

4777  
4778

Graphic Control

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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. B and C

4777  
4778

LOCALITY

East River.

Bronx River to Westchester Creek.

Port Morris and Lawrence Point.

19.33

CHIEF OF PARTY

I. E. Rittenburg.

chart 223 - reexamined June 16, 1949 - R.D.G.

JAEB  
ERCE

1.

DESCRIPTIVE REPORT TO ACCOMPANY TOPOGRAPHIC SHEETS " B " AND " C " EAST RIVER, NEW YORK HARBOR, PROJECT H. & T. # 152, 1933.

AUTHORITY Work on these sheets was done in accordance with orders of Aug. 9, 1933 and written instructions of Sept. 2, 1933.

LOCALITY The area covered by these sheets is from the Hell Gate bridge, East River, through the north side of Rikers Island to triangulation sta. Old at the East entrance to Westchester Bay, Westchester Creek and Bronx River.

CONTROL AND METHODS

Triangulation stations of Lieut. Woodworth 1932 formed an excellent framework of horizontal control. Almost anywhere on these sheets it was possible to obtain a good strong three point fix. For, supplemental control, orthodox plane table methods were used. Sheet C, the western sheet, was controlled exclusively by cuts from triangulation stations, resection and three point fixes. No traverses for control were run on this sheet. The only traverses on this sheet were between adjacent signals for the rodding of shoreline. For the location of the West pier of the Hell Gate Bridge a three point fix was taken nearby and the pier rodded in from this fix. On sheet " B " most stations in the East River, lower Bronx River, and Lower Westchester River, were cut in from triangulation stations with no triangles of error. In Bronx River above station Bronx, 1932, it was necessary to run a traverse from Sta. Bronx to the 174 th St. Bridge. A three point fix was taken here which showed an error of 4 meters in azimuth and no error in distance. From this bridge the remainder of the Bronx River shown was entirely controlled by three point fixes. No errors between these fixes and the rodded locations of the signals at which these fixes were taken were found. In Westchester Creek, all the signals to Sta. West, 1932, were cut in by intersecting cuts. North of Sta. West the Gas Holder, 1932 was tied into with no error. At the North end of Westchester Creek a three point fix was taken on top of an apartment house and a rod reading taken to signal Fred U. S. E., which had previously been located by traverse etc., and no error in position was found. These two sheets are on the N. A. 1927 Datum obtained by adding a correction factor to the geographic positions of Lieut. Woodworths triangulation of minus 11.5 meters to all latitudes and plus 3.8 meter to all the longitudes.

MARKERS OF OTHER AGENCIES.

An effort was made to tie in all the markers of other bureaus in this area. All the U. S. Engineers marks were searched for and those found were located by topography. These are shown on the accompanying list of recoverable stations and circled on the accompanying blueprints. Numerous recoverable street monuments of the Borough of the Bronx were also located and shown on the sheet and blue prints. With these locations and other well defined prominent features every blue print of either the U. S. Engineers Borough of the Bronx, Harbor Line Board etc. can be applied directly to this survey, with no other control needed. At least 3 common points are now located on every blueprint which enters into the construction of this area of Chart 226. The several U. S. E. stations located will also serve to apply future soundings of that bureau to the chart. To simplify the future chart corrections submitted by the U. S. E., it is recommended that the U. S. Eng. grid be laid down on these sheets with the stations shown as a basis.

attention  
to  
actual

GENERAL

Westchester Creek, Bronx River, Puggsleys Creek were carried to the head of tidewater in each case. At the northern limit of these three creeks dams are built as shown on the sheet "B". The limits of the marsh on sheet B were actually rodged in all cases except the small marsh at W. side of the mouth of the Bronx River. As the aerial photographs are being reduced for this area vvery little detail back of the H. W. line was obtained. Several street intersections were obtained to aid in future air photo reductions and compilations. The two piers for the Hell Gate Bridge shown on sheet "C" were also located for this purpose. L. W. is to be obtained from the hydrographic sheet after it shall have been verified. The little bight shown on sheet "C" just N. E. of M. Chimney N.Y. Central R. R. has a large number of piles, dolphins, and log raftssused in connection with an apparently abandoned marine railway.

LANDMARKS PHOTOCONTROL POINTS & LIST OF RECOVERABLE STATIONS.

