

11152

Diag. Cht. No. 1206.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Shoreline

Field No. Ph-114 (53) Office No. T-11152

LOCALITY

State Massachusetts

General locality Plum Island

Locality Plum Island Sound to Merri-
mack

194 52-53

CHIEF OF PARTY

E.H.Kirsch, Chief of Field Party
I.R.Rubottom, Tampa Photo. Office

LIBRARY & ARCHIVES

DATE July 28, 1958

11152

ADVANCE
~~PRELIMINARY~~
COMPILATION REPORT
T-11152 (PH-114)

31. DELINEATION.

Compiled graphically.

The photography was of reasonably good scale except for the flight along the Atlantic shoreline which included photographs DPP-9K-103, 104, 105, 106 and 107. The latter were of very poor scale.

Due to the hydrographic party's urgent need of the map manuscript for initiating its survey, only the shoreline, foreshore details and photo-hydro points have been shown. The remainder of the delineation will be completed when the manuscript and pertinent data are returned from the field. The complete compilation report will be written at that time.

35. SHORELINE AND ALONGSHORE DETAILS.

The shoreline has not been shown as the field inspector indicated in a number of places. The field inspection was done about the same time as the 1953-J photographs were taken. The shoreline was taken from these photographs. The biggest changes were around the northwest end of Plum Island, Chaces Island, southern party of Joppa Flats and islands in the southern part of Plum Island River.

37. LANDMARKS AND AIDS.

Landmarks will be submitted by the hydrographic party. Form 567 is being submitted for nonfloating aids.

HR
JCL

38. CONTROL FOR FUTURE SURVEYS.

Thirteen (13) temporary photo-hydro stations have been listed (along with a short description of each) under Item 49.

William A. Resure
for Rexford E. Smith, Jr.
Carto Photo Aid

APPROVED AND FORWARDED:

J. E. Waugh
J. E. Waugh, Chief of Party

49. NOTES FOR THE HYDROGRAPHER.

PHOTO-HYDRO STATIONS:

- 5201 - South gable of white house
- 5202 - Northeast corner of shack
- 5203 - Center of concrete watch house
- 5204 - South gable of barn
- 5205 - Spire, First Presb. Church
- 5206 - Red brick stack
- 5207 - Spire, Peoples Meth. Church
- 5208 - Northwest gable of most northwesterly shed on seawall.
- 5209 - Chimney, west end Sportsman Lodge
- 5210 - House cupola
- 5211 - Northwest corner of camp, north end of Woodbridge Island
- 5212 - South gable of dance hall
- 5213 - East gable of most southerly house on ocean front.

ADVANCE

~~PHOTOGRAMMETRIC~~

Form T-2

50

PHOTOGRAMMETRIC OFFICE REVIEW

T. 11152

1. Projection and grids R.W. 2. Title R.W. 3. Manuscript numbers R.W. 4. Manuscript size R.W.

CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy M.M.S. 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) XX 7. Photo hydro stations R.W. 8. Bench marks R.W. 9. Plotting of sextant fixes XX 10. Photogrammetric plot report R.W. 11. Detail points R.W.

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline R.W. 13. Low-water line R.W. 14. Rocks, shoals, etc. R.W. 15. Bridges R.W. 16. Aids to navigation R.W. 17. Landmarks XX 18. Other alongshore physical features R.W. 19. Other along-shore cultural features R.W.

PHYSICAL FEATURES

20. Water features R.W. 21. Natural ground cover XX 22. Planetable contours XX 23. Stereoscopic Instrument contours XX 24. Contours in general XX 25. Spot elevations XX 26. Other physical features XX

CULTURAL FEATURES

27. Roads XX 28. Buildings XX 29. Railroads R.W. 30. Other cultural features XX

BOUNDARIES

31. Boundary lines XX 32. Public land lines XX

MISCELLANEOUS

33. Geographic names R.W. 34. Junctions R.W. 35. Legibility of the manuscript R.W. 36. Discrepancy overlay XX 37. Descriptive Report R.W. 38. Field Inspection photographs R.W. 39. Forms R.W.

