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U. S. COAST & GEODETIC SURVEY
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DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. PATTON....., Director

State: WASHINGTON

DESCRIPTIVE REPORT

Topographic

~~Hydrographic~~

Sheet No. "0"

LOCALITY:

EAST SIDE DUWAMISH HEAD

ELLIOTT BAY

1934

CHIEF OF PARTY

JACK SENIOR

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

TOPOGRAPHIC TITLE SHEET

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. "Q"

REGISTER NO. 6331

State Washington

General locality Elliott Bay

Locality East side Duwamish Head

Scale 1:5,000 Date of survey Nov. & Dec., 1923

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

Chief of Party Jack Senior

Surveyed by E. B. Lewey

Inked by E. B. Lewey

Heights in feet above M.H.W. to ground ~~to tops of trees~~

Contour, ~~Approximate contours from line~~ interval 20 feet

Instructions dated March 29, 1923

Remarks:

DESCRIPTIVE REPORT
TO ACCOMPANY TOPOGRAPHIC SHEET "0"
EAST SIDE DUWAMISH HEAD
ELLIOTT BAY, WASHINGTON

- 0 -

JACK SENIOR, CHIEF OF PARTY
SEASON OF 1934

DESCRIPTIVE REPORT
TO ACCOMPANY TOPOGRAPHIC SHEET "O"

EAST SIDE DUWAMISH HEAD

ELLIOTT BAY, WASHINGTON

INSTRUCTIONS:

The work on this sheet was done in accordance with the Director's Instructions for Project No. HP - 171, dated March 29, 1934. ✓

LIMITS:

The area included on this sheet lies between Latitudes $47^{\circ} 34.5'$ N. and $47^{\circ} 35.8'$ N.; and between Longitudes $122^{\circ} 22.17'$ W. and $122^{\circ} 23.18'$ W. A junction is made with Topographic Sheet "B", 1935, at triangulation station SWITCH, 1934, Latitude $47^{\circ} 35.02'$ N. and Longitude $122^{\circ} 22.28'$ W. A junction is made with Topographic Sheet "P", 1934 at triangulation station DUWAMISH, 1933, on Duwamish Head, Latitude $47^{\circ} 35.72'$ N. and Longitude $122^{\circ} 23.18'$ W. T-6334 T-6332

CONTROL:

The topography was controlled by the second order scheme of triangulation executed by Jack Senior, Commanding Str. EXPLORER, in 1934. ✓

All triangulation is based on the North American Datum, 1927. ✓

SURVEY METHODS:

Standard planetable survey methods were used. A combination traverse and resection method was used in locating topographic signals, shoreline and other topographic details. ✓

A traverse was run from triangulation station SWITCH, 1934, to topographic station END at the southern limit of the sheet. The traverse location of topographic station END was verified by three resections from triangulation stations. ✓

All traverses closed satisfactorily. ✓

CONTOURS:

All elevations were determined by the usual planetable methods. ✓

Some of the contours were obtained from a blueprint of a contour map of the city of Seattle. The blueprint was obtained from Thomas R. Beeman, City Engineer. Sufficient elevations were determined on this sheet to verify the contours obtained from the blueprint and additional contours were added by the topographer. The blueprint and its photostatic reduction to the scale of this sheet is enclosed with topographic sheet "P", 1934.

COMPARISON WITH EXISTING CHARTS:

Chart No. 6449:

There are numerous differences between this survey and Chart No. 6449. However, these differences are due to changes that have been made in buildings, wharves and streets since the date of the previous survey. A difference in the high water line was noted where the bridge crosses from Harbor Avenue S. W. to Colman Creosote Works at Topographic Station CROSS, Latitude $47^{\circ} 34.92'$ N. and Longitude $122^{\circ} 22.20'$ W. As shown on the chart, the high water line does not pass under the bridge. At the present time the high water line does extend south of this bridge; it extends beyond the southern limit of the sheet. However, it is believed that all of the area south of the bridge bares at M.L.L.W. No low tides existed at the time of the survey, but this area appeared to be very shoal and there is no draw span in the bridge.

