

MADRAS RECORD OFFICE.

Government of Madras.

Revenue DEPARTMENT.

G.O. No.	162	Press ~~Mis.~~
332.333		
Dated	31-1-1865.	

Not to be folded or roughly handled

*Proceedings of the Madras Government, Revenue Department,
31st January 1865.*

No. 332. Read the following letter from Captain J. MULLINS, R. E., Consulting Engineer for Irrigation and Canal Company, to Colonel C. A. ORR, R. E., Secretary to Government, Department of Public Works, dated Madras, 24th December 1864, No. 185 :—

SIR,

Consulting Engineer's letter, No. 62, 11th September 1863.
No. 95, 15th January 1864, Revenue Department.
„ 209, 20th January 1864, Public Works Department.

1. With reference to the Order of Government as per margin, directing arrangements to be made for ascertaining experimentally the quantity of water required for rice

cultivation, I have the honor to report that my predecessor, in February last, addressed the Chief Engineer Irrigation and Canal Company, and the Superintending Engineers of the 2nd and 3rd Divisions on the subject, and the Superintending Engineer of the 2nd Division in the following month wrote, offering certain suggestions as to the mode in which the experiments might be most advantageously made.

2. In October I wrote to Colonel Anderson, to ascertain what steps had been taken, with reference to the correspondence between himself and General Ludlow, to ascertain the water requirements per acre per hour of wet cultivation, and from his reply it appeared that he had not understood it to be General Ludlow's wish that he should make experiments, but that only his opinion, as to the best mode of making them, was required. He, however, promised on his next visit to Nellore, to make arrangements in communication with the Executive Engineer of the Company, for commencing the necessary investigation, but he considered that the season was too far advanced to obtain any results this year. He proposed also to make similar experiments in the Kistna Delta.

3rd November.

3. On the receipt of this communication, I wrote again pointing out that, although a connected series of experiments, extending over the

whole period of the principal crop under the Company's works, would afford more complete information than detached experiments, it nevertheless seemed to be advisable that such information, as could be obtained without very great expense or difficulty during the current year, should be collected. It was noticed also that, in the first place, the Government wanted something more reliable than the opinions of officers, which vary, in considering the quantity of water per acre per hour required to be 1 to 2½ cubic yards; that the Company's irrigation, moreover, will be applied to very varying soils, in very different climates, and at almost all times of the year, and that therefore any information would be very acceptable, provided the facts were fully and clearly stated, so that observations for even one month only would be very useful, and the more diversified the circumstances, the more valuable would be the facts as data for the formation of reliable opinions. With a view to the comparison of the results of observations, an abstract and a detailed form for recording observations were transmitted. I have not heard again from Colonel Anderson, and I hope therefore that a commencement of the experiments has been made.

4. The Chief Engineer and the Superintending Engineer of the 3rd Division were similarly addressed, and furnished with the same forms, and the former in reply states, that “no arrangements have been made or are in contemplation

1st November No. 980, enclosed.

“to ascertain the quantity,” but he goes on to say, “in compliance with the wishes of the Government and for the interests of the Company, I shall be prepared when our works are so far in operation as to admit of it, to adopt means for carefully testing the requirements of different soils and crops in various stages, and in various seasons of the year.”

5. Colonel Cotton, after alluding to the grounds on which he considers that the 4,00,000 cubic yards of water, which the main canal has been designed to carry, will suffice for the irrigation of 4,00,000 acres of land, suggests that tanks would offer a better opportunity for making investigations as to the consumption of water for

Paragraph 5.

*For Mr. Mullins, R. E., Consulting Engineer,
Irrigation and Canal Company,
Colonel C. A. Orr, R. E., Secretary to Government,
Department of Public Works,
Madras.*

average for the whole will not suffice for the particular average of a section, every acre of which may at the same time demand a full supply. - The smaller the section the larger the particular average must be. - The distribution estimates for the 6th section of the main canal are now under examination, and in referring to the Chief Engineer for information on some points which required explanation, he has been requested to state what the arrangements which he considers sufficient, as regards the quantity of water for supplies in detail, are. -

30 December. - The Superintending Engineer of the 3rd Division reports that no arrangements have been made for the experiments on water supply. - No answer was received to the several letters written on the subject, until the present Superintending Engineer wrote on the date above named. Captain Moberly has only recently taken charge, and, while he states that the season is too far advanced to render it possible to do any thing this year, he will have every thing ready for the next monsoon. -

I have the honor to be,
Sir,
Your most obedient servant,
John ... Captain,
Cone ... for S. C. Company

B. Moberly

Jan 15 January 14. 1884

Referred to the
Revenue Department

Wm. A. M. Col. Q. E.

Chas. H. M. Col. Q. E.
Jan 15 1885

On Jan 5 of
Capt. Mullen
letter by it he
told with a
few days when
circumstances
are favorable
0332-333
31st May 1885
1416 1885
13 Jan 1885

1885
20 of 3rd
from the one
the Secretary
1885

1885
20 of 3rd
from the one
the Secretary
1885

1885
20 of 3rd
from the one
the Secretary
1885

82-162

The first consideration is of
great importance - with
reference to the Company
and the reputation
of the ship by the water &
the right - that the quantity
of water required to bring
an acre of land by &
maturity in soil of 8000
kinds should be as
contained in the water
- necessary, and ex-
posed should be in-
tended with the view as the
as possible.
The plan suggested
by the decision of the
court