

83
SHA
3697
3698
3705

3697

Diag. Cht. No. 369-4

Diag. Cht. No. 369-4 & 1215-1

3698

Diag. Cht. No. 1215-1

3705

C. & G. SURVEY,
HISTORY AND ARCHIVES
APR 16 1915

Department of Commerce and Labor
COAST AND GEODETIC SURVEY

O. H. Tittmann

Superintendent.

State: *New York*

DESCRIPTIVE REPORT.

Hydrographic Sheet No. 3697
3698
3705

LOCALITY:

Jamaica Bay

Suggestions to Coast Pilot
and blue print attached

191*1/2*

CHIEF OF PARTY:

E. B. Satham

11-445

3705

3697-8

83
SHA
3705

For

C. & G. SURV.
LIBRARY AND ARCHIVES
JUN 11 1915
Acc. No.

3705

Diag-Chart No. 1215-1

Department of Commerce and Labor
COAST AND GEODETIC SURVEY

See
Superintendent.

Hyd

DESCRIPTIVE REPORT.
3697
Sheet No.

LOCALITY:
New York
Jamaica
Eastern Part.

191

CHIEF OF PARTY:

11-4645

3705

SHS
3698

C. & G. SURVEY,
LIBRARY AND ARCHIVES
JUN 11 1915
Acc. No. _____

For
3698

Department of Commerce and Labor
COAST AND GEODETIC SURVEY

See

Superintendent.

Hyd

State: _____

3697 DESCRIPTIVE REPORT.

Sheet No. _____

LOCALITY:

191

CHIEF OF PARTY:

11-4645

3698

DEPARTMENT OF COMMERCE
UNITED STATES COAST AND GEODETIC SURVEY

O. H. TITTMANN, Superintendent.

Resurvey of Jamaica Bay New York • Northern Part

September to December 1914

Scale 1 to 10,000

Respectfully submitted

E. B. Sathau

Chief of party

Hyd Sheet 3698

by May 15 - June 30



July 1 - Dec 23



Sept 10 - Dec 12



Hyd. U.S. Eng.

Long Island R.R.

East Rockaway Inlet

Approximate outline of
by Engineer Corps U.S.A.

made Nov 1914 results to be

available - Feb 1915 (inside of broken line)

Department of Commerce
U.S. Coast and Geodetic Survey

O. H. Tittmann, Superintendent

a. blue print 15321

b. blue print 12818

c. blue print, promised
by the Engineer, Army

c

1914 - extends to another

Progress Sketch

Resurvey of Jamaica B

May 15th to Dec 23 19

Scale 80,000

DESCRIPTIVE REPORT

HYDROGRAPHIC SHEETS 3697 3698 3705

A resurvey of Jamaica Bay New York, New York

Scales 1 to 10,000

Sept to Dec 1914

The results of this survey, are shown on the three sheets above noted. The survey was made during September to December 1914 and in compliance with the instructions of the superintendent dated August 17th 1914 and the letter of the Superintendent dated Sept 4th 1914.

Additional information may be obtained from blue print 15321, showing results of a survey made by the Engineer Corps U.S.A. of Island Channel during 1914. Two points were indicated on the print, as being the same positions as those used in the survey of Hyd. sheet 3697.

Blue print 12818, shows the results of a survey by the U.S. Engineers in 1908. This survey covers a large portion of the bay on it are indicated many points which are identical with those of the survey of 1914 as shown on sheets 3697 3698 and 3705.

The U.S. Engineers made a survey of Rockaway Inlet and extending east and west of the Inlet and south to Ambrose Channel in the latter part of 1914, the results of this work, should be available at this time, as I was informed in January 1915 that the sheet had at that time been plotted.

The results of all dredging operations done inshore of the bulk head line, approved by The Secretary of War of date May 1 1911, may be obtained by addressing Mr. R.A.C. Smith, Commissioner of Docks and

and Ferries of the City of New York, Pier A North River New York N.Y.

On blue print 12818 are indicated the results of current observations made by the U.S. Engineers, in the vicinity of Rockaway Point and Inlet

The channels in Rockaway Inlet change frequently in depth and position. The channels inside the bay change but little in either position or depths. All the main channels are well buoyed and lighted by the Bureau of Lighthouses. These aids should be shown on both the proposed reprint and new issue of chart 542.

