

MADRAS RECORD OFFICE.

Government of Madras.

Revenue DEPARTMENT.

G.O. No. 487

Press

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404-405

Dated 28-2-1867.

Not to be folded or roughly handled

*Proceedings of the Madras Government, Revenue Department,
23th February 1867.*

No. 404. Read the following Proceedings of the Madras Government in the
Public Works Department:—

Expressing pleasure to learn of the feasibility
of the proposed diversion of the Perryaur river
into the Vigay, for the better irrigation of
lands in Madura District, and awaiting receipt
of Captain Ryves' final report on the project. } (Here enter 22nd February 1867, No. 539.)

No. 405. ORDER THEREON, 28th February 1867, No. 487.

Miscellaneous.

Communicated to the Revenue Board.

(True Extract.)

(Signed) J. GROSE,

Under Secretary to Government.

To the Board of Revenue, with Proceedings Public Works Department, No. 539.

Exd. S. T. Augustin.

No. 445. Read the following Endorsement of the Officiating Superintending Engineer, 8th Division, dated Strivigoondum, 6th February 1867, No. 1,897:—

Read the following letter from Captain G. M. PAYNE, Executive Engineer, on special duty, to the Superintending Engineer, 8th Division, dated Kodikarnel, 22nd January 1867.

1. With reference to my letter of the 18th September 1866, I have the honor now to report the result of my examination of the Perryaur project during the months of July, August, and September last.

* Sent separately.

2. In explanation of what has been done, I beg to forward copy of my levelling Field book,* and three sheets of survey and levels, the latter numbered 1, 2, and 3.

3. In No. 1 sheet I have given a sketch of a portion of the valley of the Chinna Mulyaur, and the country generally embraced by the project. The shaded piece on the small map in the right hand corner of the same sheet represents the extent of the country taken in, in the sketch. It has been traced from the Trigonometrical Survey Map (sheet No. 68).

4. No. 2 sheet gives an enlarged plan of the hills adjacent to the Perryaur, where it is proposed to dam the river up. Line F, A, G, H represents the first section taken, which corresponds nearly with that originally selected by Captain Ryves. Line F, K, L, M is the position of another section which I took a few days before my leaving the Perryaur, as it seemed to me one better adapted for the dam, inasmuch as a saddle between M and L offered a convenient site for a waste weir. This section, however, is incomplete, the levels having to be continued along the ridge to the west of hill M, where, from a reconnoissance, a better site might, I think, be found, on a higher level for the construction of the waste weir.

5. On sheet No. 3 I have laid down three lines of levels. No. 1, starting from the Perryaur and following the course of the Perrya Mulyaur and Chinna Mulyaur rivers, crosses the crest of the watershed at D (No. 1. sheet), and ends a little above the point where the elephant track towards Gudalur crosses a stream forming one of the sources of the Surulyaur. Levels Nos. 2 and 3 give the section alluded to in paragraph 4 above.

6. From these levels, and from observations of the country generally, I think the conclusion may be arrived at, that the project, although presenting some difficulties, is nevertheless practicable.

7. In round numbers I find the crest of the watershed (D, sheet No. 1) of the Cumbum valley, to be 170 feet above the deepest point in the bed of the Perryaur, at a ford (A, sheet No. 1) close to its junction with the Perrya Mulyaur.

8. The following suggestions have already been made on the subject of diverting the waters of the Perryaur:—

1st.—A low anicut and a deep cutting.

2ndly.—Do. and a tunnel.

3rdly.—An anicut 108 feet high, and a shallow cutting.

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22nd February 1867.

9. The first and second methods would be very costly. The third would be less expensive, but from the fact of the overflow of the river being so great, an apron to withstand its destructive effects would be not only a very difficult work to construct, but one liable to constant damage.

10. Captain Ryves being in the district, I have had the advantage of being able to consult him in this matter; and we have both come to the conclusion that the most advisable and least expensive method of carrying out the project would be by damming up the river entirely, with a strong bund composed of stone and earth, of about one hundred and fifty feet in maximum height, turning the high flood waters over an escape weir, constructed on the saddle between L and M (sheets Nos. 1 and 2), and diverting the waters of the lake that would thus be formed by a cutting through the crest of a maximum depth of about forty feet.

11. Captain Ryves having gone into the most laborious calculations, with reference to every species of work embraced in a project of the above nature, I have asked him to allow me to append, for the information of Government, an approximate estimate which he has framed, from which it will be seen that the whole project, inclusive of the improvement of existing irrigational works in the Madura District, and cutting of new channels for the supply of the Tirumungalam and Melur Talooks, would be fifteen lacs of Rupees. The minimum return has been assumed at three lacs per annum, which would be equivalent to 20 per cent. on the outlay.

12. From this would have to be deducted the amount of compensation to be paid to the Travancore Government, for the use of the water of the Perryaur.

Abstract Estimate framed by Captain Ryves from the levels, &c., furnished by me.

