

(1) Number of pages_____

(2) Date of repair_____

(3) Initials of the Referencer_____

MADRAS RECORD OFFICE

Government of Madras

Public Works DEPARTMENT

G.O. No.	2775	Press
B.P. No.		Mis.
Dated	17-10-	195-.

Not to be folded or roughly handled

No. 244.

Read the following :—

Report of Mr. J. C. JOHNSTON, Assistant Engineer on Special duty, Cumbum Tank Works, for the week ended 30th September 1876.

THE clearing of jungle done by Mr. Farmer enabled me to set out on Monday the new alignments of the Chinna Cumbum channel for nearly a mile. I discovered then that the clearings made by Mr. Farmer at every 100 yards did not, except perhaps in a few cases, correspond with the required cross sections. Accordingly, on my return home, I wrote to him demi-officially asking him to clear the whole of the jungle. In his reply he said that, if I stated this officially with my reasons, he would carry out my wishes. On Wednesday this official letter was written, and it was despatched on Thursday, and I really thought that the whole subject had been disposed of, and that the work of clearing would soon be completed. I was, however, surprised to hear again on Saturday that my written instructions for total clearing in two letters and my personal explanations on one occasion for total clearing and what was meant by the "toe" of a bank were not sufficiently definite, and that my omission to mark out the sites of cross sections before he commenced clearing at every 100 yards on the 22nd had led "to a great deal of unnecessary delay and useless expenditure."

2. I must here state that of the first 2 miles of the channel, 4,000 feet from the commencement was covered with jungle and the remainder comparatively free. After I had set out the new alignments on Monday for a mile to show the Overseer what was wanted, I commenced levelling to establish B. M^s. and completed 2 miles. The Overseer in the meantime had continued the alignments, marking the chainage and partially running the longitudinal section for the 2 miles. He had also settled upon the sites for the cross sections in the 1st mile. This latter proceeding was for his own benefit. However as he had done it, and as I wanted to take the sections as soon as possible, I wrote demi-officially on Friday to Mr. Farmer, stating that the Overseer had been ordered to mark out

For the first 4,000 feet. the sites of the cross sections and to set out a width of 15 yards at each of these sites. This was done on Saturday. The letter mentioned in the latter part of paragraph 1 was received by me on Saturday night, and in it Mr. Farmer, after accusing me of delay, stated that he considered my demi-official of the 29th cancelled my former letters on the subject. Mr. Farmer's letter and my reply are enclosed for the information of Government, and, as they speak for themselves, I consider no further remarks on my part necessary, except that the District Engineer, who is now in Cumbum, concurs with me that the whole of the jungle should be cleared, if not for levelling, at least for construction and inspection.

3. The Overseer can do neither setting out nor levelling beyond the end of $2\frac{1}{2}$ miles, and all clearing has been stopped for several days.

I shall therefore leave the Chinna Cumbum channel alone for the present, and set the Overseer and Surveyor on making a correct survey of the streets of the town with levels.

4. The Wuddars have increased their numbers on the Gundlacamma river cutting to very nearly the prescribed number now. There would not be room for many more, for the channel is neither long nor broad. The rock is difficult to excavate, and

*Proceedings of the Madras Government, Public Works Department,
17th October 1876. No. 2,775.*

I am afraid there is a larger quantity than was at first estimated for. Of 800 cubic yards of excavation, 100 cubic yards of rock have been quarried up to date.

The Surveyor Ramabrahmam has plotted his surveys in pencil. On my telling him that the morning's surveying should be plotted in the afternoon, he said that he seldom had time in the afternoon, that he was up very early and came in very late. There are no Brahmins in Cundlapuram, else he would be living close to me. At present he is staying in Raveepaud.

The health of the staff has been good, though my lascars have been suffering from fever one by one. Simple treatment with purgatives and quinine soon cures them. I should consider a supply of simple fever medicines a great boon, not only for those in my camp, but for the villagers who have applied to me for relief.

CAMP AT CUNDLAPURAM,
3rd October 1876.

(Signed) J. C. JOHNSTON,
Assistant Engineer.

From H. R. FARMER, Esq., Acting Head Assistant Collector, Kurnool, to J. C. JOHNSTON, Esq., Assistant Engineer, on Special Duty, Cumbum, dated Camp at Kristnapuram, 30th September 1876, No. 379.

I was on the bank of the Chinna Cumbum channel all yesterday.

2. If you will kindly comply with the request contained in this letter, no further avoidable delay in clearing the banks of the channel need occur.

3. What I now ask you to do is to allow one of your subordinates, who knows what you wish, (the Overseer said yesterday he did not know yet,) to place pegs at the outer limit, that is to say, the limit furthest from the water, of the space which you wish to be cleared along the channel.

