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MADRAS RECORD OFFICE

GOVERNMENT OF MADRAS

Revenue DEPARTMENT

G.O. No.	903	Press
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Dated	1.5.1875	196 .

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70

Read the following papers:—

No. 392. From Colonel F. J. MOBEY, R.E., Superintending Engineer, 4th Division, to Colonel G. W. ... R.E., Secretary to Government, Public Works Department, ... 23rd November 1872, No. 3,759.

I HAVE the honor to bring to ... ernment a claim for compensation for land taken up under the follow

2. In 1863 I, then District Engineer, Chingleput, forwarded an estimate for carrying a branch from the Kambur ... ward, and known as the Neenjal Madugu; it was prepared by Sub-Eng ... and, and amounted to Rupees 9,000.

3. On further investigation, I thought that the supply of water was likely to be very uncertain. I did not think the estimate was right, or the return stated correct, and I stopped any further proceeding.

4. In 1866 the subject was re-opened; the Superintending Engineer and Revenue Officers were more sanguine, and in G. O., No. 3,811, dated 30th November, the execution of the work was sanctioned, and was in progress till 1870, up to which time Rupees 18,457 had been expended. A report and revised estimate were forwarded by Mr. Ottmann on 21st February 1868; the latter amounts to Rupees 38,200, and the compensation now claimed is an increase in it amounting to Rupees 1,800.

5. For some reason the estimate was retained in this office, and the work abandoned as unlikely to answer. G. O., No. 878, dated 29th March 1870, is the latest document that I can find on the subject.

6. Mr. Ottmann states that the claim for compensation is valid. I trust, therefore, that Government will be pleased to place me in funds to meet it.

No. 392A. From Colonel F. J. MOBERLY, R.E., District Engineer, Chingleput, to Lieutenant-Colonel J. MULLINS, R.E., Chief Engineer for Irrigation, dated Guindy, 19th March 1874, No. 3,436.

I HAVE the honor to enclose a statement showing the particulars of the land taken up for the Neenjal Madugu project as called for in your Memorandum, No. 305, dated 14th December 1872. I also enclose 1 Copy of Mr. Ottmann's letter, No. 477, dated 14th November 1873. 1 do. Sub-Collector, No. 662, dated 24th December 1873. 2 Statements. copy of a letter from the Sub-Collector replying to my request to be informed

as to the amount that would be required if we gave up the land. I shall be obliged by your instructions on the subject.

2. As regards paragraph 2 of your letter, the only paper that I can find is contained in G. O., No. 1,080, dated 6th April 1868. Expenditure appears to have been incurred on the strength of Budget grants made to meet the estimate which was never sent in.

3. I found the mass of plans, &c., in my office when I took charge as Superintending Engineer. I have not examined them, as I conclude that experience led my predecessors in the office to condemn a project which I put aside as impracticable in 1863.

4. I enclose copy of letter from Mr. Ottmann who was most concerned in the matter.

ge Northern Range, to R. SMITH, Esq., District
ta, 14th November 1873, No. 477.

5, dated 31st ultimo, forwarding copy of a
r the information requested by that officer,
is of so old a date, I am unable without

Poonamallee Range) cannot but afford
stant of the late Poonamallee Range,
work was executed), be directed to trace

ving been admitted from time to time by
her, shows it to have been fully authorized, if
the same. The work was inspected by Colonels

having been forwarded to Government, I am
orders of the Superintending Engineer under
Public Works Department, and the Chief Engi-
I was sent to the Secretariat Office to explain the
its revision. The Superintending Engineer,
and added other instructions. The estimate was
idea who proposed the work for submission to
as observed by the District Engineer. There
at the very start it was observed that the scheme
the channels.

No. 344.

(Signed) R. SMITH,
District Engineer.

From C. S. CROLE, Esq., Acting Sub-Collector, to Lieutenant-Colonel F. J. MOBERLY, R.E.,
District Engineer, Chingleput, dated Chingleput, 24th December 1873, No. 662.
In reply to your letter, dated 20th October 1873, No. 146.

In reply to your letter, dated 29th October last, No. 1,980, I have the honor to forward the

2. The Tahsildar of Conjeveram thinks that a reduction of two-thirds of the total amount can be made. If, however, the exact amount of reduction is required by you, I shall direct the Tahsildar to obtain the same, but it will take some time before ascertaining it, as all the owners cannot be got at once for the reasons stated by the Tahsildar.

