

12952

12952

Form 504	
U. S. DEPARTMENT OF COMMERCE	
COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey <u>SHORELINE (Photogrammetric)</u>	
Field No.	Office No. <u>T-12952</u>
LOCALITY	
State <u>VIRGIN ISLANDS</u>	
General locality <u>SAINT THOMAS</u>	
Locality <u>WEST GREGERIE CHANNEL</u>	
<u>1965-66</u>	
CHIEF OF PARTY	
<u>J. Bull, Director, Atlantic Marine Center</u>	
LIBRARY & ARCHIVES	
DATE	

DESCRIPTIVE REPORT - DATA RECORD

T - 12952

PROJECT NO. (I):

JOB PH-6504

FIELD OFFICE (II):

CHIEF OF PARTY

PHOTOGRAMMETRIC OFFICE (III):

OFFICER-IN-CHARGE

Atlantic Marine Center

J. Bull, Director, Atlantic Marine Center

INSTRUCTIONS DATED (II) (III):

III October 29, 1965

METHOD OF COMPILATION (III):

Kelsh

MANUSCRIPT SCALE (III):

1:5,000

STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):

1:3,000 pantagraph to 1:5,000

DATE RECEIVED IN WASHINGTON OFFICE (IV):

DATE REPORTED TO NAUTICAL CHART BRANCH (IV):

APPLIED TO CHART NO.

DATE:

DATE REGISTERED (IV):

GEOGRAPHIC DATUM (III):

Puerto Rico

VERTICAL DATUM (III):

MEAN ~~SEA LEVEL~~ ^{high water} EXCEPT AS FOLLOWS:

Elevations shown as (25) refer to mean high water

Elevations shown as (5) refer to sounding datum

i.e., mean low water or mean lower low water

REFERENCE STATION (III):

DRIFT, 1918 ✓

LAT.:

18°19'00.587" (18.0m) ✓

LONG.:

64°57'39.454" (1158.6m) ✓

☒ ADJUSTED☐ UNADJUSTED

PLANE COORDINATES (IV):

y = 177,614.29 ft. ✓ x = 1,010,664.01 ft. ✓

STATE

Virgin Islands ✓

ZONE

Puerto Rico
Zone 1 ✓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.

DESCRIPTIVE REPORT - DATA RECORD

FIELD INSPECTION BY (III):		DATE:
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): Air Photo Compilation Date of Photography March 9, 1965		
PROJECTION AND GRIDS RULED BY (IV): A. E. Roundtree		DATE October 1965
PROJECTION AND GRIDS CHECKED BY (IV): J. Collum		DATE October 1965
CONTROL PLOTTED BY (III): B. H. Barnes		DATE December 1965
CONTROL CHECKED BY (III): A. C. Rauck, Jr.		DATE December 14, 1965
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): I. I. Saperstein		DATE November 1965
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY B. Barnes (checked) R. Pate, L. Graves	DATE January 1966
	CONTOURS Inapplicable	DATE
MANUSCRIPT DELINEATED BY (III): B. Barnes		DATE January 1966
SCRIBING BY (III): A. Shands		DATE June 1966
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): L. L. Graves		DATE June 1966
REMARKS: No Original Field Inspection - Field edited only		

DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

L camera

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
65 L 1494	9 March 1965	16:15	1:15,000	-0.07
65 L 1495	"	16:15	"	-0.07
65 L 1496	"	16:16	"	-0.07
65 L 1497	"	16:16	"	-0.07
65 L 1554	"	16:37	"	-0.17
65 L 1555	"	16:37	"	-0.17
65 L 1556	"	16:37	"	-0.17
65 L 1557	"	16:37	"	-0.17

TIDE (III) Predicted

	RATIO OF RANGES	MEAN RANGE	SPRING RANGE Diurnal
REFERENCE STATION: GALVESTON, TEXAS		--	1.4
SUBORDINATE STATION: Charlotte Amalie, St. Thomas, V. I.	0.57	--	0.8
SUBORDINATE STATION:			

WASHINGTON OFFICE REVIEW BY (IV):

Leo F. Beugnot, Atlantic Marine Center

DATE:

Feb. 13, 1967

PROOF EDIT BY (IV):

DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II):

3

RECOVERED:

3

IDENTIFIED:

3

NUMBER OF BM(S) SEARCHED FOR (II):

none

RECOVERED:

IDENTIFIED

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III): none

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III): none

REMARKS:

