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Digg. Cht. No. 1215-2

4794

Form 504

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

....., Director

G. & G. SURVEY
L. & A.
JUN 27 1928
Acc. No.

State: New York

DESCRIPTIVE REPORT

~~Topographic~~ } Sheet No. ³ 4794
Hydrographic }

LOCALITY

South Coast of Long Island

Lido Beach and Freeport

1927

CHIEF OF PARTY

C.D. Meaney

C. & G. SURVEY
L. & A.
JUN 10 1928
Acc. No.

DESCRIPTIVE REPORT
TO ACCOMPANY

HYDROGRAPHIC SHEET NO. 3

U. S. C. & G. SURVEY,
E. Lester Jones, Director.

C. D. Meaney, Chief of Party.

AUTHORITY

In accordance with instructions dated April 8, 1927, a hydrographic survey was made of the water area between latitude 40° - 33' N and 40° - 39' N and longitude 73° - 34' W and 73° - 39' W.

JUNCTIONS

This sheet joins sheet 2 on the west and sheet 4 on the east.

FLOATING EQUIPMENT

The hydrography was executed with the aid of launch 66, a Coast Guard surfboat and launch and a sea sled.

POSITIONS

Blue ink positions show work done with launch 66, red ink positions show work done with a sea sled, and green ink positions show work done with a Coast Guard surfboat and launch.

FIELD PLOTTING

The positions for launch 66 were plotted in the field, the positions for the hydrography with the Coast Guard boats were plotted in the field. The positions for the hydrography done with the sea sled were not plotted in the field as there was not sufficient room for plotting.

TIDES

Tide gauges were installed at the following places to control reducers. Long Beach in Reynolds Channel between the railroad and highway bridges, Prospect Gun Club dock, near the southwest point of Meadow Island, and Freeport near the head of Emories Canal.

A comparison of the time and range of the tide at the above stations compared with Fort Hamilton is as follows:

	H. W. I.	L. W. I.	Mean Range
Prospect Gun Club	7.98	1.70	3.1
Long Beach, Inside	8.57	2.43	3.5
Freeport	8.61	2.87	2.6

For hydrography on the outside the best available information indicates that the tide is 1.2 times the range at the Prospect Gun Club and one hour ahead in time. For the hydrography on the inside coast tide reducers were computed by interpolating for positions between tide stations.

DEVELOPMENTS

In latitude 40° - 34' .8 (North) longitude 73° - 37' (West) a fourteen foot shoal was developed.

The channels and approaches to channels on the inside waterways were developed.

The effective depths are noted on the smooth sheet for each channel developed on this sheet.

GENERAL DESCRIPTION

The outside beach which is used extensively for bathing during the summer months slopes off gradually to the southern limit of the hydrography, except for a fourteen foot shoal in latitude 40° - 34' .8 longitude 73° - 37' W. The bottom on the outside coast is hard sand.

The inside waters are made up of narrow channels and mud flats. The channels are both natural and artificial. Extensive developments are in progress along Reynold's Channel. Other developments limited in scope are in progress at Oceanside and Freeport.

CHANNELS

There is a dredged channel connecting Hog Island and Reynold's Channel with an effective depth of 10 feet at M. L. W.

From Reynold's Channel there is a natural channel branching north into Garret's Lead with a depth of 3'.7 feet at M. L. W. to Signal I K. From there to Hog Island Channel a narrow winding slough has a depth of 2' at M. L. W.

From north of Lido Beach in Reynold's Channel to north of Nassau by the Sea, at the eastern limit of the sheet there is 6 feet at M. L. W. Either of two branches with five feet may be used north and south of Middle Island. The northern branch is marked with barrels from May to November. The southern branch which is unmarked is the shorter. Subsequent to the survey dredging was in progress in the southern branch with the result that this branch will be the deeper as well as the shorter passage.

A natural winding creek branches north of Reynolds Channel east of Ingraham's Hassock to the creek west of Parsonage Creek. At the head of this creek in Oceanside a development is in progress. The effective depth from Reynolds Channel to the mouth of this creek is 2'.8 feet at M. L. W. The effective depth between the mouth of the creek and the canal at the head of the creek is 2' at M. L. W.

Table of Statistics for Sheet 3.

Sea Sled

Vol.	Day	Date	Miles	Soundings	Positions
1	a	July 29	12.0	838	210
2	b	August 29	7.7	617	167
	c	August 30	11.2	818	156
3	c	August 30	2.0	133	27
	d	August 31	11.6	857	169
	e	September 2	7.6	540	107
4	e	September 2	7.1	347	87
	f	September 6	10.2	645	190
	g	September 7	2.2	158	30
5	g	September 7	10.9	780	171
	h	September 8	10.5	765	141
6	h	September 8	4.4	319	67
	j	September 9	10.2	715	132
	k	September 11			13
Total			107.6	7532	1667

Launch #66

1	A	July 19	21.0	598	130
	B	July 20	28.3	1002	184
2	C	August 29	0.1	9	3
Total			49.4	1609	317

Coast Guard Surfboat #33

1	A	July 26	4.4	248	62
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From the junction of Long Creek and Scow Creek north of High Meadow there is a channel to the bridge of Oceanside near the head of Parsonage Creek with a controlling depth of 2' at M. L. W.

