February 16, 2013

The following is the report of a 1996 archeological survey of the southernmost portion of what at the time was the large gravel pit upon the Chamber's Bay Golf Course is now situated. The area is now part of University Place and is owned by Pierce County and its Wastewater Treatment Facility.

The area surveyed is the north shore of Chambers Bay just inside the mouth of Chambers Creek (across from the Steilacoom Marina and boathouses.

The toner on page 14 did not develop properly during reproduction by Pierce County Public Works (or earlier). It was their gracious contribution that resulted in Steilacoom Historical Museum Association receiving its copy.

Perry Brake
Webmaster

WASHINGTON STATE DEPARTMENT OF
Natural Resources

JENNIFER M. BELCHER
Commissioner of Public Lands
KALEEN COTTINGHAM
Supervisor

June 28, 1996

Joe Scorcio
Special Assistant to the Director
Chamber Creek Properties Master Site Plan
Pierce County Public Works and Utilities
9116 Gravelly Lake Drive SW
Tacoma, WA 98499

Re: Archeological Report for the Steilacoom Gravel Pits

Dear Mr. Scorcio:

As discussed at our meeting, I have enclosed a copy of the archeological report done for the southern mine site in the vicinity of the Chambers Creek Railroad Bridge. I trust this information is useful for your project. Thank you for the opportunity to respond.

If you have questions, I can be reached through the South Puget Sound Region Office at (360) 825-1631.

Sincerely,

Bonnie B. Bunning
Region Manager

David S. Pierce BB

David S. Pierce
Surface Mine Field Inspector

DSP/bh
JUN96\97

Enclosure

SOUTH PUGET SOUND REGION
28329 SE 448TH ST ▮ PO BOX 68 ▮ ENUMCLAW, WA 98022-0068 ▮ *FAX: (360) 825-1672* ▮ *TTY: (360) 825-6381* ▮ *TEL: (360) 825-1631*

Prepared for

Lone Star Northwest
6320 Grandview Drive W.
Tacoma, WA 98467

Archaeological Survey and Testing of Two Thousand Feet of Land on the North Side of Chambers Bay, in Pierce County, Washington

by

Jeanne M. Welch, M.A.

December, 1989

Western Heritage
P.O. Box 6266
Olympia, WA 98502

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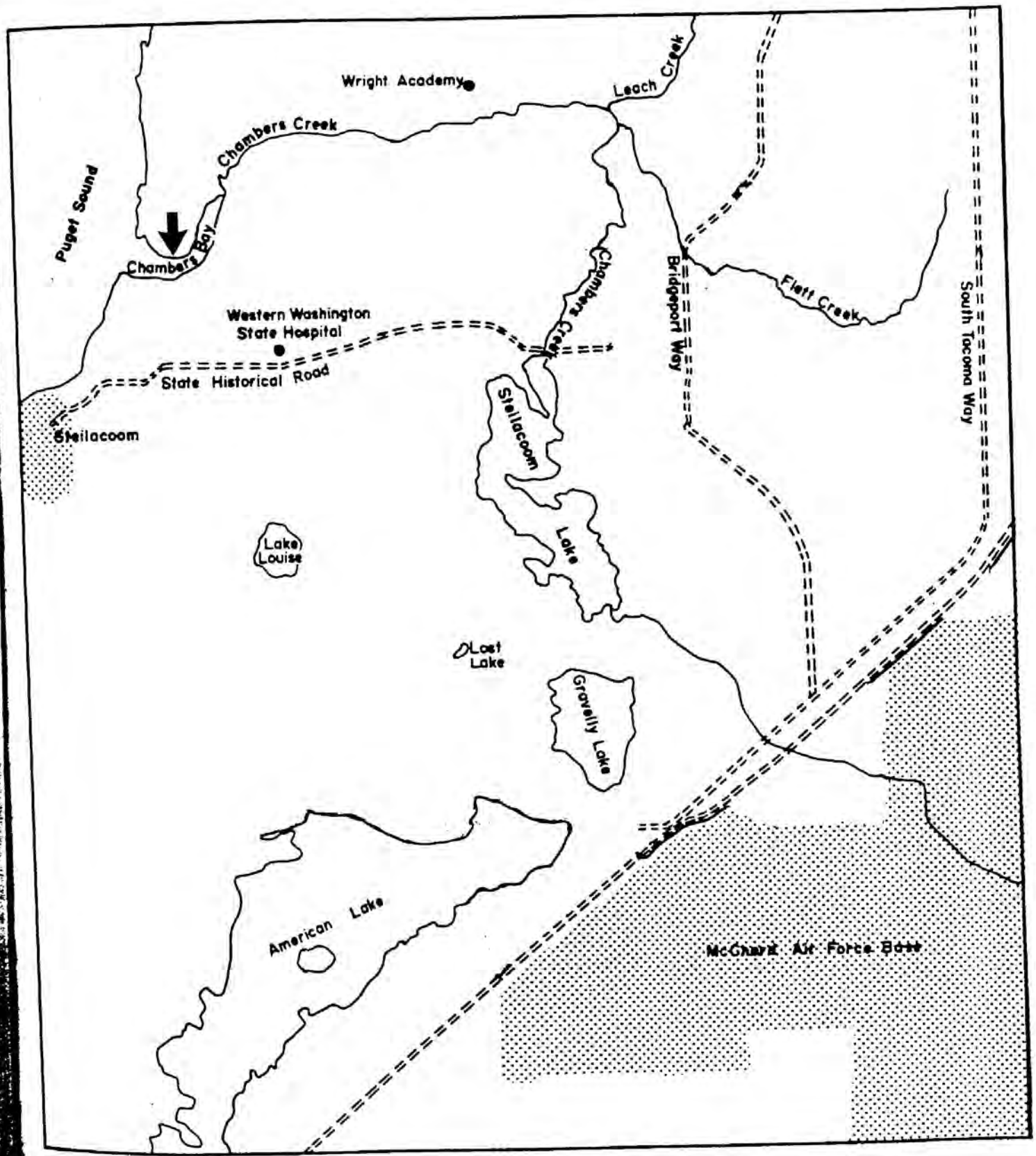
Figure 1. The survey area.