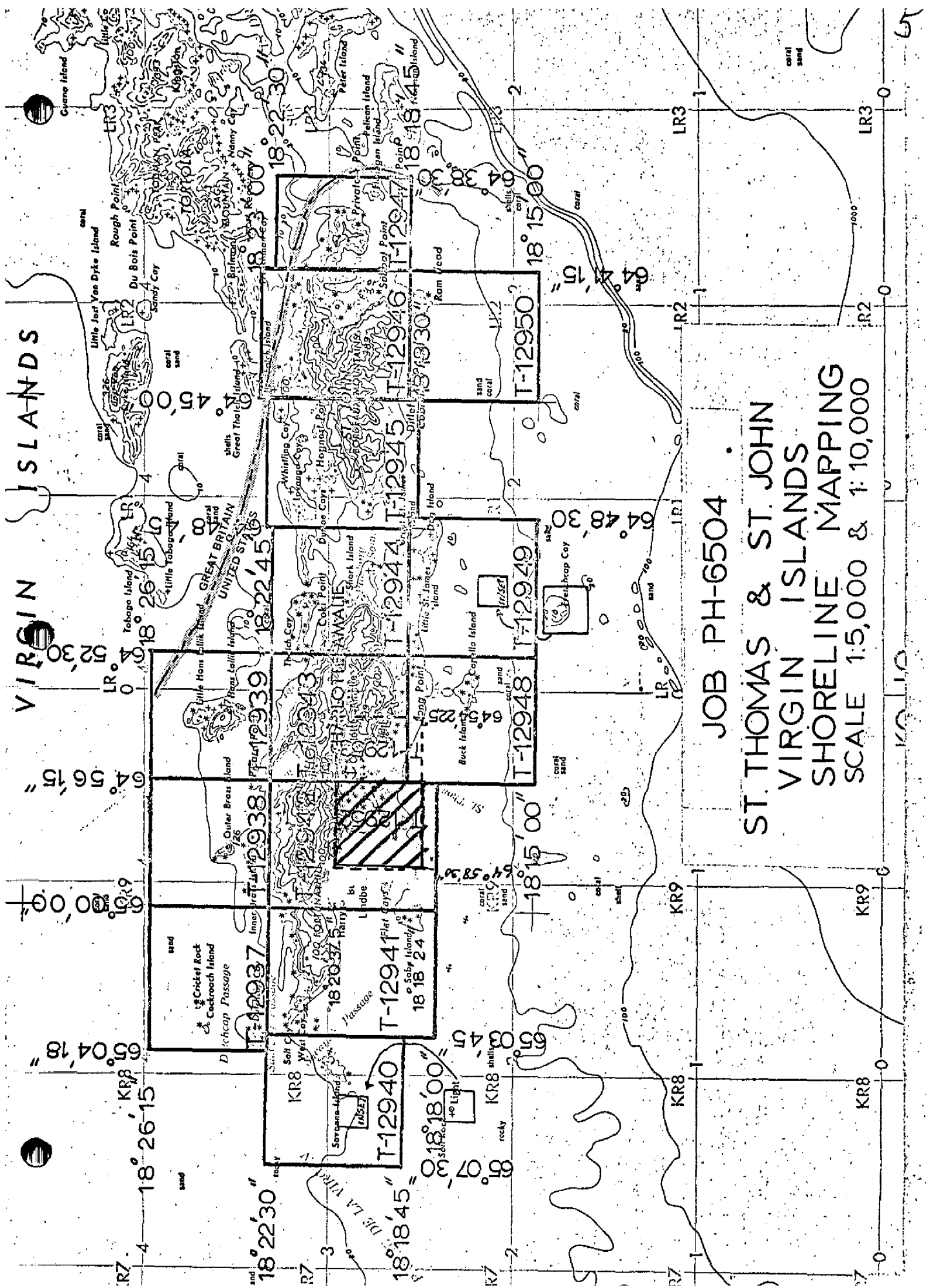
Field Edit by D. R. Rich LTjg March 1966

COMPILATION RECORD

COMPLETION DATE

REMARKS

Alongshore area for Hydro	January 1966	Superseded
Field Edit applied Manuscript complete	June 1966	<i>Superseded</i>
<i>corrected during Final Review</i>	<i>Feb. 1967</i>	



SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-12952

Shoreline map T-12952 is one of two 1:5,000 scale maps in Project PH-6504. They were compiled at this time to provide new shoreline and photo-hydro support data for hydrographic surveys to be made in the area of Charlotte Amalie, St. Thomas Island.

Field operations preceding compilation, by Kelsh instrument methods, was confined to the recovery and identification of horizontal control. Compilation was at 1:5,000 scale using the panchromatic photography obtained on 9 March 1965. A cronaflex copy of the Incomplete manuscript along with 1:5,000 scale ratio photographs were subsequently provided for preparation of the hydrographer's boat sheet, photo-hydro support and field edit purposes. The manuscript was classified Advance after application of Field edit data.

The manuscript is a vinylite sheet 2 minutes 13.5 seconds in latitude by 2 minutes 15 seconds in longitude which was scribed and reproduced on cronaflex. One cronar positive and one cronar negative are provided for record and registry.

T - 12952

There was no Field Inspection prior to compilation.

MAP T- 12592

PROJECT NO. PH-6504

SCALE OF MAP 1:5,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR λ -COORDINATE		DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
					FORWARD	(BACK)		FORWARD	(BACK)	FORWARD	(BACK)
BAR, 1918	P. 74	P.R.	18 20 12.494		384.1	✓					
DRIFT, 1918	"	"	64 58 18.203		534.5	✓					
			18 19 00.587		18.0	✓					
RED, 1918	P. 76	"	64 57 39.454		1158.6	✓					
			18 19 48.958		1505.2	✓					
BRUSH, 1918	"	"	64 58 22.875		671.7	✓					
			18 19 45.972		1413.4	✓					
BAN, 1918	P. 77	"	64 57 51.659		1516.9	✓					
			18 19 54.496		1675.4	✓					
FLAT, 1918	"	"	64 56 41.442		1216.9	✓					
			18 19 41.936		1289.3	✓					
TOP, 1918	P. 78	"	64 57 47.561		1396.6	✓					
			18 19 45.313		1393.1	✓					
BELVEDERE 2 (BELVEDERE ECC.) 1900	"	"	64 57 25.777		756.9	✓					
			18 20 13.308		409.1	✓					
CHIMNEY, 1918	"	"	64 56 34.380		1009.5	✓					
			18 20 12.622		388.1	✓					
BELVEDERE, 1900	"	"	64 56 18.720		549.7	✓					
			18 20 13.438		413.1	✓					
SPRAT, 1918	P. 85	"	64 56 34.228		1005.0	✓					
			18 19 10.36		318.5	✓					
DRIFT, 1918 Sub. Pt. A	Comp. (checked)	"	64 56 26.84		788.2	✓					
			177,560.39		1560.39	✓					
			1,010,744.66		744.66	✓					

1 FT. = 3048006 METER

COMPUTED BY:

DATE

CHECKED BY:

DATE

CONW-DC-5784

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COMPILATION REPORT

T-12952

The Photogrammetric Plot Report has been submitted with T-12953.

31. DELINEATION

The Kelsh plotter was used. There was no field inspection. Sprat Point was delineated by graphic method. Refer to Paragraph 49. Photography was satisfactory.

32. CONTROL

See Photogrammetric Plot Report.

33. SUPPLEMENTAL DATA

None.