4. Neither from your official nor demi-official letters, nor from what you have personally told me, can I ascertain precisely what you want.

5. Your estimates allow for clearing of 3 yards on each bank for 2½ miles of the Chinna Cumbum channel. These 2½ miles include the first 4,000 feet from the sluice. At present along this 4,000 feet about 5 yards, in the aggregate along both sides, and twelve openings with an average area of 120 square yards; (at every 100 yards) making altogether over 8,000 square yards of clearing have been made. About 2,000 or 3,000 square yards of this area were cleared on Friday and Saturday last.

6. In your letter, No. 26, of the 19th instant, you say that this width of 6 yards was only an average width, and that you require all brushwood and every tree (not valuable) lying within the toe of the bank to be removed. When I met you on the morning of Friday the 22nd you were not sure where cross sections would have to be taken; but seemed to acquiesce in my proposal to clear spaces averaging 15 yards in breadth at every 100 yards for cross sections, as well as a clear line for longitudinal levels. Your Maistry made the measurements, and now I learn from your letter, No. 28, of the 27th September, that the clearings made according to these measurements did not correspond with the required cross sections, and you found that my "clearing was 10 yards ahead" of yours. Though not stated positively it would seem from this that your omission to mark out the cross sections beforehand was the cause of a good deal of useless clearing being done on the 22nd when you saw the coolies set to work. As it was, there was no one to show the coolies where to begin until 8 o'clock; and as the Maistry stopped them after the end of the first 4,000 feet had been reached, they were engaged in cutting any thing they liked for the latter part of the day. Any further loss of time or labor will be avoided by putting down pegs, marking each area to be cleared.

*Proceedings of the Madras Government, Public Works Department,
17th October 1876. No. 2,775.*

7. Without these pegs to guide me, the following instructions received from you seem conflicting or indefinite:—

1st.—As regards clearing the outside of the east bank for the first 4,000 feet. This, in itself, requires a clearing varying from 6 to 18 yards, average depth 12 yards, from the top of the bank to the toe. Paragraph 4 of your letter, No. 26, would lead to the belief that you want the whole of this 16,000 square yards cleared. Your demi-official of the 26th instant confirms this view after you had seen the openings made at every 100 yards and attempted levelling for, you say, with reference to levels having to be taken at unexpected places, "it is quite necessary, therefore, to clear the whole channel, and any thing short of this will be delay to me."

Your letter, No. 28, would seem to imply the same; and I may remark in passing that as to the supposed causes of delay mentioned therein, I will undertake to see that no delay occurs if you will mark out what you really want to be cleared. Lastly, in your demi-official of the 29th, received to-day, you say, that your Overseer has determined what sections are to be taken, and that he is to mark out at each section a width of 15 yards. This demi-official would seem to cancel your previous official letters and demi-official letter of the 26th. If openings each 180 square yards in area are to be made at every 100 feet or every 100 yards, please let me know officially that your former instructions for total clearings are modified, and as soon as I hear from you that the clearings have been pegged out, I shall know the number of coolies required and arrange to set them to work at the proper time, when some one on your behalf should be present to point out where the marks are. Please also let me know whether or not you have ordered any clearing to be pegged out on the west bank, and also on both sides of the remaining 3,700 yards of channel which requires clearing. If so, please let me know depth, breadth, and area, or whether I am to clear 3 yards on each side of the water along this remaining 3,700 yards according to the estimates. I do not know exactly where the toes of the banks cease.

There is some debateable ground covered with brushwood between the cultivation and the bottom of the bank. This is one reason which makes me wish to have pegs on the lower side.

8. I shall include date trees less than 8 feet high with brushwood. Some of these smaller trees produce toddy and are valuable, but when the foliage is less than 6 feet from the ground, I am under the impression that levelling would be impeded.

9. If in future when estimates are indefinite and calculated to mislead, you would let me know at first clearly what you want; time, trouble, and money might be saved. For instance, if you had said you wanted opened at every 100 feet spaces averaging 180 square yards (15 yards along the channel and about 12 down the bank) extending from the channel to the level ground for 4,000 feet from the bank on the east bank of the Chinna Cumbum channel, and that your Overseer had pegged out the spaces to be cleared and would point out the pegs, I would have had the work done in a day. It has already taken ten or twelve days to write about it. If you will give equally clear instructions about the first 4,000 feet on the east bank and also about the rest of the channel and the opposite bank, I think you will find it a very good plan. I have remained near the channel for some time hoping to receive definite instructions as to your wishes.

From J. C. JOHNSTON, Esq., Assistant Engineer, on Special duty, Cumbum, to H. R. FARMER, Esq., Acting Head Assistant Collector of Kurnool, dated Cundlapoor, 2nd October 1876, No. 31.

