 1917 *Seattle Times* newspapers. Based on stratigraphy and ages of the artifacts, this deposit dates to between 1895 and 1920 (Cole 2002).

The known prehistoric archaeological sites in the Seattle metro area are on the fringes of the urban core, in other areas where development has not been extensive, or where intact surfaces are buried and preserved under fill materials. One of the more important of these sites is the Duwamish No. 1 site (45-KI-23) located adjacent to the Duwamish Waterway. This site is a shell midden on a low-lying terrace bordering the western margin of the Duwamish Valley where the valley opens into Elliott Bay. Both the terrace and the adjacent slough of the Duwamish River are relict geomorphic features on the valley floor, which was extensively modified in the course of urban development in the late nineteenth and early twentieth centuries. The site was formerly at the mouth of the Duwamish River, but due to the construction of the Duwamish Waterway is now 3.75 km upstream from the confluence of the Duwamish Waterway and Elliott Bay (Campbell 1981).

Expectations

Based on archival research, analysis of historical maps, study of geologic and geotechnical data, and the results of previous archaeological research in the vicinity, there is a reasonable expectation for finding prehistoric archaeological materials in the project area despite the modifications in Smith Cove associated with industrial and urban development. North of the piers there appears to have

been relatively little modification to former shorelines and the surface of the tidal flats; instead, most of the study area has been subjected to filling to bring the surface above high tide. Given the landscape setting, the ethnographic accounts, and historical accounts, the study area is considered to have potential for harboring archaeological materials related to prehistoric and ethnohistoric land use in the project area.

Because the manner of land use north of the piers appears to have been limited to building on fill with little direct modification of underlying native surfaces, there is the potential for historical archaeological materials to be located on the site. Some shoreline areas of Smith Cove may have been affected by subsequent land use, particularly by post-World War II development, but archaeological materials may be present along the former shoreline.

For both prehistoric and historical archaeological resources, expectations for encountering archaeological materials increases with proximity to the former shoreline of Smith Cove where fill thicknesses decrease. Because Area 2, the Uplands, is centered primarily over the center of Smith Cove where the fill is at its thickest, expectations for encountering potentially significant archaeological materials rise for ground-disturbing activities that would reach deeper than the post-World War II fills. On the other hand, the proximity of Area 4, the West Yard, to the former shoreline of Smith Cove suggests a greater likelihood of encountering archaeological materials with shallower excavations.

Methods

Since the project area is covered with impervious surfaces and buildings, the cultural resources assessment relied on documents, maps, research publications, and popular articles and books that provided information about historical settlement and land use in Smith Cove. The principal sources of information specific to the project area were derived from photographs in the collections of the Museum of History and Industry, Suzzallo Library at the University of Washington, and the Seattle Municipal Archives.

The second source of information used in the cultural resources assessment of the project was derived from a summary of geotechnical work that has been carried out at Terminal 91 between 1965 to 2003 by Landau Associates (2004). This data was supplied to NWAA by BOLA Architecture + Planning, and was used to estimate the amount of fill underlying the project area.

Results

Figure 9 shows the distribution of boreholes that have been drilled over the last 38 years in Terminal 91. Various cross sections constructed from the borehole logs show that the fill thickness over the project area ranges from negligible under portions of the Magnolia Bridge to a maximum of about 15 feet under the Tank Farm (Borehole B-7) and the northern end of Pier 90 (Borehole B-1). Figure 10 shows a north-south cross section extending from Magnolia Bridge north to the northeast corner of the study area. The northernmost portion of this transect shows a thin wedge of landfill extending south to the vicinity of Borehole B-7.

The historical photographs of Smith Cove suggest that after the initial filling episodes associated with construction of the Lake Washington Ship Canal and Piers 90 and 91, reclamation of the Smith Cove tideflats proceeded incrementally until World War II. The sequence of views shown in Figures

4 through 7 further indicate that filling proceeded predominantly from north to south, with the last stage of reclamation occurring during the Navy's tenure at Terminal 91.

The photographs also show that by the early 1930s the piers and the nearby shoreline were crowded with smaller wharves and docks with numerous associated buildings and structures. For example, Figure 5 shows numerous buildings and structures crowding the southern end of a small wharf west of the piers. The photograph also shows a scattering of flotsam accumulating on the tideflat surface near the shore. By 1947 reclamation had been essentially completed (Figure 13), and subsequent changes in Smith Cove were limited to construction or removal of facilities on top of the fill.

Discussion and Recommendations

Based on archival research, analysis of historical maps, study of geologic and geotechnical data, and the results of previous archaeological research in the vicinity, no known archaeologically significant cultural resources are in the proposed project. In spite of this, the project is in an archaeologically sensitive landscape setting that includes the former shoreline and tideflats of Smith Cove. Even though no known archaeologically significant cultural resources were found during this cultural resources assessment, access to subsurface sediments was hampered by buildings and impervious surfaces. As a result, the effects of the proposed project on cultural resources cannot be fully determined.

The DPD Director=s Rule 2-98 recognizes that although research may not identify the probable presence within a proposed project of archaeologically significant sites or resources, conditions may be imposed on the proposed project to ensure that no adverse impacts occur to an inadvertently discovered archaeologically significant resource.

NWAA recommends that archaeological monitoring be carried out if spoil-producing excavations extend into fill below the Navy-era fill. (For example, pile or sheet driving would not likely require monitoring because spoils are not normally produced by these activities.) Specific archaeological monitoring requirements and the development of monitoring and discovery plans should be tailored to the needs of individual projects.

The following recommendations, included in Directors Rule 2-98, also should be implemented in conjunction with the monitoring:

- Contractors and subcontractors should be supplied with copies of regulations regarding archaeological resources with the understanding that the crews will comply with those regulations;
- The monitoring plan should include an inadvertent discovery protocol to be implemented during construction. If resources are inadvertently discovered, then work will be stopped, and DPD and OAHP will be notified. If human remains are inadvertently discovered, then in addition to DPD and OAHP, representatives of affected tribes will also be contacted;
- And finally, the project should abide by all regulations pertaining to the discovery and excavation of archaeological resources.

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