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MADRAS RECORD OFFICE

Government of Madras

Public Works DEPARTMENT

G.O. No. 2546 Press
~~B.P.~~ No. Mis. 0874

Dated 9-9- —195—.

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department, 9th September 1874.

No. 160. Read again letter from the Inspecting Engineer for Buildings, No. 1,559, dated 24th November 1873, and letter from the Officer in charge, Cumbum Range, No. 231, dated 20th August 1873, recorded in G. O., No. 1,025, dated 21st April 1874 :—

From Colonel E. A. FOORD, R.E., Inspecting Engineer for Civil and Military Buildings, to Colonel G. W. WALKER, R.E., Secretary to Government, Public Works Department, dated Chepauk, 24th November 1873, No. 1,559.

On the 25th of July,* I forwarded, for the information of Government, a letter from the District Engineer of Kurnool, bringing to notice that the foundations of the incomplete Cutcherries at Koilguntla and Cumbum had given way, and that, in all probability, they would have to be rebuilt. I have now the honor to forward detailed reports on these buildings, statements of the loss likely to be sustained in each case, and the explanation of the Range Officer who was in charge at the time the Cutcherries were commenced.

* No. 833.

1 Letter from Mr. Bell, to District Engineer, No. 231, dated 20th August 1873, with one Ground Plan of Cumbum Taluq Cutcherry.
2 Letters from Captain Taylor to do., dated 18th October and 14th November 1873, with one Sketch.

2. The Koilguntla Cutcherry has not yet been inspected by the District Engineer, but his report, based on that of the Range Officer, is as follows. The ground in which the foundations were built is described thus :—From 2 to 3 feet below the surface *loose earth*, below this *sand* from 6 to 8 feet in depth, under the sand a *brownish clay*. Hence the clay lies at a depth varying from 8 to 11 feet below the surface. The bottom of the concrete in the foundation is at a uniform level of about 6½ feet below the surface. Consequently the whole was built on sand, or on a mixture of clay and sand. It is said that the ground at and near the site was formed by the Kund-airee, which has changed its course so often, and to such an extent, as to have altered a large tract of land.

3. The foundation walls have been built to the level of the ground in uncoursed rubble with undressed stones. When the Range Officer inspected the work in September there were three cracks. On the 9th of October, the cracks had increased in number to nine, running from top to bottom of walls, and in width from a quarter to half an inch. The walls have been built up to basement level, and the cost of the work done is as follows :—

	Rs.	A.	P.
Excavating foundation	122	3	0
Concrete	1,187	14	0
Roughly hammered stone in chunam	4,504	15	6
Superintendence, etc.	465	3	2
Total...	6,280	3	8

4. I do not think it will be advisable to continue the work on the present foundations. It is evident that the work has settled irregularly, and that the settlement is still going on, showing unsoundness in the ground, and that the foundations should have been carried down into the clay:

5. If it is determined to rebuild the Cutcherry on the present site, using some of the foundation trenches and such of the materials as are found to be

learning

suitable, the probable loss is estimated at Rupees 5,155, being only Rupees 825 less than the outlay up to the present time. The sum of Rupees 825 represents the value of material and excavation after deducting the cost of breaking up the masonry, but the District Engineer expects to find a better and cheaper site.

6. He also states that when the foundations were laid, Captain Taylor, now in charge of the Kurnool Range, had temporary charge of Nundial, in addition to his own (the Cumbum) range. The work was commenced in February 1869, and on the 21st June, while it was in active progress, the range was given over to Mr. Vardon, and on the 22nd of July of the same year the work was stopped. Before Captain Taylor took charge the site had been fixed and a trial pit had been dug, and the depth of the foundation trenches fixed at 6½ feet. Captain Taylor strongly objected to the site on account of its sandy nature, but his opinion was overruled.

7. The Cumbum Cutcherry was commenced in 1868, Captain Taylor being then in charge of the Cumbum Range. The site is inside the old fort, and was occupied many years ago, it is said, by a number of temporary buildings for troops. These buildings have been cleared away, but apparently portions of the old foundations have been used for the new Cutcherry, though Captain Taylor states that all material found in the trenches was stacked and re-used, and that he did not build on any old walls. The ground inside the fort Mr. Fraser, the District Engineer, states has been raised probably 8 or 10 feet with soil taken from the ditch, and that the foundations are wholly in this made-ground. Mr. Bell, the present Range Officer, states in his report that the foundations rest on the solid ground, or even have been carried one foot into it; but the District Engineer says this is a mistake, as he pointed out on the spot to Mr. Bell. It will be seen that Captain Taylor in his report denies that the soil inside the fort is made-ground; but I think the evidence is the other way.

