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MADRAS RECORD OFFICE

Government of Madras

Public Works

DEPARTMENT

G.O. No.	2575	(w)	Press
B.P. No.			Mis.
Dated	8.9.		1875.

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department,
8th September 1875.*

No 184 Read the following letter from R E NORFOR, Esq, Officiating District Engineer, South Arcot, to Major-General G W WALKER, R E, Secretary to Government, Public Works Department, dated Camp at Porto-Novo, 21st August 1875 —

IN G O, No 1,108, of the 19th April 1875, the Government considered it

necessary to recover from me the sum of Rupees 1,000, for overpayment said to have been made in connection with the Vylur Tank Project in this district, and Rupees 205 each from Messrs Hawksworth and Bell, the recovery from the former of these two officers being remitted in consequence of his having been previously severely punished; the sums fixed for recovery from each individual being, I presume, in proportion to the expenditure incurred by each while in charge of the work

2 In my No 37 of the 9th May 1875, I begged a reconsideration of the case, but in G O, No. 1,631, of 10th June 1875, the Government declined to modify their orders, as I had apparently failed to show any sufficient ground for supposing I had not overpaid

3 Again, in G O, No 2,015, of the 15th July 1875, in passing orders on the Katumylur Amicut papers, the Government attach to me the entire responsibility for the failure of this work, as I prepared the estimate, commenced and carried out three-fourths of the work, and had been directly or indirectly connected with it throughout My qualifications for designing works are also considered to be far from what must be required from one of my standing, and it has pleased the Government to remove my name from near the top of the grad grade to the bottom of the list of officers of that grade, or to the position I occupied five years ago, being equivalent to a fine of Rupees 9,000, in addition to previous fine of 1,000 Rupees

4 I beg very respectfully to represent that I am unconscious of ever having wholly neglected my duties, or omitted to do anything to forfeit a just appreciation of my services, which have on several previous occasions been acknowledged by Government I have passed the greater part of my service in the South Arcot District, and, if I may be allowed to speak in my own commendation, I have at all times endeavored to give my superiors satisfaction in the discharge of my duties I beg further respectfully to refer the Government to Colonel E A. Foord, R E, under whom I have had the honor of working during the greater part of the past sixteen years I have been in the department, and who, I am sure, will vouch for the experience I have gained, and the services I have rendered the State The various irrigation schemes that I have matured in this district and which have met with the favorable consideration of Government will of themselves show that I have not idled away my time for which I am paid, but have at all times served the Government conscientiously and had always their interest at heart

5 I have always sought to improve the condition of the district, and there are many important irrigation works in the 3rd Range projected by me, and which are well known to Colonel Foord Two of these irrigation schemes (Mahmathoor and Keenanoor Amicuts) I carried out in their entirety from beginning to end, and these

which I have always endeavored to fill to the best of my powers as far as it has been possible, I have had an extensive area of country to travel over and important works going on on every side simultaneously. I have exercised my utmost powers to keep a strict watch over the subordinates under my authority, and, if I have not been as successful as is to be desired, it was not from carelessness, laziness, or want of desire on my part to give the Government I serve the best of my time and services, and I cannot help saying it is very hard after sixteen years' service when I was looking forward shortly to be promoted and so enabled to go home and recruit my failing health to find my prospects suddenly so very gloomy and discouraging.

13 I sincerely trust, however, that with the papers and explanations I submit for the favorable consideration of Government, I may be more leniently dealt with. My successors in the range who each served for long periods have in making successive payments on total measurements virtually admitted the existence of the work passed and paid for by me, and for which detailed measurements were forthcoming.

Katumylur Aicut

14 With reference to this work it is stated in the Government Order above quoted that, were the original estimate inaccurate, it might easily and conclusively be demonstrated, but, as I had carefully gone into this original estimate and found no inaccuracies in it, I did not make any allusion to its correctness.

15 The Officiating Chief Engineer shows that, were my views correct, the total quantity of work required for the channel would be 74,358 cubic yards against 57,814 of my own estimate. I beg respectfully to state that while admitting the magnitude of the disparity these two figures represent, much of it is attributable to the fact that in the supplemental estimate I have arranged to place the new banks inside of the existing banks, as I understood Colonel Mullins to say he thought the banks were too far apart and the space between them should be reduced if possible, if this is not done and the existing banks fully utilized, that is, simply raised to the proper height and section, the figures would stand thus —

4,328	Cubic yards of limestone soil
1,181	" of rock to be blasted
3,548	" of gravel soil
1,452	" of rock to be burnt out
11,451	" of earthwork

19,624
Deduct washed down 6,440

Already paid for

13,181 + 52,640 = 65,821 or 65,824 cubic yards against 57,814, or 7,980 cubic yards in excess of original estimate.