No. 392-B. From Colonel F. J. MOBERLY, R.E., District Engineer, Chingleput, to Lieutenant-Colonel J. MULLINS, R.E., Chief Engineer for Irrigation, dated Guindy, 30th October 1874, No. 2,646.

In reply to your No. 403, of 11th June, I have the honor to enclose report, in original, by Mr. Ottmann, who, so far as I can discover, suggested the resumption of the work at the Neenjal Madugu, and executed all that has been done.

3. The Tennairy tank bank is the ground, on the north side quite hill, miles is discharged by calingulahs in at the south end—see Mr. Ottmann's wide sheet of cultivation that fills near the site of the dam there are the valley between well-marked high on the drainage of 128 square long; some at the north, some over passes principally over the they below, but lower down and ed channels.

4. In this distance the valley has received the drainage of 30 square miles, more nearly all on the north side, where two small streams throw into it any surplus that may remain after supplying the chains of tanks which are constructed across them.

5. In years of abundance the Tennairy and every other tank on the high ground discharge furiously into the wide valley which runs full for some days into the Palar; at such times no increase of water is wanted by any body.

6. In years of moderate rain the Tennai gulahs. I was told that in only four years of the crest—see paragraph 10, Mr. Ottmann's Report—in the most of these years receive the water and sub-soil drainage from the high ground and tank does not discharge over its calin up to 1873 had the water risen to their out, of course, the Madugu proper would ring from the paddy fields, the leakage e.

7. Mr. Ottmann in paragraph 6 explains how this was utilized by villages below. The site of nearly the lowest "corumboo" was chosen as that of an open dam to afford means to the villagers of quickly establishing an obstruction and procuring a supply into their tanks. These were to be little more than aprons with upright stones put across the hollows, with wing walls connecting them with the ground on each side, but flush with it, so as to afford as little hindrance as possible to the larger floods which submerge every thing.

8. Mr. Ottmann clearly did not appreciate the design, as appears from his Report. He proposed to join the dams by a bank to make the existing tank channels regular supply channels, with aqueducts, &c. The bank was constructed, and other work in the bed of the stream executed before he found out what he was dealing with, and hence the excess expenditure already incurred.

9. His estimate for the large project amounts to Rupees 38,200, and I doubt its sufficiency, but I am quite confident that it would not answer. The catchment area is all around Tennairy. If the rain falls in quantity, enough to fill the large tank, it will fill the smaller ones; if the rain is below the average, it cannot do any good to the Madugu and the work under it.

10. The design is clearly wrong in detail, as Mr. Ottmann, when he has filled the space between dams by an embankment, has only 168 feet of opening to discharge the surplus from 632 feet of Tennairy calingulah and surplus drainage of 30 square miles.

11. If the Kambakal could be counted on, we might run channels from Tennair tank along each side of the valley to fill the various tanks, but that feeder reaches Streepermatur only in good years, and I do not see any chance of its aiding Tennair.

12. I have been disappointed at every endeavour to inspect these works properly, as the valley has rarely been free from water during the last two years of exceptionally heavy rain; it might answer to revert to the original minor project and get some return for the outlay incurred, and I will take the earliest opportunity of examining it.

REPORT ON THE FINAL REVIEW OF THE NEENJAL PROJECT.

I.—OBSERVATIONS.

