Form 204

DEPARTMENT OF COMMERCE
U.S. COAST AND GEOCYCLES SURVEY

State: CALIFORNIA

DESCRIPTIVE REPORT.

Topographic Sheet No. 3819 2

Locality:

Long Beach and vicinity.

Los Angeles County.

LOS ANGELES HARBOR (San Pedro Bay).

19220.

Chief of Party:

F. G. ENGEL.
DESCRIPTIVE REPORT.

To accompany Topographic Sheet Number 2.

Long Beach and Vicinity, Los Angeles County,
California.

Resurvey under instructions dated May 12, 1920.

The topography, in the localities covered by this sheet, was done by one officer and three men from the work.

The survey was continued from Topographic Sheet #1, repeating a few features to show an overlay. No direct traverses were run. The topographer should check up the location of his planimetric at each setup, using three points when they were available. Occasionally, two points were used, and a few times, one point in addition to the orientation line and road reading was used. The close check with triangulation stations checked shows that there is little or no error in connection with the surveying.

The working ground was reached most of the time by electric cars from San Pedro. As these cars run on a forty minute schedule, this means of transportation was not entirely satisfactory. A Ford automobile, leased by the month, would probably cost very little more, and would have been much better suited for work in a locality like this. It would also aid materially in checking up maps obtained from the city.

A number of planimetric positions were determined. These are given in an accompanying list. The position of two points, "Cor" and "End", used by the launch, and shown in pencil circles on the sheet, are also given in the list.

Important changes to which attention should be called, are as follows:

A flood control diversion channel is being constructed at the west extremity of Long Beach. Except for the outlet to the ocean, this has been excavated as far north as Anahim Street. Beyond that, levees are being constructed on both sides. No excavations are to be made above Anahim Street. This channel is to care for floods during the rainy season, which that locality has not heretofore been subjected to. It is to extend northward from the beach to Dominguez. At Dominguez it branches out, forming a mouth, in order to drain the highlands on both sides. All streams that can possibly drain into the channel are to be diverted to it. The channel is approximately 720' wide. There is to be a levee on each side, about 60' wide at the top. On the east levee a highway is to be built. The Pacific Electric Railway plan laying tracks on the west levee. The channel is designed to carry 80,000 second feet of water. Storm water will probably scour the channel so that this amount will be exceeded. The two greatest floods ever recorded in this vicinity were 40,000 and 60,000 second feet.

The Pacific Electric Railway line to Long Beach, which crossed this channel on the Third Street bridge at the time the survey was made, has
(To accompany Topographic Sheet Number 2.)

The relocated tracks. It now crosses the channel on a trestle about 600 ft. north of Third Street Bridge. This new location is shown in dashed lines on the sheet.

It is suggested that the office correspond with the Los Angeles county engineer, who is cooperating with the Army Engineers in building this flood control channel, at some future date and obtain final date regarding it.

Two piers, not previously shown on the chart, are given on the sheet; an amusement pier, just west of the Long Beach Pier and the 39th Street pier at the east end of Long Beach. No boats land at the Amusement pier. There might possibly be some small boats that land at the 39th Street pier, but it is not thought so. A ferry boat that runs between San Pedro and Long Beach docks at the Long Beach pier, just north of the house on the outer end of the pier.

Belmont Shore Place and Alamitos Bay, at the southeast extremity of Long Beach, are undergoing changes. Alamitos Bay is being dredged; the dredgings are being used to fill in the arroyo land at Belmont Shore Place, which is to be built up as a residence section. It is planned to make a yacht harbor out of Alamitos Bay. The bay, including the entrance, is to be entirely dredged. A breakwater is to be built out from the entrance. The trestle across the entrance is to be replaced by either a bascule or draw bridge. Plans call for the relocating of the Pacific Electric Railway line to Seal Beach, the new line to be on the north side of Alamitos Bay.

Four prints accompany the topographic sheet. Print #1 shows the buildings of the Long Beach Shipbuilding Co., located at West Long Beach. Print #2a shows the streets now being constructed at Belmont Shore Place. Print #2b is a general plan of that locality, giving the whole layout of streets which are to be built at some future date. The remaining print is one of Naples, showing the street layout. Streets on this print have been transferred to the topographic sheet and are shown in blue ink.

The streets in Long Beach, shown in blue ink on the topographic sheet were transferred from the City Engineer's maps and checked up in the field. Topography shown in black ink only, was surveyed. That shown in blue ink was transferred from reliable sources.

R. P. A. Studier,
Jr. H & G Eng'rs.,
Topographer.

F. C. English,
H & G Eng'rs.,
Chief of Party.
### LIST OF PLANETARY POSITIONS.

To accompany Topographic Sheet Number 2.

Long Beach and vicinity, Los Angeles County, California.

