

MADRAS RECORD OFFICE.

Government of Madras.

DEPARTMENT.

G.O. No.

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Not to be folded or roughly handled

No. 35. Read the following letter from Colonel C. E. FABER, Chief Engineer; to H. FORBES, Esq., Acting Secretary to Government, dated 10th December 1857, No. 5835.

SIR,

1. With reference to Extract from Minutes of Consultation of the 28th November 1857, No. 2203, I have the honor to explain, for the information of Government, that the cause of the estimate submitted by me on the 19th Idem, for the construction of the road from Masulipatam to Ibrahimpatam, in the Masulipatam District, on the river and channel Dykes, being so much in excess of that sanctioned by the Government of India on the 11th July 1856, is, that the last named estimate provided for little more than laying over the present line of unraised road, a coating of any inferior material that might be obtainable in its immediate vicinity; whereas the estimate under reference allows for the thorough construction of a road of the most perfect description, and metalled with the very best material, procurable only at Bezoarah, or its neighbourhood.

2. To lay a similar thickness of equally good metal on the present line would cost not less than 3½ or 4 lacs of Rupees, for cart hire alone, and as the employment of the inferior material found in the delta has been condemned as more than useless, Captain Orr's assurance that the alteration of the line would ensure the road-way being gravelled at a moderate cost, appears to be borne out by the estimate, which though large, is comparatively most moderate, considering the complete character of the work for which it provides.

3. The Dykes being at present in width at top only from 3 to 5 yards, according to the depth of water they are calculated to enclose, it is necessary to enlarge them to obtain a sufficient width for the road, which accounts for the item of Rupees 44,955 for earth work, or rather less than Rupees 900 ₹ mile, which cannot be looked upon as excessive, considering that the Dykes are raised on an average 2½ yards above the level of the soil.

4. Agreeing entirely with the local Officers that it will be far better economy to construct a thoroughly good, and permanent road, on the Dykes, at the proposed large outlay, than to throw away a much smaller sum on repairs of a less effective, though cheaper character. I recommend the estimate of Rupees (1,46,000) one lac and forty-six thousand, for sanction in the out going Budget, and herewith submit the report alluded to in the concluding para. of the Extract Minutes of Consultation under reply.

Report to accompany the estimate for constructing a third Class road from Ibrahimpatam to Masulipatam, 59 miles, 7 furlongs and 192 yards.

2. Amount of estimate Rupees (1,46,000) one lac and forty-six thousand, comprising the following items:—

	Rs.	A.	P.
5,83,015 cubic yards earth work at 1 anna 2 pice and about ¾ per cubic yard.....	44,955	0	4
1,55,718 cubic yards gravel at 9 annas 1 pice and about 1½ per cubic yard.....	88,996	8	0
Masonry 17 Tunnels of 1 vent of 3 feet.....	1,662	7	4
Revetments and parapet walls to Sluices and Tunnels in channel bank.....	3,400	0	0
Sundries, Contingencies, &c.....	6,986	0	4
Total Estimate Rupees...	1,46,000	0	0

3. The top surface of the road, is to be 8 yards in width, of which 6 yards are to be covered with 9 inches of hard gravel. The side slopes of the embankments are to have generally a slope of 2 to 1.

4. Bridges none.

Fort Saint George, Public Works Consultation of 26th January 1858.

5. Reference is made to Extract from Minutes of Consultation No. 891 of the 8th May 1857 by which it will be observed that an estimate for Rupees 43,250 for the partial repair of the old road from Ibrahimpatam to Masulipatam was included in the Budget for 1857-58 and in para. 4 of the above Extract, the Right Honorable the Governor in Council was pleased to approve of the proposed change of the line of the road and to direct that a fresh estimate for the work be submitted as recommended by Captain C. A. Orr, District Engineer in charge of the Kistnah Division. The estimate has been framed for the construction of an entirely new road on the left bank of the main channel leading direct from the Annicut at Bezoarah to Masulipatam. The villages near which the road passes are shown in the survey accompanying the estimate, the road will pass over about 30 irrigating sluices and 4 drainage tunnels which will be constructed at the expense of the estimate sanctioned by Government on the 12th November 1856 for the construction of an irrigating and navigable channel from Bezoarah to Masulipatam, however at these places revetments and parapet walls will be required at the probable cost entered in the estimate. In the portion of the road between Bezoarah and Porunky where the road continues on the old line, 17 drainage tunnels will be required of the description shown in the accompanying plan. Between Bezoarah and Ibrahimpatam the road will run on the river embankment the widening and levelling of which for this purpose will save the necessity of an estimate otherwise actually required, on this account alone. The traffic on the road may be taken as 40 carts per diem throughout the year. Of its Political, Military and Commercial importance, the Government are already fully aware as well as the objections to the old line.

(Signed) W. FAREWELL, Lieutenant.
Executive Engineer in charge Kistnah Division.

Bezoarah, 31st October 1857.

No. 56.

ORDER THEREON, No. 118; dated 22nd January 1858.

