M.R.O. 1—77,000—8-6-31.

(1) Number of pages

(2) Date of repair

(3) Initials of the Referencer

MADRAS RECORD OFFICE.

Government of Madras.

P. W. DEPARTMENT.

G.O. No. 824-5 Press ~~Mis.~~

Dated 1-10-1877

Not to be folded or roughly handled

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

1st October 1877, No. 824 W.

Buildings and Roads.
Account.

Read the following :—
No. 23.

Schedule of the probable requirements of the Madras Presidency on account of Imperial Works for 1878-79.

Executive Division.	Projects.			Amount of Estimate.	Computed Expenditure up to 31st March 1878.	Estimate, 1878-79.	No.	Remarks or References.
	No.	Locality.	Description.					
			ORIGINAL WORKS.	RS.	RS.	RS.		
			Military.					
Bellary ...	1	Bellary ...	Double latrine for the European Infantry Regiment.	...	...	3,000	1	Estimate awaited.
Do. ...	2	Do. ...	Double wash-houses and urinals for the European Infantry Regiment.	7,645	...	7,640	2	G.O. No. 21 W of 4th May 1877.
Do. ...	3	Do. ...	Drainage of the married quarters of the European Regiment.	9,390	...	9,390	3	Estimate under consideration. Work approved in G.O. No. 2,385 of 20th April 1877, Military Department.
Do. ...	4	Do. ...	Two latrines for the lines of the 21st Regiment, Native Infantry.	4,290	...	2,860	4	G.O. No. 735 of 22nd March 1876. Three latrines were sanctioned, only two are recommended for 1878-79.
Do. ...	5	Do. ...	Water Supply Project	1,41,628	1,36,670	5,000	5	G.O. No. 3,118 of 2nd November 1874. Item No. 10 of Budget of 1877-78.
Presidency ...	6	Fort St. George.	Additional story to the quarters occupied by the Commissary of Ordnance.	...	...	7,100	6	Estimate awaited. Called for in G.O. No. 1,101 of 3rd May 1876.
Do.	7	Veysarpady ...	Enlarging existing quarters of Mill-men and Supervisors for residence of Master Worker and Master Refiner at the Gun Powder Factory.	10,170	...	10,000	7	G.O. No. 73 of 12th June 1871.

Schedule of the probable requirements of the Madras Presidency on account of Imperial Works for 1878-79—(Continued).

Executive Division.	Project.			Amount of Estimate.	Computed Expenditure up to 31st March 1878.	Estimate 1878-79.	No.	Remarks or References.
	No.	Locality.	Description.					
			Military—(Continued).	RS.	RS.	RS.		
Presidency ...	8	Veysarpady ...	A building for charcoal pulverising, sulphur grinding mixing machine, 8 horse power engine, and two boilers at the Gun Powder Factory.	...	...	16,300	8	Estimate awaited. Called for in G.O. No. 119 of 19th January 1874.
Do. ...	9	Do. ...	A building for press, pumps with gear for do., granulating pebble powder making 8 horse power engine, and two boilers at do.	...	...	37,300	9	Do. do.
Do. ...	10	Do. ...	A building for glazing, dusting, separating two 12 horse power engine and 2 boilers at do.	...	...	96,700	10	Do. do.
Do. ...	11	Madras ...	Corrugated roof to one of the gun sheds now used as a painter's shop at the Gun Carriage Factory.	...	...	5,500	11	Estimate awaited.
Do. ...	12	Do. ...	Entire new set of lines at Poodoopett for the Native Infantry Regiment now stationed at Vepery.	...	...	50,000	12	Estimate awaited. Approved by Government of India. G.O. No. 2,967 of 4th November 1876.
Do. ...	13	Veysarpady ...	Additional group of incorporating mills for the Gun Powder Factory.	54,010	40,000	14,000	13	G.O. No. 655 W of 27th August 1877. Item No. 8 of Budget of 1877-78.
Chingleput ...	14	Poonamallee ..	New double-storied barracks for 200 men with out-houses. New quarters for 30 families with do. Do. for Apothecary ... Alterations to existing buildings and demolitions. New Fives and Racket Court ...	1,68,070 80,150 7,150 13,000 ...	7,610	40,000	14	Estimate of Rupees 2,68,370 forwarded to Government of India with letter No. 2,221 of 22nd August 1876 has been generally approved by that Government. G.O. No. 452 of 8th February 1877. Items 7 to 11 of preliminary issue of Budget of 1877-78.

Bangalore ...	15	Bangalore ...	Additional works in connection with Ulsoor Water Supply Project.	66,598	12,500	40,000	15	Sanctioned by Government of India. Register No. 35 M.W. of 1877-78. G.O. No. 589 W of 16th August 1877 Item No. 9 of Budget of 1877-78.
Do. ...	16	Do. ...	Constructing quarters for Quartermaster Serjeant, R.H.A., Ulsoor Barracks.	4,220	...	4,220	16	G.O. No. 1,670 of 14th June 1875. Item No. 3 of Class C. Works of Budget of 1877-78.
Do. ...	17	Do. ...	Cost of road from Trinity Church to Agram Barracks.	9,200	...	9,200	17	Sanctioned by the Government of India. Register No. 8 M.W. of 1874-75. G.Os. No. 1,541 of 11th June 1874, and No. 683 of 10th March 1875. Item No. 8 of Class C. Works of Budget of 1877-78.
Do. ...	18	Do. ...	Drainage of Native Infantry lines.	14,400	6,400	5,000	18	G.O. No. 126 of 26th May 1873. Item No. 7 of do.
Do. ...	19	Do. ...	Constructing a school for Royal Horse Artillery and Royal Artillery.	11,700 Approximate.	...	11,700	19	Estimate under consideration.
Do. ...	20	Do. ...	Improvements to Dumloor tank ...	20,000	...	10,000	20	G.O. No. 524 of 25th Feb. 1876.
Do. ...	21	Do. ...	Latrines for the Sappers and Miners, two for males and two for females.	...	...	5,040	21	Estimate awaited.
Do. ...	22	Do. ...	Lining with stone drains east and west of European Infantry Barrack limits.	...	...	4,000	22	Do.
Do. ...	23	Do. ...	Plunge-bath for the Cavalry ...	...	...	5,300	23	Do.
Do. ...	24	Do. ...	Drainage of Royal Horse Artillery Barracks.	...	...	4,400	24	Do.
Do. ...	25	Do. ...	School-houses and furniture for four Native Infantry Regiments.	4,800	...	4,800	25	G.O. No. 3,354 of 23rd November and No. 151 of 18th December 1875.
Do. ...	26	Do. ...	Hospital Serjeant's quarters for 3rd Pavilion Race Course.	5,700	...	5,700	26	G.Os. No. 573 of 27th February 1871, and No. 683 of 10th March 1875. Item No. 5 of Class C. Works in the final issue of Budget of 1877-78.
Do. ...	27	Do. ...	Quarters for Resident Medical Officer.	5,640	...	5,640	27	Sanctioned by the Government of India. Register No. 16 B.M. of 1871-72. G.O. No. 1,691 of 23rd June 1871.