1. *The Project.*—The “Neenjal” is a designed with a view to the catching up of the surplus waters of the large tanks on both banks. The surplus was taken from both northern and southern branches of the Tennaiy tank irrigates its bund (2½ miles length) stretch has an area of 128 square miles breadth. On its northern water seasons. The tank discharges by five calingulahs.
2. *Features of the Madugu.*—The “Neenjal Madugu” is the name which the surplus of junction of the two branches of the surplus from Yelachur (where the present anicut is constructed) up to its termination in the Palar river at Chingleput. Its fall is about 3·92 per mile.
3. The “southern branch” of the surplus from the Tennaiy tank, and which receives the waters of three of its calingulahs (having a total length of 618 feet), has somewhat a defined course, though in the neighbourhood of the anicut it leads over the lands, the valley being very flat. Its “northern branch” which emanates from the two north calingulahs of the tank (of 280½ feet total length) has no defined course, but spreads over the lands up to its junction with “southern branch” its fall is 7·56 feet per mile. Below the junction and up to the Palar the “Madugu” has a deep scoured bed, and near Chingleput the Conjeveram road is carried over it by a bridge of five arches of 33 feet span. In the latter part of its course near the Palar the Madugu is very deep, and in the driest weather there is always from 5 to 8 feet of water in it. The highest flood line of the Madugu, as it appears on the bridge, is 17 feet above floor, the soffit of arches being 26 feet above floor.
4. The Madugu proper, as I would distinguish the stream below the anicut, receives a large local drainage on both sides, especially from left bank. Above the anicut, the local area that drains into the two branches may be estimated as 30 square miles nearly, considered between the anicut and embankment on east side, the Tennaiy tank (which stretches nearly across the whole valley of the Tennaiy) on the west, the Palar on the south, and the water-shed between the valleys of the Tennaiy and Adyar on the north. Just below the anicut, a large surplus or Madugu joins on right bank by way of Oollavur tank, through which it passes. This is the surplus of some tanks beyond the catchment basin and not included in the area above described.
5. The Tennaiy valley above the anicut is very flat; below the anicut, however, the valley slopes are more conspicuous, and favor high level irrigation. The ground is undulating.
6. The spring waters and local drainage, other than during floods of both the branches forming the Madugu, are at present intercepted by corumboos, and the water drained off for irrigation. On the north branch there are six such corumboos, on the south branch only two. Each village in its limits is authorized to erect a corumboo for utilizing the spring water, &c.
7. Below the anicut, where both branches form one stream, there is but one corumboo across the Madugu for diverting spring water and local drainage into the Reddipolliem tank of the Poloor village; but, owing to the deep section of the Madugu at this point, a corumboo is scarcely maintainable. The idea of the “Neenjal project” first originated from the Reddipolliem villagers having asked for a permanent masonry dam in lieu of the corumboo, when it was considered that such an anicut, placed somewhat more advantageously, might serve other villages also. The first estimate of the project was framed on these considerations.
8. *Tennaiy floods’ duration, &c.*—The Tennaiy tank discharges by five calingulahs, which waters together with the local drainage of 30 square miles above the anicut required to be considered in the Neenjal scheme. This accumulated supply is what will be intercepted by the

Neenjal anicut and embankment, and must be provided for. The length of Tennaiy calingulahs, relative heights, &c., are as below:—

Calingulahs.	Feet.	Gauge.	Dam Stones.	Actual Waterway.
No. 1. North calingulah	30½		11 of ¾	22½
„ 2. do. large do.	249½	85·59	74 of 1	175½
„ 3. South do. (average)	192	93·21	65 of 1	127
„ 4. do. large do. (do.)	294½	88	117 of ¾	207
„ 5. do. do. (do.)	131½	92·37	42 of ¾	99½
	867½	93·91		
Total Waterway ..				632

9. It will be observed that the crests of the calingulahs are variously placed. Moreover, the crests of calingulahs 2, 3, 4 are not of uniform level separately considered either, for in all three cases, one end is higher than the other. This is especially the case with No. 4, the low end of which is 87·58. This is the lowest level calingulah and is the standard by which the tank supplies are considered; storage being limited to top of dam stones as full supply for 15 months.

10. The last occasion that these calingulahs discharged over their crests was in 1865-66, the last highest flood known was in 1842-43, when No. 4 calingulah discharged over its dam stones, and very extensive breaches occurred, which resulted in the sinking of one end of this calingulah. This highest flood passed for between four and five days. From 1842 to 1865, the calingulah above referred to discharged variously from level of dam stones to crest level. But since 1865, the tank water has not reached even the calingulah crest. According to usage in good seasons the calingulahs are allowed to discharge four or five days before they are shut, the period of discharge depending entirely on the season and prospects of duration of floods. The capacity of tank has been stated as containing 15 months’ supply, but the villagers state that, for some 20 years, the supply at the full has not sufficed for 12 months, the tank having silted considerably. Since 1865 the tank has never received more than four months’ supply in any year.

11. From inquiry among the villagers on both banks of the Madugu, it is understood that in proper seasons the duration of the floods is from 6 to 10 days at the site of anicut, when the valley is one sheet of water and quite impassable; that after that period there is a subsidence, and the valley may be got across; but that lower down the Madugu, where it has a deep section, it is not fordable at all for from 20 to 40 days.

12. *Present cultivated area of the Tennaiy valley below the tank.*—The Tennaiy valley above the anicut is entirely cultivated over. So long as the floods do not extend beyond a week, no harm is done to the cultivation, but beyond that the plants are destroyed from the too lengthened submersion. This is a point for consideration in the new scheme. Below the anicut on both slopes of the valley, especially the right, there are very large tracts of waste land suited to wet cultivation which might be turned to account if irrigation is provided. The waste may be computed at 2,000 acres, more not less, and certainly 1,500 thereof are available for immediate cultivation.

