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MADRAS RECORD OFFICE.

Government of Madras.

Financial DEPARTMENT.

G.O. No.	2534	Press / Mis.
180-184		183-184
Dated	31-12-	1875.

36/37

Not to be folded or roughly handled

East Coast Canal.

Read the following papers:—

No. 585.

No. 183. Memorandum in the Public Works Department, on Proceedings in the Revenue Department, dated 1st September 1875, No. 1850, dated Ootacamund, 24th September 1875.

Proceedings of Government in the Revenue Department.

Read Proceedings of the Board of Revenue, dated 23rd August 1875, No. 7683 (Miscellaneous).

Read Proceedings of Government, Revenue Department, dated 22nd July 1875, No. 1533, referring to the Board of Revenue for report as to whether the further grant applied for the East Coast Canal extension in Nellore can be made.

No additional grant can be made from Canal Funds. The Canal extension, however, is being carried out from Provincial Funds over which the Board have no control.

(True Extract.)

(Signed) H. E. STOKES,
Acting Secretary.

Order, 1*st September* 1875, *No.* 1850.

Communicated to the Financial and Public Works Departments.

(True Extract.)

(Signed) LORNE A. CAMPBELL,
Under Secy. to Govt., Rev. Dept.

Referred to the Financial Department, with notes of Members of Council, with a view to provision of funds, if possible, for the prosecution of this urgent work; and for report as to the position of the Canal Funds.

OOTACAMUND, (Signed) G. W. WALKER, Major-General, R.E.,
29*th September* 1875. *Secretary to Government, P.W.D.*

No. 2127.

These papers will be referred to the Board of Revenue for their opinion whether the Canals Act may not be applied to the East Coast Canal, and the extension and improvement of the Canal carried out from the "Canal Ferry Fund."

(True Extract.)

FORT ST. GEORGE, (Signed) D. F. CARMICHAEL,
30*th October* 1875. *Officiating Chief Secretary.*

No. 183-A. Proceedings of the Board of Revenue, dated 20th November 1875, No. 3158.

Read the following Proceedings of the Madras Government, dated 30th October 1875, No. 2127, Financial Department:—

ABSTRACT.—Referring to Board certain papers relating to the East Coast Canal extension, and requesting their opinion whether the Canals Act may not be applied to the East Coast Canal, and the extension and improvement carried out from the Canal Ferry Funds.

THE funds raised from the traffic on the Cochrane's and Sadras Canal are already fully utilized in the maintenance of the canals and cannot provide any surplus from which the extension works can be carried out.

2. It would not, the Board believe, be possible to raise, by extending the Canals and Ferries Act to the Cochrane's Canal, a larger revenue from the traffic than is now obtained; and the sole object of the suggestion made by Government apparently is, that they may be enabled to provide for the extension of the canal northwards from the surplus funds which have accrued under the Act in the districts in which it has already been brought into force.

3. Though the Act expressly provides that Government shall be at liberty to expend the surplus of the fund elsewhere than in the districts in which it has accrued, the Board are most strongly of opinion that the principle is unjust, and that before funds raised in a district are diverted from it, it should be conclusively shown that they cannot possibly be utilized within it.

4. This is not the case at present. The existing surplus belongs chiefly to the districts of Godavery and Tanjore, and suggestions have been made by the Collectors of both districts for utilizing the money within them on projects of great public benefit. The proposal of the Collector of Godavery for the construction of a canal from the Kovur Lock to Pennaguduru has been submitted to Government in Board's Proceedings, dated 28th October 1875, No. 2983. They have also approved of a suggestion of the Collector of Tanjore that the surplus of that district should be spent in straightening a tortuous portion of the Vedarniem Canal, whereby the navigation and drainage will be much improved; and an estimate has been called for, for submission to Government.

5. The surplus of the Canal and Ferry Fund would not go far towards the completion of a work of such magnitude as the East Coast Canal extension; and some other method of providing for it must still be sought; and, believing that the proposed application of the money would be unjust, the Board beg to protest against it.

(A true Copy and Extract.)

(Signed) H. E. STOKES,
Acting Secretary.

No. 184. ORDER THEREON, 31st December 1875, No. 2534.

Communicated to the Public Works Department.

Proceedings of the Madras Government, Financial Department,
31*st December* 1875.

2. The Governor in Council concurs in the Revenue Board's opinion as to the inexpediency of extending the Canals Act to the East Coast Canal, and the state of the Provincial finances does not allow of any special grant of funds at present for the extension of the communication.

(True Extract.)

Chief Secretary.

To the Public Works Department.
,, Board of Revenue.
,, Revenue Department.

Exd. J. Wright.

No. 394. Read the following letter from R. SMITH, Esq., Officiating Superintending Engineer, Nellore, to Lieutenant-Colonel J. MULLINS, R.E., Officiating Secretary to Government, Public Works Department, dated Nellore, 1st June 1875, No. 23 :—

WITH reference to G. O., No. 1,414, dated 21st May 1875, animadverting on my reply to G. O., No. 814, of 23rd March 1875, I beg to express my regret that, owing to a misunderstanding on my part, I confined my observations to the query as to how the present rate of progress on the East Coast Canal could be more than doubled, without interfering with the other important works in the district.

2. During the current official year, I purpose working on two new sections, and I estimate that the expenditure on these will amount to Rupees 35,000, in addition to the allotment of Rupees 25,000,* sanctioned in the Provincial Budget of 1875-76 for the extension of the canal north of the Kundalairu. Annexed are the details of the contemplated expenditure :—

* Item No. 75 of Provincial Budget of 1875-76.

	Rs.
On reach between Kundalairu and Pennair	50,000
On reach between Pennair and Chippalairu...	10,000
Total ...	60,000
Deduct.	
Grant in Budget for reach between Kundalairu and Pennair ...	25,000
Additional sum wanted for expenditure in 1875-76...	35,000

3. The total outlay on the extension of the East Coast Canal in 1875-76 will, therefore, be as follows :—

†Item No. 74 of Provincial Budget of 1875-76.

	Rs.
On reach south of the Kundalairu	† 25,000
On the two reaches between the Kundalairu and the Chippalairu	60,000
Total ...	85,000

No. 395. ORDER THEREON, 18th June 1875, No. 1,716.

CIVIL WORKS, No. 44.

COMMUNICATED to the Financial Department in connection with G. O., No. 814, dated 23rd March 1875, with a view to a further grant, if possible, being made for the East Coast Canal extension either now or later in the year.

Proceedings of the Madras Government, Public Works Department,
18*th June* 1875.

2. The District Engineer, Nellore, will take care to report in due course the probable date by which the funds now at his disposal will be expended.

(True Extract.)

(Signed) J. O. HASTED, Major, R.E.,

Offg. Joint Secretary to Government.

To the Financial Department.
„ District Engineer, Nellore.

Order in the Financial Deptt 30th June 1875 No 189

Communicated to the Revenue Deptt

/True Extract/

/signed/ Charles Maclean

Ag Under Secretary

To

The Revenue Department

Exd. E. C. Shunker.

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Govt. of Madras.

PUBLIC WORKS.

To

THE FINANCIAL DEPARTMENT

&c., &c., &c.

Dated June 18th.

Issued

Recd. Encl.

G. O., 18th June 1875, No. 1,716.

JUNE.

Nos. 394-395

East Coast Canal.—Passing orders on the letter of the Officiating Superintending Engineer, Nellore, reporting on the proposed work and allotment for the — during the current year.

Proceedings of the Madras Government, Public Works Department,
21st May 1875.

No. 398. Read the following letter from R. SMITH, Esq., District Engineer, Nellore, to Colonel G. W. WALKER, R.E., Secretary to Government, Public Works Department, dated Camp at Doogarazapatam, 4th May 1875, No. 10 :—

With reference to that part of paragraph 3 of G. O., No. 814, dated 23rd March 1875, directing me to state the most expeditious way of completing the East Coast Canal, from the Kundalairu to the Kistna frontier, without interfering with the progress of the other important works in the district, I have the honor to report that I consider all the available local labor should be utilized by working simultaneously on the different sections, and that endeavours should be made to supplement the Nellore parties by employing all the spare labor procurable in the adjoining districts.

2. For the reach of the canal between the Kundalairu and the Pennair extra labor will, I think, be obtained in Chingleput, and for the more northern sections the labor markets of Cuddapah and Kurnool will principally be drawn upon.

No. 399. Order thereon, 21st May 1875, No. 1,414.

CIVIL WORKS, No. 25.

The vagueness of this report is unsatisfactory. The District Engineer will be expected to state precisely what work he is prepared to take up and carry out this year and what additional funds he will be able to spend.

(True Extract.)

(Signed) J. O. HASTED, Major, R.E.,
Offg. Joint Secretary to Government.

To the District Engineer, Nellore.

Exd. S. T. Austin.
Spare Copies

Referred to the Board of Revenue for report as to whether the proposed additional pay can be made

25th July/75.

Assistant Secretary

Secretary

The Board of Revenue

No 1533

Govt. of {1875} Madras.

PUBLIC WORKS.

To

THE DISTRICT ENGINEER,

NELLORE.

Dated May 21*st*.

Issued

Recd. *Encl.*

G. O., 21st May 1875, No. 1,414.

MAY.

Nos. 398-399

East Coast Canal.—Passing orders on the Nellore District Engineer's report on the expeditious way of completing the — from Kundalairu to Kistna frontier.

