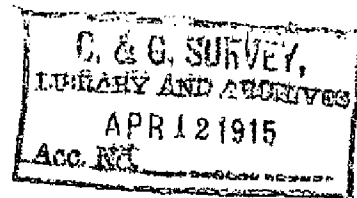




3476
3477
3478



Department of Commerce and Labor
COAST AND GEODETIC SURVEY

E. Lester Jones
Superintendent.

State: *N. Y.*

DESCRIPTIVE REPORT.

Top. *3476*
Sheet No. *3477*
3478

LOCALITY:

Jamaica Bay

1914

CHIEF OF PARTY:

C. B. Latham

11-4045

4 pages

DESCRIPTIVE REPORT

RESURVEY OF JAMAICA BAY NEW YORK N.Y.

Topographic sheets 3476 3477 3478

Scale 1 to 10,000

This resurvey of Jamaica Bay was made in compliance with the instructions of The Superintendent, dated May 5th and December 1st 1915, and the greater part of the work was done between May 15th and Sept. 4th 1914. Measures were made to connect the street plans with objects determined by me, during the period December 14th to December 22nd.

The shores of the bay are largely of marsh, backed by the low hills of the City of New York, boroughs of Brooklyn and Queens. The 10 foot contour appears on only a small area near the shores, and it was not rerun.

There are no prominent natural objects that are of aid to navigation. Many spires, cupolas, chimneys and stacks were determined. See list of topographic objects for each sheet.

Two lists of objects suggested to be placed on the charts for this region, were submitted with the seasons report for this work.

The recession, inside the bay is of small extent, in some portions of the bay the marshes are building.

Rockaway Point, seems to have reached a position where it will change but slightly. The shore line run in July of 1914 being practically in the same position shown on topographic sheet 2871, surveyed in 1908. The United States Engineers make surveys of this point at frequent intervals.

Dikes have been placed at many places and the material

consisting of fine sand, has been dredged from the bay to fill behind them. Practically all the south shore of the bay from Far Rockaway to abreast of the eastern end of Barren Island has been diked filled and is now being built on.

Rockaway point, west of the eastern end of Barren Island consists of low sand hills sparsely covered with grass and bushes with several marshy depressions leading into the hills.

Jamaica Bay is wholly within the City of New York. Its southern shore from the head of the bay to the streets shown on sheet 3477 is largely built up. The streets on all the sheets are shown (inked) in blue and yellow, where the information has been compiled from other surveys, the points determined by me are indicated by being inked in black, as are those portions of the streets that are in the vicinity of objects determined and measured from by my party.

"The Rockaways" have a permanent population of approximately 50,000 and a summer population of from 250,000 to 300,000. As many as 200,000 thousand people have come to the beaches on Sundays and holidays for the sea bathing.

Canarsie Shore is the point of departure of a fleet of pleasure fishing boats that make trips to the outside fishing grounds thruout the year.

Bergen Beach on the northwestern shore of the bay is an extensive summer resort.

Barren Island has a permanent population, and is the location of the garbage disposal plant for the City of New York, the garbage is brought to the plant in scows.

There is a plant for the rendering of oil from fish and making fertilizer from the refuse of the fish. Practically all dead animals are

from the entire city, are brought to a plant, on this island, that renders fats and other products from them.

Outside these industries all the commerce in the towns on the bay is the retail stores to supply the population with food and supplies.

There are numerous groups of houses on the north shore of the Bay that are a part of the City of New York. At the broad Channel station of the Long Island Railroad, there is a population of approximately 1000, and there is an extensive fill on which the houses have been built. Ruffle Bar has a population of from 100 to 200, who are engaged in shell fishing. There are numerous groups of houses at various places in the bay, that are supported on piles. Practically all the settlements on the islands are supported by the visitors from the city.

The greater portion of the people who live in the Rockaways and Belle Harbor are engaged in business in the city and go into the city each day.

There has been great change in the population since the previous survey, made in 1878, and practically all transportation lines have been built since that time.

The changes in shore line is largely caused by ice, portions of the marsh break off and are deposited in another locality causing new islands by standing in new localities.

Rockaway Point has advanced to the westward for several years at a rapid rate, owing to the construction of dikes, and the washing of the current from the Bay, this point now has reached a position where it will shift its position but little, the survey of 1908 topographic sheet 2571, indicates that the point, was practically

unchanged from the position of 1914

A blue print of Jamaica Bay, scale 1 to 10,000, in two sheets.

A map of the Borough of Brooklyn, City of New York, in four sheets.

A map of the Borough of Queens, City of New York, in three sheets, are filed in the office by me.