I HAVE the honor to acknowledge receipt of your letter, No. 379, dated 30th ultimo.

2. I have already described to you fully in my letter, No. 26, dated 19th ultimo, what jungle I wanted cleared. On the 22nd ultimo I again explained to you personally, and as fully as I could, what width of jungle I wanted cleared, and also pointed out what was meant by the "toe" of the bank. On the 26th, in writing to you demi-officially, I said I wanted the whole of the

*Proceedings of the Madras Government, Public Works Department,
17th October 1876. No. 2,775.*

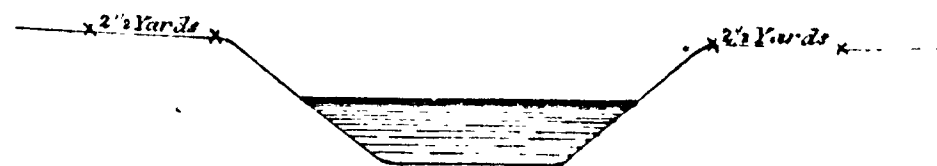
jungle cleared. In your reply you stated that, if you received this officially, you would carry out my wishes. An official letter was accordingly written on the 27th and despatched on the 28th, and I fondly hoped that the work would be carried out without any more unnecessary and unpleasant correspondence. Accordingly I was rather surprised to find that you considered another letter (No. 379, dated 30th ultimo) necessary, and that you still had no idea of what I wanted done on the channel, nor what the "toe" of the bank was.

3. In paragraph 6 you say that my omission to mark out the cross sections beforehand was the cause of a good deal of useless clearing being done on the 22nd. I deny this most positively, for I had no idea you intended clearing only at every 100 yards before that date, and assert that the only delay has been on your part. I have tried my best to explain to you what I wanted; but, though you asked for those explanations and wishes, you have treated them with contempt and insist upon having your own theories carried out as being far more correct than the practical experience of a professional man. You wish to make a saving on a estimated amount of Rupees 630, and for the last nine days you have done very little of the work allowed for for that sum, and we have been hindered from taking our cross sections, so that this saving you wish to effect is a myth, for it has already vanished in our salaries.

4. I beg to explain again what clearing of jungle is really necessary. The following is a supposed section of the channel with banks, *t t* are the outer "toes":—



and all jungle within these outer toes must be cleared. In case of a channel with no banks as below 2½ yards on each side will be necessary. With reference to your letter, No. 367, dated



23rd September 1876, to the District Engineer, Kurnool, I beg to enclose you a copy of note No. 160 W. from the Chief Engineer for Irrigation embodied in G.O., No. 2,299, dated 30th August 1876, in which you will see that it is left to my discretion as to the distances apart cross sections may be taken. I beg therefore you will clear the jungle as above described.

5. I beg you will clearly understand that no cross sections can be fixed till the new alignments of the channel are set out, and it is for the purpose of having a clear view to set out these alignments and for levelling purposes, that the jungle has to be cleared. After the new alignments and the longitudinal section have been completed, the cross sections are usually fixed upon and taken at once, and to be taken at once the jungle must first be cleared. But you want me to reverse the order. You wish me to set out the new alignments and fix upon the sites for cross sections to help you in your clearing, while the very clearing is to assist me.

6. The work done by you in the first 4,000 feet of the channel enabled me to set out the new alignments. The Overseer fearful of committing mistakes, over anxious in fact, determined for his own benefit upon the sites of the cross sections for that length. This is not usual, and I certainly would not have done it myself; but, as the Overseer had done it, I ordered him that I might save time, and thus money, to set out a width of 15 yards at each of these sites, and

*Proceedings of the Madras Government, Public Works Department,
17th October 1876. No. 2,775.*

wrote to you my demi-official of the 29th ultimo stating what I had done, and that it was my opinion that the banks below the 4,000 feet being low, total clearing was necessary, i.e., within the outer toes of these banks.

(The "toe" of a bank, I may again mention, is that point where the slope of that bank strikes the original surface of the ground).

7. My demi-official of the 29th does not cancel my former letters on the subject; my views have not changed, and it was written simply to save time, as the Overseer had settled upon a few of the cross sections. These sites were marked out with heaps of stones yesterday the 30th, and would have been pointed out to you had you been on the bank.

8. If you will kindly send the Imperial Maistry Condiah to me, I shall give him the necessary instructions.

9. I beg you will oblige me by not subjecting me to any more controversial correspondence either about the rates of this department or concerning my estimates, and to believe that I have the interests of Government at heart quite as much as you have.

No. 245. ORDER THEREON, 17th October 1876, No. 2,775.

IRRIGATION, No. 30-A.

