

5881 ~~(Add. Wk. 1936)~~
a

ADD. WK. 1936
5881a

Form 504
Rev. Dec. 1933

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

DESCRIPTIVE REPORT

Topographic } Sheet No. ~~5881a (Add. Wk. 1936)~~
Hydrographic }

State Mass.

LOCALITY

Buzzards Bay

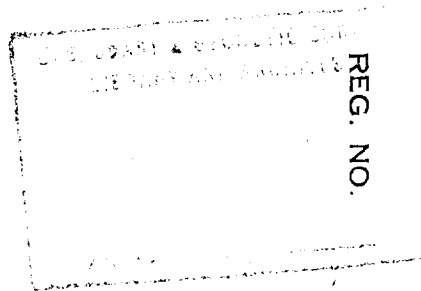
New Bedford Harbor
(Off New Bedford Gas & Edison Light Co. Wharf)
~~(Off Edison Company's Dock)~~

1936

CHIEF OF PARTY

E. B. Roberts

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. 4.....5881

REGISTER NO.

State Massachusetts.....

General locality Buzzards Bay.....

Locality New Bedford Harbor and Acushnet River......

Scale 1:5,000..... Date of survey June to August....., 1935

Vessel Field Party No.5.....

Chief of Party Lieut. Wm. D. Patterson.....

Surveyed by G.F. Jordan, Surveyor.....

Protracted by J.C. McIlwaine & D.W. Journaey......

Soundings penciled by Wm. D. Patterson & G.F. Jordan......

Soundings in ~~fathoms~~ feet

Plane of reference Mean Low Water......

Subdivision of wire dragged areas by

Inked by J. C. Ladd.....

Verified by " " ".....

Instructions dated May 14, 1934......, 19

Remarks:

DESCRIPTIVE REPORT TO ACCOMPANY
HYDROGRAPHIC SHEET NO. 4 (Field Number)
New Bedford Harbor and Acushnet River
Mass. 1935.

Project HT-179, Lieut. Wm. D. Patterson, Chief of Party.

DATE OF INSTRUCTIONS:

This survey was made in accordance with the Director's Instructions dated July 11, 1934 and Supplemental Instructions dated May 9, 1935.

SURVEY LIMITS:

This sheet covers New Bedford Harbor and waterfront from Latitude $41^{\circ} 37.3'$ north to the head of navigation in Acushnet River. The sheet joins hydrographic sheet No. 3 (field no.) on the south.

SURVEY METHODS:

The standard three point sextant fix was used for obtaining positions. Depths were obtained with the standard lead-line, a mahogany wire-center tiller rope, with cupped lead. The line was marked in fathoms and feet.

In the development of shoals and search for least water, the method of drift sounding generally employed was to mark the location with a small buoy, and drift down on the buoy broadside with two or three leadlines over the side. Numerous overlapping drifts were made so that the location was covered within a 50 meter radius of the charted sounding or least water indication.

This sheet was surveyed by a large skiff with outboard motor. The low water line was developed where possible, but due to the small range of tide and the rocky coast line this was only possible in a few localities.

DANGERS:

Submerged piling forms dangers to small boats at latitude $41^{\circ} 38.95'$, longitude $70^{\circ} 55.15'$; latitude $41^{\circ} 39.2'$, longitude $70^{\circ} 55.3'$; and at latitude $41^{\circ} 39.3'$, longitude $70^{\circ} 55.2'$.

The sand spits making off to eastward and northward of Crow Island are dangerous to small boats.

Two gravel shoals eastward of Popes Island, position 113 K with $1\frac{1}{2}$ feet and position 114 K with $3\frac{1}{2}$ feet are dangerous to small boats.

A hard sand shoal makes off the northwest end of Popes Island for about 70 meters with depths of 2 to 4 feet at its end. This sand spit is on the edge of the ship channel and is dangerous for vessels passing through the draw bridge.

Other dangers are mentioned under the heading below:

COMPARISON WITH PREVIOUS SURVEYS:

1 Latitude $41^{\circ} 37.25'$, longitude $70^{\circ} 54.6'$, charted 4 & 6 foot spots. A least depth of $4\frac{1}{2}$ feet (position 4 L) was found on the charted 4 foot spot, but a depth of 4 feet was found on this shoal on sheet "3". Recommend charting 4 feet. The 6 foot spot was not found, but it is recommended that it be retained for charting.