Wright Academy
Leach Creek
Chambers Creek
Puget Sound
Chambers Bay
Western Washington
State Hospital
State Historical Road
Steilacoom
Steilacoom Lake
Lake Louise
Lost Lake
Gravelly Lake
American Lake
McChord Air Force Base
Bridgeport Way
Flett Creek
South Tacoma Way

I. INTRODUCTION

During the third week of December 18-21, 1989, Western Heritage, Inc. conducted an archaeological survey, testing and evaluation of some two thousand feet of land at the base of a 200 foot bluff on the north side of Chambers Bay. The property lies within Section 29, T20N, R2E, Steilacoom Quadrangle, in Pierce County, Washington and is owned by Lone Star Northwest. Lone Star is in the process of removing aggregates from the north side of the 200 foot bluff, an action which will cause eventual collapse of a portion of the bluff to the north.

The study was carried out pursuant to the provisions of the National Historic Preservation Act of 1966, as amended, the National Environmental Policy Act, the Washington State Environmental Policy Act, and Washington State RCW's 27.34 and 27.44.

The basis for the archaeological and historic assessment of the study area was to determine whether cultural resources existed, whether such properties, if present, were eligible for inclusion in the National Register of Historic Places, and whether the proposed project will impact such properties. Western Heritage uses the criteria specified in 36 CFR Parts 60 and 800 to evaluate the eligibility of cultural properties and the nature of project related impacts on them, respectively.

Sources consulted in preparing for the study included the National Register of Historic Places, the Washington State Register of Historic Places, the Washington State historical and archaeological inventories, and a review of archaeological ethnographical, and historical literature.

Michael Avey, archaeologist, with Pierce Community College who has carried out extensive research and archaeological investigations in the particular area was contacted for additional information.

II. THE NATURAL SETTING

Geology - Topography

The topography and Chambers Creek drainage system is a direct result of the multiple glaciations of Puget Sound. Outflow from Steilacoom Lake is carried by Chambers Creek to the Nisqually Reach, a distance of about four miles.

The study area lies within the Puget Sound Lowlands in western Wasington. Expansion of the Puget Lobe glaciers into the Straits of Juan de Fuca during the Vashon Stade blocked the northern regions of the Puget Sound Lowland. In the Puget Sound Lowlands, older, nonglacial deposits of the Olympia Interglaciation were scoured by the ice sheet, and proglacial lakes formed. These sediments are underlain by reworked, unconsolidated sands and gravels that were deposited by earlier episodes of glaciation (Crandall 1965:345). Alpine glaciers of the Western Cascades had reached their maximum extent and were in retreat by the time of the Puget Lobe advance (Armstrong et al. 1965:345).

The recession of the Puget Lobe precipitated deposition of marine and glaciomarine material, which began to appear about 13,000 years BP. Crandall (1965:346) suggests that terminal moraines along the southern margins of the Puget Lobe did not remain long after its maximum extent.

Between 13,500 and 11,000 years ago, the glacially cut troughs of the Puget Sound Lowland began to fill with seawater, which marks the beginning of the Everson Interstade of postglacial times. The interstade is characterized by the deposition of fossiliferous marine and glaciomarine sediments in front of and beneath the retreating ice sheet (Crandall 1965:346).