Proceedings of the Madras Government, Public Works Department,
23rd March 1875.

No. 559. Read the following letter from R. SMITH, Esq., District Engineer, Nellore, to Colonel G. W. WALKER, R.E., Secretary to Government, Public Works Department, dated Nellore, 8th February 1875, No. 108 :—

I HAVE the honor to forward, by banghy,* the survey and sections of the reach of the East Coast Canal between the Kundalairu and the Pennair, a distance of miles 24·217, and to submit an estimate, amounting to Rupees 2,74,000, for the construction of that line of navigation. The rates proposed have been fixed with reference to those allowed for, and prevailing on, the portion of the canal now under execution, and I have to add that I believe them to be ample, but by no means excessive, as working on this line is occasionally very difficult and discouraging.

4 Estimates.
1 Specification.
* 27 Drawings.

2. The alignment of the canal, proposed in these papers, differs but little from that contemplated by Lieutenant (now Colonel) Chambers, R.E., 19 years ago. Two modifications only are really deserving of notice, and these I will now briefly refer to. The first is near the mouth of the Kundalairu ; the second is within the limits of the village of Koratoor. Colonel Chambers intended making the Kundalairu the line of navigation between the points marked A and B on the accompanying sketch map, but I am not disposed to recommend that arrangement, as I consider it would be difficult to preserve a good navigable passage in the vicinity of C, as that outlet is apparently silting up. Another objection to utilizing that reach of the Kundalairu is its proximity to the bar, and the consequent risk that boats would be exposed to during high floods in that river. I therefore propose taking off the canal from the left bank of the Kundalairu at the point marked D. This alignment will be rather more expensive in the first instance than Colonel Chambers', and it will entail the maintenance of a ferry in the line of the Kistnapatam road ; but I am convinced the modification is very necessary if any approach to a first-class line of navigation is contemplated. At Koratoor I consider the canal should be taken more inland, than originally intended, to avoid the drift sand. In selecting the line, on the east of the bungalow on the Koratoor beach, Colonel Chambers had apparently two objects in view—the preservation of direct communication between the village and the bungalow and the conservation of the adjacent wet lands. The former I propose to provide for by a ferry boat on the canal, and with reference to the latter it was no doubt desirable, some years ago, to forego many advantages rather than interfere with wet cultivation ; but at the present time, with a supply of water available for the whole Pennair Delta, I think a few acres of rice land may be taken up for an important communication without much compunction or inconvenience.

3. In connection with the arrangements for navigation, in the vicinity of Kistnapatam, the reach of the Kundalairu, from D to E, will be most useful for the Nellore heavy traffic, as it is navigable at *all* seasons.

4. It will be observed that the proposed line joins the main or southern mouth of the Pennair not far from the bar ; this is objectionable, but it is the only suitable junction. In fact, I think it would be impossible to find another that could be kept open for navigation without a heavy expenditure annually.

5. In deciding on the alignment of the canal it was necessary, in parts, to avoid the cheapest line, and to select one less likely to be silted up by the local

drainage, or by the drift sand. The sand hills for some distance, north and south of the village of Kistnapatam, are reported to be advancing at the rate of two or three yards annually, and I thought it absolutely necessary to leave a considerable margin between them and the canal. North of Cheanapillypalem the sand hills are comparatively low, and mostly covered with vegetation, and as I believe they will not give trouble or add to the working expenses of the canal, it has been set out rather close to them, where the adjoining ground is favorable.

6. As there are only a few hamlets on the east of the canal, and as the traffic on the three existing roads will, practically, begin or end at the canal, as the case may be, I do not consider bridges of any kind necessary over this section of the line. Ample provision has, however, been made in the estimate for ferry boats capable of carrying cattle and bandies across the canal at all seasons. The wheeled traffic is so very limited in those parts that, with one exception, it is scarcely deserving of notice; but, as before stated, arrangements have been made for maintaining speedy communication between the narrow strip of land on the east of the canal and the villages on the west of it. The exception alluded to is the Kistnapatam road, on which there is a moderate traffic, to the small port of Kistnapatam; but the trade to that port by *sea* going boats will be so very much reduced if it does not cease altogether, after the opening of the canal, that a ferry boat of the description proposed would more than suffice to meet the probable future requirements of the traffic intended for that particular route.

7. The bars between the Kundalairu and the Pennair, in the immediate vicinity of the proposed canal, are so small, and so very seldom open, that they will not interfere with the navigation to any appreciable extent.

8. To prevent silting as much as possible, provision has been made in the estimate for keeping the bulk of the local drainage out of the cuts forming the canal between the several backwaters. The drainage will in all cases, except where the configuration of the country is favorable for admitting it into the artificial reaches of the canal, be carried parallel to them and discharged into the nearest, or most convenient, backwater.

9. Compensation has been allowed in the estimate for the wet cultivation on the east of the canal, as the area is too small to justify the expenditure that would be necessary to construct the required irrigation syphons.

10. In conclusion, I have to state that I very much regret the delay that has occurred in submitting the accompanying papers; endeavours were made to despatch them sooner, but press of work, ordinary and extraordinary, materially interfered with their preparation.

No. 560. ORDER THEREON, 23rd March 1875, No. 814.

CIVIL WORKS, No. 29.

WITH the above letter the District Engineer of Nellore submits an estimate of Rupees 2,74,000 for extending the East Coast Canal from the Kundalairu river, near Kistnapatam, to the Pennair river below Nellore, a distance of 24¼ miles. The section of canal extension already in hand from Doogarazapatam to Kistnapatam on an estimate of Rs. 2,87,000, sanctioned in G. O., No. 274, of 28th January 1873, is 20¾ miles in length. The

rates for earthwork in the latter estimate ranged from 1½ to 6 Annas per cubic yard, while those of the present estimate range from 1¾ to 5½ Annas; an extra allowance of 3 Pies per cubic yard for sectioning the banks being made in both estimates.

The charges for providing intercepting drainage channels, for compensation, and for superintendence and sundries, are higher than before; so that it would appear on the whole that the working rates do not exceed those estimated, and that actual experience gives reason to believe that a mileage rate of Rs. 12,500 will not be exceeded, which for the entire length of 126 miles, between Doogarazapatam and the Kistna District, gives a total of 15¾ lakhs.

2. The deviations from the line of canal originally proposed appear to be justified by the reasons given by Mr. R. Smith. He proposes to dispense with bridges over the canal and to provide ferry boats only at Kistnapatam, Kottapalem, Nalatoor, Idaru, Kantopilly, Koduru, Venkanapalem, Koratoor, Mypaud and Pallipalem; also to dispense with irrigation syphons for maintaining such cultivation as exists between the canal and the sea, on the ground of their expense being disproportionate to the amount of cultivation concerned. It may be found necessary hereafter to modify those views in part as the work proceeds; and the Collector will be instructed, in the Revenue Department, to investigate each case in time, and to report if he considers that its requirements have not been fully met.

3. As remarked in paragraph 3, there is reason to suppose that the entire cost of extending the East Coast Canal to the Kistna District will be about 15¾ lakhs. Of which, assuming 2¾ lakhs as spent up to the end of 1874-75 and ¾ lakhs as the rate of annual outlay (both sums being overstated), it will take upwards of 17 years to complete so much of the project; after which there may still remain few miles to connect Madras with the navigable canals of the Kistna and Godavery. No adequate return, either direct or indirect, can be expected till such connection shall have been made. It is therefore expedient, on financial considerations alone, to proceed with the work, at least at double the rate of progress above mentioned. And the District Engineer will report in what manner such rate of progress may be attained without interfering with the other important works of the district; whether by concentration of more labor on the sections already surveyed and estimated, or by taking in hand, as fast as they are laid out, other sections with labor drawn from fresh sources. The District Engineer of the Kistna is likewise called on to report the extent of work that has to be planned and estimated for in his district.

(True Extract.)

(Signed) G. W. WALKER, Colonel, R.E.,
Secretary to Government.

To the District Engineer, Nellore.
,, ,, Kistna.
,, Controller of Public Works Accounts.
,, Revenue Department.
,, Financial ,,

Exd. S. T. Austin.

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PUBLIC WORKS.

To

THE DISTRICT ENGINEER, NELLORE.

Dated March 23rd.

Read.

Rect.

MARCH.

Nos. 559-560

East Coast Canal.—Passing orders on an estimate of Rupees 2,74,000 for extending the —, from the Kandaleiru river near Kistnapatam to the Pennair river below Nellore.

Special Funds.

No. 162. Read the following Proceedings of the Board of Revenue, dated 4th February 1875, No. 256 :—

The Board resolve to submit, for the approval of Government, a Statement showing the Districtwar particulars of the estimated Receipts and Charges of the Special Local Funds under their control for 1875-76. An abstract of the statement is given below :—

Funds.	Balance expected at the beginning of the year.	Estimated Receipts of the year.	Total.	Estimated Charges.	Balance.
	Rs.	Rs.	Rs.	Rs.	Rs.
Jungle Conservancy	1,38,690	1,48,720	2,87,410	2,06,670	80,740
Cattle Pound...	27,000	2,17,980	2,44,980	2,27,020	17,010
Nanul Grass	12,100	8,320	20,420	15,400	5,020
Village Service	13,04,460	20,70,530	33,74,990	19,35,250	14,39,740
Endowment	8,100	3,750	11,850	3,750	8,100
Public Bungalow	...	440	440	440	...
Irrigation Cess	11,000	23,300	34,300	26,500	7,800
Canal and Ferry	62,460	31,000	93,460	15,550	77,910
Cochrane's and Sadras Canal ...	...	42,000	42,000	40,600	1,400
Total...	15,63,810	25,45,990	41,09,800	24,71,480	16,38,320

2. The bare receipts of the Jungle Conservancy Fund for 1875-76 are estimated at Rupees 1,48,720 against Rupees 1,43,700, the estimate for the current year.