II.—THE ORIGINAL SCHEME.

13. *Intentions of the scheme.*—The original scheme prepared and submitted in 1862 was intended to provide better supply to the villages of Yelachur, Poondy, Vadakapet, Kureevambadoo, and Vembakkam on left bank, and Poloor, Reddipolliem, hamlet of Poloor, Villiambakkam, Athoor, and Dimmapuram (hamlet of Athoor), on right bank of Madugu, by damming the stream in Yelachur limits and delivering the supply by high level channels one on each bank to the tanks. The method of distribution was not at all gone into in the report accompanying the scheme.

14. Provisions of the original scheme.—The above scheme, the following work of 3 feet (depth of stream) and shutters. An open sluice (of calibrations of sluices being on level with 12 feet, the southern of 18 feet, the north channel had no channels, roads, &c. The south channel the Oollavur surplus joins for the 6 feet for Reddipolliem branch channel similar style for the crossings of the Villiamambakkam crossing of Conjeveram road, and an anicut channel of Athoor. No provision either for crossings and subsidiary works of distribution.

The estimate of this scheme amounted to 100 Rupees.

15. Defectiveness and omissions of the scheme.—The scheme, as referred to in paragraphs 13 and 14, was to afford better supply to ten villages, viz., Yelachur, Poondy, Vadakapet, Poloor, and Dimmapuram; these villages, therefore, either had been made for their supply.

16. As the channels are run on the valley and across the lines of tank irrigation of all the villages named in paragraph 15, it was essential to provide for all the crossings of channels, &c. This had been entirely overlooked. No less than 31 aqueducts and under sluices (the most essential only after omitting minor crossings) are needed for both channels, and for the road crossings, three large culverts had been otherwise overlooked.

17. Compensation for land taken up by the scheme was omitted.

18. Embankment on line of anicut and sluices had been quite forgotten; without this the anicut or sluices could not be brought into action.

19. A surplus calingulah in north channel bank to relieve the channel in floods from the large local drainage and surplus of Yelachur tank and adjacent lands, a very necessary work, was also left out.

20. Irrigation sluices (4) in anicut embankment for the most important of the irrigation channel crossings omitted.

21. Faultiness of design.—It has been already shown in paragraph 15 that five of the ten villages proposed to be brought under the scheme could not be effected at all by it.

Of these five villages, three appertain to north channel, viz., Yelachur, Poondy, Vadakapet.

22. There then remain two villages only, Gooreevambadoo and Vembakkam, under north channel, which can be benefited. But as ascertained from the Revenue returns, these two villages jointly would yield but 600 Rupees extra revenue, withal the improvement of supply.

The above circumstances rendered the utility of north channel questionable.

23. As regards the south channel, five villages were to be improved by it, two of which, Poloor and Dimmapuram, do not benefit.

In the case of the benefiting villages, Reddipolliem, Villiamambakkam, and Athoor, it will be observed on reference to original section of south channel that Villiamambakkam was placed beyond reach of supply from its high level. Athoor tank barely benefits; while as regards Reddipolliem tank it has to be stated that the tank has been superseded by the upper tank of Poloor; that its bed, except for about 50 or 60 yards width (the deep bed only along margin of bund) has been taken up by cultivation, and that only a very small quantity of water (3 feet) in a narrow belt as it were, can be put into tank, so that the present cultivation shall in no wise be effected.

From what has above been written it will be observed that in the case of the south channel also as designed the prospects were not great.

regulating works, &c.—For the carrying out of the scheme it was designed, moreover, to provide for the following works:—An anicut, 90 feet length, with body of 3 feet fitted with horizontal planking on each side at the heads of the channels, the northern sluice was to be an opening of 10 feet and planking.

For the distribution, crossings of irrigation tank of 30 feet in its bank, at the point where the channel of it. A head (open) sluice of 6 feet (channel not made), two other sluices of 6 feet for m and Athoor spring channels, a culvert for the crossing of Conjeveram road, and an anicut channel of Athoor. No provision either for crossings and subsidiary works of distribution.