RECORDED. Apparently delay and correspondence would have been avoided had the Special Assistant Engineer arranged

for the clearing of the jungle under his own orders. The District Engineer should take step for providing Mr. Johnston with simple medicines for his establishment.

(True Extract.)

Major-General, R.E.,
Secretary to Government.

To the District Engineer, Kurnool.
Special Officer, Cumbum.

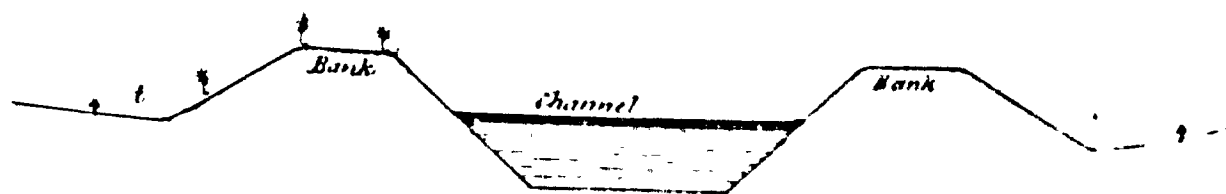
Exd. A. Grubert.
Spare Copies

Proceedings of the Madras Government, Public Works Department,
17th October 1876. No. 2,775.

jungle cleared. In your reply you stated that, if you received this officially, you would carry out my wishes. An official letter was accordingly written on the 27th and despatched on the 28th, and I fondly hoped that the work would be carried out without any more unnecessary and unpleasant correspondence. Accordingly I was rather surprised to find that you considered another letter (No. 379, dated 30th ultimo) necessary, and that you still had no idea of what I wanted done on the channel, nor what the "toe" of the bank was.

3. In paragraph 6 you say that my omission to mark out the cross sections beforehand was the cause of a good deal of useless clearing being done on the 22nd. I deny this most positively, for I had no idea you intended clearing only at every 100 yards before that date, and assert that the only delay has been on your part. I have tried my best to explain to you what I wanted; but, though you asked for those explanations and wishes, you have treated them with contempt and insist upon having your own theories carried out as being far more correct than the practical experience of a professional man. You wish to make a saving on a estimated amount of Rupees 630, and for the last nine days you have done very little of the work allowed for for that sum, and we have been hindered from taking our cross sections, so that this saving you wish to effect is a myth, for it has already vanished in our salaries.

4. I beg to explain again what clearing of jungle is really necessary. The following is a supposed section of the channel with banks, *tt* are the outer "toes":—



and all jungle within these outer toes must be cleared. In case of a channel with no banks as below 2½ yards on each side will be necessary. With reference to your letter, No. 367, dated



23rd September 1876, to the District Engineer, Kurnool, I beg to enclose you a copy of note No. 160 W. from the Chief Engineer for Irrigation embodied in G.O., No. 2,299, dated 30th August 1876, in which you will see that it is left to my discretion as to the distances apart cross sections may be taken. I beg therefore you will clear the jungle as above described.

5. I beg you will clearly understand that no cross sections can be fixed till the new alignments of the channel are set out, and it is for the purpose of having a clear view to set out these alignments and for levelling purposes, that the jungle has to be cleared. After the new alignments and the longitudinal section have been completed, the cross sections are usually fixed upon and taken at once, and to be taken at once the jungle must first be cleared. But you want me to reverse the order. You wish me to set out the new alignments and fix upon the sites for cross sections to help you in your clearing, while the very clearing is to assist me.

6. The work done by you in the first 4,000 feet of the channel enabled me to set out the new alignments. The Overseer fearful of committing mistakes, over anxious in fact, determined for his own benefit upon the sites of the cross sections for that length. This is not usual, and I certainly would not have done it myself; but, as the Overseer had done it, I ordered him that I might save time, and thus money, to set out a width of 15 yards at each of these sites, and

Proceedings of the Madras Government, Public Works Department,
17th October 1876. No. 2,775.

wrote to you my demi-official of the 29th ultimo stating what I had done, and that it was my opinion that the banks below the 4,000 feet being low, total clearing was necessary, i.e., within the outer toes of these banks.

(The "toe" of a bank, I may again mention, is that point where the slope of that bank strikes the original surface of the ground).

7. My demi-official of the 29th does not cancel my former letters on the subject; my views have not changed, and it was written simply to save time, as the Overseer had settled upon a few of the cross sections. These sites were marked out with heaps of stones yesterday the 30th, and would have been pointed out to you had you been on the bank.

8. If you will kindly send the Imperial Maistry Condiah to me, I shall give him the necessary instructions.

9. I beg you will oblige me by not subjecting me to any more controversial correspondence either about the rates of this department or concerning my estimates, and to believe that I have the interests of Government at heart quite as much as you have.