8. In January 1869 Munisawmy Chetty, the Overseer in charge of the work, wrote directly to the Superintending Engineer (Colonel Moberly) complaining of certain irregularities in the accounts, and that the orders respecting the foundations had not been attended to, that they were stone in mud instead of chunam, etc. The letter was forwarded to Captain Taylor, who denied altogether the accuracy of the Overseer's statement. The Superintending Engineer accepted Captain Taylor's explanation as to the foundations. The Overseer was directed to apologize, which he did, and he was afterwards transferred to the Nundial Range, where he now is.

9. The work at the Cutcherry was suspended in July 1869. In July 1873 Supervisor Hayes, who was in charge of the range, examined the foundations. He made no special report, but, on giving over charge to Supervisor Crowe, left a memorandum, in which he expressed a very unfavorable opinion of the stability of the foundations. On this coming to the knowledge of Mr. Fraser, he had pits dug to enable him to measure and examine the foundations, but made no special report pending the arrival of the new Range Officer who would have to carry out the work. Mr. Bell made his measurements independently of the District Engineer, and I forward his report, received through the District Engineer, as it is illustrated by sketches showing the nature of the foundation in several places.

10. Mr. Bell in his report states that no suitable bond stones have been used. On this Mr. Fraser remarks that no bond stones whatever have been used, and that the walls have been built in the style usual in the district, that is with two outer shells, the space between being filled in with fluid mortar and small stones. On reference to Captain Taylor's specification, I cannot find in it any directions for building the walls. In fact, this document is little more than a catalogue of the rooms with their dimensions.

11. Mr. Bell was at first of opinion that the walls might be repaired and strengthened, but he has since seen that this is impracticable. I agree with the District Engineer and the present Range Officer that it will not be advisable to complete the work that has been commenced, and that if it is determined to retain the present site, the Cutcherry must be entirely rebuilt from the foundations, which must be of greater depth. Mr. Fraser reports that a better site for the Cutcherry can be found on the other side of the town, and not further from the town than the fort is. At this place the foundations would rest on rock, and there is a stone quarry, only a hundred yards distant, whence building stone could be obtained. The objection to this site is that it would be more than a mile from the Police station, and the Police guard would probably have to be strengthened.

12. The expenditure on this Cutcherry has amounted to Rupees 14,407. Deducting the amount paid for land and buildings and the value of materials and store sheds, Rupees 7,331, there remains a sum of Rupees 7,076 which represents the probable loss.

13. Mr. Fraser has been supplied with copies of the standard plans, and is preparing estimates for new Cutcherries at Cumbum and Koilguntla.

From J. M. BELL, Esq., Assistant Engineer in charge of Cumbum Range, to the District Engineer, Kurnool, dated Cumbum, 20th August 1873, No. 231.

I HAVE the honor to submit the following report on the present condition of the foundations of the new Taluq Cutcherry at Cumbum.

2. For the purpose of examining the foundations of the building, thirty pits have been excavated in various parts to a depth below them. The accompanying ground plan of the building will show the position of these pits. I will proceed to describe the result of my examination of these pits that call for particular attention, from which the general character of the others can be drawn.

3. I ought to here mention that the whole of the foundations are very loosely built, with no regard to the labor, material, or judgment used in their construction. The soil on which the foundation rests consists of made-earth of a soft and spongy character. From inquiry and inspection I learn that a great part of the present foundation is the remains of old foundations, on which stood temporary buildings formerly occupied by Native troops. It is evident that when these buildings were removed to make room for the present new Cutcherry, the old foundations as far as their locality and position permitted were utilized for the construction of its superstructure. This sufficiently accounts for the want of solidity in the whole structure, and the irregularity and want of uniformity in the lines of the foundation. Taking into consideration that the earth is made, spongy and soft, the foundations which are laid at a depth of from 3 feet 8 inches to 4 feet, including old and new work, are nowhere carried down to a greater depth than 1 foot below the surface of the natural ground, while in many places it merely rests on the surface.

protective character, as whatever is done in that direction must be of a very extensive nature and would entail great cost; I therefore recommend that the whole construction be pulled down and rebuilt.

No. 160A. Read also the following letter from Lieut.-Colonel A. S. MOBERLY, R.E., District Engineer, Cuddapah, to Colonel G. W. WALKER, R.E., Secretary to Government, Public Works Department, dated Camp at Goovalchervoo, 4th June 1874, No. 442.

WITH reference to G. O., No. 1,025, of 21st April 1874, I have the honor to request you will inform me as to the exact points on which Government require information. I have applied to the District Engineer of Kurnool for the correspondence which passed between Captain Taylor and myself on the subject of the foundations of the Cumbum Cutcherry, but am told it is with Government. From the expression "It appears, moreover, that his own Overseer in charge of the work entered a protest against its execution, etc., etc.," I conclude that reference is made to stone in clay being used in the foundation. You then go on to say, "Lieutenant-Colonel Moberly will be asked to explain what would appear to have been an absence of due action on his part." In reply to this I beg to state that, on my learning from Captain Taylor that he had laid the foundations in stone in clay, I directed him, as far as I can remember, to pull up all the foundations and to relay them in chunam, he bearing the expense of laying it in clay and of ripping up the work.

