

MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

Cons. 2-2-50

G.O. No.	<i>W-49</i>	Press
		<i>Mis.</i>
Dated	<i>27-1-</i>	<i>1948</i>

Not to be folded or roughly handled

Fort Saint George, Public Works Consultation of 2nd February 1858.

Read the following papers.

No. 8. From Colonel C. E. FABER, Chief Engineer; to H. FORBES, Esq., Acting Secretary to Government, dated 14th January 1858, No. 6626.

SIR,

His Lordship the Governor in Council, will observe from the accompanying transcript of a Demi-Official report from the District Engineer of Nellore, that great additional loss consequent on the ravages of the severe Cyclone of the 1st and 2nd December last, is likely to supervene through the ignorance of the only agency available for the repair of the numerous works of irrigation, breached by the storm.

2. It may be supposed or even urged, that little, if any skill, is required for so simple a process as wheeling earth into a chasm of greater or less depth in an embankment, but the Statement of Lieutenant Mullins being precise, that he has personally witnessed great waste and misapplication of labour, I do not feel at liberty to keep back the present communication on the score of its informality, nor can I feel, I any longer have an option as to forwarding and strongly recommending the District Engineer's application for the immediate services of Corporal Gilbert Horse Artillery Executive Assistant Overseer, who happens to be at Nellore at this moment.

3. The economy and thrift of skilled labour over ignorant and ill directed professional exertions, are so well known from having been accepted as the basis of the late extensive practical reform of the D. P. W. that I am further clearly of opinion, it would be a wise and most desirable Government measure, to allow Lieutenant Mullins to have the benefit of all the experienced local agency he was unavoidably deprived of by the orders of Government under date the 18th July last.

4. On the understanding therefore, that the Government, shall be put to no further or extra expense, and that each Executive Agent shall be paid out of the usual repair estimates computed at the prevailing average rates, I have the honor to request, that not only the services of Executive Assistant Overseer Corporal H. A. Gilbert of the Horse Artillery may be made immediately available in the Nellore District, but further, that having regard to the extensive, difficult, and costly operations at the Pennair Annicut, His Lordship in Council may be pleased to authorize in G. O. G. the following Nellore Executive Assistant Overseers being placed at the temporary disposal of the District Engineer for employment on Public Works, on the stipends of their former Grade, to be charged to the ordinary repairs of the District viz.

- 1 C. J. Bird, private 2nd E. L. I.
- 2 J. Kelly, do. do.
- 3 P. Penn, Corporal do.
- 4 P. J. Shanon, Serjeant 15th N. I.
- 5 T. O'Connor, Pensioner.

Letter from Lieutenant JOHN MULLINS, District Engineer of Nellore; to Colonel C. E. FABER, Chief Engineer, dated Camp Tagacherla, 8th January 1858.

SIR,

I did not know, that you could not obtain the services of additional Assistant Overseers, to be paid out of estimates or I should not have written to you to let me have Gilbert for the Annicut works. I have received a Statement from the Collector, shewing a total of 405 Tanks breached, and a probable loss of Revenue of 1,23,000 and in one Talook I believe from observation, that he will get 50,000 less than he has put down. It is evident, that our present establishment is quite inadequate to put these tanks to rights before the next monsoon, and moreover I have seen during my recent marches many hundreds of Rupees worth of work actually thrown away, because we have to entrust the starting of works to inefficient and unqualified subordinates. Of course I can do nothing, if Government decline in the face of these facts, to allow of more Assistant Overseers being posted to this District; but it certainly appears to me

to be my duty, to do all I can to prevent such waste, by asking for the Superintendence which is necessary to enable me to get my orders carried out.

No. 9. Extract from the Proceedings of the Chief Engineer, dated 19th January 1838,
No. 6718.

Read the following letters from the District Engineer of Nellore.

From Lieutenant J. MULLINS, District Engineer Nellore; to Colonel C. E. FABER, Chief Engineer, dated Camp Chinnagopaveram, 11th January 1858, No. 46.

SIR,

I have already, in several letters regarding the heavy damage done to the irrigation works of this District, by the storm of the 1st and 2nd November last, stated that additional qualified Superintendence for the repair of these works would be necessary, and that, as soon as I had been able to collect the necessary information, I would lay before you the requirements of the Department. I have now the honor to do so, and I think you will admit that at the time of reporting the storm I did not over estimate the damage which it had caused.