Schedule of the probable requirements of the Madras Presidency on account of Imperial Works for 1877-78—(Continued).

Executive Division.	Projects.			Amount of Estimate.	Computed Expenditure up to 31st March 1878.	Estimate, 1878-79.	No.	Remarks or References.
	No.	Locality.	Description.					
			Military—(Continued).	RS.	RS.	RS.		
Bangalore ...	28	Bangalore ...	Providing racks in the Ordnance Gun Powder Magazine.	2,560	...	2,560	28	G.O. No. 2,625 of 28th October 1873. Item No. 6 of Class C. Works of Budget of 1877-78.
Do. ...	29	Do. ...	Two magazines for Native Infantry Regiments and guard-rooms.	6,790	...	7,000	29	G.O. No. 219 of 26th March 1873. Revised estimate awaited.
Trichinopoly ...	30	Trichinopoly...	A new latrine according to the standard plan for men of the Royal Artillery.	...	...	3,400	30	Estimate awaited.
Do. ...	31	Do. ...	Extending barrack accommodation for do.	4,000	...	4,000	31	G.O. No. 1,871 of 24th July 1876.
Nilgiris ...	32	Wellington ...	Additions to the Hospital guard-room for prisoners.	4,590	...	4,590	32	G.O. No. 457 W of 20th July 1877.
Do. ...	33	Do. ...	Completing the 3rd block, married quarters.	3,720	...	3,720	33	Do. do.
Do. ...	34	Do. ...	Bath-rooms to wash-houses ...	3,120	...	3,000	34	G.O. No. 1,472 of 4th June 1874.
Do. ...	35	Do. ...	Stone drains to receive water from the pipes to prevent the removal of earth from the foundation of the barracks.	...	...	4,000	35	Estimate awaited.
Do. ...	36	Do. ...	New wash-houses fitted with boilers, &c., drying and ironing rooms for married quarters.	...	...	5,300	36	Do.
Do. ...	37	Do. ...	Drinking water supplied to be conveyed in pipes from outlet to the lower story of each block of barracks.	...	...	8,000	37	Do.
Malabar ...	38	Cannanore ...	Painting doors and windows of barracks, married quarters, and out-house, European Infantry.	4,430	...	4,430	38	G.O. No. 126 of 6th May 1873. Item No. 1 of Class C. Works in the final issue of Budget of 1877-78.
Do. ...	39	Calicut	Asphalting verandahs and boarding floors of officer's quarters at West Hill.	2,700	...	2,700	39	G.O. No. 1,866 of 3rd July 1875. Item No. 2 of Class C. Works of Budget of 1877-78.
Tinnevelly ...	40	Palamcottah ...	Latrines for males and females in the lines of the 24th Regiment, Native Infantry, with earth store and cart shed.	...	...	2,600	40	Estimate awaited.
Do. ...	41	Quilon ...	Latrine for Native Infantry Regiment with well.	...	...	3,150	41	Do.
Do. ...	42	Do. ...	New Magazine for Native Infantry Regiment.	...	...	3,560	42	Do.
						5,00,000		
	43	...	Grant for minor works, the estimated cost of which does not exceed Rupees 2,500 each.	...	...	1,50,000	43	
	44	...	Repairs	...	...	2,50,000	44	
			Total, Military ...	...	...	9,00,000		
			ORIGINAL WORKS. CIVIL BUILDINGS. *Postal Buildings.*					
Presidency ...	45	Madras ...	New Post Office	2,45,010	...	50,000	45	Sanctioned by Government of India. Register No. 36 B of 1876-77. G.O. No. 1,138 of 8th May 1876.
Tanjore ...	46	Combaconum...	Do.	...	...	4,000	46	Estimate awaited.
						54,000		
	47	...	Grant for minor works, the estimated cost of which does not exceed Rupees 2,500 each.	...	...	9,000	47	
	48	...	Repairs	...	...	*5,000	48	* The amount allotted for Postal Repairs for 1877-78 having been found insufficient, Rupees 5,000 are now applied for.
			Total, Postal Buildings ...	...	...	68,000		
			Telegraph Buildings.					
Presidency ...	49	Madras ...	Telegraph Office	2,57,192	...	1,00,000	49	Sanctioned by Government of India. Register No. 36 B of 1876-77. G.O. No. 1,138 of 8th May 1876.

Schedule of the probable requirements of the Madras Presidency on account of Imperial Works for 1877-78—(Continued).

Executive Division.	Projects.			Amount of Estimate.	Computed Expenditure up to 31st March 1878.	Estimate, 1878-79.	No.	Remarks or References.
	No.	Locality.	Description.					
			Telegraph Buildings—(Continued).	RS.	RS.	RS.		
Nilgiris ...	50	Ootacamund ..	Telegraph Office	...	...	10,000	50	Estimate awaited. Item No. 15 of Budget of 1877-78.
						1,10,000		
	51	...	Grant for minor works, the estimated cost of which does not exceed Rupees 2,500 each.	...	...	10,000	51	
	52	...	Repairs	...	...	5,000	52	
			Total, Telegraph Buildings ...	...	...	1,25,000		
			Salt Works.					
Vizagapatam ...	53	Kuppily ...	Constructing Salt Superintendent's Cutcherry.	2,790	...	2,790	53	Revenue Board's Proceedings, No. 4,728 of 28th May 1875.
Do. ...	54	Karassa ...	Do. a tiled building and a raised ground near the platform for the protection of the Salt Establishment during floods.	...	...	3,500	54	Estimate awaited.
Do. ...	55	Kanada ...	Do. pucka head sluice at the mouth of the supply channel.	...	...	2,500	55	Do.
Kistna ...	56	Chinna Ganjam	Police lines	...	...	4,580	56	Do.
Do. ...	57	Nizampatam .	Do.	...	...	3,560	57	Do.
Do. ...	58	Pondraca ...	Do.	...	...	4,500	58	Do.
Do. ...	59	Nizampatam ..	Improvements to the Salt Cutcherry.	...	...	2,700	59	Do.
Do. ...	60	Chinna Ganjam	Salt Cutcherry	...	...	3,000	60	Do.
Nellore ...	61	Timmalapenta.	Making a road from the Trunk Road near Kavaly to Timmalapenta salt platform.	23,580	9,996	10,000	61	G.O. No. 1,022 of 24th April 1876. Item No. 17 of Budget of 1877-78.
Do. ...	62	Dugarazpatam.	Constructing new Police lines for the Salt Guard.	4,200	1,498	2,700	62	G.O. No. 3,428 of 3rd December 1875, Board's Proceedings, No. 7,017 of 4th August 1875.
Do. ...	63	Beerungunta .	Making an approach to the north platform.	...	...	4,000	63	Estimate awaited.