There is attached to this report a list of landmarks points for the control of air photographs, and a list of recoverable stations. Blue prints showing the U. S. E. stations and the Borough of the Bronx topo and street monuments are attachee for reference purposes only.

R. S. Spaulding,  
Observer,

I. E. Rittenburg, Lieut.,  
Chief of Party.

AIR PHOTO CONTROL POINTS LOCATED BY TOPOGRAPHIC PARTY

The following points will serve as good air photo control points in the future. The objects located by Lieut. Woodworth are not included in this report.

N. End of Westchester Creek showing bridge, dam and street.  
Bridges across Westchester Creek and Bronx River.  
N. End of Puggsleys Creek  
N. End of Bronx River  
the 2 Hell Gate Bridge piers.

RECOVERABLE TOPOGRAPHIC STATIONS AND DESCRIPTIONS

The 43 U. S. Engineers stations shown on the sheets for which the descriptions are attached.

Various street monuments of the Borough of the Queens.

Sig. Far; W. end of W. Ferry Gate, Classon Pt.

Sig. Bor, Beacon, N. end N. Brother Is.

Chimney on N Brother Id.

Bridge piers•Hell Gate Bridge.

*BYC*

Sheet 1 of 2  
U. S. COAST & GEODETIC SURVEY  
DIVISION OF CHARTS FILE NO. D ARCHIVES

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

*Supplement*  
DEC 8 1933

## LANDMARKS FOR CHARTS

Acc. No. \_\_\_\_\_

140-31 - 34th. Ave. Flushing. L.I. N.Y.Oct. 24., 193 3

DIRECTOR, U. S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

I. E. Rittenberg, Lieut. C. & G. S. Chief of Party.								
DESCRIPTION	POSITION					METHOD OF DETERMINATION	CHARTS AFFECTED	
	LATITUDE		LONGITUDE		DATUM			
	°	'	D. M. METERS	°				'
Gas holder - Hunts Pt. ✓	40	48	959	73	52	775	N.A. 1927	Triangulation 226 - 1213
N. Chy.-Gas Plant ✓	40	48	580	73	52	605	"	"
S. Chy.-Gas Plant ✓	40	48	567	73	52	612	"	"
W. Chy.-Gas Plant ✓	40	48	503	73	52	649	"	"
Chy. Gates Mfg. Co. ✓	40	48	768	73	53	846	"	"
N. Chy.-N. Y. C. R. R. ✓	40	48	550	73	54	304	"	"
S. Chy.-N. Y. C. R. R. ✓	40	48	529	73	54	279	"	"
S. W. Stack of S-G & E Co. ✓	40	47	1669	73	54	896	"	"
Chy.-Lawrence Pt. ✓	40	47	739	73	54	876	"	"
Roof tank - Oaks Mfg. Co. ✓	40	46	1648	73	53	1384	"	" 369
Tank - Astoria Import ✓	40	46	1539	73	53	1363	"	" 369
Tank - Steinway & Co. ✓	40	46	1481	73	53	1400	"	" 369
Wind indicator-Airport ✓	40	46	1368	73	52	888	"	"
Clock tower-W. & J. Sloane ✓	40	45	1180	73	50	237	"	"
Sholder-Flushing ✓	40	46	133	73	49	1368	"	"

A list of objects carefully selected because of their value as landmarks as determined from seaward together with individual descriptions, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report.

The selection, determination, and description of these points are an important factor in the value of the chart. Landmarks selected at appropriate intervals can be clearly charted. However, when none is outstanding, a group of two or three objects may by their interrelationship provide positive identification. A group so selected should be indicated.

The description of each object should be short, but such as will clearly identify it; for example, a standpipe, elevated tank, gas tank, church spire, tall stack, red chimney, radio mast, etc. Assign numerals to landmarks to indicate: (1) off-shore, (2) inshore, (3) harbor, 1, 2, 3 would be a mark useful on all charts. Generally, flagstaffs and like objects are not sufficiently permanent to chart.

## REVIEW OF TOPOGRAPHIC SURVEY No. 4778

Title (Par. 56) Port Morris + Lawrence Pt., East River, New York

Chief of Party I.E. Rittenburg Surveyed by R.S. Spaulding Inked by R.S.S.

