4790

Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, *Director*

State: CALIFORNIA

DESCRIPTIVE REPORT

Topographic | *Sheet No.* D 4790

LOCALITY

Monterey Bay

Vicinity of Monterey Harbor

1933

CHIEF OF PARTY

G. C. Jones.

U. S. GOVERNMENT PRINTING OFFICE: 1931

Applied to Chart 5403 (Insert) 11/17/52 WE

DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEET "D"

LOCALITY

This sheet covers the area from Mussel Point in the west to two miles north of Monterey Harbor in the east. It joins with sheet "E" on the western end and with sheet "C" on the eastern end.

AUTHORITY

Survey was made under the Director's instructions dated April 4, 1932, and supplemental instructions March 27, 1933 (Project HT-130).

GENERAL DESCRIPTION

From Mussel Point to the Custom House, the shore line is rocky with occasional small sections of sand beach. Fish canneries and docks are prevalent, and a number of offlying rocks, all of which are small and lie relatively close to the shore, are to be found. At Spence Street, the Monterey Breakwater projects 425 meters from the shore.* The city sections of New Monterey, and Monterey are separated by the U. S. Military Presidio and Reservation, an open section of country used for Army drill purposes, etc. The cities named above are built upon the side of the hills that rise to heights of 400 feet inshore from Mussel Point to a maximum of 815 feet inland from the Custom House.

* See Appended note in reference to this Breakwater.

Back of the cities these hills are very thickly wooded, and present a blackish appearance.

From the Custom House to the eastern end of the sheet a sand beach prevails, with no offlying rocks or reefs. At the end of Figueroa Street is located the Monterey Municipal Wharf, 515 meters in length. This wharf was constructed in 1926, is of the later design, and quite substantial. To the east of triangulation station BEATH, 150 meters, sand dunes commence, that gradually rise to a maximum height of 157 feet at the eastern end of the sheet. These sand dunes are 200 to 600 meters in width, present a yellowish-brown appearance, and contain no distinctive peaks that may serve as landmarks. The height of the dunes prevents seeing immediately beyond them, only the dark colored, low hills of the background being visible from the bay.

Between topographic station STAK and triangulation station SEASIDE the Associated Oil Co., has constructed seven large oil tanks on the top and seaward side of the sand dunes. The aluminum color of these tanks makes them most noticeable from the bay.

SHORE LINE CHANGES

It was necessary to reduce the shore line of this sheet to a 1:10,000 scale in order to compare it with the shore line of 1910. Very little discrepancy is

found between the two shore line; in fact the only place at which any can be detected is near topographic station ZIP; in this region the shore line appears to be about 30 meters inside of the 1910 line. Since the bottom of dune line shows no change, the discrepancy may be considered as of very little consequence.

LANDMARKS

The concrete stack located by triangulation and marked n.d., called MONTEREY AMERICAN CAN CO., STACK, 1932, is 70 feet in height and is the most prominent and distinctive stack in this locality.

Topographic station GAB, the north gable of the warehouse located at the end of Monterey Municipal Wharf, would be very useful to incoming ships, as it is the most prominent object in the harbor.

Topographic station BLACK is a very prominent stack, the highest stack of three, the two lower ones lying on each side of it. Aluminum colored with a black tip and rising 65 feet in height, it is distinctive enough to warrant charting.

The granite monument located by triangulation and marked n.d., called MONTEREY, PRESIDIO MONUMENT, 1932, is 30 feet in height, is very prominently situated on the brow of a barren hill and should be charted.

The aluminum colored stack located by triangulation and marked n.d., called MONTEREY, P. G. & E. STACK, 1932, is 75 feet in height and of sufficient importance to be charted.

The gas tank located by triangulation and marked n.d., called MONTEREY, P.G.& E. GAS TANK, 1932, is the most prominent object in this portion of the city. It is 31 meters in diameter, rises to a height of 131 feet, and is aluminum colored.

The chimney on the black house situated on the top of the sand dunes and designated on this sheet as topographic station CHIM should be charted, as its position against the skyline makes it quite prominent.

