

4733

Diag. Cht. No. 6002-2

Form 504

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

....., Director

U. S. COAST AND GEODETIC SURVEY
L. S. A.
FEB 27 1928
A. S. No.

State: Oregon

DESCRIPTIVE REPORT.

~~Topographic~~ } Sheet No. **E 4733**
Hydrographic }

LOCALITY

Columbia River

Astoria Waterfront

1927

CHIEF OF PARTY

T.J. Maher

4733

DESCRIPTIVE REPORT
to accompany

HYDROGRAPHIC SHEET E 4733

Astoria Water Front
Astoria, Oregon

April 6 to May 7,
1927.

Thos. J. Maher
Chief of Party

DESCRIPTIVE REPORT
to accompany
HYDROGRAPHIC SHEET "E"

Astoria Water Front, Astoria, Oreg.

AUTHORITY: Instructions dated March 5, 1927.

LIMITS: The limits of this sheet are from Longitude $123^{\circ} 46'$ to $123^{\circ} 52'$, extending along the Astoria, Oregon, water front about five hundred meters into the Columbia River.

GENERAL DESCRIPTION: The Astoria water front runs in an easterly direction from the Port of Astoria Docks to Tongue Point.

There are a number of docks along the water front, most of which are of light construction, used by fishing craft and for drying fish nets. The Port of Astoria Docks, Sanborn Dock at the foot of 9th Street, and the O. R. & N. and S. P. S. railway docks are those used by the larger steamers.

CONTROL: The control for this survey was furnished by the topographic party of Lieutenant William T. Combs in 1926. The signals are natural objects such as water tanks, flag staffs, stacks, and church steeples. The corners of docks were located accurately enough to be used as signals and were so used when needed for a fix.

METHOD: The hydrography on this sheet was done with the motor-sailer of the Steamer GUIDE and consisted entirely of handlead soundings. Lead lines were equipped with nine pound leads.

The personnel consisted of two officers, one recorder, one launch engineer, a coxswain and two leadsmen.

Sounding lines were run normal to the water front, ranges being used at all times to control the steering. Owing to the inexperience of the recorders it was possible to obtain but few soundings at closer intervals than thirty seconds.

Tidal data for the reduction of soundings on this sheet were obtained by observations on a plain tide staff on the west end of Sanborn Dock, foot of 8th Street, Astoria, except "a" day, April 8; for which Tongue Point tides reduced to 8th Street conditions were used.

CURRENTS: There were no current stations occupied on this sheet. During the progress of this work no unusual currents were noticed.

Forwarded, approved:



Thos. J. Maher,
Chief of Party.

V. M. Gibbens,
Aid, C & G Survey.

This work was carried on while reconnaissance along the outer coast was in progress. It served as a means for breaking in and organizing a new party. Orders covering the work were conditional that it should not interfere with or delay surveys along the outer coast. It was stopped as soon as offshore work was started. At the close of the season offshore work was still in progress. The date for closing the season was specified. However the vessel stopped on the way south for one day at Astoria, for the purpose of completing this work, but weather conditions were such that it could not be done without delaying our departure beyond the date specified.

Before using this sheet information should be obtained from the Port Engineer, Astoria, as to whether the port has undertaken any dredging operations between the wharfs along the water front.

The survey should be completed. It should also be extended to the eastward of Tongue Point as difficulty is now experienced in placing buoys to the eastward of the point.

Letters were used instead of names for signals as names written out would have obscured some of the details of the sheet.



Thos. J. Maher,
Chief of Party.
Steamer GUIDE.

POST-OFFICE ADDRESS:

TELEGRAPH ADDRESS:

EXPRESS OFFICE:

10-McC

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Washington

June 1, 1927.

To: Commanding Officer,
U. S. C. & G. S. S. GUIDE,
Aberdeen, Washington.

From: The Director,
U. S. Coast and Geodetic Survey.

Subject: Field work along the Columbia River.

In your letter of May 16, subject, surveys along the Columbia River, you recommend extension of the surveys of the south side of the Columbia River eastward from Tongue Point to include Prairie Channel. It is not desired to issue instructions at this time for such an extension but consideration will be given to it later on in the season, if it is found that you will be able to complete your work on the Washington coast.

Last season you completed a topographic survey of the southern shore-line of the Columbia River from the entrance to Tongue Point. Further work in that section was omitted from your instructions of March 5, 1927 as it was felt that such work might be a handicap in the completion of your other project and it was considered at the time that a detached party would be assigned to complete this work. It now appears that there will be insufficient personnel to place another party on this project and as it is highly desirable that the hydrography of this section be completed in accordance with paragraph 19 of your instructions of April 17, 1926, the first consideration will be given to that work. You will please continue your plan of carrying on this work at such times as the vessel is in the Columbia River and unable to proceed on the outside work.

Later in the season when the progress of your outside work will assure its completion and you consider that you will be able to take up additional work in the Columbia River, I will be pleased to be so advised.

/signed/ R. L. FARIS
Acting Director.

February 29, 1928. F. J. H.

