

6124ab

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

JUN 11 1936

Acc. No. _____

Form 504
Rev. Dec. 1933
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

Tophographic }
Hydrographic } Sheet No. 2 and 2a

State Connecticut

LOCALITY

Long Island Sound

a. Stratford Pt. to Fayerweather I.
~~Fayerweather Point to Stratford Pt.~~

b. Bridgeport Harbor

1934

CHIEF OF PARTY

G. C. Mattison

6124ab

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

JUN 11 1936

REG. NO.

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. a, b.
2, 2a

REGISTER NO. **H6124 a+b**

State Connecticut

General locality Long Island Sound
a - Stratford Pt. to Fayerweather Island

Locality Bridgeport b - Bridgeport Harbor

Scale 2 - 1/10,000
2a - 1/5,000 Date of survey 1934

Vessel Shore Party #16

Chief of Party G.C. Mattison

Surveyed by W.N. Martin

Protracted by G.I. Sawyer, H.W. Gibbs, A.O. Dority, G.C. Mattison

Soundings penciled by G.I. Sawyer, H.W. Gibbs, A.O. Dority, G.C. Mattison

Soundings in fathoms feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by _____

Inked by J. A. Mc Cormick

Verified by J. A. Mc Cormick

Instructions dated Aug. 10, 1933

Remarks: _____

DESCRIPTIVE REPORT

to

Accompany

HYDROGRAPHIC SHEET #2 - 1:10,000 (FAYERWEATHER POINT TO STRATFORD POINT)

Date of Instructions

Letter of instructions dated August 10th, 1933. ✓

Survey Methods

The east end of this sheet covers area occupied by oyster grounds. These are dredged yearly and change slightly because of this reason. This region also comprises numerous ridges and troughs running mostly normal to the shore line. ✓

The whole area was first surveyed by lines run at the spaces specified in the instructions for regular bottom. Ranges were used in most cases as the intensity of the current is not uniform at different depths, making compass courses unsatisfactory. Depth curves were then made of the area and the ridges were developed by lines along the ridge and drifting lines perpendicular to them to find least depth. To do this developing work and for ease of plotting in the boat, degree arcs for the stations used were drawn on the boat sheet, and the developing lines were plotted on a celluloid sheet overlay. Some lines were run on these arcs where they covered bottom to be developed. The sheet overlaps with the 20,000 sheet at the southerly limits. As the ridges extend on to the 20,000 sheet, the developing of the ridges and shoals was done mostly on the 20,000 sheet to avoid confusion in shifting sheets. Many of these ridges were developed at the start of the incoming tide, when ripples showed their location and extent. In those cases where soundings of different depths are located in the same place, it must be borne in mind that the ridges and shoals are sometimes very narrow or small. Rocks were visited at low water and located by sextant fixes. The rocks thus located at Stratford Point were the outermost rocks where they are continuous to high water, and also the large rocks, which are usually inside the outer limits. ✓

Discrepancies

Two instances of leadsmen misreading line by one fathom were discovered at once (south of Seaside Park and east of Long Point). Cross lines were immediately run to prove the error.

Dangers

The oyster stakes in this area constitute a danger at times, when they lay over completely under water during a strong current. A small boat going at full speed against the current could easily have a hole stove in her hull. In locating oyster bed boundaries, the stakes have been estimated to be from 1 to 6 meters and in varying directions from position. The actual position has been assumed to be the stakes as located. These bed stakes are not permanent and shift from time to time. Therefore these estimated distances have been considered negligible in smooth plotting. The outer limits of the stakes were located.

All shoals and shoal soundings on 220 chart were investigated and in most cases verified. The shoals were developed to a much fuller extent than was apparent on the 220 chart and the shapes of the curves are much different. One small 17' lump ^(18' charted) 41° 07' latitude - 73° 08' 30" longitude shown on the chart was struck on the regular sounding lines and O.K.'d by the leadsman at the time. Lines were later run over the area to ascertain extent, but as the lump was very small, it was not hit again.