Also dating from the Late Pleistocene is the broad expanse of

Steilacoom outwash gravels, which are apparent throughout the project area. Characteristically, these consist of pebble to cobble sized gravels and boulders ranging in thickness from 2 to 200 ft. Bretz (1913:236) was first to recognize the broad expanse of the gravels and their origins. The gravels can be traced to several rivers that originated from proglacial discharge in the Puyallup River Valley. However, names applied to Steilacoom gravels should be limited to deposits reworked by or formed from the discharge of Lake Puyallup (Walters and Kimmel 1968).

Soils

The soils within the Chambers Creek basin developed on glacial materials and were influenced by topography and vegetation. Kennedy et al. (1976:7) have differentiated the soil types within area into three basic categories. These include glacial outwash surface soils, upland Vashon Till surface soils, and low-lying peat or organic soils. In general, glacial outwash and till soils occur on nearly level to slightly undulating surfaces. Soils of this type are coarse textured, poor in nutrients, and excessively drained. The soils in a typical profile are moderately deep and medium dark in color (Zulauf 1979).

Peat or organic soils usually are found in ponded basins on the glacial plateau or along backwater depressions and are not present in the specific study area.

Climate

Due to the influences of the Pacific Ocean, the study area has a typically marine climate with mild, moist winters and relatively dry, warm summers (Griffin et al. 1962:7). The climate is characterized by fairly even temperatures and pronounced seasonal distribution of precipitation. The immediate Tacoma area averages less than 40 inches of precipitation a year (Griffin et al. 1962:5), with over 80 percent of the annual precipitation occurring between October and April. The dry season climax is at the end of July, while December and January are the wettest months. Measurable precipitation averages 140 days per year.

Flora

In the past, forests extended along the stream valley in some places. The more common large conifers in the study area included Douglas fir (Pseudotsuga menziesii), western hemlock (Tsuga heterophylla), and western red cedar (Thuja plicata). Western white pine (Pinus monticola), lodgepole pine (Pinus contorta latifolia), and western yew (Taxus brevifolia) also were common. The dense canopy of the coniferous forest resulted in sparse understory layers, which included species such as common snowberry (Symphoricarpos albus), Indian plum (Osmaronia cerasiformis), red rhododendron (Rhododendron macrophyllum), rattlesnake plantain (Goodyera oblongifolia), spotted coralroot (Corallorhiza maculata), and salal (Gaultheria shallon).

Much of the coniferous portion of the forest was removed by early logging practices and later homestead development. Broad-leaved trees became the dominant species over the coniferous forests. Some of the common broad-leafed trees in the area were the Garry oak (Quercus garryana), Oregon maple (Acer macrophyllum), madrona (Arbutus menziesii), red alder (Alnus rubra), and quaking aspen (Populus tremuloides). Few of these trees are found along the stream bank today.

Fauna

A variety of wildlife inhabits the study area. Salmon remain a major faunal resource. The Chambers Creek drainage system is an important spawning area for chum salmon (Oncorhynchus keta) and two varieties of Coho salmon (O. kisutch). One variety of Coho salmon is composed of small adults that migrate with chum salmon in October and November. The second migration group is composed of larger adults that run upstream in December and January. Small numbers of Chinook salmon (O. tshawytscha) and sockeye salmon (O. nerka) also use the creek system during migration and spawning in the fall. The Chambers Creek drainage also supports winter steelhead (Salmo gairdneri) and a variety of other trout species (Pierce County 1975:III-87).

There are a number of shellfish resources along the estuarine portions of Chambers Bay and the adjacent intertidal portions of Puget Sound. These include hardshell clam populations, shrimp (Pandalus sp.), scallops (Pectinidae sp.), and oysters (Ostrea lurida). There are fish populations of salmon, cod (Gadus macrocephalus), herring (Clupea harengus), flounder (Platichthys stellatus), perch (Cymatogaster aggregata), smelt (Hypomesus pretiosus), sole (Lepidopsetta bilineata), and various rockfish (Sebastes sp.) off shore from Chambers Bay. This marine habitat also is frequented by marine mammals, such as seals (Phoca vitulina richardii) and porpoises (Phocoena phocoena and Phocoenoides dalli).

Waterfowl found in the bay include loons (Gavia sp.), sandhill cranes (Grus canadensis), Canadian geese (Branta canadensis), and trumpeter swans (Olor buccinator). Birds of prey include the osprey (Pandion laliaethus), ferruginus hawk (Buteo regalis), pigeon hawk

(Falco columbaris), prairie falcon (F. mexicanus), and peregrine falcon (F. peregrinis).

During historic times, elk (Cervus canadensis), black tail deer (Odocoileus hemionus columbianus), white tail deer (O. virginianus leucurus), and black bear (Ursus americanus) were the major big game animals in the study area. They ranged throughout the forests and prairies and along major streams. The small fur bearing mammal populations have declined or disappeared altogether. The most common of these animals are the beaver (Castor canadensis), red fox (Vulpes fulva), wolf (Canis lupus), weasel (Mustela rixosa), marten (Martes americana), fisher (M. pennanti), squirrel, and lemming.

