5377a

5377b

Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

State: New York

DESCRIPTIVE REPORT

~~Topographic~~
Hydrographic } *Sheet No.* 6 5377a

LOCALITY

Hempstead Bay, L. I.

Jones Inlet to East Bay

1933
5377b - 1934

CHIEF OF PARTY

Raymond P. Eyman

U. S. GOVERNMENT PRINTING OFFICE: 1930

Form 537
Ed. Dec., 1930

REG. NO. 5377a

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

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. 6

REGISTER NO. 5377a

State New York

General locality Hempstead Bay, L. I.

Locality Jones Inlet to East Bay

Scale 1:10,000 Date of survey October-November, 19 33

~~Vessel~~ Shore Party #2 - Project HT-132

Chief of Party Raymond P. Lyman

Surveyed by G.A. Stanton - J.C. Tison Jr.

Protracted by W.D.Ayers

Soundings penciled by W.D. Ayers

Soundings in fathoms feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated February 25, 19 33

Remarks:

U. S. GOVERNMENT PRINTING OFFICE: 1931

DESCRIPTIVE REPORT
TO ACCOMPANY
HYDROGRAPHIC SHEET NO. 6
HEMPSTEAD BAY - LONG ISLAND, N. Y.
Raymond P. Eyman - Chief of Party
SEASON - 1933

Date of Instruction.

February 25, 1933

Survey Methods

The work on this sheet was done with a 33 foot round bottom launch "Eva" and an 18 foot skiff propelled by an outboard motor.

Standard survey methods were used throughout. A sounding pole was used in depths up to about 5 feet and read to tenths. In deeper water a lead line was used and read to nearest one-half foot. Control was furnished by triangulation signals and hydrographic signals located by topographic party. Several signals not falling within the limits of the topographic sheet were located by sextant angles.

All position numbers are shown in red as both the launch and skiff were used by one party. Both were never in use at the same time.

Channels

Dredging operations are going on at present in Ned Creek south ~~west~~ east of False Channel Meadow, and the channel south west and west of False Channel Meadow has been completely filled up. A dredge is operating south of Jones Island and one east of Short Beach Coast Guard Station. A new channel has been dredged close to the south side of Jones Island and the southside of Deep Creek Meadow. The material has been deposited south of this channel so that part of a dredged channel south east of Short Beach Coast Guard Station has been filled up and the south channel south of Jones Islandhas been filled. A channel has been dredged between Jones Island and Meadow Island in the natural channel and then northwest through the center of Pettit Marsh to Freeport.

Long Creek has been dredged out on the west side of Meadow Island from Pettit Marsh to Jones Inlet. Also a new channel has been dredged through the south side of the Bay of Fundy joining the two north and south channels above described.

The main channel from Jones Inlet to the bridge north of Green Island is marked by pile markers with an arrow.

The channel leading from the bridge north towards Bellmore Creek is marked by barrel buoys set out in the spring and taken in about Nov. 1st.

The natural channels on the north and east of Big Crow Island and on the north andwest of Deep Creek Meadow are also marked by temporary barrel buoys as above described.

The channel on the west of Whale Neck Point is very narrow and crooked and is marked by barrel buoys. The Chart is misleading in this locality in showing more depth than exists. The channel between Whale Neck Point and Bellmore Creek is also narrow, not more than 20 meters wide in most places, and crooked, and is staked by bush stakes set out by local fishermen.

Dangers

The small shoal east of Snipe Island in the center of the channel is

dangerous at night as it is not lighted but it is well marked by three pile markers with arrows.

Creeks

The central creek and dredged channel to Bellmore Harbor was sounded but signals were not visible for sufficient fixes. Hydrographic notes are described as much as possible and it will be necessary to plat these soundings after topography is obtained from Air Photos.

Tides

Auto-portable gages were located at the bridge north of Green Island and at Jones Inlet. The range is about 2.5 to 3.0 feet.

There is quite a strong current under the Jones Beach Causeway bridges and also in the natural channels south of East Bay.

Comparison with Chart

The dredged area east of the Green Island bridge (lat.40 - 37.5 Long. 73 - 29.5) is not as extensive as shown on Chart No. 579. The easterly side of this dredged channel is not cut straight through as shown but instead a point has been left west of Middle Line Island.

A small Island shown at the junction of The Narrows and Long Creek (approx. Lat. 40 - 37.5 Long. 73 - 34.5) has been entirely dredged out.

Respectfully submitted,

G. A. Stanton

G. A. Stanton
Hydrographer

Forwarded: Raymond P. Eyman

Raymond P. Eyman
Chief of Party

STATISTICS FOR FIELD SHEET NO. 5
PROJECT HT - 132 LONG ISLAND, N. Y.

