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MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

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*Proceedings of the Madras Government, Public Works Department,
22nd August 1865.*

No. 507. Read the following letter from Captain J. MULLINS, R. E., Consulting Engineer for Irrigation and Canal Company, to Colonel C. A. ORR, R. E., Secretary to Government, Department of Public Works, dated Madras, 12th August 1865, No. 69 :—

SIR,

1. I have the honor to submit the following report on the progress made in the works of the Madras Irrigation and Canal Company, during the quarter ending 30th April 1865.

2. The expenditure on the Soonkasala anicut and head works was Rupees 10,730-13-11, consisting of Rupees 8,348-14-9 for masonry, Rupees 736-13-7 for special superintendence and sundries, Rupees 675 for repairs to the anicut, Rupees 811-5-4 for stores, and Rupees 158-12-3 for proportion of store charges.

3. The expenditure on the Hindry aqueduct was Rupees 22,157-2-6, the items being—

	RS.	A.	P.
Excavation, baling, and filling in	30	8	0
Rubble-stone in chunam	2,319	6	0
Cut stone	709	13	2
Arch work in chunam, cubic yards 1,659	9,986	11	2
Centring	4,670	13	0
Plastering and cornice	1,803	5	8
Special superintendence and sundries	1,969	5	4
Stores	558	0	11
Proportion of store charges	109	3	3

4. Rupees 20,042-14-3 were expended on the 1st Section; 1 to 17 $\frac{1}{4}$ miles, the main Canal, the work done being—

	RS.	A.	P.
Excavation and embankments, cubic yards 48,388	7,785	14	11
Revetting interior banks with rough stone, do. 12,197	7,616	6	8
Culverts	199	14	5
Calingulals	122	8	0
Special superintendence and sundries	4,295	5	5
Stores	19	1	2
Proportion of store charges	3	11	8

5. The 2nd and 3rd Sections from the 18th to the 43rd miles, show an outlay of Rupees 2,10,425-3-2, the items being—

	RS.	A.	P.
Excavation and embankment, cubic yards 3,79,655	1,05,551	3	10
Revetment, square yards 39,724	32,729	11	6
Rubble masonry wall	13,476	1	11
Dry rubble wall	14,434	5	0
Packing with dry rubble	89	4	0
Dry filling in behind the masonry revetment	1,016	8	0
Foundation to masonry walls	48	10	0
Clay rammed between dry rubble	1,926	14	5
Dry rubble and gravel, &c.	12	0	0
Single or stone backing	1,234	4	0

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	RS.	A.	P.
Covering sandy bed of the main Canal below the Hindry aqueduct ...	5,748	5	6
Aqueduct at Kadrabagh ...	3,402	4	0
Do. at Ullur ...	5,149	10	5
Calingulabs ...	1,352	6	3
Culverts ...	66	8	0
Discharging sluice in the tank bund at the 40th mile ...	1,330	4	7
Sultanpoor tunnel ...	1,433	0	0
Alterations of road ...	233	12	6
Special superintendence and sundries ...	14,829	12	10
Stores ...	5,319	5	3
Proportion of store charges ...	1,040	15	2

6. On the 4th and 5th Sections of the main Canal, from the 44th to 72nd miles, there was an expenditure of Rupees 1,53,796-14-0, the details being—

	RS.	A.	P.
Excavation and embankment, cubic yards, 3,67,177 ...	73,204	8	3
Revetment and pitching, do. 6,976 ...	46,979	8	1
Bridges ...	2,378	13	7
Bridges on road from Metacondal to Yerragoodoor ...	408	15	2
Aqueduct in the 63rd mile ...	8,281	8	9
Calingulabs ...	1,914	10	0
Apron to calingulabs ...	3,090	0	0
Culverts ...	2,965	5	1
Return bund ...	1,637	3	8
Escape channel for culverts ...	414	4	0
Scouring channel and sluice ...	1,206	12	5
Special superintendence and sundries ...	8,772	6	5
Stores ...	2,126	11	10
Proportion of store charges ...	416	2	9

