No. 24
Date of receipt. 13-8-
Records of reference.
M.R.O. 1—82,400—23-11-30.

MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

Cons. 22.9.51

G.O. No. 176 Press Mis.

20.2/

Dated 6 — 8 — 18 52

Not to be folded or roughly handled

No. 20. Read the following letter from Colonel C. E. FABER, Chief Engineer; to H. FORBES, Esq., Acting Secretary to Government, dated 18th August 1857, No. 3005.

SIR,

1 Copy of letter No. 41 from District Engineer Upper Godavery dated 8th July 1857.

In continuation of my letter, No. 2860, dated 12th August 1857, and with reference to Extract Minutes Consultation No. 945, dated 16th May 1857, I have the honor to forward for the consideration, and orders of Government, the accompanying copy of letter No. 41 dated 8th July 1857, from the District Engineer Upper Godavery together with an approximate Estimate of Rupees (25,200) twenty-five thousand and two hundred, for giving effect to the measures that Officer proposes should be pursued for the improvement of the Godavery Navigation, pending sanction for the permanent works.

Extract Minutes Consultation No. 945, 16th May 1857, Para 5.

2. The works recommended at the Cintral Barrier are.

		Rs.
1st.	The completion of the lock at the mouth of the Doomgoodiem Lunkah channel.....	1,500
2nd.	Blasting and clearing rocks in the channel.....	500
3rd.	The construction of a low dam of loose stones across the channel above the lock in the lower part of the barrier, to retain the water at the proper level at the lock...	500
	Rupees.....	2,500

3. Lieutenant Haig mentions the probability of an additional lock, with a lift of 4 feet being found necessary at the very foot of the Barrier, the cost of which would be trifling, but does not recommend it at present, anticipating that a sufficiently practicable passage may be obtained by blasting the rocks which obstruct the channel at that point.

4. For completing the unfinished lock, and for clearing the channel between Cintral and Budrachellum, for which an allowance of Rupees 1,500 is proposed (the number of rocks requiring to be removed being, it is observed, surprisingly small) Lieutenant Haig notices his intention of drawing up a separate Memorandum for the guidance of the officer to whom the execution of the works may be entrusted.

5. At the Enchampilly Barrier, Lieutenant Haig advises, that submersible locks as at Cintral, should be substituted for the tram roads formerly proposed, observing, that the risks attendant on such works are not so great as he once supposed, and that their economy, and simplicity of design, and facility of repair, where wood and stone in abundance can be procured on the spot, favor their construction.

6. The works proposed at the Enchampilly Barrier are.

		Rs.
1st.	The Construction of a dam 12 feet high across the head of the summer channel through the rocks opposite Neelumpilly.....	2,500
		6,000
2nd.	A Double lock, with a total lift of 20 feet about half a mile below Neelumpilly.	4,000
3rd.	A lock with a lift of 10 feet at the junction of the Indravutty.....	500
4th	Blasting, and clearing rocks in channel.....	
	Rupees...	13,000

6. These works Lieutenant Haig considers will suffice to make good the passage through the Barrier.

7. The repair of the road at the highest or Dewalamurry Barrier, estimated at Rupees 7,200 in his letter of the 28th June 1856, might, Lieutenant Haig observes, be carried out, but the work is of inferior importance to those already named.

8. After disposing of the measures required for opening passages at the Barriers, the entertainment of the Establishment for clearing away shoals, isolated rocks, and other obstacles to the navigation of the open parts of the river, is next advocated.

9. The sum of Rupees 2013, sanctioned in Extract Minutes Consultation No. 1003, dated 26th May 1857, for a similar purpose between Dowlaishwarum and Davarapilly is available for next season. From this sum Rupees 813, provided for the salary of a Superintendent, and not now required as an extra charge to the permanent Establishment of the Department Public Works* may be deducted, leaving Rupees 1200, or Rupees 400, per mensem for the work. Lieutenant Haig however now proposes, that the Establishment should be entertained from the beginning of January instead of March, to the end of May; and a similar Establishment at Rupees 200 per mensem for the river between the Cintral and Enchampilly Barriers, making a total charge of Rupees 3,000.

* Vide para. 2 Extract Minutes Consultation No. 1003 26th May 1857.

10. Lieutenant Haig, from the experience of this year, considers, with due precaution, and careful attention on the part of the Commanding Officer to the comfort of the men, that operations at Cintral may be commenced with safety as soon as the freshes are over, and recommends that the locks at Enchampilly should be begun in December.