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the "north channel" should have a fall of 1.25 to 1.50 feet per mile, and "south channel" 0.75 to 1.22 feet per mile, the rest of channel, about 1.5 mile, should have a fall of 1.25 to 1.50 feet per mile. The north channel was to be 3 yards width in 1st section, 4 yards in 2nd section, and 5 yards in 3rd section. The south channel was to be 4 yards width in 1st section, 5 yards in 2nd section, and 6 yards in 3rd section. The north channel was to be 1.25 feet per mile, and the south channel 0.75 to 1.22 feet per mile. The rest of channel, about 1.5 mile, should have a fall of 1.25 to 1.50 feet per mile. The north channel was to be 3 yards width in 1st section, 4 yards in 2nd section, and 5 yards in 3rd section. The south channel was to be 4 yards width in 1st section, 5 yards in 2nd section, and 6 yards in 3rd section.

either the cuttings or falls prescribed would have given little or no cutting. In the north channel the result was only 0.50 feet a mile could be obtained for length of about 2 miles, and beyond this the result principally at 5.84 feet per mile, for the cuttings, these were heavy compared with alterations of fall that were made placed the Villiamambakkam tank under supply, improved.

and sluices, the wing walls thereof were left out, permitting of corrosion of banks about the anicut.

way; taking the waterway of the Tennairy into consideration, as also the local drainage, it seemed advisable to extend the anicut to reach the flood-way.

tionable also.

proved short in height.

at the crossings of the Athoor and Villiamambakkam tanks was not advisable, as those channels, g channels, are constantly flowing throughout the year, and they could not be obstructed, not even for a very short period. It is essential in both these cases that the channels be kept independently of the anicut channels for many very obvious reasons.

On referring to the plans of the "original scheme," it will be observed that the scheme was framed in a very general manner, and without any data of prospective advantages. No provision was taken for the channels; these were merely assumed by daubs on the plan, and calculated

III.—THE FIRST REVISED ESTIMATE.

Necessity of first revision and provision thereof.—The first revised estimate amounted to 100 Rupees, and was sent in February 1868. The work was in progress from June 1867; execution it was observed that the rates were very low, that several important omissions still required to be immediately provided for, and certain faults of design remedied to be made good. These omissions and faults are described fully in paragraphs 15 to 30. The revised estimate was purely intended to provide for all the above discrepancies, as represented in the paragraphs afore referred to.

As at this time, the remunerative statements had not come to hand, the pecuniary value of the scheme could not be realized, though there was room for some doubt; the projected on its premises. And it was considered that by the re-arrangements (as were the revision) of the channel system, by which two more of the tanks (of Villiamambakkam and Athoor) would be placed under supply, and the provision for omissions and faults, the scheme would be placed on as desirable a basis as was practicable, further improvements and alterations were referred to subsequent consideration—see paragraph 10 of Report, No. 527, of 21st February 1868, the subject of the first revised estimate. It was represented in this report "that the project would be of much pecuniary advantage to Government without further alterations, &c."

IV.—THE REVISION

34. *Revision now proposed.*—It will be considered, and even as regards the first supply was available and that the

On the submission, however, of the scheme for Irrigation to the scheme (under the absence therefrom of reliable data, ordered to be gone into again.

The further surveys necessary returns were prepared. From these information gathered from the subsequent survey concerned, it became apparent that the proposed supply of the several tanks, and that, which the Government might be benefited, it was necessary to revise the scheme as described, so as to produce the above effect.

In another point of view also, the great offer to the floods became a matter for some

35. *Prospects of the scheme as proposed.*—From the revenue returns that were obtained for the villages that will be of Rupees 7,629 of extra revenue is obtainable provided that the channels supplied the producing but a small portion of that extra

The particulars are as below:—

Villages.		Land.	Extra Revenue.
		CAWNIERS.	RS.
Pooroor (Reddipolliem)	ACS. 396	297	1,285
Villimbakkam	" 117	88	661
Kureevambadoo	" 41	31	421
Vembakkam	" 45	34	180
Athoor (and Dimmapuram)	" 834	626	4,276
Yelachur	" 158	119	745
Vadakupet	" 45	34	81
	Total ..		7,629

The above outturn of revenue includes second crop to some extent.

36. *Arrangements for distribution necessary to effect the extra revenue.*—It has been already shown that of the villages of (1) Yelachur, (2) Poondy, (3) Vadakupet, (4) Kureevambadoo, (5) Vembakkam, (6) Pooroor, (7) Reddipolliem, (8) Villimbakkam, (9) Athoor, (10) Dimmapuram, the channels will only effect the tanks of Nos. 4, 5 (both under one tank), 7, 8, and 9.