7. On the 6th Section, or miles 73rd to 91st of the Canal, Rupees 30,818-0-11, were expended on—

	RS.	A.	P.
Excavation and embankment, cubic yards 73,504 ...	14,990	13	4
Single and double culverts ...	313	7	11
Locks ...	9,771	15	4
Bridge ...	869	0	0
Scouring sluice and channel ...	927	12	8
Special superintendence and sundries ...	2,873	15	2
Channel for discharging surplus water below the Metacondal cut ...	593	13	6
Stores ...	399	1	4
Proportion of store charges ...	78	1	8

8. The outlay on the 7th Section, miles 92nd to 114th, amounts to Rupees 33,404, being for—

	RS.	A.	P.
Excavation and embankment, cubic yards 78,266 ...	11,172	11	10
Anicut and head works ...	4,400	1	0

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	RS.	A.	P.
Calingulabs ...	809	4	0
Bridge ...	3,425	12	8
Special superintendence and sundries ...	7,010	10	9
Stores ...	399	1	3
Proportion of store charges ...	78	1	9

9. The outlay on the 8th Section, miles 115th to 143rd, was Rs. 42,981-13-11, the items being—

	RS.	A.	P.
Excavation and embankment, cubic yards 2,40,495 ...	33,438	12	5
Calingulabs ...	3,245	11	10
Locks ...	216	0	0
Bridges ...	1,355	9	3
Culverts ...	1,233	3	4
Special superintendence and sundries ...	3,388	4	9
Store charges ...	87	3	3
Proportion of store charges ...	17	1	1

10. The anicut and head works at Somaishwaram show an expenditure of Rupees 10,350-5-4, consisting of Rupees 7,316-1-0 on the body of the anicut, Rupees 5-4-0 for pumping, Rupees 332-0-4 for railway and waggons, Rs. 1,571-8-8 for special superintendence and sundries, Rupees 941-4-4 for stores, and Rupees 184-3-0 for proportion of store charges.

11. A sum of Rupees 386-2-6 was paid during the quarter on account of rubble stone used on the Kurnool anicut in 1860.

12. The expenditure on works of distribution was Rupees 1,393-1-1, of which Rupees 16-10-0 were expended on the branch channel and sluices in the 1st Section, and the remainder Rupees 1,376-7-1 on the branch channels and sluices in the 4th Section or Nagatore Division.

13. The expenditure on buildings was Rupees 3,628, consisting of the following items:—

	RS.
Improvement of road approaches to the Bowanassy buildings ...	25
Office and store buildings at Valapanoor ...	55
Do. do. at Jupaud ...	2,718
Do. do. at Puggydial ...	291
Do. do. at Chintagoontah ...	455
Hospital at Somaishwaram ...	18
Repairs to the anicut Office at Zorapoor ...	66

14. The following abstract shews the expenditure on all works from the commencement to the close of the quarter compared with the sanctioned estimates:—

