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# MADRAS RECORD OFFICE.

## Government of Madras.

Public Works DEPARTMENT.

G.O. No. 3230 & 3231 Press / Mis. 682

Dated 26. 10. 1865.

**Not to be folded or roughly handled**

No. 678. Read the following papers :—

From His Excellency the Governor of the French Settlement in India, to His Excellency the Right Honorable the Governor of the Presidency of Fort Saint George, dated Pondicherry the 29th July 1865, No. 25.

TRANSLATION.

1. In 1854, Colonel Ouchterlony, the Engineer in charge of South Arcot, requested the French Government to contribute one-third of the cost of making the Vicravandy canal, upon condition that the French subjects should receive one-third of its water.

2. The cost, including the branch channels, was estimated at Rupees 10,000. The canal was to have, at its head, a width of ten yards, and a minimum fall of 0·00068 to a mètre (about 3·6 feet to a mile).

3. The French Government paid the third part of the sum of Rupees 10,000, during the construction or immediately after the completion of the main canal ; but the French aldées soon became aware that the water would either not reach them at all, or would come to them in insignificant quantity ; that the original dimensions, both in plan and section, had been changed in carrying out the work ; and that the English subjects stopped, as if with authority, the small quantity of water which, in extraordinarily great floods, could possibly have reached the French tanks.

4. The Revenue and Engineer Departments agreed in proving, year after year, in the plainest manner, the entire accuracy of these complaints. The French Chief Engineer ascertained that the canal, at its head, had a width of only four yards, instead of the ten yards agreed upon, and that in place of the promised fall of 0·00068 to a mètre, there was no fall whatever for the first five kilomètres, (about three miles), so that the water was kept in the upper English tanks, which were situated at a much higher level than all the rest, and could not reach the French tanks and two English tanks situated lower down : he proved besides, that the heavy expenses in the main canal had been incurred to no purpose, so long as the minor distribution channels, which had been agreed upon, were neglected.

5. He proposed to give to the canal, at its commencement, the fall necessary to enable the lower end to receive water during every flood in the river (this being no more than the fall promised by Colonel Ouchterlony).

6. As for the upper English tanks, the feeders of which would be* below the bed of the canal when deepened as proposed, their supply could be insured by erecting dams across the canal, which would raise the water sufficiently to allow it to enter these feeders ; for this two dams would suffice. There is no other way out of the difficulty.

* *See above*

7. Colonel Foord, the Engineer in charge of the canal at the commencement of the work, had, for five years, resisted the claims of this Government by causing delay, and by simply doing nothing.

8. His well known opinion is that the upper tanks have the first right to the water brought from the river.

9. This opinion seems to me to be wrong, upon two clear grounds :—

1*st*.—That the lands or tanks which ought first to be supplied by an irrigation canal are those which lie near its lower end, and not the higher ones, for which Colonel Foord claims the first right.

2*nd*.—That according to the agreement between the two Governments, the French tanks ought to get one-third of the water, which is impossible so long as the upper English tanks take, first, as much water as they choose.

10. For the last five months, the new Executive Engineer, Mr. Lawford, showing all imaginable zeal and talent, has been discussing, upon the ground, with the French Engineer, every possible mode of amicably adjusting the interests of the two nations ; and he has come to the conclusion that the first proposal of the French Engineer must be adopted.

11. All had been arranged between the two Engineers, when Mr. Lawford informed the French Engineer that Colonel Foord was opposed to their united opinion (*vide* annexed copy of Mr. Lawford's letter) ; and as the last means of coming to an agreement, he communicated to the French Engineer the proposal made by Colonel Wilkieson, the Chief Engineer, viz., to return to us our share of the outlay, and to authorize us to make a separate canal. This proposal would

doubtless not have emanated from this distinguished Engineer if he had known the localities from personal observation. The objections to it are as follows :—

| | Rs. |
|---|---|
| On account of the slight fall, which we cannot avoid, a new canal would cost us in earthwork for the first six miles ... ... ... | 7,500 |
| To which must be added for a regulating dam at the head ... ... | 1,200 |
| For three or four aqueducts over the branch channels leading to the English tanks, with sluice dams, &c. ... ... ... ... | 2,000 |
| Minimum total... | 10,700 |
| Deducting the sum to be returned to us... ... ... ... ... | 3,333 |
| Difference in round numbers... ... ... ... ... ... | 7,367 |

12. If the last three miles of the canal, which would still supply two or three English tanks, are not to be handed over to us (and it is thus I understand the proposal) Rupees 4,000 more must be added, and we should then have to make a fresh expenditure of Rupees 11,367, to obtain a canal situated upon English territory, along which the English subjects would be able constantly to intercept the passage of water, as always happens in similar cases.

13. We should be obliged to decline making this canal, and we should have no other compensation than the re-imbursement of what we have paid. But, in re-imbursing to us this sum, there would be no compensation for the loss of interest during ten years, and for the loss of all the money we have spent on branch channels and minor works constructed with the prospect of irrigation from the main canal.

14. We have no alternative but to hold to the spirit of the original agreement, a third of the water, a third of the expense.

15. If the English wish to keep for themselves the supply canal which has been made at the common cost, they ought to contribute two-thirds of the total expense of the new canal which we shall have to dig, an expense which will probably not be less than Rupees 14,800.

16. But the most natural solution of the difficulty is that both nations should share, in the original proportions, the expenditure necessary to improve the present canal so as to enable it to fulfil the stipulated conditions, an expenditure which will probably amount to about Rupees 10,000.

17. All the above estimates may perhaps appear high, but it should be borne in mind, first, that the cost of labor has risen considerably in the last ten years ; second, that in the execution of the project it has not been found possible to give to the canal more than one-sixth of the proposed fall, and it is well known that the amount of earthwork increases inversely as the square of the inclination of the bed. The quantity of earthwork will be quite disproportioned to what was contemplated in the original project.

18. I depend upon your Excellency's justice to remove the unexpected difficulties which have prevented the carrying out of the agreement made in good faith in 1854, an agreement lately renewed and strengthened by the two Engineers, Messrs. Lawford and M. Lámairessé.

19. For this I shall be truly grateful.

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No. 679. From the Superintending Engineer, 5th Division, to the Secretary to Government, Department Public Works, dated Omalúr, 12th September 1865, No. 1,520.

7 Enclosures (received from Government with Memorandum, dated 5th August) under a wrapper.

1 Survey.
1 Copy of estimate.
1 Copy of correspondence between the Collector of South Arcot and the Civil Engineer, 5th Division.

1. I have the honor to forward the report on the Vicravandy channels called for in your Memorandum, dated 5th of August.

2. The project for the Vicravandy anicut and channels was brought forward in 1854, by the late Colonel Ouchterlony in concert with M. Guerre, the Chief Engineer of Pondicherry. The sanctioned estimate, amounting to Rupees 12,000, provided for an anicut across the Vicravandy river, main channel with calingulahs in the bank, and branch channels to certain English and French tanks. The cost of the work was to be borne in the proportion of two-thirds by the English and one-third by the French Government, and the water was to be shared in a like proportion. The levels were taken, and the plans and estimates prepared by the late Surveyor Vardon, under whose superintendence the greater part of the work was done.



3. On my first visit to the work, in the early part of 1856, soon after taking charge of the South Arcot District, I found the anicut and two calingulahs built, the main channel completed, with the exception of some rock cutting, as far as the first branch channel, and the rest of the work in progress. The work was completed in 1857, and some additional work was done in 1858-59.

4. Mr. Vardon's survey does not show the proposed slope of the bed of the channel, but the upper part of the channel (where the slope is said to be insufficient) was certainly cut in accordance with the depths in the sanctioned estimate, and the bottom breadth of four yards was also in accordance with that estimate. I have never seen any document in which a bottom breadth of ten yards is specified. If the channel had been made ten yards wide, the sanctioned estimate, and the amount to be paid by the French Government, must have been largely increased.

5. Nor can I understand how a minimum slope of 3·6 feet to a mile could have been agreed upon. If the channel had been cut with such a slope, not one drop of water could have gone to the English tanks. With the much less slope now proposed to be given, the French Engineer admits that sluices will be necessary across the main channel to raise the water into the branches. Then how is it that no sluices were provided in the original estimate, and that there is not the faintest allusion to such works in the correspondence relating to the project?

6. In 1859, the channel was examined by a Sub-Engineer from Pondicherry, who wrote a long report on it. He stated that the channel had no fall for the first three miles, that the calingulahs were too low, that the flow of water was obstructed by an aqueduct, and that the French tanks did not get their proper share of water. This report having been forwarded to me, I met M. Guerre the Chief Engineer, by appointment, at the channel in December 1859. I did not find the channels by any means in the state represented. Although the monsoon was then over, I found the whole of the water in the channel was flowing, in a good stream, to one of the French tanks. I however took notes of the defects in the channel, and during the following year, the anicut and both calingulahs were raised, the aqueduct, which by the fault of a Maistry had been built too low, was partly re-constructed, so as not to obstruct the flow of water, and the channel was cleared in places. During the following year, the anicut was raised a second time, and till I left the District in May 1863, there was a yearly maintenance allowance for clearing and repairing the channel.

7. This work is far from being the most important in the Villapuram Táluq, yet it received more of the time and attention of the Táluq Overseer than any other work, and he had most particular instructions to see that the tanks at the upper end of the channel did not get an undue supply of water. I never held the opinion that the upper tanks had the first right to the water. Certainly, if, as stated, the Ryots of those tanks prevented the water going further down the channel, it was not "by authority." Nor is it only in extraordinarily great floods that the water reaches the French tanks, for I myself saw the water flowing to a French tank in 1859, when the monsoon was over, and there was no flood at all in the river.

8. In the first report by the French Sub-Engineer in 1859, the levels of the tanks in English territory, at the upper end of the channel, do not appear to have been taken into consideration, and it may have been supposed that the channel had been cut with but slight fall for three miles without any reason, and that the fall could be made uniform from end to end, without interfering with the supply of the tanks.

9. I pointed out that if the main channel were deepened, as proposed (viz., about two yards opposite the first branch, where it was already four yards deep), not only would the supply to that tank be cut off, but the operation would be very costly, as deepening would necessitate widening and throwing further back the banks previously formed. M. Lámairessé then agreed to modify his proposals, and to be content with a less fall for the upper part of the channel and to reduce the bottom breadth.

10. The last report that I wrote on this channel is addressed to the Collector, and dated 28th of January 1863. M. Lámairessé had proposed to carry out certain improvements to the main and branch channels. The amount of his estimate was 4,000 Rupees, to be contributed by the two Governments in the same proportions as before. The portion of the scheme that I objected to was the deepening the main channel in the upper part to such an extent that the tanks in the English territory would not be supplied. That this would be the result was acknowledged by the French Engineer, for he stated in his report that a sluice might be built (at the cost of the English Government) across the channel for the supply of the high level tanks. I informed the Collector that 4,000 Rupees seemed to me a large sum to lay out on the channels, and out of proportion to the benefit to be derived. I also pointed out that there was another anicut across the river, only two miles above the Vicravandy anicut, and that all small freshes were stopped by the upper anicut, and that the channels in their present state seemed to draw off the water with sufficient rapidity, as water rarely passed over the anicut. I also suggested that the matter should be referred to the Deputy Chief Engineer. I was transferred to another District soon after, and was absent from South Arcot for two years. I am therefore not responsible for any thing that was done, or not done, to the channel during that time.