Executive Division.	No.	Locality.	Description.	Amount of Estimate.	Computed Expenditure up to 31st March 1878.	Estimate, 1878-79.	No.	Remarks or References.
Do. ...	64	Do. ...	Do. from Beerungunta to Devarampadu.	...	...	5,000	64	Do.
Do. ...	65	Do. ...	Palisade with stone pillars in chunam and palmyrah rails to three salt plat forms.	...	...	4,000	65	Do.
Do. ...	66	Do. ...	Salt road from 198th mile Great Northern Road to Kanuparthy.	...	...	5,000	66	Do.
South Arcot ...	67	Harigooshti ...	Harigooshti Project	...	...	50,000	67	Do. Papers connected with this project were submitted to the Government of India with G.O. No. 1,580 of 23rd June 1876.
Do. ...	68	Merkanam ...	Completing Palayankal catch drain.	4,985	3,900	1,000	68	G.O. No. 1,274 of 4th April 1877. Item No. 18 of Budget of 1877-78.
Tanjore ..	69	Tanjore ...	Improving the Vadarniem canal ...	10,000	7,000	3,000	69	G.O. No. 755 of 20th September 1877. Item No. 19 of do.
Do. ...	70	Adrampatam..	One Head Constable's and 14 Constables' huts.	7,950	3,597	3,000	70	G.O. No. 1,391 of 5th June 1876.
Do. ...	71	Vadarniem ...	Two Head Constables' and 19 do...	...	...	3,000	71	Estimate awaited.
Do. ...	72	Cuthmavady...	One Head Constable's and 9 do...	...	...	2,000	72	Do.
Do. ...	73	...	Constructing a bridge on the road No. 36 over the extension of the Vadarniem canal.	...	...	7,570	73	Do.
Madura ...	74	Muthureguma-thapatam, Vyravanadpatam, Attengarai and Morecolam.	Masonry buildings for Salt Division Offices, each at Rupees 1,900.	7,600	...	7,600	74	Board's Proceedings, No. 9,023 of 5th October 1875, No. 854 of 28th March 1876, and No. 4,316 of 26th May 1876.
Do. ...	75	Morecolam ...	Construction of tunnels and side dams in the cross road from Morecolam salt station to the road between Madura and Ramnad.	3,450	...	3,450	75	Board's Proceedings, No. 3,414 of 26th April 1875.
Do. ...	76	Athengarai ...	Cutting a channel from the sea to the pans for supplying sea water for the manufacture of salt.	...	...	5,900	76	Estimate awaited.
						1,44,350		
	77		Grant for minor works, the estimated cost of which does not exceed Rupees 2,500 each.	...	...	15,650	77	
	78		Repairs	...	...	20,000	78	
			Total, Salt Works ...	...	...	1,80,000		

Schedule of the probable requirements of the Madras Presidency on account of Imperial Works for 1878-79—(Continued).

Executive Division.	Projects.			Amount of Estimate.	Computed Expenditure up to 31st March 1878.	Estimate, 1878-79.	No.	Remarks or References.
	No.	Locality.	Description.					
			Miscellaneous.	RS.	RS.	RS.		
Kistna ...	79	False Point Divi ...	Construction of beacon	...	...	5,000	79	Estimate awaited.
Tinnevelly ...	80	Muttum ...	Do. of light-house ...	...	...	75,000	80	Do.
						80,000		
	81	...	Grant for minor works, the estimated cost of which does not exceed Rupees 2,500	...	...	1,000	81	
	82	...	Repairs	...	...	1,250	82	
			Total ...	...	...	82,250		

Statement showing the probable amount that will he required in the Madras Presidency on account of Imperial Works, &c., for 1877-78 *under each head of service*

—	Original Works.			Repairs.	Establishment.	Tools.	Total.
	Major Works.	Minor Works.	Total.				
	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Military	5,00,000	1,50,000	6,50,000	2,50,000	2,25,000	30,000	11,55,000
Other Services.							
Postal buildings	54,000	9,000	63,000	5,000	17,000	2,040	87,040
Telegraph buildings	1,10,000	10,000	1,20,000	5,000	31,250	3,750	1,60,000
Salt works	1,44,350	15,650	1,60,000	20,000	45,000	5,400	2,30,400
Miscellaneous works	80,000	1,000	81,000	1,250	20,560	2,470	1,05,280
Total ...	8,88,350	1,85,650	10,74,000	2,81,250	3,38,810	43,660	17,37,720

Fort St. George,
October 1877.

(Signed) E. A. FOORD, Colonel, R.E.,
Secretary to Government, P.W.D.

No. 29. Order thereon, 1st October 1877, No. 824 W.

Ordered that the schedule be forwarded to the Government of India and circulated to District Engineers who will lose no time in preparing and submitting the necessary plans and estimate for all works for which estimates are awaited.

2. Unless plans and estimates are duly submitted before 15th December next, when the Regular Budget will be compiled for submission to the Government of India, appropriation of funds cannot be relied on.

(Here enter No. 825 W, dated 1st October 1877.)

(True Extract.)

(Signed) E. A. FOORD, Colonel, R.E.,
Secretary to Government, P.W.D.

To District Engineers.
To the Military Department
" Financial "
" Revenue "

Exd. A. Grubert.

Spare Copies

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Account.

No. 825 W.

No. 30.

From

THE SECRETARY TO THE GOVERNMENT OF MADRAS,
Public Works Department,

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,
Public Works Department.

SIR,—With reference to Public Works Department Resolution No. 452 A.G., dated 7th August 1873, I am directed to forward herewith a schedule of the Imperial requirements on account of Public Works for the year 1878-79.

I have the honor to be,
Sir,
Your most obedient servant,

(Signed) E. A. FOORD, Colonel, R.E.,
Secretary to Government, P.W.D.

FORT ST. GEORGE,
1st October 1877.

Exd. A. Grubert.

Spare Copies

Appendix.

Projects and Works	Amount of Estimate	Normal	Special	Remarks
Miscellaneous.				
Constructing two Draw Bridges to the platform at Karassa Rs 250 each	500	.	500	
Do Do at Kalachenwnat Rs 300 each	600	.	600	
Do Do at Konada at Rs 250 each	500	.	500	
Do Do at Kuppily at Rs 250 each	500	.	600	
Do a Pucka Guard house with two rooms on the platform at Kuppily	400	.	400	
Do Do Do at Karassa	400	.	400	
Depôts & Superintendents Cutcherries				
Constructing a Salt Superintendent's Cutcherry at Bimlipatam	683	683	.	Sanctioned in G.O. No 262 dated 26th January 1877. If funds can be alloted for the execution of the work in 1877-78, this work may be omitted from the Budget for 1878-79
	3583	683	2900	

District Engineer's Office
Waltair 3 September 1877

Major R.E.
District Engineer, Vizagapatam

Detail of the Budget Estimate of Original Works, Imperial Buildings and Roads for the year 1878-79.

