6736

Form 504
Rev. April 1935
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Topographic } *Sheet No.* B 39-40
~~*Hydrographic*~~

T6736

State Washington

LOCALITY

San Juan Islands

Rosario Strait

193/40

CHIEF OF PARTY

Ray L. Schoppe

U. S. GOVERNMENT PRINTING OFFICE

6736

Applies to Chart 6380 (Re-revised) Mar. 11/41 S.P.
" " " 6300 " " 20/41 "
" " " 6377 June 14/41 D.K.S.
" " " 6376 Aug 8, 1944 J.T.W.

Form 537a
Ed. Nov. 1929

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

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. H-39-40

REGISTER NO. T6736

State Washington

General locality San Juan Islands

Locality Rosario Strait

Scale 1:10,000 Date of survey January, 1940

Vessel SURVEYOR

Chief of party Ray L. Schoppe

Surveyed by Harold J. Oliver

Inked by Harold J. Oliver

Heights in feet above M.H.W. to ground ~~to tops of trees~~

~~Contours approximate contours~~ Form line interval 100 feet

Instructions dated September 22, 1939

Remarks:

GPO

DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEET, FIELD NO. B-39-40

REGISTER NO. T-6736

East Side, Rosario Straits

Washington

Scale 1:10,000

U.S.C.& G.S.S. SURVEYOR

Ray L. Schoppe, Comd'g.

Project HT-241

1940

AUTHORITY

This survey was accomplished in accordance with the Director's instructions dated September 22, 1939.

LIMITS AND SCALE

This sheet extends along the east side of Rosario Straits from about the middle of Burrows Bay, Latitude 48° 27.7', southward to the north side of Reservation Bay, Latitude 48° 25.0'. It includes Williamson Rocks on the north and Northwest Island on the south. Contours were carried inshore to the limits of visibility which was about 0.5 mile.

The sheet is on a scale of 1:10,000.

CONTROL

The control consists of Second-Order Triangulation stations executed in the winter season of 1939-40 and computed on the North American 1927 Datum.

SURVEY METHODS AND PARTY ORGANIZATION

The work on this sheet was accomplished by a topographer and four men basing on the Ship SURVEYOR and working from a motor dory and motor sailer. The shoreline was rodded in while working from the motor dory and the contours were extended by location of identifiable points cut in from sextant locations in the motor sailer.

The usual plane table survey methods were used in the survey of this sheet. Plane table positions were determined by traverse and checked from cuts from WILLIAMSON 1939 and resection from triangulation stations LANGLEY 1939, ERIE 1939, and topographic signal JOE on Deception Island. This position was determined by the EXPLORER in the summer of 1939 and transferred to this sheet. The signal is a square, 6 inch timber about 8 feet high marking fishing boundaries.

Traverses were extended from triangulation station LANGLEY 1939 northward to triangulation station ERIE 1939, and from triangulation station LANGLEY 1939 southward to signal COP and from triangulation station FRED (N.P.S.) 1939 northward to signal COP. There was no appreciable error in these traverses.

The low water line was rodded in at low water at such times as the stage of time permitted. When the work was in progress during high tide the mean low water was estimated.

FORM LINES

The form lines were drawn from elevations determined from offshore sextant cuts. A fix was taken and then a series of cuts and vertical angles, recording the time on each cut. A fix was taken at the end of the cuts and time recorded. The drift was considered to be in a straight line and the cuts plotted from time between fixes. Very good intersections were obtained and excellent agreement in elevations was obtained when there was a definite point to observe upon.

The elevations indicated are all ground elevations.

GENERAL DESCRIPTION OF TOPOGRAPHIC FEATURES

The area in general consists of a rugged shore line backed by high cliffs. The two bights between triangulation stations LANGLEY 1939 and ERIE 1939 end in a sand and boulder beach. The cliffs along these sections are clay and gravel and are mostly overgrown with deciduous trees. South of triangulation station LANGLEY 1939 the cliffs are outcropping rock and are very abrupt and craggy. Sares Head, about 1/4 mile north of Northwest Island, is the most prominent feature in the area of the sheet and shows rugged, scarred and green with grass and some scrub pine. Rosario Beach, east of Northwest Island at the south end of the sheet, is a summer resort settlement with two very prominent buildings.

