

Primary Battery File

National Archives, Washington D.C.

Record Group 77

Correspondence of the Chief of Engineers

Entry 103

File, Fort, Battery:

26010

Ft. Revere

Btly Ripley

UNITED STATES ENGINEER OFFICE,

P. O. BOX 5346, ROOM 124 P. O. BUILDING,

BOSTON, MASS.

June 7, 1898.

Brig. Gen. John M. Wilson,
Chief of Engineers, U. S. Army,
Washington, D. C.

General:

I have the honor to submit the following, for your consideration:

This office is authorized to construct, at Hull, Mass., emplacements for two 12-inch guns on barbette mounts, to be paid for from the appropriation for National Defense; we are also notified that two 12-inch emplacements for disappearing carriages, are to be constructed at Fort Warren, with funds presumably from the appropriation for Gun and Mortar Batteries.

I would recommend that an interchange of the allotments for these works be made, so that the work at Fort Warren may be done with funds allotted from the appropriation for National Defense, and that at Hull, with funds from the appropriation for Gun and Mortar Batteries.

There are many reasons for this change. It will greatly simplify keeping the accounts, since work is already in progress under the appropriation for National Defense at Fort Warren, and the allotments for this point, from the appropriations for Gun and Mortar batteries are practically exhausted.

The proposed change will also greatly facilitate the work in

the field. It is a point of honor with us to complete all work authorized under the appropriation for National Defense, before Jan'y. 1, 1899. At Fort Warren, we have, at the present time, an organization, which can readily be expanded, to include the new work; we are just installing quite an extensive concrete plant at Fort Warren, which, with moderate additions, will be able to handle the two 12-inch emplacements there.

At Hull, the delivery of materials is still an uncertain factor; an entirely new plant,- quite a large one,- will be required there. The stormy weather which prevailed during May held back the survey by at least two or three weeks. Consequently, I have felt some anxiety lest the work at Hull should not be finished in time; it is the only work authorized in this district under the appropriation for National Defense, concerning which I have such anxiety. If the allotments be interchanged as suggested, I feel quite sure that we can finish up all the National Defense work before the appropriation lapses. An earnest effort will be made, of course, to finish all work authorized this season, from whatever appropriation the allotments are made; but the work has accumulated so rapidly, it is almost impossible to gather and train new assistants to keep it going.

While final estimates can not yet be submitted, it is quite safe to say that the 12-inch emplacements at Fort Warren can be built for the money that would be needed at Hull.

Very respectfully,
Your obedient servant,

Lieut. Col., Corps of Engineers.

OFFICE, CHIEF OF ENGINEERS

76010

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3521

WAR DEPARTMENT.

Ordon, C. H. Lee,

June 7, 1898

Manufacture,

At. Co. of C. M.

For the reasons mentioned
within, records, that an
interchange of the acce-
ments for engine. for 2
12" guns at office, Mace,
(Chas. Alg. Allen) 5 for
engine. for 2-15" guns on
a. o. (F. & M. Co.) be made
so that the work at that
Chas. may be done with-
out from engine Chas. Alg.
(Mace) and that at office, Mace,
from engine for F. & M. Co.

After June 7, 1898.

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Subject: Estimate - Emplacements at Nantasket Head.
UNITED STATES ENGINEER OFFICE,

P. O. BOX 5346, ROOM 124 P. O. BUILDING,
BOSTON, MASS.

June 18, 1898.

Brig. Gen. John M. Wilson,
Chief of Engineers, U. S. Army,
Washington, D. C.

General:

I have the honor to submit herewith with my approval, a report by my assistant, Lieut. Sewell, upon the location of the emplacements for two 12-inch guns on barbette carriages, authorized by Department letter 26010 of April 25, 1898, with an estimate of cost for construction.

A topographical survey has been recently completed after much delay, due to unfavorable weather, and the preparations of plans are now well under way and will be submitted at the earliest practicable time.

I have made a careful study of the location, keeping in view a later occupation with batteries of Nantasket Hill, and on the 10th inst. visited the site for approval of location, and to arrange for the plant and transportation facilities.

An adequate supply of materials and means of transportation to the work are now in sight, and work will begin immediately with the expectation of completing the platforms for the guns by the time they arrive, and of the entire work by the end of the year.

Very respectfully,
Your obedient servant,


Lieut. Col., Corps of Engineers.

1 inclosure.

OR 26010
JUN 1898
WAR DEPARTMENT

Shoemaker,

June 18, 98.

