

6534ab

6534ab

Form 504 Rev. April 1935	
DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Topographic Hydrographic	Sheet No. H & H-H
<div>U. S. COAST & GEODETIC SURVEY LIBRARY AND ARCHIVES MAY 18 1937 ACQ. No. _____</div>	
State Washington	
LOCALITY E ^t Puget Sound Eld Inlet - Puget Sound	
193 6	
CHIEF OF PARTY G. C. JONES	

U. S. GOVERNMENT PRINTING OFFICE

310

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 and H-H.

REGISTER NO. T6534 ab

State Washington

General locality Puget Sound

Locality Eld Inlet

Scale 1:10,000 Date of survey July - August, 1936

Vessel U.S.C. & G.S.S. EXPLORER

Chief of Party G. C. Jones

Surveyed by H. F. Garber

Inked by H. F. Garber

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

~~Contours~~ Approximate contour, ~~from one interval~~ 50 feet

Instructions dated March 29, 1934

Remarks: Project HT-171

DESCRIPTIVE REPORT

TO ACCOMPANY TOPOGRAPHIC SHEETS "H" AND "H-H"

ELD INLET - PUGET SOUND

SEASON OF 1936

- o -

G. C. JONES, CHIEF OF PARTY, C. & G. S.

- o -

T-6534a T-6534b
DESCRIPTIVE REPORT
TO ACCOMPANY TOPOGRAPHIC SHEETS "H" AND "H-H",

ELD INLET - PUGET SOUND.

The entire area of Eld Inlet is shown on both sides of this sheet, sides "H" and "H-H", comprising the northern and southern portions respectively. As this survey is treated as a unit a single report is being submitted.

AUTHORITY:

This survey was executed in accordance with the Director's Instructions dated March 29, 1934, Project HT-171. ✓

LIMITS:

The survey includes all of Eld Inlet, and joins sheets "B-1936" and "D-1936", to the northward. ✓
(T-6529) (T-6531)

CONTROL:

The control on these sheets is on the 1927 North American datum.

SURVEY METHODS:

Standard plane table practices were followed throughout. Short closed traverses were run between triangulation stations, checking the intermediate setups by resection. ✓

T-6534b

Referring to side "H-H", a traverse was run from triangulation station "POLE" 1936, towards the head of Eld Inlet to the highway bridge; and thence along the road to triangulation station "HIWAY" 1936. There was a closing error of six meters that was adjusted. An unclosed traverse was run from the bridge to the head of the Inlet. The shoreline above the bridge is very ragged with numerous small sloughs. Only the most prominent points and sloughs were located. ✓

TOPOGRAPHIC SIGNALS:

Those signals appearing between the high and low water lines, other than piles so noted, are on logs or trees fallen across the beach. These obstructions are not of a permanent or chartable nature. ✓

CONTOURS:

Owing to the heavy second growth timber, with trees of varying heights, accurate drawing of contours was impossible. The error of elevations is the error in estimating the tree heights. In a wooded country, the contours appear smoother than they actually are, especially in the valleys. Inasmuch as this survey was made for navigation purposes rather than interior development, an attempt was made to draw the contours as they appeared.

CHARACTER OF COUNTRY:

With the exception of occasional small areas under cultivation, the land is wooded. The land rises from the beach to elevations of 150 to 200 feet, where the land becomes rolling. Two prominent hills rise from the beach one the west side of Eld Inlet in the vicinity of Latitude ^{T-6534b} 47°04' with elevations of 1140 feet and 865 feet. The country is quite hilly in this vicinity.

Sand and gravel beaches with occasional small boulders extend from the entrance of Eld Inlet to the vicinity of signals "RAT" and "SEN". ^{lat. 47°03.6' Long. 123°00.5'} From these signals to the head of the Inlet the tide flats are soft mud from low water line to high water line.

COMPARISON WITH CHART 6460:

Due to the great difference of scales, a detailed check was not made between the sheet and the chart. By inspection, however, the general trend of the contours and shore line is consistent, with the exception of the above mentioned prominent hills. These are not shown on the chart.

A log dump has been built in the vicinity of triangulation station "POLE" 1936. ^{lat. 47°03.3' Long. 122°59.8'} Logs are dumped from trucks and logging trains, and are then graded and made into rafts between the rows of piling. ^{T-6534b}

LOW WATER LINE:

The low water line was transferred directly from the hydrographic sheets of this area. H-6198(1936) and H-6202(1936).