3. The total assets of the Fund including the balance amount to Rupees 2,87,410, and the proposed expenditure is Rupees 2,06,670, leaving a balance of Rupees 80,740. As in the current year's Budget, the largest balances occur in the Nellore and Salem Districts. The Collector of the latter district remarks that as the expenditure of the year exceeds the receipts, and as "it will be some six or seven years before the young trees now planted can be left to take care of themselves, it is necessary to retain a large balance which will be gradually absorbed." The expenditure in the district is Rupees 30,060 against an estimated income of Rupees 25,000. The Nellore Estimate provides for the absorption of Rupees 33,210 from the balance reducing it to Rupees 36,790.

4. The Collector of Cuddapah allotted in his Budget Rupees 5,049 for expenditure, while the available assets amount to only Rupees 3,500. The Board have reduced the allotment to the latter sum.

5. The Collector of Kurnool represents that, owing to the reduction of the rates of seigniorage, the Jungle Conservancy Fund of his district is estimated to yield Rupees 2,850, which sum is insufficient to maintain the existing topes, while the establishments cannot be reduced for one or two years more, as the plants are still young. He, therefore, requests sanction for the transfer of Rupees 2,000 from the Surplus Pound Fund. The Board think that, under the circumstances, the proposed transfer of funds may be allowed. In that case a deduction of Rupees 1,000 must be made in the Local Fund Budget, submitted with Board's Proceedings dated 24th November 1874, No. 3390.

6. The Collector of Bellary solicits sanction for the entertainment of a Clerk on Rupees 20 a-month to carry on the business connected with the Special Funds. The Collector will address the Board separately on the subject.

7. The Collector of North Arcot observes that the detailed Jungle Conservancy Fund Budget for the current official year not having yet been sanctioned by Government, most of the new topes provided for therein have not been commenced as yet. From the Board's review of the Budget, and Board's Proceedings, 8th October 1874, No. 2932, and the statements therewith issued, Mr. Whiteside ought to have known that there was nothing to prevent the commencement of the formation of new topes.

8. The Collector of Madura reports that there is no means of deriving any income for the Nanul Grass Fund of his district, as nearly the whole of the grass planted in the bed of the Vigay River has been cut, and as it was thought advisable to allow time for its regrowth. It being necessary to maintain an establishment of watchmen to keep up the existing Nanul plantations, as well as to look after the bamboos and Casuarinas already planted along the banks of rivers and channels, and as there are no funds available for the purpose, the Collector suggests that Rupees 500 may be transferred from the Surplus Pound Fund of the district. The Board support the suggestion.

9. The Collector of the Godavery District has proposed no expenditure from the Village Service Fund and the Canal and Ferry Fund, pending orders of the Board on his letters as per margin, which contain proposals for the utilization of those funds. The Board have since passed orders on the references made, but they fail to see why the Collector has not entered in the Budget the usual annual charges to be met out of the two funds. The omission has been supplied in this office by taking the average of the actuals and the proposed expenditure for the past two and current years.

Dated 30th October 1874, No. 387.
,, 26th November ,, ,, 438.
,, 5th December ,, ,, 452.

10. The expenditure proposed from the Village Service Fund of the Kurnool District includes a sum of Rupees 1,12,000, of which Rupees 1,00,000 is for Village Choultries, the construction of which was sanctioned in G.O., Revenue Department, dated 9th July 1873, No. 707, and the remainder, Rupees 12,000,* is the contribution to Local Funds, for which credit has been taken in the Kurnool Circle Budget for 1875-76, which is now before Government.

* *Vide* paragraph 5 of Board's Proceedings, dated 24th November 1874, No. 3390.

Proceedings of the Madras Government, Financial Department,
12th February 1875.

11. The Board have omitted from the Budget under the Endowment Fund the transactions of the charitable tank at Muthialumpaud, in the Palnad taluq in the Kistna District, because the tank is to be made over to the Guntoor Local Fund Board from 1st April next, as will be seen from a separate Proceedings on the subject.

12. A statement showing the particulars of charges proposed to be incurred out of the Cochrane's and Sadras Canal Fund is also herewith submitted. The total proposed expenditure is Rupees 40,600, classified as follows:—

	Rs.
New Works	4,100
Repairs	24,100
Cost of Supervision at 25 per cent. on the Expenditure	7,050
Establishment and Contingencies	5,350
Total ...	40,600

13. In their Order, Public Works Department, dated 9th September 1874, No. 2561, the Government authorized the District Engineer, Nellore, to proceed with the construction of a boat for the use of the Range Officer in charge of the East Coast Canal in the Nellore District, in anticipation of the allotment of funds. The Collector of Chingleput now informs the Board that funds are not available this year for the work, and requests that the necessary provision may be made in the present Budget. The Board, however, have made no provision with reference to the G.O., Public Works Department, dated 19th December 1874, No. 3590-A, in which it is suggested that one or both of existing Northern or Southern Canal Boats be taken in lieu of the proposed new boat.

(A true Extract.)

(Signed) H. E. STOKES,
Acting Secretary.

ENCLOSURE No. 1.

ABSTRACT.—Copy of Estimate of Works to be executed out of the Cochrane's and Sadras Canal Fund during 1875-76.

ENCLOSURE No. 2.

ABSTRACT.—Abstract Statement of Receipts and Charges estimated on account of Special Local Funds in the several Districts of the Madras Presidency during 1875-76.

No. 163. ORDER THEREON, 12th February 1875, No. 308.

The abstract statement embodied in the foregoing Proceedings of the Board of Revenue shows in one view the estimated receipts and charges for the year 1875-76 of the nine Special Funds under the Board's control.

2. The aggregate estimated receipts of the nine funds amount to Rupees 41,09,800, and the charges to Rupees 24,71,480, leaving a balance of Rupees 16,38,320, *viz.* :—

—	Receipts including probable balance on the 1st April 1875.	Charges.	Probable Balance.
	Rs.	Rs.	Rs.
Jungle Conservancy	2,87,410	2,06,670	80,740
Cattle Pound	2,44,930	2,27,320	17,610
Nanul Grass...	20,420	15,400	5,020
Village Service	33,74,990	19,35,250	14,39,740
Endowment...	11,850	3,750	8,100
Public Bungalows	440	440	.....
Irrigation Cess	34,300	26,500	7,800
Canal and Ferry	93,460	15,550	77,910
Cochrane's and Sadras Canal	42,000	40,600	1,400
Total ...	41,09,800	24,71,480	16,38,320

3. *The Jungle Conservancy Fund.*—The charges under this fund provide for formation and maintenance of plantations, and for controlling establishment in the Board's Office, and are thus distributed :—

		Rs.
To be incurred by Revenue Department		1,98,920
Do. by Public Works Department	4,620	
Do. do. for Supervision ...	1,150	
		5,770
Cost of Controlling Establishment		1,980
Total ...		2,06,670

Compared with the estimate for the current year there is a decrease in the charges to the extent of Rupees 47,981, while there is an increase in the receipts of Rupees 5,020. The Board notice the large balances (Rupees 53,170 and Rupees 30,060) in the districts of Nellore and Salem. The balances in the districts of—

	Rs.
Kistna	13,780
North Arcot	11,340
South Arcot	10,540
Coimbatore	15,590, and
Nilgiris	11,340

are also large, and arrangements should be made for utilizing them. The reduction of the allotment in Cuddapah, and the addition to that of Kurnool from the Surplus Pound Fund, of Rupees 2,000, are approved as a special case. Orders were passed on the Board's Proceedings, dated 24th November 1874, No. 3390, on the 22nd January 1875, No. 103; the Board will therefore make the deduction of Rupees 1,000, which they propose, in the Local Fund Budget.

4. It is observed that orders were passed by Government on the detailed Jungle Conservancy Fund Budget for 1874-75, on the 29th October 1874, No. 1851.

5. *The Cattle Pound Fund.*—The receipts and charges fall short of those for the current year, but the probable balance is about the same. The charges provide for—

	Rs.
Pound Fund Establishment	1,12,250
Transferred to Local Fund and Government Farm	1,15,070
Total ...	2,27,320

The precise amount transferred to the Government Farm has not been shown: it is desirable that this should be done by a note at the foot of the general abstract statement. The largest balance, Rupees 5,480, is in the Madura District.

6. *The Nanul Grass Fund.*—The estimated receipts are nearly the same as in 1874-75, but the charges are larger by Rupees 6,500; the probable balance at the end of 1875-76 is, therefore, less than that at the close of the year 1874-75. The transfer from the Pound Fund to this Fund, in the Madura District, of Rupees 500, is approved as a special case.