34. CONTOURS AND DRAINAGE

Inapplicable.

35. SHORELINE AND ALONGSHORE DETAILS

There was no shoreline inspection. Shoreline and alongshore details were delineated from office interpretation of the photography. No low water line was shown.

36. OFFSHORE DETAILS

Refer to paragraph 49.

37. LANDMARKS AND AIDS

One aid to navigation was located during the hydrographic survey and the appropriate copies of Form 567 have been submitted to the Washington Science Center under date, June 30, 1966. One landmark was verified during the hydrographic survey and the appropriate copies of Form 567 have been submitted to the Washington Science Center under date, July 21, 1966.

38. CONTROL FOR FUTURE SURVEYS

None.

39. JUNCTIONS

1:5,000 scale manuscripts T-12952 and T-12953 lie within 1:10,000 scale manuscripts T-12942, T-12943 and T-12948. A satisfactory junction was made of T-12952 and T-12953. The 1:10,000 scale manuscripts are to be compiled at a later date.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

46. COMPARISON WITH EXISTING MAPS

A comparison has been made with U.S.G.S. Quadrangle St. Thomas, Virgin Islands, scale 1:24,000, dated 1955.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison has been made with USC&GS Chart 933, scale 1:10,000 dated April 26, 1965.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

L. L. Graves
L. L. Graves
Cartographic Technician

Approved and forwarded:

J. Bull
J. Bull, CAPT, USESSA
Director, Atlantic Marine Center

48. GEOGRAPHIC NAME LIST

ALTONA *

BANANA POINT

BANANA BAY *

CABRITABERG

CAREEN HILL

CARIBBEAN SEA

CAROL POINT

CAROLINE POINT

CAY BAY *

CHARLOTTE AMALIE

CROWN BAY

DRUIF BAY

DRUIF POINT *

EAST GREGERIE CHANNEL

ELEPHANT BAY

FLAMINGO BAY

FLAMINGO HILL *

FLAMINGO POINT

FLAMINGO POND ** **

FRENCHTOWN

GRAMBOKOLA HILL

HARRY S TRUMAN AIRPORT

HASSEL ISLAND

HAUOVER CUT *

HAYPIECE HILL

~~KRUM BAY~~

LIMESTONE BAY

LIMESTONE ROCK *

LINDBERGH BAY

LITTLE KRUM BAY

MOSQUITO POINT

NISKY MISSION *

NISKY MORAVIAN MISSION *

PORPOISE ROCKS

PROVIDENCE HILL *

PROVIDENCE POINT

RED POINT

REGIS POINT

REVENGE BEACH *

RUYTER BAY

SAND BAY *

SANDY POINT *

SPRAT BAY

SPRAT POINT

ST THOMAS ISLAND *

WATER ISLAND

WEST GREGERIE CHANNEL

* Taken from C&GS Chart 933

** Taken from Field Edit

* Name does not appear on this manuscript
 * * Name from Field editor - see Field edit sheet

49. NOTES FOR THE HYDROGRAPHER

Features believed to be of landmark value have been shown, but their visual or navigational value should be verified.

Rocks, piles, shoals, and other offshore features have been shown from office interpretation, they should be verified.

Sandy Point Rock Light was located by the Kelsh. It should be verified as to its identity and location.

Porpoise Rocks were located using cuts from only two photographs. They were then delineated from these photographs. Their geographic positions and elevations should be definitely established by the hydrographer.

Sprat Point was delineated graphically using only two photographs for positioning of this point. Its geographic position and eastern, western, and southern shoreline should be verified.

PHOTOGRAMMETRIC OFFICE REVIEW

T-10363 12952

1. PROJECTION AND GRIDS LLG		2. TITLE LLG		3. MANUSCRIPT NUMBERS LLG		4. MANUSCRIPT SIZE LLG	
CONTROL STATIONS							
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY LLG				6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) LLG		7. PHOTO HYDRO STATIONS XX	
8. BENCH MARKS XX		9. PLOTTING OF SEXTANT FIXES LLG		10. PHOTOGRAMMETRIC PLOT REPORT Bridge (W.O.)		11. DETAIL POINTS Kelsh	
ALONGSHORE AREAS (Nautical Chart Data)							
12. SHORELINE LLG		13. LOW-WATER LINE XX		14. ROCKS, SHOALS, ETC. LLG		15. BRIDGES XX	
16. AIDS TO NAVIGATION LLG		17. LANDMARKS XX		18. OTHER ALONGSHORE PHYSICAL FEATURES LLG		19. OTHER ALONGSHORE CULTURAL FEATURES LLG	
PHYSICAL FEATURES							
20. WATER FEATURES LLG				21. NATURAL GROUND COVER LLG		22. PLANETABLE CONTOURS XX	
23. STEREOSCOPIC INSTRUMENT CONTOURS XX		24. CONTOURS IN GENERAL XX		25. SPOT ELEVATIONS XX		26. OTHER PHYSICAL FEATURES LLG	
CULTURAL FEATURES							
27. ROADS LLG		28. BUILDINGS LLG		29. RAILROADS XX		30. OTHER CULTURAL FEATURES LLG	
BOUNDARIES							
31. BOUNDARY LINES XX				32. PUBLIC LAND LINES XX			
MISCELLANEOUS							
33. GEOGRAPHIC NAMES LLG				34. JUNCTIONS LLG		35. LEGIBILITY OF THE MANUSCRIPT LLG	
36. DISCREPANCY OVERLAY XX		37. DESCRIPTIVE REPORT LLG		38. FIELD INSPECTION PHOTOGRAPHS XX		39. FORMS LLG	
40. REVIEWER <i>L. L. Graves</i> Larry Lawrence Graves				SUPERVISOR, REVIEW SECTION OR UNIT <i>Albert C. Rauck, Jr.</i> Albert C. Rauck, Jr.			
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 <i>L. L. Graves</i> Larry Lawrence Graves				SUPERVISOR <i>Albert C. Rauck, Jr.</i> Albert C. Rauck, Jr.			
43. REMARKS							

T-12952

The Field Edit Report has been submitted with T-12953.