11. As before observed, Lieutenant Haig's estimate is merely an approximate one, the nature of the works proposed being such, that the measures to be adopted for carrying them into execution, can only be determined as the work progresses in the cost of the locks for the Enchampilly Barrier, Lieutenant Haig has been guided by those already constructed at Cintral a slight increase of expense being allowed on account of their greater distance from Dowlaishwarum.

12. It would be premature in the present state of the Public Works Department to enter into the question of what Officers should be detached for the works, but when the season arrives, should the District Engineer be unable to provide sufficient Superintendence, endeavours will be made to increase the strength of his Establishment.

13. Colonel Cotton, to whom Lieutenant Haig's report has been referred, writes demi-officially as follows.

"I entirely approve of what Lieutenant Haig proposes as far as it goes, but I would earn-
"estly urge that much more be done, especially that an Establishment should at *once* be posted
"along the river and never withdrawn. I hope the Iron Steamer will soon be ready for trial, and
"if she is successful, she might immediately be employed in taking up stores, or detachments,
"during the freshes."

14. The total expenditure proposed is.

	Rs.
1st.—Improvements at the Cintral Barrier	2,500
2nd.—Clearing the channel between Cintral and Enchampilly	1,500
3rd.—Improvements at the Enchampilly Barrier	13,000
4th.—Repairs of the roads at the highest, or Devalamurry Barrier	7,200
5th.—Establishment for removing obstacles to the navigations of the open parts of the river	3,000
	27,299
Deduct sanctioned in Extract Minutes Consultation No. 1003 dated 26th May 1857	2013
Rupees	25,187

or total Rupees twenty-five thousand and two hundred.

15. Fully appreciating the vast importance of improving the Navigation of the Godavery, I would add my own earnest solicitation in the event of the present restriction to expenditure being then withdrawn, that in December next the above sum, or any portion of it that Government may consider it desirable to spend, may be placed at the disposal of the District Engineer, to enable him to commence operations.

16. Lieutenant Haig in his letter No. 44, dated 20th July 1857, observes that he is unable to make any proposition respecting the management of the works at the Cintral Barrier, as long as he remains in uncertainty, as to whether or not he is to defray the cost himself, but for the present, that he has placed them, in charge of the Superintendent, and two Peons stationed at Doomgoodiem.

17. In the same letter, Lieutenant Haig reports, that the lock in the lower part of the Barrier, which is exposed to the full force of the current, has stood without the least damage a fresh which submerged it about 9 feet.

Letter from Lieutenant T. T. HAIG, District Engineer Upper Godavery; to Colonel C. E. FABER, Chief Engineer, dated Dowlaishwarum, 8th July 1857, No. 41.

SIR,

1. I have the honor, in obedience to the orders of Government as per margin to state the measures which I would propose should be pursued for the improvement of the Godavery Navigation during the interval which must now elapse until the permanent works are commenced.

2. I have already informed you, that one of the two locks commenced this year at the Cintral barrier is completed, and that the other has been left in an unfinished state. I would, in the first place, decidedly recommend, that the latter should be again taken in hand as soon as the freshes are over, that is, in the latter end of September, or the beginning of October. Very little remains to be done to it, and probably a fortnight or three weeks would suffice for its completion. I will not enter into details as to what is required for this purpose, but will draw up a separate Meomorandum for the guidance of the Officer to whom the execution of the work may be entrusted.

3. In addition to the above, some clearing of rocks will be required. About 500 Rupees might perhaps be expended with advantage in this manner. A low dam of loose stone should also be thrown across the channel above the lock in the lower part of the barrier, to retain the water at the proper level at the lock. It is possible that an additional lock with a lift of 4 feet might be found necessary at the very foot of this barrier, but I hope a sufficiently practicable passage may be obtained by blasting the rocks which obstruct the channel at that point, and in any case, the cost of the locks would be very trifling I will not recommend it at present.

4. The channel between Cintral and Budrachellum requires some clearing. The number of rocks requiring removal is surprisingly small. I would recommend that about 1500 Rupees should be sanctioned for this purpose. For this part of the operations I will also leave specific and detailed instructions for the guidance of the Officer in charge.