III. [illegible]

<u>Archaeological Studies</u>

The first professional archaeological survey [illegible] was [illegible] by Harlan I. Smith [illegible] [illegible] Smith found a [illegible] while trying to locate the [illegible] Surface inspection of the [illegible] [illegible]

[illegible] later, [illegible] scattered along the beach surface [illegible] only a small quantity of material, which [illegible] The site probably was historic [illegible] occupied [illegible]

The same area was [illegible] archaeological recommendations [illegible] shell fragments [illegible] of [illegible] on [illegible] [illegible] Bay, which [illegible]

[illegible] the sediments on the site [illegible] [illegible]

[illegible] carried out excavations [illegible] Site, [illegible]

Chambers Creek. Wessen (1984) tested an area proposed for land development on the south side of Chambers Bay. Welch and Daugherty surveyed and carried out subsurface testing for a proposed sewer line on the south side of Chambers Bay, on the north side of Chambers Creek Road in 1986.

Ethnohistory

The Chambers Bay study area occurs within the ethnographic range of that division of the Coast Salish Indians generally referred to as the Puyallup-Nisqually (Smith 1940; and Gallison et al. 1983 and 1984). The closest local group of the Puyallup-Nisqually were the Steilacoom Indians, who had a village on the south shore of Chambers Bay immediately adjacent to the present study area (Taylor 1974). The average village consisted of from twenty to forty inhabitants, depending on the number of families in residence. Salmon was the mainstary of their diet, but cod, flounder, skate, and sole also were eaten. Devil fish was considered a delicacy, and trips were made to Redondo Beach to the north where the devil fish were plentiful in order to secure them. The blooming of the dogwood indicated that clams were good and ready to be harvested. Butter clams were procured in the spring and horse clams were dug through September. Clams and shellfish usually were dug at night when the tide was low and moon full. A large shell was used to clear the digging hole of sand and water. A digging stick of ironwood about four feet long with both ends sharpened then hardened in the fire completed the tools needed for the digging task. These Salish people were coastal hunters, fishermen, and plant gatherers, and they probably ranged over much of the Chambers Creek drainage and onto many of the nearby islands of southern Puget Sound.

History

The first Euroamerican occupation of the study area in the 1830s was by the Puget's Sound Agricultural Company (PSAC), a subsidiary of the Hudson's Bay Company. In 1850, Thomas McCutcheon Chambers, a naturalized American citizen originally from Ireland, filed a Donation Land Claim of 634 acres in Sections 28, 29, and 33, T20N, R2E at the mouth of Chambers Creek. At that time Chambers, his wife and eight children had been living for over a year on the property. Chambers constructed a gristmill on the south side of the bay in 1850 and a sawmill in 1852. Chambers had a number of clashes with the Hudson's Bay Company. According to Snowden, Doctor William Tolmie, Factor, of the Bay's installation at Ft. Nisqually,