Head of Classification	Executive Division	Locality	Item No	Projects & Works	Amount of Estimate	Outlay		Grant 1878-79		Item No	Remarks and References
						Actual to end of 1876-77	Probable during 1877-78	Normal	Special		
Depôts and Superintendent Cutcherries	Vizianagram	Kuppily	1	Constructing Salt Superintendent's Cutcherry	2790	"	"	2790	"	1	Sanctioned in Boards Proceedings No 4728 dated 28th May 1875. This work may be omitted from the ensuing year's Budget, if funds for the execution of the work can be allotted in 1877-78.
Miscellaneous	Do.	Karasa	2	Constructing a tiled building on a raised ground near the platform for the protection of the Salt Establishment during floods	3,500	"	"	"	3,500	2	
Do	Do.	Konada	3	Constructing Pucka Head Sluice at the mouth of the Supply Channel	2,500	"	"	"	2,500	3	
Do.	Do.	"	4	Minor New Works, the estimated cost of which does not exceed Rs 2,500 each, appendix attached	3,583	"	"	683	2,900	4	
								3473	8900	"	

District Engineer's Office
Waltair 3 September 1877

Arrwood Major R.E.
District Engineer, Vizagapatam

Detail of the Budget
Estimate of Original works
Imperial Buildings & Roads
for the year 1878-79.

No. 1293

District Engineer's Office
Waltair 3rd September 1877

From
The District Engineer
Vizagapatam

To
The Chief Engineer. P.W.D.
Buildings and Roads Branch
Madras.

Encl. 2

Sir,

With reference to your Memo No. 2,133 dated 2nd August 1877, I have the honor to submit herewith a List of Salt Works which the Collector wishes should be carried out in the ensuing Official year.

I have the honor to be
Sir
Your most Obedient Servant
H. W. Wood Major R.E.
District Engineer
Vizagapatam.

Buildings & Roads

From
The District Engineer
Vizagapatam

To
The Chief Engineer P.W.D.
Buildings & Roads Branch.
Madras

No. 1293

Dated 3rd } September 1877
Recd. 4 }

No. of Enclosures Two.

G.O. 824, 17-1-10-77

Salt works

Submitting a list of
— which the Collector
wishes to be carried out in 1878/79

G.O. P.W. October 77 N.B. No. 28

Imperial
Buildings and Roads

Part I

Detail of Budget Estimate of Original Works &c Imperial Buildings & Roads for the year 1878/79

Head of Classification	Executive Division	Locality	Item No.	Project and Works	Amount of Estimate	Outlay: Actual to end of 1876/77	Outlay: Probable during 77/78	Grants 1878/79: Normal	Grants 1878/79: Special	Item No.	Remarks & References: The particulars as to whether the estimate has been prepared or sanctioned should be entered here. If sanctioned by Govt. of India the Register No should be quoted.
				Civil Buildings							
Civil	— Bapatla Chinaganjam			Constructing Police Line Huts.	4582		.	4582	.	.	Vide G. O. No. 149 d/28 January 1875
		Repally Nizampatam	.	— Do — Do.	3562		.	3562	.	.	+ No. 136 dated 15
		Moolapettah Mangampetty	.	— Do — Do	590		.	590	.	.	January 1877. R.D.
		Pondara	.	— Do — Do	4507		.	4507	.	.	
				Total Rs	13241		.	13241	.		
				Repairs							
				Nil	.		.	.	.	.	

Superintending Engineer's Office
Bezwada —
27th August 1877

To The Chief Engineer D. P. W.
as directed in his memo No 2133
dated 2d August 1877.

Despd 29th do.

Sd. [illegible] Major R.E.
Superintending Engineer &c

Mdl.

G. O. No 211 of 22d Jany/77

From

The Superintending
Engineer Kistna

To

The Chief Engineer
D. P. W.
Madras.

Dated 27th August 1877
Received Septr 29th do

Imperial

Part I

Budget Estimate of
Petty works for the
Official year 1878/79.

Imperial
Buildings and Roads

Supplemental

Part I

Detail of the Budget Estimate of Original works Imperial Buildings & Roads for the year 1878/79

Head of Classification	Executive Division	Locality	Item No	Projects & works	Amount of Estimate	Outlay		Grants 1878/79		Item No	Remarks and References. The particulars as to whether the estimate has been prepared or sanctioned should be entered here. If sanctioned by Govt of India the Register No should be quoted.
						Actual to end of 1876/77	Probable during 77/78	Normal	Special		
Salt —				Civil Buildings							
	Repally —	Nizampatam —		Improvements to the Salt Cutchery —	2710	.	.	2710	.		Estimate sent already through the Collector.
	Bapatla	Chinaganjam —		Constructing a salt Cutchery	3000	.	.	3000	.	.	Estimate will be sent shortly.
				Total Rs				5710	.		

Superintending Engineer's Office.
Masulipatam
7th September 1877

To
The Chief Engineer D.P.W.
in Continuation of the Budget
sent on 27th August 1877.

Jos. Stuart Major R.E.
Superintending Engineer Kistna

M.E.

14

From

The Superintending
Engineer Kistna

To

The Chief Engineer
D. P. W.

Dated 7 September 77

Received

G.O. N. 824 W-1-10-77

Imperial

Supplemental

Part I

Budget Estimate of
Salt works for ~~the~~
Official year 1878-79

G.O. 1st October 77 No. 28

Nellore District

List of Salt works. Imperial Buildings and Roads for the year 1878-79

Head of Classification	Executive Division	Locality	Item No	Projects and works	Amount of Estimate	Outlay: Actual to End of 1876-77	Outlay: Probable during 1877-78	Grant for 1878-79: Normal	Grant for 1878-79: Special	Item No	Remarks and preferences
Salt	Nellore Central	Tummalapenta	1	Making a Road from the Trunk Road near Kavaly to Tummalapenta salt plat form	23,580	4996	5000	10,000	„	1	G. O. No 1022 of 24 April 1876 Item No 17 in the Imperial Buildings and Roads Budget for 1877-78
Do	Nellore Southern	Dugarazapatam	2	Constructing New Police Lines for the salt Guard at Dugarazapatam	4,200	498	1000	2700	„	2	G. O No 3428 dated 3rd December 1875 and Revenue Boards Proceedings No 7017 dated 4th August 1875
Do	Do	Sunnapugunta	3	Reconstruction of Salt Cutchery at Sunnapugunta	2,100	Below 2500 Rs	„	2100	„	3	Estimate prepared and sent for Collector's countersignature it will be submitted for the sanction of Government at an early date
Do	Nellore Northern	Ramapatty	4	Constructing a watch tower on the No 4 Mamaru or Southernmost plat form	445	Do „	„	445	„	4	Estimates prepared and will be submitted for the sanction of Collector
Do	Do Southern	Dugarazapatam	5	Constructing watch tower on the salt plat form	400	Do „	„	400	„	5	
Do	Nellore Northern	Beeringunta	6	Making an approach to the North Plat form	„		„	4000	–	6	The Executive Officer has been called upon to furnish an Estimate for the work at once

Nellore District

List of Salt works. Imperial Buildings and Roads for the year 1878-79

Head of Classification	Executive Division	Locality	Item No.	Projects and works	Amount of Estimate	Outlay		Grant for 1878-79		Item No.	Remarks and references
						Actual to End of 1876-77	Probable during 1877-78	Normal	Special		
Salt	Nellore Northern	Beerumgunta	7	Making an approach from Beerumgunta to Devarampadu	„	„	.	5,000	.	7	The Executive Officer has been called upon to furnish an Estimate for this work
Do	Do	Do	8	Palisade with stone Pillars in Chunam and Palmyrah pails to three salt Plat forms at Beerumgunta	„	„	„	4,000	„	8	Estimates for these works have been made by the salt Department, the Amounts are probably inaccurate and are therefore not mentioned here. The Executive Officer concerned has been called upon for fresh Estimates
Do	Do	Hamparthy	9	Masonry water shoots and Brick in Chunam drainage water courses to the No. 4 Mamarun or Southern most salt plat form	„			900	„	9	
Do	Do	Do	10	Salt Road from 198 mile Great Northern Road to Hamparthy	„	„	„	5,000	„	10	An Estimate has been called for

District Engineer

District Engineer's Office
Camp Pulicat
7 September 1877

Enclosure in a Letter No. 37 Extra dated 7 September 1877 from the District Engineer Nellore to the Chief Engineer D. P. W. Madras.