5. At the Enchampilly barrier, I would advise that locks of the same kind as those constructed at Cintral should be substituted for the tramroads formerly proposed. I am inclined to think, that the risks attendant on works of this class are not so great as I once supposed, and they are so very cheap and simple of construction, and their repair so easy, where wood and stone in abundance can be procured on the spot that, I think it would be unwise to discord them.

I would propose to throw a dam 12 feet high across the head of the summer channel through the rocks opposite Neelumpilly, and to place a double lock with a total lift of 20 feet on the opposite side of the river about half a mile lower down. Also a second lock with a lift of 10 feet at the junction of the Indravutty. These two locks will, I think, make good the passage through that barrier.

6. At the highest or Devalamurry barrier, the repairs of road estimated at 7,200 Rupees in my letter of the 28th June 1856, might perhaps be carried out, but this work is of inferior importance compared with those before mentioned.

7. In addition to the above works designed specially for the barriers, I would strongly recommend, that an Establishment should be sanctioned for the purpose of clearing away shoals, isolated rocks, and other obstacles to the navigation of the open parts of the river. The sum of

2013 Rupees sanctioned for this purpose for the part of the river, between Dowlaishwarum and Davarapilly is available for the next dry season. This amount however includes Rupees 813 for the salary of the Superintendent, my letter recommending this expenditure having been written before the news of the sanction of the permanent Establishment P. W., had reached me. This amount will not now be required, and being deducted will reduce the total to Rupees 1,200, or 400 Rupees per month. I would however propose to entertain the Establishment from the beginning of January, until the end of May, or for 5 months and would solicit sanction for a similar Establishment at 200 Rupees per month for the river between the Cintral and Enchampilly barriers.

8. The above is I think, all that can be done for the improvement of the river until the permanent works are commenced. There is nothing, I am convinced to hinder the commencement of operations at Cintral as soon as the freshes are over, and I would most decidedly recommend, that the locks at Enchampilly should be begun in December. Two years ago, the Board of Revenue positively prohibited my leaving Rajahmundry with the expedition under my orders before the middle of February, as it was considered dangerous to enter the jungles before that time. This year we started from Dowlaishwarum on the 21st January, and though being in Tents for the following two months, had excellent health. I took indeed the precaution of administering 2 grains of quinine to every one daily, and it could be advisable to do this next season also for the first month or six weeks. With this precaution, and a careful attention on the part of the Officer Commanding to the comfort of his men. I feel certain, that work may be carried on, on the Upper Godavery during the cold season, as well as in every other District of this Presidency.

9. An estimate of the probable cost of the works now proposed is appended. In calculating the cost of the locks, I have not attempted to enter into details, as it would be useless to do so. As the particular mode of construction to be followed in each case must vary with the shape and nature of the bed at the spot pitched upon for the site of the lock, without a previous examination of the locality it would be impossible either to make a plan of the work, or to estimate its cubical contents. Without an inspection of the site, it is impossible to say whether it would be most advisable to build the lock in the usual manner with two sides walls, or to excavate the greater portion of it out of the rock. A far safer guide to follow in calculating the probable expense of the lock proposed for the Enchampilly barrier, is the actual cost of those already constructed at Cintral. This is the method I have followed in the accompanying estimate, allowing at the same time for a slight increase of expense on account of the greater distance of the work from Dowlaishwarum.

10. For the execution of these works, two or three Officers would be required. Had Lieut. Grove been available, he would I think have been the fitted person to superintend the whole. Mr. W. Leggatt who was my Assistant during the past working season would be very useful as one of the Subordinate Executives, as he had charge of one of the locks built at Cintral, and is acquainted with my views as to the way in which such works should be constructed. I think it would be advisable to employ him on the Godavery again. He would have been the best person to send up at the close of the flood season to complete the unfinished lock at Doomgoodiem, and I consider it almost absolutely necessary that he should be remanded to the Godavery Division for this purpose. Two Overseers, if intelligent men, ought to be sufficient to superintend the parties employed in clearing channels through the shoals in the open parts of the river. Mr. Wilkinson one of the channel Superintendents in the delta, who was this year employed for a time on the Godavery, seems a likely sort of man for this kind of work.

(True Copy)

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

No. 21. ORDER THEREON, No. 1767 ; dated 16th September 1857.

1. With reference to para. 5 Extract from the Minutes of Consultation of the 16th May last, No. 945, the Chief Engineer forwards a letter from Lieutenant Haig, District Engineer

Upper Godavery, submitting an approximate estimate, amounting to Rupees 25,200, for carrying out certain works for improving the navigation of the Godavery, pending sanction to the more expensive and permanent works recommended in his general report of the 3rd May 1856.