Harbor improvement as proposed is under the jurisdiction of the Engineer Corps of the Army, ^{and} The City of New York, and is of great magnitude.

Jamaica Bay is the logical site of the extension of wharfage facilities of the port of New York. This bay lies wholly within the City of New York. It is 32 square miles in ~~XXXXX~~ area. The City of New York owns a large portion of the islands and shores of the Bay. Its water front is approximately double that of Manhattan in both the Hudson River, from the Battery to 135th street, and in the East River, from the Battery to Hell Gate.

Canarsie Shore, four miles inside the bay, is nearer the Ocean commerce than are the North River piers.

The proposed piers in Jamaica Bay will be ten to twelve miles nearer ocean traffic than are those of ^{the} Hudson River.

Piers of maximum length, may be constructed, and the estimated length th of available wharfage in the bay is one hundred and fifty miles. After a number of years of investigation, the U.S. Engineers have reported plans for the maintenance ^r of a channel thru Rockaway Inlet and inside the Bay, and an appropriation for the

work was made in 1910.

The tracks of the Long Island Railroad (Penn system) pass close to the shores of the bay, with the completion of the Hell Gate bridge, the hauling of ocean-brought traffic will be assured. It is conceded that the solution of the expansion of harbor facilities of the Port of New York is in the improvement of Jamaica Bay. It is estimated that the available wharfage in Manhattan and upper New York will be exhausted within ten years, See

Congressional Record Feb. 24 1910 page 2318

The Problem of Greater New York Chase Beardsley

~~XXXX~~ Report of a board of Engineers etc Feb 23 rd 1909

House Document 1488 Sixtieth Congress June 25 th 1910

Report of The Chief of Engns. Part 2 Page 1698 Improvement of Jamaica Bay etc 1913

The Greater Port of New York, Elmer E. Cortbell

There has been expended \$154,780.00 on the dredging of the interior channels of the bay and there is an unexpended appropriation of ~~XXXXXX~~ \$ 1,618,940.00 now available for this work.

For the extent of the proposed improvements in the bay see Seasons Report E.B.L. dated Feb 27th 1915 pages 4 and 5.

No anchorage areas are especially designated good holding ground in all parts of the bay but limited depths are now available.

^fRange is available just inside the point at Rockaway Point

There are no especial dangers, all bottom is of sand or mud.

^uCurrents are from 1 to 2 and $\frac{1}{2}$ miles per hour, no considerable observations were made, limited observations were made to obtain the set thru the two draw bridges on the Beach and Broad Channels, see sketch on Hyd. Sheet 3705.

4

All names obtained, appear on the topographic sheets of the survey and shown on sheets 3476 3477 3478.

The plotting of the hydrographic sheets are not at this time plotted in ink, and the comparison of the depth with previous surveys at this time would be defective.

The statistics of the three sheets follow.

Sheet	Miles of Sd, Line	No Angles	No. of Soundings
3697	141.5	1767	6258
3698	371.4	5588	15280
3705	<u>519.7</u>	<u>7561</u>	<u>22278</u>
Total	1032.6	14916	43762

Party expenses \$ 2181 Pay of officers \$1001 Total season \$3182.00

No pilots are available for the Inlet, but pilots inside the bay can be obtained at Anarsie and the Rockaways.

There are no natural land marks, numerous spires, chimneys and other objects were determined. See lists of objects determined with the plane table submitted with the descriptive report for sheets Topo. 3476-7 and 8. Also list submitted with seasons report suggested to be placed on chart 542 and a list of objects suggested to be placed on the small scale charts for this region.

The channels are well buoyed, by ^{the} hte Bureau of Light Houses

The channels of the bay, are well buoyed at their lower ends by the Bureau of Light houses.

Two post lights mark the channel into Sheeps Head Bay. Post lights and buoys mark the channel from the entrance to and to the ~~entrance~~ eastward of Canarsie Shore. Island Channel is buoyed to near Bergen Beach. Beach Channel is marked with buoys and post lights from Barren Island to below Sloop Bar Hassock.