HYDROGRAPHIC SHEET #2a - 1:5,000 BRIDGEPORT HARBOR). (H-61246)

Location of signals.

Hydrographic signals were established and located by triangulation and by airphoto compilation method from single lens photographs. (These last were checked around the harbor entrance by topography on aluminum mounted sheets). Several signals were made and located by the hydrographic party by sextant fixes.

Survey Methods.

Lines were run parallel to the channel in most cases, with cross lines at intervals to delineate channel edges and depth curves.

Dangers.

Obstruction ⁷⁰ 2899 meters north of Bridgeport Harbor Lighthouse. This is the base of an old beacon having five iron uprights, four on corners and one in the center. Least depth is 1/2 foot at M.L.W. It is dangerous to small boats. The danger buoy is east of the obstruction ~~(and its relation to the danger is ambiguous.)~~

Sunken barge at entrance to Lewis Gut. The stern is visible at high water and the wreck does not need other marker.

*Coal piles
more than 150 feet*
72 meters north northeast jam
H-61246
T 5263?

Channels.

In general the channel depths are as indicated on the chart, except that shoaling has occurred in some places near the channel edges, resulting in a channel of less width than projected. ✓

Spot soundings were taken at the edge of the channel in some places to define same where it was not considered expedient to run cross lines. Soundings were taken along all docks at keel line and close to the docks. ✓

Above notes submitted by W.N.Martin, D.O., in charge of launch work. ✓

Statistics.

Total Number of Positions	9,121
Total Number of Soundings	31,196
Statute Miles of Lines Plotted	591.4 Statute Mi.
Square Miles Covered	17.2 Sq. Statute Mi.

4


Supplemental Notes by Chief of Party.

The field work on this sheet was done by a launch party using the chartered launch "Noble," with Mr. W.N.Martin, D.O., in charge. A wire-cored hand lead line was used. A pulling boat was used in those areas wherever it was more suitable than the launch.

It was originally intended to include Bridgeport Harbor on the 1:10,000 sheet, but after examining the boat sheet, on a scale of 1:5,000, it was deemed advisable to make the smooth sheet on that scale, on a sub-sheet. Through a misunderstanding, the records were not kept separate for sheets Nos. 1, 2 and 3, and it was necessary to recopy some of the days in the volumes in order to separate the volumes for each sheet.

Mr. Martin was not available when the smooth plotting was done, but no great difficulty was experienced in interpreting the records.

Temporary employees reduced the records and plotted the smooth sheets. Mr. A.O.Dority, who was employed in the New Orleans office to complete the sheets, started to ink in the unverified shoreline, but was stopped by the Chief of Party, before he had completed all of the shoreline. That accounts for the partial inking of the shoreline.


G.C. Mattison,
Lieut. Comdr., C. & G.S.
Chief of Party.

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. **H6124**

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

Number of positions on sheet 9124
Number of positions checked 167
Number of positions revised 89
Number of soundings recorded 31,196
Number of soundings revised Many
Number of signals erroneously plotted or transferred 0

Date: Jan. 25, 1937

Verification by J. A. Mc Cormick

Time: 244 hrs.

Review by R. G. Christman
Feb. 10, 1937

Time: a = 18 1/2 hrs
b = 10 1/2 hrs

HYDROGRAPHIC SURVEY NO. H6124ab

Smooth Sheet yes 2

Boat Sheet 2

Sounding Records 21 Vols.