List of Salt works, proposed to be carried out in 1878-79

Extra No. 37

NELLORE,
District Engineer's Office,
7 September 1877
Camp Pulicat

FORM THE DISTRICT ENGINEER OF NELLORE,

To The Chief Engineer
Public Works Department
Fort St. George

Sir,

In reference to your Memorandum No. 2133 dated 2nd August 1877. I have the honor to submit a list of Salt works, which in communication with the Collector are proposed to be carried out in 1878-79

I have the honor to be,
Sir,
Your most Obedient Servant

District Engineer

Regd
Compd.

General

From
The District Engineer
Nellore

To
The Chief Engineer
P. W. Deptt
Fort St George

Extra No 37. Enc. Nil.
Dated 7th September 1877
Read

Salt Works - Submits a List of — proposed to be carried out in 1878-79

G O 1st October 77 No. 28

No 119

Nil.

N. B.

There are no new Major works proposed to be undertaken during the ensuing Official year.

An estimate of Rs 1750, prepared at the request of the Collector, for constructing a head sluice over the Merkanum brine supply channel in the Tindevanam Range was forwarded to that officer on the 10th August 76 for submission to Government through the Board of Revenue, this has not yet been sanctioned. This being a Minor work, it is not considered necessary to include this in the list; but if the estimate is not sanctioned and funds granted in the current year, the work will have to be carried out in 1878-79.

The estimate for the Hariagoty project is not prepared and it is not likely that it can be owing to famine work in the district.

Distt Engrs Office S. Arcot
Cuddalore 5th Septr 1877

Major R.E.
Distt Engineer

Roads and Buildings

From District Engineer Salt and

No. 119

Dated 5 }
Recd 7 } September 1877

Salt Works — List of salt works proposed to be carried out in 1878-79. Vide Memorandum No 2133 dated 2d August 77 from Chief Engr D.P.W.

1st October 77 [illegible] No 28

List of Salt Works proposed to be executed in 1878-79 —

Original Works

	Probable amount requir for expenditure in 1878-79
Constructing 2 Head Constables & 19 Constables huts at Vadarnium — Approximate Estimate Rupees 6500	Rs. 3000
Do. 1 Head Constable and 9 Constables huts at Cuttoomavady — Approximate Estimate Rupees 3000	Rs. 2000
	5000

Repairs

Maintaining the Vadarnium Canal including the portion extended in 1875	Rs. 5400

Captain R.E.
District Engineer

District Engrs Office }
Camp Poondra-
-perunal Covil
31st August 77

Enclosure in a letter from the Distt Engineer Tanjore to the Chief Engineer D.P.W. No. 1485, dated 31st August 1877.

List of Saltworks proposed to be executed in 1878-79-

No. 1485

District Engineer's Office
Camp. Soondaraperumalcoil
31st August 77.

From
Captain R. R. E. Brockman R.E.
District Engineer

To,
Colonel E. A. Foord R.E.
Chief Engineer D.P.W.

Sir,

With reference to your Memorandum No. 2133 dated 2d. August 1877, I have the honor to forward herewith a list of Salt works proposed to be carried out in 1878/79. The list in question has been prepared in communication with the Collector and I shall duly submit the Estimates for the new works therein entered when the regular Budget Estimates for that year are forwarded from this Office.

2 It will be observed that the sum of Rs. 5400 entered under "Repairs" for the maintenance of the Vadarnien Canal exceeds the sum allotted for the purpose in the Budget of the current year by Rs. 400; this sum has been

x Rs. 5000

added

added at the request of the Collector for the Maintenance of the portion of the Canal Extended in 1875.

3. I observe from G.O. No. 533 dated 5th February 1877 R.D. and No. 503 dated 10th February 1877 F.D., copies of which were furnished to me by the Collector, that a sum of Rs. 6750 has been sanctioned for the Maintenance of the Vedarniem Canal in 1877-78 under "Canal & Ferry Fund" and the Collector has desired me to request that the said amount may be appropriated for the repairs of the Canal during the year, but as a sum of Rs 5000 has been already provided for the purpose in the Imperial Budget for 1877-78 and no orders have been passed in the Public Works Department with regard to the allotment of Rs. 6750 under Canal and Ferry fund above referred to, I request that orders may be passed with reference to the disposal of the latter amount.

Separately disposed of vide G.O. No 1185

I have the honor to be
Sir,
Your Most Obedient Servant
Captain R.E.
District Engineer

G. O no 503 d/ 10 Feb /77 F.D
" – " 533 d/ 5 – " – " R.D
" – " 360 W d/ 7 July – "
" – " 326 W. d/ 29 June – "
" – " 86 W d/ 16 May – "

From

The Dist. Engineer
Tanjore

To

The Chief Engineer
D. P. W.

No. 1485

Dated 31st August 1877
Recd.

G.O.W. 924W-1-10-77
C.E. No 265 [illegible]

Fee 1.

Salt works. Forwards
a list of Salt works
proposed to be executed
in 1878-79.

G.O. 1st October /77 I.D. No. 28

Malabar Dt Engineer's Office
Calicut 18th August /77.

From
The District Engineer
Malabar
To The Chief Engineer
Roads & Buildings
Madras.

No 72

List of Salt Works required to be provided for in the Budget for 1878/79 as called for in Memo No 2133 of 2nd August /77.

Nil

Wm. W. Kenney Lt. Col.
District Engineer, Malabar

G.O. [illegible] B No 28

B No 28

No 45

District Engrs Office
Mangalore 28th August 18

From
The District Engineer
South Canara

To
The Chief Engineer
Roads and Buildings
Madras.

Sir,

With reference to your Memo No 2133 of the 2d Instant instructing me to submit a list of Salt works proposed to be carried out in 1878-79, I have the honor to subjoin for your information an extract from the Collectors letter No 11 of the 24th Idem.

I have the honor to be,
Sir,
Your most Obedt Servt

J. Davidson
Acting Dt Engineer

No 14

No. 1421

South Canara Collr's Office
Mangalore 24th August 1877

X
From

W. H. Conyn Esq
Ag Collector of S. Canara

To

J. P. Davidson Esq
Ag. District Engineer
of S. Canara

Sir,

With reference to your letter of the 9th instant No. 48 I have the honor to state that no Salt Works requiring professional skill for their execution are proposed to be carried out during the year 1878-79.