40. Robert R. Wagner William A. Rasura
Reviewer Supervisor, Review Section or Unit

41. Remarks (see attached sheet)

FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT

42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

Compiler

Supervisor

43. Remarks:

M-2623-12

NAUTICAL CHARTS BRANCH

SURVEY NO.

Record of Application to Charts

[illegible]

M.2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

DATA RECORD

T - 11152

Project No. (II): **PH-1114**

Quadrangle Name (IV):

Field Office (II): **Newburyport, Mass.**

Chief of Party: **E. H. Kirsch**

Photogrammetric Office (III): **Tampa, Florida**

Officer-in-Charge: **Ira R. Rubottom**

Instructions dated (II) (III): **20 February 1953**

Copy filed in Division of
Photogrammetry (IV)

Supplement No. 1 - 28 March 1953

" **No. 2 - 30 April 1953**

" **No. 3 - 6 May 1953**

" **No. 4 - 26 May 1953**

" **No. 5 - 25 June 1953**

Method of Compilation (III): **Graphic**

Manuscript Scale (III): **1:10,000**

Stereoscopic Plotting Instrument Scale (III): **Inapplicable**

Scale Factor (III): **None**

Date received in Washington Office (IV): **6-21-54** Date reported to Nautical Chart Branch (IV): **JUL 14 1954**

Applied to Chart No.

Date:

Date registered (IV): **4/10/58**

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): **N. A. 1927**

Vertical Datum (III):

~~Mean sea level~~ except as follows: **M.H.W.**
Elevations shown as (25) refer to mean high water
Elevations shown as (2) refer to sounding datum
i.e., mean low water or mean lower low water

Reference Station (III): **OLDTOWN, 1850**

Lat.: **42° 46' 07".008 (216.2m.)** Long.: **70° 51' 00".897 (20.4m.)**

Adjusted

~~Unadjusted~~

Plane Coordinates (IV):

State:

Zone:

Y=

X=

Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office, or (IV) Washington Office.

When entering names of personnel on this record give the surname and initials, not initials only.

Areas contoured by various personnel
(Show name within area)
(II) (III)

DATA RECORD

Field Inspection by (II): **L. F. Beugnet**Date: **April 1953**Planetable contouring by (II): **Inapplicable**

Date:

Completion Surveys by (II): **Inapplicable**

Date:

Mean High Water Location (III) (State date and method of location): **October 1953**
Air Photo CompilationProjection and Grids ruled by (IV): **Jack Allen (W.O.)**Date: **10 April 1953**Projection and Grids checked by (IV): **H. D. Wolfe (W.O.)**Date: **10 April 1953**Control plotted by (III): **I. I. Saperstein**Date: **6 May 1953**Control checked by (III): **R. J. Pate**Date: **6 May 1953**~~Radial Plot or Stereoscopic~~ **M. M. Slavney**
~~Control extension~~ by (III):Date: **25 May 1953**Stereoscopic Instrument compilation (III): **Inapplicable**
Planimetry
Contours

Date:

Date:

Manuscript delineated by (III): **R. Dossett**Date: **10 May 1954**Photogrammetric Office Review by (III): **J. A. Giles**Date: **15 May 1954**Elevations on Manuscript
checked by (II) (III): **Inapplicable**

Date:

Camera (kind or source) (III): Dept. of Agriculture, by Robinson Aerial Surveys, Inc.

