

MAINE STATE LEGISLATURE

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DOCUMENTS

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THE LEGISLATURE

OF THE

STATE OF MAINE,

DURING ITS SESSION

A. D. 1847.

AUGUSTA:

Wm. T. JOHNSON,.....PRINTER TO THE STATE

1848.

TWENTY-SEVENTH LEGISLATURE.

No. 5.]

HOUSE.

STATE OF MAINE.

RESOLVES for the relief of the town of Oldtown.

WHEREAS, the County Commissioners for Penobscot county, by authority of a resolve, approved March seventh, eighteen hundred and thirty-six, laid out on a petition therefor, a highway across Orson Island, situated in Oldtown, in said county, and whereas said Island belongs to the Penobscot tribe of Indians, and is not subject to taxation, therefore

Resolved, That the town of Oldtown be, and hereby is, exempted from all liability, under said resolves, for making and maintaining bridges leading to and from said Island, and opening said highway and keeping the same in repair, anything in the several acts directing the method of laying out and opening and repairing highways to the contrary notwithstanding.

Resolved, That the Governor with the advice of Council, is hereby authorized to procure by some competent civil engineer, a survey of Orson Island, and of the several channels of the Penobscot river around the same, together with full and detailed plans and estimates of expenditure for the erection of the bridges necessary to connect the road over Marsh Island, with the road on the main land above said Orson Island, and the report of such surveyor shall be completed before the session of the next Legislature.

Resolved, That a sum not exceeding one hundred dollars, is hereby allowed to be paid out of any money in the treasury not otherwise appropriated, for the purposes of the aforesaid survey.

IN HOUSE OF REPRESENTATIVES, }
July 24, 1846. }

Read and passed.

EBENEZER KNOWLTON, *Speaker*.

IN SENATE, July 27, 1846.

Read and passed.

DAVID DUNN, *President pro tem*.

JULY 27, 1846.

Approved.

H. J. ANDERSON.

SECRETARY'S OFFICE, AUGUSTA, }
August 25, 1846. }

I hereby certify that the foregoing is a true copy of the original deposited in this office.

JOHN G. SAWYER, *Deputy Sec'y*.

WILLIAM P. PARROTT, Esq.:

I wish you to make the survey and estimates contemplated by the foregoing resolve, and if convenient as soon as the first of November next.

CHARLES STETSON, *one of the Council*.

Bangor, August 27, 1846.

REPORT.

*To the honorable Governor and Council
of the State of Maine :*

GENTLEMEN :

I have made the surveys and estimates directed to be made by the annexed resolve of the last Legislature, and respectfully submit the following

REPORT :

The map representing the different channels around Orson Island, is taken in part from a survey made by Mr. Zebulon Bradley some years since. From examination of the shores, the sites for the bridges appear to have been well chosen by the commissioner, and I do not think the locations can be altered for the better.

The first crossing from Oldtown to the Island is on low ground, but the shore has the same character for some distance both above and below.

The bottom of the river was sounded both above and below the sites of the proposed bridges, and it appears to be hard and permanent.

The kind of bridge I would recommend, is a truss bridge, having generally water-ways of seventy feet in width, with piers ten feet in width.

I should not recommend a less water-way than this, (although it will reduce the first cost, to have them narrower,) as I should be apprehensive that the bridge would occasion jams of logs and ice which might prove fatal to the bridge ; nor should I recommend a greater span as it would add materially to the expense.

The piers are to rest upon a foundation of timber cob work, brought up to the low water mark, and then (above low water,) to be built up with square timber, laid nearly close, leaving an air space of about two inches between each course of timber. The form and dimensions to be as represented upon the plan annexed, and the cut water to be well planked.

The two outside stringers are to be trussed in the manner shown by the drawing and the traveled way, to be eighteen feet in the clear; should foot walks be required, they can be placed outside of the truss frames.

A bridge of this dimension is equal to sustaining thirty-one tons, and will accommodate safely a traffic with waggons carrying six tons, which I suppose will be the maximum load hauled on that road.

In making the estimates, I have taken the price of timber at what I suppose is a fair average price, and as the quantity estimated is specified, any alteration in the prices from the average stated in the estimate, may be applied. The cost of the iron work will not probably vary much.

I have also added a percentage to cover the superintendence, in case it is built by the day, which sum will be a sufficient consideration for the contractor, for his labor and risk in case it is built by contract.

