

(1) Number of pages _____

(2) Date of repair _____

(3) Initials of the Referecer _____

MADRAS RECORD OFFICE.

Government of Madras.

Public's Service DEPARTMENT.

G.O. No.	60400	Press
8139		Mis.
Dated	18	

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
16th October 1872.*

Read the following papers :—

No. 268. From the Superintending Engineer, 7th Division, to the Secretary to Government, Public Works Department, dated Camp at Ootacamund, 8th July 1872, No. 73.

With reference to your memorandum of the 6th instant, I have the honour to report that before I can give any professional opinion of the value to be attached to Mr. Pringle's depreciatory remarks in regard to the material used in the construction of the Mangalore Lighthouse, it is necessary that that gentleman should furnish me with further information on the subject, which I have called for. G. O. dated 4th of July and Mr. Pringle's report reached me almost at the same time.

2. The G. O. to my mind settled the question of the continuance of the light, and therefore beyond furnishing Mr. Pringle with a copy of it and calling for the information above noted, no action has been taken by me in the matter. A copy of Mr. Pringle's letter is herewith forwarded.

From E. H. PRINGLE, Esq., Assistant Engineer, Public Works Department, to the Officiating Superintending Engineer, 7th Division, dated Mangalore, 26th June 1872, No. 87.

It having been brought to my notice that during the late cyclone the lighthouse at Mangalore vibrated so much as to make the light-keepers refuse to ascend to the lantern, I have the honour to state that I have personally examined the pillar internally and externally and find not the slightest sign of cracking. The platform is as firmly attached to the masonry as when it was first erected.

2. I have had no opportunity yet of ascertaining the amount of vibration during a gale ; but at the burst of the monsoon, when the gusts were travelling at from 21 to 22 miles an hour, I measured one-third of an inch as the greatest deviation from perpendicularity at the basement of the platform. The vibrations were rapid and the motion had nothing of a swaying character about it. Were the building* brick, I should from its section have judged it capable of standing any wind pressure, but I place so little faith in laterite that, though without orders, I do not feel justified in removing the lantern. I have stated to the Collector that, in the event of a very high wind rising at any time, I would advise the light-keepers being permitted to leave the building.

* Plan herewith forwarded.

No. 269. From the Superintending Engineer, 7th Division, to the Secretary to Government, Public Works Department, dated Coimbatore, 7th September 1872, No. 136.

With reference to your memorandum dated 27th June 1872, I have the honour to submit a plan of the mode in which the lantern is fixed on the top of the column of the Mangalore Lighthouse. The Range Officer reports that he ascertained the vibration to be equal to one-third of an inch by a series of very carefully conducted instrumental observations, and doubtless he is not far wrong. So inconsiderable a movement, however, in my opinion, could in no way endanger the column, and the Range Officer appears to me to have been needlessly alarmed for the safety of the structure. All columns are liable to a certain amount of vibration

Offg. Supd. Engr.

Proceedings of the Madras Government, Public Works Department,
16th October 1872.

during high winds, and in the case of lighthouses provision is made, in the construction of all lanterns, to preserve the plate glass from fracture on such occasions, by separating the glass from actual contact with the metal frame of the lantern. The Mangalore light column has been accurately gauged and examined by the Range Officer from top to bottom, and found to be perfectly true, while no signs of even the minutest crack can be detected anywhere; moreover, the Range Officer states that after this examination he is satisfied, in his own mind, of its security. I, therefore, attach no value to the Range Officer's depreciatory remarks concerning the material used in its construction, which he reports he was induced to make from his experience of laterite as a building material in South Canara, where he has witnessed frequent failures in consequence of the stones crushing and so forth.

No. 270. ORDER THEREON, 16th October 1872, No. 2,430.

CIVIL WORKS, No. 12.

ORDERED to be recorded.

2. The Mangalore Range Officer whose experience in the department is very limited would have done better to place the Superintending Engineer in possession of the facts which he has recorded, to enable that Officer to advise the Collector as to the propriety of removing the lantern, or permitting the lascars to abandon their duties, instead of taking upon himself that responsibility.

(True Extract.)

Colonel, R.E.,

Secretary to Government.

To the Superintending Engineer, 7th Division.
" Marine Department.
" Revenue do.

Ed. E. C. Shunker.

W73

Superintending Engineer's Office, 7th Division
Camp. Cochin, 15 July 1872

From The Superintending Engineer
7th Division

The Secretary to Government
P.W.D. Madras

Sir, With reference to your Memorandum of the 1st instant, showing the letter to report that before I can give any professional opinion of the value to be attached to Mr. Pringle's depreciatory remarks in regard to the material used in the construction of the Mangalore Light House, it is necessary that Mr. Pringle should furnish me with further information on the subject, which I have called for - G.O. dated 4th July, and Mr. Pringle's Report, reached me almost at the same time.

The G.O. to my mind settles the question of the continuance of the light, and therefore beyond furnishing Mr. Pringle with a copy of it, and calling for the information above noted, no action has been taken by me in the matter. A copy of Mr. Pringle's letter is herewith forwarded.