7. *The Village Service Fund* shows a probable balance of Rupees 14,39,740 or Rupees 1,35,280 above the opening balance. The utilization of this large balance is at present under the consideration of Government in the Revenue Department. The expenditure proposed to be incurred in 1875-76 is in advance of the estimate for 1874-75 by Rupees 1,76,050. In the allotment* for the Kurnool District is included Rupees 1,12,000; for village choultries (Rupees 1,00,000) and for contribution to the Kurnool Local Fund Circle on account of elementary education (Rupees 12,000). Orders on the Circle Budget were passed on the 22nd January 1875, No. 103.

* Rupees 4,72,000.

8. *The Endowment Fund.*—The receipts and charges are less than those for 1874-75. The balance is expected to be about the same as the opening balance.

9. *Public Bungalows.*—The receipts and charges which amount to Rupees 440 respectively appertain to the Travellers' Bungalow at Pothanore, which is self-supporting.

10. *The Irrigation Cess Fund* opens with a larger balance than was anticipated, but the estimated receipts for 1875-76 are not more than in 1874-75. The estimated charges of Rupees 26,500 are to be incurred in the following districts :—

	Rs.
Trichinopoly	12,300
Madura	700
Coimbatore	13,500
Total ...	26,500

11. *The Canal and Ferry Fund* relates to the three districts of Godavery, Kistna, and Tanjore. The estimated receipts are larger than in 1874-75, but the

charges are less, the result being that the fund is expected to close with a balance of Rupees 77,910 against an opening balance of Rupees 62,460. It will be considered by the Board of Revenue and the Public Works Department whether the large balance of Rupees 62,160 in the Godavery District, and the balance of Rupees 13,000 in the Tanjore District, cannot be utilized for some canal connected with the general scheme of canals in those districts.

12. *The Cochrane and Sadras Canal Fund* belongs exclusively to the Nellore and Chingleput Districts. The fund opens without a balance. The estimated receipts are Rupees 18,300 below the estimate for 1874-75; on the other hand the charges which amount to Rupees 40,600 exceed the grant for that year by Rupees 2,340. They are distributed as follows:—

	Districts.	
	Chingleput.	Nellore.
	Rs.	Rs.
New Works	500	3,600
Repairs	14,000	10,100
Public Works Supervision	3,630	3,420
Establishment and Contingencies	4,690	660
Total ...	22,820	17,780

13. Inquiry will be made in the Public Works Department whether the percentage of charge for the supervision of such petty works as are required in this canal should bear the same proportion as for works requiring greater skill.

14. The estimates are sanctioned as submitted by the Board of Revenue.

(True Extract.)

Acting Chief Secretary.

To the Board of Revenue.
,, Accountant-General.
,, Revenue Department.
,, Public Works Department.

Exd. J. Wright.

Govt. of 1875} 30 Works.

FINANCIAL.

To

THE BOARD OF REVENUE,

&c., &c., &c.

Dated February, 12th.

Read.

Read.

G.O., 12th *February* 1875, *No.* 303.

FEBRUARY.
Nos. 162-163.

Special Local Funds.—Orders passed on the Abstract Budget Estimate submitted by the Board of Revenue of Receipts and Charges of these funds during 1875-76.

Proceedings of the Madras Government, Public Works Department,
28th January 1873.

Read the following papers:—

No. 560. From the Superintending Engineer in charge of 4th Division, to the Secretary to Government, Public Works Department, dated Madras, 30th August 1870, No. 2,236.

I HAVE the honour to forward three plans, specification, and estimate, amounting to Rupees 2,87,000, for the extension of the Eastern Coast Canal northwards from Doogarazapatam to Kistnapatam, called for in paragraph 4 of Government Order, No. 2,735, dated 20th August 1869. The plans now submitted show a survey and longitudinal section of the canal, a sketch of the lines of proposed canal which have been selected from time to time by the officers in charge of the navigation, and a drawing of the two masonry bridges proposed to be erected.

3 Plans.
1 Specification.
1 Estimate.

2. In the order above quoted, an estimate, amounting to Rupees 1,88,210, for the portion of canal from Doogarazapatam to the end of the Siddaveram tank beyond the Soornamooky river, a distance of 11¼ miles, was returned in order that the cost of the entire extension of the canal might be incorporated in one estimate. This estimate is now submitted, and it will be seen that the sum total is much below the probable amount* which the canal was expected to cost by the late Executive Engineer in charge, Mr. Fraser.

* Rupees 4,11,606.

3. The cost per yard for the excavation of the canal would, at first sight, appear excessive, but Captain Hasted, R.E., who prepared and submitted the estimate, points out that it is proposed to excavate such a section as will admit of 4½ feet of water below mean tide level, to which depth the canal has been already excavated for the length of nine miles from Doogarazapatam to Siddaveram village by Mr. Fraser. The cost likewise of baling water is a very heavy item to be added to the rate for excavation. I observe also that Mr. Fraser's rates are higher than those allowed for by Captain Hasted, and which he states are the same as those paid for the actual work already carried out. The estimate is prepared on different data for every yard of cutting, and whilst the original rate was 1½, 4, and 6 annas per yard for the first, second, and third yard in depth of cutting, the rate now allowed for the work to be carried out is 1¾, 3½, and 4 annas per yard. There are two masonry bridges to be built at a cost of Rupees 3,860 each. Though there is no cart traffic near the canal, the villagers require the means of crossing it when the water level is high, in order to carry on their cultivation.

4. The first portion of the estimate allows for the actual cost of the work as carried out, and forms four out of the nine divisions into which it has been divided by Captain Hasted. The section was made so that the side slopes were kept 3 to 1, but owing to the very loose nature of the soil, which consists almost entirely of sand, the banks at this inclination have not withstood the action of the current and local rains. The section for the portion of the canal still to be excavated however will have banks at 2 to 1, owing to the better and firmer nature of the ground to be cut through.

5. The expenditure to date in each year is shown in the margin, and there will be required a sum of Rs. 1,51,000 to complete the work. The expenditure this year is charged to the loan fund of two lakhs.

1867-68	...	Rs. 6,248
1868-69	...	„ 64,796
1869-70	...	„ 35,134
1870-71	...	„ 29,827

G. O., No. 1,802, dated 27th July 1870.

6. As regards the direction already taken and that proposed to be adopted for the line of canal northwards, the navigation from Doogarazapatam to the Soornamooky river is carried through the backwater, and the canal thence turns westwards, in order to reach a swamp which runs between sand hills nearly as far as the Ramperu river. The line of crossing of the Soornamooky river, I understand, was approved of by the late Chief Engineer for Irrigation, Colonel Anderson.

7. From the sketch herewith forwarded it will be seen that the line chosen for the canal is the one selected by Colonel Chambers, and it takes advantage of the deep bed of the swamp and avoids the sacrifice of wet cultivation as much as possible. Mr. Kennedy's proposed line was nearer the sea. This swamp ends near the village of Iskaroyapolliem, where a tidal creek communicates with the Ramperu river. The canal will be dropped into this creek, as a bund at the 93rd mile is thrown across the end of the swamp, the water in which is now kept up for irrigation, and the bed of the creek will be slightly deepened. The river itself is deep and the bar is always open for large dhonies.

8. Captain Hasted proposes that the point B, shown in the survey, should be chosen for the landing place for goods, but that, if necessary, a small branch canal should be cut to the public road. The Local Funds of the district might be made use of for building wharfs, etc. Though a straight line of canal could be made from the swamp to the point selected for the terminus, west of the Collector's bungalow, it is not thought desirable, merely for the purpose of shortening the canal, to do so, when a considerable extent of wet cultivation would be sacrificed and the navigation at the mouth, as Captain Hasted considers, would be found more difficult to keep open.

9. It is not anticipated that the crops will be much affected by the salt water, as the Executive Engineer reports that the surface of the canal will be 2 feet, on an average, below the level of the ground. Catch drains will also be dug outside the spoil banks wherever necessary. In adopting such a plan as that proposed by Captain Hasted, namely, cutting a deep trench through the low lands covered with water, and embanking on each side with side channels to connect the swamp where it is cut through, I am apprehensive that the canal will drain the water now used for the rice fields, or, at any rate, in such portions of it where porous soil is met with. The Executive Engineer, however, does not hold this opinion, and believes there will be no leakage.

10. In the Order of Government, No. 1,619, dated 6th July 1870, it was pointed out that it would be extremely difficult with manual labour alone, and without steam or mechanical appliances, to deepen the *existing* canal to such a depth as to ensure 4½ feet of water below mean sea level, but from Captain Hasted's report, submitting the estimate, it would seem that this depth has been excavated by Mr. Fraser for the nine miles of extension lately carried out under his orders

Though such cutting in the portions under water must be, from the amount of baling, difficult of accomplishment, the Executive Engineer is of opinion that this depth should still be maintained, because when the water in the canal sinks one foot below mean sea level, the largest boats now employed have trouble in the navigation.

No. 561. From the Government of India.

(Here enter No. 145-A. I., dated 29th September 1870.)

No. 562. From the Accountant-General to the Government of Madras through the Revenue Department.

(Here enter No. 255, dated 26th November 1870.)

No. 563. From do. do.

(Here enter No. 926, dated 6th May 1872.)

No. 564. ORDER THEREON, 28th January 1873, No. 274.

CIVIL WORKS, No. 29.