See letter from E.B.Latham, as to the City of New York, having jurisdiction of the changes in shore line of Jamaica Bay.

A change of considerable extent, is in progress in the vicinity of Mill Island, to the north west of Bergen Beach is now in progress information as to its extent etc. may be obtained from the Atlantic Gulf and Pacific Company, Park Row, New York, (Manhattan).

The two letters from the Superintendent of the U.S. Coast Survey, addressed to me dated Aug. 20th and Dec. 1st 1914, are referred in connection with resurvey of the shore line in the vicinity of Rockaway Point. From inspection it was noted that the point had advanced to the westward approximately 400 meters from the last of July to the first of December. *see report of Dec 1st sheet.*

The rerun portion of the shore line is inked on all the sheets in black, as are the ends of streets and the streets in the vicinity of objects determined by me, and from which the distances were measured to the adjoining streets. Compiled shore line and streets are inked in blue and yellow. See note on each sheet.

positions determined with the plane table are listed for each sheet and attached hereto.

For a list of objects suggested to be placed on the charts for this region see list submitted with my seasons report, of date

February 27th 1915.

If the points, suggested to be placed on the charts for this region by me, are placed on the charts, there should be no difficulty in determining the aids to navigation, by the Bureau of Light houses, from these objects. Limited hydrographic surveys can be made from the objects determined in this survey, and given in the lists attached to this report without the erection of additional signals.

For additional information see descriptive report submitted with hydrographic sheets 3697 3698 and 3705.

Respectfully submitted,

A handwritten signature in cursive script, reading "E. B. Saltham".

Chief of Party U.S. Coast and Geodetic Survey

Department of Commerce and Labor

COAST AND GEODETIC SURVEY

Washington

August 17, 1914.

SUPPLEMENTAL INSTRUCTIONS.

Hyd. 3697-98
3705

Mr. E. B. Latham,

Assistant, C. & G. Survey,

Arion Hall, Rockaway Beach, N.Y.

Upon the completion of the topography of Jamaica Bay as directed
X in your instructions of May 5th, you will take up the hydrography of the
Bay.

This is to be a complete survey showing clearly all channels and
the work of a character that will admit of drawing depth contours.
Work done by, or being done by, the U. S. Engineers is not to be duplica-
ted, but your work should join with theirs and their work accurately
located on your sheets.

Hydrographic projections are being prepared and will be sent as soon
as ready. It will be necessary to transfer the shoreline and plot the
stations.

Tidal data will also be forwarded at once.

C. H. Pittman
etc
P

JFL

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

September 4, 1914.

Mr. E. B. Latham,
Coast and Geodetic Survey,
Rockaway Beach, New York.

Your letter of the 2nd instant with copy of your letter of August 21st is received.

The only question in that letter not heretofore answered is that of restricting the hydrography to certain localities where changes may probably have occurred.


The old hydrography is so much in error that the location of buoys on the Charles has been impracticable.

The hydrography of the channels outside of the work done by the engineers, and shown on their blue prints, is the principal work to be done.

This work can best be done by running lines along the channels, being certain that the deepest water can be obtained, and the limits of the channels shown.

An occasional line across the shoal areas will suffice.

The carbon of your letter of August 21st is herewith returned as requested.


Acting Superintendent.

DEPARTMENT OF COMMERCE

UNITED STATES COAST AND GEODETIC SURVEY

O.A. TITTMANN Superintendent

RESURVEY OF JAMAICA BAY NEW YORK

Western Part

May to December 1914

Scale 1 to 10,000

Respectfully submitted

E. B. Satham

Chief of Party

Top Sheet 3477

Objects determined with a plane table in the
 resurvey of Jamaica Bay 1914 Topographic Sheet 3476

| Station | Latitude | Longitude |
|---|----------------------------|--------------------------------------|
| Chimney white House with patch on roof | 40 35 17 ⁴ 8 M. | 73 52 316 M. |
| Chy small wh. Ho. | 40 36 852 M. | 73 52 202 M. |
| Chimney brown Ho. on shell pile, | 40 37 325 M. | 73 51 405 M. |
| N.W. Chy. of old unpainted house, | 40 36 775 M. | 73 51 13 M. 50 1095 M. |
| Chy, old Ho. west end Map painted salmon.col. | 40 36 331 M. | 73 50 1095 M. |
| Chimney two story white house | 40 36 204 M. | 73 51 437 M. |
| Cupola of Long Island R.R. Rockaway Park Sta. | 40 34 1546 M. | 73 50 362 M. |
| White tank Steeple Chase Park, frame goes above tank. | 40 34 1839 M. | 73 49 279 M. |
| Cross, belfry church Broad Channel | 40 36 805 M. | 73 49 630 M. |
| Water tank, Broad Channel, black | 40 36 7 ⁸ M. | 73 49 89 M. |
| Cupola Jamaica Yatch Club, Cem. Main Ho. | 40 35 666 M. | 73 48 1310 M. |
| Open yellow cupola steeple Chase Park, | 40 35 535 M. | 73 49 200 M. |

