

**Primary Battery File**

**National Archives, Washington D.C.**

**Record Group 77**

**Correspondence of the Chief of Engineers**

**Entry 103**

**File, Fort, Battery:**

**26017**

**Ft. Taylor**

**Btty Osceola**

## United States Engineer Office.

Key West, Fla., May 14, 1898.

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

General:-

Referring to department letter 26017 directing the construction of two emplacements for 12-inch barbette guns in Fort Taylor, I have the honor to submit the following preliminary scheme:-

1. To locate the guns on a line approximately parallel to the southwest face of Fort Taylor and about 95 feet north of it, and to make the elevation of the crest of the parapet about 29. The accompanying sketch (profile) shows the crest and other lines at the proposed elevation and their relation to the casemates of the southwest front of the fort. In plan I propose to follow as closely as the differences in the platforms will permit, the arrangement of rooms etc shown in fig. 10 of the drawings that accompany mimeograph No. 24 (Emplacement for a 12-inch h. p. gun mounted on U. S. disappearing carriages L. F., model 1897). Placing the crest at this elevation will involve cutting down the southwest front to the level of floor of sec-

ond tier of casemates, except the outer wall which is held about three ft. higher. It will also involve cutting down the rest of the fort to the same elevation; since it is not, I think, permissible to leave a mass of brick casemates and brick quarters in rear of the new battery and above the level of its crest. The parade of the fort is at elevation 6.5. It is proposed to place the floors of magazine, shell rooms etc. at elevation 7; this brings the crest of the parapet at 29, which is the least height that can be given to it. Even this height requires in the gun base about 164 cubic yds. of concrete in excess of the quantity called for by the typical drawing.

It is proposed to break up the bricks obtained by demolishing casemates and quarters and use the broken brick in the place of broken stone in concrete.

2. To imbed in the concrete in lieu of the random stone ordinarily used, certain of the smooth bore guns mounted in the barbette and second tier of casemates and those lying dismounted on the parade of the fort.

The following guns are mounted in the barbette tier:

- 2 15-inch Rodmans,
- 20 10-inch Rodmans.
- 3 300 pdr. Parrotts,
- 3 100 pdr. Parrotts,
- 3 30 pdr. Parrotts.

And lying dismounted on the barbette of the curtain are one  
 10-inch and two 8-inch siege mortars.

The following guns are mounted in the second tier:

- 18 24-pdr. Howitzers,
- 30 8-inch Columbiads,
- 6 30-pdr. Parrotts,
- 2 10-inch Rodmans.

Lying dismounted on the parade of the fort are the following  
 guns, viz:

- 7 100 pdr. Parrotts,
- 2 10-inch Columbiads,
- 7 8-inch Columbiads,
- 6 12-pdr. siege guns,
- 1 3-inch rifle,
- 8 6-pdr. field guns,
- 1 12-pdr. field gun,
- 4 12-pdr. Howitzers,
- 13 brass field guns and Howitzers.

In the same place are lying 9 iron carriages for 100 pounder  
 Parrotts.

Many of the guns in the second tier of the casemates are mounted  
 on wooden carriages. I would ask authority to bury in the concrete  
 such of these guns as the Department thinks are no longer of any use;  
 the brass guns might be excepted as they are small and will be useful  
 for ornamental purposes.

It is certain that the mortars, Howitzers, Columbiads and Par-  
 rotts will never be used again: and I unhesitatingly recommend that

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they be buried in the concrete of the new work. None of the guns in either the first or second tier can be served, all the carriages being unserviceable. The Rodmans of the barbette tier are our main dependence just at present for covering the mine field. They would therefore be removed one at a time, until the guns are mounted in the other batteries now under construction.

I would also ask authority to dismantle all of the iron carriages in the second and barbette tiers and those lying in the parade, and to use the I beams of the chassis as roof beams.

Very Respectfully,

Your Obedient Servant,

*C. A. Mackintosh*

1st. Lieut., Corps of Engineers, U. S. A.

(1 inclos. in separate package).

*[Faint, mostly illegible text and markings, including a signature and administrative stamps.]*

OFFICE CHIEF OF ENGINEERS

26017  
3

WAR DEPARTMENT

Key West, Fla.  
May 14, 1898.

M McKinstry  
Lieut. Col. U.S.A.

Submitting preliminary  
scheme for construction of two  
emplacements for 12" barb.  
guns at Fort Taylor, Fla.,  
involving the burying of cert.  
old armament guns in the  
concrete of the new work.

W. L. Imbort (tracing)

Inc. 4 not returned  
back  
June 1, 1898

RECD, RANK OFFICE CHIEF OF ENGINEERS JUN 1 1898

Note that in enclosure  
K. McKinstry

1st Indorsement.  
Office Chief of Engineers

May 19, 1898.

Respectfully returned.  
The section proposed by Lieutenant McKinstry shows 20 feet of concrete and over 63 feet of said. This cover is much more than shown on the type plans for 12-inch guns and disappearing carriages and should be reduced by placing the center of gun platforms at not to exceed 65 feet from the parade wall instead of at 95 feet as proposed.