1. The Chief Engineer supplies the information required by Government in Extract Minutes Consultation 28th November 1857, No. 2203, as to the necessity of so large an outlay as Rupees 1,46,000 for constructing a road from Masulipatam to Ibrahimpatam on the river and channel dykes. He explains that the former estimate merely provided for laying over the old line of unraised road a coating of such inferior material as might be procurable in its vicinity, whereas the present estimate contemplates the construction of a road of the most perfect description, and metalled with material procurable only about Bezoarah, and that the laying on of a similar thickness of good material on the old line would involve an expenditure for cart hire alone of between 3½ and 4 lacs of Rupees. Considering the character of the work, he thinks that the present estimate, though large, is comparatively moderate.

2. As regards the large amount for earth work provided for in the estimate, regarding which explanation was called for, the Chief Engineer observes that the dykes have at present a width of only from 3 to 5 yards, and that it is necessary to enlarge them to obtain a sufficient width for the road, and he does not think that the estimated charge, about 900 Rupees per mile, is excessive, considering that the dykes are raised on an average 2½ yards above the level of the soil.

3. From this it would appear to be the intention of the District Engineer to form the new road between Masulipatam and Ibrahimpatam on the level of the present Canal embankments, which are stated to be 7½ feet above the level of the soil. Every inch that a road is raised higher than may be necessary is an evil, and serves only to increase the difficulty of keeping it in repair. The Government therefore think that the estimate for earth work might be greatly and advantageously diminished, by reducing the height of the dykes, and providing, from the material thus gained, for the desired increase to the width of the road. The Chief Engineer will be pleased to give his consideration to the subject, and, in communication with the District Engineer, report to what extent this suggestion may be adopted.

(Signed) H. FORBES,
Acting Secretary to Government.

Central Office of P.W.
No. 5835 Sub. P. George 10 December 1857

From The Chief Engineer
To The Secretary to Government
P.W. Department

Masulipatam
District

Public Commu-
nication.

Road from Masu-
lipatam to
Ibrahimpatam.

Enclosure
1 Report

Sir, With reference to Extract from Minutes of Consultation of the 28th November 1857, No. 2203, I have the honor to explain for the information of Government, that the cause of the Estimate submitted by me on the 19th idem, for the construction of the road from Masulipatam to Ibrahimpatam, in the Masulipatam District, on the river and Channel Dykes, being so much in excess of that sanctioned by the Government of India on the 11th July 1856, is that the last named Estimate provided for little more than laying over the present line of unraised road, a coating of very inferior material that might be obtainable in its immediate vicinity; whereas the Estimate under reference allows for the thorough construction of a road of the most perfect description, and metalled with the very best material, procurable only at Bezoarah, or its neighbourhood.

2. To lay a similar thickness of equally good metal on the present line would

be a partial repair of the road from

would cost not less than $3\frac{1}{2}$ or 4 Lacs of Rupees, for cart hire alone, and as the employment of the inferior material as found in the Delta has been condemned as more than useless, Captain Orr's assurance that the alteration of the lines would ensure the roadway being gravelled at a moderate cost, appears to be borne out by the Estimate, which though large, is comparatively most moderate, considering the complete character of the work for which it provides.

3. The Dykes being at present in width at top only from 3 to 5 Yards, according to the depth of water they are calculated to enclose, it is necessary to enlarge them to obtain a sufficient width for the road, which accounts for the item of Rupees 14,955 for earth work, or rather less than Rupees 900 £ mile, which cannot be looked upon as excessive, considering that the Dykes are raised on an average $2\frac{1}{2}$ Yards above the level of the soil.

4. Agreeing entirely with the local Officers, that it will be far better economy to construct a thoroughly good, and permanent road, on the Dykes, at the proposed large outlay, than to throw away a much smaller sum on repairs of a less effective, though cheaper character. I recommend

recommend the Estimate of Rupees /146,000/ One Lac and forty six thousand, for sanction in the outgoing Budget, and herewith submit the Report appended to in the concluding para of the Extract Minutes of Consultation under reply.

I have the honor to be

Sir,

Your Most Obedt. Servant

Principal Office of R.W.

Fort St George

10 December 1837

W. D. Colwell

Chief Engineer

W. D.

Report to accompany the Estimate for constructing a third class road from Champatam to Karulipatam 59 Miles, 7 Furlongs and 192 Gards.

2. Amount of Estimate Rupees (45,000-00) One hundred and forty six thousand comprising the following items.

502,015 Cubic Gards Earthwork at Anna	
2 pice, and about 3 per Cubic Gard	44955-4
455,710 Cubic Gards Gravel at 9 Anna 8 pice	
and about 1/2 per Cubic Gard	80996-8
Masonry of 1000 ft. of 3 feet	1662-7-4
Rivet into and parapet wall	2400-00
to 1000 ft. of 3 feet	
Chundries & Contingencies 1/2	6906-4

Total Estimate Rupees 45,000-00

3. The top surface of the road, is to be 8 Gards in width, of which 6 Gards are to be covered with 9 inches of hard gravel. The side slopes of the embankments are to have generally a slope of 2 to 1.