Among the Associated Oil Co.,/ seven large oil tanks just sough of triangulation station SEASIDE it is thought that the two mentioned below should be particularly noted on the chart. All of these tanks are visible from the bay and quite prominent. The most southerly and most westerly of these tanks should be mentioned, as it locates the limit of the group of tanks. The most easterly tank is mentioned for the same reason and also because it is the most prominent tank. All of these tanks are aluminum colored, 40 meters in diameter, and 48 feet in height.

Topographic station BUNK is a permanent sandbunker 30 feet tall, is prominently situated very close to the high water line, and should be charted.

The 14 foot watertank designated as topographic station BAC is prominently located on the top of a sand dune 118 feet in height and is a very distinctive landmark.

Topographic station APE is a windmill 30 feet in height lying at the base of the sand dunes and is of sufficient importance to be charted.

PREVIOUSLY CHARTED LANDMARK

The aviation beacon situated on the top of San Carlos Hotel, located by triangulation and marked n.d., called MONTEREY, SAN CARLOS HOTEL AVIATION BEACON, 1932, latitude 36°36' 44 meters, longitude 121°53' 965 meters, should be removed from the charts. Requisites for air beacons prescribed by the Department of Commerce is such that the beacon did not satisfy such requirements, with the result that the beacon was discontinued in May, 1933, and it is not intended that it shall reoperate.

AUXILIARY MAPS

This topographic sheet is to be accompanied by city maps of Monterey and Seaside. Both of these maps have been checked in the field as to scale and have been corrected for accuracy of representation.

The city map of Monterey has been tied in to this sheet by means of the Southern Pacific Railroad, Figueroa St., Decatur St., Reeside St., Irving Ave., Eardley St., and Ocean View Ave. Common points to both are: Custom House, Monterey R. R. station, and Del Monte R. R. station. Two changes in the street arrangement have been indicated by blue ink on the city map and the sheet.

filed with 1290 sheet

The city map of Seaside has been tied in by means of the Southern Pacific Railroad, Lake St., and the Monterey-Castroville County Highway. The fence around the Associated Oil Co., property shown on the sheet is identical with the boundary line of the same property shown on the city map. Noted in red ink on the city map are two areas that investigation discloses are not laid out on the ground and that, from appearance of the land and trend of development of the city, will not be laid out. These areas should be taken off the city map for charting purposes. Laguna Del Rey on this sheet is the same lake as Laguna Grande shown on the city map.

not received July 1934 Pete

NEW NAMES

Point Alones is the name of the point lying just south of Mussel Point. This name appears on U.S.G.S. maps and is the local name for this point; it is to be found on local maps dated back to 1856.

CONTROL

A plane table was used throughout. Triangulation stations used in the 1932 network served as a basis of control.

CLOSING ERRORS

All traverses had closing errors well within the allowable of two meters per mile of traverse. The maximum closing error in any traverse was only two meters.

REVISION DISCREPANCIES

All artificial objects showing discrepancies between this sheet and Register #3069a are shown correctly on this sheet, as they are located from closed traverses or have been checked by several cuts from strong control traverses.

The bath house near triangulation station BEATH shown on the above has been torn down. The two large buildings on Mussel Point are grossly exagerated on sheet #3069a and are shown correctly on this topographic sheet.

It was not deemed advisable to spend the time to cover as large an area as shown on the above sheet; ~~and~~ the detail in that area is not useful for charts, and therefore has not been checked.

DECLINATOIRE

There was no nearby station at which the declination was known; therefore the declinatoire error has not been determined. The correction to be applied may be obtained from topographic sheets A, B, or C.

STATISTICS

Statute miles of shoreline - - - - - - 5.3

Area, square statute miles - - - - - - 1.6

Respectfully submitted,

Wm J Bardin

Wm. J. Bardin,
Engineer Hand.

Approved and forwarded:

G. C. Jones

G. C. Jones,
H. & G. Engr., C. & G. S.

APPENDIX

MONTEREY BREAKWATER

Since June 1933 (the date of this survey) the Monterey Breakwater has been in the process of being extended approximately 400 feet (122 meters) farther out into Monterey Bay. At the present date (December 15, 1933) the breakwater has not been completed, but the trestle has been extended to its ultimate length and has been located and inked on the Topographic sheet.