16 Bill marked Y paid by Mr Hawksworth is supported by pit measurements for 51,114 cubic yards out of 52,640 cubic yards paid for, and the remainder was apparently paid for in small sums by the Overseer himself and not by the Range Officer, if there has been payments made in excess of work done, and there seems little doubt that there has been to some extent, the Overseer ought not to be held blameless. As far as I am concerned, I admit that my inspections of this work were not sufficiently frequent to have been of much use, but in 1870 and 1871 I had not only two ranges to look after, but I devoted most of my time to the superintendence of the Vellaur bridge foundations and arches, a work situated in the south extreme end

of No 3 Range; it was a work that required careful and constant supervision, and it would have been better if I could have given it all my attention, when I left this work I was obliged to start away to visit either the Mahmathoor aicut works, the Keenan-noor Aicut in 1869, both in the Virdachellum taluq, or the bridge across the Malattar in the No 1 Range situated in the Cuddalore taluq, the Vylur tank being near the head quarters of the 3rd Range, I frequently took the opportunity of visiting it whenever I went in once a-month for three or four days to despatch accounts and overhaul office work. I have already mentioned that I was given too much work for one man to supervise properly. I tried to make the best of matters, and could do no more than I have done. With all these works going on, the strength of the range was not increased by one single hand. All I can say is that I am very sorry I should have been placed in a position in which I feel sure no man could have worked with satisfaction to himself or his employers.

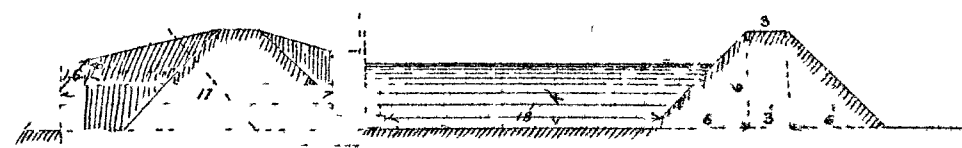
17 In respect to my qualifications as regards the designing of works, I regret that the Government have censured me so severely, and that my qualifications in this respect are considered meagre, but in justice to myself I would respectfully bring to the notice of Government that the whole of the works in connection with the Pelanderai Project, the Mahmathoor Project, the Katumylur Project and the Allangal Project were all designed by me, and received the approval of Government, and in paragraph 7 of the memorandum from the Chief Engineer for Irrigation embodied in G. O., No 3,684, of 24th November 1868, Colonel Anderson, R.E., was pleased to remark as follows —

"The project has been carefully considered and well drawn up by the Range Officer, Mr Norfor, Executive Engineer, and I would beg to recommend it for sanction."

Colonel Mullins' notes on the designs for certain works noticed in the G. O. of the 15th July 1875, No 2,015, are very severe, but I am, I respectfully beg to say, able to explain matters.

18 The distribution sluices are said to have been designed without reference to conditions to be satisfied. The design of the work itself is not my own but Colonel Foord's,* which I adopted because I thought it the simplest, and I fixed the length of the tunnel with reference to the normal section of the bund, but placing the rear vent about 4 feet beyond the foot of outer

slope of bank to give it a clear lead into the minor irrigation channel. The section of the bank, as given on the plan, though not quite correctly drawn, is intended to represent the section over the sluice, and the flat slopes to the parapet walls on either side show the section of the ramps, and not the "normal section of the bank" as is supposed. If the centre of the bund is placed where Colonel Mullins has drawn it, as shown in dotted line, the slopes would certainly extend over the vent, but I had intended to place the sluice in the bund differently, and as drawn below.