PHOTOGRAPHS (III)				
Number	Date	Time	Scale	Stage of Tide
DPP-9K-102	8-26-52	1236	1:10,000	6.7
103	"	1237	"	"
104	"	1237	"	"
105	"	1238	"	"
106	"	1239	"	5.7
107	"	1240	"	"
14K-93-98 incl. 10-20-52		1317-22 incl.	"	6.7 (9.4)
74	"	1059	"	7.6
75	"	1100	"	"
76	"	1101	"	"

Tide (III)

Reference Station: PORTLAND
 Subordinate Station: MERRIMACK RIVER ENTRANCE
 Subordinate Station: IPSWICH RIVER ENTRANCE

	Ratio of Ranges	Mean Range	Spring Range	
M.H.W.		8.9	10.1	+ 0.30
8.00	0.9	8.0	9.3	
8.70	1.0	8.7	9.9	+ 0.20

Washington Office Review by (IV): *Lonat. Sturges*

Date: 8 Oct. 1954

Final Drafting by (IV): *Lachs*

Date: 20 Jan 55

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

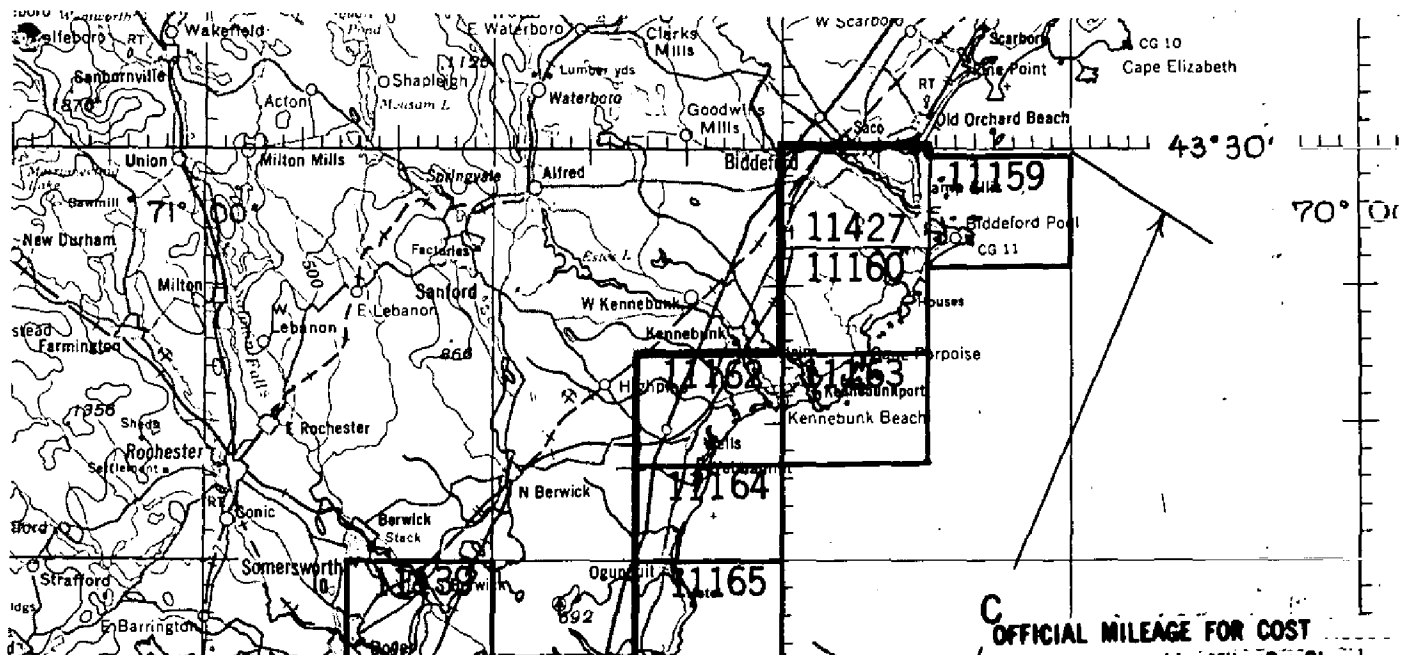
Land Area (Sq. Statute Miles) (III): 8
 Shoreline (More than 200 meters to opposite shore) (III): 65
~~Shoreline (Less than 200 meters to opposite shore) (III):~~
 Control Leveling - Miles (II): 0
 Number of Triangulation Stations searched for (II): 19
 Number of BMs searched for (II): 1
 Number of Recoverable Photo Stations established (III): 0
 Number of Temporary Photo Hydro Stations established (III): 30*

Recovered: 15 Identified: 9
 Recovered: 1 Identified: 1

Remarks:

*Seventeen (17) are additional photo-hydro stations established by the hydrographic party. Reference Item 49 of the Advance Compilation Report.