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REVIEW REPORT T-12952
SHORELINE
February 13, 1967

61. GENERAL STATEMENT

See Summary accompanying Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

The only prior registered survey in this area is Registered Survey No. 4544a which contains the shoreline and the hydrography accomplished from August 1923 to October 1925.

It was noted during final review that the position of the reference station on Survey 4544a (EAST PT. L.H. "EAST") is given as latitude $18^{\circ}19'622.9m$, longitude $64^{\circ}55'634.9m$. The position in the List of G.P.'s for EAST POINT LIGHTHOUSE, 1900 is latitude $18^{\circ}19'622.8m$ longitude $64^{\circ}55'629.9m$. This may possibly account for some of the differences in the shoreline and the position of rocks between the old and new survey.

This map supersedes the older survey for nautical chart construction purposes.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

Comparison was made with U.S.G.S. CENTRAL ST. THOMAS, V. I. quadrangle, 1:24,000 scale, edition of 1955. The comparison was generally favorable considering the difference in the scale of the two surveys.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

Comparison was made with a copy of boat sheet H-8877, 1:5,000 scale.

The shoreline on the boatsheet was taken from a copy of the Incomplete Manuscript and is not in agreement with that on the Advance Manuscript as many changes were made during the application of Field edit data and during final review. A copy of the manuscript containing all changes was provided to the Hydrographic Processing Unit, Atlantic Marine Center, for the smooth sheet.

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65. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with nautical chart 933, 1:10,000 scale, 8th edition, April 26, 1965, corrected through Notice to Mariners No. 39, September 25, 1965.

The following differences were noted:

A buoy at Sandy Pt. Rock, Latitude $18^{\circ}19'59''$, Longitude $64^{\circ}56'55''$ has evidently been replaced with a daybeacon. See Form 567 for position.

A daybeacon on the chart at Latitude $18^{\circ}20'14''$, Longitude $64^{\circ}56'22''$ is not shown on the boat sheet nor is it visible on photographs of the area.

All other differences and discrepancies have been noted on the comparison print.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

This survey complies with instructions and meets the National Standards of Map Accuracy.

Future surveys in the area should re-inspect the alongshore and offshore rocks and provide data for their correct mapping if any are found to be in error because of symbolization and/or positions.

Reviewed by:

Lea F. Beugnot

Approved by:

J. Bull
J. Bull, RADM
Director, Atlantic Marine Center

Approved by:

Charles Stearns
Chief, Photogrammetric Branch

Jack E. Luth
Chief, Photogrammetry Division

Chief, Nautical Chart Division

TO BE CHARTED

STRIKE OUT TWO

THE UNIVERSITY OF CHICAGO

I recommend that the following objects which have (Zvezdovoz) been inspected from seaward to determine their value as landmarks be charted on (Zvezdovoz) the charts indicated.

The positions given have been checked after listing by

Atlantic Marine Center

June 10, 1966

L.L. Graves

J. Bull, Director, Atlantic Maritime Center

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

* TABULARY RECORDS AND LETTERS

NON-FLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED
TO BE REVISED
TO BE DELETED

July 20 19 66

I recommend that the following objects which have ~~(have not)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(deleted from)~~ the charts indicated.

The positions given have been checked after listing by

B. H. Barnes

J. Bull, Director, AMC

Chief of Party.

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. The data should be considered for the charts of the area and not be individual field survey sheets. Information under each column heading should be given.

*** TABULATE SECONDS AND METERS**

115 COMM-DC 18234-P81

19'30"

19'30"

58'30"

58'15"

y = 180.00 FT.

Photographs used in Final Review

photo	Date	Time	stage of tide
65L1494-1497	9 May 1965	1616	-.1' below M+LW
65L1554-1557	9 May 1965	1637	-.2' " "

19'15"

- Red shoreline is from Chart 933
- Blue shoreline is from Survey 4544a

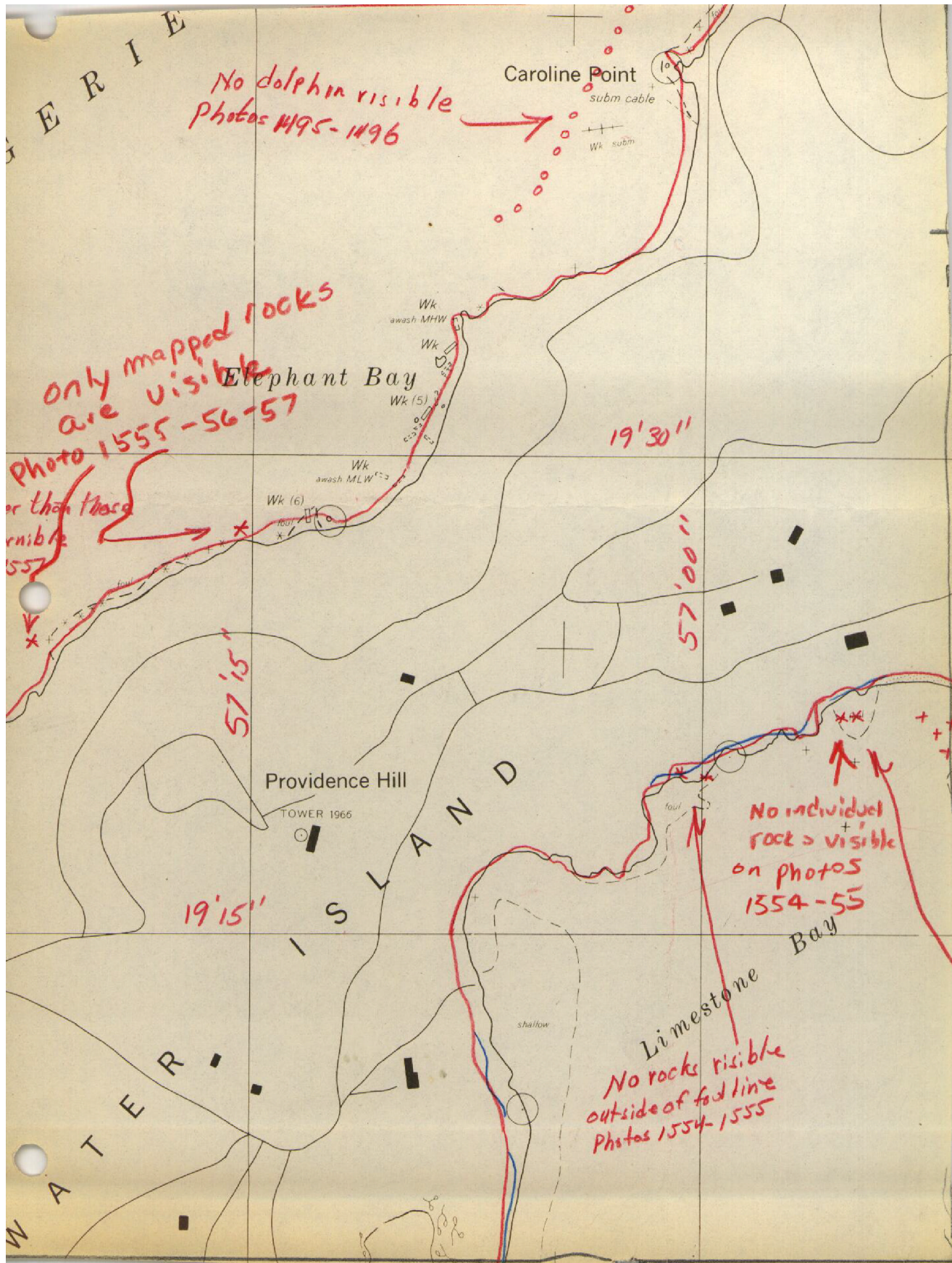
y = 178.000 FT.