Descriptive Report yes

Title Sheet yes

List of Signals no

Landmarks for Charts (Form 567) none

Statistics yes

Approved by Chief of Party no

Recoverable Station Cards (Form 524) none

Special Chart for Lighthouse Service yes
(Circular Nov. 30, 1933)

Remarks

Remarks

Decisions

1		
2		
3		
4	no "Fall"	<u>Fayer</u>
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15	called "THE GUT" on USGS.	<u>LEWIS GUT</u>
16		
17	5265 + 2837 have "Johnson", but as chart 220 already has "Johnson", it should prevail	<u>Johnson</u>
18		
19		
20	T 5263 and T 2837 have "Peggy's" but see <u>DGN</u>	<u>PO940170CK</u>
21		
22		
23		
24		
25		
26		
27		

GEOGRAPHIC NAMES

Survey No. H6124a

Name on Survey

Chart 220
On Chart No. 1213
On previous survey No. 2267 T 2837
On U. S. quadrangle Maps
From local USCP information
On local Maps
P. O. Guide or Map
Rand McNally Atlas
U. S. Light List
KUSBGN

Name on Survey	A	B	C	D	E	F	G	H	
H6124a									1
<u>Stratford Point</u> ✓	*	✓	✓	✓	✓		✓	✓	2
<u>Bridgeport</u> ✓	*	✓	✓	✓	✓	✓	✓		3
<u>Fayerweather I</u> ✓	*	✓	✓	✓	✓		✓	✓	4
<u>Panfield Reef</u> ✓	*	✓	✓	✓	✓			✓	5
<u>Point No Point</u> ✓	*	✓	✓	✓					6
<u>Seaside Park</u> ✓ *		✓	✓	✓	✓				7
<u>Long Island Sound</u> *		✓	✓	✓			✓		8
									9
						Names underlined in red approved			10
						by <u>A.P.T.</u> on 7/14/36			11
H6124b	220	1213	75263	72837					12
<u>Bridgeport</u> ✓	*	✓	✓	✓	✓	✓	✓		13
<u>Seaside Park</u> ✓ *		✓	✓	✓					14
<u>Lewis Gut</u> ✓ *	✓	✓	✓	✓	✓				15
<u>White Rock Creek</u> *		✓	✓			✓			16
<u>Johnson Creek</u> *		✓	✓		✓	✓			17
<u>Yellow Mill Pond</u> *		✓	✓	✓	✓				18
<u>Pogonuck River</u> *	✓	✓	✓	✓	✓			✓	19
<u>Tongue Point</u> ✓ *	✓	✓	✓		✓				20
<u>Long Island Sound</u> *	✓					✓			21
<u>Seaside Park</u> *		✓	✓	✓		✓			22
<u>Steel Point</u> ✓ *					✓				23
									24
									25
						Names underlined in red approved			26
						by <u>A.P.T.</u> on 7/14/36			27

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
 DESCRIPTIVE REPORT
~~PHOTOSTAT OF~~

} No. H 6124_{a+b}
 } ~~No. T~~

{ received JUN 6 1936
 registered JUN 22 1936
 verified
 reviewed
 approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
22			
24			
✓ 25		1810	"Dangers" Channels - D.R.
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	
----	--

C. H. Green

LCC

TIDE NOTE FOR HYDROGRAPHIC SHEET

Division of Hydrography and Topography:

September 2, 1936.

✓ Division of Charts: Attention: Mr. E. P. Ellis

Plane of Reference

~~Tide Records~~ are approved in
21 volumes of sounding records for

HYDROGRAPHIC SHEET 6124 a-b

Locality Stratford Pt. to Fayerweather Island and Bridgeport Harbor, Conn.

Chief of Party: G. C. Mattison in 1934
Plane of reference is mean low water reading
2.8 ft. on tide staff at Bridgeport
13.4 ft. below B.M.1

Height of mean high water above plane of reference is 6.8 feet.

Condition of records satisfactory except as noted below:

W. H. Ham
Chief, Division of Tides and Currents.

Verifier's Report on H-6124 a and b.

Records:

The two sheets are not separated in the records. Many transfers have been made from book to book resulting in considerable confusion.

Drafting:

Drafting was fair. Field draftsman made numerous errors in numbering positions and the resulting glaring errors were not corrected in the field. The drafting as a whole was poor. ✓
Verifier's time on this sheet was doubled in correcting sloppy drafting.

