DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. E. Root
Director

State: Washington

DESCRIPTIVE REPORT
Topographic Sheet No. J - 1935
Hydrographic

LOCALITY
Puget Sound,
Commencement Bay

1935.

CHIEF OF PARTY
Jack Senior
The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. ...J.... 1935...

REGISTER NO.

State................... Washington

General locality........ Puget Sound

Locality........ Commencement Bay

Scale 1:10,000........ Date of survey...... May........ 1935...

Vessel.............. U.S.C. & G.S.S. EXPLORER

Chief of Party......... Jack Senior

Surveyed by........... Edwin C. Baum

Inked by.............. Edwin C. Baum

Heights in feet above M.H.W. to ground......

CONTOUR, Approximate contour, interval...20....feet

Instructions dated...... March 29.............. 1934.

Remarks:...........................................

..............................................
DESCRIPTIVE REPORT
TO ACCOMPANY TOPOGRAPHIC SHEET "J - 1935"
PUGET SOUND - WASHINGTON.

AUTHORITY:

Survey was executed in accordance with Director's Instructions, dated March 29, 1934, Project H.T. - 171.

LIMITS:

This area is confined to the outer or western portion of Commencement Bay and includes parts of both shores. On the east shore the topography begins at Dash Point and runs south and east to a point 1-1/4 miles beyond Brown Point. On the south shore the topography begins at the Tacoma Yacht Club and runs southeast for a distance of 2-1/4 miles.

GENERAL DESCRIPTION:

East Shore: Nearly all of the shoreline, on the east shore that is included in this survey, has steep eroding dirt bluffs rising to well rounded hills. This area is grass and brush covered and is clear of trees except as shown. Dead trees and burnt stumps remain, giving evidence of having been burnt off.

Many summer cottages are built at the foot of bluffs as shown. The gently sloping hills eastward of Brown Point are under cultivation.

West Shore: The west shore, included in this survey, is industrial and commercial waterfront property.

Highways and railways run parallel to the shore and at different levels as shown.

High steep eroding dirt bluffs are found in this area, giving away to two well defined valleys near the southeast end.

At the northwest end of this area a more gradual, gently sloping hills are found.

The entire area inshore from bluff line is covered with residential property, except the two valleys shown at the southeastern end of survey.

The Tacoma Yacht Club, at northwest end of this survey, is protected by a long spit made from slag dumpings. This spit is
gradually being extended at its north end at present. The slag dumping being waste refuse from the Tacoma Smelter adjoining the Yacht Club to the southward.

The Tacoma Smelter is one of the world's largest smelters. It consists of large buildings as shown on topographic sheet. A photostat of smelter is forwarded with topographic sheet.

The position of smelter stack, as shown on photostat, was previously determined by triangulation and defined as "Tacoma Smelter Stack 1924". The position of building "A" (marked on topographic sheet) and square, brick stack (marked on topographic sheet) were located by topography and were used to orient photostat. The buildings as shown on topographic sheet were transferred from photostat. The shoreline and docks were rodded in, in detail.

The railroads as shown on photostat were left off the topographic sheet. These tracks are of different gauges and are subject to change of positions as necessity demands.

The three docks as shown are in a good condition.

Defiance Lumber Company (as marked on topographic sheet) is a modern lumber dock in operation and dock is in a good condition.

The lumber company located at topographic signal "NOT" is a modern lumber dock in operation and dock is in a good condition.

The lumber company located three hundred meters northwest of triangulation station "FUG - 1919" is a modern lumber dock in operation at present and dock is in a good condition.

The outline of dock, as shown on topographic sheet, one hundred fifty meters northeast of triangulation station "FUG - 1919", is being torn down. The black stack, as described and shown on topographic sheet one hundred fifteen meters north of triangulation station "FUG - 1919", as well as the building, of which stack is a part, are being torn down. This plant had previously burned.

The hydrographic survey for the season of 1935 extended into Commencement Bay to topographic signal "LUG" on the north shore and to topographic signal "TOM" on the south shore.
Beyond these limits the topographic signals were not named.

CONTROL:

Triangulation control points executed during seasons of 1891, 1905, 1919, 1921, and 1935, and based on the North American 1927 datum were used.

SURVEYING METHODS:

Standard plane table survey methods were used. Topographic signals were cut from triangulation stations on the opposite shore and checked by traversing between control points.

No errors were found.

All off-lying features were rodded in.

CONTOURS:

Contours were obtained from the opposite shore. Due to the height of bluff line, on south shore, no elevations back of bluff line could be determined over the gradual slope, to the south of Tacoma Smelter Stack. The topographer inspected this area, by truck, to enable him to intelligently draw in the contours in area mentioned.

DOCKS:

The docks on south shores are described in paragraph, "General Description", incorporated in this report.

A row of piling is all that remains of dock at Caledonia.

A serviceable dock in good condition is found at Hyada Park.

COMPARISON WITH CHART NO. 6407:

Comparison with chart shows several man made changes with regard to building arrangements, boom log piling, highways along shore and fill inshore between topographic signals "POR" and "LUM".

This survey shows relative elevations of railroad tracks and highway which were disregarded on chart. Also a higher and more well defined bluff line on the south shore.

No attempt was made to carry the contours below the bluff
line, due to the enormous amount of detail in this area. However, elevations were determined throughout this area between the bluff line and beach and since these elevations are shown either on the railroads or highways an intelligent interpretation may be had if cognizance is taken of railroad and highway grades.