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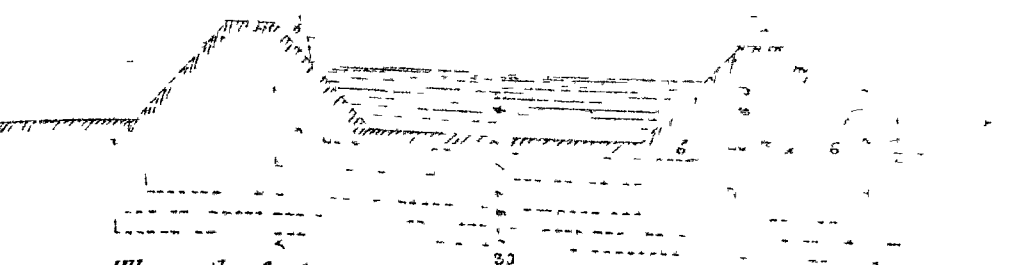
The alteration suggested by Colonel Mallins is perhaps an improvement on my plan, in this front and rear wings take the place of tunnel, but I do not approve of these wings, for the reason that they are generally injured and destroyed by cow boys and villagers, and for this reason I prefer to have as little exposed masonry as possible in these petty works, hence the object with which I adopted this plan of sluice. A covered tunnel 3 or 4 feet long on the rear, beyond the foot of outer slope, not only I think gives a lead into the branch channel, but in taking the water away the ryots are not so likely to cut into the channel bank proper, to form the head of the branch, and afterwards keep this head clear. My views may or may not be accepted, but I respectfully submit that it is very seldom that plans are not in some way altered and modified when they are sent up to higher authorities possessing considerably more experience.

19 The word "calingulah" being used in the estimate in connection with the

Inlet and outlet outlet and inlet as a mistake of the writers made in the abstract estimate; they are

not so designated in the detail estimate which I personally checked, and I did not detect the change in the abstract estimate or elsewhere.

20 *Under Tunnel*—The tunnel was given a length of 30 feet from end to end, because the section of channel at the site is as represented below, the length will, however, be reduced as ordered, but as will be seen my object was to place the two cisterns just within the outer toes of embankments.



This is the Section of Channel as Originally designed in 1865 improved as far as carried out

21 *Regulating Dam*—Dam at the end of channel, I calculated the depth of water at the tail end might be about 2.75 and 12 feet of opening allowed by me = 33 square feet against $10 \times 4 = 40$ full channel area in cutting at head. I am open to correction, but I mean to explain that I have had reasons for the proposals I submitted.

22 A perusal of the enclosed printed memorandum prepared some time ago but which I did not submit will show what I have already suffered, and through no fault of mine I had to begin to work up from the very bottom of the department a second time in 1865, after nearly six years' service in it.

23 I respectfully beg the Government will, under the circumstances above detailed, look favorably and leniently on this my application to be excused on this occasion, and my future conduct in the department will, I hope, disabuse the minds of my superiors of the unfavorable opinion they have formed of me.

No 185 ORDER THEREON, 8th September 1875, No 2,575

ESTABLISHMENT, No 13

THE Honorable the Governor in Council being of opinion that the orders passed in G. Os, Nos. 1,108 of the 19th April,

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1,631 of the 10th June, and 2,015 of the 15th July 1875, are substantially just and necessary, is unable to accede to Mr R E Norfor's request for a reconsideration of them. There can be no doubt whatever of the superficial and perfunctory nature of the inspections of the Vylur Tank and Katumylur Anicut Project Works made by the several officers concerned, and the extremely unsatisfactory results of inefficient supervision cannot be overlooked.

(True Extract)

Major-General, R E,
Secretary to Government

To Mr Executive Engineer R E Norfor, through District Engineer, Salem.
To the District Engineer, South Arcot, with the original papers. ~~2~~
" Chief Engineer for Irrigation
" Controller of Public Works Accounts

Ed E C Shunker.
Spare Copies

District Engineer's Office Sarcob
Camp Barton Nov 21. Aug 1875

From R. E. Morfou Esquire
Offg District Engr.
Sarcob

To The Secretary to Government
D. D. W.

Sir In C. O. No 1108 of the 19th

Enclosures 24 April 75 the Government considered it
4 Manuscript
Measurements
Books
14 vouchers being
- 11 for Vylor
- 3 for Tank
1 Contract for
- freight with
measurements of the
for Kallomylon
ancient
3 Bills for materials
for - do -
1 Printed ap-
- plication
1 Original Memo
from the Private
Secretary.
necessary to recover from me the sum of
Pesetas 1000. for overpayment said to
have been made in connection with
the Vylor Tank project in this District,
and Pesetas 205 each from Messrs. Hunt,
Worth and Bell, the recovery from the for-
- men of these two officers being remitted in
consequence of his having been previously
severely punished; the sums fixed for re-
- covery from each individual being I
presume in proportion to the expenditure
incurred by each while in charge of
the work.

2. In my No 37 of the 9th May 1875
I begged a reconsideration of the case, but
in C. O. No 1631 of 10th Jan 75 the Government
declined.

declined to modify their orders; as I
had apparently failed to show any
sufficient ground for supposing I had
not overpaid.

