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MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No.

1412

Press
Mis.

733-34

Dated

30-4-

1869.

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
30th April 1869.*

No. 733. Read the following letter from the Superintending Engineer, 2nd Division, to the Chief Engineer for Irrigation and Joint Secretary to Government, Public Works Department, dated Camp at Caza, 1st April 1869, No. 6:—

1. I have the honour to enclose plan and estimate for two bridges of the same size, &c., by which the roads from Masulipatam to Hyderabad and to Kowtaram may cross the newly excavated Ramarazupalum canal, as desired in G. O., No. 515, 14th February 1868.

1 Rough Sketch.
1 Plan.
1 Detailed Estimate, } Rupees 1,260 each.
1 Abstract do., }
1 Specification Report.

2. As the traffic on these roads is likely to be much obstructed by the canal when the irrigation season commences, I have authorized the Range Officer to avail himself of the present dry season to get in the foundations, and trust that I may shortly receive the sanction of Government for the work.

3. Additional allotment to the amount of only Rupees 700 will be required, as it appears that the aqueduct, costing Rupees 1,820, proposed in the original project for the canal, is not required. Its sufficiency is the subject of enquiry in paragraph 2 of the above order.

4. In the canal design it was intended to carry all the drainage from the north by the Saradoypett drain, under the Ramarazupalum canal, to the Sultanagaram swamp; the newly cleared Luzzabunda codu (drain), however, cuts off the principal quantity; and the levels show that the Saradoypett channel has so little fall between the Luzzabunda codu and the slight ridge on which the Ramarazupalum irrigation canal runs, that very small excavation will enable us to drain back into the Luzzabunda codu running into the Moonjuloor swamp, and save the cost of the aqueduct.

5. The accompanying sketch will, I trust, explain fully.

No. 734. ORDER THEREON, 30th April 1869, No. 1,412.

CIVIL WORKS, No. 107.

1. The Government sanction the estimate, Rupees 2,520, for bridges across the Ramarazupalum channel, on the roads from Masulipatam to Hyderabad and Kowtaram.

2. As the Superintending Engineer reports that an aqueduct, estimated to cost Rupees 1,820, which was included in the estimate for the channel sanctioned on the 14th February 1868, will not be required, the total of the sanction for this channel will be raised from Rupees 13,350 to Rupees 14,050.

Proceedings Madras Government, No. 515.

Item 158 of Budget.

(True Extract.)

Major, R. E.,
Acting Joint Secretary to Government.

To the Superintending Engineer, 2nd Division.

.. Revenue Department.
.. Controller of Public Works Accounts.
.. Accountant General.
.. Chief Engineer for Irrigation.

Exd. S. T. Augustin.

1st April 1869.

*Proceedings of the Madras Government, Public Works Department,
14th February 1868.*

No. 338. Read the following Endorsement of the Acting Collector of the Kistna District, dated Circuit Cutcherry at Gudowada, 10th January 1868, No. 5:—

Read the following letter from the Superintending Engineer, 2nd Division, to the Acting Collector of the Kistna District, dated Bazoarah, 26th October 1867, No. 166.

- 1 Plan.
- 1 Survey.
- 2 Detailed Estimates.
- 2 Abstract do.
- 1 Specification Report.

I have the honor to forward plans and estimates, as per margin, for an irrigation channel in continuation of the eastern side channel of the Masulipatam Canal called "Ramarazupollem Chan-

nel," amounting to Rupees 13,350, and request you will be so good as to submit them to Government for sanction, after affixing your counter-signature, together with my letter to the Secretary to Government, No. 102, dated 23rd instant, herewith enclosed, in which the necessity of the proposed work has been explained.

From the Superintending Engineer, 2nd Division, to the Secretary to Government, Department Public Works, dated Masulipatam, 23rd October 1867, No. 102.

1. I have the honor to forward, for the sanction of Government, plans and estimates, as

- 1 Plan.
- 1 Survey.
- 2 Detailed Estimates.
- 2 Abstract do.
- 1 Specification Report.

per margin, for an irrigation channel in continuation of the eastern side channel of the Masulipatam Canal, amounting to Rupees 13,350.