Manfield,

Lt. Col. D. M.

Submits, approved, copy of report of Lieut. Devitt, of June 18, 98, of preliminary project, estimate of cost (\$107,360), for construction of 2 emplacements for 12" guns on barbette carriages at Nantasket Head. Plans will be submitted as soon as practicable.

1 line.

N.D.	U. S. Engineer Office, Boston, Mass.
134	Received JUN 22 1898

Manfield
Shoemaker
RECD. OFFICE CHIEF OF ENGRS. JUN 24 1898

1st indorsement.

Office Chief of Engineers,

U. S. ARMY.

June 21, 1898.

Respectfully returned approved. In preparing the detail plans Lieutenant Colonel Mansfield is advised that a vertical thickness of 12 feet of concrete is deemed sufficient cover for the magazines and galleries. Advantage should also be taken of the smaller space required for maneuvering the gun carriage and for loading purposes to reduce the dimensions of the gun pits and to bring the centers of gun platforms nearer together than shown in the type plans for disappearing carriages. By following these suggestions the quantity of concrete can be reduced considerably, with resulting saving in time and cost. The sum of \$40,000 additional is hereby allotted from the appropriation for National Defense, Act of March 9, 1898, to be applied towards the construction of two emplacements for 12-inch guns on barbette carriages at Nantasket Head.

These papers to be returned.

By command of Brig. Gen. Wilson:

Frank B. Wilson
Captain, Corps of Engineers.

26010
4
Inclo. 5 accomp.

2d indorsement.
U. S. Engineer Office,
Boston, Mass.

June 23, 1898.

Respectfully returned to the Chief of Engineers, U.S. Army.

Manfield

Lt. Col., Corps of Engineers.
N.D. 134.

RECD. OFFICE CHIEF OF ENGRS. JUN 24 1898

(COPY).

UNITED STATES ENGINEER OFFICE,

P. O. BOX 5346, ROOM 124 P. O. BUILDING,

BOSTON, MASS.

June 18, 1898.

Lieut. Col. S. M. Mansfield,

Corps of Engineers, U. S. Army.

Colonel:

I have the honor to submit the following preliminary project and estimate for the construction of two emplacements for 12-inch guns on barbette carriages, authorized by Department letter 26010, of April 25, 1898.

It was decided to locate these guns on the height known as Cushing Hill, in the town of Hull, since this is the highest point in the Harbor for which 12-inch guns are authorized. This site lends itself well to the concealment of the battery; the slope of the ground in front is such that by sinking the battery two or three feet below the level necessary to carry out the typical design, and using the surplus earth to ease off the exterior slope, the front of the battery can be rendered quite inconspicuous.

There is a high hill some distance in rear of the battery, which will prevent the guns from appearing against the sky; the crest of the battery will be about 96 feet above mean low water,- rather low for barbette guns,- but the surrounding conditions compensate for this to a large degree.

As the battery was indicated on the general project sheet, it is exposed to an enfilade reverse fire from deep water beyond Nantasket Beach; also^{to}/the same kind of fire from any vessel that

might get through the mines into Nantasket Roads, between Rainsford's and Peddock's Islands. The first of these objections can be entirely obviated by swinging the crest of the battery ten degrees to the right, so as to defilade it by Telegraph Hill, instead of Point Allerton; this change slightly increases the exposure from Nantasket Roads, but this can be cured by a light earth traverse; it is not probable that any vessel heavier than torpedo boat destroyers would ever run in, to take any of the works in reverse. The change in the crest above referred to will not decrease the field of fire, nor will it cut out any portion of the field indicated on the general project; since the Board of Engineers did not attempt rigid locations of the works at Hull, I am having the battery located as above indicated.

There will be such a great thickness of earth in front of the guns and magazines, that I have reduced the thickness of concrete to ten feet. Otherwise, I have followed the arrangement of magazines, &c., shown on the typical drawings for the 12-inch gun on the '97 model disappearing carriage. Drawings will be prepared and submitted at the earliest practicable date.

It is proposed to install a concrete mixer, necessary engines and derricks, build stone and ^{sand} bins, and make connection with the N. Y., N. H. & H. R. R., for the delivery of materials. Work will be pushed night and day, if necessary, to get it finished before Jan. 1, 1899.

In the case of this work, as of all others in this district, quite an item for transportation has to be included in unit prices.