Date	Boat	Day Letter	Vol.	Stat. Mi.	No. Soundings	No. Positions
Oct. 20, 33	Eva	a	1	8.8	485	82
" 21 "	"	b	1	4.7	242	41
" 23 "	Eva & Skiff	c	1	13.0	609	102
" 25 "	Eva	d	1	1.4	123	15
" 26 "	Skiff	e	1-2	11.1	781	128
" 27 "	"	f	2	16.0	793	149
" 28 "	"	g	2	8.4	521	90
" 30 "	"	h	3	18.6	914	161
" 31 "	Eva	j	3	14.2	759	132
Nov 1 "	Skiff	k	3-4	16.0	845	133
" 3 "	"	l	4	4.2	189	42
" 4 "	"	m	4	10.4	460	83
		12		126.8	6721	1158

Additional Statistics for Hydrographic Sheet #6
Project HT-132 Long Island, N.Y.

Date	Boat	Vol.	Day	Miles	Soundings	Positions	Area Sq. Stat. Mi.
Oct. 27,33	Helen	"C"	5 a	18.0	724	127	
" 28,33	"	"	5 b	9.4	327	67	
" 31,33	"	"	5 c	2.1	75	15	
Nov. 1,33	"	"	5 d	3.0	115	25	
" 2,33	"	"	5 e	8.2	389	74	
" 9,33	"	"	6 f	1.6	44	12	
			Totals	42.3	1674	310	

LIST OF HYDROGRAPHIC STATIONS USED FOR CONTROL
FOR HYDROGRAPHIC SHEET NUMBER SIX.

- - - - - - - - - - - - - - - - - - - -

Name	Method of Location
JON	Triangulation, 1933
BUL	Topographic Sheet "B"
LOOK 2	Triangulation, 1933
GREEN	" 1933
GUN	Topographic Sheet "H" (High cry, Prospect Pt Gun club).
WARD	3-point fix
SHORE	Topographic Sheet "H"
MID	3-point fix
COLD	Topographic Sheet "A"
GREY	" " "H"
LY	" " "B"
CROSS	" " "A" H
SUB	Flag~~tower~~ pole Short Beach C.G. 1933 (Triang.)
TOWER	Triangulation, 1933 (Tower Jones Beach 1933)
CORK	Topographic Sheet "H"
MARKE	" " "G"
HO	" " "B"
FEET	" " "A"
FAR	" " "A"
DICK	" " "H"
GAB	" " "H"
TEAM	Triangulation, 1933
HIT	Topographic Sheet "H"
L-CLUB	Triangulation, 1933
BARe	Topographic Sheet "H"
TOM	" " "H"
HIGH	" " "H"
HUM	" " "B"
DIS	" " "H"
FLAG	" " "G"
DOT	" " "G"
SEE	" " "G"
NEAR	" " "H"
WEST	Triangulation, 1933
WHITE	Topographic Sheet "G"
BRICK	" " "G"
TIM	" " "G"
MAC	" " "H"
BREE	3-point fix.
EM	Triangulation, 1933.
EAST	3-point fix.
LOFT	Topographic Sheet "H"
YEL	" " "B"
NIP	" " "H"
COR	" " H
MARK	" " H
Nor	" " H
MAR	" " H
wet	" " H
Boat	" " H

Med - 3pt. fix

SECTION OF DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SHEET #6.
SOUTH SHORE OF LONG ISLAND - JONES INLET - SEASON 1933

GENERAL INFORMATION:

Sounding executed on Sheet #6 in the vicinity of Jones Inlet was done according to standard Coast Survey Hydrographic Surveying methods. The survey was extended outside the Inlet as far as the inshore edge of the entrance bar which circles the Inlet about ½-mile off-shore. That area outside the entrance bar was surveyed on Sheet #1 to a 1:20,000 scale.

Jones Inlet is characterized by very strong currents and very shoal bars of sand lying off its entrance. Nun Buoy "E", just inside the narrowest part of the Inlet, and Can Buoy "D", just outside, are frequently towed under by the currents. Small tide rips appear off the sand beach of the point of land on the east side of the Inlet.

Besides the entrance channel which is buoyed, a considerable number of small boats enter Jones Inlet from the west by running close in along the beach behind the breakers on the outer bar.

DANGERS:

Just outside the inlet, on its west side and close in to the beach are two sand shoals which are almost awash at low tide. No sounding lines were run over these shoals, and they show on the Boat Sheet as undeveloped areas. Between these shoals and the beach deeper water was found.

In latitude 40° 34.93' N. and Longitude 73° 35.30' W., on the inshore edge of the outer bar, lies a wreck which bares for about ½-foot at low water. This wreck was hit by the sounding launch while running a sounding line at high water, and consists of large pieces of iron lying in about a fathom of water. A small spherical buoy supposed to mark the location of the wreck has drifted off position and now lies about 100-feet to the south on the edge of the sand bar which bares at low water.

