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MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No. Press Mis.

Dated 18 .

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department, 27th October 1871.

No. 435. Read the following Endorsement of the Deputy Secretary to the Government of India, Public Works Department, dated Simla, 15th September 1871, No. 504-I. :—

Despatch from the Government of India, Public Works Department, (Irrigation,) to the Right Honourable the Secretary of State for India, dated Simla, 23rd August 1871, No. 101.

We have been furnished by the Government of Madras with a copy of its Despatch to your Grace, No. 14, dated the 31st ultimo, and accompaniments, on the subject of the present condition and future prospects of the Madras Irrigation and Canal Company, and desire at present to express our concurrence with that Government in considering it impossible to contemplate any relations with the Company in regard to further works. We purpose, however, addressing your Grace further on the whole question after ascertaining and fully considering the precise nature of the present relations between the Company and the State.

Despatch from the Government of India, Public Works Department, (Irrigation,) to the Right Honourable the Secretary of State for India, dated Simla, 15th September 1871, No. 119.

In continuation of our despatch, Public Works, No. 101-I., of the 23rd ultimo, we desire to lay before your Grace a short review of the facts connected with the Madras Irrigation Company's operations. Those operations began in 1859, or nearly twelve years ago. The result has been an outlay of more than one and a half millions sterling, and up to the present time an income of only £4,740, while the works themselves are considered by the Engineers who know most of them to be still very defective. The immediate causes of these results seem to have been due partly to want of skill in design, but more to faults in construction. The original project, it was supposed, would probably cost about one million sterling, and this sum was, as your Grace is aware, guaranteed by Her Majesty's Government after a long discussion on various points of the contract which was not finally signed until 1863.

2. After the guaranteed million had been spent, and the first part of the scheme was still incomplete, the Company applied for an extension of the guarantee, but the Government refused, offering instead to buy the undertaking. This offer the shareholders declined, and ultimately a loan of £600,000 was granted to the Company by the then Secretary of State for India, for which interest at 5 per cent. was to be paid from the profits of the canal, and on the condition that, if the works were not completed and placed in perfect working order to the satisfaction of the Local Government by the 1st July 1871, the Company should, if the Secretary of State so desired, surrender the whole of the works to the Government which would pay the capital laid out on them. A further advance is now sought for by the Company to enable them to complete their original scheme.

3. It seems very doubtful whether in their present state the works can prove remunerative, for 130,000 acres must be irrigated to pay the interest alone on the capital expended, while the largest extent of land actually irrigated hitherto by the works has only been 1,887 acres. Works which were originally estimated to cost

£493,348 are said to have actually cost £1,015,552. According to the Consulting Engineer's reports serious mistakes appear to have been made in the designs,—insufficient passages have been constructed for the water-courses of the canal; perpendicular masonry walls have been adopted as retaining walls in lieu of the usual sloping earthen banks, and contrary to the universal practice of the country. But the defects of construction appear to be more serious than those of design. Up to this time the canal has never been filled, notwithstanding which it has always been breached somewhere when partial attempts have been made to fill it. The masonry walls are of indifferent materials and faulty construction, and the water-supply is so uncertain that the ryots appear unwilling, even in a country where the value of irrigation is thoroughly appreciated, to take the water. The instability of the embanked portion seems to be a source of constant apprehension to the cultivators, who thus cannot help looking on these works constructed for their good with feelings of fear if not aversion.

4. With regard to the Minutes of His Excellency the Governor of Madras and his colleagues, we hesitate to accept the view taken by His Excellency that the Government should be considered participators in the mistakes and negligence of the Company, although we quite agree with him in the blame cast upon his Government when he says, that "though the Consulting Engineers on various occasions severely criticized the works, they nevertheless were not pulled down, but were permitted to be proceeded with." It is true that this admits fault on the part of the Madras Government and its officers, but it in no way excuses the Company and its officers who are primarily responsible for the proper execution of the work and the fulfilment of their obligations. It is possible that a greater degree of responsibility devolves on Government in respect to design than to construction in these matters, but we cannot admit that the presence and supervision of Government Engineers exonerates a guaranteed Company or a Contractor of any kind from responsibility with regard to the due construction of any of their works. In the case of failure we may dismiss our Consulting Engineers, but we must also hold the Company or the Contractor fully to their engagements. This opinion is so well expressed by Mr. Arbuthnot in the 3rd paragraph of his Minute of the 26th of June last that we need not refer to it further than to say, that, although his expressions are very clear, he might have put the case even more strongly than he has done.

