

## REPORT and T. anne estimate of the probable cost of constructing the same. The

PROM

## THE SECRETARY OF WAR,

IN COMPLIANCE

With a resolution of the Senate of the 14th instant, transmitting a copy of the survey of the harbor of City West.

February 19,1838.

Read.

FEBRUARY 21, 1838.

Referred to the Committee on Commerce, and ordered to be printed.

DEPARTMENT OF WAR, February 16, 1838.

on only can now be given, reave

SIR: With the accompanying report of the officer in charge of the Topographical Bureau, will be found the documents in reference to the harbor of City West, required by the resolution of the Senate of the 14th

very respectfully, manufact palogenical self-

turn advantages. I cannot, as a public agent, do se

Your most obedient servant,
J. R. POINSETT.

Hon. R. M. Johnson, President of the Senate.

Topographical Bureau, Washington, February 16, 1838.

Sir: I have the honor of submitting to you the report, plan, and estimate, in reference to the construction of a harbor at City West, Indiana, called for by a resolution of the Senate of the 14th instant.

te beffer e there are serious about a prosing, and of which Coverament

Very respectfully, sir,

Your obedient servant,
J. J. ABERT, Lt. Col. Top. Engineers.

Hon, J. R. POINSETT, Secretary of War. Blair & Rives, printers.

SENATE. 1

## WASHINGTON CITY February 8, 1838.

SIR: Accompanying this, I have the honor to transmit to you a plat of a survey for a harbor at "City West," mouth of Fort creek, Indiana, with an approximate estimate of the probable cost of constructing the same. The data for this estimate is founded upon the cost of material and price of labor, given during the past season at the public works at Michigan City.

Timber, suitable for the purpose required, can be obtained at or near the spot. Stone will have to be transported from the same vicinity (Green

Bay) as that for Michigan City, and will cost, at least, the same.

Fort creek, being smaller and of less volume (as can be seen by referring to the plat) than Trail creek, at the mouth of which is Michigan City harbor, and the adjacent banks of the former being much more abrupt and elevated, a greater quantity of excavation and dredging will be necessary to construct a basin, &c. there, than what will be required at the latter; and, consequently, this work will cost more to construct it, both being upon the same plan.

The exact size of the basin (or inner harbor) not having as yet been determined upon, and, therefore, the exact quantity to excavate, &c., not being known, the precise cost thereof cannot now be stated. A rough calculation only can now be given, leaving it to after and more minute ex-The prices of labor, too, it is amination to determine it more accurately. presumed, will vary, which is another reason why it is impossible to esti-

mate this item exactly.

Supposing all things to remain at the same prices they have been, then, for the past season. I estimate the probable cost of constructing a harbor at City West, upon the plan proposed, and as delineated upon the plat, at \$150,000.

The foregoing statement, in relation to the practicability of constructing a harbor at this point, is, perhaps, all, strictly speaking, that would be, under my letter of instruction, required of me to state; but, though I am sincerely impressed with the necessity of harbors being built at every point (particularly at and near the head of Lake Michigan) which offers any natural advantages, I cannot, as a public agent, do so, when I have reason to believe there are serious obstacles opposing, and of which Government is ignorant.

L therefore, feel it incumbent upon me here to make known to the Government, through you, that a sandbar, about six or ten feet under water, but supposed to be constantly increasing, exists, and is located from one to two or three miles from, and nearly concentric with, the present shore and head of Lake Michigan, and extends, perhaps, around the entire bend

of said head.

erv respectfully, sir, If this is so, and I am inclined to believe it is, any improvement, south of this bar, would, in a public point of view, be entirely useless. My reason for crediting this report is this: the present shore of the head of Lake Michigan is formed of immense sand hills, in rear of which are ponds or marshes, extending entirely around the head of the lake, and separating these hills from the main land, or what has once been the lake shore.

How, then, has the present shore been formed, and the lake thus driven from its former one? It is a well-known fact, that there is a current of tide constantly running from the foot (or north end) of this lake, towards its head, occasioned, it is supposed, by the prevailing north winds. This

[ 225 ]

current carries with it an immense quantity of sand, which is either brought from the northern shore, or else is thrown up, by springs, from the bottom of the lake, thus deepening and forming room for the receding waters. The latter, I think the most probable. By examining the debouche of every stream on both shores of the lake, every one of which turn south, with a sandbar on their north side, it is evident that this sand is brought from the foot or north end of the lake, and, being carried along each shore, is kept in suspension by these currents, until they, meeting at the bend or head, react or recoil outwards, where, counteracting each others force, the sand thus held is deposited.

In this manner, I conceive, the *present* shore was formed, leaving, at first, a pond or lake behind it; in which, being protected from the action of the wind, vegetation commenced, and has now changed them into marshes. In the same way, and by the same cause, has this new *sandbar* commenced, and by the same, sooner or later, will it be raised to the surface of the water, and become the head of the lake, leaving ponds, of greater or less width, with any improvements that may have been made.

between it and the present shore.

Before, therefore, any improvement is commenced about the head of this lake and south of Chicago and Michigan City, I would most respectfully recommend that an accurate and careful survey be made of the shore and

this portion of the lake, and that it be done as soon as practicable.

If, by such survey, it should be ascertained that no such impediment exists, I cannot too earnestly urge—because I believe that the community at large, and the commercial part in particular, require—that immediate and ample improvements be made at every point around this portion of the lake, where it may be found practicable to do so; and to ascertain where such points are, the officer who makes the survey ought to be particularly instructed to report.

Most respectfully,

I remain, sir,
Your obedient servant,
T. B. W. STOCKTON,
U. S. Civil Agent.

Col. J. J. ABERT, Top. Bureau, Washington city.