THE project for the extension of the East Coast Canal north of Madras, from Doogarazapatam to Kistnapatam, for which a revised estimate of Rupees 2,87,000 is submitted with the letter above recorded, was commenced in 1868 on an estimate of Rupees 2,35,000, and an expenditure of Rupees 1,36,026 was incurred up to August 1869, when it became necessary to suspend operations. Of that expenditure Rupees 71,044 have been charged to the Canal Funds and Rupees 64,982 to the loan of two lakhs conceded by the Government of India in July 1869. His Excellency the Governor in Council has now determined on completing the work from Provincial Funds, and the submission of the estimates to the Government of India is therefore not required under the Financial Resolution of that Government, dated 14th December 1870, No. 3,334.

2. The rise in prices which has taken place since the original estimate of Rupees 2,35,000 was framed in 1863 would have rendered a much larger excess than is represented by the revised estimate of Rupees 2,87,000 inevitable, had not a change in the direction of the canal, sanctioned at the recommendation of the late Colonel Anderson, rendered a less depth of cutting necessary. His Excellency in Council is satisfied that, looking to the nature of the work and the difficulties under which it is to be carried out, the increased outlay required for the completion of the project is not excessive.

3. As regards the direction in which the extension is to be taken, it is observed that for the first six miles advantage is taken, as always intended, of a natural depression or backwater, and that from the point where this terminates, the canal will make a sweep through the lowest ground till after crossing the Soornamooky river, it strikes into a swampy hollow which, fortunately trending in a favourable

direction, is followed almost up to the point where the tidal estuary of Kistnapatam is reached. By selecting this route the comparatively high ground near the coast, along which it was previously intended to take the canal in order to prevent interference with cultivation and under an impression that more obstruction from excess of water would be experienced in the swamp than in the sand ridge, will be avoided, and the amount of excavation greatly diminished.

4. With a width at bottom of ten yards the canal will be excavated with side slopes of 3 to 1 in sandy soil and 2 to 1 in firmer earth, and, as there is no wheeled and little other traffic to be interrupted by the work, it is proposed to provide for its being crossed by narrow bridges at two points only.

5. His Excellency the Governor in Council sanctions the revised estimate of Rupees 2,87,000, and resolves to direct that the sum of Rupees 39,982, remaining to be refunded on account of the loan, be disbursed, and adjusted later in the year by a transfer of the amount from savings under Provincial. An allotment of Rupees 75,000 will be entered in the Provincial Budget for 1873-74 for the work, and the District Engineer, Chingleput, will make the necessary preliminary arrangements to admit of operations being vigorously carried on during the ensuing year to ensure the whole of the grant being worked up to without fail.

	Rs.
Outlay from Loan	64,982
Amount already refunded	25,000
	39,982

(True Extract.)

(Signed) G. W. WALKER, Colonel, R.E.,
Secretary to Government.

To the District Engineer, Chingleput and Nellore.
,, Accountant-General.
,, Financial Department.
,, Revenue do.
,, Controller of Public Works Accounts.

Ed. S. T. Austin.

Govt. of 1873 Madras.

PUBLIC WORKS.

To

THE DISTRICT ENGINEER,

CHINGLEPUT & NELLORE &c.

Dated January 1873.

Read

Read

G. O., 28th January 1873, No. 317.

JANUARY

Nos. 560-564

Extension of the East Coast Canal, north of Madras, from Doogarazapatam to Kistnapatam.—Passing orders on revised estimate of Rupees 2,87,000 for the project.

Proceedings of the Madras Government, Public Works Department, 27th August 1869.

No. 576. Read the following Proceedings of the Government of India, Public Works Department, (Account,) dated Simla, 30th July 1869, No. 625-A. :—

Loan of two lacs of Rupees from Imperial to Local Funds for completing the extension of the East Coast Canal, Madras.

READ the following :—

Letter from Secretary to Government, Madras, No. 551, dated 2nd April 1869.
Public Works Department Resolution to Financial Department, No. 87-A.-I., dated 10th May 1869.

Read also :—

RESOLUTION by the Government of India, Financial Department, dated Simla the 5th July 1869, No. 1,783.

READ—

A Resolution of the Public Works Department, No. 87-A.-I., dated 10th May 1869, recommending an application by the Government of Madras for a loan of two lacs of Rupees for completing the extension of the East Coast Canal, Madras, and referring for orders the general question of granting loans to local funds and public bodies.

RESOLUTION.—The Governor-General in Council is pleased to sanction the loan of Rupees 2,00,000 at five per cent. interest from Imperial sources to the Local Funds at the disposal of the Government of Madras, for the completion of the East Coast Canals in the manner proposed in the letter from the Government of Madras, No. 913, dated 19th March.

The conditions of this loan are to be as follows :—

1*st*.—The half-yearly repayment to the Imperial Government of at least Rupees 5,000 in addition to five per cent. interest on the outstanding amount of the loan above prescribed.

2*nd*.—That until the loan be liquidated, the administration of the canal shall be subjected to such control and supervision, financial and general, as may be from time to time prescribed by the Government of India in the Public Works Department, in order to secure the due application of the advance to the purpose for which it is made and its faithful recovery. It will be for the Public Works Department, in communicating to the Government of Madras the grant of this loan to declare what the nature of this control and audit shall be at the outset.

* * * * * *

RESOLUTION.—In communicating to the Government of Madras, the sanction of the Government of India in the Financial Department to the grant of a loan of Rupees two lacs from Imperial to Local Funds for completing the extension of the East Coast Canal, Madras, it becomes necessary to specify the manner in which the loan should be accounted for so as to secure its application to the purpose for which it is made, and also its definitive repayment.

2. The Governor-General in Council is accordingly pleased to direct that the expenditure on this work, which is being incurred by Officers of the Public Works

Department, should be dealt with by the Controller of Public Works Accounts in the same way as expenditure on Imperial works aided by Local Funds is now brought to account. The outlay should, in the first instance, be debited to the surplus accumulations of the tolls levied on the canal, and the yearly net profits derived from the same, after meeting all charges. When this source is exhausted, the further outlay on the work should be met from the loan now granted, and should be charged to Imperial funds under the head "Extraordinary," sub-head 'Communications.' In order to admit of such a charge being raised, the Government of Madras should be requested to state the additional grant that will be required for the purpose during the current year, and the sum, if any, likely to be needed for 1870-71.

3. It is observed that the Government of Madras report that the estimate for the work, having been prepared and sanctioned by the Government of India and the Secretary of State, in 1864, is likely to be somewhat exceeded. This being so, a revised estimate for the canal should be prepared as soon as possible, and if it is beyond the competency of the Government of Madras to dispose of under the rules relating to supplementary and revised estimates, it should be submitted for the orders of the Government of India. Meantime the work can be proceeded with.

4. As regards the measures necessary for securing the refund of the loan now granted, it seems requisite for the purpose in view that the receipts derived from the canal should not as at present be credited direct to Local Funds, but should be treated by the Civil Department as remittances to the Public Works Department for adjustment by the latter department. This adjustment will involve, first the payment to Government of the interest on the sums advanced; this should be calculated half-yearly on the monthly balances expended from the Loan grant, and will be credited to the Civil Department with a view to its being brought to account in that department under the general head "Interest." The second adjustment will consist of the refund to Government of at least Rupees 5,000 every half-year, which should be credited to Public Works Revenue under the head "Extraordinary." After reserving a sufficient sum to meet these two adjustments, the balance of the receipts should be credited monthly or at any other convenient interval to Local Funds, and should be applied in the first instance towards meeting the charges for the maintenance of the canal.

5. An account should be rendered every year to show the progress made in the refund of the loan granted, and until this loan is repaid, a remunerative statement in the prescribed form of the operations of the canal should be furnished for the information of the Government of India.

ORDER.—Ordered that this Resolution be communicated to the Government of Madras for information and guidance.

Ordered also that a copy be forwarded to the Financial Department, with a request that the necessary instructions may be issued to the Accountant-General, Madras, to treat the receipts derived from the canal as remittances to the Public Works Department for the purpose described in paragraph 4.

Ordered further that a copy be forwarded to the Accountant-General, Public Works Department, for the issue of the needful subsidiary instructions on the subject to the Public Works Accounts Department.

(Signed) R. A. STRACHEY, Colonel, R.E.,
Offg.-Secy. to the Govt. of India.

To the Secretary to the Government of Madras, Public Works Department.

No. 577. ORDER THEREON, 27th August 1869, No. 2,810.

ACCOUNT, No. 51.

COMMUNICATED to the Revenue Department with reference to the orders in this department, dated 19th March 1869, No. 913.

2. Adverting to paragraph 2, the Board of Revenue will be requested to intimate to the Superintending Engineer of the 4th Division the amount that will be available for expenditure during the current and ensuing official years from the surplus accumulation of the tolls levied on the canal, and the yearly net profits derived from the same, after the payment of all charges. On receipt of this information, Colonel Bean will, in communication with Mr. Fraser, report what additional sum can be advantageously expended from the loan now sanctioned in each of the years mentioned. The work will in the meanwhile be proceeded with, and vigorously prosecuted.

3. The Controller's attention will be drawn to the orders of the Government of India in paragraphs 2 and 4 regarding the manner in which the loan in question is to be accounted for, and its repayment secured, and, obtaining the necessary data from the Board of Revenue and the Accountant-General, he will furnish the Annual Account and remunerative statement referred to in paragraph 5 in accordance with such instructions as he may receive from the Accountant-General, Public Works Department.

4. Mr. Fraser will expedite the preparation and submission of a complete estimate for the Canal Extension.

(True Extract.)