2. The three principal Irrigation Works are—

2. The three principal Irrigation Talooks of the District are those of Nellore, Talamunchy and Survapully and out of a total of 233 tanks belonging to these Talooks, it will be seen by the enclosed statement received from the Collector, no less than 193 or 82½ per cent were breached by the storm. In para 1, of my letter* No. 2211, dated 5th November to the Collector I mentioned that I believed ⅓th of the Tanks of these Talooks must have been breached, and the reality is a little in excess of that estimate.

* Copy is enclosed.

3. It will be observed from the statement above alluded to that the damage which it had caused.

3. It will be observed from the statement above alluded to that, with the exception of the Oodigherry Talook and 5 out of the 6 Talooks of the Sub Division, all the rest have suffered very severely, the breached tanks varying from 82 per cent in Sungum to 39 per cent in Goonda-

4. I will now proceed to show what Superintendence is available at present in the several Executive ranges, and what additional establishment will be necessary.

5. The Nellore range comprises the 3 principle Irrigation Talooks, in which exclusive of numerous river channels, there are 233 Tanks, of which, as has been shown above, 193 were breached, and the remainder all stand in need of more or less extensive repairs. The average Revenue of these 3 Talooks is Rupees 2,90,873 of which taking the remarks contained in the latter part of the Collector's letter, which accompanies the statement, in connection with my own personal observation of the greater part of each of the Talooks not more than 1,80,000 will be realized this year.

The members of the Department attached to this range are as follows.

	Talamunchy and } 1st Class Sub Overseer Durmaroyaloo.
	½ Nellore. " Veerasawmy Moodely.
Captain	" Soobaroyaloo.

Captain
Ritherdon
in charge.

2rd Nellore and } Assistant Overseer Plunkett.
Survapully. } Sub Overseer Sashiah.
" T. Narrainsawmy.

of these Assistant Overseer Plunkett is the only one qualified for the charge of an important Taluk, and he is only barely so; Durmaroyaloo, Veerasawmy Moodely and Shashiah are all intelligent men but the first has to be untaught and then re-taught, the second is comparatively speaking new to irrigation Marahmut work, and the third has only had one season's experience with but indifferent means of instruction.

The probable expenditure on ordinary estimate during the coming year in this range will be 1 lac of Rupees, and to prevent wasteful expenditure, which is unfortunately but too common at present, owing to want of training in the members of the Establishment, I think it absolutely necessary that an Assistant Overseer should be placed in charge of each Talook. The strength of the Department in the Nellore Range will then be.

			Tanks to be repaired.	Probable Expenditure.	Revenue.
Captain Ritherdon in charge.	Talamunchy. Talook.	1 Assistant Overseer Sub Overseer Durmarayaloo Soobaroyaloo.....	77	40,000	1,07,342
	Nellore.	1 Assistant Overseer Sub Overseer Shashiah.....	61	30,000	1,15,249
	Survapully.	Assistant Overseer Plunkett Sub-Overseer Veerasawmy Moodely. T. Narrainsawmy.....	95	30,000	68,284

six months, viz., from 1st May to 31st October, constitute the working season, and the average monthly expenditure to be supervised will be 3,333 in Talamunchy and 2,500 in each of the other Talooks on the repairs of Tanks alone, and in addition to this work there is by no means a small extent of other employment in connection with new irrigation works, roads, and buildings, on which the probable outlay in the 3 Talooks, independent of the Annicut works, will not be much under 5,000 Rupees a month during the whole official year, or say 8,000 a month during the 6 months above named. The number of Ordinary Estimates prepared and sanctioned in 1857-58, in this Range, was 114, and the amount of these estimates Rupees 73,415.

6. The Southern Range comes next in order and comprises the Kotah, Sydapoor, Toomulthulpoor and Goondavole Talooks with the portions of the Ravoor and Sungum Talooks lying to the south of the Pennair, 40 miles of the Trunk road No. 6 running through the Vencatagherry Zemindary also belong to this range. The Nunjah Revenue is as follows:—

		Average Revenue.	
Cotah Talook.....	50	Tanks.....	41,725
½ Sungum.....	22	„	26,900
½ Ravoore.....	21	„	16,321
Toomulthulpoor...	36	„	7,674
Goondavole.....	28	„	6,360
Sydapoor.....	46	„	20,000
Total... 203		Tanks.....	Rupees... 1,18,980

Not mentioned in
 Collector's State-
 ment.