2. This was reported to have been done, and when I next visited Cumbum, in November 1869, I made inquiries and learnt that all but the bottom course of stones had been removed, that the clay between the stones had been scraped out, and the spaces filled in with concrete. At that time the walls had been raised to 7 or 8 feet, and the door and window frames had been fixed. I examined the mortar in the basement and what was being used, and found it good, and Captain Taylor said the same kind had been used in the new foundations.

3. As I am quite ignorant of what has transpired during the last three years about this Cutcherry, I trust, if more information is required from me, that you will tell me the points on which explanation is required, and will furnish me with the whole file.

No. 161. ORDER THEREON, 9th September 1874, No. 2,546.

CIVIL WORKS, No. 13. -

COLONEL Moberly was asked to explain "what would appear to have been an absence of due action on his part" with reference to the fact stated in paragraph 8 of the Inspecting Engineer's letter, No. 1,559, of 24th November 1873, that in January 1869 the Overseer in charge of the Cumbum Cutcherry work wrote direct to him as Superintending Engineer of the Division, complaining of certain irregularities in the accounts, and that the orders respecting the foundations had not been attended to, they being stone in mud instead of stone in chunam.

2. It now appears that he did not visit the work till the following November, when he was satisfied on being informed by Captain Taylor "that all but the bottom course of stones had been removed, that the clay between the stones had been scraped out and the spaces filled in with concrete." The actual state of the foundations as revealed by 30 pits sunk in 1873 by the present Range Officer is shown in his Report No. 231 of 20th August 1873, which will now be printed in extenso, together with the Inspecting Engineer's summary.

3. It is sufficiently evident that Captain Taylor did most ignorantly and improperly take upon himself to substitute stone in clay for stone in chunam in the foundations, and carried out even that inferior style of work in such a manner as to elicit the protest of Overseer Munisawmy Chetty; and it is further evident that Colonel A. Moberly's procedure with reference to the Overseer's communication was most inconsistent with the position which he held, and the duty he owed the Government, inasmuch as he did not satisfy himself by personal examination, even after ten months' delay, of the actual state of the foundations, as has subsequently and most effectually been done four years later.

4. The circumstances connected with this work go to confirm an unfavorable impression on the mind of Government as to the professional conduct of both officers concerned.

(True Extract.)

Colonel, R.E.,

Secretary to Government.

To the District Engineer, Kurnool.
" " Cuddapah.

Exd. S. T. Austin.

Spare Copies

Govt. of {1874} Madras.

PUBLIC WORKS.

To

THE DISTRICT ENGINEER, KURNOOL.

&c., &c., &c.

Dated September 9th.

Recd. Encl.

G. O., 9th September 1874, No. 2,543.

SEPTEMBER.

Nos. 160-161

Cuddapah Cutcherry.—Passing orders on letter from Lieutenant-Colonel A. S. Moberly, R.E., offering explanation with regard to the faulty construction of the Cutcherry foundation in 1869.

No. 442

Cuddapah District Engineer's Office
Camp Gooralchervoo dated 4th June 1874.

From The District Engineer
Cuddapah

To The Secretary to Government
Public Works Department

Sir,

With reference to Government Order No. 1025 of 21st April 1874, I have the honor to request you will inform me as to the exact points on which Government require information. I have applied to the District Engineer of Kurnool for the correspondence which passed between Captain Taylor and myself on the Subject of the foundations of the Cumbum Cutcherry but am told it is with Government. From the expression "It appears, moreover, that his own Overseer in charge of the work entered a protest against its execution &c." I conclude that reference is made to stone in clay being used in the foundation. You then go on to say "Lieutenant Colonel Moberly will be asked to explain what would appear to have been an absence of due action on his part."

In reply to this I beg to state that on my

morning

with the whole file.

I have the honor to be
Sir,
Your Most Obedient Servant

B. Alexander Lieut Col R.E.
District Engineer
Philadelphia

Capt N.T. Moberly R.E. (H.E. No 442 of 24th June 1874)

Colonel Moberly was asked to explain "what would appear to "have been an absence "of due action on his part" with reference to the fact stated in Para 8 of the Inspecting Engineers letter No 1569 of 24th November 1873, that in

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learning from Captain Taylor that he had laid the foundations in stone in clay I directed him, as far as I can remember, to pull up all the foundations and to relay them in Cement, he bearing the expense of laying it in clay and of pumping up the water.