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

To the Superintending Engineer, 4th Division.
,, Controller of Public Works Accounts.
,, Accountant-General.
,, Revenue Department.
,, Board of Revenue.

Exd. E. C. Shunker.

Govt. of [illegible] Madras.

PUBLIC WORKS.

To

THE SUPERINTENDING ENGINEER.

Dated August, 27th.

Read.

G. O., 27th August 1868, No. 2,810.

AUGUST.

Nos. 576-577

East Coast Canal, Madras.—Passing orders on the Proceedings of the Government of India relative to the grant of a loan of Rupees two lacs from Imperial to Local Funds for completing the extension of the East Coast Canal, Madras.

No. 548. Read the following:—

MINUTE BY HIS EXCELLENCY THE PRESIDENT.

I. On my recent excursion to Nellore, I had an opportunity of inspecting the progress of the Northern Canal, which is being carried on towards Kistnapatam, under the direction of Mr. Fraser. The work appears to be satisfactory. About seven miles have been opened for navigation. The money with which the undertaking was resumed is, however, nearly exhausted, and, unless additional funds are soon provided, this useful vehicle of transport will again be arrested in the middle of the sand-waste, without having attained a terminus convenient for traffic. The expediency of prosecuting the excavation, as far as the Kistnapatam backwater, was strongly pressed on my attention by the Collector and the inhabitants of Nellore, and it is for this purpose that I submit the following suggestions to Council.

II. The whole cost of continuing the canal from Doogoorazpatam to Kistnapatam was estimated some years ago to be Rupees 2,35,000. It would scarcely be safe to assert that the works could now be satisfactorily completed for much less than Rupees 2,80,000. The accumulation in hand amounted to rather more than Rupees 80,000 when operations were begun last year. We therefore require about Rupees 2,00,000. I propose that this amount should be raised by a loan on the revenues of the canal, which might be advanced by the Supreme Government, at the rate of ten per cent. per annum; five per cent. as current interest, five per cent. to be employed as a sinking fund for the extinction of the capital of the debt.

III. The average annual income during the last three years has been rather more than Rupees 44,000. The average annual expenditure for maintenance during the same period has been rather more than Rupees 13,000. These figures represent the revenue and expenditure on the Northern and Southern Canals together, which may be justly regarded as the disunited members of a single work, of which the northern section is the most important and profitable. The aggregate revenue thus exceeds the aggregate expenditure by about Rupees 31,000 per annum. I do not, however, propose to consider the surplus revenue as so large. It is desirable to keep a considerable balance of revenue in hand for emergencies and current improvements on the older portion of the work. But we can with perfect safety assume the permanent available surplus revenue at Rupees 20,000, which is exactly the interest at ten per cent. of the sum which I propose to raise.

IV. It may be urged that we should at once contemplate a greater extension. I think not. Continued to the Kistnapatam backwater, the canal would reach a good commercial terminus. It would be brought into connection with a natural waterway, which penetrates for several miles westwards along the skirts of the great rice field of the Pennair river. The shore of the backwater would become, as Mr. Dykes observed to me, a long wharf, at which the produce of the district would be embarked for Madras. I do not mean to disparage the project of a further extension hereafter. Not only the Delta of the Pennair, but the Deltas of the Kistna and Godavery ought to be placed in connection with the Madras market by internal navigation; but the more contracted scheme can stand by itself, it is a good one, it is a cheap one, it is easy, it is within our reach; we ought, in my

humble judgment, to deal with it first, leaving the development of the enterprise on a greater scale to other times and hands. The surplus revenue of the canal, which can now carry it to the Pennair, may carry it to the Kistna at a later period.

V. It has been suggested to me that another attempt might be made to obtain from the Supreme Government the refund of the revenues of the canal, which had accumulated to the amount of more than three lacs before the canal was declared to be a local work, and which were poured into the Imperial Treasury. It has been also proposed to apply for a special grant. I think that these expedients may properly be reserved for other objects in connection with the canal, such as the junction of the Northern and Southern Canals in the town of Madras should that scheme be eventually approved, or the extension of the Southern Canal in the direction of the Cauvery Delta, to which it should eventually tend. We have before us a limited but useful project and a legitimate means of executing it, the Kistnapatam extension and a loan to do it with. I would begin with these.

VI. The Government was requested, in an address presented to me by a deputation of the citizens of Nellore, to cause the canal to be widened and deepened so as to admit of the use of steam tugs. I submit that the Department of Public Works be invited to give an opinion as to the feasibility of this proposal, and to state approximatively what would be the cost of enlarging the Northern Canal from Madras to Kistnapatam, so as to make it available for flat-bottomed steamers. I do not anticipate that we shall be able to entertain the project at present, but it would be interesting to obtain some notion of the cost which would be involved, and it would be satisfactory to the people of Nellore to know that their wishes had been considered.

VII. The design which I submit to Government is one in which not only the city of Madras and the irrigated lands in Nellore are concerned. It bears upon the general question of irrigation and revenue. The extensive works of irrigation which are being undertaken promise to accumulate great masses of wet produce on particular restricted localities. Unless transport is provided for these food-stuffs they will fall in price, become a burden to the local producer, and discourage the farmer from converting dry land into wet, and availing himself of the water offered by Government. If Government desire to secure and extend their wet revenue, they must provide not only the means of production but the means of evacuation and carriage. The double project for extending the irrigation of the Pennair on its northern and southern banks will, after the lapse of about eight years, afford the means of watering about 120,000 acres of land, only a small portion of which is now insecurely supplied. It surely behoves Government to take timely measures for putting in motion and circulation the immense addition which will thus be made to the food-supply of the country.

VIII. My attention was called by Mr. Fraser to the fact that the payment of dues on the Northern Canal is now occasionally evaded by the proprietors of boats, who land goods at Ennore, which are then carried into town by the road, the boat returning empty to the north. There is no control exercised over boats except at the lock, where tickets are issued, and at the basin, where the dues are levied. A boat which does not pass the lock eludes payment. Mr. Fraser entertains the impression

Proceedings of the Madras Government, Public Works Department,
19th March 1869.

that abuses of this sort would be prevented and a higher revenue secured if a system of licenses was introduced, and if the tonnage dues on loaded boats were abolished. It appears to me that it would be desirable to recommend this question to the consideration of the Collector of Madras, who should present a report, in conjunction with Mr. Fraser, on the alleged irregularities, and on the best method of securing the highest amount of revenue on the canal consistent with the development of navigation.

MADRAS, (Signed) NAPIER.
28th February 1869.

No. 549. Minute by the Honorable H. D. PHILLIPS.

(Here enter 28th February 1869.)

No. 550. ORDER THEREON, 19th March 1869, No. 912.

CIVIL WORKS, No. 77.

1. As suggested by His Excellency the President, an application will be made to the Government of India for a loan of two lacs of Rupees for completing the extension of the Northern Canal from Doogoorazpatam to Kistnapatam.

2. Paragraph 6 of His Excellency's Minute will be communicated through the Superintending Engineer of the 4th Division to Mr. Fraser, who will prepare and submit an estimate of the probable cost of widening and deepening the canal from Madras to Kistnapatam to render it practicable for steam tugs.

3. Paragraph 8 will be communicated through the Board of Revenue to the Collector of Madras with a view to his reporting in conjunction with Mr. Fraser on the alleged evasion of canal dues and on the best method of securing the highest amount of revenue on the canal consistent with the development of navigation. The Collector will submit a set of draft rules for the control of boats using the canals in the Madras and Nellore Districts.

(Here enter No. 913, dated 19th March 1869.

(True Extract.)

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

To the Superintending Engineer, 4th Division.
,, Board of Revenue.
,, Revenue Department.
,, Controller of Public Works Accounts.
,, Accountant General.

Exd. S. T. Augustin.

Govt. of 1869. Madras.

PUBLIC WORKS.

To

THE SUPERINTENDING ENGINEER,

4th Division.

&c., &c., &c.

Dated March, 1869.

Recd. Read.

G. O., 19th March 1869, No. 912.

MARCH.

Nos. 548-550

Northern Canal.—Passing orders on papers relative to the extension of the Northern Canal to Kistnapatam, Nellore District, and the arrangements necessary to ensure its early completion.

37

PUBLIC WORKS DEPARTMENT,

FORT ST. GEORGE, 19*th March* 1869.

No. 913.

No. 551.

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,

PUBLIC WORKS DEPARTMENT.

SIR,

CIVIL WORKS, No. 78.

1. With my letter of the 18th January 1864, No. 188, I had the honour, under instructions from the Right Honorable the Governor in Council, to submit for the consideration of the Government of India an estimate of Rupees 2,35,000, prepared by Mr. Kennedy, for the extension of the East Coast Canal from Doogoorazpatam to Kistnapatam in the Nellore District, and, reviewing the past history of that project, I explained fully the advantages which were expected to result. In Colonel Strachey's letter of the 15th March 1864, No. 1,239, the desired sanction was accorded, and in due course was confirmed by the Secretary of State in his Despatch of the 25th May 1864.

2. In consequence however of the inability of this Government to appropriate funds to the work from the small Public Works allotments of this Presidency so long as the canal remained an Imperial work, the carrying out of the extension was necessarily deferred from year to year, till at length the Government of India having decided in their Resolution of the 30th April 1867, No. 2,200, that the canal should be considered a Local Fund work, advantage was taken of the accumulated balance of surplus receipts having reached a sum of upwards of Rupees 80,000 in the beginning of last year to direct that the extension should at once be taken in hand. Work is now in active progress under those orders, and about seven miles of the southern and easier section of the canal have been opened for navigation.