<table>
<thead>
<tr>
<th>Object</th>
<th>Hydrographic Name</th>
<th>Latitude D.M.'s</th>
<th>Longitude D.P.'s</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tall Flag Staff</td>
<td>Lnm</td>
<td>33 46 1587</td>
<td>118 14 970</td>
<td>Consolidated Lumber Ed. Also shown on Topo.</td>
</tr>
<tr>
<td>Yellow Water Tank</td>
<td>Yol</td>
<td>35 45 1494</td>
<td>118 14 947</td>
<td>Flagstaff on cupola.</td>
</tr>
<tr>
<td>Cupola, Salt Works</td>
<td>Staf</td>
<td>33 45 926</td>
<td>118 14 1217</td>
<td>Flagstaff on cupola. Also shown on Sheet #1.</td>
</tr>
<tr>
<td>White Water Tank</td>
<td>Val</td>
<td>33 45 1573</td>
<td>118 14 264</td>
<td>Gas Works. Also shown on Sheet #1.</td>
</tr>
<tr>
<td>Concrete Chimney</td>
<td>Crot</td>
<td>33 46 1570</td>
<td>118 15 220</td>
<td>Cast Long Beach. Also shown on Sheet #1.</td>
</tr>
<tr>
<td>Black Stack</td>
<td></td>
<td>33 47 604</td>
<td>118 12 1044</td>
<td>Glauxn St. Woolen Mills.</td>
</tr>
<tr>
<td>&quot;I&quot; on Curtis Sign</td>
<td></td>
<td>33 48 681</td>
<td>118 12 845</td>
<td>Curtis Camin, Co.</td>
</tr>
<tr>
<td>Cupola, Daisy Street</td>
<td></td>
<td>33 45 890</td>
<td>118 11 1481</td>
<td>Black and white Cupola.</td>
</tr>
<tr>
<td>School</td>
<td></td>
<td>33 45 1573</td>
<td>118 11 1153</td>
<td>Ascendant Pier.</td>
</tr>
<tr>
<td>Diving Tower</td>
<td>Div</td>
<td>33 45 1573</td>
<td>118 11 800</td>
<td>Outer extremity.</td>
</tr>
<tr>
<td>Flagstaff, Long.</td>
<td>Pin</td>
<td>33 45 1569</td>
<td>118 11 1362</td>
<td>Middles or pier.</td>
</tr>
<tr>
<td>Beach Pier</td>
<td></td>
<td>33 45 576</td>
<td>118 08 648</td>
<td>South one of two, Napolis.</td>
</tr>
<tr>
<td>Flagstaff, 29th</td>
<td></td>
<td>33 45 1762</td>
<td>118 11 160</td>
<td>Temporary Hydrographic Signal, shown in pencil on the Topographic Sheet.</td>
</tr>
<tr>
<td>Street Pier</td>
<td></td>
<td>33 45 1768</td>
<td>118 11 576</td>
<td></td>
</tr>
</tbody>
</table>
## Description of Object

<table>
<thead>
<tr>
<th>Description of Object</th>
<th>Latitude</th>
<th>E</th>
<th>Longitude</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black steel water tank, with red band, Long Beach Shipbuilding Co.</td>
<td>33 46</td>
<td>182.1</td>
<td>118 12</td>
<td>1250.5</td>
</tr>
<tr>
<td>Virginia Hotel, △ Virginia Hotel, W. flag, - Long Beach</td>
<td>33 46</td>
<td>30.8</td>
<td>118 11</td>
<td>1254.7</td>
</tr>
<tr>
<td>White Tank, Los Corritos, - Long Beach Very prominent</td>
<td>33 46</td>
<td>22.8</td>
<td>118 09</td>
<td>1192.2</td>
</tr>
<tr>
<td>Clock Tower, - Long Beach. This appears as square cupola on building.</td>
<td>33 46</td>
<td>195.3</td>
<td>118 11</td>
<td>802.4</td>
</tr>
<tr>
<td>Pavilion, - Alamitos Bay, △ Pavilion flagstaff</td>
<td>33 44</td>
<td>1619.1</td>
<td>118 07</td>
<td>571.2</td>
</tr>
<tr>
<td>Tower on end of Seal Beach Pier. Not on Topographic Sheet #2</td>
<td>33 44</td>
<td>461.53</td>
<td>118 06</td>
<td>638.3</td>
</tr>
<tr>
<td>Sugar Refinery Stack, white brick, inland from Huntington Beach. Not on Topographic Sheet #2. Rather prominent.</td>
<td>33 41</td>
<td>329.9</td>
<td>117 59</td>
<td>1486.7</td>
</tr>
</tbody>
</table>
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
WASHINGTON

SECTION OF FIELD RECORDS

REPORT ON TOPOGRAPHIC SHEETS Nos. 3619 & 3620.
Surveyed in 1920.

Chief of Party: F. G. Engle.
Surveyed by A. P. Eyman and R. F. A. Studds.

1. The plan and character of the survey fulfill the requirements of the General Instructions.

2. The extent of the survey satisfies the specific instructions but the numerous details obtained from city maps and other sources were not handled as directed in paragraph 2 of the instructions.

Topographic details from maps and blueprints should not have been transferred to the plane table by the field party. The facilities and collateral information in the Washington office enable this to be done to better advantage than in the field.

None of the maps and blueprints were marked up to show existing and projected improvements.

In addition to the shoreline prominent points that are common to the plane table sheet and the blueprint should be indicated on the letter. This was done on only one or two prints.

3. The field drafting was completed to the extent prescribed in General Instructions.

4. No further surveying is required within the limits of the sheets.

5. Both the surveying and field drafting are excellent. The descriptive reports and accompanying information are illuminating.

6. Reviewed by E. P. Ellis, August, 1921.
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

The finished Topographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. 3819

State . . . . California.
Locality . . . Long Beach and vicinity.
Chief of party . . . F. C. Engle.
Surveyed by . . . R. P. A. Studds
Date of survey . . . September, 1920.
Scale . . . . . 1-10,000
Heights in feet above
Contour interval . . . feet.
Inked by . . . . R. P. A. S. Lettered by . . . R. P. A. S.

Records accompanying sheet (check those forwarded): Photographs,
Descriptive report, Horizontal angle books, Field computations,
Data from other sources affecting sheet Four Prints . . .

--- Remarks: Topography shown in blue ink was not surveyed, but transferred from reliable sources.