2. Owing to the recent introduction of the Salt Excise System in this District the necessity for bridging or otherwise improving the Salt Roads alluded to in the correspondence quoted in your letter has ceased to exist so far as Imperial funds are concerned, and none of these works need therefore be entered in the Public Works Budget.

x x x

I have &c
Signed/ W. H. Conyn
Ag Collector

(True Extract)

J. Davidson
Ag Distt Engineer

Roads and Buildings

From
The District Engineer
Canara

To the Chief Engineer
for Roads & Buildings

No. 45

Dated 28th August 1877

No. of enclo: one.

[illegible]

Civil Works — Subjoining
extract from the Collector's
letter noted within on the
subject of ~~—~~ proposed to
be carried out during
the year 1878–79.

Madura District

List of salt works to be executed by D.P.W. in the official year 1878/79 - vide Chief Engineers Memorandum No. 2133 of the 2nd August 1877

Head of Classification	Executive Division	Locality	Item No.	Project and works	Amount of Estimate	Outlay Actual to end of 1876-77	Outlay Probable during 1877/78	Grant 1878-79 Normal	Grant 1878-79 Special	Item No.	Remarks and references.
											× Not commenced
Salt	Madura	Muthuregunathapatam	1	Constructing a masonry building for the Salt Division office.	1900	"	"	1900	"	1	Sanctioned in Boards Proceedings dated 5th October 1875 Mis: No. 9023 Boards Proceedings dated the 28th March 1876. No. 854.
Do.	Do.	Vyravanadapatam.	2.	Do. Do. Do.	1900	"	"	1900	"	2	Do. Do. Mis: No. 4316 dated the 26 May 1876.
Do.	Do.	Attengarai	3	Do. Do. Do.	1900	"	"	1900	"	3	The Estimates for these 2 salt cutcherries are the same as those for Muthuregunadapatam & Vyravanadapatam sanctioned in Boards Proceedings Mis: No. 9023 of the 5th October 1875.
Do.	Do.	Morecolum	4	Do. Do. Do.	1900	"	"	1900	"	4	
Do.	Do.	Do.	5	Construction of tunnels & side dams in the cross road from Morecolum salt station to the Road between Madura and Ramnad.	3450	"	"	3450	"	5	Sanctioned in Boards Proceedings dated the 26th April 1875 No. 3414.
Do.	Do.	Attengarai	6	Cutting a channel from the sea to the pans for supplying sea water for the manufacture of salt	5915	"	"	5915	"	6	Estimate will be submitted shortly.
Do.	Do.	Vuttanum	7	Constructing a road from coast road No where it branches off to Devicottah near Vuttanum to Theethandathanum 3 miles in length.	1115	"	"	1115	"	7	Do. Do.

District Engineer's office
Madura 1st September 1877

W. Sevrington
District Engineer.
Madura.

of 6th October/77 No. 28

From

The District Engineer

Madura

To

The Chief Engineer

P.W.

Dated 1st } September 77
Recd 6

List of Salt works to be executed by D.P.W. in the official year 1878/79 — vide Chief Engineer's Memo No 2133 of the 2nd August 1877.

No 72 District Engr's Office, Tinne
Palamcottah 19th August 187

From. I. D. Grant Esquire
Offg Dist Engineer, Tinnevell

To. Colonel E. A. Foord R.E
Chief Engineer P.W.D.

General.

Sir,

With reference to your Memorandum No 2133 of the 2nd Instant. I have the honor to inform you tha the Collector states that there are no salt works to be carried out in this District in 1878-79 by this Department.

I have the honor to be
Sir
your most obdt Servt

I. D. Grant
Offg Dist Engineer

Generally

From

The Offg District Engineer
Tinnevelly.

To

The Chief Engineer
D. P. W.
Madras.

No. 72

Dated 19th August 1877.

No. of Enclosures. –

J.P. 824W-1-10-77

Salt works.

Informs that the Collector States that there are no works to be carried out in 1878-79.

Extract from Schedule of Works required by the Telegraph Department during the year 1878-79.

Provinces	Division of Public Works	No of work.	Name and locality of proposed work	Amount of Estimate	Amount if any likely to be expended up to 31st March 1878.	Amount required during ensuing Official year	Remarks.
Madras	Consulting Architect	1	Telegraph Office Madras	257,192	-	1,00,000	The necessity for this work has been frequently brought to the notice of Government, and the grants applied for in previous years have only been disallowed on financial grounds. It is very desirable that the new building should be put in hand as early as practicable, and with this view, application for the grant of one lac is made for 1878/9.-
Do.	Nilgiri district	2	Telegraph Office Ootacamund	-	-	10000	A grant of Rs 10,000 was allotted for this work in the orders on the Schedule for 1877/78, but the plan and Estimate have not yet been prepared and the Madras Government report that no arrangements have been made for utilizing the grant during the current year. Under these circumstances the full grant of Rs 10,000 is again applied for.

True Extract

C H Reynolds

Assistant Superintendent

in ch: office of Director General of Telegraphs in India

CwD

No. 1972.

FROM

THE DIRECTOR GENERAL OF TELEGRAPHS IN INDIA,

TO

THE SECRETARY TO THE GOVERNMENT OF Madras
PUBLIC WORKS DEPARTMENT.

Simla. ~~Calcutta~~, the 7th of Septr 1877.

Sir,

I have the honor to forward an Extract from the Schedule of Requirements of this Department in Public Works in 1878/79, containing Works required in the Madras Presidency, and to request the favour of the necessary provision being made for them in the Provincial Budget Estimate for Imperial Works of the ensuing official Year.-

I have the honor to be,
Sir,
Your most obedt Servant,

Offg Director General of
Cuttd Telegraphs in India

G.O. 824 W-1-10-77

G.O. 1st October/77 I.B.D. 28

No. 695. A. G.

All communications should be addressed to the Secretary.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

ACCOUNT.

General.

To

The Secretary to the Govt. of Madras,
Public Works Department.

Dd. Simla, the 18th September 1877.

Sir,

With reference to Public Works Department Resolution No. 422-39 A. G. dd. 7th August 1875, I am directed to request that the schedules of demand for Imperial Public Works for the ensuing official year 1878-79, may be submitted without fail so as to reach the Government of India on the prescribed date, viz, the 10th October 1877.

I have the honor to be,
Sir,
Your most obedient servant.

Chas. M. McNeill Major.

Offg. Secy. to the Govt. of India.

GOVERNMENT OF MADRAS.

MILITARY DEPARTMENT.

10th September 1877, No. 5087.

Barracks and Buildings.

Read the following paper :—

No. 107. *From Brigadier-General H. O'CONNELL, Quartermaster-General, to Colonel J. MICHAEL,* C.S.I., *Secretary to Government, Military Department; dated Head Quarters, Ootacamund, 1st September 1877, No. 613-5913.*

I have the honor, by order of His Excellency the Commander-in-Chief, to forward, for the approval of Government, the accompanying two lists of "Major" and "Minor" Military works to be provided for in the Public Works Budget Estimate of 1878-79.