2 Latitude $41^{\circ} 37.3'$, longitude $70^{\circ} 54.8'$, a charted 4 foot spot was not found. This area has deepened and it is recommended that the 4 foot sounding be deleted. *See Review para. 76-101*

3 The charted 5 foot spot on Dix Ledge, latitude $41^{\circ} 37.7'$, longitude $70^{\circ} 54.3'$ was found with a least depth of $5\frac{1}{2}$ feet (position 2 G). Recommend charting $5\frac{1}{2}$ feet. *(See Rev. 76th)*

4 The charted two 5-foot shoals northwest of Palmer Island in latitude $41^{\circ} 37.7'$, longitude $70^{\circ} 54.8'$ were found with least depths of $5\frac{1}{2}$ feet on each (position 1 J and 48 S).

5 The charted 5, 6 and 4 foot spots on the shoal bank extending off the wharves in approximate latitude $41^{\circ} 37.8'$, longitude $70^{\circ} 55.0'$ were found with depths of $5\frac{1}{2}$ feet (position 47 S), 7 feet at position 46 S and $4\frac{1}{2}$ feet (position 45 S) respectively. Recommend charting the new depths.

6 The charted 6 foot spot in latitude $41^{\circ} 37.9'$, longitude $70^{\circ} 55.1'$ was found with a least depth of 6 feet (position 44 S). A new shoal with a least depth of 4 feet (position 43 S) was found 110 meters to westward of this spot.

7 The charted 13 foot spot in latitude $41^{\circ} 38.0'$, longitude $70^{\circ} 55.15'$ was searched for (position 40 S) but not found. It is recommended that it be removed from the chart. *See Review 8a-(4)*

8 The charted 9 foot spot, latitude $41^{\circ} 38.0'$, longitude $70^{\circ} 54.7'$ was searched for and not found. A least depth of 12 feet (position 30 S) was found. It is recommended that 12 feet be charted in place of 9 feet. The charted 11 foot spot to eastward was found (position 31 S). *See Review 8a-(1)*

9 The charted 2 foot spot in latitude $41^{\circ} 38.4'$, longitude $70^{\circ} 54.6'$ falls in deep water on this survey and its deletion is recommended. *See Rev. par. 7b-(9)*

10 The charted 2 foot spot in latitude $40^{\circ} 38.5'$, longitude $70^{\circ} 54.9'$ was searched for and a least depth of 3 feet (position 14 S) was found. It is recommended that 3 feet replace the 2 foot sounding. *See Rev. par. 8a-(2)*

11 The charted 2 foot sounding in latitude $40^{\circ} 38.85'$, longitude $70^{\circ} 55.2'$ was searched for and a least depth of 3 feet (position 13 S) was found. It is recommended that 3 feet replace the 2 foot sounding. *See Rev. par. 8a-(2)*

12 The charted 4 foot sounding in latitude $40^{\circ} 38.45'$, longitude $70^{\circ} 55.4'$ was searched for on two occasions and not found. It is recommended that it be deleted. *See Rev. par. 8a-(3)*

13 The charted rock awash on the east side of Palmer Island in latitude $41^{\circ} 37.5'$, longitude $70^{\circ} 54.6'$ was searched for and not found. A submerged rock was found just south of this position and two submerged rocks further north. It is recommended that the rock awash be deleted from the chart. *See Rev. par. 7b-(6)*

CHANNELS:

New Bedford Harbor, and the main approach channel, is being deepened by dredging and the removal of rock ledges by blasting. This work was in progress during and after the completion of this survey, so the correct depths for charting should be taken from the final U.S. Engineers Survey after their work is completed.

A line of deep soundings extends northwestward from Palmer Island. This was caused by dredging for a cable crossing.

BRIDGES:

New Bedford-Fairhaven Bridge has a center pier opening with a horizontal clearance of 94 feet and a vertical clearance of 82 feet at mean high water when closed (see Vol. 3 page 45 to 49).

The Coggeshall Street Bridge has a center pier opening with a horizontal clearance of 33 feet and a vertical clearance of 29 feet at mean high water when closed. (See Vol. 5, page 4 & 5). *See Rev. par. 1d-(2)*

Slocum Bridge has a vertical clearance, under the center span of 53 feet at mean high water (see Vol. 4 page 65).