2. The items included in the present estimate are as follow :—

Sinteral Barrier.

	Rs.	
Completing the lock at the mouth of the Doomgoodiem Lunka channel... ...	1,500	
Blasting and clearing rock in the channel	500	
Constructing a low dam of loose stone across the channel above the lock, in the lower barrier, to retain the water at the proper level at the lock... ...	500	
Clearing the channel between Sinteral and Buddrachellum...	1,500	
		4,000

Enchampilly Barrier.

Constructing a dam 12 feet high across the head of the Summer channel through the rocks opposite Neelumpilly...	2,500	
A double lock, with a total lift of 20 feet above half a mile below Neelumpilly.	6,000	
A lock with a lift of 10 feet at the junction of the Indravutty...	4,000	
Blasting and clearing rock in the channel...	500	
		13,000
		17,000

Dewalamurry Barrier.

Repair of road at the above barrier...		7,200
		24,200
Establishment for 5 months, at 600 Rupees a month, for removing shoals in open parts of the river...		3,000
		27,200
Deduct establishment sanctioned in Extract Minutes of Consultation 25th May 1857, No. 1003...		2,013
Remainder.....		25,187
or in round numbers.....		25,200

3. With his letter of the 28th June, submitted by the Chief Engineer on the 6th July 1856, Lieutenant Haig submitted an estimate for the removal of obstructions to the navigation of the Godavery at the three Barriers of Sinteral, Enchampilly, and Dewalamurry, amounting to Rupees 35,600 as shewn below, exclusive of an annual allowance of Rs. 5,760 for establishment.

Sinteral Barrier.

Vide page 12 Chief Engineer's report 7th July 1856.

	Rs.	
Rough stone dam at the mouth of the Doomgoodiem channel 50×12×4=2400 cubic yards, at ½ Rupee...	1,200	
2 Miles of single tram road...	6,000	
2 Temporary warehouses...	200	
Waggons &c.	1,300	
10 Ponies, at 60 Rupees each	600	
Superintendence, one Officer and one Overseer, for 4 months... ...	3,000	
		12,300

Enchampilly Barrier.

Railroad &c. as above...	11,100	
Loose stone dam, 10 cubic yards, at ½ Rupee	5,000	
		16,100

Dewalmurry Barrier.

Improvement of the road at the above barrier...		7,200
Total...		35,600

4. Pending the receipt of the sanction of the Government of India to the above expenditure, which was strongly recommended to that authority for immediate sanction, in a letter from this Government dated 8th December 1856, No. 2276, Lieutenant Haig took upon himself the responsibility of commencing the construction of two submersible locks, out of the sum of 6,000 Rupees* placed at his disposal for the purchase of materials required for the Tramroads, the construction of which formed part of the project recommended to the Government of India in the letter above quoted. The views of Government on this proceeding, are recorded in the correspondence noted in the margin, and need not here be adverted to. It now appears that Lieutenant Haig is in favor of constructing submersible locks, as a temporary measure, at the Barriers of Sinteral and Enchampilly, in lieu of the Tramroads previously recommended by him; and his present estimate accordingly provides, among other items, for the completion of the unfinished lock at the Sinteral Barrier, and the construction of similar works at the Barrier of Enchampilly.

* Extract Minutes Consultation 29th Decr. 1856, No. 2423.

From Chief Engineer 27th March 1857, No. 11323
Extract Minutes Cons., 9th April " " 673
From Chief Engineer 19th June " " 1357
Extract Minutes Cons., 2nd July " " 1282

5. In consequence of a representation from Lieutenant Haig that certain shoals, between Daverapully and the annicut at Dowlaisweram, obstructed navigation and required to be deepened, the sanction† of the Government of India was obtained for the entertainment of an establishment for that purpose, for three months, at a cost of Rupees 2,013 for the whole period. In consequence however of the lateness of the season, the work was not undertaken, and the amount is available for the next dry season. Lieutenant Haig states that the Superintendent will be provided from the permanent establishment of the Public Works Department; and that, deducting the salary proposed for him, his writer and lascars, amounting for three months to Rupees 813, there will remain Rupees 1,200, or Rupees 400 per mensem, for the work. But he now recommends that the establishment should be entertained from January, instead of March, to the end of May, and that another establishment, at 200 Rupees per mensem, should be sanctioned for the same period for clearing the river between the Sinteral and Enchampilly Barriers; the total amount required for five months being Rupees 3,000 as shown in the margin. He has accordingly included the amount in his present estimate.