Ship Shore party #15 Instructions dated Sept. 2, 1933 Surveyed in Sept. Oct. 1933

1. ✓ The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 13, 16.)
2. ✓ The character and scope of the survey satisfy the instructions.
3. ✓ The control and closures of traverses were adequate. (Par. 12, 29.)
4. ~~The amount of vertical control that the Manual specifies for contours and lines was accomplished.~~ (Par. 18, 19, 20, 21, 22, 23.)  
*There are no contours or vertical control on this sheet.*
5. ~~The delineation of contours and lines is satisfactory.~~ (Par. 49, 50.)
6. There is sufficient control on maps from other sources that were transmitted by the field party to enable their application to the charts. (Par. 28.) *(Namely, U.S.E. blue prints) a number of photostats of U.S.E. stations with descriptions and coordinates were also submitted (these were given to Cato. Sec. for filing.)* *See Chart Letter 45 (1934)*
7. ✓ High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, 44.)
8. ✓ The representation of low water lines, reefs, coral reefs and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.)  
*(See notes on reverse side)*
9. ✓ Rocks and other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.)
10. ~~The span, draw and clearance of bridges are shown.~~ (Par. 16c.)
11. ~~Locations and elevations of summits are given.~~ (Par. 19, 51.)
12. ~~The tree line was shown on mountains.~~ (Par. 16g.)

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.

1. Just off shore about 125 meters south of  $\Delta$  Sta. "Stack"  
(G. & E. Co) 1932 ~~there~~ are three dots, (thus- / )  
It is not clear just what these dots represent.  
They are possibly piles.?
2. On the chart there is a rocky shore line shown  
just north west of  $\Delta$  Sta. Bowery (1932).  
This survey does not show any rocky area in this  
vicinity.
3. The marsh symbol on this survey is not  
drawn according to the standard symbol.  
(See note on T4777) (on page 109, Top. manual.)
4. Between  $\Delta$  Woodrey U.S.E., and Tisdale U.S.E. there  
is an inset line from the shore running out  
between two rocks awash. It is not clear  
what this line represents.
5. There are no topographic names shown on  
this sheet.

4777? ~~two~~ "piles" in the place of spar buoys  
in dredge channel! northern part of it??

P



13. ✓ The descriptive report covers all details listed in the Manual, in so far as they apply to this survey. (Par. 64, 65, 66, 67.)
14. ~~The descriptive report also contains additional information required in aero-topography relative to type of photographs, method of compilation and type of ground control.~~
15. ✓ The descriptions of recoverable stations and references to shore line were <sup>not</sup> accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of DMs and DPs, 68.)
16. ✓ A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 60.)
17. ✓ The magnetic meridian was shown and declination was checked. (Par. 17, 52.)
18. ✓ The geographic datum of the sheet is North American (1927) and the reference station is correctly noted. (Par. 34.)
19. Junctions with contemporary surveys are adequate. *There are no contemporary coast survey surveys in this area.*
20. Geographic names are shown on the sheet and are covered by the Descriptive report. (Par. 64, 66k.)  
*no names are shown on this survey.*
21. ✓ The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 50.)
22. ✓ No additional surveying is recommended.
23. The Chief of Party inspected and approved the sheet and the descriptive report after review by *There is no definite statement that the chief of party has inspected or approved this sheet. His signature is typed only.*
24. Remarks: *see reverse side of page 1.*

Reviewed in office by

*John S. Ladd*

Examined and approved:

*L. O. Lobel*  
Chief, Section of Field Records*Eric B. Pouchard*  
Chief, Division of Charts*H. B. Borden*  
Chief, Section of Field Work*G. H. Rude*  
Chief, Division of Hyd. and Top.

## REVIEW OF TOPOGRAPHIC SURVEY No. 4777

Title (Par. 56) ~~Bronx River to Westchester Creek, East River, New York.~~

Chief of Party ~~I.E. Rittenburg~~ Surveyed by ~~R.S. Spaulding~~ Inked by ~~R.S.S.~~

Ship ~~Shore Party~~ \*15 Instructions dated ~~Sept. 2, 1933~~ Surveyed in ~~Sept.-Oct.~~