The Establishment is shown below.

Captain Watts in charge.....	{	Kotah and the Trunk Road.	}	Assistant Overseer Jack.
		Sydapoor.		Sub-Overseer Gowdie.
		Toomultaloooor and ½ Sungum.	}	Sub-Overseer Ramaswamy.
		½ Ravoor and Goondavole..		Sub-Overseer Felix.

The first section may remain as it is, the superintendence though none too much being I think sufficient. For the second section, an Assistant Overseer is required there being 104 Tanks and more than 50,000 Rupees of Revenue. Sub-Overseer Ramasawmy can then be placed in charges of the 3rd Section, and Sub-Overseer Felix transferred to work under the orders of the Assistant Overseer in the 2nd Section, he not being qualified for a separate charge. I cannot say what the expenditure on repairs in this range is likely to be but it will greatly exceed that of the present year, and this year 139 estimates were prepared and sanctioned, amounting altogether to Rupces 28,495-8.

7. The Centre Range includes the Northern portions of the Ravor and Sungum, the Oodiagherry, Calegherry and Cauvelly Talooks. The Nunjah Revenue is as follows:—

		Average Revenue.
$\frac{1}{2}$ Ravor Talook.....	21 Tanks.....	16,320
$\frac{1}{2}$ Sungum „	22 „	26,930
Oodiagherry „	53 „	5,744
Calegherry „	53 „	22,641
Cauvelly „	47 „	43,962
	<u>196</u>	<u>1,15,537</u>

The Establishment is shown below.

Sub-Engineer Irving in charge.	$\frac{1}{2}$ Ravor.....	Sub-Overseer Subaputty.
	$\frac{1}{2}$ Sungum and Gale-gherry.	Assistant Overseer Rose.
	Cauvelly.	Sub-Overseer Venketrutnum.
		Sub-Overseer Coniah.

In this range the Cauvelly Talook requires an Assistant Overseer of some experience, the person at present in charge being an intelligent and zealous man, but not sufficiently well trained for so important a trust, and moreover during the coming official year there is every probability of there being a very heavy expenditure on the portion of Trunk road No. 6 running through this Talook, and therefore though, on the score of irrigation works alone, an additional Sub-Overseer would be sufficient, such will not be the case if the construction of the Trunk road is continued.

8. No additional superintendence is at present required for the Northern range, I merely exhibit its establishment to show that it cannot assist in meeting the wants of the other ranges, in fact though, for the small amount of work required to be done to the irrigation works, the present strength of the department will suffice, such will not be the case should the Trunk Roads be carried forward in 1858-59.

Lieutenant Marshall in charge.	Buddapooddy and Dana-goodoor.	Assistant Overseer M. O'Connor.
	Ongole Enamanamulloor.	Sub-Overseer C. Annasawmy.
	Chendaloor.....	Sub-Overseer V. Mooneesawmy.
		Sub-Overseer Iyaloo. [Moodelly.

there being besides the Talooks, through which Trunk roads No. 6 and 7 pass, the Ongole and Cumbum Road about 45 miles of which lies in Zemindary Estates.

9. The additional superintendence required is therefore as follows:—

For the Nellore Range 2 Assistant Overseers.
Ditto Southern ditto 1 ditto.
Ditto Centre ditto 1 ditto.

or four altogether, and without this assistance I am quite sure that the repair of the irrigation works cannot be properly and economically carried out, and that if they are not granted a waste of money, far exceeding the total amount of their salaries, will be incurred, and in addition to this much of the work done will be executed in an inferior manner and thus render an early further outlay necessary.