† From Government of India 30th April 1857, No. 2001, in Consultation 26th May 1857, No. 1003.

	Rs.
Amount originally sanctioned for clearing the river between Daverapully and the anicut at Dowlaisweram..	
Deduct Superintendence...	2,013
	813
Remainder for 3 Months..	1,200
For 5 Months...	2,000
For clearing river between Sinteral and Enchampilly Barriers, at 200 Rupees a month, for 5 months..	1,000
Total .	3,000

6. It thus appears, from what has been above stated, and from an examination of the details of the present estimate, that it is intended to supersede the works included in the estimate which was recommended to the Government of India, in the letter from this Government of the 8th December last. Before addressing the Supreme Government however on the works now proposed pending sanction to the more permanent and expensive measures recommended for the improvement of the navigation, the Government request that the Chief Engineer will distinctly state whether the present estimate is in substitution of that previously submitted.

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

7×

P. W. No 1648

The Government will be good enough to decide, with reference to Mr Secretary Forbes' letter, what works are to be undertaken on the Rubber Godavery, pending the return of Lieut. Haig & the receipt of his Engineering experience & Report thereon

[illegible] to the Coast of India. This is explained: that it is not expected that they will be [illegible] of the present [illegible] continue that in order that they may be [illegible] & collected so that [illegible] of movement in general after [illegible]

[illegible] may be accomplished in the ensuing operations in Asia which is superintendent during the time[illegible] [illegible] in order to facilitate the carriage of Cotton to the Coast

H.
W.C.

No 1767. 15 P.W.D.

Extract from the Minutes of Consultation
Under date the 18th September, 1857.

Read the following
letter from the Chief Engineer

/ Here enter 18th August 1857 No 3005 /

1 With reference to para
5 Extract from the Minutes of
Consultation of the 16th May
last No 945, the Chief Engineer
forwards a letter from Lieut.
Haig, District Engineer Upper
Godavery, submitting an approxi-
mate Estimate, amounting to
Rupees 25,200, for carrying out
certain works for improving the
navigation of the Godavery,
pending sanction to the more
expensive and permanent
works recommended in his
General report of the 3 May
1856.

2 The items included
in

in the present estimate are as follows:-

Sinteral barrier

	Rs.	
Completing the lock at the mouth of the Doongoodiem Lunka Channel	1500.	
Blasting and clearing rock in the Channel	500.	
Constructing a low dam of loose stone across the channel above the lock, in the lower barrier, to retain the water at the proper level at the lock	500.	
Clearing the Channel between Sinteral and Budrachellum	1500.	4,000.

Enchampilly barrier

Constructing a dam 12 feet high across the head of the Summer Channel through the rocks opposite Nelumpilly	2500	
A double lock, with a total lift of 20 feet, about half a mile below Nelumpilly	6000.	
A lock with a lift of 10 feet at the junction of the Indrawutty	4000.	
Blasting and clearing rock in the Channel	500	13,000.
		17,000.

Dewalamurry barrier.

Repairs of road at the above barrier		7,200.
		24,200.
Establishment for 5 months, at 600 Rs a month, for removing shoals in open parts of the river		3000.
		27,200.
Deduct Establishment sanctioned in Extract Minutes of Consultation 25th May 1857 N° 1003		2,013.
Remainder		25,187.
or in round numbers		25,200.

3. With his letter of the 28th June, submitted by the

the Chief Engineer on the 6th July 1856, Lieut. Haig submitted an Estimate for the removal of obstructions to the navigation of the Godavery at the three barriers of Sinteral, Enchampilly, and Dewalamurry, amounting to Rupees 35,600 as shewn below, exclusive of an annual allowance of Rupees 5760 for establishment.

Sinteral barrier

	Rs	
Rough Stone dam at the mouth of the Doorkyoodiem Channel 50×12×4 = 2400 Cubic yards, at ½ Rupee	1200.	
2 Miles of single tram road	6000.	
2 Temporary Warehouses	200.	
Waggons &c	1300.	
10 Ponies, at 60 Rupees each	600.	
Superintendence, one Officer & one Overseer, for 4 Months	3000.	12,300.