Private aids, the entrance to Dead Horse Channel was marked by a private aid in 1914, but there were no other aids in place, in any of the ~~channels~~ creeks to the westward of Island Channel except some iron stakes that were in Garrettson Creek. The channel to Bergen Beach and thence to Canarsie Shore, are maintained by the yacht clubs of this vicinity and consists of powder kegs painted red.

From the last buoy to the eastward of Canarsie Shore, the narrow channel leading into ~~the~~ Old Mill Creek, is marked with bush stakes maintained by the clubs and individuals of that vicinity.

Yankee, Big Fish Kill and Pumpkin Patch Channels are marked with bush stakes placed and maintained by ~~private~~ ~~clubs~~ clubs and oystermen. The intricate channel thru Grassy Bay is marked with 4" by 4" stakes painted white, with red pointers, these are placed by the clubs and others who use this channel.

The Raunt Channel is marked with buoys (kegs painted in the colors of the club) placed and maintained by the Vigilant Yatch Club.

There are no aids in Broad Channel, but the channel is straight from the last Government buoy to the draw bridge of the Long Island Railroad. Above the bridge there are bush stakes to mark the channel but there are so many poles placed to mark the boundaries of oyster

grounds, that it is impractical for a stranger to identify the channel stakes, it is safe to keep within the area marked by the poles as they, in general, are placed in depth of six feet or more.

The narrow channel leading from Greens point, into the Raunt Channel and Jacks Hole Creek, is marked with bush stakes, see Topo. sheet 3476.

Hassock Creek has numerous stakes that mark the limits of the oyster grounds, which in general will indicate a depth of six feet, this is the only indication of the channel.

Grass Hassock Creek east of the Sloop ^R ar post light, is marked with black, cylindrical bouys numbered from in odd numbers (one to thirty one) the last buoy is near Nortons Point. A barrel painted black and supported about five feet above high water, marks the position of a wreck, in the narrowest part of this channel. All these buoys and the barrel are shown on Topo. sheet 3476 as of the date July 1914.

Bass Channel, up to Far Rockaway, is marked by barrel buoys, painted red and 4" by 4" stakes in the upper part of this channel. There are three barrels on supports on the south western bank of Bass Chammel Island, the channel is about ten feet from these marks. See Topo. Sheets 3476 for these aids as of date July 1914.

Supplies and water may be obtained at numerous places on the south shore of the bay, and at Bergen Beach and Canarsie Shore.

Coal in limited quantities to be obtained at Mammels , Hollands and Far Rockaway, and can be purchased in Brooklyn for delivery at Canarsie Shore and Bergen Beach.

Gasolene-- Henry W Rohde, keeps a large stock of Gasolene oils and motor boat supplies at a depot near the western end of Barren Island, any size boat can obtain sufficient gasolene to fill tanks here

There were three scows, the furnished gasolene and other supplies anchored off Canarsie Shore during 1914, they could supply several hundred gallons of gasolene on demand.

Gasolene in ordinary quantities may be obtained at Rockaway Park, Hollands, near Rockaway, Broad Channel The Raunt Goose Creek and at other places in the Bay.

Broad Channel and Beach Channels have draw bridges at the Long Island Railroad. Both these bridges carry lights on both ends and in their centers. See sketches for widths and limited current observations to determine the set of the current thru these draws (Hyd. Sheet 3705)

There are several openings for motor boats without masts one on ^{each of} the following listed channels, Beach, Broad Creek The Raunt and at Goose Creek. See Topo. Sheet 3476 for widths and Head room.

The openings between the bents of the trestle of the railroad are approximately sixteen feet with a clearance of about 2 and $\frac{1}{2}$ feet at high water.

Small railroads and minor repairs may be found at Canarsie Shore, Bergen Beach, Holland and near Rockaway.

The number of motor boats in use in these waters reach in -to the thousands, and there are numerous yacht and fishing clubs, for a partial list of these clubs, see seasons report E.B.L dated Feb 27th 1914 pages 5 and 6 .