10. I am aware that very valuable assistance has been rendered by the Revenue authorities within the last four months to enable us to close the breaches in the Tank Bunds, but assistance of this nature though not to be undervalued does not compensate for an inefficient department, and unless Government will be content to see year after year 20 to 25 per cent. of the Nunjah Revenue spent in securing the return of Revenue at all, without the irrigation works being placed in any better condition than they were, before the outlay was made, it is necessary that I should have a sufficient number of European Assistant Overseers under my orders, who shall be capable of understanding the directions that are given, and able by constant inspection to see that these orders are carried out. The state of the irrigation works before the storm was briefly this. There were not half a dozen tanks, out of the whole number of 755, that could, without danger, hold a full supply of water; there were not 25 tanks which were in a state to allow of a fully supply being retained at all, and as a general rule the more favourable the monsoon the less likelihood was there of

realizing a large revenue, because a heavy fall of rain ensured the breaching of $\frac{1}{3}$ rd of the Tanks of the locality under the influence of the rain.

11. If the establishment of this Department cannot, under present circumstances, be placed on an efficient footing, it would be much better, to place the executive of Marahmut works in the Collector's hands again. That Officer possesses a much more numerous staff, and he has the power of making the Heads of the Villages do what is required. He, I admit, would probably never get the works into a proper state of repair, but neither can I do so as I am now situated, and in addition to the mortification of seeing work carried on almost as badly as before, I cannot get it done as fast as the Tahasildars themselves can. There is another important point also; as long as the Wudders and Coolies can obtain work under the Tahasildars and are allowed to do according to their custom, that is execute the work how, when, and where they like, they will not take the trouble to conform to the directions given to them by my subordinates; and moreover until the whole of the works of the District are carried out on one system, under the orders of this Department, the plan of giving advances cannot be effectually checked, and I know from experience that this system has been, and is now, the one great obstacle to getting work of any, and every description, properly done.

P. S. Should additional Assistant Overseer be appointed, I would request that the under-mentioned men, who were formerly employed in this District, and who are therefore to some extent acquainted with the localities and with the rules that have been laid down further guidance of the subordinates, may be reported.

Serjeant Shannon.

Corporal Gilbert.

Private Bird.

and do. Kelly.

(if his character, with regard to the charges made by his Father-in-law, has been shown to be satisfactory.)

From Lieutenant J. MULLINS, District Engineer Nellore; to F. B. ELTON, Esq., Collector of Nellore, dated 5th November 1857, No. 2211.

SIR,

In acknowledging the receipt of your letters Nos. 268 and 269 of the 31st Ultimo, and 3rd Instant respectively, I have the honor to inform you that I am quite sure that the whole strength of this Department, as at present constituted, was quite unequal to the task of placing the irrigation works of the District in a state fit for this year's cultivation, even before the recent hurricane had breached, as I believe it has done, the bunds of $\frac{1}{3}$ th of the tanks in the principal Nunjah Talooks, and in order to secure as much of the Revenue, as possible of the Current Fusly, I consider that it is highly desirable and indeed necessary that the services of the Talook authorities should be allowed to continue available for the superintendence of a portion of the works, at all events until either the monsoon has entirely closed, or until the Department is once more placed upon an efficient footing.

2. It is my desire to carry out at the earliest possible moment the directions of Government with regard to the entire separation of the executive of the D. P. W. from the Revenue Establishment and had not the recent sweeping reduction of Establishment been made I should have had at my disposal a body of men acquainted with their duties, and able to superintend the energetic prosecution of the extensive repairs required; but under existing circumstances it would be suicidal policy to carry out in its entirety a plan which, however correct in principle cannot be at present successfully carried out, without a very large increase of strength to the Establishment, as it now stands.

3. I am about preparing a statement shewing the present distribution of the Establishment, the work that has to be done in each Talook, and the additional assistance that will be required for a period of at least 18 months. When this District was in common with the rest of the Presidency made subject to the reductions ordered by the Government of India, the state of the irrigation works, and the absolute necessity for a very large expenditure upon them, was not sufficiently taken into account, and now that this necessity has been rendered so much more urgent than ever by the events of the last few days, I feel sure that the Government will not

decline to modify their previous orders to such an extent as may be necessary to prevent the loss of a large Revenue, and the consequent or rather concurrent distress which would result to many thousands of Ryots, who depend for their livelihood upon the produce of the irrigated lands of this District.

From F. B. ELTON, Esq., Collector of Nellore; to Lieutenant JOHN MULLINS, District Engineer Nellore, dated 31st December 1857, No. 318.