19'00"

19'00"

65-L-1557





No dolphin visible
Photos 1495-1496

only mapped rocks
are visible
Photo 1555-56-57

er than those
visible
1557

19'30"

57'00"

57'15"

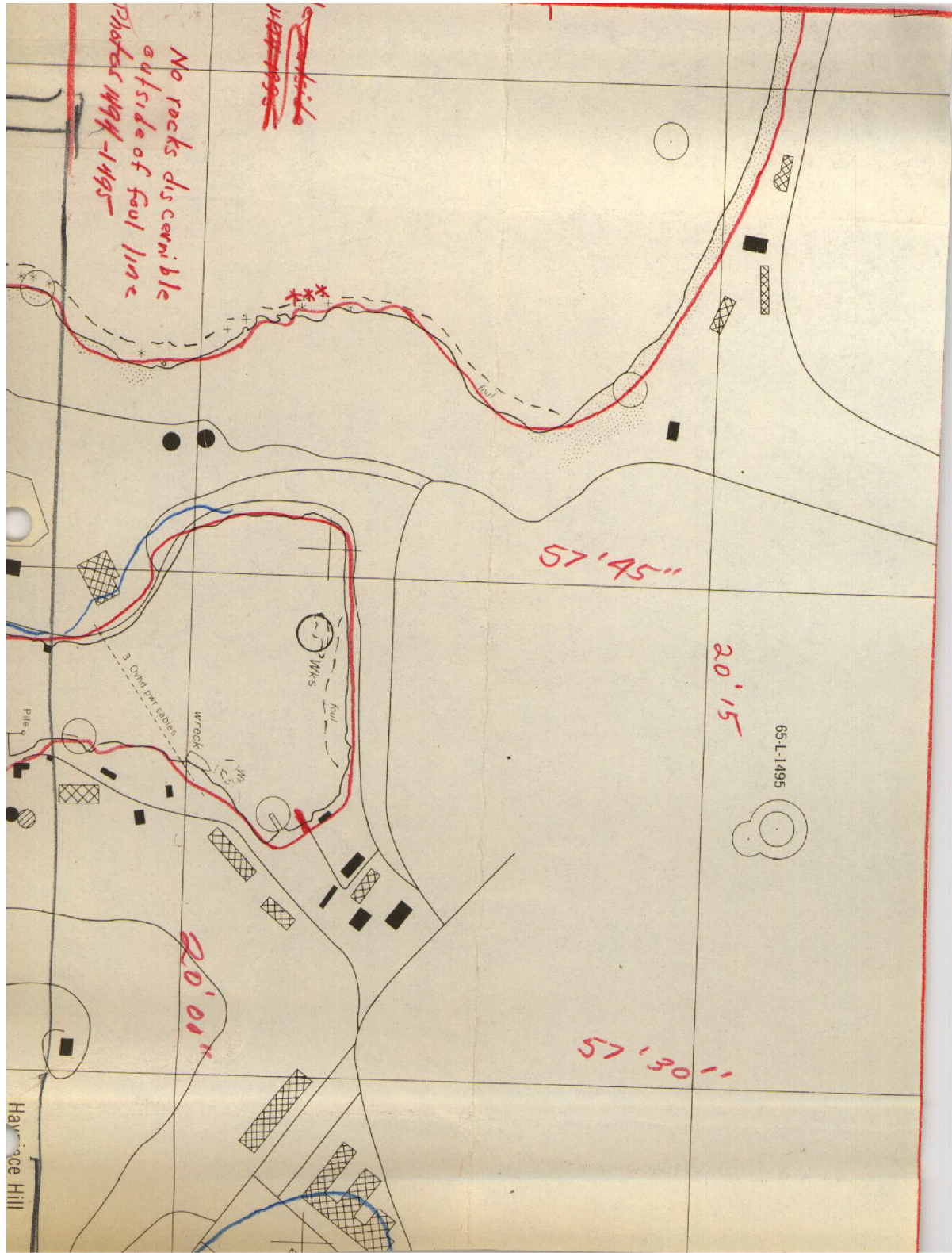
19'15"