GEOGRAPHIC NAMES:

ELD INLET: This bay is locally known as Mud Bay, due to the large area of mud at its head. It is believed that the name, Eld Inlet, ^{should} be retained due to numerous other bays named "Mud Bay".

ROCKY POINT: Rocky Point is locally known as such, and now appears on Chart 6460. T-6534b

FLAPJACK POINT: The point on which triangulation station "YEW - 1936", is located is locally known as Flapjack Point. It is recommended that this named be charted. T-6534a

PERRY CREEK: The creek, at the vicinity of triangulation station "POLE - 1936", is locally known as Perry Creek. The name also appears on the highway maps of the area. It is recommended for charting. T-6534b

COOPER POINT: The point dividing Eld and Budd Inlets is generally known as Cooper Point as charted. T-6534a

Respectfully submitted,

Harry F. Garber
Harry F. Garber,
Jr. H. & G. Engr.,
U.S.C. & G.S.S. EXPLORER.

APPROVED AND FORWARDED:

Sheets examined & approved
G. C. Jones
G. C. Jones,
Commanding Officer,
U.S.C. & G.S.S. EXPLORER.

STATISTICS
T-6534a T-6534b
SHEETS "H" AND "H-H"

Statute miles of shore line	32.1
Area, square statute miles	8.5
Statute miles of roadways	3.0
Statute miles of railroad	0.8

Remarks.

Decisions

1		USGB decision
2		" "
3	not on this sheet yfe	" "
4		
5	For Title	USGB decision
6	" "	" "
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		

GEOGRAPHIC NAMES

Survey No. T-6534a

Name on Survey	On Chart No. 6460		On previous survey No. 71075, H-14460		From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List	
	A,	B,	C,	D						
<u>Eld Inlet</u>	✓ appd									1
<u>Cooper Point</u>	✓ appd									2
<u>Budd Inlet</u>	✓ appd									3
<u>Flapjack Point</u>				D.R. PJ 3						4
<u>Puget Sound</u>	✓ appd									5
<u>Washington</u>	✓ appd									6
										7
										8
										9
										10
										11
										12
										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
Names underlined in red approved										26
by <u>SGE</u> on <u>5/28/37</u>										27

Remarks.

Decisions

1		<i>USGB decision</i>
2		
3		
4	<i>For Title</i>	<i>USGB decision</i>
5	<i>" "</i>	<i>" "</i>
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
M 234		

GEOGRAPHIC NAMES

Survey No. T-6534b

GEOGRAPHIC NAMES		Survey No. T-6534b									
Name on Survey	On Chart No. 6460										
	A,	B,	C,	D	E	F	G	H	K		
<u>Eld Inlet</u>	✓ app'd									1	
<u>Rocky Point</u>	✓	✓	✓	D.R. Pg. 3						2	
<u>Perry Creek</u>	✓			D.R. Pg. 3	✓					3	
<u>Puget Sound</u>	✓ app'd									4	
<u>Washington</u>	✓ app'd									5	
										6	
										7	
										8	
										9	
										10	
										11	
										12	
										13	
										14	
										15	
										16	
										17	
										18	
										19	
										20	
										21	
										22	
										23	
										24	
										25	
										26	
										27	

Names underlined in red approved

by GLE on 5/28/37

M 234

Names underlined in red approved
by LHE on 5/28/37

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
~~PHOTOSTAT OF~~

~~Moott~~

No. T -6534ab

received T-6534ab
registered
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		CKG	sent memo
26			
30			
40			
62			
63			
82			
✓ 83			
88			
90			

RETURN TO

82	C. K. Green
----	-------------

Section of Field Records

REVIEW OF TOPOGRAPHIC SURVEY NO. 6534a (1936) FIELD NO. H

Eld Inlet, Puget Sound, Washington
Surveyed in July - August 1936, Scale 1:10,000
Instructions dated March 29, 1934 (EXPLORER)

Plane Table Survey

Aluminum Mounted

Chief of Party - G. C. Jones.
Surveyed by - H. F. Garber.
Inked by - H. F. Garber.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Topographic Manual except as follows:

- a. There is no evidence that the declinoire had been checked at a station of known declination during the season's work. (par. 17).
- b. Triangulation station Dust, in lat. $47^{\circ} 06.3'$, long. $122^{\circ} 57.7'$, is noted on the descriptive card as being located on a boulder which is covered at high water. A rock awash symbol and the note "Covered at high water" has been added to the station in the office.
- c. The low water line shown on this survey was transferred from H-6198 (1936) and H-6202 (1936). It is not the accepted practice to transfer the low water line from hydrographic surveys to contemporary topographic surveys. The low water line on hydrographic surveys is subject to office revision and changes cause differences with transferred low water line on topographic surveys. (par. 16(a), Topographic Manual).