The sea usually breaks in all of that area to the east of the line of entrance buoys, extending from the shore on the east side of the Inlet outward to Can Buoy "B". The limit of Sheet #1 on the east side of this area outlines the eastern extension of the breakers, except in very rough weather.

SECTION OF DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SHEET #6, SOUTH SHORE OF LONG ISLAND, JONES INLET - SEASON 1933, (Continued)

DANGERS, (Continued):

The outer bar is always covered with breakers and bares completely in places at low water. It is impossible to enter the Inlet except through the buoyed channel, or by skirting the beach on the west side of the Inlet in behind the first line of breakers.

UNDEVELOPED AREAS:

With the floating equipment on hand for the survey, it was impossible to develop the outer or entrance bar, due to the surf in that vicinity.

Due to want of good weather and suitable stages of tides, the two sand shoals near the beach on the west side of the Inlet could not be developed before the close of the season.

The area to the east of the line of entrance buoys eastward to a junction with Sheet #1 was not developed. Want of good weather, causing breakers in this area, made development impossible before the end of the season.

Immediately west of the line of entrance buoys probably one or two more sounding lines might have been run before the outer sand bar made further development impossible. The bar bares at low water just to the west of the entrance channel. Weather conditions made such development impossible before the end of the season.

DISCREPANCIES WITH PREVIOUS SURVEYS:

Inside Jones Inlet dredging has been recently done by the State of New York, and consequently depths do not check those shown on existing charts.

Outside the Inlet, considerable shifting of sand has occurred, and the entrance channel has moved to the east.

Respectfully submitted.

J.C. Tison, Jr.

J.C. Tison, Jr.,
Aid - C & G. Survey.
Hydrographer.

Forwarded:

Raymond P. Eyman

Raymond P. Eyman,
Chief of Party.

POST-OFFICE ADDRESS: 45 Broadway, New York City

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

1 Bebruary, 1934

To: The Inspector,
U.S.Coast and Geodetic Survey,
6 State Street,
New York, N.Y.

From: G.C.McGlasson.

Subject: Changes on Hydrographic Sheet # 6, from Captain Eyman's party.

In Zachs Bay on Hydrographic Shbet # 6 between position 12 and 13a(red) there is a three and one half foot sounding. This sounding seems to be in error. It probably was recorded as 3½ when it should have been 23½ft. We have a cross line 4b-5b, which comes close to the above sounding, and it shows deep water in this place. The old chart does not show this shoal place consquently I recommend that this sounding be rejected or bhanged to read 23½ ft.

G.C.McGlasson

SHEET 6

Soundings not plotted (in canals) due to lack of shore line.

1. 3d to 7d inclusive--positions 4d and 5d plotted from fixes--others follow middle of canal.

2. 114e to 120e inclusive--position 114 e plotted--others to be follow the middle of canal.

Lee

February 20, 1934

Division of Hydrography and Topography:

Division of Charts:

Tide Reducers are approved in
6 volumes of sounding records for

HYDROGRAPHIC SHEET 5377

Locality Jones Inlet to East Bay, Long Island, N. Y.

Chief of Party: R. P. Eyman in 1933
Plane of reference is mean low water, reading
2.3 ft. on tide staff at Green Island
8.6 ft. below B. M. 1

0.6 ft. on tide staff at Meadow Island, Jones Inlet
6.5 ft. above B.M. 4

Height of mean high water above plane of reference is 2.0 feet at Green Island and 3.1 feet at Meadow Island.

Condition of records satisfactory except as noted below:

Paul P. Whitney

Chief, Division of Tides and Currents

NOTE: On account of the large time and range difference between Green Island and Jones Inlet the sheet was divided into 6 sections for the reduction of soundings as follows:

Section	1,	referred	to	Jones Inlet direct									
"	2,	"	"	Jones Inlet with time	14	minutes	later	and	range	0.3	ft.	less	
"	3,	"	"	Jones Inlet "	"	27	"	"	"	"	0.6	"	"
"	4,	"	"	Green Island "	"	27	"	earlier	"	"	0.6	"	greater
"	5,	"	"	Green Island "	"	14	"	"	"	"	0.3	"	"
"	6,	"	"	Green Island direct									

Survey No. H-5377 a-b

GEOGRAPHIC NAMES

Date. April 17, 1935

Chart No. 1215

New York

Diagram No. 1215-2

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

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

Under investigation. Q

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	Middle Bay				
	East Bay				
	Baldwin Creek				
	Bellmore Creek				
	Deep Creek Meadow				
	Haunts Creek				
	Zachs Bay				
	Bay of Fundy				
	Jones Inlet				
	Swift Creek R				
	Broad Creek Channel.				