Lines of communication The Long Island Rail Road operate a

passenger and freight service from Manhattan (Pennsylvania Station 33 rd street) Flatbush Ave Brooklyn, and Long Island City to Aqueduct, Goose creek, The Raunt, Broad Channel, Rockaway Park and Far Rockaway and to the eastward on Long Island.

From Rockaway Park and Far Rockaway the time to the city by express trains is about forty minutes.

The Brooklyn Rapid Transit Co. operate trains from Canarsie S Shore to all parts of Brooklyn and to Brooklyn Bridge Manhattan side and City Hall Manhattan , time to the city about one hour.

During the summer months the B.R.T. operate trains to Rockaway Park and Coney Island.

Surface electric cars are operated between Canarsie Shore and Brooklyn and the Manhattan side of the Williamsberg bridge.

Surface electric cars are operated between Bergen Beach and Brooklyn.

There is an electric surface line from Belle Harbor to Far Rockaway and thence to Jamaica ,

Ferries are operated from Canarsie Shore to Barren Island and Rockaway Point thruout the year, two to four trips daily and at more frequent intervals during the months of July to September.

The Sheeps Head Bay ferry operates during the Summer and fall months from this bay to points on Rockaway point and to Hammels Landing at Rockaway Park.

A motor boat ferry is opertaed between Canarsie Shore and Bergen Beach during the summer months.

During the summer months the Iron Steamboat Company have passenger service to Rockaway Park from landings in the

Hudson River which make two round trips daily. There is a steamer line from Newark, N .J . to Rockaway Park which runs at an irregular schedule.

There is a small steamer engaged in freighting, but its trips are at irregular intervals.

There are numerous sailing vessels, scows and small steamers engaged in the traffic incidental to the industries on Barren Island.

Steamers and scows serve the factories on Mill Island. Sand, brick, coal and cement are brought to the bay in schooners and other vessels. There are three steam dredgers at work loading sand for transportation to the City. All were at work near the western end of Barren Island during this resurvey.

Practically all vessels entering the bay use the channel from the westward, along the Coney Island shore, this channel is well buoyed by the Bureau of Lighthouses.

The shell fish industry is extensive, oysters and clams are gathered and floated for several days before shipment. Ruffle Bar is center of this industry.

A fleet of small vessels are engaged in carrying parties to the off shore fishing grounds, Canarsie Shore is the headquarters for them, but numerous vessels leave other parts of the bay for the offshore fishing grounds.

The placing of the aids to Navigation on chart 542 is urgently recommended.

Respectfully submitted

E. B. Satham
 Chief of Party, O. B. Survey

For the information of the Coast Pilot Section.

In addition to the matters of interest to this section of the office written of in the descriptive report for the sheets of the resurvey of Jamaica Bay New York, ^{page} sheets from which are hereto attached, the following is submitted.

Coast Pilot Atlantic Coast Part 4 page 186- These engravers to Jamaica Bay lies between Rockaway Point and Coney Island. Dead Horse Inlet between Barren Island and Plum Island, is thought to be a part of Jamaica Bay, as are the waters south of Plum Island Beach and east of Coney Island.

Rockaway Point is the local name for the point west of Belle Harbor. That is Rockaway Point extends from Belle Harbor to the point of the land at the true point.

See blue print 12518, for current observations by the U.S. Engravers in the vicinity of Rockaway Inlet observed during 1908 .

Page 186 There is no reason why vessels should not proceed to Canarsie Shore and to the head of the bay and Far Rockaway, if the Aids are placed of chart 542 as recommended by me.

All aids in the Bay were determined by my party either with the plane table or by rounds of angles with a sextant, of date December 1914. In this connection it is suggested that the channels that are marked by private aids, should be indicated by a single line with an appropriate legend, on chart 542. *and referred to in the*

Page 186 Canarsie, should be Canarsie Shore. It is a town and resort (not summer) as it is not a summer resort in the usual sense of the word.

Descriptive reports of Topographic sheets 34766-3477--3478-- and

Coast Pilot

hydrographic sheets 3697--3698--3705e-- describe the sheets of the resurvey of the bay as made by my party during 1914.

It is desired to emphasise the desirability of placing the aids on the reprint and new edition of chart 542, also ~~the~~ the placing of the channels marked with private aids seems especially desirable for this chart.