11. M. Lámairessé now proposes that the floor of the channel at the head should be seven feet below the crown of the anicut. But why as much as seven feet? It is known that several of the tanks are on a high level, and are with difficulty supplied, then why should the head of the channel be placed so low and the difficulty increased. Such a depth at the head is not necessary, and I beg to suggest that it be reduced to five feet. Next M. Lámairessé proposes that the channel bed should slope gradually to a certain outlet, and thence have a fall of 6·34 inches per mile to the first branch. Now this outlet is a low part of the channel where it is crossed by a ravine, and a calingulah has there been built in the channel bank. In his remarks on the Vicravandy channel (one of the documents sent to me) M. Lámairessé states, that the whole difficulty is that the floor of the channel rises from this outlet instead of falling. The difficulty seems to be one of his own creating. The level of the channel bed, where it is crossed by the ravine, does not affect the flow of the water. If the channel has a fall from the head to the first branch, it does not matter if one intermediate portion of the bed is accidentally deeper than it need be.

12. The objection to deepening the upper part of the channel, in this case, is that it appears to be incurring a needless expense, first to deepen the channel so that certain tanks cannot be supplied, and then to build sluices to remedy the defect.

13. I have no objection whatever to the other works proposed by the French Engineer, viz., to the further raising of the anicut, so far as it can be done without injury to the cultivation on the river bank; to giving the slope proposed to the lower part of the channel; to cutting branch channels to any other tanks that can be supplied; to building sluices at the heads of the branch channels; and to the appointments of the Superintendents to regulate the distribution of the water.

14. As particular reference is made in the letter of His Excellency the Governor of Pondicherry to a letter of mine to Mr. Lawford, it is necessary for me to state the reason for my writing the letter. In Mr. Lawford's Inspection Report for June I noticed the following remark opposite the Vicravandy channel: "By the French levels the channel is said to rise: by mine there is a regular fall of about one foot per mile." The channel being reported in a much better state than it had been represented to be by the French Engineer, I wrote to Mr. Lawford that the French Engineer had proposed a *uniform fall* for the channel from end to end, and to that *uniform fall* I decidedly objected, on account of the unnecessary cost. As I tanks in the English territory, and on account of the levels of the knew nothing of any arrangement that Mr. Lawford and M. Lámairessé had come to, no opinion of mine on such arrangement was expressed in my letter, and the



uniform fall is no longer insisted on by the French Engineer. I am surprised that so much has been made of a letter of mine to one of my Assistants, particularly as neither the original nor a copy of the letter had been seen.

15. There is no copy in my office of the original Agreement between the French and English Governments regarding this channel. I have applied to the Collector for a copy, but have not yet been furnished with it. I return all the papers which accompanied your Memorandum, and I forward, in addition, the papers noted in the margin. There is no previous correspondence on the subject to which reference can be made.

Survey of the Vicravandy channels.
Copy of estimate for the anicut and channel.
Letters of the Collector and late Colonel Ouchterlony.

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No. 680. From the Acting Collector and Special Agent, South Arcot, to the Under Secretary to Government, Public Works Department, dated Camp, Tindevanum, 18th September 1865, No. 228.

1. In reference to your Memorandum, No. 55, dated 15th September, I have the honor to state that no formal agreement was entered into between the French and English Governments regarding the construction of the Vicravandy anicut.

2. On this subject the French Government, in support of their claim, refer to the correspondence which passed between the then Civil Engineer, Captain Ouchterlony, and M. DeVerninac, the Governor of Pondicherry in 1854, as guaranteeing them one-third of the volume of water which may be derived from the anicut, in consideration of the French Government contributing one-third of the expense of the construction of the anicut.

3. The entire correspondence on the subject is in the office of the Superintending Engineer, 5th Division, who I have no doubt has already submitted these papers, or copies thereof, with his report to Government.

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No. 681. From the Superintending Engineer, 5th Division, to the Secretary to Government, Department Public Works, dated Usur, 25th September 1865, No. 1,660.

In the last paragraph of my report, dated 12th September, on the Vicravandy channel, I stated that I had applied to the Collector for a copy of the original Agreement between the French and English Governments. I now beg to forward his reply, enclosing a letter from His Excellency the Governor of Pondicherry. Copies of the correspondence referred to I forwarded with my report.

2 Letters.

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From the Acting Collector and Special Agent, South Arcot, to the Superintending Engineer, 5th Division, dated Tindevanum, 12th September 1865, No. 221.

1. In reference to your letter of the 21st ultimo, No. 1,303, I have the honor to state that finding no trace among my records of any Agreement between the French and English authorities relative to the Vicravandy anicut and channels, I thought proper to address the Governor of Pondicherry with a view to satisfy myself beyond doubt of the existence or otherwise of such a document, and the accompanying letter (with translation) is His Excellency's reply.

2. You will observe that His Excellency admits that no formal Convention was entered into when the anicut and channels were first proposed, but contends that the official correspondence which passed between the Civil Engineer, Captain Ouchterlony, and Mr. DeVerninac, the Governor of Pondicherry in 1854, explicitly declare the conditions on which the French Government consented to bear one-third of the cost of the project. His Excellency especially refers to Mr. Verninac's letter of the 28th April 1854, in which, as alleged, his Government agreed to pay their share on the distinct understanding that one-third of the volume of water which may be derived from the anicut should be appropriated for the exclusive use and benefit of the five French villages contemplated in the proposal. This letter is on my office records, but while it makes no mention of the above terms, it refers to certain papers forwarded therewith which, at the Governor's request were sent to Captain Ouchterlony with Mr. Maltby, the then Collector's, letter of the 29th April 1854, No. 77, by a reference to which you will probably be able to ascertain whether they bear out His Excellency's assertion.

3. It is scarcely necessary for me to refer you to all the other correspondence which has passed on this subject, as these are sufficiently known to yourself, and I will only add that your predecessor, Colonel Wilkieson, in his letter to Mr. Reade of the 15th February last, informed the Collector that he had deputed Mr. A. C. Lawford, in charge of the Villapooram Taluq, to apply himself in concert with Mr. Lámairessé towards bringing about a satisfactory settlement of the long pending and vexatious disputes between the English and French villages, touching the equitable distribution of water through the Vicravandy anicut channels, but with what result has yet to be seen.

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From the Governor of the French Establishments in India, to the Collector of South Arcot, dated Pondicherry, 5th September 1865, No. 74.

1. By your letter of the 26th August last, you did me the honor to ask whether there exists any Agreement or Deed passed between our respective Governments, anent the Vicravandy channel in 1854, and if so, to furnish you with a copy of the same.

2. In reply thereto, I have to state, that the Convention or Agreement between the two Governments, consists solely but very explicitly and positively in the terms of the official correspondence which passed between the functionaries, then deputed for that purpose.

3. Captain Ouchterlony, by his letter of the 7th April 1854, copy of which is herewith enclosed, having requested the co-operation of the French Government towards the execution of his project of the Vicravandy channel and the opinion of the Governor on the conditions of the conference, Mr. DeVerninac, replied to the above letter on the 28th April 1854, meanwhile informing the Collector :—

1*st*.—"That the Council of Administration at Pondicherry have given their sanction to the "proposed work."

2*nd*.—"That one-third of the expense will be borne by the French Government for the excava- "tion of the channel, which will have to supply *one-third of the volume of its waters*, which is "supposed necessary for the irrigation of our five villages." (*Vide* annexed copies of two letters of the Governor Mr. DeVerninac, especially the one addressed to the Engineer.)

4. By a letter dated 11th September 1854, the Collector of South Arcot, had informed Mr. DeVerninac "of the sanction by the Government of Fort Saint George, for construction of a dam "across the Vicravandy river, and for the excavation of the main and branch channels for a supply "of water to the several tanks situated in our respective territories, a work estimated at Rupees "11,993-2-7, and that one-third of the amount should be borne by the French Government." (*Vide* copy of the answer from Mr. DeVerninac to the Collector, dated 13th September 1854.)

5. The project of Mr. Ouchterlony, submitted to the Government of Fort Saint George, contained evidently the correspondence between that Engineer and Mr. DeVerninac, as also the stipulated condition of *one-third part of water from the channel, in return of one-third of the expenses incurred;* consequently the pure and simple approval given to the propositions of Mr. Ouchterlony necessarily involves the acceptance of the condition : one-third part of water, for one-third of expenses incurred.

6. This principle, moreover, has never been contested by the English Engineers. Mr. Foord himself admits in his correspondence, that the French should get their portion of water from the channel, one-third part of the time only. But afterwards he departed from the principle of the application ; first, in allowing the work to be carried out by his own Maistries for the exclusive benefit of the English villages, in contravention to the project of Mr. Ouchterlony, which was sanctioned on the correspondence between our respective Governments, and in opposing the modifications of the said work.

7. It is in the absence of a compact, which is not the less important because of its not having been duly and authoritatively ratified and signed, that I have now addressed myself to the equity of His Excellency the Governor of Madras.

(True translation.)

(Signed) G. BANBURY,
*Acting Collector and Special Agent.*

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No. 682. ORDER THEREON, 26th October 1865, No. 3,230.

CIVIL WORKS, No. 97.

1. These papers relate to a request of the French Government of Pondicherry to this Government to undertake the carrying out of certain modifications and improvements of the Vicravandy anicut and channel to remedy alleged defects in their construction, by which the tanks



within the French territories have been prevented from receiving such proportion of the supply of water from the channel as was stipulated for when the Government of Pondicherry agreed to pay one-third of the original cost of the works. There appears to be no formal agreement between the two Governments on the subject, but it is clear from the tenor of the correspondence referred to in the Order of this Government, No. 975, dated 19th August 1854, sanctioning the British share of the cost of the work, that in return for the one-third of the total outlay which was to be contributed by the Government of Pondicherry, the French were to receive a like proportion of the channel water.

2. The anicut and channel were constructed between the years 1854 and 1857, and it seems that ever since their completion the French have been dissatisfied. They now complain that the channel has not been made of the dimensions, either in plan or section, originally proposed, and that, having no fall for several miles of its upper course, it is not capable of supplying much more water than is drawn off by the English tanks, the owners of which, as if by authority, take care to abstract more than their proper share, and thereby deprive the French of their supply.

3. M. Lámairessé, the French Engineer, proposes to rectify matters by raising the anicut across the Vicravandy river, and by enlarging the channel and increasing the slope of its bed for the first few miles of its course, providing for the supply of the English tanks, which are on a high level, by a calingulah furnished with sluices that should be opened or shut during stated periods, to regulate the delivery of water according to the stipulated proportions.