No. 245. ORDER THEREON, 17th October 1876, No. 2,775.

IRRIGATION, No. 30-A.

RECORDED. Apparently delay and correspondence would have been avoided had the Special Assistant Engineer arranged

for the clearing of the jungle under his own orders. The District Engineer should take step for providing Mr. Johnston with simple medicines for his establishment.

(True Extract.)

Major-General, R.E.,
Secretary to Government.

To the District Engineer, Kurnool.
" Special Officer, Cumbum.

Exd. A. Grubert.
Spare Copies

N^o 379.

Sanj. Krittupuram
20
27 30 September 1966

From

The Jg Head Asst. Collector
of Kurnool

To

The Assistant Engineer
on Special duty
Cumbum

Sir

- I was on the bank of the Chinnu Cumbum Channel all yesterday.
2. If you will kindly comply with the request contained in this letter, no further avoidable delay in clearing the banks of the Channel need occur.
 3. What I now ask you to do is to allow one of your subordinates, who knows what you wish, (the Overseer said yesterday he did not know yet) to place pegs at the outer limit, that is to say the limit furthest from the water of the space which you wish to be cleared along the Channel.
 4. Neither from your official nor Deini. official letters nor from what

No 379.

Samp. Krishnapuram
Dy 30th September 1876

From

The Dy Head Asst Collector
of Kurnool

To

The Assistant Engineer
on Special duty
Cumbum

Sir

- I was on the bank of the Chinnu Cumbum Channel all yesterday.
2. If you will kindly comply with the request contained in this letter, no further avoidable delay in clearing the banks of the Channel need occur.
 3. What I now ask you to do is to allow one of your subordinates, who knows what you wish, (the Overseer said yesterday he did not know yet) to place pegs at the outer limit, that is to say the limit furthest from the water, of the space which you wish to be cleared along the Channel.
 4. Neither from your official nor from your private letter nor from what

You have personally told me can
ascertain precisely what you want
5. Your Estimates allow for clearing
of 3 yards on each bank for $2\frac{1}{8}$ miles
of the China Piumum Channel.

These $2\frac{1}{8}$ miles include the 1st 4000 feet
from the sluice. At present along the
4000 feet about 5 yards, in the aggregate,
along both sides, and 12 openings with
an average area of 120 Square Yards,
[at every 100 yards] making altogether
over 8000 Square Yards of clearing have
been made. About 2 or 3 thousand Square
Yards of this area were cleared on Friday
and Saturday last.

6. In your letter N^o 26 of the 19th instant
you say that the width of 6 yards was
only an average width, and that you
require all brushwood and every tree
(not valuable) lying within the toe of
the bank to be removed. When I met
you on the morning of Friday the 22nd
you were not sure where cross sections
would have to be taken; but I am
to acquiesce in my proposal to clear
spaces averaging 15 yards in breadth
at every 100 yards for cross sections

well as a clear rule for the
levels. Your Maistry made the mea-
surements, and now I learn from
your letter N^o 28 of the 27th September that
the clearings made according to these
measurements did not correspond with
the required cross-sections and you
found that my "clearing was 10 yards
a head" of yours. Though not stated
positively it would seem from this
that your omission to mark out the
Cross-sections before hand was the
cause of a good deal of useless clearing
being done on the 22nd when you saw the
coolies set to work. As it was, there
was no one to show the coolies where to
begin until 8 O'clock and as the Maistry
stopped them after the end of the first
4000 feet had been reached, they were
engaged in cutting anything they liked
for the latter part of the day. Any
further loss of time or labor will be
avoided by putting down pegs marking
out each area to be cleared.

7. Without these pegs to guide me the
following instructions received from

You seem conflicting or indefinite.

1st As regards clearing the outside of the east bank for the 1st 4000 feet. This in itself requires a clearing varying from 6 to 18 yards, average depth $\frac{12}{2}$ yards from the top of the bank to the toe. Part 4 of your letter No 26 would lead to the belief that you want the whole of this 16000 square yards cleared. Your Demi-official of the 26th distant confirms this view after you had seen the openings made at every 100 yards and attempted levelling. For you say with reference to levels having to be taken at unexpected places, "it is quite necessary, therefore, to clear the whole Channel and anything short of this will be delay to me."