Note:- The hydrographer had been discharged before the smooth sheet was plotted and this report is being written by the Chief of Party from data in the Sounding Records. The horizontal clearances given above are from the Coast Pilot and appear to check the topographic sheet. It is believed that the hydrographer measured the horizontal clearances, but no record could be found of the results.

GEOGRAPHIC NAMES:

No changes in Geographic Names were noted in this area.

LANDMARKS FOR CHARTS:

These will be submitted as a separate report for the entire season.

REMARKS:

The hydrographer was discharged, due to the disbandment of the party, before the smooth sheet was plotted. This report is being written by the Chief of Party from the data available.

Respectfully submitted,



Wm. D. Patterson,
Lieut., C. & G. Survey,
Chief of Field Party No. 5.

STATISTICS

for

Sheet No. 4 (Field No.)

DATE	DAY	VOLUME	POSITIONS	SOUNDINGS	MILES (Stat.)
June 7	A	1	64	293	6.0
8	B	1	162	786	18.0
13	C	1	40	206	4.5
14	D	1	125	527	11.8
15	E	2	85	370	5.4
17	F	2	116	512	9.1
19	G	2	109	448	6.3
20	H	2	6	24	0.4
21	J	3	72	309	5.1
22	K	3	115	558	10.0
24	L	3	105	396	5.9
25	M	3	63	368	5.7
26	N	4	127	605	11.4
27	P	4	118	534	8.6
28	Q	4	72	340	6.8
July 1	R	4 & 5	23	43	0.4
Aug. 5	S	5	50	174	2.7
6	T	5	29	114	2.0
Totals			1481	6607	120.1

Area in square statute miles..... 2.10

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. 5881

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

Number of positions on sheet	1481
Number of positions checked	250
Number of positions revised	5
Number of soundings recorded	660.7
Number of soundings revised	5.5
Number of signals erroneously plotted or transferred	none

Date: Jan. 16, 1936

Verification by J. G. Ladd

Time: 10 da., 1 hr.

Review by G. Pisegani

Time: 17 da., 1 hr.

HYDROGRAPHIC SURVEY NO. 5881

Smooth Sheet Yes

Boat Sheet Vol. 1

Sounding Records Yes Vols. 5

Descriptive Report Yes

Title Sheet Yes

List of Signals Vol. 1

Landmarks for Charts (Form 567) Yes ✓

Statistics Yes

Approved by Chief of Party Yes

Recoverable Station Cards (Form 524) No

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

Remarks _____

TIDE NOTE FOR HYDROGRAPHIC SHEET

December 4, 1935.

Division of Hydrography and Topography:

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

Tide Reducers are approved in
5 volumes of sounding records for

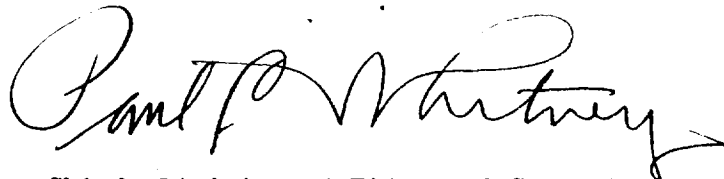
HYDROGRAPHIC SHEET 5881

Locality New Bedford Harbor and Acushnet River, Mass.

Chief of Party: Wm. D. Patterson in 1935.
Plane of reference is mean low water reading
0.6 ft. on tide staff at New Bedford-Fairhaven Bridge
15.5 ft. below B.M. 1
0.4 ft. on Tide Staff at Nashawena Mills
12.0 ft. below B.M. 10

Height of mean high water above plane of reference is 3.7 feet at New Bedford-Fairhaven Bridge; 3.8 feet at Nashawena Mills.

Condition of records satisfactory except as noted below:



Chief, Division of Tides and Currents.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5881 (1935) FIELD NO. 4

New Bedford Harbor and Acushnet River, Buzzards Bay, Mass.

Surveyed in June - August, 1935.

Instructions dated July 11, 1934 (W. D. Patterson) and

Supplemental Instructions May 9, 1935.

Hand Lead Soundings.