Control:

Topographic signals are from T-6491 (1933-34) and T-6492 (1932). Numerous signals were spotted on the photographs of T-5263 (1933). ✓
Hydrographic signals originate with the records of H-6124 a and b. ✓
Shoreline is from T-5263 (1933).

Junctions:

Verifier has considered only contemporary junctions. This sheet is joined on the south and southeast by H-6125 (1934). The junction is satisfactory. ✓
H-6123 a (1933-34), H-6123 c (1933-34) and H-5223 (1932) join on the west. These junctions were also satisfactory.

Soundings on H-5223 (1932) were transferred to H-6123 a (1933-4) and the former superseded. [see Review of H-6123 a (1933-4)]

Rfb

Remarks:

This party seems to have tried to make all possible errors. The sheets do not look bad in their final shape however.

Kenner has attempted to correct the colors used to ^{H-6120} indicate tops, byars and spotted signals on 1 Field party made no differentiation and all names were lettered in blue. +

Jan. 25, 1937.

Submitted;

J. A. Mc Cormick

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 6124a (1934) FIELD NO. 2

Stratford Point to Fayerweather Island, Long Island Sound, Conn.

Surveyed in May-Sept. 1934, Scale 1:10,000

Instructions dated Aug. 10, 1933 (G. C. Mattison), April 18, 1932
(S. B. Grenell) and Mar. 23, 1933 (H. A. Cotton).

Hand Lead Soundings.

3 Point fixes on shore signals.

Chief of Party - G. C. Mattison.

Surveyed by - W. N. Martin.

Protracted by - G. I. Sawyer, H. W. Gibbs, A. O. Dority, G. C. Mattison.

Soundings penciled by - G. I. Sawyer, H. W. Gibbs, A. O. Dority, G. C. Mattison.

Verified and inked by - J. A. McCormick.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual except as follows:

- a. The sounding records in the "a" sheet and the "b" sheet which sheets were surveyed on different scales, were not kept separate. (See D. R., page 4).
- b. No list of signals was attached to the fly leaf of the first volume of the sounding records., (Par. 139).

The Descriptive Report satisfactorily covers all items of importance except that the method of locating the air photo signals should have been clearly stated, there being no certainty as to whether the signals were derived from a radial plot or from positions spotted on the photographs.

2. Compliance with Instructions for the Project.

The plan, character and extent of the development are in accordance with the instructions for the project.

3. Shoreline and Signals.

Shoreline is derived from the air photo compilation, T-5263 (1933).

The topographic signals in red originate from graphic control surveys, T-6491 (1933-34) and T-6492 (1932). Those in green have been spotted from the photographs of the air photo compilation, T-5263 (1933).

The hydrographic signals were located by sextant cuts and measured distances recorded in sounding volumes 8 and 12.

the bottom is characterized by numerous parallel ridges or lumps of narrow width extending in a north-south direction. The steep slopes indicated on the old survey by differences of 5 to 8 feet in adjacent soundings are verified in a number of instances by the present survey, an example being a least depth of 22 feet in lat. $41^{\circ}06.4'$ long. $73^{\circ}07.6'$ which is close to depths of 31 to 32 feet on either side. The present survey development while generally excellent is not sufficiently close to confirm, disprove, or indicate alteration of depths on all of these 1885 and 87 spots and a number have been carried forward. The depths which were or were not carried forward, however, were selected only after a careful study of each individual case in relation to the irregularity of the area as a whole. In this connection, no authority could be found in the records of the 1887 work, for the 20 foot sounding (charted; lat. $41^{\circ}06.85'$ long. $73^{\circ}08.4'$) falling on a ridge and in depths of 24 feet on the present survey. This sounding should be disregarded in future charting.