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Works.	Amount of the estimate.	Expenditure up to 31st Jan. 1865.	Cost in the quarter ending 30th April 1865.	Total expenditure.	Add amount transferred to this from other works.	Deduct refunds do. do.	Total net expenditure.	AMOUNT.	
								Available.	Increases of estimate.
	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
<i>Main Supply.</i>									
Anicut and head works at Kurnool...	3,03,080	66,548	386	66,934	.....	8,470	58,464	2,44,616	.....
Do. do. at Soonkasala	3,09,650	3,49,753	10,731	3,60,484	.....	.....	3,60,484	.....	50,834
Do. do. at Somaishwaram	1,62,470	46,471	10,350	56,821	.....	.....	56,821	1,05,649	.....
Aqueduct across the river Hindry	2,18,753	2,27,687	22,157	2,49,844	.....	.....	2,49,844	.....	31,091
Canal for one mile from the head sluice of the Kurnool anicut	65,000	49,211	.....	49,211	.....	.....	49,211	15,789	.....
South main Canal, 1st Section, 17½ miles	8,56,777	7,89,448	20,043	8,09,491	.....	22,489	7,87,002	69,775	.....
Do. do. 2nd and 3rd Sections from 18th to 43rd miles.	19,16,717	14,65,625	2,10,425	16,76,050	8	7,755	16,68,303	2,48,414	.....
Do. do. 4th and 5th do. from 44th to 72nd do.	9,52,963	7,96,136	1,53,797	9,49,933	.....	734	9,49,199	3,764	.....
Do. do. 6th do. from 73rd to 91st do.	3,84,434	2,39,395	30,818	2,70,213	.....	102	2,70,111	1,14,323	.....
Do. do. 7th do. from 92nd to 114th do.	2,35,850	1,16,367	33,404	1,49,771	.....	102	1,49,669	86,181	.....
Do. do. 8th do. from 115th to 143½ do.	5,55,610	1,23,230	42,982	1,66,212	.....	.....	1,66,212	3,92,398	.....
	59,64,304	42,69,871	5,35,093	48,04,964	8	39,652	47,65,320	12,80,909	81,925
<i>Distribution.</i>									
Branch channels and sluices between the first 17½ miles of 1st Section...	5,520	4,416	17	4,433	.....	.....	4,433	1,087	.....
Irrigation channels and sluices for irrigating about 30,000 acres between the rivers Bowanassy and Kisina	10,218	.....	1,376	1,376	.....	.....	1,376	8,842	.....
	15,738	4,416	1,393	5,809	.....	.....	5,809	9,929	.....
<i>Buildings.</i>									
Central Hospital with out-houses and compound wall at Kurnool	2,540	4,188	.....	4,188	.....	.....	4,188	.....	1,648
Repairs to do.	68	.....	.....	.....	.....	.....	.....	68	.....
Office, Store-house, and Workshop at Soonkasala...	4,000	7,771	.....	7,771	.....	8	7,763	.....	3,763
Roads, Bridges, &c., at Bowanassy...	.....	3,868	.....	3,868	.....	.....	3,868	.....	3,868
Office, Store-room, and Artificers' shed at Bowanassy	7,298	7,470		7,470			7,470		172

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Improvement of the road approaching to the above buildings and repairing two culverts at do. ...	578		25	25			25	553	
Repairing the above building at Bowanassy	168	.....	.....	.....	.....	.....	.....	168	.....
Converting the unfinished building intended for a Gun Powder Manufactory into an Hospital at Bowanassy ...	427	12	.....	12	.....	.....	12	41	.....
Office and Store building at Valapauoor in the Bowanassy Division ...	1,970	5,141	55	5,196	.....	.....	5,196	.....	3,226
Do. do. at Jupaad in the Nagatore Division ...	2,444	2,826	2,718	5,544	.....	12	5,532	.....	3,088
Do. do. at Puggardial in the do.	3,030	2,916	291	3,207	.....	.....	3,207	.....	177
Do. do. at Chinnagoontah in Kunder ...	3,552	4,805	455	5,260	.....	.....	5,260	.....	1,708
Do. and temporary shed at Ayaloor in do....	642	67	.....	67	.....	.....	67	575	.....
Quarters for Sub-Assistant Engineer and Assistant Surveyor at do. ...	1,236	697	.....	697	.....	.....	697	539	.....
Hospital and Apothecary's residence at Somaishwaram ...	2,900	1,549	18	1,567	.....	.....	1,567	1,333	.....
Office building at Somaishwaram ...	1,470	1,470	.....	1,470	.....	.....	1,470	.....	.....
Repairs to the ancient Office at Zorapoor ...	327	242	66	308	.....	.....	308	19	.....
	32,650	43,022	3,628	46,650		20	46,630	3,670	17,650
Total...	60,12,692	43,17,309	5,40,114	48,57,423	8	39,672	48,17,759	12,94,508	99,575

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15. This Statement shows that the expenditure of the quarter was Rupees 5,40,114, and the net total outlay up to the end of the quarter Rupees 48,17,759.