The Descriptive Report satisfactorily covers all items of importance except the following:

- d. Information should have been included relative to the existence or non-existence of the rocks awash (charted) falling close to shore and roads (charted) falling within the limits of the present survey. (See pars. 4b(1)(b) and 5a(1)).
- e. It is desirable that the Descriptive Report contain an alphabetical list of all the plane table stations determined and all triangulation stations outside the high water line accompanied by a brief description of each and a statement as to whether the plane table stations are recoverable or not.

2. Compliance with Instructions for the Project.

The plan, character and extent of the survey satisfy the instructions for the project. Though the survey covers the shoreline area in general, the charted roads that fall within or very close to the limits of the present survey were not shown on the sheet nor mentioned in the Descriptive Report. It is assumed that since this sheet is primarily intended to be a control sheet for the hydrography, the survey of roads in the heavily wooded country was not undertaken, and since no information is given to the contrary, the roads are considered existent as charted. (See par. 5a(1)).

3. Junctions with Contemporary Surveys.

The junctions with T-6529 (1936) on the north and T-6534b (1936) on the south are satisfactory.

T-6531 (1936) on the north is essentially a shoreline survey and contains no contours. It makes a satisfactory junction with the present survey.

4. Comparison with Prior Surveys.a. T-1327a (1873) 1:10,000.

This survey covers the area of the present survey on the east shore of Eld Inlet from lat. $47^{\circ} 08'$ to Cooper Pt. The comparison of the old shoreline with that on the present survey shows a general good agreement, except that Cooper Pt. has extended northerly, approximately 70 meters, and has slightly widened. Most of the contours shown on the old survey are sketched and represent only a generalization of the topography in this area. They do not agree in location with the present contours, although there is a similarity in the pattern in some places. Inasmuch as numerous elevations are shown on the present survey, the contours thereon are considered the more accurate representation of the area.

The present survey has adequately covered the area and should supersede T-1327a (1873) for charting purposes.

b. T-1675 (1880), 1:10,000.

This survey covers most of the area of the present survey.

(1) Shoreline and Associated Details.

- (a) Comparison of the old shoreline with the present shows a good agreement, the only outstanding change noted being at Cooper Pt., where the present representation shows that the tip has extended northerly approximately 95 meters and has slightly

widened.

- (b) A number of sunken rocks (some charted as rocks awash) originating with this survey and falling inside the low water line on the present survey were not verified by the present survey nor the contemporary hydrographic surveys. Most of these have been carried forward on the present survey as rocks awash. (For further details, see Reviews of H-6198 (1936) and H-6202 (1936).

(2) Contours and Inland Details.

- (a) Contours and other inland details on the old survey extend only 100 to 400 m. inland. In general, the contours are in fairly good agreement with those on the present survey. Contours of the present survey cover more of the interior area and since they are substantiated by numerous elevations are considered the more accurate representation of the area. (See Descriptive Report, page 2, Contours).

Because the present survey is more detailed and with the indicated additions adequately covers the area it should supersede T-1675 (1880) for charting purposes.

5. Comparison with Chart 6460 (New Print July 26, 1937)
Chart 6462 (New Print April 8, 1937)

a. Topography.

Within the area of the present survey the charts are based on surveys discussed in the foregoing paragraphs and the following additional information:

- (1) The charted roads which fall within or very close to the limits of the present survey originate with a Progressive Military Map of the U. S. Army Engineers (Olympia, Wash. Quadd. - 1914). Since there is no information on the present survey to indicate that the roads are no longer in existence, they are assumed to exist as shown and should be retained on the chart. (see Par. 2, this review).
- (2) No authority could be found for the land figures charted in this area. They appear to be the numerical equivalents of the highest contours shown on T-1675 (1880). Since the present survey has located numerous elevations and the contours thereon are considered to be the more accurate representation of the area (par. 4b(2) this review) the charted figures should be disregarded in future charting.

b. Magnetic Meridian.