I think the prices stated will, if suitable persons are employed, insure good substantial work. I have stated in the specification, that the frame should be weather boarded. The good effect I have noticed where this has been done in increasing the durability of the bridge, convinces me that it is a good plan.

Specification of Bridges at Orson Island.

The piers to be built upon a foundation of cob work laid fair on the bed of the river, and well filled with stones to be brought up to low water mark.

The piers to be built of square pine timber, each course to be laid within two inches of each other, the cross ties to be halved in, and each to be pinned through to the course below.

The tops of the piers to be finished with a corbel or bolster timber, to receive the string pieces ; these timbers are to be firmly secured to the piers, and the pens well filled with stone.

The bolster timbers are to be each one in one piece, and to project at least six feet on each side of the pier.

The superstructure of the bridge to be framed in trusses for the outside stringers, in the manner and of the dimensions shown in the annexed drawings, or similar to the one constructed this year at Oldtown, with the exception that the queen posts shall be of sufficient length to receive a cross tie which will allow any load crossing the bridge to pass under it.

The intermediate stringers, the cross timbers and planking, to be of the dimensions and placed as shown in the drawing.

The reaches not to be less than seventy feet in the channel of the river, and the number of piers and water-ways to conform to the plan.

All the frame work to be built of good sound pine timber, and all the joints to be well secured with iron straps.

The whole of the frame is to be covered over with weather boarding, so arranged as to keep the rain from the timber, and yet present as small surface as possible to the wind.

The bridge to be substantially railed, the posts to be secured to the floor timbers and not to the stringers.

The abutments are to be built of the same materials and manner as the piers, to be well carried into the bank where it is loose and to be well loaded with stone.

Estimate of Bridge, A to A'.

Foundation for three piers, timber,	-	-	-	48	00
Timber for four piers, 75 M feet, at \$8,	-	-	-	600	00
Timber for four abutments, 30 M, at \$8,	-	-	-	240	00
Covering for piers, 4 M, \$10,	-	-	-	40	00
200 yards stone, 75c,	-	-	-	150	00
Labor,	-	-	-	388	00
				<hr/>	
				\$1,466	00

Superstruction containing 83 M feet, average price \$12 per M, 348 feet, at \$7 56 per foot, - -	2,630 88
Superintendence, - - - - -	250 00
Total cost, A to A', - - - - -	<u>\$4,346 88</u>

Estimate of Bridge, B to B'.

Foundation of piers, 24 M wharf timber, at \$4, -	96 00
Timber for 4 piers, 75 M, \$8, - - -	600 00
Timber for 2 abutments, 32 M, \$8, - - -	246 00
Laying, [labor,] - - - - -	450 00
Coving for piers, 4 M, \$10, - - - -	40 00
Stone ballasting, 230 yards, at 75c, - - -	175 00
Superstructure 478 feet in length, average price of timber, \$12, (quantity estimated at 110 M,) at \$7 56 per lineal foot, (of the bridge,) - -	3,582 68
Superintendence, - - - - -	310 00
Total cost, B to B', - - - - -	<u>\$5,499 68</u>

Whole cost from A to A', - - - - -	4,346 88
Whole cost from B to B', - - - - -	5,499 68
To prepare the approaches to the bridges, there is estimated 1035 cubic yards of gravel, at 13c, -	134 55
Making, - - - - -	<u>\$9,981 11</u>

For the whole cost of the two bridges.

I think it well worthy of consideration, whether it would not be the better economy to establish and maintain a ferry at these places, instead of building bridges at this time, as it appeared that the travel at present is small, and the expense of the bridges appears to be more than the amount of travel would justify, and to build a cheap bridge is in such a case as this, to waste money.

Should the settlement of the country increase so that permanent

bridges would be required of the best construction, they could be built with stone piers and abutments, at a cost probably not exceeding twenty thousand dollars.

In the course of fifteen years the bridges above described would require extensive repairs, if not an entire renewal, with the exception of the lower part of the piers.

I would therefore suggest whether it would not be better to establish ferrys until such time as the travel would warrant the expense of building stone piers and a more permanent bridge.

Respectfully,

Your obedient servant,

WM. P. PARROTT.

Boston, Nov. 5th, 1846.

STATE OF MAINE.

HOUSE OF REPRESENTATIVES, May 28, 1847.

ORDERED, That three hundred and fifty copies of the foregoing Report, be printed for the use of the Legislature.

SAMUEL BELCHER, *Clerk.*