16. Out of the sum of Rupees 39,672 deducted from the total expenditure, Rupees 38,428-8-5 consist of the value of stores transferred from the works to the general plant account,* but as the correctness of this entry is doubtful, the Agent has been addressed on the subject, and in submitting to Government the store accounts of the quarter which are now under audit, the item will be fully explained and, if necessary, an adjustment in the Progress Report for the 1st quarter of 1865-66 will be made.

* Form S.

17. The subjoined Statement shows the expenditure in excess of sanction at the close to have been only Rupees 99,575, which is a great improvement on the amount† of excess at the end of the previous quarter :—

† Rupees 9,51,487.

Works.	Excess expenditure up to 31st Jan. 1865.	Excess expenditure during the quarter 30th April 1865.	Total.	Deduct refunds.	Excess net expenditure up to 30th April 1865.
<i>Main Supply.</i>	RS.	RS.	RS.	RS.	RS.
Anicut and head works at Soonkasala ... 2,24,753	40,103	10,731	50,834	.....	50,834
Deduct the amount of the supplemental sanction during the quarter ... 1,84,650					
Aqueduct across the river Hindry at Kurnool					
	8,934	22,157	31,091	.....	31,091
Total...	49,037	32,888	81,925	.....	81,925
<i>Buildings.</i>					
Central Hospital at Kurnool ...	1,648	.....	1,648	.....	1,648
Office and Store at Soonkasala ...	3,771	.....	3,771	8	3,763
Do. do. and Artificers' shed at Bowanassy	172	.....	172	.....	172
Road and bridges at Bowanassy ...	3,868	.....	3,868	.....	3,868
Office and Store at Jupaud in the Nagatore Division	382	2,718	3,100	12	3,088
Do. do. at Chintagoontah in Kundaur Division	1,253	455	1,708	.....	1,708
Do. do. at Valapanoor in Bowanassy	3,171	55	3,226	.....	3,226
Do. do. at Puggydial in Nagatore...	.....	177	177	.....	177
Total...	14,265	3,405	17,670	20	17,650
Grand Total...	63,302	36,293	99,595	20	99,575

Of this excess Rupees 81,925 are on account of main supply, and sanctions to the extent of Rupees 68,619 have since been given. The anicut expenditure has more than kept pace with the successive sanctions, and the Agent's attention has been called to the necessity for the submission of another estimate. The rest of the excess Rupees 17,650 is on buildings, and of this Rupees 3,405 belong to the quarter under notice. Rupees 2,718 having been

Anicut and head works, Soonkasala. Proceedings Madras Government, No. 1,289, dated 12th May 1865	RS. 41,342
Hindry aqueduct. Proceedings Madras Government, No. 1,970, dated 12th July 1865	27,277
	68,619

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	RS.
Jupaud estimate	2,414
Total expenditure	5,532
Excess...	3,088
Chintagoontah estimate	3,552
Total expenditure	5,260
	1,708

added to previous excess on the Jupaud station buildings, and Rupees 687 on similar buildings at Chintagoontah (Donapad), &c. The Agent's attention has been called to these outlays in the Memoranda of audit on the three monthly Progress Reports.

18. The following estimates were received from the Agent, and submitted to Government during the quarter :—

1. Plans and estimates for Office at Somaishwaram 1,470
2. Supplemental do. for covering the sandy bed of the main Canal below the Hindry aqueduct... .. 3,476
3. Supplemental do. and plans of the 3rd Section main Canal 3,35,150
4. Do. do. do. for the Kadrabagh aqueduct... .. 16,591
5. Do. do. do. for the 8th Section main Canal 1,21,200
6. Plans and estimates for repairs, &c., to the Soonkasala anicut 38,142

Of these the first five received the sanction of Government during the quarter, together with three estimates which was previously submitted, viz. :—

- Supplemental estimate 2nd Section main Canal 7,56,740
- Additional estimate for the construction of aprons to the calingulabs of the 4th Section 24,395
- Supplemental estimate of the Soonkasala anicut 1,84,650

19. The per-centage of cost of establishments of all kinds, on the expenditure of the quarter, is 20·92, of which 5·15 are for general management, 8·23 for permanent and 4·21 for temporary establishments employed on construction, and 3·33 for establishments engaged in investigations in Bellary, Cuddapah, &c.