It has been likewise shown that the Reddipolliem tank, as it now stands, is but a belt of water about 50 yards wide, at most with but a depth of a yard at the utmost; that this tank cannot be improved, it having been superseded by a higher tank, and its bed, moreover, placed under cultivation. Further, it must be borne in mind that Reddipolliem and Pooroor are one village actually, the former being merely a hamlet of the latter so much as regards Reddipolliem tank.

The Kureevambadoo tank which supplies Vembakkam also cannot be improved without damaging the Vadakupet lands, which it already floods. Its supply can only be rendered more certain.

SCHEME NOW PROPOSED.

so far as the original scheme was concerned, it was assumed that the water-

ion was taken by the Chief Engineer (under the submission of projects) from the supply and revenue, and the matter was

reupon undertaken, and the revenue the Revenue Department, from infor-

from the inquiries that were made in the villages it stood, would barely pay by improving merely there existed room for much improvement by the extent of some thousands of rupees annually, system of distribution entirely as hereinafter

rection that the anicut and embankment would leration.

altered.—From the revenue returns that were the scheme, it was found that as much as several villages referred to in the old scheme, directly, the augmenting of the tank supplies

The Villimbakkam and Athoor tanks are so water for about 60 yards width is somewhat deep time the irrigation of the river spring channel of; while therefore more certain supplies not permit of much being received.

All the above tanks, however, will supply more than once, from the early

As regards Dimmapuram, it must be supply, and the bulk of the land that will

37. The only arrangement, then, to be made, is by making both channels serve the land Poondy (Enam) Vadakupet, Poloor, and Dimmapuram supplies to the tanks of the other villages. The arrangement, which seems to be not only very desirable, but feasible, and the experience of the past two years on the south channel (from which I have channel to irrigate by cuts in the bank) establishes

38. In short, the flood waters will be delivered bulk of the irrigation will be carried out by the spring anicut, as also the local drainage caught up by the slopes on the upper sides of each from channels

39. An attempt was made in last year to get and thus obtain specific data, but unfortunately arrangement. From the observations, however, this year) spring water it was found passed over the January, and February, averaging from 1 to 5 inches passing all the year round the villagers affirm.

40. *Details of the revised scheme.*—The basis represented in preceding paragraphs, and for effecting utilizing all the work already performed (see Survey Report 6):—

(a.) The anicut to be extended each side so as to give 176 feet additional waterway and provided with dam stones and shutters as in present anicut.

(b.) The anicut embankment to be raised and strengthened, and four irrigation sluices with shutters provided therein to permit of the crossings of present irrigation channels of supply.

(c.) The north channel head sluice to be abandoned and a new covered sluice to be built more north. The sluice to be of two vents of 3 by 3 feet each. The channel left as designed, but finished off, it being in an incomplete state. Its embankments strengthened.

(d.) A calingulah of 20 yards to be put in the right bank on plan of calingulah built for Oollavur to relieve Yelachur tank, &c., surplus.

(e.) Four head sluices to be placed in the embankment for direct irrigation to Yelachur (1), Poondy (1), and Vadakupet (2) lands. The heads of these sluices will be after the pattern of tank sluices, and have plug holes, so as to regulate the discharge. The channels from these sluices to be excavated by the ryots.

(f.) The channel in the low grounds to be embanked on left side also, so as to prevent swamping of cultivation as already experienced; and the drainage that these banks will intercept will be discharged by sluices in the bank for utilization by the channel, or relieved altogether by under sluices.

(g.) All the important tank irrigation channel crossings (10 in number) to be provided with the necessary under sluices and aqueducts as designed in first revision.

(h.) The present village road crossings to be deferred for consideration to some future time (these were provided for in first revision).

(i.) The south channel head sluice to be abandoned and a new covered sluice to be provided and placed more south. Its embankments in the low ground to be strengthened. The channel as excavated will be allowed to remain for the present, except that it will be finished off. Future alterations being considered as occasion arises.

flat, except along the margin where the tanks merely supplement at the present times, and which are the mainstay thereto both tanks, their capacities will

of being enabled to supplement is materially assist irrigation.

let of Athoor. It has no separate us to this village.

which the work can be rendered properly, and which will thus bring Yelachur, under supply also, besides furnishing the tanks of all the villages concerned press this, but feasible, and the experience of the past showed the villagers on the first portion of the idea.

to the tanks whenever practicable, but the water and local drainage, intercepted at channels (which are catch drains) from the

floods that should pass through the anicut, failure of the monsoons quite upset the made at the anicut (in the last and this out in all October, November, December, depth over crest, and that such continues

cheme now contemplated is on the principal the following arrangements are proposed

the following arrangements are proposed

(l.) The right bank through low provided with drainage sluices.