4. Bridges, none.

5. Reference is made to Extract from Minutes of Consultation No 89 of the 8th May 1854 by which it will be observed that an Estimate for Rupees 40,250 for the partial repair of the old road from

Base 1202295 66-67
1202295 41-42
1202295 3-4

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The Chief Engineer
The Secretary to Government
Rangoon

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Dec 11/53

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Champalam to Masulipatam was included in the Budget for 1857/58 and in Part of the above Extract, the Right Honorable the Governor in Council was pleased to approve of the proposed change of the line of the Road and to direct that a fresh Estimate for the work be submitted as recommended by Captain C. A. Orr District Engineer in charge of the Kistnah Division. The Estimate has been framed for the construction of an entirely new road on the left bank of the main channel leading direct from the Anicut at Bezorah to Masulipatam.

The villages near which the road passes are shown in the survey accompanying the Estimate, the road will pass over about 20 irrigating sluices and 4 drainage tunnels which will be constructed at the expense of the Estimate sanctioned by Government on the 12th November 1856 for the construction of

an irrigating and navigable channel from Bezorah to Masulipatam, however at these places revetments and parapet walls will be required, at the probable cost entered in the Estimate. In the portion of the Road between Bezorah and Country where the road continues on the old line, 14 drainage tunnels will be required of the description shown in the

accompanying plan. Between Bezorah and Champalam the road will run on the River Embankment the widening and levelling of which for this purpose will save the necessity of an estimate otherwise actually required, on this account alone. The traffic on the Road may be taken as 40 carts per diem throughout the year. Of its Political, Military and Commercial importance the Government are already fully aware as well as the objections to the old line.

Bezorah
5th October 1857

W. Macdonald
Executive Engineer in charge
Kistnah Division

20 Dec 1857

21 Dec 1857

Public Works Dept

No. 118
Extract from the Minutes of Consultation
Under date 16th 22nd January 1858
Read the follow.
ing letter from the
Chief Engineer:

/Here enter 10th December 1857
No 5835/

St

21 Dec 1857

Report to accompany the
Estimate for constructing a
third class road from
Champatani to Masulipatan

Report to be made
by the Chief Engineer
on the subject of
the proposed road
from Champatani to
Masulipatan
and the estimated
cost of the same
to be submitted to
the Government
for their consideration

WM

The Chief Engineer
supplies the information
required by Government
in Extract Min^{is} Con^{is}
28th November 1857 No
2203 as to the necessity
of so large an outlay
as Rspees 146,000 for
constructing a road
from Masulipatan
to

to Brampatam on the
river and Channel dykes.
He explains that the
former estimate merely
provided for laying
over the old line of
unraised road a
coating of such inferior
material as might be
procurable in its vicinity,
whereas the present
estimate contemplates
the construction of a
road of the most per-
fect description, and
metalled with ma-
terial procurable
only about Bezavara,
and that the laying
on of a similar thick-
ness of good material
on

on the old line would
involve an expenditure
for each River alone
of between $3\frac{1}{2}$ and
4 lacs of rupees. —
Considering the cha-
-racter of the work
he thinks that the
present estimate,
though large, is com-
-paratively moderate.
As regards
the large amount
for earth work pro-
-vided for in the
estimate, regarding
which explanation
was called for, the
Chief Engineer observes
that the dykes have
at present a width
of

of only from 3 to 5 yards,
and that it is necessary
to enlarge them to
obtain a sufficient
width for ^{the} road, and
he does not think
that the estimated
charge, about 900 Rs
per mile, is excessive,
considering that the
dykes are raised
on an average $2\frac{1}{2}$
yards above the level
of the soil.

3. From this it
would appear to be
the intention of the
District Engineer to
form the new road
between Masulipatam
and Brampatam
my

on the level of the
present Canal em-
bankments, which
are stated to be
 $7\frac{1}{2}$ feet above the
level of the soil.
Every risk that
a road is raised
higher than may
be necessary is an
evil, and serves
only to increase
the difficulty of
keeping it in
repair. The Govt. there-
fore think that the esti-
-mate for earth
work might be
greatly ^{and advantageously} diminished
by reducing the
height of the
dykes

dykes, and providing,
from the materials
thus gained, for the
desired increase
to ^{the} width of the
road. The Chief
Engineer will be
pleased to give
his consideration
to the subject, and,
in communication
with the District
Engineer, report
to what extent this
suggestion may be
adopted.

RZ

9 Copies to the Chief Eng.
Dec 23-1
Retd with an Encl. 20-2.

Public Works 1858
Sept Dec: 26 Jan'y:

Nov 11/8

Contract to this day
Sept 22 January 1858

Smith & Co. New York
1858 Dec: 14 & 15 & 16 & 17 March

Showing that the
estimate for the south road
for constructing a road from
Hartford to the station
between, might, by, reducing
the height of the bridge, provide
for the width of the road, from
the material thus gained.

N. 35436.