(M-136)

Survey No. H-5377 a&b

GEOGRAPHIC NAMES

Date. April 17, 1935

Chart No. 1215

Diagram No. 1215-2

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

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

Under investigation. Q

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	Merrick Bay				
	Whale Neck Point				
	East Bay				
	Great Island				
	Middle Line I.				
	Low Island				
	East Island				
	South Line I.				
	Green I.				
	Egg Island				
	Middle Island				
	Cuba Island				
	Big Crow I.				
	Ned Meadow I.				
	~~Fighting Island~~				
	False Channel Meadow				
	Pettit Marsh				
	The Narrows				
	Long Creek				
	Bay of Fundy				
	Meadow Island				
	West Crow I.				

(M-136)

Survey No. H-5377 a

GEOGRAPHIC NAMES

Date. April 17, 1935

Chart No. 1215

Diagram No. 1215-2

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

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

Under investigation. Q

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	Middle Crow Island				
	Jones Island				
	East Crow I.				
	Deep Creek Meadow				
	Snipe Island				
	Zachs Bay				
	Jones Beach State Park				
	Alder Island Jones				
	Jones Inlet.				
	ATLANTIC OCEAN				

(M-136)

Mar 22, 1934

Field Record Section
Report on H 5377 a

Chief of Party - Raymond R Egmon
Surveyed by - G. A. Stanton & J. B. Dson, Jr
Protracted by - W. H. Ayers.
Penciled by - W. H. Ayers.
Verified & Inked by - Ewe Jesberid

The sounding records were neat legible & complete.

Except for a few instances the protracting was good.

The field draughtsman used too soft a pencil & made his sounding figures too large. In complicated areas the amounts were obscure. The day letters & figures in some places are too large.

Crossings in general are poor. There are any number of very shoal soundings in deep areas which appear to be either recorder or leadsman's errors.

The tide gage between O Grey & Gun in Lat. 40°-36.0' & Long 70°-33.8' was not inked because it is appiximately shown on boat sheet & not shown on topo sheet. There is a reference to it in the sounding records as being 50 m. north of poo. 486 (bluff). It is plotted about 95 m. north.

No copies were made on this sheet because the adjoining sheets are now in work.

Respectfully submitted
Ewe Jesberid

SECTION OF FIELD RECORDS
Review of Hydrographic Sheet No. 5377a
Jones Inlet to East Bay, Hempstead Bay, L. I., New York
Surveyed October - November 1933
Instructions dated Feb. 25, 1933 (Eyman).

Chief of Party - R. P. Eyman.
Surveyed by - G. A. Stanton and J. C. Tison, Jr.
Protracted and soundings plotted by - W. D. Ayers.
Verified and inked by - I. M. Zeskind.

1. Records - The recorder used too hard a pencil during the early work on this sheet, the resulting record being faint and hard to read. Notes in the sounding records are not full enough for this class of work. Some buoys are noted as abeam without giving distance and direction; and channel markers are passed close to without any reference note in the records. Such notes would afford a very valuable check on sounding lines. The Descriptive Report does not give as much details as desirable in this class of work.

2. The plan and extent of development do not fully conform to the Hydrographic Manual though the specific instructions are fairly well satisfied. Several areas, notably east of Egg Island and of East Island, have not been sufficiently developed, also at the junction of the dredged channels south of Pettit Marsh. The topo control sheet does not show all the shoreline and the air photo compilation is not yet available.

3. Soundings do not clearly indicate the controlling depths in the channels. The skiff with outboard motor was used in running cross-channel lines. The records show no allowance of time for turning at the ends of the zigzag lines and, as plotted by the field party, some of the shoal soundings have been pushed too far into the channel. Probable errors in recorded soundings add to the uncertainty and indicate lack of experience and/or close supervision of recorder and leadsman. Natural channels are being changed by dredging which is still in progress, see "Channels" in Descriptive Report. Some of the shoal soundings may be spots missed by the dredge or caused by changes in current directions.

4. Depths curves can not be drawn satisfactorily except in Jones Inlet, for reasons noted in paragraphs 2 and 3.

5. Junction with H. 5276 to eastward is adequate.

With H. 5371 outside Jones Inlet, a close junction was prevented by breakers over the greater part of the inlet.

There is no contemporary survey to the westward.

6. Comparison.- The previous survey (H. 4795-6 of 1927) shows that radical changes have taken place both in the inlet and in the channels. East Bay and Merrick Bay are however fairly stable.

Chart 579 does not show the recently dredged channel across Pettit Marsh and the improved channels leading toward Freeport from Jones Inlet. Nor does it show the channel conditions correctly southward of Jones Island and Deep Creek Meadow.

7. Field protracting was generally good, a few positions were corrected. Too soft a pencil and too large figures in complicated areas made reading the penciled soundings difficult. Choice and spacing of soundings were not always the best to bring out channel conditions, especially in cross channel lines when without an allowance for turning a strict spacing by time pushed shoal soundings into the channel.