1. ✓ The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 13, 16.)
2. ✓ The character and scope of the survey satisfy the instructions.
3. ✓ The control and closures of traverses were adequate. (Par. 12, 29.)
4. ~~The amount of vertical control that the Manual specifies for contours and lines was accomplished.~~ (Par. 18, 19, 20, 21, 22, 23.)  
*There is no vertical control and no contours on this sheet.*
5. ~~The delineation of contours and lines is satisfactory.~~ (Par. 49, 50.)
6. There is sufficient control on maps from other sources that were transmitted by the field party to enable their application to the charts. (Par. 28.) *U.S.E. blue prints and a number of photostats of U.S.E. stations with their descriptions and coordinates, were submitted (These were given to Capt. Sec. for filing) See Chart Letter 45 (1934)*
7. High water line on marshy ~~and mangrove~~ coast is clear and adequate for chart compilation. (Par. 16a, 43, 44.)
8. The representation of low water lines, reefs, coral reefs and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.)  
*(see notes on reverse side)*
9. ✓ Rocks and other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.)
10. ~~The span, draw and clearance of bridges are shown.~~ (Par. 16c.)
11. ~~Locations and elevations of summits are given.~~ (Par. 19, 51.)
12. ~~The tree line was shown on mountains.~~ (Par. 16g.)

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.

1. In the vicinity of the mouth of Snugleys Creek there are two topographic signals shown. There is no name given for these two signals.
2. West of Clason Point in the vicinity of U.S.E. B.R. 12 this survey shows three rocks awash but no reef of any sort. The chart shows a reef clear around this point.
3. A small black "dot" marked "Pier" is shown about 120 meters west of U.S.E. station "Barretto". From the size of this dot, it appears that it is a pile rather than a "Pier".
4. A small black square (looks like a float) is shown about 60 meters north of Sig. U.S.E. "Standard", in upper Westchester Creek. This feature is lacking in identification.
5. The marsh symbol on this sheet is not drawn according to the standard practice. (See page 109 - Topographic Manual).

Wm. H. H. H.  
1/14

13. ✓ The descriptive report covers all details listed in the Manual, in so far as they apply to this survey. (Par. 64, 65, 66, 67.)
14. ~~The descriptive report also contains additional information required in aero-topography relative to type of photographs, method of compilation and type of ground control.~~
15. ✓ The descriptions of recoverable stations and references to shore line were <sup>Not</sup> accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of DMs and DPs, 68.)
16. ✓ A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 60.)
17. The magnetic meridian was shown and declination was checked. (Par. 17, 52.)
18. ✓ The geographic datum of the sheet is North American (1927) and the reference station is correctly noted. (Par. 34.)
19. Junctions with contemporary surveys are adequate. *There are no contemporary coast survey surveys in this area.*
20. ✓ Geographic names are shown on the sheet and are covered by the Descriptive report. (Par. 64, 66k.)
21. ✓ The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 50.)
22. ✓ No additional surveying is recommended.
23. The Chief of Party inspected and approved the sheet and the descriptive report after review by *There is no note in descriptive report to the effect that the chief of party has examined and approved the sheet.*
24. Remarks:

Reviewed in office by

*John G. Rued*

Examined and approved:

*L. O. Colburn*  
Chief, Section of Field Records*W. H. Raper*  
Chief, Division of Charts*J. B. Borden*  
Chief, Section of Field Work*G. H. Rude*  
Chief, Division of Hyd. and Top.

7. 754/1  
APB

IN REPLY ADDRESS THE DIRECTOR  
U. S. COAST AND GEODETIC SURVEY  
AND NOT THE SIGNER OF THIS LETTER

DEPARTMENT OF COMMERCE

AND REFER TO NO.

20-MG

1990 (15)

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

February 27, 1934.

To: Lieutenant Isidor Rittenburg,  
Coast and Geodetic Survey,  
Beaufort, South Carolina.

From: Chief, Division of Hydrography and Topography.

Subject: Review of Topographic Sheets, East River, New York.

Enclosed, for your information, is a copy of several notes prepared in the Field Record section at the time your last season's topographic sheets were reviewed. If the points in question can not be cleared up without access to the sheets, you will please arrange to inspect the sheets in this office at the time you transfer your party from South Carolina to New York.



Chief, Division of  
Hydrography and Topography.

Enclosure.

82-DRM

The answer to the doubtful point mentioned  
in this letter as answered by Lt. Rittenburg  
on the left margin of this letter have been  
applied to the top sheets in question and approved  
by Lt. Rittenburg  
(\* with red ink.) J. H. [unclear] June 9, 1934

February 26, 1934.

To: Chief, Section of Field Work.

From: Chief, Section of Field Records.