3. His Excellency the President having, on a recent visit to Nellore, had an opportunity of inspecting the canal has recorded the accompanying Minute, in which His Lordship explains fully the importance of the extension, and makes certain suggestions to ensure its early completion. It will be observed that the assignment from Local Funds has been nearly exhausted, and that, unless it is speedily supplemented, operations must of necessity be brought to a stand before the canal can reach a convenient terminus for traffic. Under these circumstances, and deeply impressed by his personal observation as well as by the representations made to him by the inhabitants of Nellore, with the importance of speedily completing the canal as far as Kistnapatam, from whence the means of navigation by a backwater extends some miles inland, and from whence a good road exists to Nellore, His Lordship suggests that, to avoid the delay that must take place if the

progress of operations be rendered dependent on the annual appropriations from the surplus receipts of the canal, the amount required for the completion of the work should be obtained by means of a loan, to be raised on the security of the revenues of the canal and bearing interest at ten per cent. per annum. The estimate having been framed some years ago it is probable that it may be somewhat exceeded, and His Excellency the Governor in Council thinks it advisable to raise, in the manner proposed, not less than two lacs of Rupees.

4. The average annual revenue during the last three years from the Northern and Southern Canals has been upwards of Rupees 44,000, while the average annual outlay on their maintenance during the same period has been a little more than Rupees 13,000, leaving a balance of income amounting to Rupees 31,000, but, allowing a broad margin for emergencies, it may be safely assumed that a surplus of Rupees 20,000 per annum will be available to meet the charge for interest at five per cent. and to form a sinking fund for the liquidation of the loan.

5. I am accordingly to request that the Government of India may be moved to sanction the advance of a loan of two lacs of Rupees from Imperial Funds on the terms above indicated, and to be paid off by the half-yearly appropriation to its liquidation of Rupees 5,000 from the surplus canal receipts.

I have the honour to be,

Sir,

Your most obedient servant,

(Signed) CHARLES A. ORR, Colonel, R. E.,

Secretary to Government.

Govt. of {1869} Madras.

PUBLIC WORKS.

To

THE SECRETARY TO THE GOVERNMENT

OF INDIA.

Dated March 19th.

Recd. Encl.

G. O., 19th March 1869, No. 913.

S. O. W. 2534-37. 31st Dec. 1875. Print.

MARCH.

No. 551

Northern Canal.—The Government of India requested to sanction the advance of a loan of two lacs of Rupees from Imperial Funds, for completing the extension of the Northern Canal from Doogoorazpatam to Kistnapatam, Nellore District.

Memo shewing the transactions of the Cochrane's & Sadras Canal Fund for 1874/75

	Receipts			Charges				Remarks.
	Collr of Chingleput Accounts	Public Works Receipts	Total	Collector of Chingleput Accounts	Public Works Charges on Chingleput	Public Works Charges in Nellore	Total	
April 1874	2562 3 9	" " "	2562 3 9	261 12 6	30 7 8	636 4 4	928 8 6	
May "	5956 5 "	3 " "	5959 5 "	273 10 4	328 11 "	1049 11 6	1652 3 10	
June "	5591 9 3	4 " "	5595 9 3	274 1 6	425 7 3	42 " "	741 8 9	
July "	3615 10 3	" " "	3615 10 3	274 9 7	312 9 6	854 9 2	1441 12 3	Balance at debit on the 31st March 1874 — 7053-9-6
August "	1779 1 "	" " "	1779 1 "	274 2 8	135 3 8	357 3 6	766 9 10	Add Charges — 25141-15-7
September "	1961 1 "	2 10 4	1963 11 4	272 14 5	973 15 "	267 8 4	1514 5 9	32195-9-1
October "	2041 1 "	" " "	2041 1 "	276 " 2	105 6 "	303 9 10	685 " "	Deduct Receipts — 33845-1-7
November "	1765 3 "	51 5 "	1816 8 "	275 15 1	235 3 4	570 7 7	1081 10 "	
December "	1829 7 "	" " "	1829 7 "	276 7 4	962 2 6	136 10 8	1374 15 6	Balance at Credit on 31st March 75 } 1649-8-6
January 1875	2452 14 "	" " "	2452 14 "	271 13 9	1377 3 9	182 9 9	1831 11 3	
February "	1896 10 "	" " "	1896 10 "	282 9 7	3308 1 8	165 11 5	3756 9 8	
March "	2333 1 "	" " "	2333 1 "	271 9 9	7923 11 9	1161 10 9	9367 " 3	
Total	33784 2 3	60 15 4	33845 1 7	3285 5 8	16128 3 1	5728 6 10	25141 15 7	

For Land George Accts Genls Office 13th October 1875

Forwarded to the Chief Secretary to Government with reference to his Official Memo No. 573 of 11th October 75.

For Rule

In charge of Office of Accountant General

April 1875 Departt.
From
The Accountt. Genl.
Madrast.
To
The Chief Secretary
to Government

Dated 13th
Received 16th } October 1875

No.

1395/

Memo. shewing the transactions of the Cochrane's and Sadras Canal Fund for 1874-75.

Sent to Revd
W. Rudolph
for perusal

C 16/10

Traffic Code Form C1.

45

Class. 1 | INDIAN TELEGRAPH. | Local No. 5-7

To (Station) Pollachee ck | From (Station) Madras

No.	Words.	Time tendered for transmission. (Madras time.) Day	H.	M.	Official Instructions.—
311	60	4	16	45	

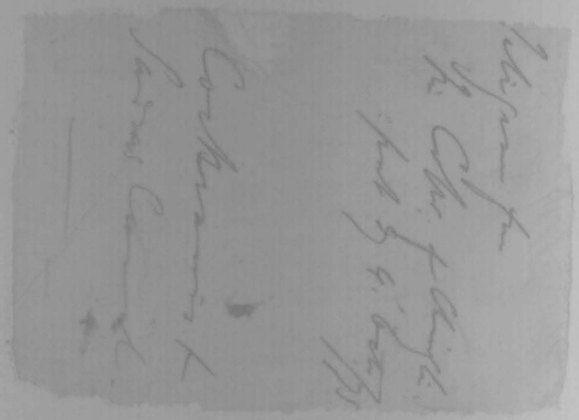
To (Person) Sundries Various | From (Person) Chief Sec.t & Collector

Cope	Ferry	act-
4	5	1870
Wat	Rt	Dun
10	11	12 Cochranes
Rd	Ent	Coast-
Canals -	20	21
22	23	24
25	26	27
28	29	30
31	32	33
34	35	36

Recd. from _____ (L. L.) _____
At ____ H. ____ M., on the _____
By _____
Date 10/75

Sent to _____ (L. L.) _____
At ____ H. ____ M., on the _____
By _____
S. Sinclair Telegraph Master.

(P. T.)—Govt. Tel. Press, 3rd ed., 50,000—7-75— 10-75



No 585

47

Memorandum for the P. W. Dept.; on Proceedings in the Revenue Dept. dated 1st Sept. 1875, No. 1850, dated Ootacamund 24th Sept. 1875.

Referred to the Financial Department, with Rates of Members of Council, with a view to provision of funds, if possible, for the prosecution of this urgent work; and for report as to the position of the Canal Funds.

Ootacamund
29th Sept 1875

T. W. Walker Major Genl R.E.
Secy to Govt. P.W.D.

To The Financial Dept.
with three Original Enclosures.

Rev. Department

Proceedings of the Madras Government
Read the following
Ins. No. 7683
Proceedings of the Board of Revenue
dated 23rd August 1875

Read Proceedings of the Madras Government, Revenue Department, dated 22d July 1875, No. 1533, referring to the Board of Revenue for report as to whether the further grant applied for the East Coast Canal Extension in Nellore can be made.

No additional grant can be made from Canal funds. The Canal Extension, however, is being carried out from Provincial funds over which the Board have no control.

True Extract
J Leyd[en] H. C. Stokes
Offg. Secretary

Order thereon, 1st September 1875, No. 1850
Communicated to the Financial and Public Works Departments.

True Extract
Under Secy. to Govt.

To The Public Works Department

Encl. H.D.

Financial Department
Letter from Madras Govt.
Dated 23d August 1875
No. 7683
Enclosure 1

Referring to the Financial Department for consideration of application for allotment of funds for extending East Coast Canal in Nellore.

Under Secy. to Govt.

Copy forwarded 30/8/75

Memo: for Orders. 51

In connection with Order No: 814 of 23rd June 1875 re: Estimate of R 274,000 for extension of the East Coast Canal a distance of 24¼ miles, in addition to the 20¾ miles being completed this year at a cost of R 287,000, the Govt. call attention to the necessity of utilizing the water to the fullest possible extent, as it becomes progressively more valuable, as the Madras Irrigation Works (under control of Superintending Engineer, Trichinopoly) are in connection (some 9 years): The very rapid increase of Irrigation Works for Public Works in 1875-76 (4 Lakhs more than the Allotment) has

P. W. 1875 Dept.
No: 5827.
Pro: of the Revs: Dept.

Dated 18th Septr 1875.
Read 11th " 1875.

No: 1850.