The 9 and 10 foot soundings (charted) originating with H-1575 (1883) in lat. $41^{\circ}08.9'$ long. $73^{\circ}12.2'$ fall in depths of 13 to 15 feet on the present survey and between soundings lines spaced 50 to 75 m. apart. The soundings were obtained on line and each is confirmed by another sounding of similar depth on the same line.

The two soundings (charted) are actually two detached shoal spots since they are separated by a single $13\frac{1}{2}$ foot depth. Inasmuch as surrounding depths on both surveys are in excellent agreement and the development on the present survey is not sufficiently close to indicate changes in depth, the soundings have been carried forward.

Because of the changes noted and except as noted above, the closer development of the present survey, H-6124a (1934) should supersede the above surveys for future charting purposes.

A pencil note on H-1731 (1886) states "30 ft. on chart 265 without known authority". The 30 was charted on the Nov. 1911 edition of Chart 265 in lat. $41^{\circ}07.1'$ long. $73^{\circ}10.7'$ but does not appear on the Sept. 1916 edition of the same chart. This is noted here as a permanent record of the facts.

c. T-1527 (1883), T-2837 (1907) and T-4255 (1927).

The numerous bare rocks in the vicinity of Seaside Park and the rocks, bare and awash (all charted as rocks awash) at Stratford Point originate with T-1527 (1883) and T-2837 (1907) and T-4255 (1927) respectively. They are generalized representations of a stone or boulder strewn beach, the more

important of which were definitely located on the present survey or on the adjoining sheet, H-6124b (1934). The present survey delineation should supersede previous chartings from these surveys.

8. Comparison with Chart 220 (New Print dated July 14, 1936).

a. Hydrography.

Within the area of the present survey, the chart is based on surveys discussed in the foregoing paragraphs except that the channel into Bridgeport Harbor is shown by limiting lines.

b. Controlling Depths.

The charted controlling depths of "24 feet Aug. 1933" and "25 feet March 1933" are derived from U. S. Engineer Surveys, BP. 26932 (1933) and 26325 (1933) respectively. These charted controlling depths are consistent with the present survey except for a single sounding of $22\frac{1}{2}$ feet, hard mud, near the center of the channel (lat. $41^{\circ}09.05'$ long. $73^{\circ}10.87'$). This $22\frac{1}{2}$ (obtained on June 1, 1934) falls close to a 21.6 foot sounding on the Engineers' survey (BP. 26932, surveyed Aug. 1933) which sounding is accompanied by the notation "removed to 25.5 by dragging". The date of the dragging operation is not known but in all probability occurred before the receipt (Nov. 1933) of the blueprint in this office. However, in the event that the dragging notations represented proposed work, it is possible that the actual dragging was done subsequent to the date of the present survey in which case the shoal would have been removed. This matter has been referred to the Engineers' for information regarding the date of the dragging.

c. Aids to Navigation.

- (1). The charted aids to navigation are in substantial agreement with the positions given by the present survey and satisfactorily mark the features intended.
- (2). The present survey shows marker buoys accompanying the lighted bell buoys in lat. $41^{\circ}06.9'$ long. $73^{\circ}07.3'$ and lat. $41^{\circ}08.5'$ long. $73^{\circ}11.0'$ which are not shown on the chart. They are also listed in the 1936 Local Light and Buoy List.
- (3). L. H. N to M 32 (1936) states that the designation of the buoy in lat. $41^{\circ}07.9'$ long. $73^{\circ}07.5'$ has been changed from "N20" to "Gong". This information is subsequent to the present survey.

9. Field Plotting.

The protracting of positions was fair but numerous errors were made in numbering the positions and the drafting as a whole was poor.

10. Additional Field Work Recommended.

The survey is satisfactory and no further work is required.

11. Note to compiler.

Attention is called to the status of several floating Aids to Navigation discussed in paragraph 8 c (2) and (3) and to the 20 foot sounding which should be expunged from the chart discussed in paragraph 7 b of this review.

12. Superseded Prior Surveys.

Within the area covered the present survey with the indicated additions from previous surveys supersedes the following surveys for charting purposes.