3 Again in G. O. No 2015 of the
15th July 1875 in passing orders on the
Kottoomylor account papers, the Go-
vernment attach to me, the entire
responsibility for the failure of this work;
as, I prepared the estimate, commenced
and carried out three fourths of the work,
and had been directly or indirectly con-
nected with it throughout. My quali-
fications for designing works are also con-
sidered to be far from what must be
required from one of my standing, and
it has pleased the Government to re-
move my name from near the top of
the 3rd Grade to the bottom of the list
of officers of that Grade, or to the posi-
tion I occupied 5 years ago being
equivalent to a fine of Rs 9000,
in addition to previous fine of 1000 Rs.

4 I beg very respectfully to re-
state that I am unconscious of ever
having wilfully neglected my duties,
or omitted to do any thing, to forfeit

a just appreciation of my services, which
have on several previous occasions been
acknowledged by Government. I have
passed the greater part of my service in
the South Arcot District, and if I
may be allowed to speak in my own
commendation, I have at all times
endeavored to give my superiors sa-
tisfaction in the discharge of my
duties. I beg further respectfully to
refer the Government to Colonel E. J.
Good R. E. under whom I have
had the honor of working during the
greater part of the past 16 years. I
have been in the Department, and
who I am sure will vouch for the
experience I have gained, and the
services I have rendered the state.
The various Irrigation schemes that
I have matured in this District, and
which have met with the favorable
consideration of Government will of
themselves show that I have not
idled away my time for which I am
paid, but have at all times served the
Government conscientiously and had
always their interest at heart.

5 I have always sought to improve the condition of the District and there are many important Irrigation works in the 3^d Range projected by me, and which are well known to Col. Ford.

Two of these Irrigation schemes (Mathoor and Kattomylor aments) I carried out in their entirety, from beginning to end; and these I successfully completed within their estimated cost; in other cases I have not been so fortunate; I have commenced and not had the opportunity of completing them myself, but they have ^{all} changed so many hands that in my humble opinion this is really the cause of their failure. I am certain that both the Vyloor and Kattomylor projects would have been carried out to completion without any excess if I had been left to complete them.

6 I wish respectfully to show that it is possible that overpayments may have been made by my successors in these two works which form the subject of this letter. The papers I

7K
I am now constrained to place before Government will I trust in some measure absolve me of so large a share of the blame which is said to be attached to me in respect to the Vyloor tank and Kattomylor ament.

Vyloor Tank

7 This work was commenced in April 1869 and completed in March 1873. The Superintending and District Engineers during this time were:

Col. E. A. Ford R.E. to 5th April 1870

" R. A. Roberts P.E. from 6th April 1870 to 14th November 1870

" Bailean P.E. to 8th August 1871

Major J. Vertue P.E. to 23rd November 1872

P.E. Norpoth Esquire from 24th do

to completion of work in March 1873 (4 months) at same time in charge of No. 1 Range as well.

The work was inspected by Col. Ford P.E. on 19th January 1870, and by Major Vertue on 15th February 1872, and 10th May 1872. Not inspected by me during the short time I was aj. Distt. Engr. as I had charge.

charge of No. 1 Range and I had more
 - over which frequently as Range Officers.

The Range Officers	Dates of inspection by Range officers
were. Mr R.E. Starvor	Mr R.E. Starvor
to 10. July 1870, Lieut.	" 27. Feb'y '69
Purchase to 17. July 70;	" 11. August '69
Mr J.M. Bell to 10.	" 21 st Sept. '69
Sept 70, Mr R.E. Starvor	" 28. Oct. '69
from 11. Sept. to 22 nd April	" 1. Dec. '69
1871; Mr R.E. Starvor from	" 19. Jan'y '70
22 nd April 71 to 25. July 71.	Mr Hawthorth 27. Feb'y '71
Mr J.M. Hawthorth	" 27. August 71
from 26. July 71 to 23 rd June	" 1 st Sept. 71
72; Mr J.M. Bell from 24. June 72 to 13. June	" 16. Feb'y 72
1873.	" 10. May 72
	" 15. June 72
	" 1 st March 73
	" 26. April 73

8 The above shows the superior and
 subordinate officers of the Department in
 charge of the District and the ^{Range} ~~main~~; as
 well as the inspections made by the several
 officers concerned. I respectfully submit
 that considering that during this time there
 were so many large and important works
 going in the Range, inclusive of the
 Villars Bridge which while the founda-
 - tions were being put in in 1870 required
 the Range Officers constant and unremit-
 - ting attention, this work received a fair
 amount of supervision, and that as far
 as

as possible the Overseer in charge of the
 Tally in which the Lylore Tank is si-
 - tuated was not left altogether to his
 own devices

9 I would now respectfully ask you
 to examine the various Bills paid by the
 several Range Officers for earthwork done
 to this tank. Each Bill is supported
 by Pit measurement and on the whole
 these have been checked.