No. 508. ORDER THEREON, 22nd August 1865, No. 2,434.

CIVIL WORKS, No. 72.

Ordered to be communicated to the Home Government.

(True Extract.)

(Signed) CHARLES A. ORR, Colonel, R. E.,

Secretary to Government.

To the Consulting Engineer of the Irrigation and Canal Company.
.. Manager for .. do. .. do.

Exd. S. T. Augustin.

Consulting Engineer's Office
Irrigation & Canal Company
Madras, 12th August 1865

N^o 69

From Captain J. Mullins R.E.
Civil Engineer & C. Co.

To The Secretary to Government
Department of Pub. Works.

Sir,

1. I have the honor to submit the following report on the progress made in the works of the Madras Irrigation and Canal Company during the quarter ending 30th April 1865.

2. The expenditure on the Sontkavalu Ament and headworks was Rupees 10730-13-11, consisting of Rupees 8348-14-9 for masonry, Rupees 736-13-7 for special superintendence and sundries, Rupees 675 for repairs to the Ament, Rupees 811-5-4 for stores, and Rupees 158-12-3 for proportion of store charges.

3. The expenditure on the Hindry Ament was Rupees 22157-2-6 the items being:

Excavation, Baling and filling in	30-8-9
Gravel stone in channel	2319-6-0
Cut stone	709-13-2
Arish work in channel	1659-9-8
Centring	4670-13-0
Plastering and cornice	1803-5-8
Special superintendence and sundries	1969-5-4
Stores	558-4-11
Proportion of store charges	100-3-3

4. Rupees 20,042-14-3 were expended on the 1st Section - 1 to 17 1/4 miles of the Main Canal, the work done being,

Excavation & Embankments Cubyds 48388	7785-14-11
Revetting interior banks with rough stone Cubyds 12197	7616-6-8
Culverts	199-14-5
Calingulaks	122-8-
Special superintendence & sundries	4295-5-5
Stores	19-1-2
Proportion of store charges	3-11-8

5. The 2nd and 3rd Sections, from the 18th to the 43rd miles, show an outlay of Rupees 210,425-3-2 the items being,

Excavation & Embankment Cuyds 379655	105551-3-10
Revetment, square yards 39734	52729-11-6
Rubble masonry wall	13476-1-11
Dry rubble wall	14434-5-
Packing with dry rubble	89-4-
Dry filling in behind the masonry revetment	1016-8-
Foundation to masonry walls	48-10-
Clay rammed between dry rubble	1926-14-5
Dry rubble and gravel	12-
Single stone backing	1234-4-
Covering sandy bed of the Main Canal below the Kindry Aqueduct	5748-5-6
Aqueduct at Kadraabagh	3402-4-
do at Ullur	5149-10-5
Calingulaks	1352-6-3
Culverts	66-8-
Discharging sluice in the tank bund at the 40th mile	1330-4-7
Sulthanpur Tunnel	1433-
Alterations of road	233-12-6
Special superintendence and sundries	11,829-12-10
Stores	5319-5-3
Proportion of store charges	1040-15-2

6. On the 4th and 5th Sections of the Main Canal from the 44th to 72nd miles, there was an

14. The following Abstract shows the expenditure on all works from the commencement to the close of the quarter compared with the sanctioned estimates.