H-18(1835) in part	H-29(1838) in part
H-20(1835) in part	H-1575(1883) in part
H-23(1837) in part	H-1731(1886) in part
H-24(1837) in part	H-1735(1886) in part
H-25(1835) in part	H-1736(1885 & 87) in part

13. Reviewed by R. J. Christman, Feb. 10, 1937.
Inspected by Harold W. Murray, Feb. 24, 1937.

Examined and approved:

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

L. O. Tolbert
Chief, Division of Charts.

Fred. L. Peacock
Chief, Section of Field Work.

Thude
Chief, Division of H. & T.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 6124b (1934) FIELD NO. 2a

Bridgeport, Long Island Sound, Connecticut
Surveyed in May-Sept. 1934, Scale 1-5,000
Instructions dated August 10, 1933 (G. C. Mattison) Apr. 18,
1932 (S. B. Grenell) and March 23, 1933 (H. A. Cotton)

Hand Lead Soundings.
Pole Soundings.

3 Point fixes on shore signals.

Chief of Party - G. C. Mattison.
Surveyed by - W. N. Martin.
Protracted by - G. I. Sawyer, H. W. Gibbs, A. O. Dority,
G. C. Mattison.
Soundings penciled by - G. I. Sawyer, H. W. Gibbs, A. O.
Dority, G. C. Mattison.
Verified and inked by - J. A. McCormick.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual except that the topographic signals were located on a scale of 1-10,000 instead of on the scale of the hydrographic sheet.

The reason for not keeping the sounding records for H-6124a and H-6124b separate is explained on page 4 of the Descriptive Report.

The Descriptive Report satisfactorily covers all items of importance except that the method of locating the air photo signals should have been clearly stated, there being no certainty as to whether the signals were derived from a radial plot or from positions spotted on the photographs.

2. Compliance with Instructions for the Project.

The plan, character and extent of development are in accordance with the instructions for the project.

3. Shoreline and Signals.

The shoreline is derived from air photo compilation T-5263 (1933).

The topographic signals are derived from graphic control survey, T-6491(1933-4) and air photo compilation, T-5263 (1933).

The hydrographic signals were located by sextant cuts recorded in sounding volumes 8, 9 and 10.

4. Sounding Line Crossings.

The depths at sounding line crossings agree satisfactorily.

5. Depth Curves.

Within the area of the survey the usual depth curves can be drawn satisfactorily.

6. Junctions with Contemporary Surveys.

The junction with H-6124a (1934) to the south is satisfactory.

7. Comparison with Prior Surveys.

a. H-23 (1837), H-24 (1837), H-25 (1835).

These surveys are on scales 1-10,000, 1-20,000 and 1-5,000 respectively. The area embraced by the present survey has been greatly changed by dredging and other improvements. No part of the information on the above surveys is in use on the present chart and they need not be considered in future charting.

b. H-1575 (1883), H-1736 (1885).

These surveys are on scales of 1-5,000 and 1-10,000 respectively, the first containing only a few soundings within the area of the present survey westward of Bridgeport Light. The entire area covered by the present survey has changed since the above surveys were made, due to dredging and other improvements. The information from these surveys on the present chart is negligible, consisting only of an occasional sounding or other feature in areas which were not covered by the U. S. Engineer surveys. The present survey adequately covers these areas and should supersede the above surveys in future charting.

c. T-1527 (1883).

The numerous bare rocks (charted as rocks awash) in the vicinity of Seaside Park originating with this survey is a generalized representation of a boulder strewn beach, the more prominent which are definitely located on the present survey. The delineation on the present survey should supersede previous chartings from this survey.

8. Comparison with Chart 220 (New Print dated July 14, 1936).

a. Hydrography.

Within the area covered the chart is based on surveys discussed in the foregoing paragraph and on U. S. Engineer surveys. The latter are shown by limiting lines and

controlling depths. The latest blueprints on file affecting the area under discussion are Nos. 26325 (1933), 29717 (1936), 29748 (1936), 29928 (1936) and 30215 (1937).

b. Controlling Depths.