4. Colonel Foord, who is thoroughly acquainted with the work since its commencement, denies that the channel, as completed, differs from that which was projected and estimated for, and he opposes the proposal to alter the slope of its bed, as that would not only make it difficult to supply the English tanks, but would involve an expenditure out of all proportion to the benefits to be derived. Colonel Foord has no objection, however, to M. Lámairessé's other propositions ; and as the Government are of opinion that, the exact measures to be taken to improve the channel and to satisfy the French Government can only be properly settled on the spot, the Superintending Engineer of the 5th Division will be requested to place himself in communication with M. Lámairessé, and, concerting a meeting with him, decide what should be done, reporting the result for the information of Government.

Ordered that the following letter be sent :—

(Here enter No. 3,231, dated 26th October 1865.)

(True Extract.)

Colonel, R. E.,
*Secretary to Government.*

To the Superintending Engineer, 5th Division.
,, Collector and Agent, South Arcot.
,, Political Department.

Exd. S. T. Augustin.

PUBLIC WORKS DEPARTMENT.
FORT SAINT GEORGE,
*26th October* 1865.

No. 3,231.

No. 683.

To HIS EXCELLENCY THE GOVERNOR OF THE FRENCH SETTLEMENTS IN INDIA.

SIR,

CIVIL WORKS, No. 98.

1. I have the pleasure to acknowledge the receipt of your Excellency's letter, No. 25, dated 29th July 1865, bringing to notice the insufficiency of the supply of water to tanks in the French territory from the Vicravandy channel in the South Arcot District.

2. As the exact measures to be taken to improve the channel can only be properly settled on the spot, Colonel Foord, the Superintending Engineer of the 5th Division, has been instructed to place himself in communication with your Chief Engineer, M. Lámairessé, and, concerting a meeting with him, decide what should be done.

3. I would add that the Madras Government have every desire to meet your Excellency's wishes in this matter to such extent as may be possible, consistent with the interest of the owners of the tanks in the British territory.

3. Accept, Sir, the assurance of the high consideration with which

I have the honor to be,
Your Excellency's
Most obedient and humble servant,
(Signed) W. T. DE NISON.

Exd. S. T. Augustin.

so as to fit them to bear the increased

No: 22. Civil Engineer's office 5th Div
Pondicherry 14th January 1854

From

Captain J. Cracklethorp
Civil Engineer 5th Div

To,

The Hon'ble Malthy Esquire
Collector of South Arcot

Sir

I have the honor to forward herewith for your consideration a Plan illustrating of the project of irrigation alluded to in my Diary for the past month under the head cited in the margin, together with estimates of the expense likely to be incurred in excavating the main and branch channels, and in constructing the anicut Calingulahs and Revetments required to ensure the success of the undertaking; and also of the expense of putting the bunds of the various tanks which it is proposed to supply into a proper state of repair, so as to fit them to bear the increased

Proposed Anicut across the River & channel of Irrigation in the Settlement.

Rs. 10,000--0--
--0-- 2,000--0--

--0-- 2,000--0--

prepared which will be brought on them by the additional quantity of water introduced from the channel.

2 The amount which falls to be shared between the English and French Government you will observe is Rupees 12,000 — and I conclude you will consider the proportion to be borne by each should be regulated by that of the water which the territories of either State actually receive from the main channel, a point which will fall to be determined by the extent of land, claiming irrigation, which lies in a position practicable for the purpose.

3 If you will be good enough therefore to direct a Statement to be prepared of the Berry and ayacut of the various English villages which will be benefited by the project and call upon the French Receiver de Domaine for a similar memorandum as regards those situated within the Pondicherry limits, the adjustment of the question of contribution of cost could no doubt be speedily ensured and as the project promises to prove of great value in augmenting the Revenue



of the District, in giving increased support to the industry of the Ryots interested, and particularly in providing immediate means of employment for the suffering class of labourers, with much facility of subsistence, I am induced to hope it would receive cordial support from the Board of Revenue, and early sanction, and their recommendation from Government.

4 As I have had experience of the person in charge of the whole works, the French Engineer, Monsieur Louis Guérard, offers to undertake the supervision of all the masonry details, upon the understanding that a Surveyor is appointed on our side to lay out and conduct the line of excavation for the main and branch channels for which duly skilled Mistries will be available by the time sanction for the work is obtained. The details of the amicut will vary according to the nature of the rock which appears to form the bed of the river, but Mons. Guérard and myself are of accord in believing that the amount allowed for

the entire work, will prove sufficient
to cover its cost. Viz. £ 12,000 for the whole.

I have the honor to be
Sir
Your most obedient Servant
(Signed) J. Buckleton
Civil Engineer 5th Div.

Pondicherry
14th January 1854

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No. 58

South Arcot Collectorate
Cuddalore 17th March 1854

From

C. Maltby Esqre
Collector of South Arcot

To

Captain J. Buckleton
Civil Engineer 5th Division

Sir

In reference to your letter of the 14th January last regarding a projected Ammint across the Veeranamdy river, I have the honor to state that it was accompanied only by two detailed estimates and for the excavation of the of the main and branch channels at an outlay of Rs 10,000 and the second for strengthening and improving the bands of the tanks in the villages to be benefited. I therefore request that you will favor me with the details of the plan and estimate



for the Ammint itself, as also with a sketch of the different villages, and the lines proposed for their channels, when Assistant Revenue Surveyor Vardon has finished the task of setting the bunds which was to be assigned to him according to your Diary for December 1853 Page 12.

2 Your estimate for excavating the watercourses, should work to be performed in four English and 2 French villages which the project is shown by your diary of December to benefit 10 of the former and 6 of the latter. I shall therefore be obliged by your informing me if I am right in supposing that your estimate provides for all the works which are proposed by you and the French officers to be executed jointly and that all the other subsidiary works in the remaining villages are to be performed separately by the Government to which those villages belong.

3 I enclose for your information an account just received from the Village Provision Tahsildar showing the additional revenue expected to be derived from the projected English

villages; but unfortunately it is impossible with precision to which branch villages the branch channels will lead, this amount must be guided conjecturally.

I have the honor to be Sir

(signed) C. Maltby

Callendar

I shall soon receive a plan with all details I had begun last Dec. Maltby 2 months ago, and recommending final examination of the estimates when I would find that all the village tanks were duly provided with channels.

---

No. 72.

Southern Great Colar Catchment

Cuddalore 31st March 1854

From

C. Maltby Esqre

Collector of Southern Div.

To

Captain J. Cracklethorp

Civil Engineer S. Division

Sir

I have the honor to return with my countersigned the estimates received with your letter of the 11th January last and to request that you will forward them for sanction to the Board of Revenue.

2 Since addressing you on the 17th instant I have found in my office Mr Pardoe's map showing the roads and the position of the French and English villages to be unfinished. I have therefore sufficient information to make bid concur cordially in the plan, and as it is important to avoid delay I have thought it desirable to send some minor points for further decision and return the estimates at once for submission to the Superior authorities with a request that sanction may be granted for executing the works in conjunction with French Authorities, either an equal division of the expence or of each Government paying its share in proportion to the benefit received by it.

3 In the above paragraph I alluded only to the annicut and the main channel since each Government might undertake the branch channels and tank repairs for their respective villages. With respect to the annicut and main channels it seems to be the simplest plan that the expence should be

equally divided as the expected advantage
to each Government is nearly the sum
of Rupees 3,000 per annum, but if
the French authorities wish for a
more accurate division of the expense
this will be fixed after more detailed accounts
and measurements showing the area to
be irrigated in each village.

4. The sizes of the heads of the branch
channels will of course be fixed according
to the cultivable area of each village, and
it will be advisable to construct them
so as to regulate the volume of water
admitted and prevent further
disputes in accordance with the sug-
gestion made in your Diary of
December last page 12.

5 The account forwarded with
my letter of the 17th instant shows the
extent of the benefit expected to be derived
by the English villages, and it is thought
sufficient to obtain the approval of
the Board and Government for the
work, though a more detailed Statement
is being prepared for use in regulating
the supply of water for each village and
eliminating the portion of the cost of
the anicut and main channel

which ought to fall to our Government
if the French authorities offer objections
to an equal division of the expense.

I have the honor to be
Sir
Your most obedient Servant
(signed) C. Mallery
Collector

No 184 Civil Engineer's office 5th Dec
Tindivanam 7th April 1864

From

Captain J. Auchterlony
Civil Engineer 5th Div

To

His Excellency
The Admiral de Verninac
Governor of the French Possessions in India

Sir

Your Excellency
I do myself the honor to lay
before your Excellency in Council a Plan
and an estimate illustrating a project
for obtaining a supply of water for the
irrigation of certain French and
English villages lands from the River Gingy
by means of a Dam to be built
across it, and of a channel to be
excavated in the position shewn on
the plan.

2 I also take leave to recommend to your
Excellency's consideration the accompanying
letters addressed to me on the subject

by Mr Maltby the Collector of Customs at Calcutta and beg to request your Excellency will honor him by informing him of the sentiments of your Government on the question of the portion of the expense of the project which your Excellency may feel disposed to charge it with. Your Excellency will not fail to observe that Mr Maltby [in his letter No. 72, para 3.] expresses an opinion that the French and British Governments should undertake the execution of the branch channels and bear a proportion for the respective channels. The latter item will of course fall to be so arranged; but I am unable to concur with Mr Maltby in his opinion regarding the branch channels, because as your Excellency will observe on consulting the map it is in many places impossible to pronounce which is to be considered the main and which the local branch channel. As for example A. B. C. D. E. F. G. V to be considered the main channel, but supplying Cuicha pottah it might be considered a French branch channel, and again after B, the line B X, E, F, might be set down as an English branch, whereas it constitutes the main channel for Cuddalore [English] and Cuddalore [French]. I am therefore of opinion that all and every opinion of the project, and that of preserving the Tanks should be included [As your Excellency will perceive it is in the

Estimates have been submitted] in one total, to be shared between the two Governments according to the extent of benefit which each will respectively derive from it.

3. I solicit permission to refer your Excellency to Messieurs, Messieurs Monthenon and Le Gierre for any further information regarding the project which your Excellency may desire to possess as the details and general principles of the work have been arranged in communication with those gentlemen after an inspection of the localities in their company.

4. It is proposed to construct the Dam with brick in chunam of the general section exhibited on the Plan, and Monsr Le Gierre consents to undertake to charge himself with the superintendence of the work, whilst the authorities of our Government undertake to provide an agent to mark out the lines of the channel & to indicate the levels to be observed.

5. I do myself the honor to request that your Excellency will do me the favor to cause to be returned to me the Plans, Estimates and documents now forwarded, for your Excellency's consideration

1 Plan
1 Estimate
2 Letters
1 Memo of Remarks
to be returned from
English Officers

of the subject they refer to shall have been accomplished.