8. Recommendations. This is a preliminary review of the hydrography on H. 5377 accomplished in 1933. Additional work needed is indicated on the accompanying bromide copy of the sheet. A number of questionable soundings are also noted. Comparisons in the sounding records show that the leadline was marked in fathoms and feet but all soundings are recorded in feet and fractions without the usual OK after those soundings that show a marked irregularity in the bottom. Some of the discrepancies may be due to the conversion by the leadsman or recorder.

The bromide copy of H. 5377 should be returned to the office with the boat sheet and original records of the additional work when completed.

9. Reviewed by - R. J. Christman - April 18, 1934.

Examined and approved:

K. T. Adams
K. T. Adams,
Chief, Section of Field Records.

L. O. Colbert
Chief, Division of Charts.

T. S. Borden
Chief, Section of Field Work.

G. Rude
Chief, Division of H. & T.

applied to drawing of chart No. 1215
10/2/34 - H.E.M.

5377b

Form 504
Rev. Dec. 1933

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

~~Topographic~~
Hydrographic } Sheet No. 5377b

State New York

LOCALITY

Hempstead Bay, L.I.

Jones Inlet to East Bay

193 4

CHIEF OF PARTY

M.O. Witherbee

U.S. GOVERNMENT PRINTING OFFICE: 1934

5377b

Form 537
Ed. Dec., 1930

REG. NO. 5377

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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. .....

REGISTER NO. 5377b

State New York

General locality ~~Long Island~~ Hempstead Bay, L.I.

Locality ~~Hempstead Bay~~ Jones Inlet to East Bay

Scale 1:10,000 Date of survey May- October, 1934

Vessel Shore Party No.2

Chief of Party M. O. Witherbee

Surveyed by A. M. Weber

Protracted by S. E. Perkins

Soundings penciled by S. E. Perkins

Soundings in ~~fathoms~~ feet

Plane of reference MLW

Subdivision of wire dragged areas by .....

Inked by S. E. Perkins

Verified by S. E. Perkins

Instructions dated ~~February 23rd.~~ 25th, 1933

Remarks: This sheet partially completed in 1933 by R.P. Eyman.

Additional work done in 1934 not plotted on smooth sheet by field party.

U. S. GOVERNMENT PRINTING OFFICE: 1931

DESCRIPTIVE REPORT TO ACCOMPANY
HYDROGRAPHIC SHEET NO. 5377

Hempstead Bay, Long Island, New York.

a. Instructions dated February 25, 1933, and Supplemental instructions dated April 13, 1934.

b. Standard methods of hydrographic surveying were used.

A small launch was used, soundings were obtained by hand lead, and positions determined by three-point sextant fixes, using signals located by triangulation and plane table.

The slips at the head of Bellmore and Whale Neck Creeks fell outside the limits of the topographic sheets, and control for three point fixes was lacking, so positions were referred to corners of bulkheads, center of slips etc., as determined from detailed topography from airplane photographs.

c. No. discrepancies found in this years work.

d. The area covered by this sheet is practically all shoal except for dredged channels, a few narrow winding natural channels, and areas which have been dredged to obtain material for fills.

The following shoal spots, which are surrounded by deeper water should be classed as dangers.

A shoal in Latitude 40°35'.8, Longitude 73°33'.8, with least depth of one-half foot on position 11r.

A shoal in Latitude 40°35'.9, Longitude 73°32'.9 with least depth of 4 feet between position numbers 21 and 22 a'.

A large shoal in Latitude 40°35'.7, Longitude 73°32'.9 with least depth of one foot, between positions 70 and 71p and 77p.

A shoal in Latitude 40°35'.8, Longitude 73°33'.3, with least depth of 4½ feet, between positions 84 and 85r and between 88 and 89r.

e. The entrance channel in Jones Inlet is continually shifting. At present the controlling depth over the bar is 7 feet at Latitude 40°34'.6, Longitude 73°33'.9.

The least depth of the channel between Meadow Island and Jones Island is 9 feet at the southern end. This channel connects Jones Inlet and the State Boat Channel with two dredged channels to Freeport and a dredged channel which connects with Reynolds Channel about one mile west of Jones Inlet.

The State Boat Channel is dredged to a depth of 18 feet.

All other newly dredged channels have a depth of 15 feet.

Bellmore Creek and connecting channels have a controlling depth of 4 feet.

The dredged channels are well marked by channel markers, large black piles with white acorn tops with arrows pointing toward the channel. A number of these which were located in 1933 were temporary, and have been replaced with permanent markers, usually in a different position. These changes are indicated on Topographic Sheet [illegible] and Topographic Sheet A.

DESCRIPTIVE REPORT TO ACCOMPANY
HYDROGRAPHIC SHEET NO. 5377.
Additional Work, 1934
South Shore -- Long Island,-- New York.

g. Some sounding was done in the area of this sheet in the fall of 1933. Considerable dredging and filling was being done all over this area during and after that time, so that when work was resumed in the late spring ~~of~~ 1934, it was found that in places there was considerable change of depth, and many spots were sounded again. The most important changes are as follows:

Jones Inlet was found to be continually washing away on the west side and building up on the east. Some changes were noted between the fall of 1933 and the spring of 1934.