| Stations | Latitude | | | Longitude | | |
|---|----------|----|---------|-----------|----|--------------------------|
| South spire of two. | 35 | | | | | |
| St. Rose of Lima Cath- olic Church | 40 | 35 | 315 M. | 73 | 48 | 845 M. |
| Chimney lone yellow house | 40 | 37 | 1251 M. | 73 | 48 | 770 M. |
| Chimney | 40 | 37 | 759 M. | 73 | 47 | 100 M. |
| Light center of draw bridge Broad Channel | 40 | 36 | 655 M. | 73 | 48 | 1285 M. |
| Light center of draw bridge Beach Channel | 40 | 35 | 1186 | 73 | 48 | 846 M. |
| flag pole on hotel | 40 | 35 | 1229 M. | 73 | 48 | 878 M. 644 M. |
| Chimney old house, Brants point | 40 | 35 | 1000 M. | 73 | 48 | 374 M. |
| Middle chimney yellow Ho. | 40 | 37 | 1205 M. | 73 | 47 | 678 M. |
| Flag pole center of Arverne Hotel (pole not plumb) | 40 | 35 | 590 M. | 73 | 47 | 1274 M. |
| Chimney small house | 40 | 36 | 1377 M. | 73 | 46 | 1377 M. |
| White house Cupola | 40 | 36 | 1607 M. | 73 | 46 | 435 M. |
| Square cupola Y.C. | 40 | 36 | 566 M. | 73 | 46 | 402 M. |
| Salmons Castle highest tower | 40 | 36 | 245 M. | 73 | 45 | 1386 M. |
| Tallest building in Far Rockaway, flag pole | 40 | 36 | 408 | 73 | 45 | 364 M. |
| Chimney very tall Queens, Borough Gas and Elec. Co. diferently des. by J.B. COMM. | 40 | 36 | 1102 M. | 73 | 45 | 912 M. |
| Tank on open tower | 40 | 37 | 499 M. | 73 | 45 | 538 M. |
| Stand Pipe Queens Co. Water Company | 40 | 36 | 868 M. | 73 | 45 | 106 M. |

| Stations | Latitude | Longitude |
|--|---------------|---------------|
| Church large square belfry | 40 36 1076 M. | 73 44 1184 M. |
| Belfry Innwood school | 40 36 1804 M. | 73 45 12 M. |
| Methodist church square tower | 40 36 1750 M. | 73 44 1036 M. |
| North west Chy white club house, | 40 37 1499 M. | 73 44 40 M. |
| Wind mill | 40 38 230 M. | 73 44 896 M. |
| Tank on open tower | 40 38 388 M. | 73 45 508 M. |
| Wind mill large white wheel on open framed tower, | 40 38 1152 M. | 73 45 315 M. |
| Black house square tower | 40 38 263 M. | 73 45 1002 M. |

Objects determined with a plane table in the
resurvey of Jamaica Bay 1914 On topographic Sheet 3477

| Station | Latitude | Longitude |
|--|---------------|---------------|
| Cross green church | 40 33 1282M. | 73 54 1087 M. |
| Belfry fire house | 40 34 70 M. | 70 53 510 M. |
| Rockaway Point | | |
| Cupola boat house | 40 34 1510 M. | 73 53 23 M. |
| Rockaway Pt. L.S.S. | | |
| Rockaway point Life | 40 33 1457 M. | 73 53 1211 M. |
| Saving Sta. Cupola | | |
| Tall round brick chimney | 40 35 59 M. | 73 52 943 M. |
| Same as J. B. C. Triangl. | | |
| Iron stack fish factory | 40 34 1363 M. | 73 53 309 M. |
| Tallest of three iron stacks. | 40 35 1705 M. | 73 53 1410 M. |
| Pipe yellow house | 40 #36 334 M. | 73 53 250 M. |
| Chimney square red h house | 40 36 655 M. | 73 53 396 M. |
| Pipe small house | 40 36 663 M. | 73 53 574 M. |
| Pipe small white house leans (Gun. Hyd.) | 40 36 868 M. | 73 53 1026 M. |
| Pipe lone black house | 40 35 1661 M. | 73 53 768 M. |
| Chimney yellow house | 40 35 646 M. | 73 53 877 M. |
| Large chy on middle of four white houses in group | 40 36 443 M. | 73 53 1239 M. |

