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Department of Commerce and Labor
COAST AND GEODETIC SURVEY

O. H. Tittmann
Superintendent.

State: *Wash.*

DESCRIPTIVE REPORT.

Topographic Sheet No. *2938*

LOCALITY:

Toconoma Water
Front

1909

CHIEF OF PARTY:

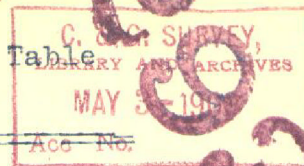
A. P. Derickson

2938

~~See accomp. blueprints 12806 to 12813 incl.~~
City Plans being set aside for destruction 4/15/52

Descriptive Report to accompany Plane Table

Sheet of Tacoma Waterfront.



This sheet on a scale of 1:10000 was commenced on or about February 2, 1909, carried on intermittently until April 7, delays being caused by rain and foggy weather. No triangulation or other data was available, so the sheet was commenced without a projection. A base of 510 meters was measured by tape, on the flat north of the city waterway; from this base several spires and topographic flags were cut in. Cuts taken to points across the bay on the opposite shore, gave very acute intersections, and determinations of not absolute accuracy. From the measured base a traverse was carried on, in and about the different docks, waterways and streets. All details on the sheet were roded in, also all points in the hydrography; no reductions from other maps or sketches being used. Some of the railway track details will be found to differ from those shown on the city and R.R. maps, these maps are several years old and changes have been made since their publication. South of the N.P. yards, the ground rises rather abruptly into a bluff varying from 100 to 220 feet high. An attempt to show this not being successful, was discontinued, sufficient being shown however to indicate its general character and location. My instructions did not call for contours, but when time permitted the heights of several points were obtained and contours sketched; they are given approximately and show a general outline of land adjacent to the water front. The railway tracks were all roded in, no other maps being used for this purpose.

Street car lines are indicated; several gulches or ravines run into the city line did not permit a detailed survey and contouring of these, so their general outline is indicated by dotted lines, as stated above; these ravines are timbered, with no improvements, and haven't any factories or other business located in them.

A bluff runs all along the waterfront, from S. 7th Street, to Point Defiance, being discontinuous at one or two places. Beyond the bluff the street is laid out in squares, all well paved. The district towards Point Defiance is considerable different from the way shown on the old chart. A street car line runs along the top of the bluff beyond the old town to the Point; a large park is located there. Beyond the Smelter the waterfront is undeveloped.

The Chicago Milwaukee & Puget Sound R.R. are making extensive improvements and changes along the water front. On April 9th, the day before I left Tacoma, I obtained from the Vice President of that road, the accompanying blue prints, showing their contemplated changes from the Smelter to the Tacoma Mill. A bulkhead, which from the nature of its construction, appears to be only temporarily, is now being constructed to the east of the Defiance Lumber Co; the double lines on the sandy beach indicate that part which has already been constructed, and the dotted lines on the south side of Front Street along which the work will be continued. I have been informed that this part of the road is not connected direct with the main lines, the terminals of which are indicated on the northern part of the sheet, and that either a ferry

service a right of way, or the use of the N.P. track would be necessary to connect the two. Blue prints of this roads terminals are also furnished for further information in connection with this sheet; they have not reached the state of completion shown on the blue prints, but their condition at the time of the survey is shown on the P.T.sheet. Work is being carried on very rapidly. At the time of leaving, piles were being driven for the grain elevator, indicated on the blue print. The lines on this sheet correspond to the inner temporary bulkhead, shown on the blue print. The waterway between the docks is being dredged to a depth of 35 feet. The waterway and mud flats running north from the Puyallup River, are to be filled in. For purposes of orientation the Old Mason Wharf is shown dotted. The fill will entirely cover it.