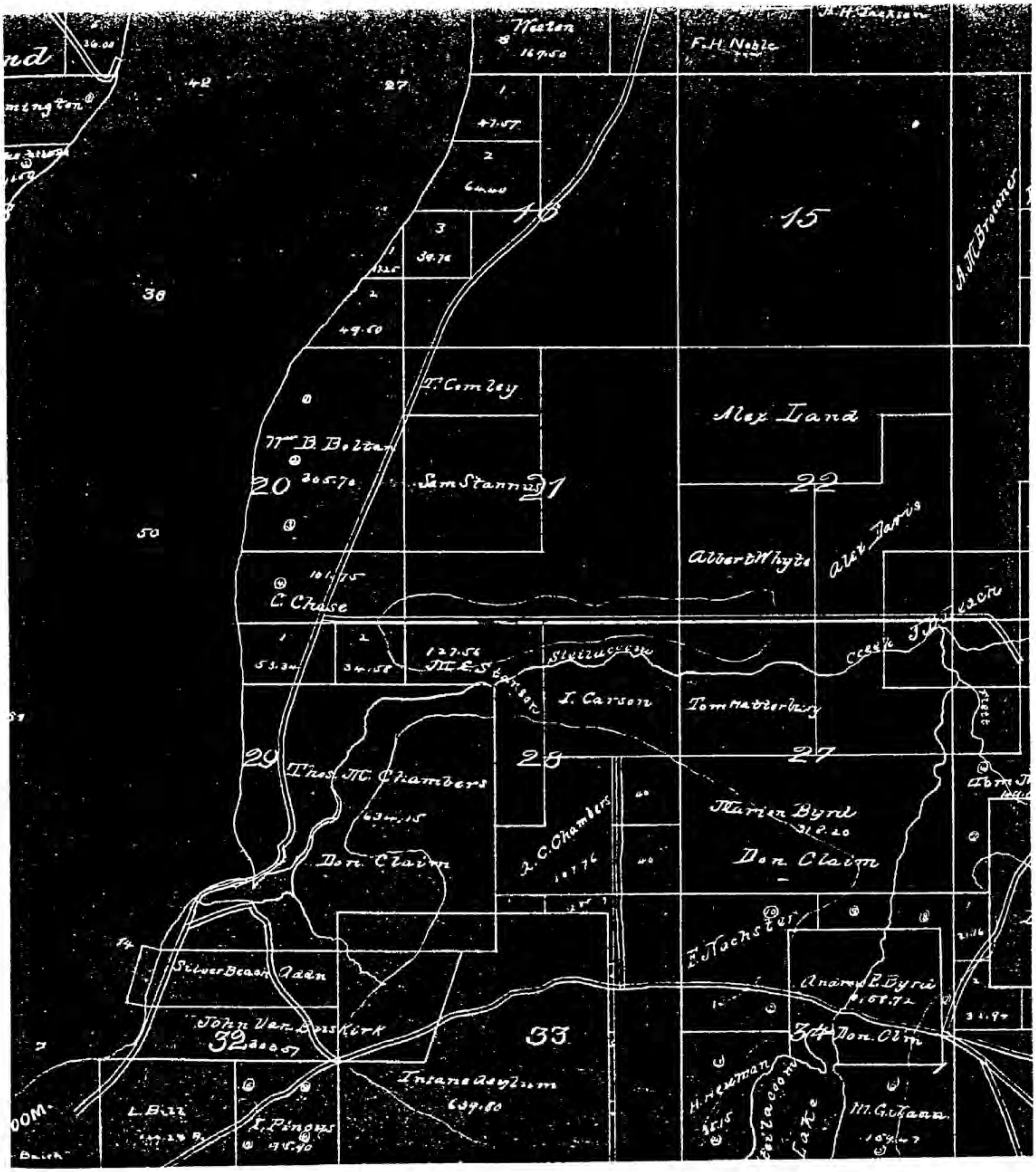
> frequently and formally warned him to go away and make his improvements elsewhere, or else not make them at all, but this Chambers refused to do. He not only refused,....he openly did all that he could to induce other Americans to settle near him, contending that the Agricultural Company was a foreign concern, entitled to no rights...(1090:447).

Chambers even stood with a gun in his hand and "defied the Bay Company to dislodge him" (Hunt,1916:37). Chambers would not budge against their threats and when the creek began to be called Chambers Creek (ca. 1858), his residency almost was assured. Chambers eventually served as a witness against the PSAC at the hearing on the company's claims (E. Shackleford 1965).

Chambers also feuded with fellow settler Andrew Byrd. Chambers hired August Kautz, an early resident of the area, to survey the Chambers Creek basin. Chambers wanted Kautz to determine to what extent the flow of water in the creek had been slowed by the establishment of Byrd's dam and mill near the outlet at Steilacoom Lake.