SHORELINE MAPPING PROJECT PH.114
BIDDEFORD POOL, MAINE TO CAPE ANN, MASS.



Summary to Accompany T-11152

Field instructions were issued for Ph-114 on 13 March 1953, to provide shoreline and control for inshore hydrographic surveys and to provide standard shoreline manuscripts for chart compilation. The hydrographic phase of this surveying was accomplished in the summer of 1953 under instructions for project CS-355 (Plum Island Sound to Portsmouth Harbor) and CS-361 (Cape Porpoise Harbor).

* FIELD INSPECTION REPORT SUBMITTED SEPARATELY

* Filed as a part of Report T11148
hch.

COMPILATION REPORT T-11152

PHOTOGRAMMETRIC PLOT REPORT.

Filed as a part of Report T11147
~~Submitted as a separate report.~~ *lcl.*

31. DELINEATION.

Compiled graphically.

Reference Item 31 of the Advance Report.

Two (2) field inspections were made of the areas embodied. The first was by Mr. J. C. Lajoie prior to the completed compilation. The second was by Mr. H. R. Spies after the advance compilation had been sent to the hydrographic party for initiating its survey. The subsequent changes of shoreline contradictory to the first inspection are delineated in red ink.

32. CONTROL.

Reference Photogrammetric Plot Report.

33. SUPPLEMENTAL DATA.

None

34. CONTOURS AND DRAINAGE.

Contours are inapplicable.

Drainage has been shown according to field inspector's notes or photographic interpretation.

35. SHORELINE AND ALONGSHORE DETAILS.

Reference Item 35 of Advance Report and Item 31 of this report.

36. OFFSHORE DETAILS.

Shown according to field inspection.

37. LANDMARKS AND AIDS

Reference Item 37 of Advance Report.

38. CONTROL FOR FUTURE SURVEYS

Reference Item 38 of Advance Report.

Seventeen (17) additional photo-hydro stations established by the ^{field} ~~hydrographic~~ party have been listed under Item 49.

No topographic stations were recovered or established.

39. JUNCTIONS

A satisfactory junction has been made with T-11151 on the north and T-11153 on the south. There is no contemporaneous survey on the west. The Atlantic Ocean is on the east.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

46. COMPARISON WITH EXISTING MAPS.

Comparison was made with ARMY MAP SERVICE Quadrangle NEWBURYPORT EAST, scale 1:25,000, copied in 1947 from a 1945 USGS edition. No outstanding differences were noted.

47. COMPARISON WITH NAUTICAL CHARTS.

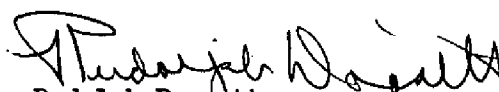
Comparison was made with USC&GS Nautical Chart No. 331, scale 1:20,000, published July 1939, corrected to 17 September 1951, and USC&GS Nautical Chart No. 1206, scale 1:80,000, published October 1948, corrected to 14 July 1952. No outstanding changes of shoreline were noted.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY.

None

ITEMS TO BE CARRIED FORWARD.