10 The work executed during any time
 is represented in the Bills marked 1 to 7
 the pit measurements for each of these
 will be found in the pit books with the num-
 - bers corresponding those marked on the
 Bills to which they relate

11 Payments were made from time to
 time, and as excavations were made in
 the same pits again and again, the whole
 work on each occasion of payment was made,
 is measured up throughout, and lateri-
 - cular payments (which means previous
 quantity of work) deducted with the
 exception of 2 Bills (which I paid
 without inspection of pits, for reasons
 stated on face of the Bills) I examined
 all

away, it was
 broken into
 to be all the same

* N.S.P. 19. 15. 8
 - " - 6 - 123. 6. 0
143. 5. 8

all other work while I was in charge, and my last payment before leaving the Range for good is represented in Bill No. 7 containing the whole work done up to February 1871, and the Pit measurements for this will be found in Pit book, as stated in the Column of remarks in Bill. I checked measured these pits and am so far satisfied that the work I paid for was there.

12. Mr. Hawksworth is the next officer who makes a payment on Bill No. 10 supported by pit measurement No. 10. It will be seen here that the whole of the work is again measured up, the quantity already paid for deducted, and the Balance paid for. In the same way 5 successive payments are made after I left the Range between April 1871 and March 73 by Messrs. Hawksworth and Bell; the whole work on each occasion being measured up and supported by pit measurements. I would most respectfully submit that in the system followed in this District, ever since the

the establishment of the Department, it is absolutely necessary for the succeeding Officer to measure up all pits before paying, as he is otherwise likely to pay for pits already measured and paid for, by his predecessors. Of course the pits are not marked, and as I have said, the Contractors continue excavations in the same pits: this system has been followed by my successors who have had before them the total measurements on each occasion on which they made payments. I am not sure (as there is nothing to show) whether Mr. Hawksworth at anytime checked the pit measurements, but Mr. Bell on the occasion of the last payment appears to have done so, and in the Completion Certificate for this work there is a statement made to the effect - that after personal inspection it is Certified that the whole of the work (given in detail) therein enumerated has been substantially and well executed

executed, to the full extent of the estimate.
I submit that it is hardly fair to as-
sume that I am responsible to a great
degree simply because I passed
work to a larger extent, it is quite possi-
ble that little or nothing was done
after I left, and that subsequent mea-
sures were not correct, or even fail-
ing this aside the officer who succeed-
ed me had only Range duties to per-
form and nothing else, and if I had
ever paid they had 2 years to have
found this out, and recovered the value
from the Contractor either in Cash or
work, which latter course I should
certainly have adopted if I found the
work was still incomplete when the
estimate was exhausted, as this I in-
variably do unless I can trace an
error in the estimate. I submit that
an Officer who fails to bring to notice
within a reasonable period any defects
in work taken over from his predecessors
should, as in Bengal, be held
responsible for the work, both as to
quantity and quality so far as it may
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1454	Rock to be burnt out	to
11454	Earthwork	most
19624 1/4		aw
6440	Deduct washed down	see
13184 1/4		of
52640	already paid for	
65824 1/4		
7980	or 65824 byes against 57844 or	
	7980 cys in excess of Original estimate.	16

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works, the Kewarwood ditto in 1869, both
in the Vardachellam Taluq, or the
Bridge across the Kollattar in the 1st
Range situated in the Kundalori Taluq,
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Head

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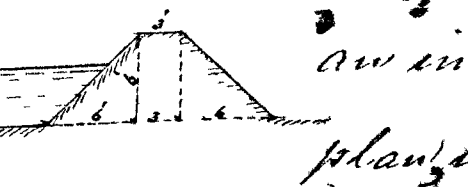
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Distribution Sluices