3 Point fixes on shore signals.

Chief of Party - W. D. Patterson

Surveyed by - G. F. Jordan

Protracted by - J. C. McIlwaine, D. W. Journaey

Soundings penciled by - W. D. Patterson, G. F. Jordan

Verified and inked by - J. G. Ladd

1. Condition of Records.

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

- a. A part of the west shore line southward from Lat. $41^{\circ} 37.4'$ was omitted.
- b. Several descriptive notes pertaining to rocks, bulkhead, and bridges were omitted.
- c. Buoy N 12 was not plotted on the sheet. Additions covering the above were accomplished in the office.
- d. The Descriptive Report is complete as to essential details and satisfactorily covers all items of importance, except as follows:

(1) The controlling depth in the channel was omitted.

(2) The vertical clearances at the center spans of Slocum Bridge and Coggeshall Bridge as given in the descriptive report are not in close agreement with the values computed in the office from the sounding records. The differences between the values are as follows:

Slocum Bridge: $5\frac{1}{2}$ ft. at M.H.W. in D.R; 7.8 ft. office comp.
Coggeshall St. Bridge 4 ft. at M.H.W. in D.R; 2.8 ft. office computation.

In the case of the New Bedford - Fairhaven Bridge only a small difference of .2 of a foot exists. The office values have been added to the sheet and to the Descriptive Report.

2. Compliance with Instructions for the Project.

The survey complies with the instructions for the project, except that the shoal soundings mentioned in par. 8a(5), 8a(6) in this review were not investigated. The channel approach to Green and Woods pier in approximate Lat. $41^{\circ} 37.7'$, Long. $70^{\circ} 55.0'$ was insufficiently developed on the present survey. This area was dredged subsequent to the present survey and the U. S. Engineer survey BP 29,635 of May 1936 shows a close development of the area on a scale of 1:2,400 and under date of May 22, 1936 (Chart letter 356 of 1936) they report "as determined by sweeping there is a clear depth of 20 feet with a width of about 100 feet in the approach."

With reference to the grounding of the S.S. LIBERTY GLO (Chart letter 316 of 1936), which grounding was not charted, the exact location of the obstruction is not known but the dock engineer plans a resurvey of their slip in a few weeks (see letter from the Inspector at Boston, dated May 23, 1936, attached to Chart letter 356 of 1936).

3. Shore-line and Signals.

The shore-line and signals originate with T-6355 (1935) and T-6356 (1935).

4. Sounding Line Crossings.

The few crosslines that were run as well as the adjacent lines show excellent agreement.

5. Depth Curves.

The usual depth curves may be satisfactorily drawn, including portions of the low water curve.

6. Junctions with Contemporary Surveys.

The junction with H-5880 (1935) on the south is satisfactory.

7. Comparison with Prior Surveys.a. H-158 (1845), H-159 (1845).

These surveys are on a scale of 1:20,000 and cover the area of the present survey from Palmer Island to approximate Latitude $41^{\circ} 39'$. Considerable changes have taken place since the old survey due to extensive dredging operations for harbor improvements and to the current action in the channel up river. In general, however, in the more open areas unaffected by the dredging, the agreement in depth with the present survey is fair.

b. H-2230 (1895), H-2231 (1895), H-2250 (1896).

These surveys on a scale of 1:10,000 constitute a single survey of the area under consideration. A comparison with the present survey indicates that very little change has taken place except in areas affected by dredging for harbor improvements. A shoaling of 2 to 3 feet has taken place in the channel northward of the Coggeshall Bridge as shown on H-2231 (1895). A shoaling up to about 1 foot is noted in the area northward of Popes Island (H-2230) and a like amount in the areas eastward of the improved harbor south of the New Bedford-Fairhaven bridge, and westward of Palmer Island (H-2250).

Special features are noted as follows:

- (1) Dix Ledge with a least depth of 5 feet (charted) in Lat. $41^{\circ} 37.7'$, Long. $70^{\circ} 54.3'$, was developed on H-2250 (1896). A single line of soundings on H-2230 (1895) also gives 5 feet as the depth on the ledge. The present survey made an examination of the ledge by drift sounding over the area and found a least depth of 5-1/2 feet. The 5-1/2 feet has been plotted on the smooth sheet.
- (2) A 3 foot sounding "Rock" (not charted) is shown on H-2230 (1895) in Lat. $41^{\circ} 37.6'$, Long. $70^{\circ} 54.76'$. It falls near a 4 foot sounding on the present survey. The bottom in the vicinity is irregular and therefore the 3 has been carried forward to H-5881 (1935).
- (3) A 13 foot sounding falls in approximate Lat. $41^{\circ} 38.5'$, Long. $70^{\circ} 55.3'$, on H-2230 (1895). A pencil note on the sheet refers to "Letter by Hanus, Reg. No. 454 of 1897, Hyd. I. Office" as authority for the removal of this rock.
- (4) The pier extending out from the west shore about 120 meters north of the Coggeshall Bridge has disappeared. However, the present survey found a pile of rocks in the position of the end of the former pier as given on H-2231 (1895) and this is shown on H-5881 (1935) by the rock awash symbol. This pile of rocks may have been used as support for the end of the pier.
- (5) Two indefinite symbols (not charted) shown on H-2250 (1896) in Lat. $41^{\circ} 37.5'$, Long. $70^{\circ} 54.6'$ originate with T-2220 (1895) but are also noted in the sounding records of H-2250 as "remains of old wharf." The present survey found no evidence of these features and it is assumed that the wharf has entirely disintegrated.

- (6) A bare rock (not charted) is shown on H-2250 (1896) in Lat. $41^{\circ} 37.55'$, Long. $70^{\circ} 54.6'$, which appears to originate with T-194 bis (1844). The records of H-2250 (1896) do not note any bare rock in this vicinity but mention a sunken rock at minus tide "with 2 feet of water on top." This rock plots in the position of the rock awash symbol on the chart. The present survey shows a rock awash about 30 meters N by W of the sunken rock but does not note any bare rock. The 2 foot sounding from H-2250 (1896) has been carried forward and with this addition the representation on H-5881 (1935) should be accepted for charting purposes.
- (7) The 3 foot sounding (charted) in Lat. $41^{\circ} 37.4'$, Long. $70^{\circ} 54.55'$ comes from H-2250 (1896) and falls on the present survey between a 5 foot and a 9 foot sounding. The general depths in the vicinity are in good agreement on the two surveys and as this is a generally foul area the 3 has been retained.
- (8) The foul ground extending southward of Palmer Island is in general agreement with the present survey except that the present survey does not show any bare rocks and the 2 foot rock (charted 2) from H-2250 (1896) in Lat. $41^{\circ} 37.3'$, Long. $70^{\circ} 54.52'$ falls close to two sunken rocks with depths of $3\frac{1}{2}$ feet on the present survey. It is probable that some disintegration has taken place in this area and the representation on the present survey should be accepted for charting.
- (9) The 2 foot sounding (charted) in Lat. $41^{\circ} 38.4'$, Long. $70^{\circ} 54.64'$ comes from H-2250 (1896). Great changes have taken place in this vicinity due to dredging and filling since the above survey was made. The present survey should be accepted for charting. (See Descriptive Report, page 3, item 9.)
- (10) The 4 foot sounding (charted) in Lat. $41^{\circ} 37.33'$, Long. $70^{\circ} 54.85'$ is one of two such soundings on H-2250 (1896) at the edge of the shoal extending S.S.W. of Palmer Island. A careful search with drift soundings during the present survey shows a deepening to 8 feet in this vicinity. The 4 should no longer be charted. (See Descriptive Report page 2, item 2.)
- (11) The sand spots (charted) in Lat. $41^{\circ} 37.68'$, Long. $70^{\circ} 54.23'$ and in Lat. $41^{\circ} 37.92'$, Long. $70^{\circ} 54.28'$ originate with H-2250 (1896) and fall on the present survey in depths of 1 to 3 feet. Examination of the

records shows that these are zero soundings on a hard bottom. Since the present work is closely developed and shows a uniform and deeper bottom it is believed that these spots no longer exist and should be disregarded in future charting.

c. H-2307 (1896-97)

This survey is on a scale of 1:10,000 and covers the channel area of the present survey between Latitude $41^{\circ} 37.5'$ and Latitude $41^{\circ} 38'$. The depths in the channel area have been deepened by dredging. In the inshore areas between Palmer Island and the east side of the harbor, the depths are in general good agreement with the present survey.

8. Comparison with Chart 252 (New Print dated Jan. 23, 1936)
Chart 249 (New Print dated Dec. 18, 1935)

a. Hydrography.

