Department of Commerce and Labor
COAST AND GEODETIC SURVEY

O.H. Tittmann
Superintendent.

State: N.J.

DESCRIPTIVE REPORT.

Top. Sheet No. 3451

LOCALITY:

Passaic River

1914

CHIEF OF PARTY:

Stehman Forney
DEPARTMENT OF COMMERCE.
COAST AND GEOGRAPHIC SURVEY.
O H TITTMANN SUPERINTENDENT
DESCRIPTIVE REPORT.
TOPOGRAPHIC SHEET 3451.
PASSAIC RIVER NEW JERSEY.
SECOND RIVER TO COAL TRIANGULATION STATION
SCALE 1/5,000
surveyed 1914

(a) General description,

Shore

The of the Passaic River within the limits of this sheet, on both sides, are high, reaching an elevation on the east shore (at the half mile limit) of 140 feet, and on the west shore of 120 feet above Mean high water, there are no factories within the limits of this sheet.

(b) Currents,

The currents within the limits of this sheet are tidal and set fair with the channel, the ebb and flood tides follow each other at an interval of about fifteen minutes. The current on the ebb tide is very strong and swift, during severe cold weather, ice forms on the river within the limits of this sheet; the water is cleaner than in the lower part of the river.

(1) Methods of survey,

The street lines along the water front and a few of those running from the river in to the towns of Bellevue-Nutley-North Arlington-Linherst and Rutherford were run with plane table, the other streets shown on this sheet were traced from the maps of the maps of the town surveyors and transferred to the plane table sheet.
(2)

The rail roads were traced from blueprints furnished by the engineers of the respective roads and transferred to the plane table sheet.

The heights were determined with the vertical arc on the alidade, the elevations are expressed in feet and show the heights above mean high water on the river. The full red lines indicate the 20 feet curves and the broken red lines indicate the 10 feet curves.

[Signature]

Chief of Party
# RECORD OF INFORMATION

**FURNISHED TO**  
Coast and Geodetic Survey Office Washington, D.C.

Request received in Comp. Div. 191  
Request referred to on 191  
Finder sheet prepared by on 191  
Photostat or blue print requested 191  
Photostat or blue print received 191  
Data mailed 191

**GENERAL LOCALITY:** Passaic River, N.J.

**DATUM Head room of draw bridges**  
Above mean high water.

<table>
<thead>
<tr>
<th>STATE</th>
<th>SHEET</th>
<th>NAME OF STATION</th>
<th>ESTABLISHED YEAR</th>
<th>DESC. VOL. NO.</th>
<th>LATER NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td></td>
<td>Bellview bridg</td>
<td></td>
<td></td>
<td>8 feet Sinchels</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Abindale bridg</td>
<td></td>
<td></td>
<td>7 feet</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D L &amp; W R.R Bridg</td>
<td></td>
<td></td>
<td>26 feet</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rutherford Avenue bridg</td>
<td></td>
<td></td>
<td>6 feet</td>
</tr>
</tbody>
</table>

*Handwritten note by J. Sherman, Chief P.I.*
DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY  
O H TITTMANN SUPERINTENDENT  
DESCRIPTIVE REPORT  
TOPOGRAPHIC SHEET  
PASSAIC RIVER NEW JERSEY  
COAL TRIANGULATION STATION TO FIRST DAM ABOVE PASSAIC  
SCALE 1/5,000  
SURVEYED 1/014

(a) General description,

The shores of the Passaic River within the limits of this sheet on both sides are high, reaching an elevation on the east shore (at the half mile limit) of feet, and on the west shore of feet above mean high water. East Rutherford on the east side is a residential town with a population of about 2500, Wallington on the same side of the river is a manufacturing town with a population of about 3500. Garfield, opposite the city of Passaic is a residential and manufacturing city of about 10,200 population. Passaic on the west shore shore has a population of about 60,000 and is an extensively manufacturing city. Clinton on the west shore near the first dam above Passaic is a small manufacturing town with tenement houses, for the employees in the factories of Passaic and Clinton. The Garfield bridge that connects Garfield with Passaic is the head of navigation, from this bridge to the dam the river bed is full of sunken rocks and rocks that show above water at high tide, it is impracticable to get a flat bottom boat from the Garfield bridge to the dam at low water, at high water slack a flat bottom boat might be taken almost to the dam, at many points between Garfield bridge and the dam the river can be waded at low water; a canal of good size runs from the base of the
dam through the factory district and is used to supply water power to the manufacturing plants.

(b) Currents,

The currents within the limits of this sheet up to the Monroe street bridge are tidal, and set fair with the channel, from here to the dam the current runs down stream at all times while the tide is rising and ebbing, the current from here to the dam is strong and swift so strong that it is difficult to row a skiff up to the dam, the average rise and fall of tides at the Monroe street bridge about 3 feet.

The above statements are based on general observations as I passed up and down the river in my launch, I did not have any tides observed on the Passaic River, the Army Engineers have observed tides at various points on the river, and have ample data pertaining to the currents and tides, In obedience to my instructions of February 4th 1913, it was not within my provence to duplicate the work of the Army Engineers.

(i) Methods of survey,

The street lines along the water front and a few of those running from from the river in to the towns shown on this sheet, were ran with the plane table, the other streets were transferred from maps and blueprints furnished by the town and city surveyors.

The railroad were taken from blueprints furnished by the engineers of the respective roads, reduced to scale of 1/5,000 and transferred to the plane table sheet.

The heights were determined with the verticle arc on the
Alidade. The elevations are expressed in feet and show the height above mean high water on the river, the full red lines indicate the 20 foot curves and the broken red lines indicate the 10 foot curves.

[Signature]

Chief of party,
## RECORD OF INFORMATION

**Furnished to:** Coast and Geodetic Survey Office, Washington D.C.

**General Locality:** Passaic River N.J.

**Datum:** Head room of draw bridges

<table>
<thead>
<tr>
<th>Position Files</th>
<th>Name of Station</th>
<th>Established</th>
<th>Later Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Above mean high water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>Union Avenue bridge</td>
<td></td>
<td>12 feet</td>
</tr>
<tr>
<td></td>
<td>Erie Rail Road bridge</td>
<td></td>
<td>19 Feet</td>
</tr>
<tr>
<td></td>
<td>Gregory Street bridge</td>
<td></td>
<td>8 Feet</td>
</tr>
<tr>
<td></td>
<td>Second Street bridge</td>
<td></td>
<td>12 Feet</td>
</tr>
</tbody>
</table>

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Signed: Herman Henry

Chief Draftsman