I beg your excellency to accept the assurance of my entire respect and I have the honor to be your excellency's most obedient and humble servant — —

(Signed) J. Auchterlony
Civil Engineer 5th Division

(Translation)

Civil Engineer's Office &c.
Pondicherry 28th April 1854.

From The Governor of Pondicherry
To the Civil Engineer 5th Div.n
Monsr le Captain

The documents relating to the project of a canal to irrigate certain French and English villages received with your letter of the 7th instant have been communicated to Monsr Genard the Colonial Engineer and subsequently submitted to Council and it is with pleasure I inform you that it accords its entire approbation of the works which you have designed.

The Council is of opinion that the French Government should bear one third part of the expense of the establishment of the channel & this opinion I shall support when I shall have the honor to propose to the Government of Fort Saint George to bear the necessary addition for these works and to state that this Government will reimburse its share in January next.

Monsr Genard's remarks on the Plan and Estimate are herewith forwarded

I am &c.
(Signed) Vermineau, contre admiral
Gov.r des Etablis.ts Français —

Cuddalore
29th April 1854

From
Cr. Maltby Esqre
Collector in charge
of the Stk Agents Depart.t

To Captain J. Auchterlony
Civil Engineer 5th Division

Sir, By desire of His Excellency Rear-admiral de Vermineau I have the honor to forward to you the enclosed papers

regarding the proposal for an Amicut in the Veeranandy river and request that to avoid the risk of confusion and inconvenience, the mode carried on addressing the Pondicherry Government through the office of the Special agent may be strictly followed as directed by Government under date 18th July 1834.

I have the honor to be Sir

(Signed) C. Maltby

Collector

in charge of the Special

Agents Department

Civil Engineers office &c

No 215 Salem 4th May 1854.

From

Captain J. Anchterlony

Civil Engineer &c &c

To

C. Maltby Esquire

Collector of Southern Arcot

Sir I have had the honor to receive your letter of the 29th ultimo giving cover to the papers referring to the project of the Veeranandy Amicut and requesting that to avoid the risk of confusion and inconvenience, the mode carried on addressing the Pondicherry Government through the office of the Special agent may be strictly followed as directed by Government under date 18th July 1834.

I have had the honor to receive your letter of the 29th ultimo giving cover to the papers referring to the project of the Veeranandy Amicut and requesting that to avoid the risk of confusion and inconvenience, the mode carried on addressing the Pondicherry Government through the office of the Special agent may be strictly followed as directed by Government under date 18th July 1834.

I should deeply regret if any misapprehension should exist between the Government of Pondicherry & myself, and I should very sincerely & highly reprehend in myself to adopt a course which should contravene a Regulation of Government or complicate the duties of any Public Department; but as I am wholly unable to comprehend what "risk of confusion and inconvenience" is involved by my laying before the French Government the estimates, plans and correspondence illustrating a project in which they would be found as joint in interest; and as I have never seen or heard of any order on the subject by Government under the date upon quoted [as you must be well aware] I sincerely hold myself excused for having employed the means which seemed, in a common sense point of view, the best adapted to attain the end desired, viz to push forward an valuable project already unnecessarily delayed in its passage thro' your office.

3 It seems also strange to me that you have not at an earlier date taken exception

French Government - With my letter to you
No 37 of 21st January last, I forwarded copies
of correspondence with Admiral de
Verninac upon the subject of the Coast
Canal inclusive; to be undertaken by
French Engineers under the authority
from my immediate Superiors the
Board of Revenue; yet your reply contains
no remarks upon this cause pursued, a
course which has caused the renewal
of fine criticisms, lined the sentiments
of the French Government upon the
subject now conveyed to me in less than
a week, while a month elapsed before
I was favored with yours.

4. I have now received an order from
the Board of Revenue under date 24th
April 1854 to prepare and submit "a
survey and detailed Estimate for the
proposed junction Canal between
Cuddalore and the Palar, with a
Statement of the amount that the
French Government is willing to contribute
towards the execution of the work" and
I certainly consider myself warranted
under this authority in addressing to
the French Government a request
for co-operation in the prosecution of the

2

survey, and for information upon
the question of expenditure.

I have the honor to be
Sir
Your most obedient Servant.

(signed) J Lauchlan Lang
Civil Engr 5th Division

True copies & translations.

(Signed) J Lauchlan Lang
Civil Engineer 5th Div.

(True Copies)

E H Ford Lieut & Coll R. E.
Asst Engineer 5th Division

Inspg. Engrs Office 5th Division
Omalur 12th September, 1865.

No 1520.

From

Lieutt Colo. E. A. Foord R.E.
Superintg. Engineer 5th Division

To

Colonel C. A. Orr R.E.
Secretary to Government P.W.D.

Sir,

I have the honor to forward the report on the Vicravandy channels called for in your Memorandum dated 5th of August.

2. The project for the Vicravandy anicut and channels was brought forward in 1854 by the late Colonel Ouchterlony in concert with M. Guerre the Chief Engineer of Pondicherry. The sanctioned estimate amounting to Rupees 12000 provided for an anicut across the Vicravandy river, main channel with Calingulahs in the bank, and branch channels to certain English and French tanks. The cost of the work was to be borne in the proportion of two thirds by the English and one third by the French Government, and the water was to be shared in a like proportion. The levels were taken, and the plans and estimates prepared by the late Surveyor Vardon, under whose superintendence the greater part of the work was done.

3. On my first visit to the work, in the early part of 1856, soon after taking charge of the South Arcot District, I found the anicut and two Calingulahs

Enclosures.

7 Enclosures (recd from Govt with Memo dated 5th August) wanting.

1 Survey
1 Copy of Estimate
1 Copy of Correspondence between the Collector of South Arcot & the Civil Engineer 5th Div.

Enclosure in Letter from the Engr 5th Div. dated 12th September 1865.

P.W. 3535/65

Copy of Correspondence between the Collector of South Arcot & the Civil Engineer 5th Div. in connection with the Vicravandy Channels.

calingulabs built, the main channel completed, with the exception of some rock cutting, as far as the first branch channel, and the rest of the work in progress. The work was completed in 1857, and some additional work was done in 1858.59.

4. Mr Vardon's survey does not shew the proposed slope of the bed of the channel, but the upper part of the channel, where the slope is said to be insufficient, was certainly cut in accordance with the depths in the sanctioned Estimate, and the bottom breadth of 14 yards was also in accordance with that Estimate. I have never seen any document in which a bottom breadth of 10 yards is specified. If the channel had been made 10 yards wide, the sanctioned Estimate, and the amount to be paid by the French Government, must have been largely increased.

5. Nor can I understand how a minimum slope of 3.6 feet to a mile could have been agreed upon. If the channel had been cut with such a slope, not one drop of water could have gone to the English tanks. With the much less slope now proposed to be given, the French Engineer admits that sluices will be necessary across the main channel to raise the water into the branches. Then how is it that no sluices were provided in the original Estimate, and that there is not the faintest allusion to such works in the Correspondence relating to the project?

6. In 1859 the channel was examined by a Sub Engineer from Pondicherry, who wrote a long report on it. He stated that the channel had no fall for the first three miles, that the Calingulabs were too low, that the flow of water was obstructed by an aqueduct and that the French tanks did not get their proper share of water. This report having been forwarded to me, I met in Guerre the Chief Engineer, by appointment, at the Channel in December 1859. I did not find the channels by any means in the state represented. Although the Monsoon was then over, I found the whole of the water in the channel was flowing, in a good stream, to one of the French tanks. I however took notes of the defects in the channel, and during the following year, the ancient and both Calingulabs were raised, the aqueduct, which by the fault of a Maistry had been built too low, was partly reconstructed, so as not to obstruct the flow of water, and the channel was cleared in places. During the following year, the ancut was raised a second time, and till I left the District in May 1863 there was a yearly maintenance allowance for clearing and repairing the channel.

7. This work is far from being the most important in the Villapuram taluq, yet it received more of the time and attention of the Taluq Overseer than any other work and he had most particular instructions to see that the tanks at the upper end of the channel did not get an undue supply of

of water. I never held the opinion that the upper tanks had the first right to the water. Certainly, if, as stated, the ryots of those tanks prevented the water going further down the channel, it was not by authority. Nor is it only in extraordinarily great floods that the water reaches the French tanks, for I myself saw the water flowing to a French tank in 1859 when the Monsoon was over, and there was no flood at all in the river.

8. In the first report by the French Sub Engineer in 1859 the levels of the tanks in English territory, at the upper end of the channel, do not appear to have been taken into consideration, and it may have been supposed that the channel had been cut with but slight fall for three miles without any reason, and that the fall could be made uniform from end to end, without interfering with the supply of the tanks.

9. I pointed out that if the main channel were deepened as proposed (viz. about two yards opposite the first branch, where it was already four yards deep) not only would the supply to that tank be cut off but the operation would be very costly, as deepening would necessitate widening and throwing further back the banks previously formed. M. La Maireese then agreed to modify his proposals, and to be content with a less fall for the upper part of the channel and to reduce the bottom breadths

the



10. The last report that I wrote on this channel is addressed to the Collector and dated 28th of January 1863. M. La Maireese had proposed to carry out certain improvements to the main and branch channels. The amount of his estimate was 4,000 Rupees, to be contributed by the two Governments in the same proportions as before. The portion of the scheme that I objected to was the deepening the main channel in the upper part to such an extent that the tanks in the English territory would not be supplied. That this would be the result was acknowledged by the French Engineer for he stated in his report that a sluice might be built (at the cost of the English Government) across the channel for the supply of the high level tanks. I informed the Collector that 4,000 Rupees seemed to me a large sum to lay out on the channels and out of proportion to the benefit to be derived. I also pointed out that there was another anicut across the river, only two miles above the Viravandy anicut, and that all small freshes were stopped by the upper anicut, and that the channels in their present state seemed to draw off the water with sufficient rapidity, as water rarely passed over the anicut. I also suggested that the matter should be referred to the Deputy Chief Engineer. I was transferred to another District soon after, and was absent from South Arcot for two years.

I

I am therefore not responsible for any thing that was done, or not done, to the channel during that time.

11 M. La Maireuse now proposes that the floor of the channel at the head should be 7 feet below the crown of the anicut. But why as much as 7 feet? It is known that several of the tanks are on a high level, and are with diffienlty supplied, then why should the head of the channel be placed so low and the diffienlty increased. Such a depth at the head is not necessary and I beg to suggest that it be reduced to 5 feet. Next M. La Maireise proposes that the channel bed should slope gradually to a certain outlet, and thence have a fall of 6.34 inches per mile to the first branch. Now this outlet is a low part of the channel where it is crossed by a ravine, and a Calingulah has there been built in the channel bank. In his Remarks on the Vicravoundy channel (one of the documents sent to me) M. La Maireise states that the whole diffienlty is that floor of the channel rises from this outlet instead of falling. The diffienlty seems to be one of his own creating. The level of the channel bed where it is crossed by the ravine does not affect

the



the flow of the water. If the channel has a fall from the head to the first branch, it does not matter if one intermediate portion of the bed is accidentally deeper than it need be.