Commtg. Board's Proceedgs. intimating that no Addl. Grant can be made from Canal Funds

Cii – 24-9-75
Returned to Boy 21-9-75
Dispd to Govt 11-9-75.

more than Rs 50000 in the Budget. The Dist: Engineer of Nellore has reported in letter no: dated 18th June that he can spend Rs 35000 more than the above sum. This is far short of the 1½ Lakh, reckoned by Govt. in the Order just quoted, as being the minimum annual outlay that should be incurred to secure an adequate rate of progress; but it may be accounted for by the great increase of work thrown on the P. W. Officers of Nellore by the damages to the Irrigation Works caused by the floods of Oct: 1874. Still it is a sum which could not be met from the funds placed at the

disposal of the P.W. Dept:

Under these circumstances a reference was made to the Financial Dept: in G.O. No: 1716 with a view to provision of a further grant, if possible, later in the year. This reference appears to have been passed on to the Revenue Dept: and by it to the Revenue Board; with the result now submitted for the orders of Govt. It may be that the maintenance of the old portion of the Canal annually, absorbs all the income; a state of affairs which differs greatly from that stated in para: 4 of letter to the Govt. of India No: 913 of 19th March 1869 when Rs 20,000 per annum was reckoned an available surplus for extensions. Whether this is indicative of better or worse management is not

known; as the Canal denounces tho' largely carried out by P. W. Officers are in a state: mates which are not sanctioned in that Dept. However that may be, the Board of Revenue repu: diate (it is presumed cor: rectly) any liability to contribute out of Canal Surplus Funds towards extensions, on the plea of these latter being cor: ical Funds - Canal Funds would thus ap: pear to have a claim on repaid of Principal Funds for the Rs 71044 originally lent out (See para 1 of G.O.No. 274 of 28th June 1873) - as no further proceedings are being taken in the Finan: cial Dept. on the reference made to them, the under: signed has the honour to request instructions as to further procedure —

24.9.75.

A. W. Mathews Major Lond
Secy to Govt. P.W. Dept.

No. 3,158.

PROCEEDINGS OF THE BOARD OF REVENUE, dated 20th November 1875.

Read the following Proceedings of the Madras Government, dated 30th October 1875, No. 2,127, Financial Department:—

ABSTRACT.—Referring to Board certain papers relating to the East Coast Canal extension, and requesting their opinion whether the Canals Act may not be applied to the East Coast Canal, and the extension and improvement carried out from the Canal Ferry Funds.

THE funds raised from the traffic on the Cochrane's and Sadras Canal are already fully utilized in the maintenance of the canals and cannot provide any surplus from which the extension works can be carried out.

2. It would not, the Board believe, be possible to raise by extending the Canals and Ferries Act to the Cochrane's Canal a larger revenue from the traffic than is now obtained; and the sole object of the suggestion made by Government apparently is, that they may be enabled to provide for the extension of the canal northwards from the surplus funds which have accrued under the Act in the districts in which it has already been brought into force.

3. Though the Act expressly provides that Government shall be at liberty to expend the surplus of the fund elsewhere than in the districts in which it has accrued, the Board are most strongly of opinion that the principle is unjust, and that before funds raised in a district are diverted from it, it should be conclusively shown that they cannot possibly be utilized within it.

4. This is not the case at present. The existing surplus belongs chiefly to the districts of Godavery and Tanjore, and suggestions have been made by the Collectors of both districts for utilizing the money within them on projects of great public benefit. The proposal of the Collector of Godavery for the construction of a canal from the Kovur Lock to Pennaguduru has been submitted to Government in Board's Proceedings, dated 28th October 1875, No. 2,983. They have also approved of a suggestion of the Collector of Tanjore that the surplus of that district should be spent in straightening a tortuous portion of the Vedarniem Canal, whereby the navigation and drainage will be much improved; and an estimate has been called for, for submission to Government.

5. The surplus of the Canal and Ferry Fund would not go far towards the completion of a work of such magnitude as the East Coast Canal extension; and some other method of providing for it must still be sought; and believing that the proposed application of the money would be unjust, the Board beg to protest against it.

(A true Extract.)

Acting Secretary.

To the Officiating Chief Secretary to Government, Financial Department,
with three original enclosures, returned.

Copy to the Acting Collector of Chingleput,
with copy of Government Order, and of its enclosures.

Exd. W. H. French.

East Coast Canal

57

Financial Department.

PROCEEDINGS of the MADRAS GOVERNMENT.

Read the following ~~letter~~

Memorandum on the Public Works Department, dated 29th September 1875 No. 585, on Proceedings in the Revenue Department, dated 1st September 1875 No. 1850.

Order thereon 30 October 1875 No. 2124

These papers will be referred to the Board of Revenue for their opinion whether the Canals Act may not be applied to the East Coast Canal, and the extension and improvement of the Canal carried out from the "Canal Ferry Fund."

To The Board of Revenue
" Public Works Department.

Desp. 30/11-
2/11.

24.9.75.

Financial Department.
East Coast Canal
1875.

Board of Revenue,
MADRAS.

PROCEEDINGS, 20TH NOVEMBER 1875, No. 3,158.

Desp. 29 Nov. 1875
No. 2534/31
Encl. 3
Received 27 Nov. 1875

NOVEMBER.
No. 3,158.

East Coast Canal.—Submitting to Government Board's views with reference to question whether the Canals Act may not be applied to — and the extension and improvement of the Canal carried out from the "Canal and Ferry Fund."

61

Another reference must be made to the Financial department. It would seem from the proc: Jany 73. that the extension of this Canal is to be carried out Entirely from Provincial Funds but I do not see that this determination renders it unnecessary to refund, Rs 71.044 which under a different arrangement

^ for a provision if possible, (Sr. I dubt) of funds.

^ to Canal Funds

Govt of India 1875 Mayors.

Financial

To

Dated 3 May
Recd. 1875. No. 212

Nos.

from Govt

Last Coast Canal

30 Oct 1875 212

was taken from the Canal
Funds. – In extention
The Board may be
asked to report on
the expenditure of
the Canal Funds with
reference to the remark
in the Chief Engineers
Memo as to the
increased cost of
maintenance

RE

25 Sept 75

I understand that
any expenditure necessary
~~for~~ or that the Legislature
of Jan. 73 precludes
the use of Canal
funds on Extensions
These funds are I
think at the disposal
of the Local Govt. as
constituting them
a "Provincial"
I think we should
call for a statement
of the position of the
Canal funds. L. H.

Seen 1st Oct

Memorandum for Orders.

Referring to the application for an additional grant required for the prosecution of the Coast Coast Canal, and the letter of members thereof, it is submitted that Canal funds cannot be appropriated for the purpose required by the provisions of Act I of 1870, are made applicable to the Canals.

2. It has been ascertained, vide telegram, put up from the Collector

But I am not sure whether this position of the Lockmaster of the Sirhind Canal fund & the Executive Canal fund is just. Is not the fund under the Act. Is it a distinct Act. Is not the Act Govt. Act?

Ref. No. 2276
15

collector, that the provisions of the Act do not at present apply to Cocharane's or the East Coast Canal.

3. The balance available under the "Canal and Ferry Fund" is Rs 77,910, and may be utilized for the work adverted to, but it will be seen from a reference to Section 29 of Act I of 1870, that all rents, license fees, tolls and fines collected and levied under the Act "shall "be applied to the "construction, improvement, repair, maintenance, and extension "of the channels and ferries

Sir. Lt. Col. Knight
that there will be many
calls in this above act
However we must keep
as correct for the future
& Sd. towards the Rd
Whether the Canals not
may not be applied to the
E. Coast Canal.
17.10.75

* Vide S.O. 9 12 Feby/75
No. 308.

Ferries to which the
provisions of this act
may be applied."

4. From the same section it will be seen that the Govt are "under no obligation to "expend in any particular district the "whole or any part "of the surplus fund "realized in that dis-"trict."

5. The Canal funds belong at present to three districts, Godavery, Kistna, and Tanjore.

6. The Cocharane's and Madras Canal has only sufficient funds for its own purposes.

7. It is submitted that

that the papers be
remitted to the B.
of Revenue for their
opinion whether in
the circumstances
there are any objec-
-ions to the applica-
-tion of the provisions
of Act I of 1870.
to Cochrane's and the
East Coast Canal.

Financial Department.

PROCEEDINGS of the MADRAS GOVERNMENT.

Proceedings

READ the following ~~letter~~

of the Board of Revenue
dated 20th November 1875 No 3158.

Order thereon 31 Dec. 75 No 2534

Communicated to
the Public Works Department.

The Governor in Council
concurs in the Revenue Board's
opinion as to the inexpediency of extending the Canals Act to the East Coast Canal, and the state of the Provincial finances does not allow of any special grant of funds at present for the extension of the communication.

Panel Papers read in G.O. 30 Oct. No 2127 of the 5th, Board's Pro & O - 45 Cl

To
The Public Works Department
" Board of Revenue.
" Revenue Depart.

Dec 7/1875

Govt. of {1875} Madras.

Jul

To

Dated 31 Dec 1875, No. 2534
Read.

Nos. 183–4.

East Coast Canal.

Coast Canal & the question of improvement of the Canal carried out jointly the Canal & Ferry Fund. Communicated to P.W. Dept.

Ext of the Board's Proc. submitting Sir Arthur Cotton's views with reference to the question whether the Canals at may not be abandoned to the East-