No individual
rock visible
on photos
1554-55

Limestone
No rocks visible
outside of foul line
Photos 1554-1555

~~Wreck~~
~~1495~~

No rocks discernible
outside of foul line
Photos 1494-1495



Hayace Hill

Concrete buoys

Crown Bay

Little Krum Bay

No ruins visible
Photos 1495-1496

WEST GREGERIE CHANNEL
DAY BEACON 4, 1966

Sandy Point

C H A N N E L

Ruyter Bay

No rock awash discernible
Photos 1495-1496

20'15"

57'15"

57'00"

20'00"

19'45"

Boat ramp

subm cable

Wk sub

No Subm. rock discernible photos
1555-1556-1557

D r u i f B a y

No rock or wash visible at this
location - photos 1555-1556-1557

All rocks discernible on photos
1555-1556-1557 have been
mapped

No rocks discernible on
photos 1556-1557

18'45"

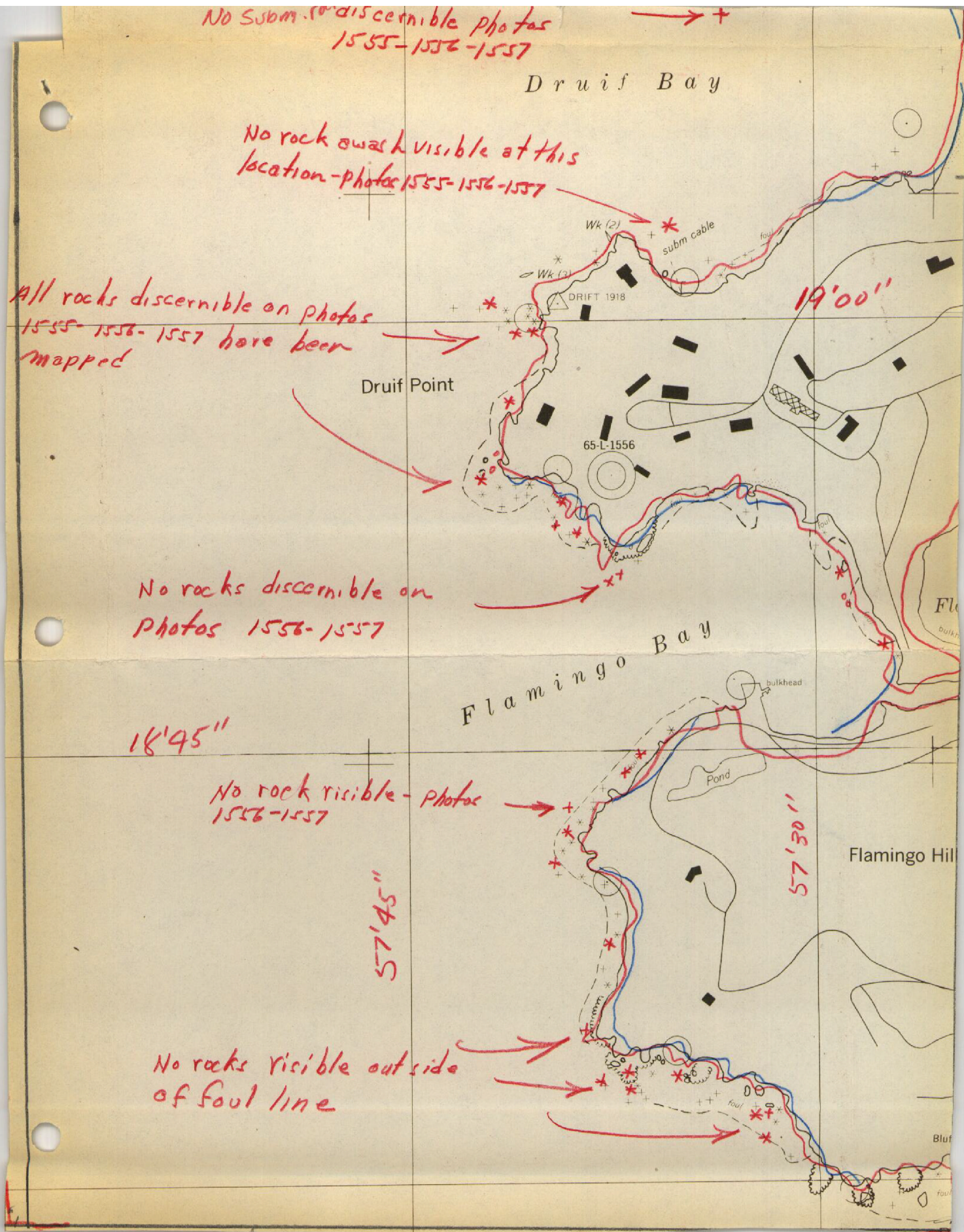
No rock visible - photos
1556-1557

57'45"

No rocks visible outside
of foul line

F l a m i n g o B a y

Flamingo Hill



19' 00"

65-L-1555



56' 45"

18' 45"



18' 30"

57' 00"