Enchampilly barrier

Railroad &c as above	11,100.	
Loose Stone dam, 10 Cubic yards, at ½ Rupee	5000.	16,100.

Dewalamurry barrier

Improvement of the road at the above barrier	7,200.
Total Rupees	35,600

vide Page 12 Ch Engrs Report 7th July 56.

4 Pending the receipt of the sanction of the Government of India to the above expenditure, which was strongly recommended to that authority for immediate sanction, in a letter from this Government dated 8th December 1856 N° 2276, Lieut. Haig took upon himself the responsibility of commencing the construction of two submersible locks, out of the sum of 6000 Rupees placed at his disposal for the purchase of materials required for the tramroads, the construction of which formed part of the project recommended to the Government of India in the letter above quoted. The views of Government on this proceeding, are recorded in the correspondence noted in the margin, and need not here be adverted to.

+ E.M.C. 29th Dec.r/56 N° 2428.

From Chief Engr 27th March/57 N° 11323.
E.M.C. 9th April/57 N° 673.
From Chief Engr 19th June/57 N° 1357.
E.M.C. 2d July/57 N° 1282.

6.

6. It now appears that Lieut. Haig is in favor of constructing submersible locks, as a temporary measure, at the barriers of Sintoral and Enchampilly, in lieu of the tramroads previously recommended by him; and his present estimate accordingly provides, among other items, for the completion of the unfinished lock at the Sintoral barrier, and the construction of similar works at the barrier of Enchampilly.

7. In consequence of a representation from Lieut. Haig that certain Shoals, between Davenpully and the Aniout at Dowlaisweram, obstructed navigation and required to be deepened, the sanction of the Government of India was obtained for the

× From Govt of India 30th April/57 N° 2061, in Corr. 26th May/57 N° 1003.

the entertainment of an establish-
ment for that purpose, for
three months, at a cost of
Rupees 2013 for the whole
period. In consequence
however of the lateness of the
season, the work was not
undertaken, and the amount
is available for the next
dry season. Lieut. Haig
states that the Superintendent
will be provided from the
permanent establishment
of the Public Works Depart-
ment; and that, deducting
the salary proposed for him,
his writer and Lascars,
amounting for three months
to Rupees 813, there will
remain Rupees 1200, or Rupees
00 per mensem, for the work.
But he now recommends that
the establishment should be
entertained from January,
instead

instead of March, to the end
of May, and that another
Establishment, at 200 Rupees
per mensem, should be
sanctioned for the same period
for clearing the river between
the Sinteral and Enchampilly
barriers; the total amount
required for five months
being Rupees 3000, as shown
in the Margin. He has
accordingly included the
amount in his present
estimate.

	Rs.
Amount originally sanctioned for clearing the river between Daverapully and the Aniout at Doulaiveeram	2013
Deduct Superintendence	813
Remr. for 3 Months	1200
For 5 Months	2000
For clearing river between Sinteral & Enchampilly barriers, at 200 Rs. a Month, for 5 Months	1000
	3000

It thus appears,
from what has been above
stated, and from an exami-
nation of the details of the
present estimate, that it
is intended to Supersede the
works included in the
estimate which was recom-
mended to the Government
of India, in the letter from
this

this Government of the 8th
December last. Before address-
-ing the Supreme Government
however on the works now
proposed, [redacted];
pending sanction to the
more permanent and exc-
-pensive measures recom-
-mended for the improve-
-ment of the navigation,
the Government request
that the Chief Engineer
will distinctly state whether
the present estimate is in
substitution of that previously
submitted.

J. Copies to the Chief Engr
with an Encl.
Dispt 17

Copy in Letter to C.
of 3d Nov. 1857. No. 18.

29-8-1857

Public Works 1857 Dept.
Dr. to Cons: 22 Sept.

No 1767

Extract Mins: of Cons:
Dated 16th Sept. 57.

Ch. Chief Engr. 25.d.d. 5th 57 6 No 1908
to 20 Oct.
From Chief Engr. of 3d Septr. 57 Cr 2335
in Cons.

Requesting the Chief Engineer
to state whether the present Estimate
Rupees 25.200 for carrying out
certain works for improving the
navigation of the Godavery is in
substitution of that previously
submitted.-

Letter &
Copy with Encls. to the Govt.
of India - 14 Oct. 57 -
No. 1927.

No 20+21.

C4 Sep. R10