It is not yet determined whether it will be better to buy or hire engines and derricks, but the cost will probably be about the same, in either case. The engine and mixer, however, for mixing concrete, would better be purchased.

There will ultimately be three 12-inch guns at this point; it will also be necessary to install here some of the rapid fire guns projected for Nantasket Head by the Board of Engineers; the new type of magazines require more light than the older ones. For these reasons, the generating set to be installed now for electric lighting purposes should be considerably larger than would be obtained by following strictly the mimeograph on this subject issued by the Department. The estimate for electric light here contemplates a set of about 25 k.w. capacity, with room in the power house to duplicate it, should future requirements demand it. I think this battery will best be served by a plant of its own. When the construction of the other batteries at Hull is undertaken, the question of a common power plant for them should be considered. 25 k.w. will, for the present, supply lights for magazines, power for lifts, and for at least one search light, for the battery under construction. If, in the future, power is applied to the carriages,- and I am informed that experiments with this end in view are under way,- the duplicate set of 25 k.w. will have to be put in.

The estimate of cost for two emplacements is as follows:

Estimate of Cost.

Exc. & Emb., 12000 cu. yds. @ 75¢.....	\$9,000.00
Drainage.....	500.00
Nat. cem. concrete, 10,000 cu. yds. @ \$5.50.....	55,000.00
Port. " " 1000 " " " \$7.50.....	7,500.00
Asphaltic " 200 cu. yds. @ \$16.00.....	3,200.00
Steel beams, &c., 160,000 lbs. @ 3¢.....	4,800.00
Ammunition service.....	2,000.00
Electric light plant.....	4,000.00
Engines and concrete mixer.....	3,000.00
Cement shed, bins, derricks, &c.,.....	4,000.00
	<u>93,000.00</u>
Contingencies, 10%.....	9,300.00
Total,.....	<u><u>\$102,300.00</u></u>

Very respectfully,

Your obedient servant,

John Stephen Sewell,

1st Lieut. Eng.

N.D.

U. S. Engineer Office,
Boston, Mass.

120

Received JUN 18

98

OFFICE CHIEF OF ENGINEER

26010

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WAR DEPART Boston, Mass.,

June 18, 1898.

Sewell,

1st Lt., John Stephen,

To Lt. Col., S. M. Mansfield.

Submits prelim. project &
estimate for constrn. of 2
emplts. for 12" guns on barbette
carriages at Nantasket Head.

N.D.

S. Mansfield
1
Boston, Mass.

1898

Subject: Battery at Nantasket Head, Mass.
UNITED STATES ENGINEER OFFICE,

P. O. BOX 5346, ROOM 124 P. O. BUILDING,

BOSTON, MASS.

October 24, 1898.

Brig. Gen. John M. Wilson,
Chief of Engineers, U. S. A.,
Washington, D. C.

General:

Replying to Department letter (26010) dated October 22, 1898, requesting a report of the manner in which the battery at Nantasket Head is being constructed, I have the honor to say that under the authority contained in Department letter of April 25, 1898 (26010), an agreement has been made for each item of labor and material when there was no time to advertise.

It was found impracticable to do the work by hired labor, and under the method pursued the construction of the battery has advanced to a point far beyond that which it would have reached had the work been conducted in any other manner, and it is believed much more economically.

Every effort is being made to complete the battery by the 31st of December. We are in position now to push the concreting with the utmost rapidity, and with favorable weather it is thought the battery will be essentially finished by that date.

The returns of officers and hired men are correct.

Two blue prints are respectfully inclosed; the one showing the condition of the work on September 27, 1898, and the other on October 20, 1898.

Very respectfully, your obedient servant,

(2 inclos.-blue pts.)


Colonel, Corps of Engineers.

OCT 25 1898

WAR DEPARTMENT

Boston, Mass.,
Oct. 24/98.Manchester,
Cal. St. Ill.

Repts. the manner in which
batteries at Manchester station
being constructed is that agree-
ment has been made for each
line of labor & will, when the
was a time to advance; that
was impracticable to do the work
by hired labor, tender over the
ground the work has been done
to a point far beyond that which
it could have reached by any
other method. Says it is through
batteries will be finished by Dec 31.
Repts. returning of the river
over correct, between 2 blue
points showing existing and
Sept 27 & Oct. 20/98.

(Rec'd. 3.0) to file
Oct 24/98 7.8 in 9) Cap. S. B. D. 186, S. B. 4.

Rec'd. Oct. 26, 1898.