5. For the objects with which the works were originally designed, they are practically useless. We consider that in strict equity the Company has no right to expect a further sum from the Government than the value of the works in their present state, having regard to the liability of £600,000 to the Government, and the return which, after the necessary outlay in re-construction and repairs, the Government is likely to obtain from it. It seems unlikely that the works in their present state would be anything like security for even the £600,000 which the Government have advanced. We apprehend there can be no difference of opinion as to the inexpediency of making any further advance to the existing Company, or incurring any further obligation with regard to them, and we fully agree in Colonel Carpendale's remark that neither "the history of this canal, its present condition or future prospects are such as warrant consideration or indulgence

Proceedings of the Madras Government, Public Works Department, 27th October 1871.

being shown to the shareholders." It is but fair to say that Colonel Rundall, our Officiating Inspector-General of Irrigation Works, from his knowledge of the country and its requirements, takes a more hopeful view of the prospects of returns than either Colonel Carpendale or Captain Scott, but it seems doubtful whether the canal in its present state can be used for the objects for which it was constructed. We have, however, caused inquiry to be made as to what it will cost to place the works in a state of usefulness, and until that point is known it is impossible for us to form any opinion, or to make any recommendations regarding an extension of the works.

6. Since writing our former despatch we have examined the original and supplementary contracts made with the Company, and, after consulting our colleague the Honourable Mr. Stephen, we regret to say that we cannot discover that the State has any remedy for the loss to which it has been subjected by the mismanagement of the undertaking by the Company, but must continue to pay to the Company the guaranteed interest of 5 per cent. annually on their original capital of £1,000,000 until such time as the works are surrendered to Government. It appears from the wording of the contracts that Government cannot *claim* possession of the works on the ground of a breach of contract, and it would consequently be inadvisable to press the assumption of the works; but, as it is most inexpedient to make any further advances to the Company, advantage should be taken, as recommended by the Government of Madras, of any opportunity that may offer for negotiating for the surrender of the works to the State on the best terms that can be obtained.

ORDER.—Ordered that a copy of the foregoing, and also of despatch No. 101-I. of the 23rd ultimo, be forwarded to the Government of Madras in the Public Works Department, Irrigation Branch, with a request that the Government of India may be furnished as quickly as possible with an estimate of the probable cost of rectifying the existing defects in the works, and rendering them both useful and thoroughly safe.

(Signed) F. H. RUNDALL, Colonel, R.E.,
Depy. Secy. to the Govt. of India.

No. 436. ORDER THEREON, 27th October 1871, No. 2,725.

IRRIGATION, No. 23.

COMMUNICATED to the Chief Engineer for Irrigation.

2. The Governor in Council is of opinion that, in order to ascertain the locality of all weak points in the embankments and walls prior to forming an estimate of the cost of putting the Madras Irrigation and Canal Company's Main Canal in a thoroughly safe and efficient state by rectifying all existing defects, it is absolutely necessary to subject the canal to the test of carrying a full supply of water, but as the Company's Engineers are disinclined to run the risk of subjecting the work to this test it must necessarily be deferred until the works are surrendered to the Government, or until the Board of Directors express their willingness to meet the wish of Government; and the Government of India will be informed accordingly.

£493,348 are said to have actually cost £1,015,552. According to the Consulting Engineer's reports serious mistakes appear to have been made in the designs,—insufficient passages have been constructed for the water-courses of the canal; perpendicular masonry walls have been adopted as retaining walls in lieu of the usual sloping earthen banks, and contrary to the universal practice of the country. But the defects of construction appear to be more serious than those of design. Up to this time the canal has never been filled, notwithstanding which it has always been breached somewhere when partial attempts have been made to fill it. The masonry walls are of indifferent materials and faulty construction, and the water-supply is so uncertain that the ryots appear unwilling, even in a country where the value of irrigation is thoroughly appreciated, to take the water. The instability of the embanked portion seems to be a source of constant apprehension to the cultivators, who thus cannot help looking on these works constructed for their good with feelings of fear if not aversion.