* G. O. No. 3,342, dated 19th October 1866.

2. The eastern side channel, as sanctioned by Government*, terminates at Ankamur-roo Lock, with a bottom width of 15 feet and slope of 7 inches per mile; the discharge of which, with 3 feet depth of water, will be 11,583 cubic yards per hour, or sufficient for about 5,000 acres.

3. The channel now proposed (which may be called the "Ramarazupollem Channel") is continued from its termination with a slope of 3 inches per mile and width at first of 22 feet, gradually diminishing as the branch channels are taken off, till at 11 miles the width is only 4 feet. Its depth throughout will be maintained at 3 feet.

4. From the levels noted in the survey (made by Overseer Vencata Row) which accompanies, it will be seen that a large extent of land can be irrigated from it on its right bank, and that from the $8\frac{1}{2}$ mile cultivation can be carried on under both banks. An approximation to the quantity of land likely to be eventually watered is 4,500 acres, most of which is at present waste.

5. This is not likely to be all taken up very speedily, as the soil was injured by the sea-water during the cyclone of 1864, and the inhabitants are poor; but if liberal terms are given at first, it is probable that in five or seven years all will be cultivated and pay full revenue.

6. The estimate amounts to Rupees 13,350; allowing 4 Rupees water-rate and 1 Rupee for dry sist on only 4,000 acres per annum, we may expect eventually a yearly revenue of Rupees 20,000 under the channel. If only 1,000 acres are taken up for the first few years, the return will be amply remunerative, but as the population of the adjacent villages is considerable (amounting to nearly 9,000 people) more may be expected.

7. Under these circumstances, I beg to recommend the project to the favorable consideration of Government. Should it be approved, I request that Rupees 2,500 may be transferred from the allotment of Rupees 6,130 granted in G. O. No. 1,703, dated 7th June 1867 for the channel to Kykaloer, as the whole of that sum is not needed during the present year.

*Proceedings of the Madras Government, Public Works Department,
14th February 1868.*

Plan and Survey sent by banghy.

1. Submitted to Government as requested by the Superintending Engineer.

Herewith forwarded.

2. Lieutenant-Colonel Winscom's letter No. 102, dated 23rd October 1867, to the Secretary to Government, contained only information as to the probable extent of land that might be eventually taken up; much of this had, he observed in his paragraph 5, been injured by the sea inundation in 1864, and would not probably be profitable for some years. I thought it better, before laying the project before Government, to ascertain the immediate prospects of return from the work, and referred to the Tahsildar, who has sent a detailed list of acres 2,087 in thirty-one villages and hamlets, the water-rate on which will be Rupees 8,348, or 62½ per cent. on the estimated outlay per annum. I strongly recommend the immediate execution of the work.

(Signed) W. WILSON,
Acting Collector.

MEMORANDUM.

1. The estimates submitted with the accompanying letter from the Superintending Engineer of the 2nd Division refer to the opening out of a branch channel from the terminus of the eastern side channel of the Masulipatam Canal near Ankumurroo Lock, for the purpose of irrigating a sandy tract of ground which extends for a distance of eleven miles from the canal in a direction nearly parallel to the sea. The tract in question was inundated by the sea during the cyclone of 1st November 1864, and the productive power of the soil was in consequence much impaired. It is understood that the soil was poor even before the cyclone, and that it required the aid of the Kistna alluvium to render it as productive as the soil in other parts of the Delta. There appear to the undersigned to be stronger reasons for irrigating it now than before, as it is only by repeated artificial floodings that the injurious effect of the large quantity of salt which has been left on the ground can be neutralized, and he accordingly recommends that the estimates for the proposed work, amounting to Rupees 13,350, may receive the sanction of Government.