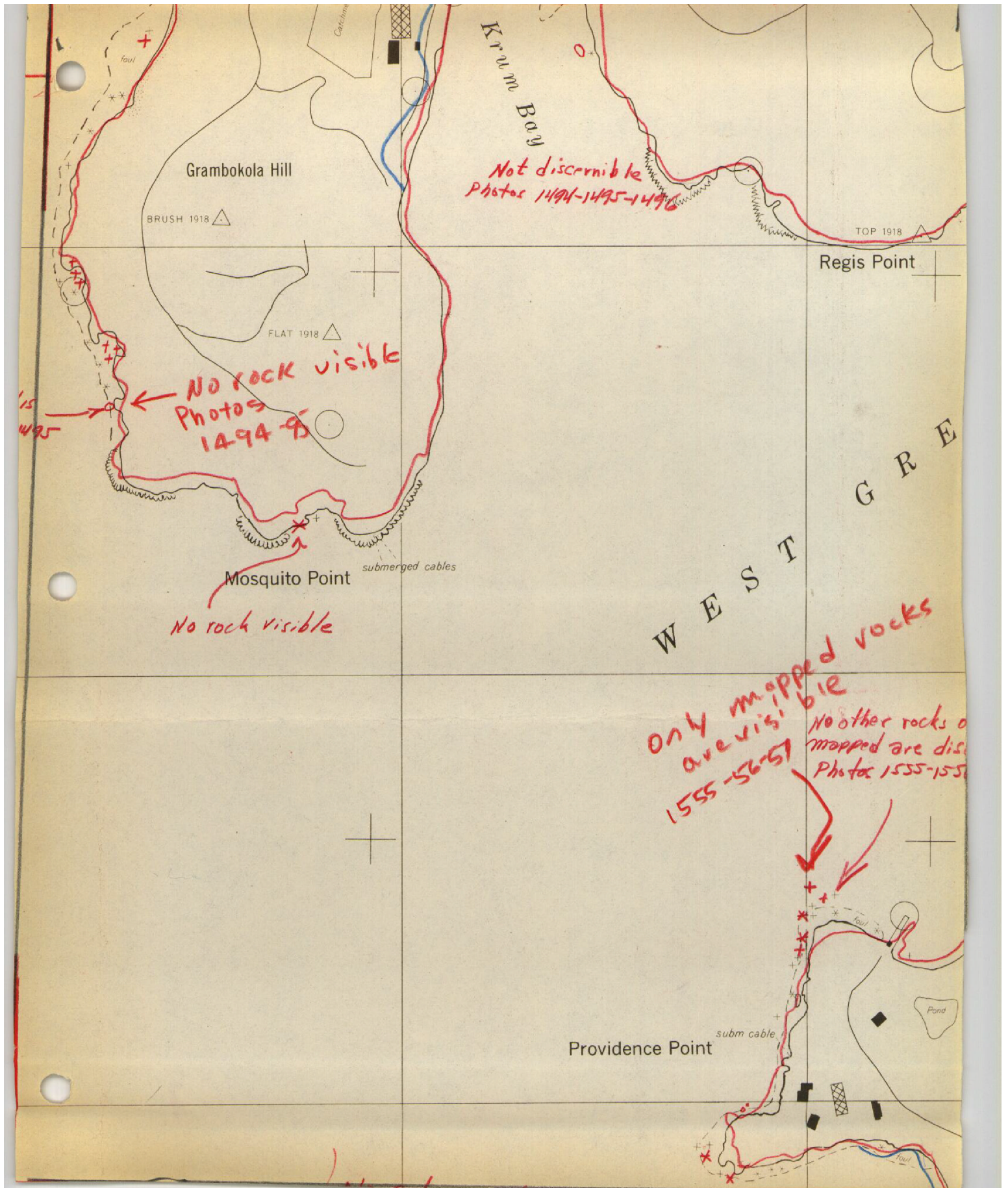
This area is in shadows on photos.
Only those rocks mapped are discernible
on photos 1555-1556