A vertical cover of 12 feet of concrete over magazines is now considered sufficient and the crest of the battery should be accordingly placed at a reference 27.0 The cover of 14 feet adopted by Lieutenant McKinstry was presumably taken from the latest type emplacements for 12-inch gun on disappearing carriage, where this thickness is rendered necessary in order to obtain sufficient cover over the shot rooms, a consideration that does not obtain in the barbette mount.

The plan shown on Fig. 10 of Mimeograph No. 4 will be satisfactory so far as the magazines and ammunition service are concerned. Inasmuch as the barbette carriage does not require the same amount of room for loading and maneuvering as does the disappearing carriage, the dimensions of the terreplein or loading platform, laterally

and from front to rear, may be reduced below those shown on Fig. 10 of Mimeograph No. 24. A careful graphical study of the mounts in relation to its field of fire and to the traverse and breast-height walls should be made before fixing the dimensions of the loading platform or terreplein.

It is desired that the emplacements be constructed as economically as possible and that all unnecessary concrete be avoided.

For the present the Chief of Engineers deems it best not to expend any money in cutting down the old fort outside the immediate field of fire of the proposed battery, unless the material thus obtained can be utilized in the construction of the battery.

The Chief of Ordnance has been requested to authorize the dismantling of old gun carriages and the imbedding in the concrete of the old guns. These papers to be returned.

By command of Brig. Gen. Wilson:

Joseph E. Fisher  
Captain, Corps of Engineers

26017  
3

Inclo. 4 in sep. roll.

2nd Indorsement

U S. ENGINEER OFFICE.

KEY WEST, FLA. May 28, 1898.

Respectfully returned to  
the Chief of Engineers U.S.A.  
with report of this date.

M McKinstry  
First Lieut., Corps of Engineers.

26017  
3

RECD, OFFICE CHIEF OF ENGRS. JUN 1 1898

Subject:

## United States Engineer Office.

Key West, Fla., May 28, 1898.

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

General:-

I have the honor to inclose herewith for approval tracings showing plan and sections of the proposed battery for two 12-inch barbette guns in Fort Taylor.

Section:- Elevations refer to mean high water, as this is the system used in all drawings of Fort Taylor; mean rise and fall of tide 1.5 feet.

The crest of the parapet is taken at reference 27 as directed in first indorsement on letter 26017. The maximum depression allowed the guns is  $2^{\circ}18'$  (4 on 100). The line of sight with this angle of depression will strike mean low water surface at a distance of 710 feet from the gun. The distance to the nearest point of the 18 foot contour within the field of fire is 840 feet. The <sup>dimensions</sup> drawing of the gun and carriage and the angle of depression, the crest being at 27, fix the top surface of the gun

2.  
base at 20. The top of the gun base is slightly cut away to enable the ammunition track to be brought in under the gun crane.

If the loading platform and terreplain should be taken at 20 there would be an insufficient amount of protection over the ammunition hoists, and men employed in bringing up ammunition would be exposed to fire coming over the crest at slight angles of descent. The men loading are necessarily exposed. I have dropped the terreplain to 18. This does away to some extent with the objections mentioned and has but one disadvantage, viz: that of requiring the projectiles to be raised through two additional feet by the gun crane.

Plan:- The crest of the parapet is taken parallel to the southwest face of Fort and each gun is given a field of fire of 140 degrees. The bearings of the lines limiting the field of fire are S 59°-30' E and S. 80°-30'.W respectively and all the southerly entrance channels, viz: the Southeast, the Main Ship, the Rock Key, the Southwest and the West channels, are well covered as are also certain areas of deep water outside the most easterly and the most westerly channels.

The locale has necessitated certain departures from the typical design.

No. 3.

In the ordinary design for two guns the magazine and shell room of one gun are placed under the traverse between the guns, and the magazine and shell room for the other gun are placed in one of the outward flanks. This arrangement is not possible at this site on account of lack of space. All the magazines and shell rooms are therefore placed between the guns.

Again, in the proposed design, magazines and shell rooms are located farther to the front than on the typical design. Distant large calibre fire (involving large angles of fall) can be brought against both flanks of this battery almost to the limiting lines of fire. This requires that the magazines should be advanced to the front, in order that shots fired at small angles to the crest may not penetrate to them.

Referring again to indorsement 26017 it is there directed  
3  
that the center of gun platforms be placed at not to exceed 65 feet from the parade wall (outside of masonry foundation.). The plan as drawn shows the center of the gun bases at 81 feet from this wall. This is an error, not discovered until after the drawing was finished. To save time a note to this effect is made in the tracing. A corrected tracing will be submitted later.

4.

It was intended to place the line joining the centers seven feet near <sup>or</sup> the parade wall, viz: at 74 feet from it. This is nine feet farther than is prescribed in  $\frac{26017}{3}$ , but is rendered necessary in my opinion by the arrangement of rooms proposed, and this arrangement of rooms is necessitated, as explained above, by the limited space available. It is also respectfully suggested that as the face wall of the Fort is not bonded in any way to the masonry of the arches, sustained fire would bring down this face wall. This would cause considerable of the fill behind the wall to fall into the sea and greatly decrease the cover in front of the magazines.