Within the area of the present survey the charts are based on surveys discussed in the foregoing paragraphs and on information from the following U. S. Engineer blueprints and miscellaneous data: -

- (1) The 9 foot sounding (charted) in Latitude $41^{\circ} 38.0$, Longitude $70^{\circ} 54.65'$ comes from Bp. 9,967 (undated but received in 1904) and falls on the present survey in depths of 12 to 20 feet practically on the edge of a dredged channel. The area was examined by drift sounding and the 9 should no longer be charted. (See Descriptive Report page 2, item 8.)
- (2) A 2 foot sounding (charted) in Latitude $41^{\circ} 38.83'$, Longitude $70^{\circ} 55.12'$ and a 2 foot sounding (charted) in Latitude $41^{\circ} 38.5'$, Longitude $70^{\circ} 54.86'$ come from Bp. 12,769 (1905). The depths on the blueprint actually are 2.7 feet and they fall in depths of 3 to 4 feet on the present survey. The area was examined by drift sounding with a resulting least depth of 3 feet and in view of the close agreement the present survey should be accepted for charting. (See Desc. Rep. page 3, items 10 and 11.)
- (3) The 4 foot sounding (charted) in Latitude $41^{\circ} 38.45'$, Longitude $70^{\circ} 55.32'$ comes from Bp. 12,969 (1909) and falls in depths of 9 feet on the present survey which covers the area adequately. In addition, the 4 foot spot was searched for on two occasions without finding any indications. It should no longer be charted. (See Desc. Rep. page 3, item 12.)

- (4) The 13 foot sounding (charted) in Latitude $41^{\circ} 38.0'$, Longitude $70^{\circ} 55.15'$ comes from Bp. 22,783, (1928-29) and falls in a depth of 18 feet on the present survey. A special search failed to find the 13 and it should no longer be charted. (See Desc. Rep. page 2, item 7.)
- (5) A number of soundings shoaler than indicated by the present survey are charted from various U. S. Engineer blueprints of the improved areas in New Bedford Harbor and approaches. Dredging was in progress at the time of the survey. (See Desc. Rep. page 3 "Channels".) Because of these changes, it is recommended that the present survey be accepted for charting pending the receipt of revised surveys from the U. S. Engineers.
- (6) The "21 RK" charted about 225 meters north of Palmer Island light comes from Chart letter 175 (1934) which states that the Army Engineers located a pinnacle rock or boulder with $21\frac{1}{2}$ feet as the least depth. The "21 RK" should be retained on the chart until its removal has been definitely reported. *removed see Bp 27964*

b. Controlling Depth.

The charted controlling depth "26 feet June 1935" originates with Chart letter 630 (1935) and is consistent with the present survey. (See par. 8a(5) of this review.)

c. Aids to Navigation.

The aids to navigation, except as noted below, are in substantial agreement with their positions as located on the present survey. Several of the buoys differ from their charted positions by 20 to 40 meters but in these cases they adequately mark the features and no menace to navigation results from the differences.

- (1) Red nun buoy No. 2 (Lat. $41^{\circ} 38.55'$, Long. $70^{\circ} 55.25'$) was located by plane-table on the present survey about 90 meters N.N.W. from the charted position. The buoy was charted from L.H.N.M. No. 13 of 1935 and marks the southeast entrance to the Acushnet River channel. A possible menace to navigation results from the fact that a vessel rounding the buoy close to from the south-eastward would pass through appreciably shoaler water than indicated on the chart. This matter has been reported to the Bureau of Lighthouses. *Buoy replaced on station. See letter from L.H. Bureau, Sept. 8, 1936, attached to Descriptive Report.*
- (2) The following buoys were taken up during dredging operations and have been reestablished in new positions:
- Buoy N 2 south of Fish Island
 " C 15 " " " " "
 " C 11 New Bedford Harbor
 (See L.H.N.M. No. 27 of 1936)

(3) Buoys C 13 and S 7A in New Bedford Harbor have been discontinued (see L.H.N.M. No. 42 and 45 of 1935).

9. Field Plotting.

The protracting of positions and the plotting of soundings were well done.

10. Doubtful Sounding.

The 18 foot sounding in lat. 41°-37.87', long. 70°-55.08' is probably erroneous. It falls in general depths of 27 to 28 feet, and these depths are supported by the U. S. Engineer's survey (Bp. 27888 of 1934) which shows similar depths with no indication of an 18 foot spot in this locality.