Your letter No 28 would seem to imply the same; and I may remark in passing that as to the supposed causes of delay mentioned therein I will undertake to see that no delay occurs if you will mark out what you really want to be cleared. Lastly in your Demi-official of the 29th —

112
referred to say you say that I have determined what Sections are to be taken and that he is to mark out at each Section a width of 15 yards. This Demi-official would seem to cancel your previous official letters and Demi-official letter of the 26th. If openings each 180 Sq. yards in area are to be made at every 100 feet or every 100 yards, please let me know officially that your former instructions for total clearings are modified and as soon as I hear from you that the clearings have been pegged out I shall know the number of coolies required and arrange to set them to work at the proper time; when some one, on your behalf, should be present to point out where the marks are. Please also let me know whether or not you have ordered any clearing to be pegged out on the west bank and also on both sides of the remaining 3700 yds of Channel which requires clearing. If so, please let me know depth, breadth, and area or whether I am to clear 3 yds on each side of the water along this remaining 3700 yards, according to the estimates. I do not know exactly where the toes of the banks cease. There is some debateable ground covered with brushwood between the cultivated and the bottom of the bank. This is one

You seem conflicted or uncertain.

As regards clearing the entire of the east bank for the 1st 4000 feet. This actually requires a clearing varying from 6 to 18 yards, average depth 2 yards from the top of the bank to the water. I of your letter N^o 20 would seem to be the belief that you want the whole of this 16000 Squire yards cleared. Your Demi-official of the 26 distant confirms this view after you had seen the openings made at every 100 yards and attempted levelling. For you are with reference to levels having to be taken at unexpected places, "it is quite necessary, therefore, to clear the whole channel and anything short of this will be delay to me."

Your letter N^o 28 would seem to imply the same; and I may remark in passing that as to the supposed causes of delay mentioned therein I will undertake to see that no delay occurs if you will mark out what you really want to be cleared. Lastly in your Demi-official of the 29th

received to day you say that your Officer ¹¹² has determined what Sections are to be taken and that he is to mark out at each Section a width of 15 yards. This Demi-official would seem to cancel your previous official letters and Demi-official letter of the 26. If openings each 180 Sq^s yards in area are to be made at every 100 feet or every 100 yards, please let me know officially that your former instructions for total clearings are modified and as soon as I hear from you that the clearings have been pegged out I shall know the number of coolies required and arrange to set them to work at the proper time; when some one, on your behalf, should be present to point out where the marks are. Please also let me know whether or not you have ordered any clearing to be pegged out on the west bank and also on both sides of the remaining 3700 yds of Channel which requires clearing. If so, please let me know depth, breadth, and area or whether I am to clear 3 yds on each side of the water along this remaining 3700 yards, according to the estimates. I do not know exactly where the trees of the banks cease. There is some debateable ground covered with brushwood between the cultivation and the bottom of the bank. This is one

you seem confident or certain.

1st As regards clearing the entire of the east bank for the 1st 4000 feet. This in itself requires a clearing varying from 6 to 18 yards, average depth 12 yards from the top of the bank to the low water. If your letter No 26 would bear the belief that you want the whole of this 16000 Squire yards cleared. Your Demi-official of the 26th distant confirms this view after you had seen the openings made at every 100 yards and attempted levelling. For you can with reference to levels having to be taken at unexpected places, it is quite necessary, therefore, to clear the whole channel and anything short of this will be delay to me.

Your letter No 28 would seem to imply the same; and I may remark in passing that as to the supposed causes of delay mentioned there will undertake to see that no delay occurs if you will mark out what you really want to be cleared. Lastly, in your Demi-official of the 29th

received to day you say that your Overseer ¹⁹² has determined what Sections are to be taken and that he is to mark out at each Section a width of 15 yards. This Demi-official would seem to cancel your previous official letters and Demi-official letter of the 26th. If openings each 180 Sq^s yards in area are to be made at every 100 feet or every 100 yards, please let me know officially that your former instructions for total clearing are modified and as soon as I hear from you that the clearings have been pegged out I shall know the number of coolies required and arrange to set them to work at the proper time; when some one, on your behalf, should be present to point out where the marks are. Please also let me know whether or not you have ordered any clearing to be pegged out on the west bank and also on both sides of the remaining 3700 yds of channel which requires clearing. If so, please let me know depth, breadth, and area or whether I am to clear 3 yds on each side of the water along this remaining 3700 yards, according to the estimates. I do not know exactly where the toes of the banks cease. There is some debateable ground covered with brushwood between the cultivation and the bottom of the bank. This is of it

reason which makes me wish to have
pegs on the lower side.

8. I shall include date trees less than
8 feet high with brushwood. Some of
these smaller trees produce food
and are valuable, but when the foliage
is less than 6 feet from the ground,
I am under the impression that ir-
rigation would be impeded.