Sir,

With reference to your letter of the 16th Instant, I have the honor to forward herewith a statement shewing the total number of tanks in the several Talooks of this District, distinguishing those which were breached by the storm from those which were not (according to the Reports received from the Sub Collector and the Tahsildars) the average wet cultivation demand for the last three years, and the estimated wet cultivation demand of the Current Fusly; much of the present year's cultivation however was commenced before the storm, and it is expected that a considerable portion of the crops under the breached Tanks will perish, thereby rendering the actual settlement considerably lower than the cultivation. Demand shown in the statement. The remission of wet Assessment sanctioned by Government will also have to be deducted.

Names of Talooks.	Number of Tanks.			Average wet cultivation, Demand of 3 years Fuslies 1264-1265 and 1266.	Expected wet cultivation, Demand for the present year Fusly 1267.	Remarks.
	Breached by the storm.	Not breached by the storm.	Total.			
Cottah...	19	31	50	Rs. 41,725	Rs. 41,000	Vide letter accompanying.
Survapully	83	12	95	68,284	30,000	
Nellore	43	18	61	1,15,219	1,00,000	
Talamunchy	67	10	77	1,07,342	1,00,000	
Sungum	36	8	44	53,833	35,000	
Calegherry	29	24	53	22,641	16,000	
Ravoor...	22	20	42	32,641	25,000	
Toommultulpoor...	29	7	36	7,674	2,000	
Goondavole	11	17	28	6,360	6,200	
Woodiagherry	8	45	53	5,744	5,000	
Sydapoor	32	14	46	"	"	
Cavelly	15	32	47	43,962	35,000	
Buddapoody	7	42	49	34,160	25,000	
Davagoodoor	3	27	30	13,022	11,000	
Ongole...	1	20	21	9,326	8,000	
Enamanamelloor	0	9	9	1,034	600	
Chendaloor	0	14	14	1,843	1,200	
	405	350	755	5,64,810	4,41,000	

(Signed) J. B. ELTON,
Collector.

Nellore Collector's Office,
31st December 1857.

Letter from Lieutenant J. MULLINS, District Engineer Nellore; to Colonel C. E. FABER, Chief Engineer, dated Nellore, 14th January 1858, No. 75.

SIR,

With reference to my letter No. 46 dated 11th January 1858, I have the honor to suggest that, as probably under existing circumstances, it may be considered inadvisable to add in any way to the strength of the permanent Establishment of the Department, the additional Assistant Overseers, shewn to be required for the Superintendence of the repairs of irrigation works, may be considered as temporary Superintendents and their salaries charged to the Ordinary estimates, which they may be appointed to carry out.

Resolved, in continuation of the Chief Engineer's Despatch No. 6626 of the 14th Instant, to forward the foregoing letters (in original) for the favorable consideration of the Right Honorable the Governor in Council with a recommendation that the District Engineer's suggestion (that the Subordinates applied for may be considered temporary and their salaries charged to the Ordinary estimates) may receive the early favorable consideration and prompt sanction of Government.

(Signed) C. E. FABER, Colonel,
Chief Engineer.

No. 10. ORDER THEREON, No. 148; dated 27th January 1858.

With the first of the communications quoted above, the Chief Engineer submits a demi-official letter from the District Engineer of Nellore, representing that the loss of revenue consequent on the breach of numerous tanks in the storm of November last is calculated by the Collector to amount to 1,23,000 Rupees, and by Lieutenant Mullins himself to 1,73,000 Rupees, and stating that he has seen that many hundred Rupees worth of work are lost, for want of scientific superintendence. Colonel Faber requests that six* of the Assistant Overseers, who were lately, on the reduction of the establishment, removed from Nellore, may be re-appointed, and their salaries charged to the estimates.

2. With the second communication, the Chief Engineer submits two letters from Lieutenant Mullins, dated the 11th and the 14th Instant, officially applying for assistance to enable him to carry out the repair of the works damaged in the late storm.

3. The Right Honorable the Governor in Council has given full consideration to the arguments adduced by the District Engineer, and under the conviction that the measure is absolutely necessary for the restoration of the Public Works to such a state as to make them serviceable in the coming season, he is pleased to order that application be made through the Military Department for the services of the undermentioned Non-Commissioned Officers and men, for temporary employment in Nellore.