The values of the magnetic declinations determined with the declinatoire agree within 1 degree of the charted value.

c. Aids to Navigation.

There are no aids to navigation in this area.

6. Field Drafting.

The inking of the shoreline and topographic features is very good. The lettering is satisfactory but a mechanical lettering set should be used whenever possible.

7. Additional Field Work Recommended.

No additional field work is required.

8. Note to Compiler.

Attention is called to the following:

a. Par. 5a(1) and (2) of this review relative to the present charted roads and land figures.

b. Several triangulation stations are shown outside the high water line. These are not located on any topographic feature, the descriptive cards stating that they are standard marks set between the high and low water line.

9. Superseded Old Surveys.

Insofar as the topography actually included on the present survey is concerned, the present survey supersedes the following surveys for charting purposes:

T-1327a (1873) in part
T-1675 (1880) in part.


10. Reviewed by - G. Risegari, Dec. 29, 1937.

Inspected by - Harold W. Murray.


Examined and approved:



T. B. Reed,
Chief, Field Records Section.



K. T. Adams
Chief, Division of Charts.



Fred. L. Peacock
Chief, Section of Field Work.



G. H. Hude
Chief, Division of H. & T.

Section of Field Records

REVIEW OF TOPOGRAPHIC SURVEY NO. 6534b (1936) FIELD NO. H-H

Eld Inlet, Puget Sound, Washington
Surveyed in July - August 1936, Scale 1:10,000
Instructions dated March 29, 1934 (EXPLORER)

Plane Table Survey

Aluminum Mounted.

Chief of Party - G. C. Jones.
Surveyed by - H. F. Garber.
Inked by - H. F. Garber.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Topographic Manual except as follows:

- a. There is no evidence that the declinoire was checked at a station of known declination during the season's work. (par. 17).
- b. Triangulation station Rocky is noted on the descriptive card as being located on bed rock and is covered at high water. A note "On ledge covered at high water" has been added to the station in the office.
- c. The low water line shown on this survey was transferred from H-6202 (1936). It is not the accepted practice to transfer the low water line from hydrographic surveys to contemporary topographic surveys. The low water line on hydrographic surveys is subject to office revision and changes cause differences with transferred low water line on topographic surveys. (par. 16(a)).

The Descriptive Report satisfactorily covers all items of importance except the following:

- d. Information should have been included relative to the existence or non-existence of the rocks awash (charted) falling close to shore and roads (charted), portions of which fall within the limits of the present survey. (See pars. 4a 1(b) and (c), 4a 2(b), and 5a (1), this review.
- e. It is desirable that the Descriptive Report contain an alphabetical list of all plane table stations determined and all triangulation stations outside the high water line, accompanied by a brief description of each and a statement as to which plane table stations are recoverable.

2. Compliance with Instructions for the Project.

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

shoreline area in general, the portion of the charted road on the west shore north of lat. $47^{\circ} 04.5'$ that falls within the limits of the present survey was not located on the sheet nor mentioned in the Descriptive Report. It is assumed that since the survey is primarily intended to be a control sheet for the hydrography, the survey of roads in the densely wooded country was purposely avoided, and since no information is given to the contrary, the charted road not shown on the sheet is considered existent as charted (see par. 5a(1)).

3. Junctions with Contemporary Surveys.

The junction with T-6534a (1936) on the north is satisfactory.

4. Comparison with Prior Surveys.

a. T-1675 (1880), 1:10,000.

This survey covers the area of the present survey.

(1) Shoreline and Associated Details.

- (a) The comparison of the old shoreline with the present shows a good agreement, except that some minor differences are noted probably due to differences in surveying accuracy or in some cases as a result of erosion. The log dump, docks and railroad in the vicinity of Perry Creek and the old and new highway bridge in the vicinity of lat. $47^{\circ} 03'$, long. $122^{\circ} 59'$ are improvements made subsequent to the old survey.
- (b) A number of sunken rocks (some charted as rocks awash) originating with this survey and falling inside the low water line on the present survey were not verified on the present survey nor on H-6202 (1936). Most of these have been carried forward to the present survey as rocks awash. (See par. 8a, Review of H-6202 (1936) for further details.
- (c) Several rocky ledges (charted) of varying widths are shown along the west shore on the old survey in the vicinity of lat. $47^{\circ} 04'$, long. $123^{\circ} 01'$. Inasmuch as the longest and most important ledge on the north was verified as shown on the old survey, the remaining ledges have been carried forward and should be used in future charting.