| Stations | Latitude | | | Longitude | | |
|-------------------------------------|----------|----|---------|-----------|----|---------|
| Chimney old white Ho. | 40 | 36 | 578 M. | 73 | 53 | 1226 M. |
| Chimney white house | 40 | 36 | 726 M. | 73 | 53 | 1029 M. |
| Dark Ho. Yellow top | 40 | 36 | 1131 M. | 73 | 53 | 1311 M. |
| Pipe yellow Ho. | 40 | 36 | 1114 M. | 73 | 54 | 365 M. |
| Iron stack lead works | 40 | 36 | 1294 M; | 73 | 55 | 120 M. |
| Hyd. Mid.) | | | | | | |
| Middle chimney of | 40 | 36 | 832 M; | 73 | 55 | 593 M. |
| Warren Bros. Inn | | | | | | |
| Bay View Hotel Chy. at south end | 40 | 36 | 505 M. | 73 | 55 | 467 M. |
| Square Chy two story gray house | 40 | 35 | 1278 M. | 73 | 54 | 555 M. |
| Cupola center of Ho. | 40 | 35 | 560 M. | 73 | 54 | 563 M. |
| High pipe in Chy of white house | 40 | 35 | 243 M. | 73 | 54 | 154 M. |
| Wind mill white | 40 | 35 | 1803 M. | 73 | 55 | 1024 M. |
| Brick Chy disposal works | 40 | 35 | 694 M. | 73 | 55 | 1381 M. |
| (Hyd. Pis) | | | | | | |
| Cupola hotel | | | | | | |
| Iron stack | 40 | 34 | 1197 M. | 73 | 56 | 684 M. |

Duplicate attached to the descriptive report for topographic sheet
3477, resurvey of Jamaica Bay, City of New York, by E.B. LaPlam
May to Dec 1914

Objects determined with plane table

Resurvey of Jamaica Bay, New York Topographic Sheet 3478

| Object | Latitude | Longitude |
|---|--------------|--------------|
| Windmill | 40 37 1665 M | 73 53 1376 M |
| Spire Tall slender in Canarsie | 40 38 630 M | 73 54 325 m |
| Iron Stack | 40 39 855 M | 73 53 565 M |
| Windmill | 40 38 1305 M | 73 52 1218 M |
| Canarsie light | 40 37 1305 M | 73 52 1218 m |
| Chimney house white | 40 37 803 M | 73 51 1066 M |
| Chimney old Ho. | 40 37 1066 M | 73 50 609 M |
| East one of four semaphores L.I.R.R. | 40 39 120 M | 73 49 900 M |
| Cupola | 40 39 788 M | 73 51 866 M |
| Cupola | 40 39 406 M | 73 51 675 M |
| Chimney green top house | 40 39 877 M | 73 47 796 M |
| Gable house has sign "Uncle Toms Cabin " | 40 38 1602 M | 73 47 967 M |
| Pipe house at trees | 40 39 826 M | 73 48 45 M |

Submitted by S.B.R.
on Jan. 15, 1916

Topographic Sheets 3476 -7 -8

(Not yet sent up by Chart Division for approval)

These three sheets were turned in by the surveyor in an unfinished condition.

Attention is called to the following points:

1. Ink additional names and symbols of triangulation points.
2. Ink names of geographic features.
3. Ink names and symbols of all signals and pencil marks that may have future value. Erase those that had only temporary value.
4. Marsh areas should be defined by ruling rather than by the use of the word "marsh".
5. Avoid, if possible, the use of a line to define the inner limits of marsh.

Also avoid lines to define the outer limits of marsh lying outside of the highwater line.

When necessary to use these lines, they should be noticeable lighter than the high water line.

6. The positions of buoys should have been transferred from the topographic sheets and tracings to the hydrographic sheets.
7. The outer shoreline of Rockaway Pt. should have been resurveyed.
8. Title and notes have not yet been placed on these sheets by the Chart Division.

E. P. Ellis

E. P. Ellis

Nov. 12, 1915.

Only adverse criticism given

EXAMINATION OF HYDROGRAPHIC SHEETS
by the
Sections OF FIELD WORK AND FIELD RECORDS.