Dam...	{ Stone	1½	lacs	C. Yds. at	2½	C. Yds. per Rupee	= 1.60	12 of Rupees.
	{ Earth	4¼	"	"	"	"	= 1.70	
Bund	{ Earth	5½	"	"	3	"	= 1.71	3.30
	{ Stone Re-		"	"	¼	"	= .20	
	{ vetment		"	"		"	= .20	
Escape weir.	{ Drop walls and wings	046	"	"	½	"	= .552	.852
	{ Packed stone	15	"	"	½	"	= .30	
	{		"	"		"	= .30	
Cutting in stone		2¼	"	"	¼	"	= 3.00	3.
								9.062
Plant ..								.75
Ghaut, hutting coolies, &c. ...								.500
Contingencies								.938
Total for works at the Perryaur ...								11.250
Improvement of existing irrigational works, and cutting new channels in Tirumungalam and Melur ...								3.75
Total of approximate estimate, Rupees ...								15,00,000

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13. From Captain Ryves' knowledge of Madura District, and of the locality of the project, and from his experience in connection with the large works of irrigation in the Godavery and Kistna, I feel assured the Government would obtain from that Officer a more reliable estimate than any that I could have prepared, and I beg to submit whether it would not be very desirable, in the event of the project receiving the favorable attention of Government, that the final examination should be made by that Officer, assisted, if Government should think fit, by myself. My knowledge of the country about the Perryaur is now pretty considerable; but I should not feel at all satisfied in submitting a final estimate for so exceptionally difficult a project, without my work had previously been scrutinized by an Officer of known judgment and experience. Captain Ryves, as the Government doubtless is aware, has already devoted a great deal of time and labor to the investigation of the project, and to him is the credit due of being the first to bring it to the notice of Government, and hence, I cannot but think that that Officer's final report is most desirable.

14. The work that remains to be done before a complete estimate can be submitted is as follows:—

1st.—Completing the section F, K, L, M (sheets Nos. 1 and 2).—*Vide* paragraph 4 above.

2ndly.—Accurate measurements at the site finally selected for the dam and waste weir.

3rdly.—Contouring above the dam to show the area of the lake.

4thly.—Accurate measurements and cross sections along the line selected for the cutting.

5thly.—Further observations of discharge of river during the south-west monsoon.

6thly.—Examination of existing irrigational works in the Madura District, with a view to estimates for their improvement.

7thly.—Surveys and estimates of new channel for the Tirumungalam and Melur Talooks.

15. Of the above items Nos. 1 and 2 might be done between 15th February next and the first week in March, about which time the long elephant grass can be burnt. The hills become feverish generally about the middle of March.

16. Items 3, 4, and 5 could be taken up during the next working season, viz., from about the 15th June, and if, as above proposed, Captain Ryves can be spared to work with me, Government might, I believe, be furnished with full information on every point, and with final estimates by the close of the season.

17. Items 6 and 7 could be put in hand as soon as the extra establishment sanctioned in G. O. No. 3,402 of the 24th October 1866 has, been appointed.

Enclosures 3.

1. Submitted for the information of Government, to show the progress made in the investigation of the Perryaur project. This report is only a preliminary

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22nd February 1867.*

one, and does not call for much remark on my part, especially as Captain Ryves has been authorized* to remain in the district, and present the scheme in a practical form.

* G. O. No. 152, dated 16th January 1867.

2. It has now been ascertained that the crest of the watershed of the Cumbum valley is 169.3 feet above the deep bed of the Perryaur river; and my own opinion is decidedly in favor of a high dam being thrown across the river, so as to arrest its waters entirely, with a calingulah at the adjacent saddle.

3. Captain Payne will now be engaged in taking further levels to determine the point from which the surplus water may be discharged, and accurate measurements of the site for the dam.

4. As Captain Ryves is specially deputed to report on the project, the Government will receive a more full report after the present working season is over.

(Signed) H. L. PRENDERGAST, Captain, R. E.,
Officiating Superintending Engineer, 8th Division.

No. 446.

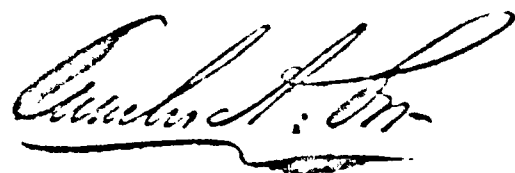
ORDER THEREON, 22nd February 1867, No. 539.

CIVIL WORKS, No. 67.

The Government are pleased to learn that Captain Payne's late investigation of the Perryaur project tends to

the conclusion that the proposed diversion of that river into the Vigay, for the better irrigation of lands in the Madura District, is feasible, and they will be glad to receive Captain Ryves' final report on the project.

(True Extract.)



Colonel, R. E.,

Secretary to Government.

To the Superintending Engineer, 8th Division.

.. Public Department.

.. Revenue do..

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Exd. S. T. Augustin..

28th July 1867.

Decr 1867. McIntosh
no of Good for January
p. 515.

Proceedings in the
Case of the Defendant

Wm. Lusk 22^d - 29th July.
 Phoenix 25th 1863.
 No. 539 -

Expressing pleasure
to learn of the desirability
of the proposed extension of
the Penitentiary, and in view of
this, for the bettering
of our condition in a human
and, and amending the
of the Penitentiary, and in
view of this, for the bettering
of our condition in a human
and, and amending the

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With order