Thomas Chambers was very active in the early politics and development

Figure 2. Plummer's Atlas, 1889, showing the Chamber's Donation Land Claim.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A.M. Brosoner
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Albert Whyte
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M.E. Stanson
I. Carson
Tom Hatterbury
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Thos. M. Chambers
28
27
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Marion Byrd
318.20
Don Claim
J. C. Chambers
Don Claim
Silver Beach Adn
John Van Bos Kirk
32
33
Insane Asylum
639.60
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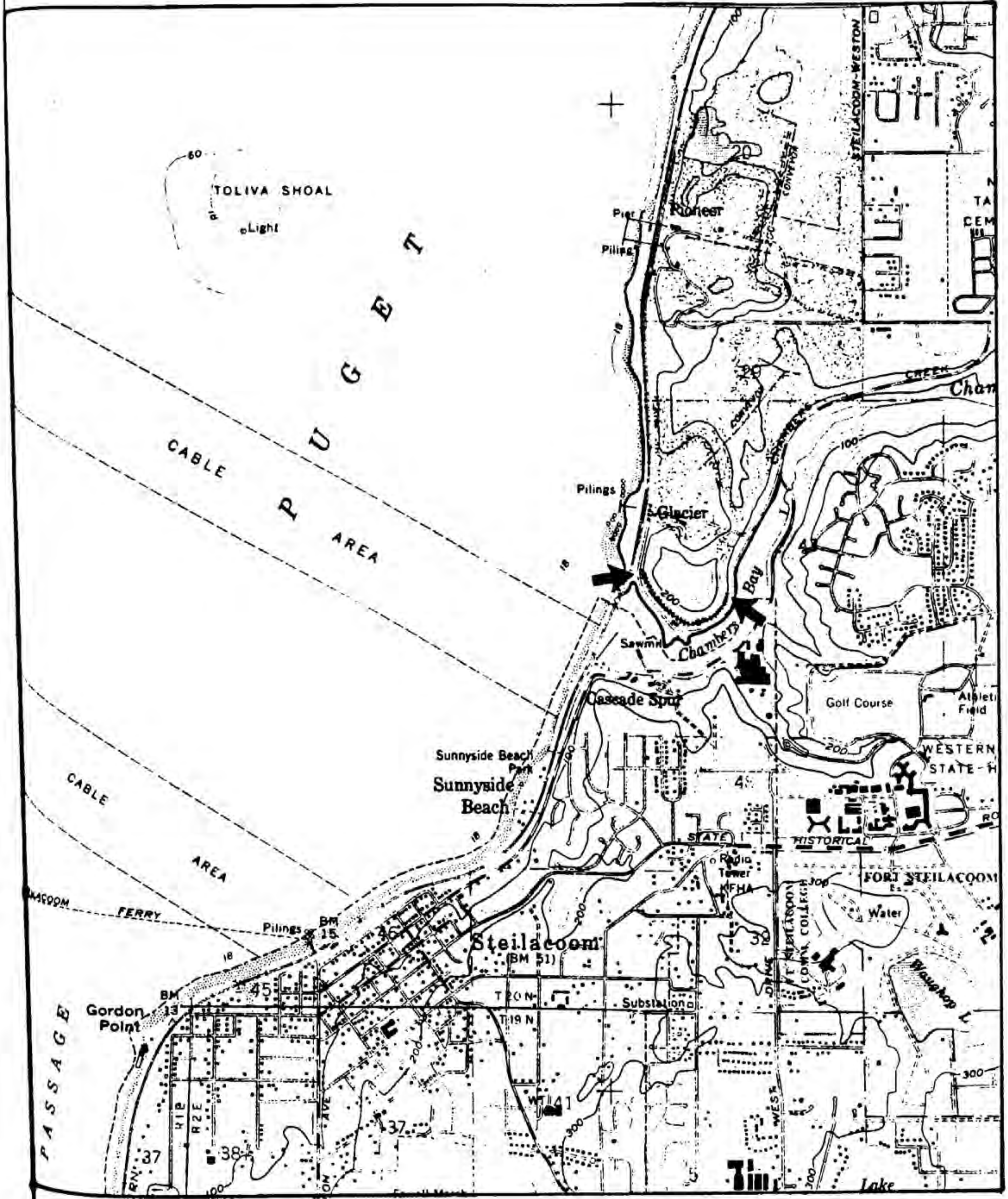
I. Pinous
H. Hewman
Lake
M. G. Cann
34
Don. Clm

of the area. He served as Justice of the Peace in 1849 when the area was still part of Lewis County, Oregon Territory. Chambers "called to order" the Cowlitz Convention during Washington's bid for territorial independence in 1951. He also was one of the first county commissioners for Pierce County. Because of challenges over the property by the PSAC, Chambers's Donation Land Claim was not approved by the Secretary of the Interior until 1881, some years after Chambers's death in 1876. His claim was honored and his heirs received the property (Bonney 1927:574-575).

Figure 3. Placement of testpits.