Sheet No. 3476

1. + Are numbers of hydrographic sheets adjoining limits of work shown? *No*
2. Are transferred soundings of adjacent hydrographic sheets made to show that ground has been covered? *No*
3. + Is sheet of proper size?
4. + Is sheet well laid out, no additions required?
5. Are limits of hydrography regular?
6. + Are positions of signals accentuated by light dot of black ink to assist plotting? *No*
7. + Are tidal stations plotted on sheet? *No*
8. Is area of work completely covered?
9. Are critical soundings and dangers shown distinctly?
10. + Is the control good?
11. + Are positions of signals clearly shown?
12. Are soundings well distributed?
13. Are shoals carefully and sufficiently developed?
14. Do soundings cross satisfactorily?

15. Is existence or non-existence of a reported shoal determined?
.....
16. Is least sounding over bar probably determined by check sound-
ings or diagonal sounding lines crossing same?
.....
- 17.+ Are projection and plotting checked?
18. Is the scale of this sheet sufficient to show the necessary
details in the navigable channels?
.....
19. +Is the shoreline shown?
- 20.+ Is there an accompanying list of plane table or sextant posi-
tions of signals?
21. Has sufficient attention been given to the development of
channel?
.....
22. Are sufficient bottom characteristics shown?
23. Are sounding lines normal to coast?
24. Have suspicious soundings been investigated?
25. Are ranges or bearings given for important shoals?
- 26.. Are sailing directions given?

27. Is the general hydrography in the entire area properly developed?
28. Are shallow channels for motor boats sounded?
29. Is there a note as to coloration of water in or near mouths of rivers and bays?
30. Is there any information given as to obtaining fresh water?
31. Are there proper intervals between soundings?
32. Are projecting points of land and reefs determined by sufficient lines with soundings at close intervals run at right angle to direction of points?
33. Is there sufficient data to draw depth curves?
34. Are shoal areas remote from shore properly developed by independent system of buoy signals placed in the vicinity of shoal?
35. Are soundings obtained at docks in harbor?
36. *Is there a full list of data effecting sheet given?
37. Are description of hydrographic signals and marking of same recorded? *Yes*
38. Is there a list of land marks given? *No*

- 39.+ Does descriptive report give date of instructions? *Yes*.....
.....
40. Are small islets and rocks distinctly shown?
41. Is information relative to anchorage given?
- 42.+ Are survey methods explained sufficiently?
43. Are geographical names given on sheet?
44. Are coast pilot notes given?
45. Is the unit of soundings given in title?
46. Are sufficient depth curves shown?
47. Are aids to navigation shown?
48. Are grass or kelp indications shown?
49. Are sailing courses shown on sheet?
50. Is descriptive note given as to visibility of shoals?
-
51. Are dangers fully described in descriptive report?
-
52. Is the character of reefs described on sheet?
-
53. Are beaches indicated where vessels in distress could be safely beached? *No*.....
54. Are standard symbols used in drafting?
55. Is information relative to currents given?
56. Is there a statement as to certainty or probability of least depth over dangers given?
57. Is the existence of certain shoals doubtful?
58. Is a general description of coast given?

59. Is information relative to commercial importance given?
.....
60. Does the descriptive report cover one or a moderate number of
sheets?
.....
61. Are descriptions of headlands given?
.....
62. Is the nature of shoals whether coral rock or sand shown on
sheet?
.....
- 63.+ Is the position of the tide gauge well selected? Is the tidal
data sufficient for the reduction of soundings over the area
of the sheet?
.....
- 64.+ Have projection lines been numbered around all the edges? ...
.....
- 65.+ Has the geographic position of one of the triangulation points
on the sheet been inked near the bottom edge of the sheet?
.....
.....
66. Was the speed of the sounding boat such as to allow vertical
readings of the leadline?
.....
67. Were lines of soundings run along the axis of narrow channels?
.....
.....
68. Have rocks or shoals seen from the sounding boat in passing
been definitely located?
.....
69. Have charted shoals reefs, or rocks been investigated?
.....
- 70.+ Have sounding records been kept in approved form?
.....

71. Are Wire drag surveys required?
72. Is the area between the soundings taken and the shore indicated or described as being covered by reefs, etc. as the case may be?

Other Remarks

.....

.....

The foregoing points marked by a cross (+) and the following additional points are to be considered for wire drag hydrographic sheets.

73. What additional areas, if any, in the locality covered by the sheet should be dragged?
-
74. Number of small areas inside limits of work missed by drag (few, moderate number, numerous)
75. Are shoals discovered with drag clearly shown?
76. Were shoals later covered by drag set at suitable depth?
-
77. Are all areas missed by drag clearly shown?
78. Are overlaps ample?
79. Do effective depths conform to instructions under which the work was done?
80. If work was done before present practice as regards effective depths was adopted, should the area be re-dragged to conform to the present practice?
-
-
81. Are all shoals discovered shown on current issue of chart?
-