4. With regard to the Minutes of His Excellency the Governor of Madras and his colleagues, we hesitate to accept the view taken by His Excellency that the Government should be considered participators in the mistakes and negligence of the Company, although we quite agree with him in the blame cast upon his Government when he says, that "though the Consulting Engineers on various occasions severely criticized the works, they nevertheless were not pulled down, but were permitted to be proceeded with." It is true that this admits fault on the part of the Madras Government and its officers, but it in no way excuses the Company and its officers who are primarily responsible for the proper execution of the work and the fulfilment of their obligations. It is possible that a greater degree of responsibility devolves on Government in respect to design than to construction in these matters, but we cannot admit that the presence and supervision of Government Engineers exonerates a guaranteed Company or a Contractor of any kind from responsibility with regard to the due construction of any of their works. In the case of failure we may dismiss our Consulting Engineers, but we must also hold the Company or the Contractor fully to their engagements. This opinion is so well expressed by Mr. Arbuthnot in the 3rd paragraph of his Minute of the 26th of June last that we need not refer to it further than to say, that, although his expressions are very clear, he might have put the case even more strongly than he has done.

5. For the objects with which the works were originally designed, they are practically useless. We consider that in strict equity the Company has no right to expect a further sum from the Government than the value of the works in their present state, having regard to the liability of £600,000 to the Government, and the return which, after the necessary outlay in re-construction and repairs, the Government is likely to obtain from it. It seems unlikely that the works in their present state would be anything like security for even the £600,000 which the Government have advanced. We apprehend there can be no difference of opinion as to the inexpediency of making any further advance to the existing Company, or incurring any further obligation with regard to them, and we fully agree in Colonel Carpendale's remark that neither "the history of this canal, its present condition or future prospects are such as warrant consideration or indulgence

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being shown to the shareholders." It is but fair to say that Colonel Rundall, our Officiating Inspector-General of Irrigation Works, from his knowledge of the country and its requirements, takes a more hopeful view of the prospects of returns than either Colonel Carpendale or Captain Scott, but it seems doubtful whether the canal in its present state can be used for the objects for which it was constructed. We have, however, caused inquiry to be made as to what it will cost to place the works in a state of usefulness, and until that point is known it is impossible for us to form any opinion, or to make any recommendations regarding an extension of the works.

6. Since writing our former despatch we have examined the original and supplementary contracts made with the Company, and, after consulting our colleague the Honourable Mr. Stephen, we regret to say that we cannot discover that the State has any remedy for the loss to which it has been subjected by the mismanagement of the undertaking by the Company, but must continue to pay to the Company the guaranteed interest of 5 per cent. annually on their original capital of £1,000,000 until such time as the works are surrendered to Government. It appears from the wording of the contracts that Government cannot *claim* possession of the works on the ground of a breach of contract, and it would consequently be inadvisable to press the assumption of the works; but, as it is most inexpedient to make any further advances to the Company, advantage should be taken, as recommended by the Government of Madras, of any opportunity that may offer for negotiating for the surrender of the works to the State on the best terms that can be obtained.

ORDER.—Ordered that a copy of the foregoing, and also of despatch No. 101-I. of the 23rd ultimo, be forwarded to the Government of Madras in the Public Works Department, Irrigation Branch, with a request that the Government of India may be furnished as quickly as possible with an estimate of the probable cost of rectifying the existing defects in the works, and rendering them both useful and thoroughly safe.

(Signed) F. H. RUNDALL, Colonel, R.E.,
Depy. Secy. to the Govt. of India.

No. 436. ORDER THEREON, 27th October 1871, No. 2,725.

IRRIGATION, No. 23.

COMMUNICATED to the Chief Engineer for Irrigation.

2. The Governor in Council is of opinion that, in order to ascertain the locality of all weak points in the embankments and walls prior to forming an estimate of the cost of putting the Madras Irrigation and Canal Company's Main Canal in a thoroughly safe and efficient state by rectifying all existing defects, it is absolutely necessary to subject the canal to the test of carrying a full supply of water, but as the Company's Engineers are disinclined to run the risk of subjecting the work to this test it must necessarily be deferred until the works are surrendered to the Government, or until the Board of Directors express their willingness to meet the wish of Government; and the Government of India will be informed accordingly.

Proceedings of the Madras Government, Public Works Department, 27th October 1871.

3. It is understood that an estimate of the cost of constructing additional calingulahs, and enlarging existing ones, to adapt these surplus works for discharging maximum floods is under preparation, and the Company's officers will be requested to expedite its submission.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

To the Chief Engineer for Irrigation.
,, Agent and Manager of the Madras Irrigation and Canal Company.