4. The salaries of these men will be charged to the ordinary estimates, and the sanction now given for their employment will be communicated to the Government of India.

Corporal H. A. Gilbert, Horse Artillery.

Serjeant Shannon, 51st Native Infantry.

Private Bird, 2nd European Light Infantry.

Private Kelly, ditto.

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

No. 11. Ordered in consequence that the following letter be despatched.
From H. FORBES, Esq., Acting Secretary to the Government of Fort Saint George; to Captain H. YULE, Officiating Secretary to the Government of India, D. P. W., dated 27th January 1858, No. 119.

Sir,

I have the honor by desire of the Right Honorable the Governor in Council, to report to the Government of India, that in a Cyclone which visited the District of Nellore in November last, about five hundred tanks were breached, the water which the tanks contained having been lost, and there having been no subsequent fall of rain, the revenue of the current year will, it is feared, very materially suffer.

2. In order that the loss which is this year inevitable, may not extend over the coming season, the Public Works Department has been urged to exertion in repairing the damages sustained. This Department in the Nellore District is however numerically so weak in consequence of the reduction made in accordance with the expressed wishes of the Government of India, that it is found impracticable to perform the work now necessary in a manner that shall be expeditious, permanent, or economical, unless more aid be afforded, and on the urgent request of the District Engineer, supported by the Chief Engineer, and by the opinion of the Superintending Engineer of the Circle who has lately visited Nellore on duty, the Right Honorable the Governor in Council has sanctioned the temporary employment of four of the Overseers removed from the Department under the orders reducing the establishment, and ordered that their salaries shall be charged to the estimates of repair.

3. In Colonel Baker's letter of the 7th August last, No. 3898, the satisfaction of the Government of India was expressed at the ready co-operation of this Government in the measures of economy, which circumstance forced upon the Government of India, and His Lordship in Council is satisfied that the proceedings he has adopted on this occasion will be viewed as measures of real economy and of necessity by the Governor General in Council.

Camp. Tagachula

8 January 1858

My dear Colonel Baker.

I did not know, that you could not obtain the services of additional Assistant Overseers, to be paid out of Estimates, or I should not have written to you to let me have Gilbert for the Ancient works. I have received a Statement from the Collector, showing a total of 405 Tanks breached, and a probable loss of Revenue of 123,000, and in my Talook I believe from observation, that he will get 50,000 less than he has put down. It is evident, that our present establishment is quite inadequate to put these tanks to rights before the next monsoon, and moreover I have seen during my recent marches many hundreds of Rupees worth of work, actually thrown away, because we

we

we have to entrust the starting of works
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nates. Of course I can do nothing, if
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but it certainly appears to me to be
my duty, to do all I can to prevent
such waste, by asking for the Superinten-
dence which is necessary, to enable
me to get my orders carried out.

Yours sincerely
/s/ John Mullins

(A true copy)

Wm. Lister Colonel
Chief Engineer

No 26

Central Office of P.W.
Fort Saint George,
14 January 1858.

From
The Chief Engineer
To
The Secretary to Government
S. W. D.

Sir,
His Lordship, the Governor in Council, will observe from the accompanying transcript of a semi Official Report from the District Engineer of Bellary, that great additional loss consequent on the ravages of the severe Cyclone of the 1st & 2^d December last, is likely to supervene through the ignorance of the only agency available for the repair of the numerous works of irrigation, breached by the storm.

2. It may be supposed or even urged

Enclosure 1.

Enclosures in a letter
from the Chief Engineer
to the Secy to Government
P. W. D. 14 Jan 1858

P.W.D. 14 Jan 1858

Copy of a letter
from the Chief Engineer
to the Secy to Government
P. W. D. 14 Jan 1858
concerning the
ravages of the
Cyclone of the 1st & 2^d
December last, and
the loss of the
irrigation works
thereby destroyed.

urged, that little, if any skill, is required for so simple a process as wheeling earth into a chann of greater or less depth in an embankment; but the statement of Lieutenant Mullins being precise, that he has personally witnessed great wastes and misapplication of labour, I do not feel at liberty to keep back the present communication on the score of its informality, nor can I feel, I any longer have an option as to forwarding and strongly recommending the District Engineer's application for the immediate services of Corporal Gilbert Horse Artillery. Ex Assistant Overseer, who happens to be at Bellare at this moment.