South of the C.M.& P.S.R.R.docks, a large bulkhead has been driven; this consists of several rows of piles forming a bulkhead about 16 feet wide, of the shape indicated; the inner end of this is open, at low water the enclosed portion is dry. Numerous piles are driven in the waterway between this bulkhead and the St.Paul & Tacoma Dock, without any apparent regularity; many of these being used as dolphins for log booms. I made no attempt to rod or sketch these in, as I was informed that this section was to be materially changed. The waterway is not navigable at present, a boom of logs stretches across the entrance from the St.Paul & Tacoma Mill wharf to the bulkhead. The platform at the end of the St.Paul & Tacoma Mill Co's dock is shown square on the accompanying blue prints, this

is wrong as it is the shape indicated on this sheet. The tracks of a tram form a network over the the dock, the principal ones being shown. Over the Puyallup River several draw bridges expend, only one being shown; it is of the Cantel lever type, two arms, one ^texpending over the river the other extending over the shore, being mounted on a pillar on the N.E. shore of the river.

Across the city waterway are two bridges, one for the N.P. trains, at 14th, Street, the other for passengers and vehicles at 11th, Street, a shallow waterway extends to the eastward from a point midway between the two bridges; a wooden bridge, apparently fixed, stretches across this waterway about 400 meters from the entrance. At the end of the waterway numerous platforms are built on piles for the accomodation of traffic; these piles permit a free flow of water into the swamp or pond beyond, but do not permit navigation of any kind.

Six buoys are shown on the sheet, five of these are for general traffic; the sixth off the Puget Sound Flour Mill wharf, being used by the Tacoma Mill Co. for a log boom anchorage.

A plank wagon road extends along the docks, on the south shore behind the warehouses; this often narrows to a width less than 10 feet and is shown by broken lines, to avoid confusion with the railroad tracks. Two railroad tracks run along a rising embankment from the railroad yards to the coal bunkers.

A comparison of Danahers Wharf with the blue print plat will show a difference in the western wing of the wharf; I had

difficulty in obtaining readings here on account of the lumber piles all over the wharf, my readings being obtained from the roof of an adjoining building, the angle of depression being considerable. I did not have the blue print then, not obtaining it until April 9th, and did not have an opportunity to check the work. As I have no positive knowledge error exists, I made no change. The Puget Sound Lumber Co. plant burned down and the details are not shown. The only points or land marks whose positions could be determined accurately, are those on the south shore. Positions on the north shore were obtained from two cuts from the base signals. Traverses along the waterfront were often short and irregular, due to shipping.

The survey appeared to be correct in azimuth until I reached the Tacoma Mill Co's dock; shipping then cut off the base signals; I then used for orientation, a signal on the north shore whose position was determined by acute cuts. I was aware shortly after that I was slightly out in azimuth, but continued to use this signal so that the amount of deviation would continue uniform.

An azimuth line drawn from the base signal to the Tacoma Smelter chimney, the latter being visible six miles from Tacoma, will show the deviation in azimuth. To the west of the High School, a stadium is to be erected; contours in red indicate where excavating and clearing is now being carried on for this purpose. The curb lines of the squares were roded in and not the property lines, as in city surveys. By doing this I could set up in positions out of the line of traffic, and it was always easier to get rod readings.

The streets were ³roded in both the city and R.R. blue prints show squares to the waters edge neglecting the bluff. Beyond the bluff this is correct, but no squares extend to the waters edge except where indicated on my sheet. Beyond the smelter one or two streets run to the smelter buildings. Along a lower embankment varying from 60 to 85 feet high, an unpaved road extends.

This sheet is inked in by the Topographer in order that no detail should be lost.

For purposes of orientation and geographical positions, the Church Spires located in Tacoma and the Smelter chimney with the intersecting cuts to Point Brown light-house and signals used on the Topographic sheet of the N.E.shore, will serve to properly locate the work.

Respectfully submitted,



Aid, C. & G. Survey,

Topographer.

Approved,

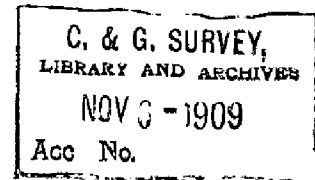


Chief of Party.

(Copy)

Seattle, Wash.

October 30, 1909.



To the Superintendent,

Coast and Geodetic Survey,

Washington, D. C.

Sir:-

In reply to your letter of October 23rd, in regard to the list of plane table positions on the two sheets of Commencement Bay, I have to report that no lists were submitted as the survey shown was a revision of previous work and I presumed the prominent points had previously been submitted with the original sheets.

Very Respectfully,

F. B. Perickson,

Asst., Comdg.