TOPOGRAPHIC SIGNALS:

Except as noted on sheet, all topographic signals shown outside of highwater line are targets attached to stumps, fallen trees and etc., and are not of a permanent nature.

LOW WATER LINE:

The low water line was transferred from smooth hydrographic sheets.
<table>
<thead>
<tr>
<th>Chart name.</th>
<th>Local name.</th>
<th>Source from which information was obtained.</th>
<th>Recommended name.</th>
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<td>Commencement Bay</td>
<td>Commencement Bay</td>
<td>Well established name.</td>
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<tr>
<td>Dash Point</td>
<td>Dash Point</td>
<td>Well established name.</td>
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<td>Brown Point</td>
<td>Brown Point</td>
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<tr>
<td>Hyada Park</td>
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<td>Well established local name, name on dock as well as on local maps.</td>
<td>Hyada Park.</td>
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<tr>
<td>Ruston</td>
<td>Ruston</td>
<td>Well established name.</td>
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<tr>
<td>Tacoma Yacht Club</td>
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<tr>
<td>Tacoma Smelter</td>
<td></td>
<td>Being one of the world's largest smelters and visited by steamers from every corner of the world this notation may be of value on large scale charts.</td>
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Respectfully submitted,

Edwin C. Baum
Jr. H. & G. Engr.,

APPROVED AND FORWARDED:

Jack Senior,
Commanding Officer,
U.S.C. & G.S.S. EXPLORER.
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Date: 6/10/42

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*Names unapproved in red*
MEMORANDUM
IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
PHOTOSTAT OF

-No. H-
No. T 6444

received
registered
verified
reviewed
approved

APR 17 1936
MAY 18 1936

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

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C. K. Green
REVIEW OF TOPOGRAPHIC SURVEY No. 6444

Title (Par. 56). Commencement Bay, Wash.

Chief of Party Jack Sorel Surveyed by E.C. Boom Inked by E.C. Boom

Ship Explorer Instructions dated Jan 29, 1934 Surveyed in May 1935

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 12, 16.)

2. The character and scope of the survey satisfy the instructions.

3. The control and closures of traverses were adequate. (Par. 12, 29.) Closures not listed

4. The amount of vertical control that the Manual specifies for -contours- was accomplished. (Par. 18, 19, 20, 21, 22, 23.)

5. The delineation of -contours- is satisfactory. (Par. 49, 50.)

6. There is sufficient control on maps from other sources that were transmitted by the field party to enable their application to the charts. (Par. 28.) Photostat of Tacoma Smaller attached to survey (filed in jacket).

7. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, 44.)

8. The representation of low water lines, reefs, coral reefs and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.)

9. Rocks and other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.)

   See reverse side

10. The span, draw and clearance of bridges are shown. (Par. 16c.)

11. Locations and elevations of summits are given. (Par. 10, 51.)

12. The tree line was shown on mountains. (Par. 16g.)

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.
Paragraph 9

T1452 (1876-7), T1453 (1877)

These surveys cover very little of the present survey. For that part which is covered the two surveys are generally in good agreement with the present survey. Due to man-made changes the present survey is somewhat different in details such as docks and piling.

T2263 (1892)

This survey is in fair agreement with the present survey except for man-made changes. Practically the entire extent of the West Coast of Commencement Bay shown on the present survey has been changed by man-made changes.

T2902 (1909)

This survey covers the Eastern shore of Commencement Bay from Dash around and south of Broun Point. The two surveys are in close agreement except for man-made changes such as docks and piling.

T2938 (1909)

This survey covers the western part of Commencement Bay on the present survey. Due to the mass of man-made changes along this shore the two surveys are not in very good agreement. Some docks have been torn down and in other places new docks built.

T3152 (1910-11)

This survey is a number of tracings showing bearings from one point or object to another and is of no value in making a comparison with the present survey.

T4321 (1927)

This survey is in good agreement around Broun Point and Dash Point but due to many man-made changes on the West side of Commencement Bay the details of the two surveys are not in very good agreement. Some docks have been built since the survey of 1927 and others torn down while still others check very well. The slag peninsula enclosing the Tacoma Yacht Club is continually changing. T6444 supersedes T1452, T2263, T2902, T2938, T3152 and T4321 in part.

The comparison with Chart 6407 on page 3 of the Descriptive Report is sufficient.
13. The descriptive report covers all details listed in the Manual, in so far as they apply to this survey. (Par. 64, 65, 66, 67.)

14. The descriptive report also contains additional information required in aero-topography relative to type of photographs, method of compilation and type of ground-control.

15. The descriptions of recoverable stations and references to shore line were accomplished on Form 524. (Par. 69, 30, 57, 67 except scaling of DMs and DFs, 68.) None Submitted

16. A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 60.)

17. The magnetic meridian was shown and declination was checked. (Par. 17, 52.) Declination checks value on Chart. No note of having checked Decl. or
deviation.

18. The geographic datum of the sheet is NAVD 1927 (Adjusted) and the reference station is correctly noted. (Par. 34.)

19. Junctions with contemporary surveys are adequate. Jumps T6485(1835) and T6445(1835) on the North.

20. Geographic names are shown on the sheet and are covered by the Descriptive report. (Par. 64, 66k.)

21. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 50.)

22. No additional surveying is recommended.

23. The Chief of Party inspected and approved the sheet and the descriptive report after review by.

24. Remarks:


Examined and approved:

C.J. Green
Chief, Section of Field Records

L.D. Doolittle
Chief, Division of Charts

Fred L. Peacock
Chief, Section of Field Work

G. F. Steele
Chief, Division of Hyd. and Top.