3. The economy and thrift of skilled labour over ignorant and ill directed professional exertions, are so well known from having been accepted as the basis of the late extensive practical reforms of the D.P.W. that I am further clearly

of opinion, it would be a wise and most desirable Government measure, to allow Lieutenant Mullins to have the benefit of all the experienced local agency he was unavoidably deprived of by the orders of Government under date the 18th July last.

4. On the understanding therefore, that the Government, shall be put to no further or extra expense, and that each Executive Agent shall be paid out of the usual repair Estimates computed at the prevailing average rates, I have the honor to request, that not only the services of Ex Assistant Overseer Corporal H. A. Gilbert of the Horse Artillery may be made immediately available in the Bellare District, but further, that having regard to the extensive, difficult, and costly operation at the Pennam Anicut, His Lordship in Council may be pleased to authorize in O. O. O. the following

Bellare.

By Assistant Quartermasters being placed,
at the temporary disposal of the Dis-
trict Engineer for employment on
Public Works, on the stipends of their
former grade, to be charged to the
ordinary repairs of the District - Viz

- 1 - C. J. Bird - Private - 2^d S. I.
- 2 - J. Kelly - Do - Do -
- 3 - S. Senn - Corporal - Do -
- 4 - S. J. Shannon - Sergeant - 5th S. I.
- 5 - T. O'Connor - Pensioner -

Central Office
Fort George
14 January
1858.

James McKinnon to be
Scri.
Your most obedient servant.
Wm. Lister Colonel
Chief Engineer

N^o 6718.

Extract from the Proceedings of the Chief Engineer
in the Department of Public Works.

Under date the 19 January 1858.

And the following letter from
the Dist. Eng^r of the above.

Appl^y for 4 additional Asst. Engineers
for the purpose of superintending the irrigation works in the Helote district. (H.C. Jan 11/58 No 46)

Suggesting that the Asst. Engineer
applied for in the above letter may be considered temporary. (H.C. 14/1. No 75)

Resolved, in continuation of the
Chief Engineer's despatch No 6626 of the 11th
instant, to forward the foregoing letter
(in original) for the favorable consideration
of the Right Honorable the Governor in
Council with a recommendation that the
District Engineer's suggestion that the sub-
ordinates applied for may be considered
temporary & their salaries charged to the
Ordinary Estimates may receive the early
favorable consideration and prompt
sanction of Government.

Wm. John Colwell
Chief Engineer

To The Secretary to Government

W. J. C.

As returned

Enclosures
Letter
with 3 Encls.

W. J. C.
Asst. Chief Engineer
to the Council of the Helote

Chief Engineer
of the Helote

Asst. Chief Engineer
of the Helote

Asst. Chief Engineer
of the Helote

Asst. Chief Engineer
of the Helote

Asst. Chief Engineer
of the Helote

Asst. Chief Engineer
of the Helote

Asst. Chief Engineer
of the Helote

Asst. Chief Engineer
of the Helote

W. J. C.

No 148.

27th January 1858.

Read the following
letter from the
Chief Engineer.

Received

14 January 1858
No 6626

19 January 1858
No 6768.

With the first of the
communications
quoted above, the C.E.

W. Schmitt a deci-
sive letter from the

D. Engineer of Helene,

representing that the

loss of revenue con-

-sistent on the breach

of numerous dams,

in the storm of November

19th Jan 1858
P.M. to Comd. 22 February
1858

to the Secretary of
the Long River
to the Secretary of the
Long River

W.M. 1st June 1858
Returned
23.2.58

25th Jan 1858
26th Jan 1858
27th Jan 1858

28th Jan 1858
29th Jan 1858
30th Jan 1858

31st Jan 1858
1st Feb 1858
2nd Feb 1858

3rd Feb 1858
4th Feb 1858
5th Feb 1858

6th Feb 1858
7th Feb 1858
8th Feb 1858

9th Feb 1858
10th Feb 1858
11th Feb 1858

12th Feb 1858
13th Feb 1858
14th Feb 1858

Cost is calculated by
the estimate to amount
to 123000 Pounds, &
of St Mullin being
to 173000 Pounds, and
stating that he has
seen but many hundred
thousand worth of work are
lost for want of scientific
superintendence. Col.
Johar & reports that
of the Assistant Engineer,
no one lately, on the
direction of the establish-
ment, removed from
Hull, may be reappointed,
and his salary, charged
to the estimate.
With the second com-
missioner the Chief
Engineer submits two

Reduced to
4 in a deni.
off note.