Exd. S. T. Augustin.

5

No. 101. Public Works
Government of India
Public Works Department
Irrigation

To His Grace
The Right Honble the Duke of Argyll K.T.
Secretary of State for India
Simla, 23rd August 1871.

My Lord Duke,

We have been furnished by the Government of Madras with a copy of its Despatch to your Grace No. 44 dated the 31st ultimo and accompaniments on the subject of the present condition and future prospects of the Madras Irrigation and Canal Company and desire at present to express our concurrence with that Government in considering it impossible to contemplate any relations with the Company in regard to further works. We purpose however addressing your Grace further on the whole question after ascertaining and fully considering the precise nature

of

the present relations between the Company and the State.

P. W. 4504/71
Dem. 27 October 1871
L. & 435.

We have the honor to be &c.
(signed) Mayo
" Napier of Magdala
" John Strachey
" R. Temple
" J. F. Stephen
" B. H. Ellis
" H. W. Norman

27/10/71

Minute paper dated 6th October 1871
circulated with the accompanying
Memorandum.

7

The accompanying Memorandum.

order of the Government of India communicating copy of a despatch to the Secretary of State regarding the operations of the Madras Irrigation and Canal Company is circulated for perusal of the Members of Council and Members of Government.

It appears to me impossible to arrive at any reliable estimate of the cost of completing the existing works of the Company so as to render them perfectly safe, and I cannot think that the Canal Members of Government have properly tested the advisability of making such a large supply of water. The estimate of the probable cost of placing the works in a state of usefulness will be called for, but I continue of opinion that in order to avoid misunderstanding and doubt as to the

ascertain the locality of all weak points, and to form an approximate estimate of the cost of putting the Canal in a thoroughly safe and efficient state, it is absolutely necessary to subject it to the test of carrying a full supply of water, and that the Company are unwilling to do, but I understand the Chief Engineer to inform His Excellency the President that he would on his arrival in England impress on the Board of Directors the expediency of

representation of this Govt should be of any avail I do not know.

I understand from Colonel Carpendale that an estimate of the cost of [illegible] certain [illegible] which, in my opinion, is under preparation. The Company's Officers might be called upon to expedite the furnishing of this return & I think this has been done might be impressed on the Govt of India.

acquiescing in the opinion of the Government on this point.

28th Sept.

No 2504

No 2725

Communicated to the Chief Engineer for Irrigation -

The Governor in Council is of opinion that in order to ascertain the locality of all weak points in the embankments and walls prior to forming an estimate of the cost of putting the Madras Irrigation and Canal Company's Main Canal

in a thoroughly safe and efficient state by rectifying all existing defects, it is absolutely necessary to subject the Canal to the test of carrying a full supply of water, but as the Company's Engineers are disinclined to run the risk of subjecting the work to this test it must necessarily be deferred until the works are surrendered to the Government, or until the Board of Directors express their willingness to meet the wish of Government; and the Government of India will be informed accordingly.

It is understood that an Estimate of the cost of constructing additional Culverts, and enlarging existing ones, to adapt these supplus works for discharging maximum floods is under preparation, and the Company's Officers will be requested to expedite its submission

Docket

2-2
3

5 Ag. Ch. Engr for Irrig. re written agreement that ticket should be exempted from charge called for
Despe 1/11/71-

Docket No. 2726 dated

Copy of the above
forwarded to the Govern
=ment of India.

21/01

Desp. 31/10/71 with 6 Encls

Copies

Received from the Public Works Department the orders of the Secretary of State in Council sanctioning the estimate for the Madras Irrigation & Canal Company's operations & calling for an estimate of the probable cost of rectifying the existing defects in the works and rendering them useful and safe.

C - No. 4504

Govt. of {1871} Madras.

PUBLIC WORKS.

To The Chief Engr for Irrigation and

To The Secretary to the Govt of India

Dated

Recd. Encl. 1 V

G. O. 27 Oct 1871, No. 2725-2726.

Nos. 435-436 & 437

Drawings &c in Mr Cassel's Company's works - Communicating to the Chief Engr for Irrigation orders from the Secretary to the Govt of India calling for an estimate of the probable cost of rectifying the existing defects in the works and rendering them useful & calling upon the Company's Officers to expedite the preparation of the estimate &c for submission &c