Respectfully submitted,

E. B. Sathern

Chief of Party, U.S. C & G Survey

VEC

Feb. 27, 1915.

L. P. S.

HYDROGRAPHIC SHEET 3697.

Jamaica Bay, New York, by Assistant E. B. Latham
in 1914.

TIDES.

	Canarsie	Hollands	Friberg
	ft.	Landing	Wharf
	ft.	ft.	ft.
Mean low water, or plane of reference on staff	-0.5	3.5	0.5
Lowest tide observed " "	-2.4	1.7	0.0
Highest " " " "	7.2	12.7	5.3
Mean range of tide	4.8	4.7	4.6

Allowance was made for difference in tide at tide gauge and
place of sounding.

VEC
Feb. 17, 1915
S. P. S.

HYDROGRAPHIC SHEET 3698.

Jamaica Bay, New York, by Assistant E. B. Latham
in 1914.

	Tides.		
	Canarsie ft.	Hollands Landing ft.	Friberg Wharf ft.
Mean low water, or plane of reference on staff	-0.5	3.5	0.5
Lowest tide observed " "	-2.4	1.7	0.0
Highest " " " "	7.2	12.7	5.3
Mean range of tide	4.8	4.7	4.6

VEC

Mar. 19, 1915.

B. P. A.

HYDROGRAPHIC SHEET 3705.

Jamaica Bay, eastern part, New York, by Assistant E.B. Latham in 1914.

TIDES.

	Hollands Landing ft.	Canarsie ft.
Mean low water, or plane of reference on staff	3.5	-0.5
Lowest tide observed " "	1.7	-2.4
Highest " " " "	12.7	7.2
Mean range of tide	4.7	4.8

Allowance has been made for difference in tide at tide gauge and place of soundings.

H. 3705.

The area is well covered, altho a complete survey has not been obtained. The narrow and sinuous channels with uneven bottom would necessarily have to be developed on a much larger scale if the survey is intended for other than general charting purposes.

Sheet examined in Div.
of Hyd'y & Top'y.

Hyd. Sheet No. 3697

E. B. Latham, Asst. Chief of Party. Protracted
Sailed and verified by S. S. Rosenberg

Soundings in feet.

LIBRARY
Place with descriptive report of hydrographic sheet No. 3697 L. & A.
061 23 15
Acc. No.
Drawing Section.

This survey was a very poor one and it was extremely difficult to protract, plot and verify the work. The observations were either carelessly made or carelessly recorded, for 115 positions had to be changed before they could be plotted. Not only were angles given wrong, but frequently the signals were confused. In many cases it was impossible to straighten out the error without the assistance of the chief of the Party. In addition to these 115 changed positions, 54 ^{additional ones} had to be rejected entirely.

Too many soundings were taken in shallow water, there being ~~too~~ great number which were either negative or zero.

Several shallow soundings appear in the channel and these are indicated by pencil lines running to the edge of the work.

Two 26 ft. soundings (lat. $40^{\circ}34'$ - long. $73^{\circ}54'25''$) are shown in red as they are very doubtful and were put on the sheet for safety. The same was true of a 19 ft. sounding (lat. $34'27''$ - long. $53'10''$) which appeared between a 43 and a 33 foot sounding.

S. S. Rosenberg.

Oct., 1915.

Marginal figures for longitude, in red, are incorrect. Original figures in black are O.K.

Respectfully referred to the Chief of Division of Charts.

Hydrographic Sheet 3697

The positions on this sheet, as indicated in the title were plotted in the field. The positions spoken of as being rejected were rejected from plotting on the boat sheet, at the time the observations were made.

During the plotting of the smooth sheet (in the field) positions were rejected, where the angles were confused and the area involved covered by other sounding lines.

In verifying soundings indicated as faulty, in four cases (indicated on attached tracing), the fault appears to be in the plotting of soundings, as no soundings corresponding to those plotted on the sheet could be found, by me, in the records. The errors seem to be the result of not plotting the depths indicated in the record on the sheet.

Hydrographic sheet number 3698 should be treated as this sheet is.