(m.) Eight head sluices to be Oollavur (1), Poloor and Reddipo head sluices and road culvert channels from all these head slu

(n.) Head sluice for Redd

(o.) Covered head sluices spring channels. Open sluices of the spring water.

(p.) Under sluices for the

(q.) A culvert of three vents for

(r.) Alteration of the aqueduct in height.

(s.) Village road crossings to be in first revised estimate.

(t.) Alteration of present road provided for before.

(u.) The Reddipolliem branch sluices should be provided in that tank which the tank bed is subsequently to

(v.) The irrigation to Athoor situated in the second section of the

(w.) Road culvert at extreme er

(z.) All the important tank irrigation and under sluices according to circumstances

41. The project admits of extension to Chingleput; supplying intermediate to join the "ancient channel" of Kalatur. It can confidently be affirmed will yield, but it is observed that the Kureevambadoo tank is greatly favored by the north channel; from it very large supplies may be taken off for Chingleput and Kalatur. The Chingleput tank needs filling on sanitary grounds alone, as the bed in dry weather emits foetid gases, which are any thing but desirable to the inmates of the large jail in Fort and the several courts and cutcherries located therein. Otherwise the tank is already well supplied to serve the lands thereinunder.

42. The plans bearing c

"Original Series."

1. *ect.*—Survey of *ect.*
2. *Do.* Section of south channel.
3. *Do.* Section of north channel.
4. *Do.* Plan of *ancut.*
5. *Do.* Plan of subsidiary works.

"Revised Series."

6. *Sheet.*—Survey of project.
- 6A. *Do.* Survey at extreme up to Tennair tank.
7. *Do.* Sections of Tennair bund.
8. *Do.* Section of north branch of Madugu.
9. *Do.* Sections of south branch of *do.*
10. *Do.* Sections of northern and southern channels of the project.
11. *Do.* Working section, south channel.
12. *Do.* Working section, north channel.

CHINGLEPUT,
22nd June 1870.

ent, F.
il 1875.

constructed as in north channel, and similarly

ank for direct irrigation from channel, viz.,
mmapuram (2); these two latter will be
must cross the Soorappen road. The
ryots.

provided, covered.

oor with small branch channels into
d no provision made for the obstruction

in the anicut channel water independently.
road at the crossing.

hour channel originally estimated, it being short

at any subsequent period. These were entered

head sluice for regulating supply to Athoor, not

sluice N to be excavated by ryots, and eventually
intervals for direct irrigation from the channel,

ram will depend largely on the sluices O and T

el for its crossing as provided in original scheme.
nel crossings; (20) to be provided with aqueducts

th side, by leading from Kureevambadoo tank
continuing the channel on left bank of Madugu
very large tank indeed, and which by the supply
4 and 5,000 Rupees extra revenue. It will be
observed that the Kureevambadoo tank is greatly favored by the north channel; from it very large supplies may be taken off for Chingleput and Kalatur. The Chingleput tank needs filling on sanitary grounds alone, as the bed in dry weather emits foetid gases, which are any thing but desirable to the inmates of the large jail in Fort and the several courts and cutcherries located therein. Otherwise the tank is already well supplied to serve the lands thereinunder.

(Signed) S. OTTMANN,
Sub-Engineer, D.P.W., No. 3 Range, Madras.

From H. E. STOKES, Esq., Acting Collector
MOBERLY, R.E., District Engineer
No. 407.

REFERRING to your No. 1,840, dated
Barlow, not satisfied with the report
Collector for his opinion, and I now be
will see that, as surmised by you, in
Madugu Project. I regret that, in a
egregious mistake, but have requested
stupidity.

No. 2

Note by the Ch

No. 392C.

IN G. O., No. 3,811, of the 30th N
Rupees 9,000, was sanctioned for the Nee
being the construction of a dam or anicu
channel from the Tennair tank and falls
right bank (north and south) channels for
to carry out the works, it was found that
and a revised scheme was prepared, but

Proceedings, Madras Government, 29th March
1870, 5th page, 1st item of statement of
O. C.

items included in the statement, and the
did not attract attention, though in the
Engineer's attention was drawn to the fact
been sanctioned.

2. In November 1872 an application
neer, 4th Division, for the sanction of a sum of
for land taken up for the project, and then the
inquired into.