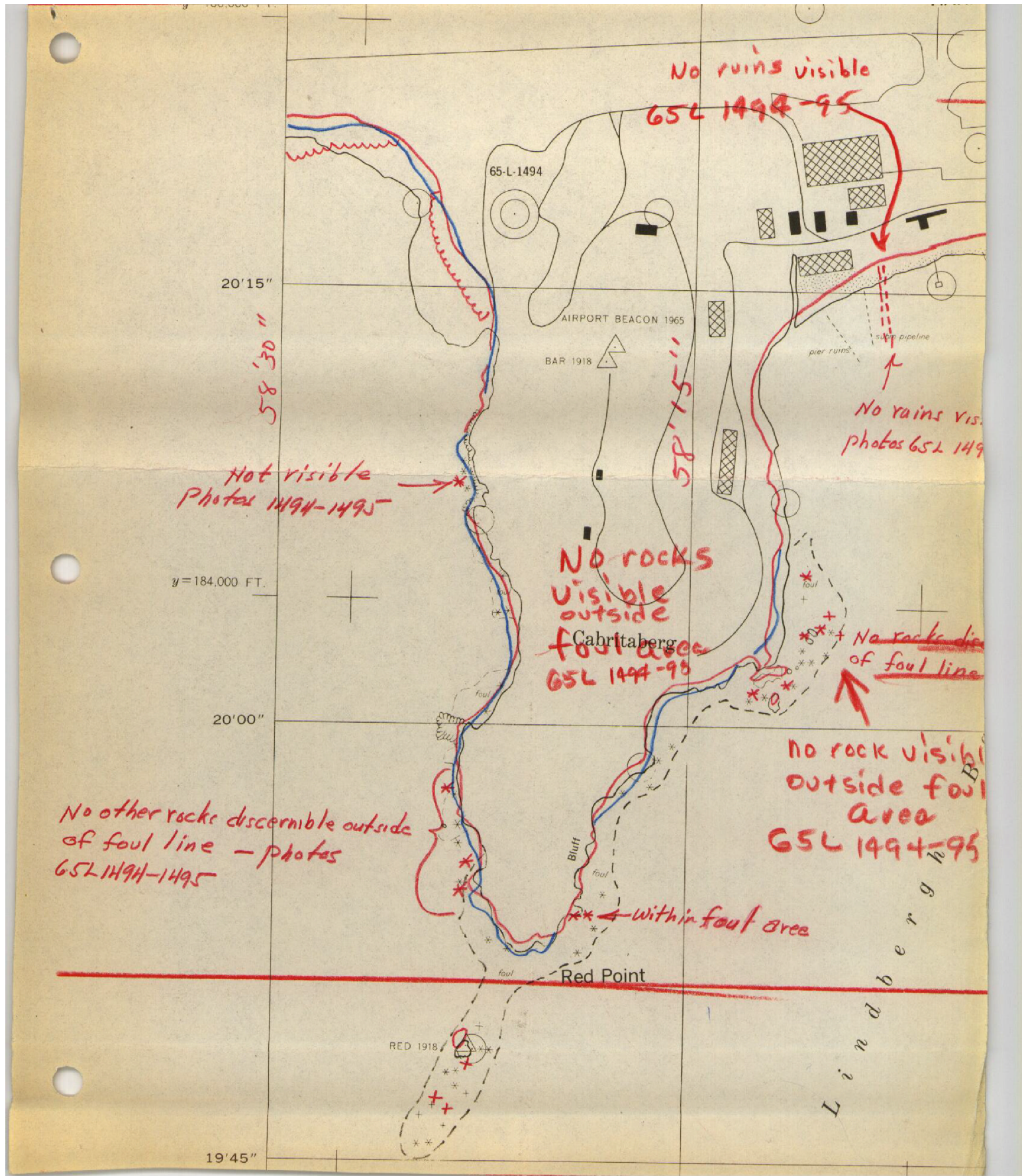
not visible



Pond

TOWER 1950





11° 54' 55"

11° 56' 30"

No rock awash discernible at this location - photos 1554-1555

If there are submerged rocks in this area they have very little height and are not discernible on photos 1554-1555

← see note on Boat Sheet

U = 180,000 FT.

19° 15"



Limestone Rock

Carol Point

Bluff

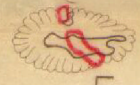
Sprat Bay

Sand Bay

Revenge Beach

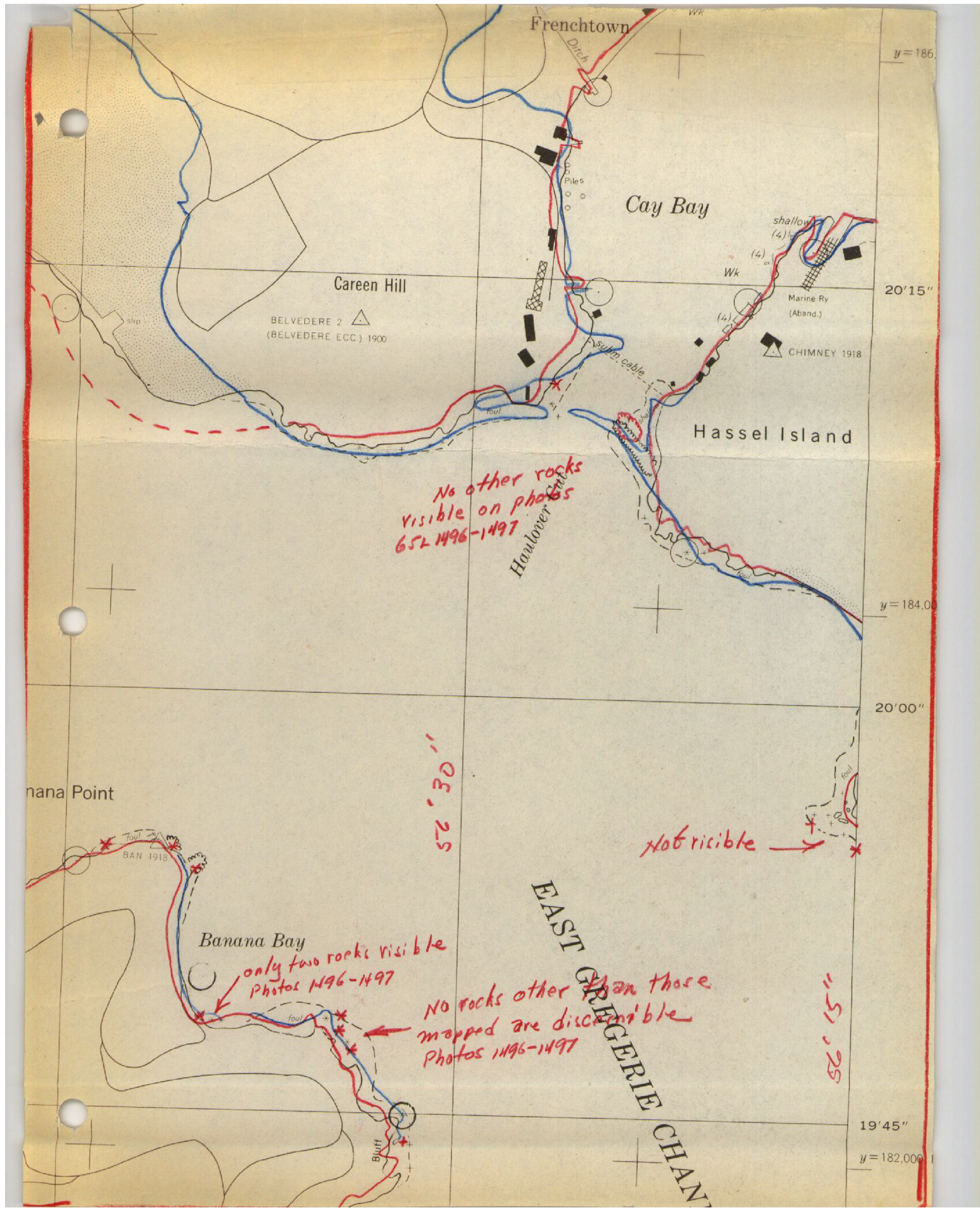
Pond

Sprat Point



individual submerged rocks discernible in this area on photos 1554-1555

No rocks discernible on photos 1554-1555 outside of ledge or foul limits



Frenchtown

Cay Bay

Careen Hill

BELVEDERE 2
(BELVEDERE ECC) 1900

Hassel Island

No other rocks
visible on photos
652 1496-1497

Haulover

Banana Point

Banana Bay

only two rocks visible
Photos 1496-1497

No rocks other than those
mapped are discernible
Photos 1496-1497

EAST
GREGORIE CHAN

y = 186

20°15"

y = 184.00

20°00"

19°45"

y = 182,000

56° 30''

Not visible

56° 15''

