

4357

Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

....., Director

U. S. G. SURVEY
L. & A.
AUG 15 1928
Acc. No.

State: Florida.....

DESCRIPTIVE REPORT

Topographic }
Hydrographic } Sheet No. 4357

LOCALITY

East Coast-North of Miami

Bakers Haul over and Entrances
to Lake Mabel and Ft. Lauderdale

1928

CHIEF OF PARTY

G.C. Mattison, R.L. Schoppe

NOTED BY PLANTER OFFICE

4357

DEPARTMENT OF COMMERCE
U.S.COAST AND GEODETIC SURVEY
E. LESTER JONES, DIRECTOR.

DESCRIPTIVE REPORT
to accompany
TOPOGRAPHIC SHEET #1
MIAMI, FLA.

S.S. RANGER

G.C.MATTISON-
R.L.SCHOPPE,
CHIEF OF PARTY.

1928

DESCRIPTIVE REPORT
to accompany
TOPOGRAPHIC SHEET #1

LIMITS:

This sheet comprises two separate surveys. Number one at Bakers Haulover and number two extending from Bay Mable to Fort Lauderdale, Entrance.

SURVEY #1.

This survey extends from traverse station START 2 to traverse station BRIDGE, and lies between the limits of the meridians $80^{\circ} 07'$ and $80^{\circ} 08'$ and between the limits of the parallels $25^{\circ} 53'$ and $25^{\circ} 55'$.

GENERAL DESCRIPTION OF SURVEY:

The object of this survey was to show the present condition of Bakers Haulover. The hurricane of 1926 washed out the approaches on either side of the bridge. The aerial photographs furnished by the office show this condition. As the shore line on either side of the Haulover (Bridge) has been changing since the new bulkheads have been driven the survey was carried approximately one half ($\frac{1}{2}$) mile in each direction.

GENERAL DESCRIPTION OF COAST:

The shore line along this stretch of beach is a sand beach ending in a steep sandy bank about ten feet high at the high water mark. At the present time small ^{Groins} (bulkheads) are being driven in an effort to save this stretch of beach from washing away. The beach road shown dotted on the south half of the sheet is now abandoned, as large areas was washed out during the hurricane. And in some places

The sands have been washed from under the road surfacing.

The present bridge at Bakers Haulover is the same one that is shown in the photographs. The approaches and bulkheads are new. Steel sheet piling was driven and the soil filled in back. A very strong current flows in and out at the Haulover and this is having a very marked effect on the shore line. A tendency to build up the beach on the north side and wash away on the south. North of the Haulover the road runs close to the beach but seemed to escape the damage of the hurricane. The vegetation shown on this survey is a mixture of bushes and palmetto palms.

DESCRIPTION OF INTERIOR:

Survey was carried inside the haulover to points that connected with old shore line.

SURVEY METHODS:

Stations BRIDGE, BRIDGE 1, SIT, START 3 and START 2 were first plotted on the sheet from the traverse records. Survey was started at BRIDGE, table oriented on START 2 and a traverse was run in both directions from BRIDGE, checking on the plotted positions of START 2 and BRIDGE 1. There was no error for adjustment.

BAKER was not recovered in this survey.

CHANGES IN SHORE LINE:

Changes in the general coast line and approaches to Bakers Haulover. The two bulkheads are also new.

CONTROL:

Traverse stations plotted on the sheet.

This survey was made by Mr. G.A. Fredrickson.

SURVEY #2.

This survey extends from station SAND on the south point of the first inlet south of Bay Mable to and including Fort Lauderdale Inlet. This comprises the area between the limits of Meridian $80^{\circ} 06'$ and $80^{\circ} 07'$ and the limits of the parallels $26^{\circ} 04'$ to $26^{\circ} 07'$.

GENERAL DESCRIPTION OF THE SURVEY:

Numerous changes in the locality made a topographic survey necessary. The inlet just north of SAND changes continually and according to local information one storm will alter it as much as fifty yards.

At Bay Mable the inner jetties have been finished and the dredges were still working at the entrance between the sheet piling bulkheads.

The survey at Lauderdale breakwater and inlet will enable this work to be tied in with the photographs.

DESCRIPTION OF COAST:

The long neck of land upon which SAND is located is subject to a strong current parallel to the beach. Difference between the high and low water mark is only 8 or 10 meters, while at the high water mark there is a bank some 3 meters high. Projecting roots and dead palms show there is a gradual washing away. As stated before, the point is constantly shifting. At the time the survey was made a dredge was working in this inlet. In the vicinity of SAND the land is covered with a thick growth of palmetto palms and bushes.

From this inlet north to the Bay Mable breakwater the shore is a broad flat sandy stretch.

The shrubbery has been killed off by the dredging operations in the bay. The shore line is flat.