An inlet, on the ~~north~~ south side of the main channel from Jones Inlet to the Green Island Draw Bridge, and just east of Jones Inlet, was found to have been dredged and considerably enlarged at its head. The Short Beach Coast Guard Station, previously located on an island in the afore mentioned channel, was moved to the west bank of this inlet during the winter of 1933-34. This island, on which the Coast Guard Station was formerly located, was removed entirely, by dredging, and the area around it dredged. This area was resounded in 1934.

A new channel from the Narrows to the Bay of Fundy was cut through in the fall of 1933. This channel was sounded in 1933.

A channel from Ned Creek to The Narrows, which was closed in 1933, was dredged, and was sounded in 1934.

Some additional sounding was done in Jones Inlet, particularly with a view to establishing the edge of the channel, and additional notes were made on breakers in the vicinity.

An 8' spot, shown in 1933 surveys about 140 meters northwest of signal JON, was investigated. The area was developed and about ~~an hour~~ 30 min was spent in drift sounding around the spot, but no such depth could be found, and it is the conclusion of this survey that it does not exist. See verifier Report

Two 16-foot soundings from previous surveys, shown 270 meters 1932 northwest of signal JON, were investigated and could not be found. No indication was given in the sounding in 1934 of a hole of 16-feet depth shown on previous charts at Latitude 40°35'.9, and Longitude 73°32'.9, nor of a hole of 22-feet depth, Latitude 40°35'.8, Longitude 73°33'.2. A 4-foot sounding at Latitude 40°36'.1, Longitude 73°29'.8, and a 3½-foot sounding at Latitude 40°36'.0, Longitude 73°30'.2, were both investigated and not found.

A shoal about 200 m in diameter with a general depth of 5 to 6 feet, with one 4 foot and one 3 foot spot was found in Latitude 40°35'.9, and Longitude 73°32'.9 to 73°33'. This shoal ~~either~~ did not exist at the time of the 1933 survey. ~~or it was missed.~~

DESCRIPTIVE REPORT TO ACCOMPANY
HYDROGRAPHIC SHEET NO. 5377

South Shore-- Long Island,-- New York.

g. (Continued)

A large shoal area was found in approximate, latitude 40°35'.8, and Longitude 73°33'.8, having a least depth of one-half foot. This shoal is shown on Sheet 4795, surveyed in 1927, although it has changed considerably since then. The 1933 work on this sheet fails to show this shoal, showing soundings of 9 and 11 feet near the present one-half foot spot. This shoal is plainly visible on the photographs, the limits of discolored water on the photograph approximating the three foot curve on the sheet. See paragraph 4

A shoal with least depth of 5 feet was found in Latitude 40°35'.7, Longitude 73°33'.6.

The shoal in Latitude 40°35'.8, Longitude 73°33.3 appears to have extended farther south, ~~and to have separated from the shore since 1933.~~ not correct statement

Respectfully submitted,

Albert M. Weber

Albert M. Weber,
Hydrographer.

Forwarded:

M. O. Witherbee

M. O. Witherbee,
Chief of Party.

REPORT ON H. 5377b

General Statement.

This sheet is of additional work done May - October, 1934, by the party of M. O. Witherbee. The work was received in the office plotted only on the original boat sheet of 5377 and in black ink. It was impossible to differentiate between the original and additional work. It was therefore necessary to plot the additional work on an overlay tracing. When this overlay was practically completed, it became apparent that, due to the extensive development and to the radical change that had taken place during the interval between surveys, a new smooth sheet must be made for the additional work.

This smooth sheet was plotted by the verifier, (projection made on the machine) and the shoreline taken from 1933 and 1934 topographic surveys. The soundings from the basic survey were transferred to the additional work smooth sheet in red. A selection of sounding was made in highly developed areas. In cases where shoals from the basic survey were not ~~deleted~~ shown, but in cases where additional work showed a new channel or a new shoal, the red soundings were not shown. The additional work smooth sheet was registered as 5477b and the basic sheet was registered as 5477a.

disproved the red soundings were

1. The records conform to the requirements of the General Instructions.

2. Depth curves were drawn from the combination of soundings from H. 5377a and 5377b.

3. The line 50 p to 51 p which notes "Bridge Construction" should be rejected (it has not been plotted). This line was done in May, 1934. The topographic sheet 6198a done in June and July, 1934, shows an approach to the bridge covering this line of soundings. Lat. 40 - 35.8, Long. 73 - 32.6.

