

## 3492

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Department of Commerce and Labor
COAST AND GEODETIC SURVEY
,
E.LESTER.JONES Superintendent.
State: NEW JERSEY
DESCRIPTIVE REPORT.
Top. Sheet No. 3492
LOCALITY:
Hackensack River
1915
. CHIEF OF PARTY:

Department of Commerce

Coast and Geodetic Survey

O H Tittmann Superintendent

Descriptive Report to Accompany

Topographic Sheet X 3492

Re-Survey of The Hackensack River N J

from

Triangulation Station Brick

to

Anderson Street Bridge

Chief of Party

1915

Scale 1/5000

X

(a) General Description.

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Within the limits of this sheet the shores immediately along the water on the Eastern side of the river are low and marshy, from the winside limits of the marsh land, the country rises gradually to an elevation of 127 feet above mean high water at the  $\frac{1}{2}$  mile limit, on the Southern end of this sheet is the village of Ridge Field Park within the limit of \frac{1}{2} mile and at the Northern end of this sheet on the East shore is located the town sof Bogota and Tea Neck. Opposite Bogota on the West shore of the Hackensack River is located the town of Hackensack a beautiful little city with about 17000 inhabitants, it is not of much commercial importance but a lovely residengial place, it is connected with Paterson and Passaic by the Erie Rail Road and with Jersey City by the Susquehanna Rail Road, a trolley line connects it with Passaic, Newark, and Fort Lee Ferry on the Hudson River, on the Western shore below Hackensack are located a number of brick yards, that manufacture a good quality of bricks. In front of Hackenseck there is a narrow stric of marsh land from the Eric Rail Road Bridge to Anderson Street Bridge, from this marsh the land rises gradually to an elevation of 23 feet above mean high water at the \frac{1}{2} mile limit, from Anderson Street Bridge to the Southern limit of this sheet the land immediately on the river is meadow or marsh land, and at the limit of the  $\frac{1}{2}$  mile, the land rises to an elevation of 35 feet above mean high water.

(i) Method of Survey .

The Topography was executed with the Plane Table, based on a system of tertiary triangulation brought over from the triangulation on the Passaic River, at Little Ferry Bridge and Anderson Street Bridge the triangulation was connected with a base line at Little Ferry Bridge and Anderson Street Bridge measured by the Army Engineers With the

X

following results. Length of Little Ferry Base measured by the Army Engineers 619.465 feet computed length C & G Survey Triangulation. 619.631, length of Anderson Street Bridge Base measured by the Army Engineers 346.60 feet computed length C & G Survey Triangulation 346.922 feet. The heights in Little Ferry and Tea Neck were obtained , by vertical angles measured with the vertical arc in the Plane Table Alidade and are referred to mean high water, the heights are expressed in feet and show the elevations above mean high water. The contours are given for every 20 feet difference in level. The full red lines indicate the 20 foot curves and the broken red lines show intermediate 10 foot curves. The streets and contours in the village of Ridgefield Park were obtained from a map made and loaned by the borough engineer. Those in Bogota were obtained from a blue print and map made and loaned by the engineer in charge of the sewage - system of the borough. The streets in Little Ferry were obtained from the assessors map of the borough. The streets and contours of the town of Hackensack were obtained from the assessorsmap. All of the above data was reduced to the scale of 1/5000 and transferred to the Plane Table Sheets A running reconnaissance with canoe was wade by Harold H Griffin Aid and one man and the following information was obtained. For about 2 miles above Anderson Street Bridge one or both shores are low and marshy. From there up the banks become steeper and the river narrower untilmat New Milford it is only about 25 metres wide. The small villages of New Bridge, Cherry Hill, River Edge, and New Milford are passed in the order named New Milford is about 4 miles above Anderson Street Bridge and is the site of the Hackensack water company. This is the limit of navigation for small motor boats. Bells Ink Co. and Campbells Wall Paper Co. have factories on the

channels for the purpose of getting in coal and raw materials.

The river has many mud flats as far as New Bridge, above which the bottom is sandy but scattered with many rocks and stumps. Boats not drawing over 4 feet can go to Phelps's New Dock at low water, boats drawing not over 2 feet can go as far as River Edge on low tide, and to New Milford on high tide. The channel is however so crocked and changeable that only men thoroughly familiar with it can navigate this stretch. The range of tide is about 3 feet at New Milford.

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See letter of Mr. A. A. Shiffin dated Oct 22/16 attached to Descripting Report of Top Sheet 3490

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