TOLIVA SHOAL
Light
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Pier
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Pioneer
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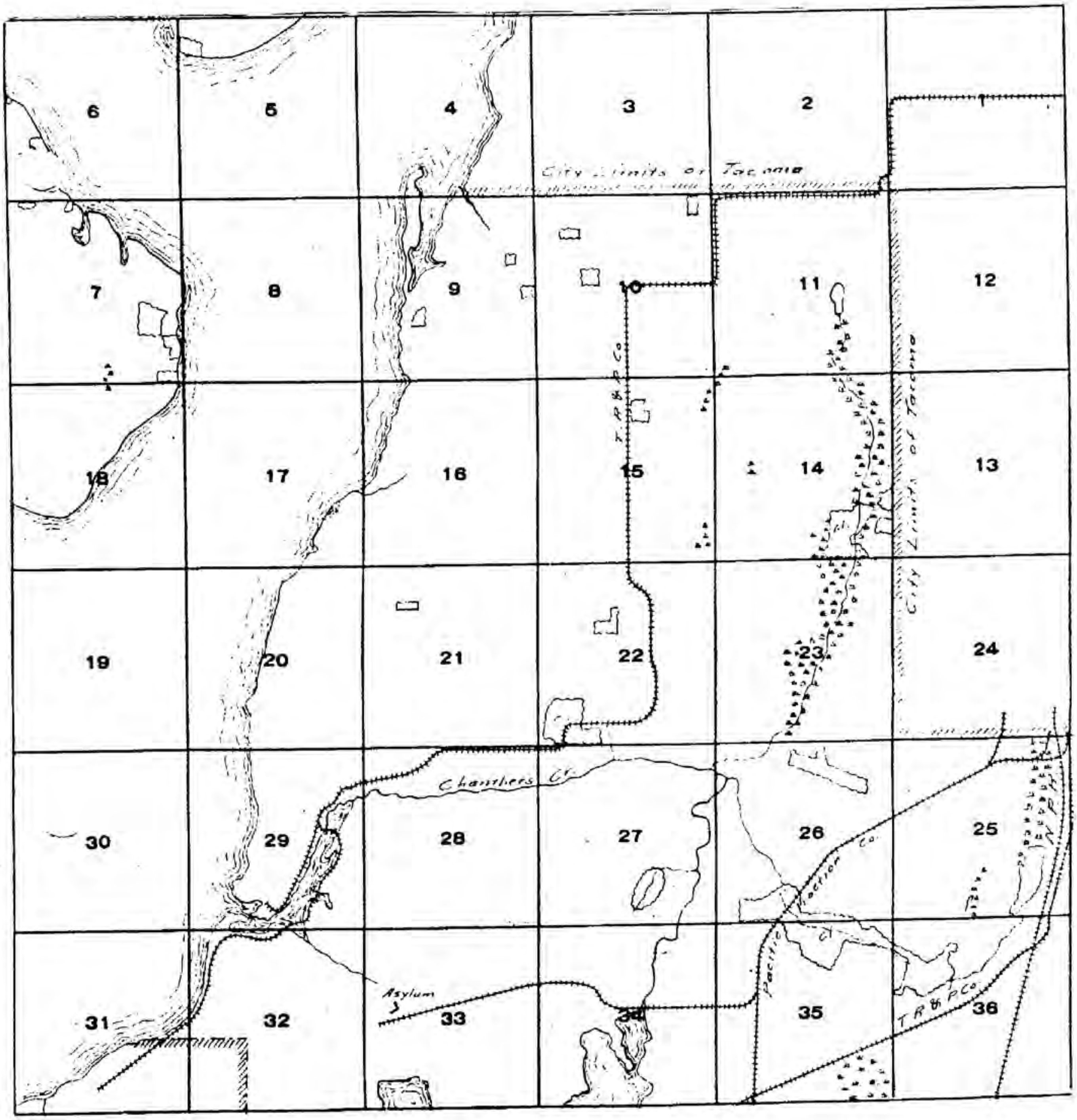
Chambers Bay
Sawmill
Cascade Spur
Golf Course
Athletic Field
WESTERN STATE H
Sunnyside Beach Park
Sunnyside Beach
STATE
HISTORICAL
Radio Tower
FORT STEILACOOM
Water
Pilings
BM 15
Steilacoom
(BM 51)
Substation
T 20 N
T 19 N
Gordon Point
BM 13
STEILACOOM-WESTON
CEM
Chan
Lake

Figure 4. Pierce County Assessor's map, 1906 showing the Tacoma Railway and Power Company line.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City Limits of Tacoma
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T R & P Co
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City Limits of Tacoma
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Chambers Cr
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Pacific Traction Co
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32
Asylum
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35
T R & P Co
36

to advance. There was no evidence of prehistoric or historic occupation on the face or on the top of the bluff.

At the base of the bluff on the south side of the primary roadbed there is a terrace situated ten feet above the tidal flats and some seven hundred and fifty feet east of the mouth of Chambers Creek. A backhoe trench was excavated into the terrace in an east to west direction for a distance of fifteen and one-half meters. At a depth of 55 cms black, charcoal-stained and vivid orange sediments showed evidence of a burn. Intermixed within the sandy soils were two inch strands of wire cable, large metal grappling irons, hooks, a roller from a mill, mill spikes, numerous pieces of burned and rusted metal along with pieces of burned lumber of uneven thickness. A boiler found in the marsh grass on the tidelands immediately below the the terrace and some very heavy five-inch link chain still attached to a wooden piling on the edge of the bay, together with the objects mentioned above indicate that a small log mill was operated in the area. Ceramic sherds recovered included pieces of Chinese rice bowls, and thick white earthenware.

The lands in the project area have been used for mining gravel for over one hundred years by various gravel companies such as Glacier, Pioneer and Lone Star. There is no information in the Pierce County, Auditor's or Assessor's office about a small logging mill operating in the area. In addition to the Pierce County records, early maps which depict the mouth of Chambers Creek were reviewed. The maps included R.N. Inskip, Naval Institute, London:1846; Lt. Comdr. James Alden U.S.N., U.S. Coast Survey:1856; Plummer's Atlas:1889, and F.E. Springer, Pierce County Assessor's Office:1909. Only the Springer, 1909 map shows a structure on the spit, a cabin valued at $25.00.