(2) Contours and Inland Details.

- (a) In the comparison of contours, attention is called to the Descriptive Report (page 2, "Contours")

wherein it is stated that (1), the heavy timber growth prevents the accurate drawing of contours; (2) that contours in wooded country appear smoother than they actually are especially in the valleys and (3), that the present survey contours have been drawn as they would appear from a distance. Bearing these facts in mind, the agreement between the old and present survey is as good as can be expected. Agreement of the few elevations that are shown on the old survey is within a few feet of those shown on the present survey except in the case of the 445 foot elevation in lat. $47^{\circ} 03.8'$, long. $123^{\circ} 01.2'$ which is 60 feet less than the present survey determination of 505 feet. The present survey contours which are based on considerably more elevations is considered the better representation.

- (b) The inland roads shown along the western shore on the old survey are indicated by dashed lines. The main road (charted) located on the present survey is the same as that on the old survey, except that it is straighter and shows less deviations. Other roads (charted) branching off from the main road are not indicated on the present survey. It is assumed from this that they are either no longer in existence or are unimportant from a charting viewpoint and should, therefore, be disregarded in future charting.
- (c) Portions of the 1890 survey information, particularly contours in the vicinities of lat. $47^{\circ} 04.8'$ long. $123^{\circ} 01.6'$ and south and eastward of lat. $47^{\circ} 03.2'$, long. $122^{\circ} 59.7'$ extend inland of the present survey limits. For charting purposes in the former area, an adjustment will be necessary in connecting the old work with the present work. In the latter area, very little if any adjustment will be necessary.

Within the area covered, the present survey with the indicated additions mentioned in par. 4a(1)(b), and (c), this review, should supersede T-1675 (1880) for charting purposes.

5. Comparison with Chart 6460 (New Print dated July 26, 1937.)
Chart 6462 (New Print dated April 8, 1937).

a. Topography.

Within the area of the present survey the charts are based on surveys discussed in the foregoing paragraphs and the following additional information:

- (1) The portion of the charted road on the west shore north of lat. $47^{\circ} 04.5'$, falling within the limits of the

present survey, originates with a Progressive Military Map of the U. S. Army Engineers (Shelton, Wash. Quad. 1909-10). Since there is no information on the present survey to indicate that the road is no longer in existence, it is assumed to exist as shown on the present chart and should, therefore, be retained in future charting (see Par. 2, this review).

- (2) No authority could be found for the land figures charted along the east shore in this area. They appear to be the numerical equivalents of the highest contours shown on T-1675 (1880). Since the contours were found to be in disagreement with those determined on the present survey (see par. 4a(2), this review), the charted figures should be disregarded in future charting.

b. Magnetic Meridian.

The values of the magnetic declinations determined with the declinoire at triangulation stations Cook and Kay, are 2° and 1° greater, respectively, than the charted value.

c. Aids to Navigation.

There are no aids to navigation in this area.

6. Field Drafting.

The inking of the shoreline and topographic features is very good. The lettering is also very good.

7. Additional Field Work Recommended.

No additional field work is required.

8. Note to Compiler.

Attention is called to the following:

- a. Pars. 4a(2)(a) and (b) and 5a(1) and (2) of this review relative to the treatment of contours, roads and charted numerical equivalents of contours which appear to be definite elevations.
- b. A number of triangulation stations fall outside the high water line. These are not located on any topographic feature, the descriptive cards stating that they are standard triangulation marks set between the high and low water line.

9. Superseded Prior Surveys.

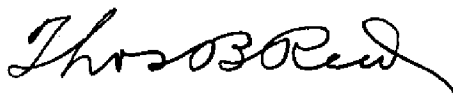
Insofar as the topography actually included on the present survey is concerned, the present survey supersedes the following survey for charting purposes.

T-1675 (1880) in part.

10. Reviewed by - G. Risegari, Jan. 3, 1938.

Inspected by - Harold W. Murray.

Examined and approved:



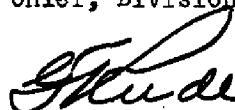
T. B. Reed,
Chief, Section of Field Records.



Chief, Division of Charts.



Chief, Section of Field Work.



Chief, Division of H. & T.