The rock fill has not been completed , but the U. S. Engineers in charge were consulted and they advised that when the rock fill is completed it will be just 80 feet (24.4 meters) short of the end of the present trestle, at M.L.L.W. It has been shown on the Topographic Sheet in this manner.

The U. S. Engineers report that at the completion of the breakwater (sometime during 1934) the trestle is to be torn down. They also report that the toe of the rock fill extends out to the end of the trestle, according to their designs of the breakwater.

Respectfully submitted,

Ira R. Rubottom

Ira R. Rubottom,
Jr. H.& G.Engr., C.& G.S.

Approved:

G. C. Jones

G. C. Jones,
H.& G.Engr., C.& G.S.

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PLANE-TABLE POSITIONS

Landmarks

Object and description	Latitude	D. M.	Longitude	D. P.	Height	Remarks
		Meters		Meters	Feet	
Hopkins Marine Station	36° 37'	503	121° 54'	330	45	N. corner
Large barn	36 37	364	121 54	226	40	E. corner
Barn	36 37	246	121 54	196	35	E. corner
North stack of 2	36 37	051	121 53	1,474	60	Top.
End of dock	36 37	001	121 53	1,321	25	S. corner
End of dock	36 37	253	121 54	034	25	S. corner
End of dock	36 36	1,557	121 53	1,169	35	S. corner
Corner house	36 36	1,409	121 53	1,238	20	S. E. corner
Garage	36 36	1,380	121 53	1,235	15	W. corner
"Dutch" windmill	36 36	1,263	121 53	1,200	35	Top of dome
Halborn dock	36 36	1,303	121 53	1,008	12	Middle of end
Halborn home	36 36	1,257	121 53	1,122	22	S. E. corner
End of dock	36 36	1,078	121 53	938	25	S. corner
High stack of 2	36 36	1,079	121 53	1,016	65	Top.
End of breakwater	36 36	977	121 53	568	18	Top of middle
Long warehouse	36 36	851	121 53	923	22	S. Gable
Wharf warehouse ⊙Gab	36 36	646	121 53	483	30	End Gable (N.)
Wharf warehouse	36 36	564	121 53	449	30	S. Gable
Union Oil shack	36 36	613	121 53	700	16	End Gable (N.)
Standard Oil shack	36 36	554	121 53	659	16	End Gable (N.)
High stack of 3 ⊙Black	36 36	497	121 53	861	65	Top.
Custom house	36 36	386	121 53	816	18	N.E. corner
Culvert	36 36	232	121 53	732	6	Middle

Datum - North American 1927.

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PLANE-TABLE POSITIONS

(Continued)

Object and description	Latitude	D. M.	Longitude	D. P.	Height	Remarks
		Meters		Meters	Feet	
Monterey R. R. Station	36° 36'	116	121° 53'	613	18	E. Gable
Old dance hall	36 36	110	121 52	1,381	25	N. W. corner
Del Monte R. R. Station	36 36	038	121 52	614	15	N. E. corner
✓ House chimney ⊙Chim	36 36	270	121 52	046	35	Top.
Warehouse	36 36	249	121 51	1,447	28	E. Gable
Most S. W. Assoc. Oil tank	36 36	526	121 51	1,236	48	Top.
Most East " " "	36 36	649	121 51	993	48	Do.
N. stack of 2	36 36	680	121 51	1,344	45	Do.
White house	36 36	1,022	121 51	486	22	S. Gable
Watertank	36 36	1,154	121 51	418	15	Top.
Large building	36 36	1,224	121 51	599	30	N. W. corner
S. watertank	36 36	1,229	121 51	552	15	Top.
N. watertank	36 36	1,235	121 51	552	15	Do.
Sand bunker	36 36	1,476	121 51	564	17	Do.
✓ Sand bunker ⊙Bunk	36 36	1,565	121 51	498	30	N. End
Black pole	36 36	1,571	121 51	510	20	Top.
Windmill	36 36	1,683	121 50	1,301	25	Do.
Sand loader	36 37	494	121 50	1,314	18	Do.
✓ Watertank ⊙Bac	36 37	765	121 50	975	14	Do.
✓ Windmill	36 37	841	121 50	1,076	30	Do.