12. The objection to deepening the upper part of the channel in this case, is that it appears to be incurring a needless expense first to deepen the channel so that certain tanks cannot be supplied and then to build sluices to remedy the defect.

13. I have no objection whatever to the other works proposed by the French Engineer viz. to the further raising of the anicut, so far as it can be done without injury to the cultivation on the river bank; to giving the slope proposed to the lower part of the channel; to cutting branch channels to any other tanks that can be supplied; to building sluices at the heads of the branch channels; and to the appointment of Superintendents to regulate the distribution of the water.

14. As particular reference is made in the letter of His Excellency the Governor of Pondicherry to a letter of mine to Mr. Sawford, it is necessary for me to state the reason for my writing the letter. In Mr. Sawford's

Inspection

Survey of the Vicravandy Channels.
Copy of Estimate for the Channel & Channel.
Letters of the Collector & Lieut. Col. Onchterlony.

Inspection Report for June I noticed the following remark opposite the Vicravandy channel "By the French levels the channel is said to rise: by mine there is a regular fall of about one foot per mile". The channel being reported in a much better state than it had been represented to be by the French Engineer, I wrote to Mr. Lawford that the French Engineer had proposed a uniform fall for the channel from end to end and to that uniform fall I decidedly objected, on account of the levels of the tanks in the English territory and on account of the unnecessary cost. As I knew nothing of any arrangement that Mr. Lawford and M. La Mairose had come to, no opinion of mine on such arrangement was expressed in my letter, and the uniform fall is no longer insisted on by the French Engineer. I am surprised that so much has been made of a letter of mine to one of my assistants, particularly as neither the original nor a copy of the letter had been seen.

15. There is no copy in my Office of the original agreement between the French and English Governments regarding this channel. I have applied to the Collector for a copy but have not yet been furnished with it. I return all the papers which accompanied your Memorandum and I forward in addition the papers noted in the margin. There is no previous correspondence on the subject to which reference can be made.

I have the honor to be,
Sir,
Your most Obedt Servt

E A Ford Lt. Col. R.E.
Supg. Engineer 5th Dn.

Rec.
Pro - 19th August 1854
No 23-24
Rec.
To England No 15 of 1855

For 1868 Depte
Pro 13 Govt for Calcutta
No 3535

From
The Supg. Engineer
5th Div.

To
The Secretary to
Government N.W.P.

Dated 12th September/65.
Recd 15th
No 1520.
Enclosures 10
2-

Report on the
Viceroy and aments
Channels No 1 Range
South Arcot

No 679

No 3230-68231-265 Calcutta

Calcutta 15th Oct. 65

*Estimate of the probable expense of erecting an anicut across the Ginjee River and of excavating certain Channels of Irrigation in the District of South Arcot.*

*Excavating a Channel from the River Ginjee to Caddalore Village.*

| Parts and Villages | Measurement Length | Breadth | Height | Cubical contents 1st yard | 2nd yard | 3rd yard | 4th yard | Particulars of work. | Rupees | Annas | Pie. | Rate per. | Amount | Total | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 565 | 6 | 1 | 3391 | | | | Drawn head to Channel c to d. | | | | | | | |
| | " | 4½ | ½ | " | 1271¼ | | | | | | | | | | |
| | 285 | 8½ | 1 | 2422½ | | | | | | | | | | | |
| | " | 6½ | 1 | " | 1852½ | | | " d to e | | | | | | | |
| | " | 4¾ | ¾ | " | " | 1015⅝ | | | | | | | | | |
| | 307 | 11⅓ | 1 | 3472⅓ | | | | | | | | | | | |
| | " | 8⅓ | 1 | " | 2558⅓ | | | | | | | | | | |
| | " | 6⅓ | 1 | " | " | 1944⅓ | | " e to f | | | | | | | |
| | " | 4⅓ | ⅔ | " | " | " | 886⅔ | | | | | | | | |
| | 205 | 8 | 1 | 1640 | | | | | | | | | | | |
| | " | 6 | 1 | " | 1230 | | | | | | | | | | |
| | " | 4½ | ½ | " | " | 461½ | | " f to g | | | | | | | |
| | 352 | 8 | 1 | 2816 | | | | | | | | | | | |
| | " | 6 | 1 | " | 2112 | | | | | | | | | | |
| | " | 4½ | ½ | " | " | 792 | | " g to h | | | | | | | |
| | 271 | 10 | 1 | 2710 | | | | | | | | | | | |
| | " | 8 | 1 | " | 2168 | | | | | | | | | | |
| | " | 6 | 1 | " | " | 1626 | | " h to i | | | | | | | |
| | " | 4½ | ½ | " | " | " | 609¾ | | | | | | | | |
| | 369 | 10 | 1 | 3690 | | | | | | | | | | | |
| | " | 8 | 1 | " | 2952 | | | | | | | | | | |
| | " | 6 | 1 | " | " | 2214 | | " i to j | | | | | | | |
| | " | 4½ | ½ | " | " | " | 799½ | | | | | | | | |
| | 293 | 9⅔ | 1 | 2832⅓ | | | | | | | | | | | |
| | " | 7⅔ | 1 | " | 2246⅔ | | | | | | | | | | |
| | " | 5⅔ | 1 | " | " | 1660½ | | " j to k | | | | | | | |
| | " | 4⅓ | ⅓ | " | " | " | 423⅔ | | | | | | | | |
| | 375 | 11 | 1 | 4125 | | | | | | | | | | | |
| | " | 9 | 1 | " | 3375 | | | | | | | | | | |
| | " | 7 | 1 | " | " | 2625 | | " k to l | | | | | | | |
| | " | 4½ | ⅓ | " | " | " | 541⅔ | | | | | | | | |
| | 354 | 11 | 1 | 3894 | | | | | | | | | | | |
| | " | 9 | 1 | " | 3186 | | | | | | | | | | |
| | " | 7 | 1 | " | " | 2478 | | " l to m | | | | | | | |
| | " | 4½ | ½ | " | " | " | 796½ | | | | | | | | |

Carried forward.

Brought forward

Excavating a Channel from the River Gunjeea to Cuddalore Village.

| | | | | |
|---|---|---|---|---|
| 373 | 10 | 1 | 3730 | |
| " | 8 | 1 | " 2984 | |
| " | 6 | 1 | " " 2238 | |
| " | 3⅓ | ⅓ | " " " 414 4/9 | From Ge. to K |
| 401 | 11⅓ | 1 | 4544/9 | |
| " | 9⅓ | 1 | " 3742/9 | |
| " | 7⅓ | 1 | " " 2940/9 | K. to O |
| " | 4⅔ | 1⅔ | " " " 3118 8/9 | |
| 325 | 11⅓ | 1 | 3683/9 | |
| " | 9⅓ | 1 | " 3033/9 | |
| " | 7⅓ | 1 | " " 2383/9 | O to P |
| " | 4⅔ | 1⅔ | " " " 2527 7/9 | |
| 482 | 10 | 1 | 4820 | |
| " | 8 | 1 | " 3856 | |
| " | 6 | 1 | " " 2892 | P to Q |
| " | 4 | 1 | " " " 1928 | |
| 353 | 7 | 1 | 2471 | |
| " | 5 | 1 | " 1766 | q to r |
| " | 3 | 1 | " " 1059 | |
| 259 | 4½ | 1 | 1165½ | r to s |
| 1187 | 2¾ | ¾ | " 5343/16 | |
| | 3⅓ | 1 | 685/9 | s to t |
| " | 2⅓ | ⅓ | " 145 4/9 | |
| 462 | 3½ | 1 | 1617 | t to u |
| " | 2¼ | ¼ | " 295 7/16 | |
| 584 | 2¾ | ¾ | 1284½ | u to V |
| 1406 | 3 | 2 | 8436 | Raising banks from V to W |
| 784 | 3 | 2 | 4704 | W to X |
| 696 | 3½ | 1 | 2436 | Excavating from X to Y |
| " | 2¼ | ¼ | " 391½ | |
| 986 | 3½ | 1 | 3451 | Y to Z |
| " | 2¼ | ¼ | " 554 5/8 | |
| 828 | 3 | 2 | 4968 | Raising banks from Z to A |
| 1090 | 3 | 2 | 6540 | A to S |
| 1210 | 3 | 2 | 7260 | S to T |
| 1610 | 3 | 2 | 9660 | T to U |
| 1044 | 3 | 2 | 6264 | U to V |
| 982 | 3 | 2 | 5892 | V to W |
| 514 | 3 | 2 | 3084 | W to B |
| 550 | 3 | 2 | 3300 | B to X |
| 1826 | 3 | 2 | 10956 | X to E |
| 800 | 2 | 1 | 1600 | E to F 37 |

Total Cyad 133164/9

402183/36

Earthwork @ 6 Cyad 41 6 12 6 5

" @ 18 " 167 5 12 9

Carried forward Rupees 585 2 5

Brought forward Rupees 5837 2 5

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Earthwork | | | | @ | 10 | Cyard | 1371 | 5 | |
| | | | | @ | 1 | " | 752 14 | 6 | 7 9 6 1 5 11 |

Building Village

| | | | | | | |
|---|---|---|---|---|---|---|
| 490 | 8 | 1 | 3920 | | | |
| " | 6 | 1 | " | 2940 | | |
| " | 4 | 1 | " | 1960 | | |
| " | 2½ | ½ | " | " | " | 612½ |
| 211 | 5⅓ | 1 | 1125⅓ | | | |
| " | 3⅓ | 1 | " | 713⅓ | | |
| " | 2⅙ | ⅓ | " | 152⅞ | | |
| 384 | 4 | 1 | 1536 | | | |
| " | 2½ | ½ | " | 480 | | |
| 355 | 3 | 1 | 1065 | | | |
| 285 | 2⅓ | ⅓ | 221⅓ | | | |
| Total b yard | | | 7868 | | | |
| | | | 4123⅓ | | | |
| | | | 2112⅔ | | | |
| | | | 6121½ | | | |

From P to B

B to C

C to D

D to E

E to "

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Earthwork | | | | @ | 6 | b yd | 245 | 14 | |
| " | | | | @ | 9 | " | 171 | 12 | 11 |
| " | | | | @ | 1 | " | 110 | 3 | |
| " | | | | @ | 13 | " | 38 | 4 | 6 5 6 5 15 7 |

Excavation and Bank Lands

| | | | | |
|---|---|---|---|---|
| 387 | 2½ | ½ | 483¾ | |
| 680 | 2¾ | ¾ | 1402½ | |
| 320 | 2½ | ½ | 400 | |
| 310 | 2½ | ½ | 1162½ | |
| Total b yard | | | 3448¾ | |

Excavating from V to G

Do " G to H

" " H to Station 3

Raising banks from 03 to I

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Earthwork | | | | @ | 6 | Cyard | 107 | 12 | 4 |
| " | | | | @ | 6 | " | 107 | 12 | 4 |