Works	Amount of the Estimate	Expenditure up to 31st March
<u>Main Supply.</u>		
Amient and head works at Kurnool	303080	665
do do at Sootkatala	309650	3497
do do at Somasivaram	162470	464
Aqueduct across the river Kindry	218753	2276
Canal for 1 mile from the head sluice of the Kurnool Amient	65000	492
South Main Canal 1 Section 17 1/4 miles	856777	7894
do do 2nd and 3rd sections from 18th to 43rd miles	1916777	14656
do do 4th and 5th sections from 44th to 72nd miles	952963	7961
do do 6th section from 73rd to 91st miles	384434	2393
do do 7th section from 92nd to 114th miles	235850	1163
do do 8th section from 115th to 123 3/4 miles	558610	1232
	5964304	42690
<u>Distribution.</u>		
Branch channels and sluices between 1st 17 1/4 miles of Section	5520	44
Irrigation channels and sluices for irrigating about 30,000 acres between the rivers Rowanasey & Krishna	10218	
	15738	44
<u>Buildings.</u>		
Central Hospital with out houses & compound wall at Kurnool	2540	41
Repairs to do do do do	68	
Office, Store house & Workshop at Sootkatala	4000	77
Roads, Bridges &c at Rowanasey	7298	74
Office, Store room and Artificer's shed at Rowanasey		
Improvement of the road approaching to the above buildings and repairing 2 culverts at do	578	
Repairing the above building at Rowanasey	168	
Converting the unfinished building intended for gun powder Magazine into an Hospital at Rowanasey	427	
Office and Store buildings at Valapanoor in the Rowanasey Do	1970	57
do do at Supur in the Nagavari Do	2444	28
do do at Puyyadial in the do	3030	29
do do at Chintagootah in Kindar	3552	40
do do at Agaloor in do	642	
do and temporary sheds at Agaloor in do	1236	69
Quarters for Sub Asst Engineer & Asst Surveyor at do	2900	154
Hospital and Apothecary's residence at Somasivaram	1470	147
Office building at Somasivaram	327	24
Repairs to the Amient Office at Yonapoor		
	32650	4302
<u>Total</u>	<u>6012692</u>	<u>43173</u>

Of these the first five received the sanction of
Government during the quarter, together with
3 estimates which were previously submitted

4. Rupees 20,042-14-3 were expended on the 1st Section - 1 to 17 1/4 miles of the Main Canal, the work done being,

Excavation & embankments Cubyds	48,300	7705-14-11
Revetting interior banks with rough stone Cubyds	12,197	7616-6-8
Culverts		199-14-5
Calingulaks		122-8-
Special superintendence & sundries	4,295	5-5
Stores		19-1-2
Proportion of store charges		3-11-8

5. The 2nd and 3rd Sections, from the 18th to the 43rd miles, when an outlay of Rupees 210,425-3-2 the items being,

Excavation & embankment Cubyds	379,655	105,551-3-10
Revetment, square yards	397,34	32729-11-6
Rubble masonry wall		13,476-1-11
Dry rubble wall		14,434-5-
Packing with dry rubble		89-4-
Dry filling in behind the masonry revetment		1016-8-
Foundation to masonry walls		48-10-
Clay rammed between dry rubble		1926-14-5
Dry rubble and gravel		12-
Single stone backing		1234-4-
Covering sandy bed of the Main Canal below this kindry Aqueduct		5748-5-6
Aqueduct at Madrabagh		3,402-4-
do at Ullur		5,149-10-5
Calingulaks		1,352-6-3
Culverts		66-8-
Discharging sluice in the tank bund at the 40th mile		1330-4-7
Sulthanpur Tunnel		1,433-
Alterations of road		233-12-6
Special superintendence and sundries		14,829-12-10
Stores		5,319-5-3
Proportion of store charges		1040-15-2

6. On the 4th and 5th Sections of the Main Canal from the 45th to 50th miles,

an expenditure of Rupees 153,796-14-, the details being,

Excavation and embankment Cubyds	367,177	73,204-8-3
Revetment and pitching	6976	46,979-8-1
Bridges		2,378-13-7
Bridges on road from Metacundal to Terragondur		408-15-2
Aqueduct in the 63rd mile		8281-8-9
Calingulaks		1914-10-
Apron to calingulaks		3090-
Culverts		2965-5-1
Return bund		1637-3-8
Escape channel for culverts		414-4-
Scouring channel and sluice		1206-12-5
Special superintendence & sundries		8772-6-5
Stores		2126-11-10
Proportion of store charges		416-2-9

7. On the 6th Section or miles 72nd to 91st of the Canal Rupees 30,818-1-11 were expended on

Excavation & embankment Cubyds	73,504	14,990-13-4
Single and double culverts		313-7-4
Locks		9771-15-4
Bridge		869-
Scouring sluice and channel		927-12-8
Special superintendence and sundries		2873-15-2
Channel for discharging surplus water below the Metacundal cut		593-13-6
Stores		399-1-4
Proportion of store charges		78-1-8