"Cat" is the top of a large cupola and was listed in the "Landmarks for Charts" by the Ship EXPLORER (Old) in their field work of 1939. Elevation "239" northeast of "Cat" is also a prominent house but not of sufficient prominence to be listed as a "Landmark for Charts". The beach consists of coarse sand and round pebbles. Extensive kelp extends offshore about 50 meters from LANGLEY 1939 to and including Northwest Island. not shown on sheet

Northwest Island is a grass-covered island about 28 feet high. At the water line on the northwest corner the General Land Office has set a bronze disc in the rock stamped "A.M.C. T 34 N, R 1 E, S 22, 1928". not shown on sheet

Williamson Rocks consists of two grass-covered islands quite close together and several small rocks extending westward from the south end of the two islands.

The vegetation as viewed from the water appears to be mostly second growth pine. A closer examination reveals that there is a large percentage of deciduous trees, bushes, and grass. Back of the hills along the shore most of the land is cultivated. There are also frequent small clearings and dwellings along the shore in what appears from the water to be dense timber.

JUNCTIONS

On the north a tie was made with sheet No. 6802(1939-40) at triangulation station ERIE 1939. The topographic detail made a satisfactory junction and no adjustment was necessary.

On the south a tie was made with sheet No. T-6688b (1939) at signal BAA. The topographic detail made a satisfactory junction and no adjustment was necessary.

MAGNETIC MERIDIANS

Magnetic observations were made with Declinatoire No. 231 which gave a magnetic declination of 23° 01' at 2:12 P.M. on April 28, 1939, at

Lincoln Park, Washington, Magnetic Station.

Magnetic Declinations were observed as follows:

Triangulation Station	Magnetic Declination
DECEPTION 1854	22° 12'
WILLIAMSON 1939	24° 10'
FRED (N.P.S.) 1939	23° 00'
ERIE 1939	19° 52'
LANGLEY 1939	23° 30'

COMPARISON

An accurate comparison with Chart No. 6380 was impossible due to the difference in scale.

The previous survey of this area was made on Sheet No. 1667 in 1885. The shore line of unchangeable areas appears to be identical. The topographic features and form lines of the previous survey indicate some discrepancies. In general, however, the form lines and important features agree as closely as could be expected. The old survey fails to indicate the rock slide and crumbling cliffs east of Rosario Beach. This may be due to the heavy growth of trees indicated in this area on the 1854 sheet. Such other differences between the old work and the present survey may have been caused by the heavy growth of trees which has since been largely cut over. A second growth of pine and deciduous trees now covers those portions of the area which are not cultivatable.

SIGNALS

The hydrographic signals on the sheet are whitewashes on rock.

There are no triangulation signals outside the high water line.

The following is a list of topographic signals outside the high water line:

Rag	Whitewash on boulder; bares 5 feet at M.H.W.
Nit	Whitewashed box on beach.
Pet	Whitewash on boulder; bares 10 feet at M.H.W.
Con	Whitewash on log overhanging high water line.
	Whitewashed boulder; bares 4 feet at M.H.W.

AIDS TO NAVIGATION AND PERMANENT LANDMARKS FOR CHARTS

The above subject is taken up in a separate report by the Chief of Party. Letter 394-1940

GEOGRAPHIC NAMES

Name	Where obtained	Recommendation
Fidalgo Island	Chart 6380	Be Retained
Rosario Strait	"	"
Sares Head	"	"
Northwest Island	"	"
Williamson Rocks	"	"
Langley Point	"	"
Langley Bay	"	"
Telegraph Bight	"	"
Burrows Bay	"	"
Rosario Beach	General use	Be charted

STATISTICS

Statute miles of shoreline - - - - - - - - - - - - - - 5.8

Statute miles of roads - - - - - - - - - - - - - - - - 1.0

Area in square statute miles - - - - - - - - - - - - - 2.3

Number of hydrographic signals - - - - - - - - - - - - 41

Respectfully submitted,

Harold J. Oliver

Harold J. Oliver,
Jr. H. & G. Engr.