2. Colonel Winscom has not given any particulars of the quantity of drainage water which passes along the channel, crossing the proposed channel at the third mile. It is observed that there is a separate outlet to the drainage water, but its sufficiency combined with that of the small tunnel provided for in the present estimate, for disposing of the surplus water from the considerable tract of irrigated land to the westward should, in the opinion of the undersigned, be examined and the result reported in due course. Estimates should also be submitted for bridges on the Masulipatam and Hyderabad road, and on the road from Masulipatam to Cowtrum, both of which will be intersected by the new channel. The undersigned considers that the cost of bridges on existing thoroughfares, where they are crossed by the Delta channels, should be a charge on the Delta Project, and that, in the case of new lines of road being led across the channels, the cost of bridges should be charged to Communications.

*Proceedings of the Madras Government, Public Works Department,
14th February 1868.*

3. The transfer of funds proposed by the Superintending Engineer in paragraph 6 of his letter is recommended for the sanction of Government.

(Signed) J. C. ANDERSON, Lieut.-Colonel, R. E.,

29th January 1868.

Chief Engineer for Irrigation.

No. 339.

ORDER THEREON, 14th February 1868, No. 515.

IRRIGATION, No. 17.

1. Agreeably to the recommendation of the Chief Engineer for Irrigation, the Government sanction the estimates of Rupees 13,350 for a channel eleven miles in length from the terminus of the eastern side channel of the Masulipatam Canal near the Ankumurroo Lock to Gokaveram.

2. The attention of the Superintending Engineer is drawn to paragraph 2 of Colonel Anderson's Memorandum. Colonel Winscom will report on the sufficiency or otherwise of the means to be provided for disposing of the surplus water from the tract of land referred to, and he will submit estimates for the bridges shown to be required on the road from Masulipatam to Hyderabad and from Masulipatam to Cowtrum.

3. The Government approve of the manner in which Colonel Anderson proposes to adjust the cost of bridges on existing thoroughfares, and on any new lines of road which may be led across the channels, and they sanction the transfer of funds proposed in paragraph 7 of the Superintending Engineer's letter.

(True Extract.)

(Signed) CHARLES A. ORR, Colonel, R. E.,
Secretary to Government.

To the Superintending Engineer, 2nd Division.

" Revenue Department.

" Controller of Public Works Accounts.

" Accountant General.

Exd. F. R. Bantleman

1869

Specification of Bridge over Ramrag-
haleu Channel, for the Hyderabad Road.

The Bridge will consist of Abutments in
Brickwork laid in Chunar, with a Super-
structure of Teak-wood, Connected by
Wrought Iron Bolts and Spikes.

The span of the Bridge to be 25 feet,
with Roadway 18 feet in width.

All particulars are given in the Plans
and Estimates.

Wm. McAlpine.

Chief Engineer in Charge of 7th Range R.D.

of the Range Office R.D.

Masulipatam

March 1st 1869.

W. H. C. S. S.

Superintending Engineer 2^d Div.

Sup^g Engineer Office
2nd Division
Camp Masulipatam
1st April 1869

39/1695/69
27. 12. 1868

1-0
1-0
1-0
3-0
3-0
9-9
7-10
3-0
3-9
0-6
6-0
1-11
8-2
4-10
-6
0
10
3
7

Out side longitudinal stringers	4	28'-0"	0'-11"	0'-7½"	64'-2"-0
Centre Do. Do.	2	28-0	1-1	0-9	45-6-0
Transverse beams	5	25-0	0-9	0-6	46-10-6
Do.	2	20-0	0-9	0-6	15-0-0
Do.	8	20-0	0-9	0-3	30-0-0

Vertical Posts	10	3-9	0-4	0-4	4-2-0
Struts	10	3-2	0-3	0-2	1-3-10
Rails	4	29-0	0-4	0-2	6-5-4
Planking	2	28-0	9-0	0-2	84-0-0
Bed plates	6	1-10	1-6	0-2	2-9-0
					300-20-8
					070

Superintendence and Sundries

Work. constructing a timber top Bridge over Ramrajapalem lake for the Hyderabad Road.