None


Rudolph Dossett
Carto Photo Aid

APPROVED AND FORWARDED


Ira R. Rubottom, Chief of Party

48. GEOGRAPHIC NAME LIST

AMERICAN YACHT CLUB
ATLANTIC OCEAN

BOSTON AND MAINE RAILROAD

CHACES ISLAND
COTTAGE STREET

GREAT CREEK

HATE COVE
HIGH ROAD

ISLAND CREEK

JOPPA FLATS

MARSH AVENUE
MASSACHUSETTS
MERRIMACK RIVER

NEWBURYPORT
NEWBURY NECK CEMETERY
NEWBURY OLD TOWN

OLD POINT ROAD

PARKER RIVER
PINE ISLAND
PINE ISLAND CREEK
PINE ISLAND ROAD
PLUM ISLAND
PLUM ISLAND RIVER
PLUM ISLAND SOUND
PLUM ISLAND TURNPIKE

SEAL ISLAND

THE BASIN
WATER STREET
WOODRIDGE ISLAND

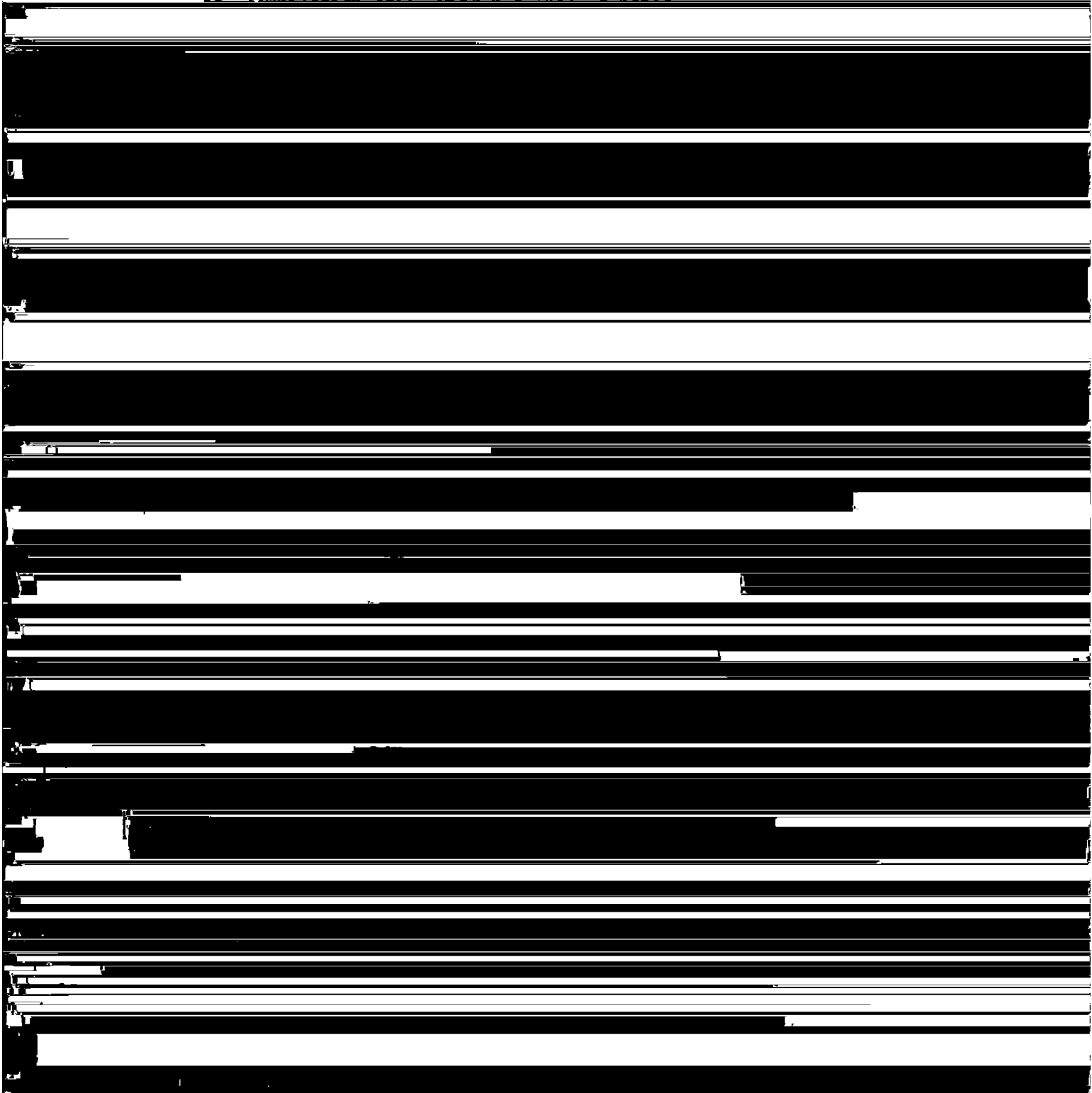
Northern Blvd.