Subject: Notes on topographic surveys, East River, New York.

The following notes are made in the review of topographic sheets  
4777 and 4778, executed in the East River, New York by the party  
under Lieut. I. E. Rittenburg. It is suggested that these be called  
to his attention in order that any notes may be added to the sheets  
or descriptive reports to clear up the doubtful points raised.

T. 4778

Just offshore about 125 meters south of station "Stack",  
1932, there are three dots. It is not clear what these dots  
represent.

On the chart there is a rocky shoreline just northwest  
of triangulation station "Bowery". No rocky area is shown  
in this vicinity. The question arises whether the topographer  
has examined this area closely.

Between U.S.E. triangulation stations "Woolsey" and  
"Tisdale" there is an inked line running out from the shore  
between two rocks awash. It is not clear what this represents.

There are no geographic names shown on the sheet.

T. 4777

In the vicinity of the mouth of Pugsley Creek there are  
two topographic signals shown without names.

West of Clason Point in the vicinity of U. S. E. B.R. 12  
this survey shows three rocks awash but does not show the reef  
which is shown on the chart as extending entirely around the  
point.

A small black dot marked "Pier" is shown about 120 meters  
west of U.S.E. station "Barretto". From the size of this dot  
it would appear that it is a pile rather than a pier.

Pier  
maple

Barretto  
Coast  
Rocky shore  
H.W. water  
Buccinard

Signals were  
not used in 1932.

3 most prominent  
rocks, Reef there  
OK

Pile  
driving pier  
about 4 ft. sq.

Stack of tag covered  
at H.W. bore at L.W.  
just off dock.  
On a black. Is. W. was  
limits of dock

Diving pier  
diamond buoy

Wrong pool

A small black square is shown about 60 meters north of U.S.E. signal "Standard" in Upper Westchester Creek. This feature should be identified by a proper note.

Just east of Hunts Point Light there are shown two piles. Referring to the hydrographic sheet of this vicinity it appears that these dots marked "Piles" are in the exact location of the black and red buoys marking the channel along the east side of Hunts Point. It is a question whether the topographic sheet is not in error in this respect.

Photostats of 43 U.S.E. stations were forwarded. The descriptive report mentions other recoverable stations. Form 524 was not accomplished so that the data desirable on this form can not conveniently be obtained for future revision.

On the two sheets the marsh symbol was not drawn according to the standard symbol.

(Signed) L. O. Colbert

Chief, Section of Field Records

removed from  
sheet J.S.P.

The answers to the above mentioned doubtful points as indicated by H. Rittenburg in pencil on the margin have been applied to the original tops sheet

J.S.P.

June, 8, 1934

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

U. S. COAST & GEODETIC SURVEY  
LIBRARY AND ARCHIVES

DEC 8 1933

Acc. No.

REG. NO. 44777

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. B

REGISTER NO. 4777 Graphic Control

State New York

General locality East River, N. Y.

Locality Bronx River to Westchester Creek, N. Y.

Scale 1:10,000 Date of survey Sept. Oct, 19 33

Vessel Shore Party 15

Chief of party I. E. Rittenburg

Surveyed by R. S. Spaulding

Inked by R. S. Spaulding

Heights in feet above.....to ground to tops of trees

Contour, Approximate contour, Form line interval.....feet

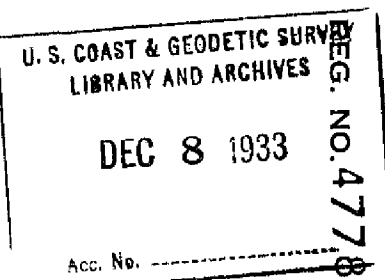
Instructions dated Sept. 2, 1933, 19.....

Remarks:.....



DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET



The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. C

REGISTER NO **4778** ~~Graphic Control~~

State New York

General locality East River, N. Y.

Locality Fort Morris and Lawrence Point.

Scale 1:10,000 Date of survey Oct., 1933

Vessel Shore Party 15

Chief of party I. E. Rittenburg

Surveyed by R. S. Spaulding

Inked by R. S. Spaulding

Heights in feet above \_\_\_\_\_ to ground to tops of trees

Contour, Approximate contour, Form line interval \_\_\_\_\_ feet

Instructions dated Sept. 2, 1933, 1933

Remarks: \_\_\_\_\_