8. The outlay on the 7th Section - miles 92nd to 114th - amounts to Rupees 33,404 - being for

Excavation and embankment Cubyds	78,266	11,172-11-10
Minor and head works		4,200-1-9
Culverts		6108-4-
Calingulaks		809-4-
Bridge		3,425-12-8
Special superintendence & sundries		7010-10-9
Stores		399-1-3
Proportion of store charges		78-1-9

9. The outlay on the 8th Section - miles 115th to 143rd

143 rd - was Rupees 42,981-13-11, the items being:	
Excavation & Embankment Cut by 240,495-33,438-13-5	
Calcuttalahs	3245-11-10
Sacks	216-1-1
Bridges	1355-9-3
Cuttings	1233-3-4
Special superintendence and sundries	3388-7-9
Store charges	87-3-3
Proportion of store charges	17-1-1

10. The Ancient and head works at Somaiswaram show an expenditure of Rupees 10,350-5-4, consisting of Rupees 7,316-1-1 on the body of the Ancient, Rupees 5-4-1 for pumping, Rupees 332-1-4 for railway and waggons, Rupees 1,571-8-8 for special superintendence and sundries, Rupees 941-4-4 for stores, and Rupees 184-3-1 for proportion of store charges.

11. A sum of Rupees 386-2-6 was paid during the quarter on account of rubble stone used on the Turnool Ancient in 1860.

12. The expenditure on works of distribution was Rupees 1393-1-1; of which Rupees 16-10-1 were expended on the Branch channel and sluices in the 1st Section, and the remainder Rupees 1376-7-1 on the Branch channels and sluices in the 4th Section or Nagabara Division.

13. The expenditure on Buildings was Rupees 3,628 - consisting of the following items:

Improvement of road approaches to the Rowanasey	25-1-1
Office and store buildings at Valapanoor	55-1-1
do do at Supia	2710-1-1
do do at Puzayal	1291-1-1
do do at Chintagootah	455-1-1
Hospital at Somaiswaram	18-1-1
Repairs to the Ancient Office at Yonapoor	66-1-1

14. The following Abstract shows the expenditure on all works from the commencement to the close of the quarter compared with the sanctioned estimates.

Works	Amount of the Estimate	Expenditure up to 31 st January
<u>Main Supply.</u>		
Ancient and head works at Turnool	303080	265
do do at Sookkasala	309650	3497
do do at Somaiswaram	162470	464
Aqueduct across the river Andry	218753	2276
Canal for 1 mile from the head sluice of the Turnool Ancient	65000	1492
South Main Canal 1 st Section 17 1/2 miles	856777	7894
do do 2 nd and 3 rd sections from 18 th to 43 rd miles	1976717	14656
do do 4 th and 5 th do from 44 th to 72 nd	952963	7961
do do 6 th do from 73 rd to 91 st	384434	2393
do do 7 th do from 92 nd to 114 th	235850	1163
do do 8 th do from 115 th to 143 3/8	558610	1232
	<u>5964304</u>	<u>42690</u>

<u>Distribution.</u>		
Branch channels and sluices between 1 st 17 1/2 miles of Section	5520	44
Irrigation channels and sluices for irrigating about 130,000 acres between the rivers Rowanasey & Krishna	10218	
	<u>15738</u>	<u>44</u>

<u>Buildings.</u>		
Central Hospital with out houses & compound wall at Turnool	2540	41
Repairs to do do do do do	68	
Office, store house & workshop at Sookkasala	4000	77
Roads, Bridges &c at Rowanasey	7298	74
Office, store room and artificer's shed at Rowanasey		
Improvement of the road approaching to the above buildings and repairing 2 culverts at do	578	
Repairing the above building at Rowanasey	168	
Converting the unfinished building intended for gun powder Main factory into an Hospital at Rowanasey	427	
Office and store buildings at Valapanoor in the Rowanasey D.	1970	51
do do at Supia in the Nagabara D.	2644	28
do do at Puzayal in the do	3030	29
do do at Chintagootah in the do	3552	48
do do and temporary shed at Agaloor in do	642	
Quarters for Sub Assistants & Asst Surveyor at do	1236	69
Hospital and Apothecary's residence at Somaiswaram	2900	154
Office building at Somaiswaram	1470	14
Repairs to the Ancient Office at Yonapoor	327	26
	<u>32650</u>	<u>4302</u>