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in
2 volumes of sounding records for

HYDROGRAPHIC SHEET 4753

Locality: ASTORIA, OREGON.

Chief of Party: F. J. Maher, 1927.

Plane of reference is M L L W

-0.4 ft. on tide staff at 8th Street, Astoria.

Condition of records satisfactory except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of each day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks.



Chief, Division of Tides and Currents.

STATISTICS SHEET E

Vessel: Motor sailer of Steamer GUIDE.

Date	Letter	Vol.	Positions	Soundings	Miles
April 8	a	1	59	273	6.3
" 9	b	1	46	242	7.4
" 11	c	1	103	486	13.9
" 12	d	1	60	263	4.8
" 12	d	2	31	208	3.5
" 16	e	2	53	274	5.2
May 6	f	2	19	87	1.9
" 7	g	2	16	54	1.7
TOTAL	7	2	387	1,687	44.7

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

AND REFER TO No. 11-DRM

WASHINGTON

June 7, 1928.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4733

Surveyed in 1927

Chief of Party, T. J. Maher.

Surveyed by V. M. Gibbens, C. A. Burmister.

Protracted and soundings plotted by V. M. Gibbens.

1. The following information should have been given in the record:
 - a. Bottom characteristics
 - b. Approximate distance from some well defined point or object when beginning and ending lines.
 - c. Boats' courses and changes in boat speed.

2. Owing to the conditions explained on page 3, Descriptive Report, "General Instructions" could not be entirely complied with. The work is incomplete; large gaps occur in the work and the inner limits of the shoal north of FINNISH LUTHERAN CHURCH have not been defined.

A sounding line should have been run along the wharves on the west.

3. Depth curves cannot be completely drawn.
4. The buoys referred to in the sounding records were not plotted on the smooth sheet.

The fact that all soundings were plotted at uniform distances between positions regardless of the fact that a variable time interval was used, added to the difficulty of checking.

Position 14-a is a 'Revolver'.

Position 12-b was plotted 120 meters out of true position.

Buoy at position 46-B not shown.

Dock 'G' used as a signal was not shown on smooth sheet.

'Hotel' is given as a signal on C day. The signal is not shown on the sheet.

No signal 'K' could be found for position 75-C.

Signal 'N' given as center object for position 82-C is no doubt signal M.

Position 89-C was found to be 70 meters out of true position. Signal 'Can' is doubtful for the reason that there are two such signals close together distinguished by the letters E. and W. Unfortunately these distinguishing letters were not used in the record.

Pos. 51-d was 30 meters out of position.

Pos. 30-d was 25 meters out of position.

Pos. 7-f has signal 'Pole' given as "left hand signal". No doubt this is Flagstaff.

Pos. 65-d was 45 meters out of position.

Pos. 67-d was 10 meters out of position.

Pos. 29-E was 40 meters out of true position.

Attention is called to the soundings following position 4-f which are not plotted.

Distance to Dock on the turn between positions 4-5-E should be given.

The sounding line crossings for 'f' day and 'd' day are unsatisfactory (extreme right of sheet).

Dredging operations may be responsible for the unusual character of depth curves.

Considered as a whole the work is unsatisfactory and incomplete. The area should be surveyed again and completely developed.

Report by J. Fleming
June 5, 1928.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

AND REFER TO NO. 11-DFM

WASHINGTON

June 7, 1928.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4733

Chief of Party, T. J. Maher.

Surveyed by V. M. Gibbons and C. A. Burmister.

Protracted and soundings plotted by V. M. Gibbons.

Verified and inked by J. Fleming.

1. The plan of development adopted is in conformity with the requirements for this area. The character of the actual work is inferior.
2. Large gaps in the area actually supposed to have been covered, irregularity and unnatural character of the depth curves, unlikely soundings, weak and incompletely indicated fixes, frequent errors in the work, all brand this as very poor work, done by inexperienced officers.
3. The faults have been noted in detail by the draftsman in attached report, in which the reviewer concurs.
4. Owing to the importance of this area, and the fact that only two days work of a capable party would be required to resurvey the area, it is recommended that the results shown on this sheet be completely rejected. It is believed the work is emphatically inferior to Coast Survey standards.
5. Reviewed by E. B. Roberts.

Approved:

Chief, Section of Field Records (Charts)

Chief, Section of Field Work (H. & T.)

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4733

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. E

REGISTER NO. 4733

State ~~Washington~~ Oregon

General locality Columbia River

Locality Astoria water front

Scale: 10,000 Date of survey April 6 to May 7, 1927

Vessel Starboard motor sailer, Steamer GUIDE

Chief of Party Thos. J. Maher

Surveyed by V. M. Gibbens and C. E. Burmister

Protracted by V. M. Gibbens

Soundings penciled by V. M. Gibbens

Soundings in ~~FATHOMS~~ feet

Plane of reference M L L W

Subdivision of wire dragged areas by

Inked by J. FLEMING JUNE - 4 - 1928

Verified by J.F.

Instructions dated March 5, 1927

Remarks: The work on this sheet is contained in two volumes.