The charted controlling depth "25 feet March 1933" in the entrance channel is based on Bp. 26325 (1933). The present survey shows 26 feet in this channel.

The anchorage area is charted "14 to 22 feet June 1935" from U. S. Engineer Reports. The present survey shows 24 to 28 feet which is in agreement with the 1933 Engineer survey. A later Engineer Report (Chart letter 523/2 of 1936) is on file.

The controlling depths in Johnson Creek are charted from U. S. Engineer Reports. The present survey is in agreement with the charted depths.

All other controlling depths are from sources later than the present survey, (see Chart letter 523/2 of 1936 and blueprints listed in part. 8a).

As maintenance dredging is liable to be done at any time charting should be from the latest information available.

c. Aids to Navigation.

The charted aids to navigation are in substantial agreement with the positions given on the present survey.

9. Field Plotting.

The protracting of positions and the drafting as a whole was only fair. Numerous errors were made in numbering the positions.

10. Additional Field Work Recommended.

The survey is satisfactory and no further work is required.

11. Superseding Old Surveys.

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

H-23 (1837)	in part
H-24 (1837)	" "
H-25 (1883)	" "
H-1575 (1883)	" "
H-1736 (1885)	" "

12. Reviewed by - R. J. Christman.

Feb. 5, 1937.

Inspected by - A. L. Shalowitz.

Examined and approved:

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

L. O. Robert
Chief, Division of Charts.

Fred. L. Peacock
Chief, Section of Field Work.

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

4. Sounding Line Crossings.

The sounding line crossings are satisfactory, depths generally agreeing within 1 foot or less.

5. Depth Curves.

Within the limits of the survey the usual depth curves may be satisfactorily drawn.

6. Junctions with Surveys.

- a. The junctions with H-6124b (1934) at the entrance to Bridgeport Harbor, with H-6125 (1934) to the south and southeastward and with H-6123a (1933-34) and H-6123c (1933-34) to the westward are satisfactory.
- b. This survey makes a satisfactory overlap with H-3936 (1916) to the westward. The 10 foot sounding (charted) in lat. $41^{\circ}08.5'$ long. $73^{\circ}12.75'$ was an error in plotting, the records showing the correct depth to be 17.9 feet. The 10 foot sounding should be expunged from the chart.
- c. The junction on the east and northeast with H-1735 (1885) is satisfactory.

7. Comparison with Prior Surveys.

- a. H-18 (1835), H-20 (1835), H-23 (1837), H-24 (1837), H-25 (1835) and H-29 (1838).

The first three surveys are on scales of 1:10,000, the others, on scales 1:20,000, 1:5,000 and 1:20,000 respectively. In the deeper areas the agreement with the present survey is fair. Inshore areas; however, have changed greatly and there is considerable difference in the detail of the 12 foot curve. The shoal areas off Point No Point have shifted in position and slightly deepened (1 to 3 feet). The charts are based on surveys subsequent to the above surveys and it would serve no useful cartographic purpose to list the various changes in detail. The above surveys need not be considered in future charting.

- b. H-1575 (1883), H-1731 (1886), H-1735 (1885), and H-1736 (1885 & 87).

These surveys are on scales of 1:5,000, 1:40,000, 1:10,000 and 1:10,000 respectively. The agreement with the present survey is generally good except off the entrance to Bridgeport Harbor where dredging has been done and directly off Point No Point where there has been considerable change in details on the shoal areas originating with H-1736 (1885 and 87). These shoals have changed in position and shape and in some instances in depth of water over them. In the vicinity of lat. $41^{\circ}07'$ long. $73^{\circ}07.5'$

Applied to Chart Car. 220

1213

February 2, 1938

Apr. 1938

W. E. McEwen
S. M. Albert

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1212

11 July 1958

Nichols