Approved and forwarded:

G. M. Dobieralski

~~J. H. Smook~~, H. & G. Engr.,
Officer in Charge,
Seattle Processing Office.

	Remarks	Decisions
1		484226 US.6.B
2		484225
3		484226
4		"
5		"
6	Bl. Pr. 34227 applies Beach to beach on this cove, which it calls Rosario Bay	"
7		484227 U.S.6B
8		484226
9		"
10		484227
11	For title	485229
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M 234

GEOGRAPHIC NAMES

Survey No. T6736

Name on Survey	On Chart No. A,	On previous survey No. B,	On U. S. quadrangle Maps C,	From local information D	On local Maps E	P. O. Guide or Map F	Rand McNally Atlas G	U. S. Light List H	K	
Burrows Bay										1
Fidalgo Island										2
Langley Bay										3
Langley Point										4
Northwest Island										5
Rosario Beach										6
Rosario Strait										7
Sares Head										8
Telegraph Bight										9
Williamson Rocks										10
San Juan Islands										11
										12
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Names underlined in red approved by L. Heck on 9/12/40

M 234 R

FORM M-238

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
PHOTOSTAT OF

~~No. xxxx~~
No. T T6736

received July 24, 1940
registered July 25, 1940
verified
reviewed
approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
22			
24			
25	✓	11/30	Pages 3 + 4
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	T. B. Reed

✓ 1030R

CHART DIVISION

SURVEYS SECTION

REVIEW OF TOPOGRAPHIC SURVEY NO. 6736 (1940) FIELD NO. B-39-40

Washington, San Juan Islands, Rosario Strait
Surveyed in January 1940, Scale 1:10,000
Instructions dated September 22, 1939 (SURVEYOR)

Plane Table Survey — Aluminum Mounted

Chief of Party - Ray L. Schoppe
Surveyed by - Harold J. Oliver
Inked by - Harold J. Oliver
Reviewed by - Harold W. Murray, April 7, 1941
Inspected by - H. R. Edmonston

1. Junctions with Contemporary Surveys

The junction on the north with T-6802 (1939-40) and on the south with T-6688b (1939) is very good.

2. Comparison with Prior Surveys

T-1252 (1871) and T-1667 (1885), scales 1:10,000

T-1252 covers the present survey southward of Lat. 48° 26'. T-1667 covers the entire area of the present survey.

Agreement of shoreline details is very good. Some differences, however, are listed in the Descriptive Report, page 5. The 20-foot form lines on the old surveys are controlled by only a few elevations. Agreement with the present survey is therefore good in some areas but in others differences of as much as 300 meters are noted in identical form lines. The present survey supsedes this survey.

3. Comparison with Charts 6377 (New Print date 11-2-39)
6380 (" " " 4-13-40)

a. Topography

Topography shown on the chart originates with surveys discussed in the preceding paragraphs.

b. Magnetic Meridians

The values of the 5 magnetic meridian determinations are listed in the Descriptive Report, page 5.

The values agree closely with the charted value except that made at station ERIE 1939 which measures 19° 52' and differs 3° 47' with the charted value. This discrepancy has been referred to the Division of G. & S.

4. Compliance with Instructions for the Project

The plan, character and extent of the survey satisfy the instructions for the project.

5. Condition of Survey

a. The inking of the topographic details is very good.

b. The Descriptive Report is clear and satisfactorily covers all matters of importance. It is desirable that buildings mentioned in the Descriptive Report be shown on the smooth sheet.

6. Additional Field Work Recommended

This is an excellent survey and no additional work is necessary.

7. Superseded Surveys

T-1252 (1871) In part
T-1667 (1885) " "

Examined and approved:

Thos. B. Reed,
Chief, Surveys Section

Chief, Division of Charts

Chief, Section of Hydrography

Chief, Division of Coastal Surveys