Left V to Ramchelet Lands. &c.

| | | | | | | |
|---|---|---|---|---|---|---|
| 582 | 4 | 1 | 2328 | | | |
| 740 | 4 | 1 | 2960 | | | |
| 520 | 2½ | ½ | 650 | | | |
| " | 2½ | ½ | 650 | | | |
| 302 | 2½ | ½ | 377½ | | | |
| | 2½ | ½ | 377½ | | | |
| 473 | 2 | 1 | 946 | | | |
| Total b yards | | | 8289 | | | |

Raising banks from X to M

Do " Do M to N

Excavating from N to O

Raising banks from N to O

Excavating from O to O - 30

Raising bank from O to 30 . O

Do from O 30 to O 31

Left X from X to Ramchelet Land &c.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Earthwork | | | | @ | 6 | b yard | 259 | 6 | 259 6 |

| | | | | |
|---|---|---|---|---|
| 180 | 2½ | ½ | 225 | |
| 587 | 3 | 1 | 1761 | |
| 350 | 2½ | ½ | 437½ | |
| Total b yards | | | 2423½ | |

Excavating from B to Y

Do " Y to Z

Do " Z to A

Left O from O to Letter Land &c.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Earthwork | | | | @ | 6 | b yard | 75 11 | 9 | 75 11 9 |

Carried forward Rupees 8969 14 7

Excavation in Branch Channel from B to C and from C to D

| | | | |
|---|---|---|---|
| 783 | 2¼ | ¼ | 440 7/16 |
| 389 | 2¼ | ¼ | 218 13/16 |
| Total 6 yard | | | 659 4/16 |

Brought forward Rupees 8907 4 1

From B to C

" C to D

Earth work C " 6 lyad 20 97 20 97

899 7 8

add for blasting rock which is likely to be met with near the canal Head and Contingencies 1063 5 5

This sum should although surely cover cost of construction Main canal Main to each branch Channel should this way during December 1853

Total Company's Rupees 9993 13 1

Pondicherry 2nd January 1854

E. E.

(Signed) J. Puckterlony
Civil Engr 5th Division

(Signed) H. S. Hardon
Asst Revd Surveyor 5th Division

# General Estimate

of the Cost of the works of Masonary to be erected in connection with the Veeravandy project of Irrigation and of the excavation of the Main Channel as well as of branch Channels to Conduct water therefrom to all the tanks French as well as English which it is proposed to supply.

For the Annicut and Abalingulah - - - - - - - @ 12 1/2 1/2 Rupees 1999 5 6

the excavation of the Main and branch Channels - - - - - - - - - - - - 9993 13 1

Amount to be shared between the French English Govt Rs 11993 2 7

Pondicherry 12th January 1854

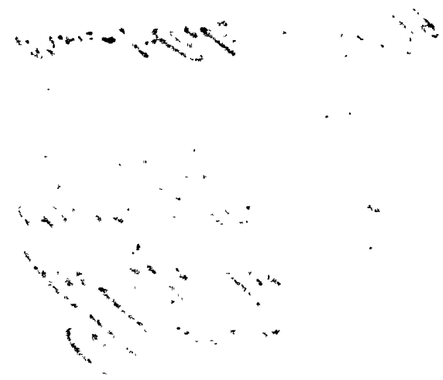
(Signed) C. Matteby
Collector

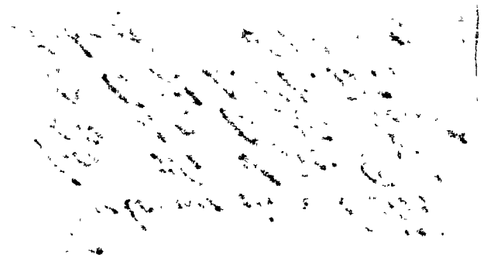
(Signed) J. Puckterlony
Civil Engr 5th Division

(True Copy)

Edmd Lieut Col R. E.
Superintg Engineer 5th Division

Edmd H. Buckley





From:
G. Bambury Esquire
Col. Collector & Head Quarters

Madras 1st October 1845

Under Secretary to Government
Revenue Department
Fort St. George

Sir,

I have the honor to transmit herewith a Petition dated 15th August last from Mahomed Ahmed Saheb and Mahomed Ibrahim Saheb Merchants of Tanjore praying that they may be allowed to export from the Coast of Coromandel to Singapore and Penang the Cargo of the Ship Segar belonging to them now lying at Negapatam.

2. On this Petition the Petitioners state that they have purchased a Cargo of Paddy and Rice at Negapatam and Tanjore for the purpose of exporting it to Singapore and Penang, and that they have been prevented from doing so by the Order of Government prohibiting the Export of Grain from the Coast of Coromandel. They further state that they have been at considerable expence in purchasing the Cargo and in the Port Charges of the Vessel, and that they will be subjected to heavy loss if they are not allowed to export the Cargo.

3. The Petitioners are Merchants of respectability and I am of opinion that no injury to the Revenue or to the Interests of the Inhabitants of this Presidency would result from granting the Petitioners request.

I have the honor to be
Sir
Your most obedient Servant
G. Bambury
Collector

(3)

Enclosure in a letter from the Collr. of Tanjore dated 1st October 1845

Rd. 7th Oct. 1845

No. 3535/45

Copy of an Estimate for the Veeravandy Ancient Schoomeloo in the Villapuram Taluq of South Arcot District

From 26th Oct. 1844 - Rs. 679

or copies thereof with his respects to Government.—

I have the honor to be
Sir
Your most Obedient Servant

Lea Rambaut
Asst. Collector & Special Agent

South Arcot
Camp Pindevanum
18th September 1865

Dft 1865 Sept
(13) 3613 (?)
Recd from Constantinople
No. 228 dated 18 October
re Treaty of Paris
Lands ceded

To
The Under Secretary
of State for F. O.

Dated 18 October 1865.
Recd 19 " "
No. 228

Stating that a formal agreement was entered into between the French & English Govts. regarding the construction of the Suez Canal.

W.

Enc. 3230-63231-265 Oct/65

No. 680.

Encl. Oct 19/65 Ord. 5th

meanwhile informing the Collector:—

1st. That the Council of administration at Pondicherry have given their sanction to the "proposed work".—

2d. "That 1/3 of the Expense will become by the French Govt for the excavation of the Channel, which we have to supply 1/3 of the Volume of its waters, which is supposed necessary for the irrigation of our five Villages" (vide annexed Copies of 2 letters of the Govr Mr De Cermiac, especially the one addressed to the Engineer).—

By a letter dated 11th Sept.r 1854 the Collector of Karikal acquainted Mr De Cermiac of the sanction given by the Govt of Fort St George, for construction of a Dam across the Veeravandy River &, for the excavation of the main & branch Channels for a supply of water to the several Tanks situated in our respective Territories, a work estimated at Rs 11993-2-7 and that 1/3 of the amount should be borne by the French Government" (vide Copy of the answer from Mr Cermiac to the Coll.r dated 13th Sept.r 1854).

The project of Mr Anchterlony submitted to the Government of Fort St George contained evidently the correspondence

Correspondence between that Engineer & Mr Cermiac, as also the stipulated condition of one third part of water from the Channel, in return of 1/3 of the Expences incurred, consequently the pure & simple approval given to the propositions of Mr Anchterlony necessarily involves the acceptance of the Condition: one third part of water, for 1/3 of Expenses incurred.

This principle moreover, has never been contested by the English Engineers.—

Mr Ford himself admits in his correspondence, that the French should get their portion of water from the Channel, one third part of the time only— But afterwards he departed from the principle of the application, first in allowing the work to be carried out by his own Masistries for the exclusive benefit of the English Villages, in contravention to the project of Mr Anchterlony, which was sanctioned on the correspondence between our respective Governments, and in opposing the modifications of the said work.—

It is in the absence of a Compact, which is not the less important because of its not having been

correspondence which passed between the

been duly & authoritatively satisfied
& Signed, that I have now addressed
myself to the agency of H. E. the
Governor of Madras. —

I have &c &c
/Signed/ Bontemps
Governor & the French Establishm
Pondicherry

/True translation/
G. Banbury
A.C. Collector & Special Agent

3751/8/5

No. 221

59

From,

G. Banbury Esquire
a.t Collector & Special agent

To,

Lieut Col. E. A. Foord R.E.
Superintending Engineer 5th Circle

Sir,

In reference to your letter of the 21st Oct. No. 1303, I have the honor to state that finding no trace among my records of any agreement between the French & English authorities relative to the Veeravandy Annicut & Channels, I thought proper to address the Governor of Pondicherry with a view to satisfy myself beyond doubt of the existence or otherwise of such a document and the accompanying letter (with translation) is His Excellency's Reply. —

2. You will observe that His Excellency admits that no formal convention was entered into when the Annicut and Channels were first proposed, but contends that the official correspondence which passed between the

the Civl Engineer Capt.n Auchterlony and Mr. De Perninac the Governor of Pondicherry in 1854, explicitly declare the conditions on which the French Government consented to bear 1/3 of the cost of the project. His Excellency especially refers to Mr. Perninac's letter of the 28th. April 1854 in which, as alleged, his Government agreed to pay their share on the distinct understanding that 1/3 of the Volume of water which may be derived from the Anicut should be appropriated for the exclusive use & benefit of the 5 French Villages contemplated in the proposal.—
This letter is on my Office Records, but while it makes no mention of the above terms, it refers to certain papers forwarded therewith which at the Governor's request were sent to Capt.n Auchterlony with Mr. Maltby, the then Collector's letter of the 29th April 1854 N.o 77, by a reference to which you will probably be able to ascertain whether they bear out His Excellency's assertion.—

2. It is scarcely necessary for me to refer you to all the other correspondence which has passed on this subject as these are sufficiently known to yourself, and I will only add that your Predecessor Lieut.t Wilkinson in his letter to Mr. Beade of the 15th Febry last, informed the Collector that he had deputed Mr. A. C. Lawford in charge of the Villupporam Taluq to apply himself in concert with Mr. Lamairesse towards bringing about a satisfactory settlement of the long pending and vexatious disputes between the English & French Villages touching the equitable distribution of water through the Bicravandy Anicut Channels, but with what result has yet to be seen.—

I have the honor to be
Sir
Your most Obed.t Servant
Geo Buckley
a.g Collector & Dep.y Agent.

Coll.r's Off.e Cuttchery
Tindevanum
12th Sept.r 1865

No. 1660. Superintending Engineer's Office 62
Ulsur Madagerd 25th September 1865

From

Lieut-Colo. C.A. Foord R.E.
Superintending Engineer
5th Division

To

Colonel C.P. Orr R.E.
Secretary to Government
P.W.D.

Sir,

In the last para of my report dated 12th September on the Vicravandee Channel I stated that I had applied to the Collector for a Copy of the original Agreement between the French and English Governments. I now beg to forward his reply enclosing a letter from His Excellency the Governor of Pondicherry. Copies of the Correspondence referred to I forwarded with my report.