No. 108. ORDER THEREON, 10th September 1877, No. 5087.

Communicated, and the enclosures transferred, to the Public Works Department, for consideration and issue of the necessary orders and provision of funds.

(True Extract.)

J. Michael Colonel,

Secretary to Government.

To the Public Works Department, with two lists & no spare copies
„ Quartermaster-General.

G O 1st October/77 I B 28

P W G O 1st October/77 L 2 28

Govt of (1877) Madras.

MILITARY.

The PUBLIC WORKS DEPARTMENT

&c. &c. &c.

Dated September, 1877.

Read

G.O., 19th September 1877, No. 5087

8.

SEPTEMBER.

Nos. 107-108.

Communicating letter from the Quarter-master-General, submitting lists of "Major" and "Minor" Military works to be provided for in the Public Works Budget Estimate of 1878-79.

G O 1st Octr/77 I B 28

Ac 29/9/77 Dr 1/10/77

List of Military Works for entry in the Public Works Budget of 1878-79 prepared

from lists received from Divisions.

Station	Description of Buildings &c. and for what [illegible] required	Sanctioned Works in actual progress for which an allotment in the Budget is required for expenditure in 1878-79	Sanctioned works not commenced and for which an allotment is now asked for expenditure in 1878-79	New Works not yet sanctioned which in the opinion of the Commander in Chief are urgently required	Total allotment required for each work in the Budget of 1878-79	Orders of Government bearing on the [illegible] necessity of the buildings.
[illegible]	Additional [illegible] the Quarters occupied by the C[illegible] of Ordnance		7,100	.	7,100	G.O. No. 1961 dated 19th June 1877. G.O. No. 1104, dated 8 May 1876
	A Covered Gymnasium be erected in Ball Alley of the [illegible] Regiment		.	2,500	2,500	This is very much needed
	Enlarging existing [illegible] of Millmen and Supervisors [illegible] of Master Worker and Master Refiner at the Gun Powder Factory	.	7,550	.	7,550	G.O. No. 1478 dated 12th June 1877.
	A building for Charcoal pulverizing, Sulphur grinding, Mixing Machine, 8 Horse Power Engine and 2 Boilers at the Gun Powder Factory	.	.	16,500	16,600	G.O. No. 59, dated 9th January 1878
	A building for Pellet Presses with Gear for do granulating, Pellet making, 8 Horse Power Engine, and 2 Boilers at the Gun Powder Factory	.	.	57,300	57,300	Rs 40,000 for buildings at the Gun Powder Factory have been granted in the Public Works Budget of 1877-78. It is recommended that Rs 1,00,000 be appropriated in 1878-79 for carrying out these works to completion.
Madras	A building for glazing, dusting, separating Two 12 Horse Power Engine and 2 Boilers at the Gun Powder Factory	.	.	96,700	96,700	
	A building for 6 Mills including Engine House, Chimney, Boiler House, 6 Mill rooms, grain charge room, Watch house for European and Native Tramway Compound wall and road at the Gun Powder Factory	.	.	50,000	50,000	Regarding this work the Inspector General of Ordnance and Magazines writes "I am myself very doubtful as to the necessity of building the new [illegible] mills [illegible] I believe the information regarding the powder [illegible] required for India, made by the Special Ordnance Commission was erroneous" [illegible]
	One of the Gun Sheds [illegible] used as a Painter's Shop required [illegible] at the Gun Carriage Factory	.	.	5500	5500	Recommended
	Entire New Set of Lines at Poodoopett for the Native Infantry Regiment now stationed at Vepery		241,500		100,000	G.O. No. 2301 dated 19 July 1877. G.O. No. [illegible] dated [illegible] May 1876 [illegible]

Stations	Description of Buildings &c and for what Department needed	Sanctions of Works in actual progress for which an allotment in the Budget is required for Expenditure in 1878-79	Sanctioned Works not yet commenced but for which an allotment is now asked for Expenditure in 1878-79	New Works not yet sanctioned which in the opinion of the Commander in Chief are urgently required	Total Estimate required for works in the Budget of 1878-79	Orders of Government to any reference to the Works or remarks as to the necessity of the Building &c.
St. Thomas' Mount	General im[illegible]					
	Swimming B[illegible] New Barracks	.	12,600	.	12,600	G.O. No. [illegible] dated [illegible] of [illegible]
	Expense Mag[illegible] the Butts near the Gun and Mo[illegible]	.		5000	5000	The Inspector General of Ordnance & Magazines considers that this is not at present necessary or advisable. [illegible]
	New Barrack[illegible] Men, Family Quarters and Outh[illegible]	.	2,55,370	.	60000	G.O. No. 3044 dated 28 May 1877.
	Double Storeyed [illegible] for 90 Patients with Outhouses Rs. 1,02,000	2,000	.	.	2,000	
	Improvements and Alterations to the existing Buildings as follows					
	[illegible]					
Poonamallee	No. 2 Ward. [illegible] adding Ridge Ventilators	.	1,115	"	1,115	G.O. No 1739 dated 21 June 1874 G.O. No 2527 dated 27 May 1875 G.O. No 3044 dated 23 May 1877. [illegible]
	Western Range. Removing part	.	250	"	250	
	Northern Range. Ridge Ventilators	.	3,300	.	3,300	
	Out houses. Removing	.	130	"	130	
	Temporary Hospital					
	Removing	.	300	.	300	
	Ball Alley					
	Removing	.	260	.	260	
	Fort Ditch					
	Filling	.	27,050	.	27,050	
	European Barracks					
	Eastern and Western [illegible] Removing	.	385	.	385	
	North Eastern Range. [illegible] into 7 Quarters for Marri[illegible]	.	2,150	.	2,150	
	South Western Ra[illegible]	"	1,700	.	1,700	
	South Eastern Ra[illegible]	.	2,500	.	2,500	
	North Western Ra[illegible]	.	1150	.	1150	
	Women's Wash[illegible] Cast Corner. Removing	.	23	.	23	
	Cook Room. South [illegible] Removing	.	70	.	70	
	Guard Room. Conver[illegible] into 2 Solitary Cells	.	100	.	100.	