4. Line 25 - 26 S not plotted. Position 26 S cannot be correctly located. Lat. 40 - 35.7, Long. 73 - 34. These were taken at shoalest points found, not intended to be on same spot

5. Positions 89 and 90 d' are spot soundings taken to locate the 8 foot shoal sounding located in 1933. However, they plot 25 to 30 meters away from that position. The 8 foot sounding was not transferred but the verifier questions whether it has been disproved. See Page 2 of the Descriptive Report.

6. Paragraph g, page 2, of Descriptive Report, refers to a 3½ foot sounding in Lat. 40 - 36, Long. 73 - 30.2. This is apparently the wrong location for the 3½. Shoal sdg. located at lat 40-36.7 long. 73-30.2 RJE

7. Signals: -

"Bree" and "Med" are topographic signals in 1934. (These are indicated as hydrographic signals on the smooth sheet).

"Mark" was called "Marke" in 1933.

"Black" was called "COR" in 1933

"See" was called "Sea" in records 1934.

"Wood" was called "gone" on T. 6198a.

"Turk" not named on T. 6198a.

8. The wrong set of signals was recorded for 62 - 67 V day.

9. The metal protractor was used for plotting practically all positions.

10. A lighthouse chart has been received for this area.

11. The boat sheet does not indicate signal "Ward 1934". "Ward 1933" was used to plot boat sheet positions. "Ward 1934" was used by the verifier to plot the smooth sheet positions.

12. M day was indicated as M' day on the boat sheet. The soundings for M day were not plotted on the boat sheet. The latitude and longitude indications for the beginning of lines was often omitted.

13. The right angle for position 22 U day was recorded, 10 degrees in error.

14. The shoreline and dock shown on air photo compilation T. 6051, at Lat. 40 - 36.9 and Long. 73 - 30.3 are in conflict with the hydrography. This adjustment is pending receipt of air photographs from the field.

15. Attention is called to a line of soundings in Lat. 40 - 36, Long. 73 - 32.3 transferred from 5377a. The line is too shoal and the verifier suggests deletion. Deleted HTIC

16. Junctions fall outside the limits of H. 5377b, but are on H. 5377a.

17. The statistics sheet in the Descriptive Report was found to be in error. All the totals were corrected.

Respectfully submitted,

S. E. Perkins

S. E. Perkins.

April 22, 1935.

STATISTICS FOR FIELD SHEET NUMBER 5377

(Additional work 1934)

Letter Day	Positions	Soundings	Statute Miles of Sounding Lines.
n	106	475	7.5
p	114	611	10.3
q	94	498	9.8
r	~~87~~ 96	~~[illegible]~~ 475	9.2
s	122	483	11.3
t	45	304	5.2
u	64	391	6.1
v	98	480	10.3
w	18	81	0.4
x	16	113	0.3
y	48	222	5.1
z	72	438	6.9
a'	99	608	8.1
b'	59	364	5.1
c'	70	346	4.6
d'	91	502	7.9
e'	80	460	6.1
	1147	6184	106.7
	39	192	
	1186	6376	
			3.2
f'	35	197	1.8
g'	28	172	
	1249	6745	111.7

RAC

December 27, 1934.

Division of Hydrography and Topography:

Division of Charts:

Attention: Mr. Ellis.

Tide Reducers are approved in
5 volumes of sounding records for

HYDROGRAPHIC SHEET **5377b (Additional Work)**

Locality **Jones Inlet to East Bay, Long Island, New York.**

Chief of Party: **M. O. Witherbee in 1934.**
Plane of reference is **mean low water reading**
0.8 ft. on tide staff at **Meadow Island**
6.3 ft. below **B.M. 4**
2.8 ft. on tide staff at Deep Creek Meadow
4.1 ft. below B.M. 1
2.3 ft. on tide staff at Cuba Island
4.1 ft. below B.M. 1
2.4 ft. on tide staff at Green Island
8.5 ft. below B.M. 1
1.9 ft. on tide staff at Neds Creek
4.1 ft. below B.M. 1
2.1 ft. on tide staff at Bellmore Creek
6.7 ft. below B.M. 1
1.3 ft. on tide staff at Freeport
6.5 ft. below B.M. 1

Height of mean high water above plane of reference is 3.1 feet at Meadow Island and Freeport; 2.7 feet at Deep Creek Meadow; 2.5 feet at Cuba Island; 2.2 feet at Green Island and Bellmore Creek; 3.3 feet at Neds Creek.

Condition of records satisfactory except as noted below:

Paul A. Whitney
Chief, Division of Tides and Currents.

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. 5377 b

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

Number of positions on sheet	1249
Number of positions checked	.....
Number of positions revised	.....
Number of soundings recorded	6745
Number of soundings revised	.....
Number of signals erroneously plotted or transferred	.....