I have the honor to be
Sir,
Your Most Obedient Servt

Ellford Lieut-Colo R.E.
Superintending Engineer

Enclosures: 2
2 letters

From
The Collector of Chingleput
To
The Chief Engineer
Fort St. George

Dated 12th October 1865

Sir,

3151/55.

I forward herewith for your information a Copy of the Agreement between the French and English Governments relative to the Vicravandee Channel, which I received from the Collector of Chingleput.

I am Sir
Your Most Obedient Servt
Ellford Lieut-Colo R.E.
Superintending Engineer

...lement
...enais Français
...dans l'Inde

Pondichéry, le 29 Juillet 1865

Service de l'Ordonnateur.

N° 2 S.

A Mons[ieur] le Gouverneur,

Conformément à la demande que le Gouverneur de Pondichéry a faite à l'Ordonnateur, Ingénieur en chef, par sa dépêche du 4 Juin courant, n° 2 S., j'ai l'honneur de lui transmettre ci-joint, pour être soumis à Son Excellence le Vice-Amiral Gouverneur, un état des dépenses des travaux du canal de Villenour, pendant le 1er semestre de l'année courante.

Cet état, qui s'élève à la somme de 1,000 francs, a été dressé d'après les renseignements fournis par le Conducteur des travaux, M. Arnaud, et vérifié par moi.

Le Commissaire de la Marine,
Ordonnateur p.i.

---

P.W. 1865. Rec[d] 16
No 3751
Rs. 1[st] R668 for October
From,
The Supg Engineer
5th Division
To
The Secretary to
Government D.P.W.
Dated 25 } September 1865
Recd 27 }

P. 2

With reference to last
para of Supg Engr's
report of the 12th Sept[r]
forwards a reply of the
Collector of S. Arcot
enclosed a letter from
His Excellency the Gover-
nor of Pondicherry re-
garding the original
agreement between Govt
& Erapilly Pr[s] for repairs
of Vicravandi channel
encs 3230 & 3231-26 Oct[r] 65

P. 681.

C. Lr Oct[r] 65 Pl. 5

Le Gouvernement français paya la
des 10,000 Roupies pendant une année après
ment après l'exécution du canal
principal, mais les alléés françaises
firent bientôt connaître que l'eau ne
leur arrivait pas ou leur venait en
quantité insignifiante; que les piquetages
primitifs en traces et en hauteur avaient
été changés dans l'exécution et que les
sujets anglais arrêtaient même dans
tout le peu d'eau qui, dans les grandes
crues extraordinaires, aurait pu, par
exception, arriver aux Etangs français.
Le Service des contributions et le
Service du Génie constatèrent concurrem-
ment de la manière la plus explicite
chaque année, l'exactitude complète
de ces plaintes. L'Ingénieur en chef
français reconnut que le canal n'avait
à l'origine qu'une largeur de 4 yards
au

69

au lieu des 10 yards promis et que au lieu
de la pente progressive de 0.m00068 par
mètre, il n'en avait pas du tout sur les
3 premiers kilomètres, en sorte que beau-
coup de l'eau précédemment retenue par les premiers
étangs anglais situés au niveau beau-
coup plus élevé que tous les autres,
sans pouvoir parvenir aux Etangs
français. Des Etangs anglais à l'aval,
il passera en outre que de fortes dépenses
dans le canal principal auraient été
faites inutilement tandis qu'on avait
négligé les rechercheurs promis.
Il proposa de donner au canal
dans sa première partie la pente indis-
pensable pour que l'eau de toutes les
crues puisse arriver jusqu'à son extrémité
Il demandait seulement la 1/2 de la pente promise par M.r
Cuchterlong, pour aux étangs anglais à
niveau élevé dont les prises d'eau
seraient plus basses que le fond du ca-
nal

ainsi

[illegible] dessèchements par un canal d'irrigation,
sont les terrains ou étangs qui sont bas
[illegible] regarderait à lui et non pas ceux qui
sont très hauts, comme ceux pour lesquels
M.r Foords réclame le premier droit.
La seconde raison [illegible] dit, d'après la
convention entre les 2 Gouvernements, les
français doivent avoir les terres de leur
côté, ne peuvent avoir lieu, si les premiers
étangs anglais [illegible] d'abord pour
eux tout ce qu'ils veulent.
Depuis 5 mois le nouvel Ingénieur
exécutant M.r Lawford a étudié sur
le terrain, avec toute le zèle et tout le
talent imaginables, de concert avec
l'Ingénieur français, tous les moyens
possibles de concilier également les
intérêts des 2 nations, il a fini par
reconnaître qu'il fallait absolument en
revenir à la première proposition de
l'Ingénieur français.

Cont.

[illegible] remarqué qu'il convenait
[illegible] toute atténuation en tenant le canal
[illegible] prendre des ouvrages qui garantissent
[illegible] pourrait [illegible] faire monter les eaux
[illegible] de manière à les emmagasiner dans ces
[illegible] pièces d'eau; 3 ouvrages suffisaient
[illegible] pour cela. Cédait le seul remède un
[illegible] mal.
M.r Foords, Ingénieur, qui
avait présidé à l'ouverture des com
[illegible] pendant 5 ans, sans donner au
[illegible] motifs sérieux, repoussé la réclama
tion de mon Gouvernement par de s
ajournements et par la force d'inertie
Son opinion bien connue est que
les premiers étangs ont le premier
droit aux eaux dérivées de la rivière.
Cette opinion inacceptable amène
pour 2 raisons principales:
La première est que les terrains
des étangs qui doivent en premier lieu

être

Carat était préparé de concert entre
ces 2 Ingénieurs, quand Mr Lawford
a informé l'Ingénieur français que Mr
le Colonel Fearon était contraire à leur
commune opinion; (voir la copie de la lettre de
Mr Lawford ci-jointe), et comme dernier moyen
de conciliation, il a fait part à l'Ingénieur
français de l'idée émise par Mr l'Ingénieur
en chef, docteur Wilkinson, de nous
remettre la somme versée par nous, en
nous autorisant à établir un canal à
part. Cette idée n'aurait point été sans
doute émise par cet Ingénieur distingué
s'il avait pu prendre connaissance
des lieux par lui-même; elle donne lieu
aux objections suivantes:

En raison de la feuille-pente à
laquelle il faut se résigner, sur
notre canal, nous coûterait en
tous frements pour les 6 premières
milles ..... 7,500 Rix

Report - 7,500 Rix
Il faudrait y ajouter 73
pour un ramage de répartition
en tête ..... 1,200.
pour 3 à 4 aqueducs par dessus
les embranchements des étangs
anglais, avec ramages, &c - 2,000.
Total minimum - 10,700.
A retrancher la somme qui
nous serait rendue ..... 3,333.
Différence en nombre rond - 7,367.

Si on ne nous cédait pas les 3
derniers milles du canal qui alimen-
tent encore 2 à 3 étangs anglais, et
c'est ainsi qu'on l'entend, il faudrait
ajouter encore 2 - 4000 Rix, nous aurions
donc à dépenser à nouveau 11,367 Rix
pour avoir un canal situé sur le
territoire anglais sur lequel les sujets
anglais intercepteraient constamment
le passage des eaux comme cela a lieu
sur

lieu en pareil cas.

Nous serions forcés de renoncer à exécuter ce canal et nous n'aurions dans le dédommagement que le remboursement de nos avances. Or, en nous remboursant la somme payée, on ne nous dédommagerait pas de la perte des intérêts pendant 10 ans et de la perte de toutes les dépenses pour les embranchements et menus ouvrages construits en vue de l'irrigation par le canal principal.

Nous ne pensons que nous maintenons dans le principe de la convention : un tiers de l'eau, un tiers des dépendes.

S'il convient aux anglais de garder pour eux seuls le canal d'amenée qui a été fait à frais communs, ils doivent contribuer pour les $\frac{2}{3}$ à la dépense totale du nouveau canal à creuser pour nous, dépense qui ne saurait être au dessous de 14.800 Rps.

Mais la solution la plus naturelle est que chacune des 2 nations contribue dans la proportion originaire à la dépense nécessaire pour améliorer le canal actuel de manière qu'il remplisse les conditions convenues, dépense qui pourra s'élever à 10000 Roupies environ.

Toutes les évaluations qui précèdent peuvent paraître élevées, mais il faut songer 1°. que le prix de la main d'œuvre a augmenté considérablement depuis 10 ans, 2°. que en appliquant le projet sur le terrain, on a trouvé qu'il n'est possible de donner au canal qu'une pente 6 fois plus faible qu'on ne l'avait supposé dans le projet et on sait que la solidité des terrassements augmente en raison inverse du carré de la pente. Ils sont hors de proportion avec ce qu'avait supposé

[illegible] projet primitif.

J'ai l'honneur de prier Votre Excellence pour que les [illegible] qui rencontre l'accomplissement de la transaction légale du [illegible] récemment reprise et commencée par MM. les Ingénieurs Lansford et Lamairesse soient levés.

Veuillez agréer, Monsieur le [illegible] l'assurance de la haute considération avec laquelle j'ai l'honneur d'être

De Votre Excellence,

Le très humble et très obéissant serviteur,

Le Commissaire général de la Marine,

Gouverneur des Établissements français de l'Inde.

Dumas

In 1854, Col. Rochfort, the Engineer in charge of South Arcot, requested the French Govt to contribute one third of the cost of making the Veeravandy canal, upon condition that the French subjects should receive one third of its water.

The cost, including the branch channels, was estimated at ~~Rs~~ 1,000.

The Canal was to have, at its head, a width of 10 yards, and a minimum full of 0·000 68 of a metre (about 3·6 feet to a mile).

The French Govt paid the third part of the sum of ~~Rs~~ 1,000, during the construction, & immediately after the completion of the main canal; but the French soon became aware that the Natives would either not reach them at all, or would come to them in insignificant quantity; — that the original dimensions, both in plan and section, had been changed in carrying out the work; and that the English subjects stopped, as if with authority, the small quantity of water which, in

Pl. No. 3535/55.

Rec'd 2891/65.

Encl. to Pol. Let. No. 178.

extraordinarily great floods, could possibly have reached the French tanks.

The Revenue and Engineer Departments agreed in proving, year after year, in the plainest manner, the entire accuracy of these complaints: the French Chief Engineer ascertained that the canal, at its head, had a width of only 4 yards, instead of the 10 yards agreed upon, and that in place of the promised fall of 0·00068 to a metre, there was no fall whatever for the first 5 kilometres, (about 3 miles,) so that the water was kept in the upper English tanks, which were situated at a much higher level than all the rest, and could not reach the French tanks and two English tanks situated lower down: — he proved besides that the heavy expenses ~~incurred~~ in the main canal had been incurred to no purpose, so long as the minor distribution channels, which had been agreed upon, were neglected.