9. If in future when estimates are
indefinite and calculated to mislead
you would let me know at first clearly
what you want; time, trouble and
money might be saved. For instance
if you had said you wanted
openings at every 100 feet spaces averaging
180 sq yds (15 yards along the channel and
about 12 down the bank) extending
from the channel to the level ground
for 4000 feet from the bank, on the
east bank of the Chinan pumkun
channel; and that you ordered
to have pegged out the spaces to be cleared
in

and would paint out the pegs; ¹³² I
would have had the work done in
a day. It has already taken 10 or 12 days
to write about it. If you will give
equally clear instructions about
the first 4000 feet on the east bank
and also about the rest of the channel
and the opposite bank; I think you
will find it a very good plan. I
have remained near the channel
for some time hoping to receive de-
finite instructions as to your wishes.

I have the honor to be
Sir

Yours most obedient Servant
/ Sigd H. R. Farmer
Asst. Secy & Collector

/ True Copy

John. Shustone
Assistant Engineer

P.W.D.
90176
No 7215

No 31

Special Engineer's office
Bandapur 22 October 1915

From,

The Special officer

Cumbum

To,

The Head Assistant Collector
Murnool

Cumbum

Sir

I have the honor to acknowledge receipt of your letter No 379 dated 30th Sept. 2. I have already described to you fully in my letter No 26 dated 19th Sept. what I wanted cleared. On the 22nd Sept. I again explained to you personally and as fully as I could, what width of jungle I wanted cleared and also pointed out what was meant by the 'toe' of the bank. On the 26th in writing to your comm. officer I said I wanted the whole of the jungle cleared. In your reply you stated that if you received this officially, you would carry out my wish. An official letter was accordingly written on the 27th and despatched on the 28th and I fondly hoped that the work would be carried out without any more unnecessary and unpleasant correspondence. Accordingly I was rather surprised to find that

you. Considered another letter (No 299 dated 30th Sept) necessary, and that you still had no idea of what I wanted done on the channel, nor what the 'toe' of the bank was.

3. In para 6 you say that my decision to mark out the cross sections before hand was the cause of a good deal of useless clearing being done on the 2nd. I say this most positively, for I had no idea you intended clearing only at every 100 yards before that date, and assert that the only delay has been on your part. I have tried my best to explain to you what I wanted; but though you asked for three explanations and wishes, you have treated them with contempt, and insist upon having your own theories carried out as being far more correct than the practical experience of a professional man. You wish to make a saving on an estimated amount of Rupees 630, and for the last 9 days you have done very little of the work allowed for, for that sum, and we have been hindered from taking our cross sections, so that this saving you wish to effect is a myth, for it had already vanished in our salaries.

4. I beg to explain again what clearing of jungle is really necessary. The following is a supposed section of the channel with banks. 11 are the outer 'toes'



and all jungle within these outer toes must be cleared. In case of a channel with no banks as below 2 1/2 yards on each side will



be necessary. With reference to your letter No 357 dated 23rd September 1876 to the District Engineer, Hurmool, I beg to enclose you a copy of note No 166 ^{from the Chief Engineer} W. for irrigation embodied in G. O. No 2,299 dated 30th August 1876 in which you will see that it is left to my discretion as to the distances apart cross sections may be taken. I beg therefore you will clear the jungle as above described. 5. I beg you will clearly understand that no cross sections can be fixed till the new alignments of the channel are set out, and it is for the purpose of having a clear view to set out these alignments and for levelling purposes, that the jungle has to be cleared. After the new alignments and the longitudinal section have been complete.

the cross sections are usually fixed upon and taken at once and to be taken above the jungle must first be cleared. But you want me to precede the order. You wish me to set out the new alignments and fix upon the sites for cross sections to help you in your clearing, while the very clearing is to assist me.

6. The work done by you in the first 4000 ft of the channel enabled me to set out the new alignments. The overseer fearful of committing mistakes, over anxious in fact, determined for his own benefit, upon the sites of the cross sections for that length. This is not usual and I certainly would not have done it myself but as the overseer had done it, I ordered him, that I might save time and thus money, to set out a width of 15 yds at each of these sites, and wrote to you my deini-official of the 29th ultimo stating what I had done and that it was my opinion that, the banks below the 4000 feet being low, Total clearing was necessary i.e. within the outer toe of these banks.

(The 'toe' of a bank, I may again mention, is that point where the slope of that bank strikes the original surface of the ground)

7. My deini-official of the 29th does not ¹⁹² detail my former letters on the subject, my views have not changed and it was written simply to save time, as the overseer had settled upon a few of the cross sections. These sites were marked out with heaps of stones yesterday the 30th and would have been pointed out to you had you been on the bank.

8. If you will kindly send the Imperial Ministry Conchile to me I shall give him the necessary instructions.

9. I beg you will oblige me by not subjecting me to any ^{more} controversial correspondence either about the rates of this department or concerning my estimates and to believe that I have the interest of Government at heart quite as much as you have.

I have the honor to be
Sir
your most Obedt. Servant
(Signed) J. C. Johnston
Assistant Engineer

(True Copy)

J. C. Johnston
Assistant Engineer

P.W.D.