23
letter from St Mullin
dated the 11th and 14th
of instant, officially
offering for assistance
to enable him to carry
out the repair of the
work damaged in the
late storm.

Mr Stephenson has
given full considera-
tion to the arguments
addressed by the D. Engg,
and under no conviction
on that the measure is
absolutely necessary
for the restoration of the
public works to such
a state as to enable
them to be serviceable in
the coming season.
He is pleased to

Cancelled
Sept 10, 1858
Wm. H. H.

hundred rupees worth of
work are being lost for
want of successful su-
pervision - Col:
I then reports that six
of the assistant overseers,
no one being on the
reduction of the es-
tablishment, resumed
from India, may be
reappointed, and their
salaries charged to the
Estimates, "no further
"on their absence" being
incurred by Govt.

It appears to Govt. that
nowhere to be seen will
be needed, the same

27
Rather the salaries of the
Assistant overseers are
charged as salary to
the Department, or are
charged ^{to} the estimates
for repairs, and as the
reduction in the Dep.
took place, as the G. E.
is well aware, under the
order of the Govt. of India,
Mr. R. H. G. will not de-
cline to accede to an
arrangement which
will avoid any be-
coming slide in an
indirect measure, the
order of the Govt. of India

B. G.
Secretary

1. The first part of the paper
 is a general introduction to the
 subject of the paper.
 2. The second part of the paper
 is a description of the
 material used in the
 experiment.
 3. The third part of the paper
 is a description of the
 results of the experiment.
 4. The fourth part of the paper
 is a discussion of the
 results of the experiment.
 5. The fifth part of the paper
 is a conclusion of the
 experiment.

[The page contains several lines of extremely faint, illegible handwriting.]

100-443887-100

100

[Illegible handwritten notes]

[illegible]

19 July 1922

coming season, the Public
Works Department has been
wiped to extinction in repairing
the damage sustained. This
department in the Hellier
District is known uncommo-
nally to exist, in consequence
of the destruction made in
accordance with the wishes
of the Govt of India,
but it is found imprac-
-ticable to perform the work
now necessary in a manner
that shall be satisfactory,
permanent, or economi-
-cal, unless more aid be
afforded, and on the
urgent request of the District
Engineer, supported by the
Chief Engineer, and by the
opinion of the Superintending
Engineer of the Circle No 10

35
to be on duty; Mr. H. G. G. G.
for sanctioned to
employment, employ-
ment of four of the
District Engineer
from the Department
under the order re-
-specting the abolition
-ment, and ordered
but his salary
shall be charged to
the estimate of repair

In Colonel Baker
letter of the 7th August,
No. 3898, the satisfaction
of the Govt of India
on a wheel at the

ready cooperation of
his friends in the measure
of economy. Thick cir-
cumstances forced
upon the Gov. of India,
and his brother in
Council is satisfied
- that the ^{proposed} ~~proposed~~ be
adopted in his or-
- dination will be needed
as means of real
economy and of
accepting of the Gov-
- ernment in Council.

B. J.

Public Works 1858 & 1859
Re to Com: 2^d February.

No. 149

To
The Secretary to the
Govt of India.
Dated 2nd Jan'y 1858

No. 11.
Reporting that in a
cyclope which visits the
District of Bellary in November
last, about 500 tanks were
washed the water which
the tanks contained being
low lost, and there being
few or no subsequent fall of
rain, & the pressure of the
current year will, it is
feared, very materially suffer
therefrom.

but that the loss which
is this year inevitable, may
not extend over the coming
season, the Govt. has sanctioned
the temporary employment
of four of the Surdars -
removed from the Dept.
under the Orders reducing
the establishment.