He proposed to give to the canal, at its commencement, the full accessary to enable the lower

× Sic. above?

end to receive water during every flood in the river. (this being no more than the fall promised by Col. Crutchley.)

As for the upper English tanks, the feeders of which would be × below the bed of the canal when deepened as proposed, their supply would be insured by erecting dams across the canal, which would cause the water sufficiently ~~to~~ to allow it to enter these feeders: — for these dams would suffice. Here is no other way out of the difficulty.

Col. Foord, the Engineer in charge of the canal at the commencement of the work, had, for five years, resisted the claims of the Govt by causing delay and by simply doing nothing.

His well-known opinion is that the upper tanks have the first right to the water brought from the river.

This opinion seems to me to be wrong, upon two clear grounds.

First, — that the lands or tanks which ought first to be supplied by an irrigation canal are those which lie near its lower end, and not the higher ones, for which Colonel Foord claims the first right.

second, — that according to the agreement between the two Governments, the French tanks ought to get one third of the water, which is impossible so long as the upper English tanks take, first, as much water as they choose.

For the last five months, the new Executive Engineer, Mr. Lawford, showing all imaginable zeal and talent, has been discussing, upon the ground, with the French Engineer, every possible mode of amicably adjusting the interests of the two nations; and he has come to the conclusion that the first proposal of the French Engineer must be adopted.

All had been arranged between the two Engineers, when Mr. Lawford informed the French Engineer that Col. Foord was opposed to their united opinion; (vide enclosed copy of Mr. Lawford's letter;) and as the last means of coming to an agreement, he communicated to the French Engineer the proposal made by Col. Wilkieson, the Chief Engineer, viz:, to return to us our share of the outlay, and to authorize us to make a separate Canal. This proposal would doubtless not have emanated from this distinguished Engineer if he had known the localities from personal observation. The objections to it are as follows: —

On account of the slight fall, which we cannot avoid, a new canal would cost us in earthwork for the first six miles — — — 7500

To which must be added for a regulating dam at the head — — — 1200

For 3 or 4 aqueducts over the French channels leading to the English tanks, with sluice-dams, &c. — — 2000

Minimum total 10,700

Deducting the sum to be returned to us — 3,333

Difference, in round number — 7,367

Of the last 3 miles of the Canal, which would still supply 2 or 3 English tanks, are not to be handed over to us, (and it is thus I understand the proposal,) 4,000 more must be added, — and we should then have to make a fresh expenditure of 11,367,

to obtain a Canal situated upon English territory; along which the English subjects would be able constantly to intercept the passage of waters, — as always happens in similar cases.

We should be obliged to decline making this Canal, and we should have no other compensation than the reimbursement of what we have paid. But, in reimbursing to us this sum, there would be no compensation for the loss of interest during ten years, and for the loss of all the money we have spent on branch channels and minor works constructed with the prospect of irrigation from the main Canal.

We have no alternative but to hold to the spirit of the original agreement, — a third of the water, — a third of the expense.

If the English wish to keep for themselves the Supply Canal which has been made at the common cost, they ought to contribute two thirds of the total expense of the new Canal, which we shall have to dig, — an expense which will probably not be less than ~~Rs~~ ~~xxxx~~ 14,800.

But the most natural solution of the difficulty is that both nations should share, in the original proportions, the expenditure necessary to improve the present Canal so as to enable it to fulfil the stipulated conditions, — an expenditure which will probably amount to about ~~Rs~~ 10,000.

All the above estimates may perhaps appear high, but it should be borne in mind, — first, — that the cost of labour has risen considerably in the last ten years, — second, — that in the execution of the project it has not been found possible to give to the Canal more than one sixth of the proposed full, and it is well known that the amount of earthwork increases inversely as the square of the inclination of the bed. The quantity of earthwork will be quite disproportioned to that contemplated in the original project.

I depend upon your Excellency's justice to remove the unexpected ~~difficulties~~ difficulties which have prevented the carrying out of the agreement made in good faith in 1854, — an agreement lately renewed and strengthened by the two Engineers, Messrs Lawford and Samuelson.

For this I shall be truly grateful.

Receive — &c —

Memorandum

Circulated for the orders of Govern-

ment.

These papers relate to a request of the French Government of Pondicherry to this Government to undertake the carrying out of certain modifications & improvements of the Vicravandy Anicut & Channel, to remedy alleged defects in their construction by which the banks within the French territories have been prevented from receiving such proportion of the supply of water from the Channel as was stipulated for when the Government of Pondicherry agreed to pay one third of the original cost of the works. There appears to be no formal agreement between the two Governments on the subject, but it is clear from the tenor of the correspondence referred to in the order of this Government, sanctioning the British share of the cost of the work, that in return for one third

+ From S. Engr 5 Dr 12 Sept 1865.
" Ag Collector of South Arcot d/12 Sept 1865
" Do d/18 Do "
" S. Engr 5 Dr 25 Do "
- ment.

+ E. in C. 19 Augt/64 № 975

S. no. 11804/65 R 1/6

Ry S.

Secy 3280-B 231-264 Oct/65.

tal outlay to be contributed by the Government of Pondicherry the French were to receive a like proportion of the Channel water.

The Anicut & Channel were constructed between the years 1854 & 1857, and it seems that ever since their completion the French have been dissatisfied. They now complain that the Channel has not been made of the dimension either in plan or section, originally proposed, & that, having no fall for several miles of its upper course, it is not capable of supplying much more water than is drawn off by the English tanks, the owners of which, as if by authority, take care to draw off more than their proper share & thereby deprive the French of their supply.

M. La Mairesse, the French Engineer, proposes to rectify matters by raising the Anicut across the Vieravandy river and by enlarging the Channel and increasing the slope of its bed for the first few miles of its course, providing for the supply of the English tanks, which are on a high level, by a Calingulah furnished with Sluices that should be opened or shut during stated periods, to regulate the delivery of water according to the stipulated proportions.

Col: Foord, who is thoroughly acquainted with the work since its Commencement, denies that the Channel, as completed, differs from that which was projected & estimated for, and he opposes the proposals to alter the slope of its bed, as that would not only make it difficult to supply the English tanks, but would involve an expenditure out of all proportion to the benefits to be derived. He has no objection, however, to M. La Mairesse's other proposals; and the undersigned is of opinion that, as the exact measures to be taken to improve the Channel and to satisfy the French Government can only be properly settled on the spot, Col: Foord should be directed to put himself in communication with M. La Mairesse, and, Concerting a meeting with him, decide what should be done.

I think that it will be best I know by past experience that the French are slippery fellows always try to evade an Engagement

Fort St George
3rd October 1865.

JJP
Such to be the result of my interview with Mr Goodwin & Mr Sullivan the two Engineers who have been down from Madras to make a careful survey & estimate of the works required for the proposed alterations

And that must be the first step taken

WDM

Col RE
Secretary to Government

P.W.D.

No 3230

Proceedings of the Madras Government.

Under date the 26th Octr 1865

Read the following papers

| | | | | |
|---|---|---|---|---|
| From His Excellency the Governor of the French Settlements Pondicherry — Submitting certain proposals relative to the distribution of the waters of Veeravandy Anicut | Jt C | August | 1865 | No — |
| " Supg Engr 5th Dn | Jt C | 12th Septr | 1865 | No 1520 |
| " Collr and Special Agent South Arcot | Jt C | 18th — | Do — | " 228 |
| " Supg Engr of the 5th Dn | Jt C | 25th — | Do — | " 1660 |

These papers relate to a request of the French Government of Pondicherry to this Government to undertake the carrying out of certain modifications and improvements of the Veeravandy Anicut and Channel to remedy alleged defects in their construction by which the tanks within the French territories have been prevented from receiving such proportion of the supply of water from the channel as was stipulated for when the Government of Pondicherry agreed to pay one third of the original cost of the works — There appears to be no formal agreement between

W.H.

Rec. 2 Oct 1865. Dn.

the two Governments on the subject, but it is clear from the tenor of the correspondence referred to in the order of this Government, No. 975 dated 19th August 1854, sanctioning the British share of the cost of the work, that in return for the one third of the total outlay which is to be contributed by the Government of Pondicherry the French were to receive a like proportion of the Channel water

The Anicut and Channel were constructed between the years 1854 and 1857, and it seems that ever since their completion the French have been dissatisfied. They now complain that the Channel has not been made of the dimensions, either in plan or section, originally proposed, and that, having no fall for several miles of its upper course, it is not capable of supplying much more water than is drawn off by the English tanks, the owners of which, as if by authority take care to abstract more than their proper share and thereby deprive the French of their supply

M. Lamairesse, the French Engineer, proposes to rectify matters by raising the Anicut across the Vicravandy river and by enlarging the Channel and increasing the slope of its bed for the first few miles of its course, providing for the supply of the English tanks, which are on a high level, by a Calingulah furnished with Sluices that should be opened or shut during stated periods, to regulate the delivery of water according to the stipulated proportions.

Colonel Ford, who is thoroughly acquainted with the work since its commencement, denies that the Channel, as completed, differs from that which was projected and estimated for, and he opposes the proposal to alter the slope of its bed, as that would not only make it difficult to supply the English Tanks, but would involve an expenditure out of all proportion to the benefits to be derived. Colonel Ford has no objection, however, to all Lamairesse's other propositions, and as the Government are of opinion that, the exact measures to be taken to improve the Channel and to satisfy the French Government can only be properly settled on the spot, the Supt Engineer

Engineer of the 5th Division will be requested to place himself in communication with Mr. Lamairesse, and, concerting a meeting with him, decide what should be done, reporting the result for the information of Government—

Ordered that the following letter be sent—

No 3231

To His Excellency the Governor of the French Settlements in India—

Sir,

I have the pleasure to acknowledge the receipt of your Excellency's letter, No 25, dated 29th July 1865 bringing to notice the insufficiency of the supply of water to Tanks in the French territory from the Vicravandy Channel in the North Arcot District—

As the exact measures to be taken to improve the Channel can only be properly settled on the spot, Colonel Foord the Supt Engineer of the 5th Division has been instructed to place himself in communication

6 To the Supt Engineer
6 — 5th Division
" — Collector & Magte North Arcot
" — Political Supt

Dated 27th October.

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with your Chief Engineer Mr. Lamairesse—, and, concerting a meeting with him, decide what should be done—

I should add that the Madras Government have every desire to meet your Excellency's wishes in this matter to such extent as may be possible, consistent with the interest of the owners of the Tanks in the British territory—

Accept Sir the assurance of the high consideration with which

Fort St George
26th Octr 1865

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Dated 1st November

-J. W. 1865 Ditto
Pkt. of Govt. for each

No. 8230 & 8231
Pkt: of the Allgood
Dt. 26 October 65

Yesterday Mr. Leach - The
Civil Engineer of the 5th Divn
requested to place himself in com-
munication with Mr. Lemaire &c
to decide what should be done
for the improvement of - & to re-
port the result for the informa-
tion of Government

No. 678 & 683

[illegible] 1865 - 195