90076

7245

212
Report of Mr. J. C. Johnston Assistant Engineer on Special duty, from
Chum Laik Work for the week ended
30th September 1876.

The clearing of jungle done by Mr. Farmer enabled me to set out on Monday the new alignments of the Chima Chum Channel for nearly a mile. I discovered then that the clearings made by Mr. Farmer at every 100 yards did not, except perhaps in a few cases, correspond with the required cross sections. Accordingly on my return home, I wrote to him demanding officially asking him to clear the whole of the jungle. In his reply he said that if I stated this officially with my reasons he would carry out my wishes. On Wednesday this official letter was written and it was despatched on Thursday and I really thought that the whole subject had been disposed of and that the work of clearing would soon be completed. I was however surprised to hear again on Saturday that my

written instructions for total clearing in two letters and my personal explanations on one occasion for total clearing and what was meant by the 'toe' of a bank were not sufficiently definite, and that my omission to mark out the sites of cross sections before he commenced clearing at every 100 yards on the 22nd, had led to a great deal of unnecessary delay and useless expenditure.

2. I must here state that of the first two miles of the Channel, 4000 feet from the commencement was covered with jungle and the remainder comparatively free. After I had set out the new alignments on Monday for a mile to show the Overseer what was wanted, I commenced levelling to establish B.M.s and completed two miles. The Overseer in the meantime had continued the alignments, marking the chain-nage and partially running the longitudinal section for the two miles. He had also settled upon the sites for the cross sections in the first mile. This latter proceeding was for his own benefit. However as he had done it, and as I wanted to take the sections as soon as

in the first
4000 feet

possible. I wrote demin. Officially²³² on Friday to Mr. Farmer stating that the Overseer had been ordered to mark out the sites of the cross sections and to set out a width of 15 yards at each of these sites. This was done on Saturday. The letter mentioned in the latter part of para 1 was received by me on Saturday night, and in it Mr. Farmer, after accusing me of delay, stated that he considered my demin. official of the 29th cancelled my former letters on the subject. Mr. Farmer's letter and my reply are enclosed for the information of Government, and as they speak for themselves, I consider no further remarks on my part necessary, except that the District Engineer, who is now in Sumatra, concurs with me that the whole of the jungle should be cleared, if not for levelling, at least for construction and inspection.

3. The Overseer can do neither setting out nor levelling beyond the end of 2 1/2 miles, and all clearing has been stopped for several days.

I shall therefore leave the Chinnam
Cumbum Channel alone for the
present, and set the Oversee and
surveyor on making a correct survey
of the streets of the town with levels.

4. The waddas have increased
their numbers on the Guntacamma
River cutting to very nearly the prescribed
number now. There would not be room
for many more, for the Channel is
neither long nor broad. The rock is
difficult to excavate and I am afraid
there is a larger quantity than was at
first estimated for. Of 800 cubic yards
of excavation, 100 Cys of rock have
been quarried up to date.

The surveyor Ramabrahmam
has plotted his surveys in pencil. On
my telling him that the morning's sur-
veying should be plotted in the after-
noon, he said that he seldom had
time in the afternoon, that he was up
very early and came in very late.

There are no brahmins in Sandalapuram,
else he would be living close to me.
At present he is staying in Ravepand.

25
The health of the staff has been good,
though my fascias have been suf-
fering from fever one by one. Simple
treatment with purgatives and
quinine soon cures them. I should
consider a supply of simple fever -
- - - - - a great boon, not only for
those in my camp but for the village
- - - - - who have applied to me for relief.

1, 2, 3, 4, 5
Camp Sandalapuram
15 October 1876
Photographed by J. H. ...

J. H. Shustow
Assistant Engineer

4030-8-76 2299.

P.W.D.
900176
No. 7245

From
The Special Officer
Bambam

Dated 5th October 1896.

Basin 2 A

Report on the drainage
works for week ending 31st September
1896.

No 2775 of 19th Feb 1896.

Reported - Apparently clean and comfortable under the
asider under the Special Officer Engineer arranged for the
under his own order. The District Engineer should be
the position will make necessary public satisfaction.

J. E. M. M. M.
Special Officer

Sept. 2. 11. 76

By. M. M.

No. 244/45

Rep. to C. 10-10-76

With the order

4810-2-1-1
724511.
Govt. of 1876 Madras.

PUBLIC WORKS.

To The N. B. K. K. K.

Dated

Issued

Recd.

Encl.

G. O. 17 Oct 1876, No. 2775

Nos. 244/4.

Cumbam Drainage Works

Passing orders on the
Point of the Special
Asst Engineer on the
— for work
ending 30th Sept/76

Dr. P. in 1876
3-11-76

117