A similar Bridge across Masulipatam and Kowtarani Road Rs	12 60	"	"
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And M. L. Prince.
Ex^l Engineer in Charge of 7th Range R.R.

Libboud R.E.
Superintendent Engin 2nd Div.

Superintendent Engineer Office
2nd Div. Camp Kasa
1st April. 1869 -
E. D. C. P. 1869

Estimated No. 1 of 1869-70
 Works (Constructing) on
 Number 1 top 18 ridge road
 Ramaragoo Pollem Canal
 for the Hyderabad Road
 and Mandol and other works
 Rs Rs 1600 - each

Enclosure in as letter from
 the Engineer and D. in
 to the Secretary to Govt. of
 1218/101 of 12/10/1869.

No. 6

Superintending Engineer
 Office 2nd Division
 Camp Coorg.
 1st April 1869.

From

Lieut. Colonel H. J. Roobery A.B.
 Superintending Engineer
 2nd Division
 The Chief Engineer for Irrigation and
 Secretary to Government
 Public Works Department

- Enclosure Sir.
- 1 Rough sketch
 - 1 plan
 - 1 Detailed estimate & plan and estimate for two bridges
 - 1 abstract of the same size as by which the road
 - 1 Report from Major-General H. J. Roobery and

I have the honor to enclose
 plan and estimate for two bridges
 of the same size as by which the road
 from Mandol to the newly excavated
 Com train, may cross the newly excavated
 Ramaragoo Pollem Canal, as desired
 in G. O. No 515. 14 February 1868.

2. As the traffic on these roads
 is likely to be much obstructed by the
 Canal when the irrigation season com-
 mences, I have authorized the Range
 Officer to mark himself at the bridge

required; as it appears, that the
Aqueduct costing Rspees 1820
proposed in the original project, for
the Canal is not required. Its
sufficiency is the subject of inquiry
in para 2 of the above order.

4. In the Canal design it was
intended to carry all the drainage
from the north by the Saradrypett
Drain under the Ramaragupalleni
Canal to the Sultanagarani Swamp;
the newly cleared Siggahunda Coon
drain, however cuts off the principal
quantity; and the levels show that
the Saradrypett channel has so
little fall between the Siggahunda
Coon and the slight ridge on
which the Ramaragupalleni irri-
gation Canal runs, that very
small excavation will enable
us to draw back into the Siggahun-
da Coon running into the
Moojilur Swamp and save
the cost of the aqueduct.

Her accompanying
sketch will, I trust

explain

explain fully:-

I have the honor to be
Sir,

Your most Obedient Servant
J. Macomber. Lieut Colonel R. B.

Supergr Division

No 112

Under date the 30th April 1869.

up of *Onopordium* L. E. N. 6 dated 1st April 1869
B. Division

Rupees 2,520, for Bridges
across the Ramayupalam
Channel, on the road from
Masulipatam to Hydera-
bad and Kovvuram.

2. As the Super Engineer re-
ports that an aqueduct,
estimated to cost Rs. 1820,
which was included in
the estimate for the chan-
nel sanctioned on the
14th February ¹⁸⁶⁸ ~~last~~, will not
be required, the total

Pro. Madras Govt. N^o 515.

167333

[illegible][illegible]

of the sanction for this
channel will be raised
from Rs. 13,350 to Rs.
14,050.

(1)
Honor 158-
of Budget

W.D.

To the Deputy Engineer 2nd Div.
Pay. Dept.
Controller of Public Works Accts.
Accounts General
Chief Engineer for Irrigation

21st April 1869. P. 260

487

Cue 1575

Govt. of 1869, Madras.

PUBLIC WORKS.

To
The Superintending Eng^r
& Division

Dated

Recd.

O. O. 30 April 1869, No. 1412

Nos. 733 & 734

Bridges Estimate of Rs 2520
for bridges across the Rama-
raipalam channel on the
Wodegaru Manikpalam to
Hydrabad and Kowloon in
the Vishnu St., Santhome
Remarks