Total - 6012692 43173

was Rupees 42,901-13-11, the items being
 variation Embankment July 24, 1895-33,432-12-5

15. This statement shows that the expenditure of the quarter was Rupees 52,011-4, and the net total outlay up to the end of the quarter Rupees 48,177-59.

16. Out of the sum of Rupees 39,672 deducted from the total expenditure, Rupees 38,422-8-5 consists of the value of stores transferred from the works to the General Plant Account, but as the correctness of this entry is doubtful, the Agent has been addressed on the subject, and in submitting to Government the Store Accounts of the quarter which are now under audit the item will be fully explained and, if necessary, an adjustment in the Progress Report for the 1st Quarter of 1895/96 will be made.

17. The subjoined Statement shows the expenditure in excess of sanction at the close to have been only Rupees 99,575, which is a great improvement on the amount of excess at the end of the previous quarter.

Works.			
Main Supply.			
Ambient and head works at Somnath.	324,753	10,000	50,834
Deduct the amount of the Supt. sanction during the quarter.	18,650		
Agreed net across the river Hindry at Turmoil.	89,342	31,091	31,091
Total.	470,577	32,200	81,925
Buildings.			
Central Hospital at Kutch.	1648	1648	1648
Office & Store at Somnath.	3771	3771	8 3763
do do at Barikpur.	172	172	172
Road & Bridges at Barikpur.	3868	3868	3868
Office & Store at Barikpur.	382	2710	3100 12 3088
do do at Chintamani in Kutch.	1253	455	1708
do do at Barikpur in Barikpur.	3171	55	3226
do do at Barikpur in Barikpur.	177	177	177
Total.	11,265	3405	17650 20 17650
Grand Total Rupees.	63,302	36,293	99,595 20 99,575

Of this excess Rupees 81,925 are on account of Main Supply and sanctions to the extent of Rupees 68,619 have since been given. The amount expenditure has more than kept pace with the excessive sanctions, and the Agent's attention has been called to the necessity for the submission of another estimate. - The rest of the excess Rupees 17,650 is on Buildings, and of this Rupees 3,405 belong to the quarter under notice. Rupees 2710 having been added to previous excess on the Supad Station buildings, and Rupees 687 on similar buildings at Chintamani (Barikpur). The Agent's attention has been called to these outlays in the Memo. of Audit on the 3 monthly Progress Reports.

18. The following estimates were received from the Agent and submitted to Government during the quarter.

1. Plans and Estimate for Office at Somnath. 14,700
2. Supplemental estimate for covering the sandy bed of the Main Canal below the Hindry Agueduct. 34,700
3. Supplemental estimate and plans of the 3rd Section Main Canal. 33,515
4. do do for the Kutch Agueduct. 16,591
5. do do for the 3rd Section Main Canal. 12,200
6. Plans and Estimate for repairs to the Somnath Canal. 38,142

Of these the first five received the sanction of Government during the quarter, together with 3 estimates which were previously submitted.

at Somnath
 to the Agent Office at Barikpur

2	5020	46050	20	46630	8670	17650
3	5020	46050	20	46630	8670	17650

Have the honor to be,
Sir,
Your most obedient servant,
Wm. Lullin Captain, R.E.
Care, Engineer & Co.

of Virginia & North Carolina
of 22nd Aug. 1865 & 1863.

1863
of 22nd Aug. 1863
of 22nd Aug. 1863
of 22nd Aug. 1863

The General Agent
of the General Agent
of the General Agent

The Secretary to the
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Dated 12th of August 1865
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