This was reported to have been done and when I next visited Caumburn in November 1869 I made inquiries and learnt that all but the bottom course of stones had been removed; that the clay between the stones had been scraped out and the spaces filled in with Concrete. At that time the walls had been raised to 7 or 8 feet and the door and window frames had been fixed. I examined the mortar in the basement and what was being used and found it good and Captain Taylor said the same kind had been used in the new foundations.

As I am quite ignorant of what has transpired during the last three years about this butchery I trust, if more information is required from me, that you will tell me the points on which explanation is required and will furnish me with

(B)

2546 P. W. D.

Proceedings of the Madras Government,

Under date the 187 .

Read ~~the following~~ again

letter from the Inspecting Engineer for Buildings
No. 1559, dated 24th November 1873, and letter
from the officer in charge, Cuddalore
Range, No. 231, dated 20th August 1873—
recorded in G.O. No. 1035 dated 21st April 1874.

Read also the following

from Col. A.T. Moberly R.E. (H.E. No. 4442 of 4th June 74.)

Colonel Moberly
was asked to explain
"what would appear to
"have been an absence
"of due action on his part"
with reference to the fact
stated in Para 8 of the
Inspecting Engineer's
letter No. 1559 of 24th
November 1873, that in

Dy. No. 2546. of 75.74

Public Works Dept.
No. 1025 of 21st April 1874

Despatched
Date 8th June 1874

Public Works Dept.
Dy. No. 3408.
Rec'd 5th June 1874

From
Lieut. Col. A.T. Moberly R.E.
Executive Engineer
Cuddalore

To
The Secretary to Govt.
Public Works Department
Ootacamund

Sir

With reference to G.O. No. 1025 of 21st April 1874 regarding to certain remarks on the exact figures on which Government require information —

I beg to state that I am quite ignorant of what has transpired during the last three years about this Cutchery. I trust, if more information is required from me, that you will tell me the points on which explanation is required and will furnish me with

7 or 8 feet and the door and window frames had been fixed. I examined the mortar in the basement and what was being used and found it good and Captain Taylor said the same kind had been used in the new foundations.

As I am quite ignorant of what has transpired during the last three years about this Cutchery I trust, if more information is required from me, that you will tell me the points on which explanation is required and will furnish me with

Audd. 12.6.74
Supd. & Exec. Engrs. 8 June/74

Annd. 12.6.74
Surd. to Ch. & Insp. 8 June/74

January 1869 the Overseer
in charge of the Dumbarns
Lutcherry work wrote
direct to him as Supg:
Engineer of the Division,
complaining of certain
irregularities in the
accounts, and that the
orders respecting the
foundations had not
been attended to, they
being stone in mud
instead of stone in
Chunam.

It now appears that
he did not visit the work
till the following November,
when he was satisfied on
being informed by Capt.n
Saylor that all but
the bottom course of
stones had been removed,
that

that the clay between
the stones had been
scraped out and the
spaces filled in with
concrete. The actual
state of the foundations
as revealed by 30 pits
sunk in 1873 by the
present Range officer
is shewn in his
Report Dee 231 of 20th
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Engineer's summary.

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evident that Captain
Saylor did most ignorantly
and presumptuously
take upon himself
to substitute stone
in

in clay for stone in Chunam in the foundations; and carried out even that inferior style of work in such a manner as to elicit the bold protest of Overseer Iroonesawmy Chetty - and it is further evident that Colonel A. Inoberly's procedure with reference to the Overseer's communication was most inconsistent with the position which he held, and the duty he owed the Government; inasmuch as he did not satisfy himself by personal examination

(1)

examination, even after a 10 months delay, of the actual state of the foundations; as has subsequently and most effectually been done four years later [illegible] will require years of efficient work to efface the impression of professional ignorance on the part of Captain Taylor, and habitual neglect of duty on the part of Colonel A. Inoberly, that the investigation into the Cumbum Cutcherry case have made on the mind of Government -

Govt.

[illegible]

Would it not be better to say - The circumstances connected with this work do not confirm an unfavorable impression on the mind of Govt as to the professional conduct of the Overseer in charge -

or some of that kind

Some censure in the expressions contained in the Dy. Col. R.'s order as a Sepd. Dept has been in effect a reprimand to the Overseer - but to let him start afresh appears to me.

[illegible]

[illegible]

x the S.E. Thermometer
" Cuddapah
1. Cyclone dep. 21/9/71.

Govt. of 1874 Madras.

PUBLIC WORKS.

☆

To

The Dist. Engr
Kurnool

Dated

Rec'd. Encl.

G. O. Lr. No. 2546

No. 160-161

Cumbum Cutcherry.

Passing orders on letter from ~~the Supt.~~ Lt Col. A. S. Moberly R.E. Offg Explanation with regard to the ~~Cumbum~~ construction of the Cutcherry foundation in 1869.