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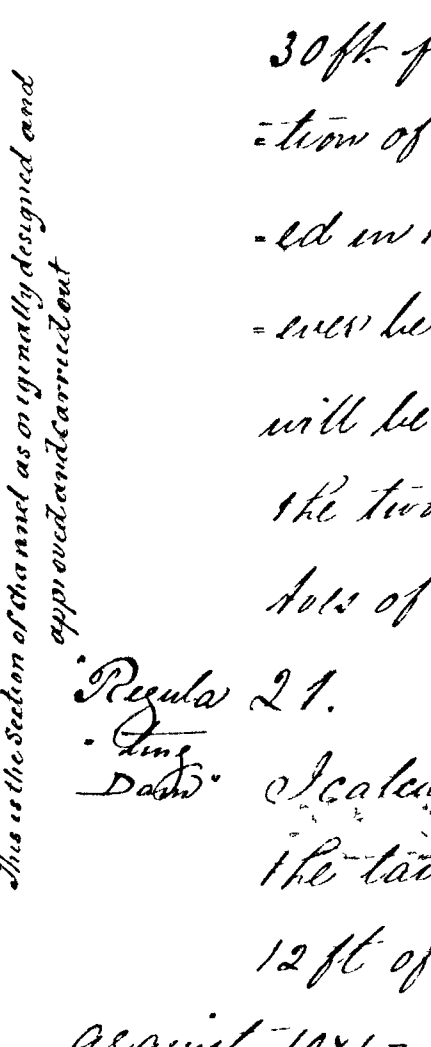


and villagers, and for this reason I prefer to have as little exposed masonry as possible in these petty works; hence the object with which I adopted this plan of sluice. A covered tunnel 3 or 4 ft. long on the rear, beyond the foot of outer slope, not only I think gives a lead into the branch channel, but in taking the water away the dyots are not so likely to cut into the channel bank proper, so form the head of the branch, and afterwards keep this head clear. My views may or may not be accepted, but I respectfully submit that it is very seldom that plans are not in some way altered and modified when they are sent up to higher authorities possessing considerably more experience.

19 The word "calculated" being used in the estimate in connection with the outlet and inlet is a mistake of the writers, made in the abstract estimate they are not so designated in the detail estimate, which I personally checked, and I did not detect the change in the Abstract estimate or elsewhere.

20 The tunnel was given a length of "Under Tunnel" 30 ft.

Inlet and Outlet



30 ft. from end to end, because, the section of channel at the site is as represented in the margin. the length will however be reduced as ordered, but as will be seen my object was to place the two cisterns just within the outer lots of embankments.

Regula 21. Dam at the end of channel. I calculated the depth of water at the tail end might be about 2.75 and 12 ft of opening, allowed by rule = 33 sq ft against $10 \times 4 = 40$ full channel area in cutting at head I am open to correction, but I mean to explain that I have had reasons for the proposals I submitted.

22 At perusal of the enclosed printed Memorandum prepared some time ago but which I did not submit will show what I have already suffered; and through no fault of mine, I had ^{to} begin to work up from the very bottom of the Department a second time in 1865, after nearly 6 years service in it.

23 I respectfully beg the Government will under the circumstances above detailed look favorably and leniently on this my application.

to be excused on this occasion, and my fu-
ture conduct in the Department will
I hope disabuse the minds of my superiors
of the unfavorable opinion they have form-
ed of me.

I have the honor to be
Sir
your most obedient servant

W. L. Miller

Offg. Dist. Engr

Oct 1/68. 72-136

Dated 31st August 75

in connection with the same.

[Handwritten signature]

The Honorable the
Governor in Council
being of opinion that
the orders passed in
L.C. Nos. 1108 of the 17th
April, 1851 - 10th June
and 2015 of the 13th July
1855, are substantially
just and necessary,
in order to accede to
the R. Co. for a second
for a reconsideration
of them. And as there
is no doubt in the
of the superficial and

11

perfunctory nature of the
inspections of the Taylor
Tank and Kalamazoo
ancient project works
made by the several
officers concerned, and the
extremely unsatisfactory
results of inefficient
supervision cannot
be overlooked.

Wm. 2/9

Wm

Mr. Engr R. E. Porter Thos. D. S.
Salem
5 Dring N. Arcot with the night paper
5 Ching for Engr.
5 Cont. D. to Accts
se Dec 27-9-75

No 184/5

5803

Govt. of 1875: Madras

PUBLIC WORKS.

Mr. Ingr.

Salem

187

187

187

187

2575

184-185

Failure of the Taylor
Tank & Kattumpan
Ancient Projects.

Passing orders on
letter from Mr. R.
E. Norfor, Offg. Secy.
Engr. A. Arcot, prayer
for a reconsideration
of the orders passed

2575