

6813

Form 504
Rev. April 1935

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Topographic

~~H-40~~

Sheet No. H-40

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

APR 16 1941

Acc. No.

State Washington

LOCALITY

Grays Harbor, North Bay

East side

19340

CHIEF OF PARTY

Charles Pierce

U. S. GOVERNMENT PRINTING OFFICE 102221

6813

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-40

REGISTER NO. **T6813**

State Washington

General locality North Bay, Grays Harbor.

Locality East Shore, North Bay.

Scale 1:10,000 Date of survey Jan. 10, 1941, 19

Vessel Discoverer

Chief of party Charles Pierce

Surveyed by J. T. Jarman

Inked by J. T. Jarman

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

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

Instructions dated April 13 and April 26, 1939, 19

Remarks: Project HT 235

DESCRIPTIVE REPORT

To Accompany

Topographic Sheet H

Project 235

East Shore of North Bay

Grays Harbor, Wash.

INSTRUCTIONS

The work on this sheet was done in accordance with instructions dated April 13, and 26, 1939. Field work was begun on December 26, and completed January 10, 1941.

LIMITS

The area covered by this sheet extends along the east shore of North Bay from Campbell Slough on the north to Point New on the south.

JUNCTIONS

This sheet joins sheet G-40 on the north, and sheet J-40 on the south. The above two sheets are contemporary surveys with both junctions being satisfactory.

CONTROL

The control for this survey was executed in 1940 by this party, and consists of the following five triangulation stations: Neds Rock 2 1939, Chenois 1940, Holman 1940, Tulips 1940, and Grass 1940. Stations Neds Rock 2 1939 and Chenois 1940 are main scheme stations established with second order accuracy; Holman 1940 is a supplemental station also of second order accuracy; stations Tulips 1940 and Grass 1940 are intersection stations established with third order accuracy.

METHODS

Standard Coast Survey methods were used throughout this survey.

There was sufficient control so that no long traverses were necessary, and no adjustments were required. A short 0.7 mile traverse up the Humptulips River was not closed.

At the time this survey was in progress, the tides were high with the lower low waters occurring at night, and there was little opportunity to locate the M.L.L.W. line.

The M.L.L.W. line of the Humptulips River Channel, and Gillis Slough Channel shown inked on the sheet with a dashed line was obtained Jan. 7 and 8, when there was a predicted tide of 2' and $1\frac{1}{2}$ ' respectively above M.L.L.W. Both of the above two streams have cut channels with a definite gradient through the tidal flats. A tide of $1\frac{1}{2}$ ' or 2' above M.L.L.W. is not sufficient to force the waters of the streams out of their channel banks in the areas where the M.L.L.W. line is shown inked.

A short section of M.L.L.W. line, which is just west of the mouth of Chenois Creek, was sketched and has been left in pencil. It was obtained on Jan. 7 when there was a predicted tide of 2' above M.L.L.W., and is approximate.

From observation, the channels of North Bay appear to agree approximately with those shown on chart No. 6195. To locate these channels by topography would be an endless and expensive job. Air photography secured at or near M.L.L.W. furnishes the best and most economical method of locating these channels.

Points along the shore at which rod readings were taken are indicated with black dots in accordance with Field Memorandum No. 1, 1935,

It was realized that no hydrography would be done in the area covered by this survey during the present field season. Therefore, an

effort was made to mark enough stations so that hydrography could be accomplished at a later date without additional topography. A number of the stations have been permanently marked, and descriptive cards on form 524 have been submitted for all stations which are likely to be recovered. Stations along sloughs and creeks have been temporarily marked with 2" x 4" stakes. A 1" x 4" name plate is attached with the station's name outlined with carpet tacks. They should last about five years if left undisturbed.

Marshy areas along the coast are numerous. In most cases, there is no definite edge or berm to the marsh. It begins at the storm water line, and slopes offshore gradually for a distance, varying from 50 to 150 meters, at which point tidal mud flats begin. The high water line, unless actually observed at mean high water, is very difficult to determine in these areas. Usually there is a distinctive change in the color of the grass at or near the high water line, the color being a brown lifeless hue offshore, and a greener hue inshore. Consequently, a line was rodged in which is based on observation, and which very closely approximates the mean high water line. The shoreline, in such cases, was shown on the sheet by means of the marsh symbol in accordance with Field Memorandum No. 1, 1938, the marsh being shown with an unbroken symbol between the tree line and the located shore line, and by means of a broken marsh symbol outside the located line. (See snapshots "A" and "B" which are submitted with descriptive report for sheet G-40)

CHARACTER OF SHORELINE

The greater part of the shoreline on this sheet consists of marshy areas already mentioned under "Methods". It is really a semi-marsh in that a person can walk over it without sinking much deeper than his ankles. During extreme high tides, the marshy areas are covered to the storm water line with only tufts of grass showing.

Several bluffs are shown on the sheet, which are of a mixed clay and gravel formation with a slow rate of erosion. The section of beach between Chenois Creek and Campbell Slough has an unusual amount of driftwood deposited.