18 Disproved.
See Review
H-5881 (1934).
sounding
removed from
sheet.

11. Additional Field Work Recommended.

The survey is satisfactory except for the doubtful 18 foot sounding noted in par. 10 of this review. Because of the importance of the locality, this sounding should be investigated.

Accomplished
on H-5881A.

12. Bridge Clearance.

Attention is called to the vertical clearance differences of the following bridges as determined by the present survey and the U. S. Engineers.

Bridge	Clearance	
	Present Survey	Engineers
	feet	feet
New Bedford - Fairhaven	8.2 (M.H.W.)	6.3 (H.W.)
Coggeshall St.	2.8 (")	4.0 (")
Slocum St. (Wood St.)	7.8 (")	6.0 (")

13. Superseding Old Surveys.

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

H- 158 (1845)	In part
H- 159 "	"
H-2230 (1895)	"
H-2231 "	entirely
H-2250 (1896)	In part
H-2307 (1896-97)	"

14. Reviewed by G. Risegari and R. J. Christman, July 30, 1936.

Inspected by A. L. Shalowitz.

Examined and approved:

G. K. Green

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

L. O. Lobert

Chief, Division of Charts.

Fred. R. Peacock

Chief, Section of Field Work.

G. H. Hude

Chief, Division of H. & T.

Report on H-5881 (1935)

1. The records conform to the requirements of the Hydrographic Manual,
2. The topographic signals originate with T-6355 and T-6356
3. A junction is made with H-5880 (1935) on the south, the overlapping soundings however have not been shown since H-5880 has not been inserted at this date.
4. No part of the field plotting had to be done over in the office. The field plotting (in all phases) was excellent.
5. Attention is called to notes on the B.S. explaining probable cause of some of the irregular bottom.
6. All topographic detail has been carefully checked with the topographic surveys, and made to conform.

John G. Ladd
Jan. 17, 1936

80

ADDRESS ALL COMMUNICATIONS TO
SUPERINTENDENT OF LIGHTHOUSES
CHELSEA, MASS.

DEPARTMENT OF COMMERCE

LIGHTHOUSE SERVICE

EJC-HFO

1936 SEP 10 AM 8:34

OFFICE OF SUPERINTENDENT, 2D DISTRICT
37 MARGINAL STREET
CHELSEA, MASS.

September 8th, 1936.

U. S. Coast and Geodetic Survey,
Washington, D. C.

Dear Sirs:

Referring to your letter of August 26th (File 82-LEF) with which you inclosed a photostat of a section of hydrographic survey No. 5881 your office is advised that the lighthouse tender was furnished with a copy of the said data with instructions to investigate the location of the red nun buoy No. 2 (Acushnet River Buoy 2). In reply the commanding officer of the tender advised that when relieving this aid on August 7th, 1936 he did find same off station and steps were promptly taken to replace it on its proper charted position. At the time your report was investigated on September 4th, the buoy's position was verified and it was found to be on its proper station.

Respectfully,

For and in the absence of
the Superintendent.

Edward J. Curran
Chief Clerk.

Noted in Review.

A. S. (10-5-36)

82-LEF

August 26, 1936.

Superintendent of Lighthouses,
2nd District,
37 Marginal Street,
Chelsea, Massachusetts.

There is enclosed, for your information, a photostat of a section of hydrographic survey No. 5881, the field work of which was completed in August 1935. The vicinity of Buoy No. 2 is indicated in yellow on the photostat.

It is believed that the paragraph below, from the review of this survey, will be of interest to you:

"Red nun buoy No. 2 (lat. 41°38.55', long. 70°55.25') was located by plane table on the present survey about 90 meters NNW from the charted position. The buoy was charted from Lighthouse Notice to Mariners No. 13 of 1935, and marks the southeast entrance to the Acushnet River Channel. A possible menace to navigation results from the fact that a vessel rounding the buoy close to from the southeastward would pass through appreciably shoaler water than indicated on the chart."

(Signed) PAUL C. WHEATNEY

Acting Director.

Applied to chart 249 May 14, 1937 F.H.C.
Applied to chart 252 May 17, 1937 F.H.C.
Applied to Records of chart 1210 thru chart 252 11/25/61. JMR