The finished jetties shown are the inner ones and are built of Coquina rock. At future date the plans call for two more jetties extending farther out to the north and south. A blue print showing this proposed plan accompanies this sheet.

From Bay Mable to Lauderdale there is no change in the shore. Except possibly between hydrographic signal LI and the North Bay Mable breakwater; here there may be some land filled in by the dredges.

Fort Lauderdale inlet is the same as shown on the existing chart.

DESCRIPTION OF THE INTERIOR:

The interior is flat swampy land covered by a thick growth of trees extending to the limit shown on the sheet.

The triangulation stations SAND, COUNT and FORT form the control point for this survey. Survey was started at SAND. The instrument was oriented on COUNT and checked on FORT. The hydrographic signals shown were located by the plane table.

All errors in topographic traverse were compensated in the field.

This survey was made by S.B.Ehlers.

*Respectfully Submitted,
Benjamin H. Hogg*

LIST OF PLANE TABLE POSITIONS

TOPOGRAPHIC SHEET #1
SURVEY #2

Subject and Description	Lat	D.M.	Long.	D.P.	Remarks.
ROOT	26 04	970	80 06	1152	
STUMP	26 04	1190	80 06	1122	
DEAD	26 04	1268	80 06	1113	
TREE	26 04	1316	80 06	1104	
LET	26 04	1536	80 06	1014	
FRESH	26 05	400	80 06	947	
CAR	26 05	1013	80 06	847	
OUTER	26 05	1045	80 06	515	
BUL	26 05	1258	80 06	841	
LI	26 05	1779	80 06	714	
LIT	26 06	631	80 06	597	
PER	26 06	1157	80 06	862	
WHITE	26 06	1363	80 06	909	
TOW	26 06	1257	80 06	540	
BOAT	26 06	1382	80 06	516	
DOCK	26 06	1546	80 06	627	

STATISTICS FOR SURVEY

NUMBER ONE

New area surveyed in square miles, stat.	0
Area re-surveyed in " " "	0.3
Length of detailed shoreline in Sq.stat.mi	2.1
Length of, shoreline of rivers and creeks resurveyed in square stat. miles	0
Length of roads surveyed in square stat.mi	2.0

STATISTICS FOR SURVEY

NUMBER TWO

New area surveyed in square miles stat.	0
Area resurveyed in " " "	1.0
Length of detailed shoreline in Sq.stat.mi.	2.7
Length of shoreline of rivers and creeks resurveyed in square stat.miles	4.1
Length of roads surveyed in square stat.mi.	0

AND REFER TO NO. 11-DRM

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON

September 17, 1928.

SECTION OF FIELD RECORDS

Report on Topographic Sheet No. 4357

Bakers Haulover and Entrances to Lake Mabel and Port Lauderdale, Fla.

Surveyed in 1928

Instructions dated January 3, 1928 (RANGER)

Chiefs of Party, G. C. Mattison and R. L. Schoppe.

Surveyed by C. F. Ehlers and G. A. Frederickson.

Inked by B. H. Rigg.

1. The records as well as the character of the survey conform to the requirements of the General Instructions.
2. The party's instructions do not call for a topographic survey, but one appears to have been needed due to changes that have occurred since the locality was photographed.
3. The junctions with the adjoining C. & G. S. surveys are adequate.
4. This survey should be used in conjunction with existing aerial photographs. The photograph covering the new entrance to Lake Mabel shows a point of land and an island in the fairway of the entrance. The survey should have been carried further inland at this place to show the existing conditions.
5. With the exception of the locality noted in the preceding paragraph no additional surveying is required.
6. The character of the surveying is excellent and the scope is good. Field drafting is excellent.
7. Reviewed by E. P. Ellis, September, 1928.

Approved:

L. O. Solbert
Chief, Section of Field Records (Charts)

J. B. Borden
Chief, Section of Field Work (H. & T.)

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4357

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. 1

REGISTER NO. **4357**

C. & G. SURVEY
L. & A.
AVG 18 1928
Acc. No.

State FLORIDA

General locality ~~EAST COAST FLORIDA~~ E. Coast-North of Miami
Bakers Haulover and Entrances to Lake Mabel and Fort Lauderdale

Locality ~~BAKERS HAULOVER, MIAMI BEACH~~

~~DAY MABLE ENTRANCES, PORT LAUDERDALE~~

Scale 1:10,000 Date of survey Mar. Apr. May, 192 8

Vessel RANGER

Chief of Party G.C. MATTISON, R.L. SCHOPPE

Surveyed by C.F. Ehlers - G.A. Fredrickson

Inked by B.H. RIGG

Heights in feet above _____ to ground to tops of trees

Contour, Approximate contour, Form line interval _____ feet

Instructions dated Jan. 5 - March 23, 1928

Remarks: These surveys show recent changes in the above mentioned

localities and are to be used in conjunction with the aerial
photographs.