3. It now appears that the

* 1870-71, Rupees 873.
Later " 1,344.

Acting Sub-Collector's letter, No. 407, 16
October 1874.

scheme was prepared upon inadequate a

Vide Report.

answer, and that Colonel Moberly was
outlay already incurred could be turned to
been received, and it appears to be desirable
this project at present stands, that erroneous entries in the accounts should be corrected,
and that those whose lands have been taken up should be either paid for them, or, as

† Acting Sub-Collector's No. 662, 24th Decem-
ber 1873.

nt, Public Works Department,
1875.

he Chingleput District, to Colonel F. J.
eput, dated Sydapet, 16th October 1874.

t, I have the honor to state that Mr.
ferred the matter to the Acting Sub-
r, dated 5th instant, from which you
has been derived from the Neenjal
he Tahsildar should have made such
mand him for his carelessness and

B.
Engineer for Irrigation.

ber 1866, an estimate, amounting to
Madugu Project, the work to be done
ss the Madugu, which is the surplus
Palar near Chingleput and of left and
apply of certain tanks. On proceeding
re revision of the scheme was necessary,
r submitted for sanction, although in
ss of the original estimate of Rs. 9,000,
e than as much again had been spent.
he order just quoted, the Controller
authorized to pass the objectionable
expenditure on this project thereafter
against the item the Superintending
that the supplemental estimate had not

as made by the Superintending Engi-
Rupees 1,800 on account of compensation
the facts connected with the scheme were

the incurred has produced no results in
sion of irrigation and increase of
ue, and that the entries* of returns
aded in the statements of remunera-
works are erroneous; that the original
incorrect data; that it is very doubtful
her the much larger project investi-
by Mr. Sub-Engineer Ottmann would
ctober last, able to state whether the
unt. Since then no further report has
e that Government should know how
exception of the proprietors of three huts,
willing to receive back their lands, have
the lands returned to them.

Proceedings of the Mac

4. It will be seen that C
mising, and a perusal of Mr. Ot
therefore, that the Superintend
retransfer of the land, and to su
will still need to be paid.

CAMP AT BOOCHIREDDYPOLEEM,
3rd March 1875.

No. 393.

ORDER THERE

IRRIGATION, No. 43.

Rupees 9,000 was sanctioned in 1866
of 18,000 Rupees had been expend
sanctioned, or submitted for sanction
there is but very little probability of
for the outlay that would be requir
appears to be little or none available
is required; the country also is E
which would involve numerous m
they carry.

2. Under these circumstances
altogether, to retransfer to their ow
pay to them such compensation as r
latter should be prepared and submit

3. In thus deciding upon the
Governor in Council cannot but notice
by the officers both of Revenue a
mendations the scheme in the fir
Banbury, the Acting Collector of Mac
and Colonel Boileau, the Su

To the Superintending Engineer, Chin
" Chief Engineer for Irrigation.
" Revenue Department.
" Collector of Chingleput.
" Controller of Public Works Accounts

Exd. A. Grubert.

20 Spare Copies

rs the project altogether unpro
s this view. It is recommended,
be instructed to arrange for the
all for settling what compensation

N MULLINS, Lieut.-Col., R.E.,
Chief Engineer for Irrigation.

5, No. 1,048.

THE Government are of opinion that
e foregoing papers show that the Neenjal
adugu Project, for which an estimate of
which up to November 1869 upwards
out any revised estimate having been
very imperfectly investigated, and that
lification of it securing adequate results
water-supply is unreliable, and there
seasons of heavy rainfall when none
idation, and is traversed by channels
s for the passage of the water which

o be advisable to abandon the scheme
ands taken up for the project, and to
own to be reasonable. A bill for the
n as possible.

ment of this project, His Excellency the
dissatisfaction the want of care exhibited
Public Works Departments, on whose recom
mentioned. These officers were Mr.

M. Cockerell, Collector in 1866,
Division, since deceased.

Colonel, R.E.,
Secretary to Government.

THE SUPERINTENDENT

CHINGLEPUT

to the

Dated April 15th.

Issued

Rs. 27.30/-

Recd.

Encl.

G. O., 15th April 1875, No. 1,048.

APRIL

Nos. 392-393

Nenjal Madugu Project, Chingleput District.—Passing orders on Note by the Chief Engineer for Irrigation respecting the —.

4903

Comm. to the
Board of Revenue

1. May 75

14. Feb. 1875. To Secy. to Govt. of Madras