Datum - North American 1927.

Form 537a

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

REG. NO.

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field Letter D

REGISTER NO. 4420

State Central California

General locality Monterey Bay

Locality Vicinity of Monterey Harbor

Scale 1:5,000 Date of survey June, 1933

Vessel Shore party; project HT-130

Chief of Party G. C. Jones

Surveyed by W. J. Bardin

Inked by W. J. Bardin

Heights in feet above M.H.W. to ground ~~Xxxxxxxxxxxx~~

~~Contour~~ Approximate contour ~~Xxxxxxxxxxxx~~ 50 feet

Instructions dated April 4, 1932
Supplemental, March 27, 1933

Remarks: Additional information is to be found on Coast Chart city maps of Seaside and Monterey.

REVIEW OF TOPOGRAPHIC SURVEY No. 4790 (1933)

Title (Par. 56) Monterey Bay, Vicinity of Monterey Harbor, California

Chief of Party S. C. Jones Surveyed by W. J. Bardin Inked by W. J. Bardin

Ship Shore party HT 130 Instructions dated Apr. 4, 1932 Feb. 24, 1933 Surveyed in June 1933

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 13, 16.) ✓

2. The character and scope of the survey satisfy the instructions. ✓

3. The control and closures of traverses were adequate. (Par. 12, 29.) ✓

4. The amount of vertical control that the Manual specifies for -contours-~~formlines~~- was accomplished. (Par. 18, 19, 20, 21, 22, 23.) ✓
Only eastern portion of sheet contoured.

5. The delineation of -contours-formlines- is satisfactory. (Par. 49, 50.) ✓

6. There is sufficient control on maps from other sources that were transmitted by the field party to enable their application to the charts. (Par. 28.) ✓ The points common to the map "City of Monterey" and the topo sheet are not marked on the map but are listed in Desc. Rep. (Over) The map "Seaside" has not been received in the office.

7. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, 44.) ✓

8. The representation of low water lines, reefs, coral reefs and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.) ✓

9. Rocks and other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.) ✓

10. ~~The span, draw and clear~~ance of bridges are shown. ~~(Par. 16c.)~~

11. Locations and elevations of summits are given. (Par. 19, 51.) ✓

12. ~~The tree line was shown on mountains. (Par. 16g.)~~

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.

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The map "City of Monterey" does not conform to the requirements of par. 28 of the General Requirements for Topographic Work, Topographic Manual, in that the points common to it and the topographic sheet are not marked on the map; neither is the map signed by the topographer or statement made on the face of the map by the Chief of Party as directed in said paragraph.

13. The descriptive report covers all details listed in the Manual, in so far as they apply to this survey. (Par. 64, 65, 66, 67.)

14. The descriptive report also contains additional information required in aero-topography relative to type of photographs, method of compilation and type of ground control.

15. The descriptions of recoverable stations and references to shore line were not accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of DMs and DPs, 68.) They are listed in the Descriptive Report.

16. A list of landmarks for charts was furnished ~~on Form 567~~ and plotting checked. (Par. 16d, e, 60.) Listed and described in the Descriptive Report

17. The magnetic meridian was shown, ~~and declination was checked~~. (Par. 17, 52.)

18. The geographic datum of the sheet is North American 1927 and the reference station is correctly noted. (Par. 34.) Datum note added in office.

19. Junctions with contemporary surveys are adequate.

20. Geographic names are shown on the sheet and are covered by the Descriptive report. (Par. 64, 66k.)

21. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 50.)

22. No additional surveying is recommended.

23. The Chief of Party inspected and approved the sheet and the descriptive report after review by

24. Remarks:

Reviewed in office by R. J. Christman, July 1934

Examined and approved:

C. J. Green — Chief, Section of Field Records

L. B. Borden — Chief, Section of Field Work

L. O. Colbert — Chief, Division of Charts

G. T. Rude — Chief, Division of Hyd. and Top.

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