Neds Rock (known locally as James Rock) is not really a rock, but is a small island of a "mixed clay and gravel formation" similar to the bluffs already mentioned. Its sides, rising 80' out of mud and gravel flats, are steep and precipitous. It can be reached on foot only at low tide. The original triangulation ^{station} atop the rock has been lost, but the party of W. M. Scaife established Neds Rock 2 on its top during the summer of 1939. The latter station was under a heavy 4" x 4" tripod erected by the U. S. Army Engineers. During a severe storm the latter part of December 1940, the tripod was demolished, and a knarled, lone spruce tree atop the rock, which has been mentioned by the earliest explorers in Grays Harbor, was destroyed. The top of the rock can not now be reached without some preparatory work, since the spruce tree mentioned above served as a ladder in getting over the lip at the top of the rock. At the present time, the top of the rock is covered with grass and a heavy growth of alder bushes.

(cht. 6195)
charted as
76' above MHHW
W.A.B.
8/19/41

GEOGRAPHIC NAMES

North Bay, Campbell Slough, Jessie Slough, Humptulips River, Gillis Slough, Chenois Creek, and Grass Creek are geographic names shown on both chart 6195 and the U. S. Geological Survey map, Ocosta quadrangle. All of them are in general use by the local inhabitants.

Pt. New is shown on both chart 6195 and the U. S. Geological Survey map, Ocosta quadrangle. No effort was made to verify it locally.

Neds Rock, which is the geographic name applied to the small island just off Pt. New on both chart 6195 and U. S. Geological Survey

map, Ocosta quadrangle, is not known locally by that name. James Rock is the local name in general use. It received this name due to the proximity of a farm owned by the James family who were early settlers of Grays Harbor. Several old residents stated that they knew personally that the rock has been known as James Rock for over 40 years.

COMPARISON WITH PREVIOUS SURVEYS

No copies of previous surveys are available on this party. A comparison with chart 6195 indicates very few changes with the exception of the sand spit extending Nly from Pt. New, and the shifting of the high water line in the marshy areas at the mouth of the Humptulips River.

MAGNETIC MERIDIAN

Magnetic meridians were determined with declinoire No. 199 at triangulation stations Chenois and Grass. The values shown on the sheet are uncorrected scaled values. Declinoire No. 199 was standardized at the Lincoln Park magnetic station at the beginning of the 1940 field season, and at the end of the season at the Seward Park magnetic station. The results of the standardization have been forwarded to the Washington Office.

The value of the magnetic declination was secured at triangulation station Grass with the transit magnetometer, and should be used in lieu of the values obtained with the declinoire in the vicinity.

COAST PILOT NOTES

On page 224 (U.S. Coast Pilot, Pacific Coast), line 16, which reads "About half of the buoys in North Bay were gone in 1933" should be deleted, and the following substituted: "All of the buoys in North Bay were gone in 1940".

LANDMARKS FOR CHARTS

Triangulation station: Chenois has a permanent tripod of heavy

timber constructed over it, which makes it a fair landmark. The charted triangulation station shown atop Neds Rock should be removed, since the tripod over this station has been destroyed. However, Neds Rock with its temple like appearance, and its height of 80' is still prominent.

LIST OF PLANE TABLE POSITIONS

Descriptions and locations of all topographic signals with the exception of signal "Spit" have been submitted on form 524.

STATISTICS

Statute miles of shoreline	7.3
Roads, railroads, and sloughs	10.8
Area in square statute miles	4.0

REMARKS

Some of the east bank of Grass Creek and a short section of the west bank of the Humptulips River was sketched. This shoreline has been shown on the sheet with a dashed line. It should be fairly accurate, since it is based on cuts and estimated distances.

Numerous groups of piling are found on either side of the Humptulips River Channel. In most cases, the extremities of each individual group of piling were located with cuts, and those ^{piling} in between were sketched. However, signals Dog, Boy, Tall, and Pin are distinctive single piling which have been definitely located by three cuts.

All bridges on this sheet, both highway and railroad are fixed ^{mean} in type. Clearances at ^{mean} H.H.W. have been shown on the sheet for each bridge. The minimum span or channel width is 10' at any one bridge.

Respectfully Submitted,

Approved
Charles Pierce
Charles Pierce
H. & G. E.
Forwarded
L. D. Graham
L. D. Graham,
Commanding Ship Discoverer.

J. T. Jarman
J. T. Jarman,
Jr. H. & G. E.

Remarks

Decisions

1		470240-241
2		"
3		"
4		"
5		469240-41
6		470240-241 USGB
7	1940/41 U.S.G.B. Decision for Neds Rock	469240-241
8		470240-241
9		469240-241
10		469240-241
11	village and R.R. station.	"
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GEOGRAPHIC NAMES

Survey No. **T6813**

GEOGRAPHIC NAMES											
Survey No. T6813											
Name on Survey											
	A,	B,	C,	D	E	F	G	H	K		
Campbell Slough											1
Chenois Creek											2
Gillis Slough											3
Grass Creek											4
Grays Harbor											5
Humptulips River											6
Neds											
James Rock											7
Jessie Slough											8
North Bay											9
Point New											10
Chenois Creek											11
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											27

Names underlined in red approved

by L. Heck on 8/18/41

M 234

Names underlined in red approved
by L. Heck on 8/18/41

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
~~PROPOSAL~~

~~XXXXX~~

No. T 6813

received April 16, 1941
registered April 29, 1941
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	✓	HOL	Pages 3 to 6
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	T. B. Reed
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v 7/23/42