I have the honor to be,

Sir,
Yours most obedt. Servant,
W. Pringle, Esq. Col. Secy.
Offg. Superintending Engineer, 7th Division

No. 87. *No. 1 or Mangalore Range of South Canara*
Mangalore 26th June 1872

To The Superintending Engineer
 7th Division
 Coimbatore

Sir,
 It having been brought to my notice, that during the late Cyclone the light House at Mangalore, vibrated so much as to make the light keepers refuse to ascend to the lantern, I have the honor to state that I have personally examined the pillar internally and externally and find not the slightest sign of cracking. The platform is as firmly attached to the masonry as when it was first erected.

I have had no opportunity yet of ascertaining the amount of vibration during a gale, but at the burst of the monsoon when the gusts were travelling at from 21 to 22 miles an hour, I measured $\frac{1}{3}$ of an inch as the greatest deviation from perpendicularity at the base of the platform. The vibrations were rapid and the motion had nothing of a swaying character about it. Were the building brick, I should from its section have judged it capable of standing any wind pressure, but I place so little faith

* plan herewith forwarded

Handwritten notes on the left page, including:
 The Superintending Engineer
 7th Division
 Coimbatore
 Mangalore 26th June 1872
 No. 87
 No. 1 or Mangalore Range of South Canara
 Mangalore 26th June 1872
 To The Superintending Engineer
 7th Division
 Coimbatore
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in laterite that, though, without orders, I do not feel justified in removing the lantern. I have stated to the Collector, that in the event of a very high wind rising at any time I would advise the light keepers being permitted to leave the building.

I have &c.

Signed/ E. H. Pringle

Asst Engineer

/ True Copy/

W. S. S. C.

Off Supg Engineer 7th Div

Mr. Pringle's report on the condition of Mangalore Light House

and Mangalore Lighthouse

18th 6/18/72

In letter No 73 of 27th 10/72 from Mr. Pringle, Assistant Engineer, Mangalore Lighthouse, dated 10/72.

No. 136. H. Supg Engineer's Office, 7th Division Coimbatore 7th Sept 1872

From The Supg Engineer, 7th Division

To The Secretary to Government, D. O. S. Madras -

Sir, With reference to your memo, dated 27th June 1872, I have the honor to submit a plan of the mode in which the lantern is fixed on the top of the Column of the Mangalore Light House. The Range Officer reports that he ascertained, the vibration to be equal to $\frac{1}{3}$ of an inch by a series of very carefully conducted instrumental observations, and doubtless he is not far wrong, so inconsiderable a movement, however in my opinion, could in no way endanger the Column, and the Range Officer appears

Source
lan.

appears, ^{to me} to have been needlessly
alarmed for the safety of the
structure - All columns are liable
to a certain amount of vibration
during high winds, and in the
case of light houses, provision
is made, in the construction
of all lanterns, to preserve the
plate glass from fracture on
such occasions, by separating
the glass from actual contact
with the metal frame of the
lantern - The Mangrove light
Column has been accurately gauged
and examined by the Range
Officer from top to bottom, and
found to be perfectly true;
while no sign of even the
minutest crack can be
detected any where, moreover
the Range Officer states that
after this examination, he is
satisfied

|| satisfied, in his own mind,
of its security - I therefore attach
no value to the Range Officer's
depreciatory remarks concerning
the material used in its con-
struction, which he reports he
was induced to make from
his experience of laterite as a
building material in South America,
where he has witnessed frequent
failures in consequence of the
stones crushing and so forth -

Have the honor to be,

Sir,

Yours most obedient

Wm. M. A. B. C.

Supy Engineer, &c

No. 2430 R.D. No. 5
 Proceedings of the Madras Forest
 Revenue Commission

From the 1st of Aug. 1902 to the 31st of Dec. 1902
 Do ——— Do — (1) 136 3 7 1/2

Ordered to be re-
 corded in the office

It would appear
 that the Mangalore
 Range Officer whose
 experience in the Dept.
 is very limited would
 have done better to place
 the Superintending En-
 gineer in possession
 of the facts which he
 has recorded, to enable
 the

The
 Commission
 has
 been
 informed
 of the
 facts
 which
 he
 has
 recorded

PM 1892 District
 Revenue Office
 No. 4392

The
 Deputy
 Commissioner

To the
 Secretary to Govt.
 of Madras

No. 136
 9.3.1902

The
 Commission
 has
 been
 informed
 of the
 facts
 which
 he
 has
 recorded

Class 4390 & 4948

Govt. of 1872 Madras.

PUBLIC WORKS.

To The ~~Commissioner~~ ^{Superintending Engineer}
of the Division

Dated

Recd.

Encl. /

G. O. 16th Oct. No. 2430

Nos. 268 @ 270

Mangalore Lighthouse.

Letters from the Insp.
Superintendent reporting
on the state of the
Mangalore Lighthouse,
accompanied with re-
marks.