Thomas M. Chambers operated a gristmill and a sawmill on the south side of the bay in the early 1850s, however, the remains of the mill found on the north side are too recent to have been associated with the Chambers mill. Therefore, it is reasonable to assume that the objects found represent a spillover from the sawmill belonging to the Tacoma Narrows Lumber Company. This sawmill was in operation on the spit on the south side of Chambers Bay in the 1950s but shut down in 1978 after an extensive fire.

Continued gravel operations on the north side of the bluff eventually will reduce the height of the bluff. However, no gravel mining will take place on the south side and a fifty foot vertical bluff and a fifty foot horizontal buffer zone will be maintained on the south side, thus isolating and protecting any impact to the primary road area and the tidelands.

Therefore, no mitigative measures for the present mining operation are warranted or recommended.

REFERENCES CITED

Anderson, W.S., A.O. Ness, and A.C. Anderson
1955 Soils Survey of Pierce County, Washington. USDA Series 1939:27. Washington, D.C.

Armstrong, J.E., Dwight R. Crandell, Donald J. Easterbrook, and J.B. Noble
1965 Late Pleistocene Stratigraphy and Chronology in Southwestern British Columbia and Northwestern Washington. GeologicalSurvey Bulletin No. 76.

Avey, Michael G., Martha J. Gray, and Linda L. Perez
1983 Chambers Bay: "A Historical Perspective." Unpublished manuscript on file at Department of Anthropology, Fort Steilacoom Community College, Tacoma.

Bonney, W.P
1927 History of Pierce County, Washington. Vol. 1. Pioneer Historical Publishing Company, Chicago.

Bretz, J. Harlen
1913 Glaciation of the Puget Sound Region. Washington Geological Survey Bulletin No. 8.

Crandall, Dwight R.
1965 The Glacial History of Western Washington and Oregon. The Quaternary of the United States: a Review Volume for the VII Congress of the International Association for Quaternary Research. H.E. Wright, Jr. and David G. Frey, editors. Princeton University Press, Princeton.

Franklin, Jerry F. and C.T. Dyrness
1973 Natural vegetation of Oregon and Washington. USDA Forest Service, General Technical Report PNW-8.

Gallison, James D., Jenel Virden, Mark Roe, and Sheila Stump
1983 Final Report of Phase I Survey and Inventory and Phase II Testing and Evaluation of Cultural Resources in the Brookdale I, Brookdale II, Parkland III, and Spanaway ULID 73-1 Project Areas, Pierce County, Washington.

Griffin, W.C., J.E. Sceva, H.A. Swenson, and M.J. Mundorff
1962 Water Resources of the Tacoma Area, Washington. U.S. Geological Survey Water-Supply Paper 1499-B.

Hunt, Herbert
1916 Tacoma: Its History and Its Builders; A Half Century of Activity. Vol. I. S.J. Clarke Publishing Co., Chicago.

National Archives
1851-1903 Oregon and Washington Donation Land Claim Records, Washington, D.C.

1975 Chambers Creek ULID 73-1 Environmental Impact Statement.

Plummer, Fred
1889 Fred Plummer's Complete Atlas of the County of Pierce. On file, Pierce County Road Department, Tacoma.

Prosser, William Farrand, Col.
1903 A History of the Puget Sound Country: Its Resources, Its Commerce and Its People. Lewis Publishing Company, New York.

Reese, Gary Fuller
1968 Tacoma Steeet Car Lines. Tacoma Public Library, Tacoma.

Shackleford, Charlotte
1940 Donation Land Claims. In Building A State: Washington 1889-1939. Charles Miles and O.B. Sperline, editors. Pioneer Inc., Tacoma.

Shackleford, Elizabeth
1965 "Land Dispute" Suburban Times, July 1, 1965.

Smith, Harlan I.
1907 Archaeology of the Gulf of Georgia and Puget Sound. American Museum of Natural History Memoirs Vol. 4(6).

Smith, Marian
1940 The Puyallup-Nisqually. Columbia University Contributions to Anthropology Vol. 32.

Snowden, Clinton A.
1909 The Rise and Progress of an American State. The Century History Company, New York.

Taylor, Herbert C., Jr.
1974 The Medicine Creek Tribes. In Coast Salish and Washington Indians II. David A. Horr, editor. Garland Publishing, Inc., New York.

Walters, Kenneth L. and Grant E. Kimmel
1968 Ground-water Occurrence and Stratigraphy of Unconsolidated Deposits, Central Pierce County, Washington. Department of Water Resources, USGS.

Welch, Jeanne M.
1987 A Cultural Resource Survey of the Proposed Steilacoom-Chambers Bay Sewer Project in Pierce, County, Washington
Western Heritage, Inc.

Wessen, Gary
1984 Archaeological Survey and Testing of the Proposed Cascade West Land Company Development at Chambers Bay, Pierce County, Washington
Western Heritage, Inc.

Zulauf, Allen S.
1979 Soil Survey of Pierce County Area, Washington. United States Department of Agriculture, Soil Conservation Service.