Date: April 22 1935

Cartographer: S. E. Perkins

~~Verification of protracting~~ Plotting
Verification & inking of rocks and shoals by S E Perkins

Time: } 284 3/4 hrs

Verification of inking by

Time: 18 hrs

Review by H. T. Kelly
R. J. Christman

Time: 11 3/4 hrs

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5377b (1934)

Jones Inlet to East Bay, Hempstead Bay, L. I., N.Y.
Surveyed in May-October 1934.
Instructions dated February 25, 1933 (R. P. Eyman)
Supplemental Instructions April 13, 1934 (M. O.Witherbee).

Hand Lead Soundings — 3 Point Fixes on Shore Signals.

Chief of Party - M. O. Witherbee.
Surveyed by - A. M. Weber.
Protracted and soundings penciled by - S. E. Perkins.
Verified and inked by - S. E. Perkins.

1. Condition of Records.

The records are neat legible and conform to the requirements of the Hydrographic Manual with the following exceptions:

a. Position numbers and day letters on cover and title page did not conform to the color used in the records. This has been corrected.

b. No copy of Landmarks for charts on form 567 accompanied this particular sheet.

2. Compliance with Instructions for the Project.

The plan, character and extent of the survey satisfy the instructions for the project. The bromide copy of the 1933 survey showing additional work desired was not returned with the records but apparently all the work asked for was accomplished.

3. Sounding Line Crossings.

Cross lines, where run, are in good agreement, considering the nature of the bottom.

4. Depth Curves.

Within the limits of the survey the usual depth curves are drawn. They are based on the combined 1933-1934 surveys but should be modified for charting to give preference to the 1934 survey. See note to compiler, paragraph 10.

5. Junction with Contemporary Surveys.

This survey was made as additional work in 1934 on sheet H-5377a (1933); later replotted as H-5377b because of the inconsistencies of many of the former soundings due to the elapsed time in an area of rapid natural and artificial changes. As many of the former soundings as did not materially conflict were then transferred. The soundings that were considered in error due to wrong recording were noted on sheet H-5377a. For junctions see the basic sheet H-5377a.

6. Comparison with Prior Survey.

a. H-50 (1835)

This survey covered on a 1:10,000 scale the entrance to Jones Inlet but the position of the whole entrance has changed so much that comparison is valueless.

b. H-1481b (1880)

This survey, on a 1:10,000 scale covers the area of the present survey, but changes have been too extensive to make a comparison having any cartographic value.

c. H-1538 (1882)

This survey on a 1:40,000 scale is an offshore sheet and overlapped the present survey at the entrance to Jones Inlet only where the bottom is very changeable.

d. H-3707 (1914)

In the area covered by the present survey H-3707, on a 1:20,000 scale included only one line run through Haunts Creek.

e. H-4794 (1927)
This survey on a 1:10,000 scale, covers only a small section of Long Creek from Lat. 40° 36'.6, Long. 73° 34.5 to Lat. 40° 37'.0. The shoal area in midstream directly off the entrance to Scow Creek remains, but the channel to the west of it appears to have been dredged since the 1927 survey.

Scow Creek was not surveyed on H-5377b (1934).

f. H-4795 (1927)
H-4796 (1927)

Comparison with these two sheets is discussed under review H-5377a.

7. Comparison with Chart No. 579.

a. Hydrography.

This is discussed in general under review H-5377a. The inlet at Lat. 40° 35'.5, Long. 73° 33'.2 was dredged out between the 1933 and 1934 work. According to the letter since received (831-1934 Long Island State Park Commission) this has been finished off as a yacht basin, but probably the depths remain as shown.

Engineer blue prints 28044-28045 received subsequent to this survey show additional changes in channel depths both inside and outside Jones Inlet.

b. Aids to Navigation.

The channel beacons shown in H 5377b (1934) were located by hydrography, but these have been completely changed about since the time of this survey. See letters 831 (1934) and 861 (1934).

8. Field Plotting.

This sheet was replotted in the office.

9. Additional Work Recommended.

This survey is complete in that the area is covered and no additional work is required, but in the elapsed time between the two seasons work sufficient changes occurred to make it difficult to combine the two surveys.

10. Note to Compiler.

This sheet H-5377b shows the additional work done during 1934 in black. Due to the changeable nature of the bottom in this area, preference should be given to the black soundings for charting purposes and the red soundings (1933 survey) should be used only to fill in blank areas or where the shal spots have not been disproved by the 1934 survey.

11. Superseding Old Surveys.

Within the area covered the present survey supersedes the following surveys for charting purposes:

H-50 (1835) in part	H-4794 (1927) in part
H-1481b (1880) in part	H-4795 (1927) in part
H-1538 (1882) in part	H-4796 (1927) in part
H-3707 (1914) in part	

12. Reviewed by - Harry T. Kelsh, May 1935.

Inspected by - R. J. Christman.

Examined and approved:

C. K. Green, C. K. Green
Chief, Section of Field Records

R. S. Patton
Chief, Division of Charts.

T. S. Borden
Chief, Section of Field Work.

G. Rude
Chief, Division of H. & T.

25 Jan 27, 1936
Ehrl