Very Respectfully,

Your Obedient Servant,

*C. H. McKinstry*  
 1st. Lieut., Corps of Engineers, U. S. A.

(2 Incls. in sep. pke.)

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OFFICE CHIEF OF ENGINEERS

26017

NO. 4 MAY 7

WAR DEPARTMENT

May 28, 1898.

McKinstry, Lieut. C. O. K.

Checkers for approval, drawings showing plans and sections of the proposed battery for 2-12 inch barbette guns in Fort Bay con, etc. 2 sheets (drawing)

Correct drawings see 26017 12/13

RECD. BLDG OFFICE CHIEF OF ENGRS JUN 8 1898

1st Indorsement.

Office Chief of Engineers, U. S. ARMY.

June 1, 1898.

Respectfully returned to Lieutenant McKinstry.

An observation station should be provided on each flank of the battery, in addition to the one shown on the plans, in order to have a point of view free from smoke whichever the direction of the wind.

As the battery may be exposed to fire at short range from vessels attempting to run by on the right flank, it is deemed advisable that the traverse on this flank be extended to the rear edge of the terreplein.

It is noted that the dimensions of the ammunition lifts conform to those shown on the typical plans for the 12-inch disappearing carriages. As the ammunition truck for the barbette carriage will require less floor space, it would be well to diminish the dimensions of the lift in plan to conform to the dimensions over all of the barbette truck, drawings of which have been sent to Lieutenant McKinstry.

Special precautions are to be observed to secure thorough drainage, and all surfaces indicated as horizontal should be provided with a slight slope to carry off water. Seepage and leakage of water into magazines and galleries should be guarded against by the use of air spaces and water-proof courses.

The centers of platforms may be placed at 74 feet from the face of foundation walls as recommended.

With these exceptions the plans are approved.

When such record as may be necessary has been made, and after signing this letter, these papers will be returned to this office.

By command of Brig. Gen. H. H. Wilson:

Joseph B. Keiser, Captain, Corps of Engineers.

26017  
7  
Incls. 8-9 in sep. roll.

2nd Indorsement.

U. S. ENGINEERS OFFICE, Key West, Fla. June 6, 1898

Respect fully returned to the Chief of Engineers U. S. A. the necessary record having been made.

A. W. McKinstry, 1st Lieut. Corps of Engineers.

26017  
7

RECD. OFFICE CHIEF OF ENGRS JUN 8 1898

## United States Engineer Office,

ARMY BUILDING,

NEW YORK CITY, October 18, 1898.

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

General:-

I have the honor to say that a comparison of the arrangement and size of the rooms in the 12-inch barbette battery being constructed at Key West, with those of several other 12-inch barbette batteries constructing elsewhere leads me to the conclusion that it would be advisable:

First, to make the passageway in front of the ammunition hoists 7 feet wide instead of 4 feet.

Second, to increase the size of the shot room, (widening the passageway aforementioned decreases the size of the shot room --an additional reason for increasing the size of the shot room.).

Third, to add two rooms to the Key West battery; one to serve as a dynamo and engine room, and the other as a storage battery room. In the original plan I had in mind to use as an engine and storage battery room the large room (28' X 12'6") under the loading platform of the right gun, but I am now convinced that this would not leave sufficient storeroom in the battery.

Fourth, to make the reference of the loading platforms and covered way 19 instead of 18.

The changes mentioned involve diminishing the width of the covered way leading from one gun to the other, from 18 feet to 10 feet. Likewise decreasing

the width of the office or administration room from 11'6" to 10'.

I have the honor to ask authority to make the changes above described.  
A blue print is herewith showing the changes proposed.

Very respectfully,

Your obedient servant,

*C. H. McIntyre*  
Captain, Corps of Engineers, U. S. A.

1 Inclo., blue print in sep. pkg.

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EXHIBIT 100-100000-100000

OFFICE CHIEF OF ENGINEERS

26017

26017

WAR DEPARTMENT, 1898

WAR DEPARTMENT,

New York

Oct 15, 1898.

Medicine,

Capt. L. M.

To make changes described in the accompanying lists of rooms in the 22<sup>nd</sup> and 21<sup>st</sup> batts at West Point. I enclose brief report showing the changes prepared.

26017  
21  
Incls. 22 in separate roll.

*Joseph M. B. Fisher*  
Captain, Corps of Engineers.

Acting Chief of Engineers:

By order of the

When such record as may be necessary has been made, these papers will be returned to this Office.

Respectfully returned approved.

October 20, 1898.

U. S. ARMY,

Office Chief of Engineers,

Field Indorsement.

2<sup>nd</sup> Indorsement.

U. S. ENGINEER OFFICE,

NEW YORK CITY, Oct. 21, 1898

Stopproofing returned to the effect of the Chief of Engineers, U. S. Army, the necessary records having been made.

By direction of Capt. M. H. Kunitz and in his absence.

*Elliot S. Smead*

*Gene*

RECD. OFFICE CHIEF OF ENGS. OCT 23 1898

RECD. OFFICE CHIEF OF ENGS. OCT 23 1898

File 22

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