A narrow winding slough connecting Scow Creek Drain with the channel north of Parsonage Island has a depth of one foot at M. L. W.

Long Creek and Little Swift Creek have a controlling depth of 6 feet at M. L. W. to Freeport. The controlling depth from Little Swift Creek to the channel on the north side of Baldwin Bay is 6 feet at M. L. W.

The controlling depth of Milburn Creek is four feet at M. L. W.

Randall Bay has a controlling depth of 17 feet at M. L. W. with depths ranging in the canal from 1 foot near the bank to 27 feet at M. L. W.

Woodcleft Bay has a controlling depth of 20 feet at M. L. W. with depth ranging from 1 foot to 41 feet at M. L. W.

SMOOTH SHEET PLOTTING

The smooth sheet was plotted in the Washington Office by R. A. Earle.

Soundings were reduced by the Tidal Division.

Soundings were plotted by C. D. Meaney in the Washington Office.

Respectfully submitted,


C. D. Meaney.

June 30, 1928

Division of Hydrography and Topography:

✓ Division of Charts:

Tide reducers are approved in
9 volumes of sounding records for

HYDROGRAPHIC SHEET 4794

Locality: South coast of Long Island, N. Y.

Chief of Party: C. D. Meaney, 1927

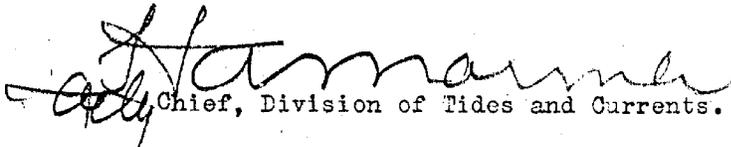
Plane of reference is M. L. W.

4.2 ft. on tide staff at Jones Inlet (Standard gauge)

3.9 " " " " " Long Beach inside

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.

Note: For time and height corrections see notes in sounding books.

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

AND REFER TO No. 11-DFM

SECTION OF FIELD RECORDS

Review of Hydrographic Sheet No. 4794

Instructions dated April 8, 1927. (Meaney)

1. The work conforms to the requirements of the specific instructions.
2. No additional work seems to be necessary on this sheet at the present time. Need for some may arise, however, if considerable dredging is done in the future and the inside passages become more important.
3. The soundings referred to by the verifier as having been taken with the line "leading aft" were left on the sheet as originally plotted, after consultation with the Chief, Section of Field Records. All of these soundings occur in an area that isn't critical, and to be consistent they would either all have to be rejected or all accepted. By rejecting them some large gaps would have been left on the sheet.
4. In Vol. 8 on page 15, positions 196 h and 197 h show the same fix (both angles alike) but the soundings are 44 ft. and 12 ft. The shoaler sounding was plotted. The discrepancy may be due to the steep banks of the channel, and after turning around the men taking the angles may have been in the same positions but the leadsman had moved relatively.
5. The geographic position of a triangulation station was omitted from the smooth sheet.
6. The buoys shown on the sheet are of the barrel type. When sheet 4793 was verified, Lieut. Meaney stated that these buoys are not maintained by the Lighthouse Service. They are usually removed in the winter and are probably not replaced in the same position in the spring. A note to this effect was made on the sheet.

On pages 53 and 54, Vol. 8, the barrel buoys are located by sextant fixes. Positions 10 and 12 are marked for Red Barrel

No. 2 and 11 and 13 for Black Barrel No. 1. As the fixes are for different positions this matter will be taken up with Lieut. Meaney when he comes in to the office. No buoy is plotted on the location of position 12.

7. Reviewed by J. M. Smook, January, 1929.

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. 4794

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. 3

REGISTER NO. 4794

State New York

General locality South Coast of Long Island

Locality ~~Vicinity of Lido Beach to~~ ^{Freeport} ~~Oceanside.~~

Scale 1:10,000 Date of survey July 19-Sept. 11, 1927

Vessel Launch 66

Chief of Party C. D. Meaney

Surveyed by C. D. Meaney

Protracted by R. A. Earle

Soundings penciled by C. D. Meaney

Soundings in ~~fathoms~~ feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by - - - -

Inked by

Verified by

Instructions dated April 8, 1928

Remarks:

HYDROGRAPHIC SHEET No. 4724-

The following statistics will be submitted with the
cartographer's report on the sheet:

Number of positions on sheet 2,046.
Number of positions checked 11,735.
Number of positions revised 514.
Number of soundings recorded 9,389.
Number of soundings revised 3,917.
Number of signals erroneously
plotted or transferred 11.

Date: -- Dec. 10, 1927 --

Cartographer: -- *Jessie S. Jarman* --