*Names approved
 10-12-54
 A.J.W.*

49. NOTES FOR THE HYDROGRAPHER

Reference Item 49 of Advance Report.

The following seventeen (17) photo-hydro stations were selected and located by the field party. Their positions have been checked in the correlation section of the report.



PHOTOGRAMMETRIC OFFICE REVIEW

T-11152

1. Projection and grids J.G. 2. Title J.G. 3. Manuscript numbers J.G. 4. Manuscript size J.G.

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40. Jesse A. Giles William A. Rasure
Reviewer Supervisor, Review Section or Unit

41. Remarks (see attached sheet)

FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT

42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

Compiler

Supervisor

43. Remarks:

Review Report T-11152
Shoreline Map
8 October 1954

61. General

Stick-up was applied to the map manuscripts in this project as a part of the compilation process, i.e., prior to review. The map manuscripts at this phase are labeled "Advance Print".

These map manuscripts were not altered during review. Any additions, alterations, or deletions recommended by the reviewer were recorded on review correction overlays to be used by the drafting section for application of the called-for revisions on black line impressions on vinylite. These positives on vinylite, with corrections applied, serve as the final map manuscripts.

62. Comparison with Registered Survey

T-355 1:10,000 1851 Newburyport Harbor & Vicinity

T-559 1:10,000 1854 Mass. Coast Rowley R. to Newburyport

T-4426 1:10,000 1928 Merrimac River Entrance.

T-11152 supersedes the older surveys for charting shoreline and cultural details, except that the western extension of the old breakwater on T-355 may be still in existence. It is not visible on the 1952 or 1953 photographs, which were taken at approximately MHW.

This old breakwater still there as shown by H-8096 vol. 16 p 27 J.T.L.

63. Comparison with Maps of Other Agencies

USE Newburyport, EAST, 1:25,000 1947

Because of recent changes, the shoreline area in common with T-11152 is superseded by T-11152.

64. Comparison with Contemporary Hydrographic Surveys

H-8096 (ECFP-1253) 1:10,000, 1953 Merrimac River and

66. Bridges

Bridge List:

Field Inspection 1953

Parker R: F. Hwy: Hor.Cl. 60 ft.	Hor. Cl. 58 ft.
V.Cl. 19.57 ft. MLW	
V.Cl. 11.57 ft. MHW	V. Cl. 10 ft. MHW
Bridge Bk 1941 ✓ page 356	
Plum Id. R: SW.Hwy: Hor.Cl. 30.0 ft. (left)	Hor. Cl. 31.8 ft
V.Cl. 15.1 Ft. (MLW)	
V.Cl. 7.5 ft. (MHW)	V. Cl. 7.00 ft. MHW
Bridge Bk 1941 pg 374	

67. Accuracy:

This map is of National and Bureau Standards of Accuracy.

Reviewed by:

Lena T. Stevens
Lena T. Stevens

Approved:

L. C. Lande
Chief, Review Section
Div. of Photogrammetry

Max B. Katto
Chief, Nautical Chart Branch
Division of Charts

W. Swanson
Chief, Division of Photogrammetry
22 July 1958

[Signature]
Chief, Division of Coastal
Surveys