Respectfully

E. B. Latham

Feb 26th 1916

Chief of Party.

Hyd Sheet No. 3697

On this sheet the ground is closely covered, but the work seems to be below the usual standard probably because of the adverse weather conditions existing at that time and the inexperience in hydrographic work of the supporting field party.

Some lines could not be plotted and had to be rejected.

The fact that signal Δ "Far" was plotted in the wrong position was due to an error made in the office and to no fault of the field party. This change affects the hydrography very little.

Mr. Latham thinks the two 26 ft soundings, shown in red, are probably in error, and should be rejected.

There are a number of discrepancies in the main channel where this sheet overlaps Hyd Sheet No 3705.

R. L. Johnston

Soundings shown in feet.

Protracted & plotted by H. K. Doolittle

Inked & verified by S. L. Rosenberg

also verified & adjusted by R. L. J.

Marginal figures for longitude, in red, are incorrect, original figures in black are C. L.

Points plotted in
fields 89 A

DEPARTMENT OF COMMERCE

Hyd. Sheet 3698.

This sheet was very good, there being no bad crossings and the channels were well developed. The only criticism is that too many soundings were taken in very shoal water.

S. S. Rosenberg.

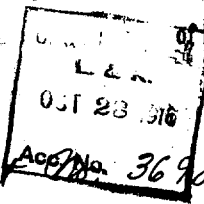
Plotted by Doolittle. Sounded & verified by S. S. Rosenberg.

Edgs. in feet.



LIBRARY

OCT 28 1916

Place with descriptive report
of hydrographic sheet No. 3698

Drawing Section.

Hyd. Sheet ~~3698~~ No. 3698

Although the ground is well covered, this work is below the usual standard, probably because of the inexperience of the supporting party in hydrographic work. There are a number of discrepancies, especially in the overlap with Hyd 3705. These were adjusted whenever it was possible to do so.

A. L. Johnston

Soundings shown in feet.

Protracted by field party.
Soundings plotted by H. C. Doolittle
Verified by S. Rosenberg.
Adjusted & corrected by A. L. Johnston

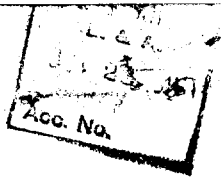
DEPARTMENT OF COMMERCE

Hyd. Sheet 3705.

The part of the survey included on this sheet was very poorly done and it is not very accurate. There were a great number of bad crossings and observations (both angles and ~~the~~ signals) were frequently wrong, necessitating much shifting and adjusting. Several lines were so obviously wrong that they were rejected altogether, and all of G. day was transferred from the boat sheet.

S. H. Rosenberg.

Surveyed by Latham. Plotted and protracted by Doolittle.
Inked & verified by Rosenberg.



LIBRARY OCT 27 1916

Place with descriptive report
of hydrographic sheet No. 3705

GP

Drawing Section.

Hyd. Sheet No. 3705

On this sheet the ground is thoroughly covered and a conscientious effort seems to have been made to make a complete and accurate survey.

The hydrography however is full of discrepancies and poor crossings and no single part can be relied on to be accurate, although in general it is probably alright. That is, a mean of these curves would probably show the existing conditions.

The trouble is due to the fact that no member of the supporting party had ever before attempted hydrographic work and also to unfavorable weather conditions.

R. L. Johnston

Soundings shown in feet.

*Protracted by field party
Soundings plotted by H. K. Doolittle & L. E. Bolinger
Verified by S. Rosenberg
Adjusted & corrected by R. L. Johnston*

OK. PBL

H. 3697.

The ground is well covered. The bottom appears very uneven and it is with difficulty that the depth curves are to be followed.

A complete survey has not been obtained, but it is thought that the development meets the needs for general charting purposes.

Sheet examined in Div.
of Hyd'y & Top'y.

Sheet examined in Div.
of Hyd'y & Top'y.

H. 3698.

Symbol for the Long Island Ry. crossing the channel developed is not properly shown. Returned to chart Division, for completion. Ground well covered and soundings spaced satisfactorily. The 1 boat curve is of no importance and should have been omitted when it appears spasmodically. Altho this survey is not in detail, it appears sufficient for general charting purposes.