GENERAL DESCRIPTION:

A deep valley extends south-south-west from Topographic Station FER, Latitude $47^{\circ} 35.26'$ N. and Longitude $122^{\circ} 22.63'$ W. The remainder of the shore covered by this sheet is steep.

Most of the shoreline is marked with either concrete or wooden bulkheads. With the exception of the Alaska Steamship Wharf, the wharves are in poor shape. Around Duwamish Head are many old and broken piling and the remains of an old wharf.

DISTORTION:

A 24" x 31" aluminum mounted sheet was used. No distortion was noted at any time.

MAGNETIC OBSERVATIONS:

Due to the presence of steel rails in the near vicinity of the triangulation stations, no magnetic observations were made within the area covered by this sheet. ✓

LIMIT OF DETAIL:

No attempt was made to locate all of the buildings or streets within the limits of the sheet. The street following the shoreline (Harbor Avenue S. W.) and its intersections with all other streets were carefully located. All buildings, wharves, the street car line, and the railroad tracks east of Harbor Avenue S. W. were located.

Some of the area covered by the sheet is wooded. However, since numerous traverses would have been required to determine the limits of the trees, the vegetation is not shown.

NOTE:

Due to the absence of low tides at the time of the survey, the low water limits could not be obtained.

Respectfully submitted,

Ernest B. Lewey
Ernest B. Lewey,
Jr. H. & G. E., C. & G. S.,
U.S.C. & G.S.S. EXPLORER

Approved and forwarded,

Jack Senior
Jack Senior,
Commanding Officer,
U.S.C. & G.S.S. EXPLORER.

Sheet 0 (1894) approved.
Jack Senior.

*Low water limits will be obtained
by hydrographer.*
J.S.

STATISTICS

TO ACCOMPANY TOPOGRAPHIC SHEET "O"

Number of statute miles of shoreline.....	2.2
Number of statute miles of streets.....	2.0
Number of statute miles of street car lines.....	1.7
Number of statute miles of railroad tracks.....	3.5
Number of square statute miles of area surveyed.....	0.4
Number of elevations determined.....	18

Diagram No. 6450-2; 6460-2

Approved by the Division of Geographic Names, Department of Interior. ✱

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

[illegible]

REVIEW OF TOPOGRAPHIC SURVEY No. 6331 F.No. "O"

Title (Par. 56) *East Side Duwamish Head, Elliot Bay, Washington*Chief of Party *Jack Senior* Surveyed by *E. B. Levey* Inked by *E. B. Levey*Ship *Explorer* Instructions dated *Mar. 29, 1934* Surveyed in *Nov.-Dec. 1934*

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 13, 16.) ✓
2. The character and scope of the survey satisfy the instructions. ✓
3. The control and closures of traverses were adequate. (Par. 12, 29.) ✓
4. The amount of vertical control that the Manual specifies for -contours-~~formlines~~ was accomplished. (Par. 18, 19, 20, 21, 22, 23.) ✓
5. The delineation of -contours-~~formlines~~ 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.) *a blueprint with photostat reduction was submitted by the field party as authority for the contours shown on the sheet. The blueprint has not been filed. (See Par. 1 pg. 2 D.R.)*
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.) ✓
10. The span, draw and clearance of bridges are ^{not} shown. (Par. 16c.) *the roads and railways are supported on trestles across tidal flats but the clearance at HW is not noted.*
11. Locations and elevations of summits are given. (Par. 19, 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.

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. 29, 30, 57, 67 except scaling of DMS and DPs, 68.) ✓
16. A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 60.) ✓
17. The magnetic meridian was ^{not} shown and ~~declination was checked~~. (Par. 17, 52.) *see page 3 of the Desc. Rep.*
18. The geographic datum of the sheet is *North American 1927* and the reference station is correctly noted. (Par. 34.) ✓
19. Junctions with contemporary surveys are adequate. ✓
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:

Reviewed in office by *R. J. Christman, March 13, 1936.*
Inspected by A. L. Chalovitz

Examined and approved:

C. K. Green
Chief, Section of Field Records

L. O. Solbert
Chief, Division of Charts

Wm. L. Peacock
Chief, Section of Field Work

G. H. Hude
Chief, Division of Hyd. and Top.