Station	Description of Buildings &c and [illegible] for which Corps Depart most needed	Sanctioned Works in actual progress and for which an Allotment in the Budget is required for Expenditure in 1878–79	Sanctioned Works not commenced and for which an Allotment is now asked for Expenditure in 1878–79	New Works not yet sanctioned and which in the opinion of the Commander in Chief are urgently required	Total Allotment required for each Work in the Budget of 1878–79	Orders of Government bearing reference to the Works, or remarks as to the necessity of the building
Poonamallee	[illegible] (continued)					
	Solitary Cells [illegible] of 2 Men	.	767	.	767	
	Latrine on [illegible] partition walls	.	30	.	30	
	Store Room. [illegible] to Kitchen	.	330	.	330	
	[illegible]					
	Ridge and [illegible]	.	530	.	530	
	[illegible] Barracks					
	Ridge Ventilators [illegible]	.	850	Europeans	850	O.G. No 1739 dated 30 June 1874 O.G. No 2527 dated 27 May 1875 O.G. No 3114 dated 23 May 1877 M.D.
	Latrine Alterations [illegible]	.	920	Do	920	
	Garrison [illegible] Major's Quarters					
	Constructing Verandah [illegible]	.	470		470	
	Hallowm. Cemetery					
	Filling	.	2200	Miscellaneous	2200	
Trichinopoly	Reroofing the European Detail Hospital	.	14,100		14,100	O.G. No 2110 W dated 8 June 1877 P.W.D. O.G. No 3621 dated 20 June 1877 M.D. Rs 11,750 of this sum has been allotted.
	A Separate Infectious Disease Ward for European Detail Hospital	.	5460	Do	5460	O.G. No 489 dated 13 February 1877 – Urgently required.
	A new Latrine according to Standard Plan for Men of the Royal Artillery	"		3400	3400	Very Necessary
	Extending Barrack Accommodation for Men of the Royal Artillery	4000 [illegible] No 1871 of 24/7/76 – [illegible]	4000	. .	4000	O.G. No 3776 dated 7 August 1876 M.D.
	A Central School for Battery and Detachment European Infantry Men and Children of both Services	"		12320	12320	Urgently required
	New Hospital [illegible] Troops	"		40,000	40,000	When funds are available.
	Harness Room [illegible] Battery of Artillery	"		2500	2500	

Stations	Description of Buildings &c. and for what Corps or Department needed	Sanctioned Works in actual progress for which an Allotment in the Budget is required for Expenditure in 1878-79	Sanctioned works not commenced and for which an Allotment is now asked for Expenditure in 1878-79	New Works not yet sanctioned which in the opinion of the Commander in Chief are urgently required	Total Allotment required for each work in the Budget of 1878-79	Orders of Government bearing reference to the Works, or remarks as to the necessity of the Buildings
Palamcottah	Latrines [illegible] the Lines of the 24th [illegible] Earth Store and Cartshed	.	"	2600	2600	Absolutely necessary on sanitary grounds.
	Latrine for [illegible] with well	.	"	3150	3150	Absolutely necessary on sanitary grounds
Quilon	New Magazine [illegible] Native Regiment	.	"	3560	3560	Necessary
	Fire Lines with [illegible] for a Native Infantry Regiment	.	"	1,20,000	1,20,000	When funds are available.
Bangalore	[illegible] Works					
	New Filter [illegible] Works Est. 23,000	10,500	"	"	10,500	O.G. No. 177 dated 24 January 1876.. O.G. No. 3392 dated 11 June 1877. — Rs 12,500 allotted in Budget of 1877-78.
	Cavalry					
	For providing [illegible] Roof to Cistern Agram Barracks Est. 16,450	"	16,520	"	16,520	
	Royal Horse Artillery					
	For providing Iron Roof to Cistern Royal Horse Artillery Ulsoor Barracks Est. 10,420	"	10,420	"	10,420	O.G. No. 1158 dated 11 March 1875 O.G. No. 2806 dated 18 Oct 1876 M.D.
	Commissariat Department					
	For providing Iron Roof to Cisterns Bakery Square Est. 4,230	.	4230	"	4230.	
	Royal Horse Artillery					
	For Constructing Quarters for Quarter Master Sergeant R.H.A. Ulsoor Barracks Est. 4,220	.	4220	"	4220	O.G. No. 2298 dated 12 August 1874
	Garrison					
	Cost of road from Trinity Church to Agram Barracks Est. 9,200		9200		9200	O.G. No. 644 dated 28 February 1874 O.G. No. 1341 dated 11 June 1874 O.G. No. 2806 dated 18 October 1876 M.D.
	Royal Horse [illegible] Royal Artillery Constructing a S[illegible] Est. 11,700		11,700		11,700	O.G. No. 3662 dated 21 July 1876.
	[illegible]					
	Improvement to [illegible] Tank Est. 17,000		17,000	"	17,000	O.G. No. 195 dated 11 January 1876.

Station

Bangalore

Description of Buildings &c. and for what Corps or Department needed.	Sanctioned Works in actual progress for which an allotment in the Budget is required for Expenditure in 1878-79	Sanctioned Works not commenced yet and for which an Allotment is now asked for Expenditure in 1878-79	New Works not yet sanction'd which in the opinion of the [illegible] Commanding in 1877 they are urgently required	Total Allotment required for early work in the Budget of 187	Orders of Government bearing reference to the Works or remarks as to the necessity of the buildings
[illegible] Infantry					
Lines for 2 Regiment[illegible] N. I. ___ Estd 1,60000	100,000			100,000	[illegible] dated 26 January 187[illegible] [illegible]
Drainage for ___ Estd 14,400		5000		5000	G.O. No. [illegible] dated 25 January 1873 G.O. No. 1348 dated 19 April 1873 G.O. No. 126 dated 26 May 1873
[illegible]					
Military Prison ___ Estd 1,19,600	"	50000	"	50000	G.O. No. 352, dated 5 February 1873 G.O. No. 876 dated 17 February 1876
A Stone Wall [illegible] round Military Prison ___ Estd 22,100	"	22,100	"	22,100	G.O. No. 1114 dated 28th March 1873 G.O. No. 3392 dated 11 June 1877
Sappers & Miners					
Latrines for the [illegible] 2 for Males and 2 for Females ___ Estd 5040	"	"	5040	5040	Necessary.
Commissariat Department					
Wall round [illegible] Lines ___ Estd 8200	"	"	8200	8200	G.O. No. 1747 dated 11 May 1869.
European Infantry					
To Complete parapet Wall round Barrack Limits ___ Estd 7000	"	"	7000	7000	Necessary
Lining with Stone [illegible] East and West of Barrack Limits ___ Estd 4000	"	"	4000	4000	Necessary
Armourer's Shop Parade Barracks ___ Estd 5400	"	"	5400	5400	Necessary.
[illegible]valry					
Plunge Baths ___ Estd 5300	"	"	5300	5300	G.O. No. 1107 dated 12 May 1865.
Royal [illegible] Artillery					
Draining of Barrac[illegible] ___ Estd 4400	"	"	4400	4400	Necessary.
New Walls round [illegible] Yards ___ Estd 2520	"	"	2520	2500	When funds are available.
New Infirmary ___ Estd 10000	"	"	10000	10000	do
New Harness [illegible] ___ Estd 4500	"	"	4500	4500	do
Royal Artillery (Agram Barracks)					
Tailor's Shop ___ Estd 4000	"	"	4000	4000	do

Stations	Description of Buildings &c. and for which Corps or Department needed	Sanctioned works in actual progress for which an allotment in the Budget is required for Expenditure in 1878-79.	Sanctioned Works not Commenced and for which an Allotment is now asked for Expenditure in 1878-79.	New Works not yet sanctioned which in the opinion of the Commander in Chief are urgently required	Total Allotment required for each Work in the Budget of 1878-79.	Orders of Government bearing reference to the Works, or remarks as to the necessity of the buildings.
Bangalore	Roads and [illegible] ——— Est. 10,000	„	„	10,000	10,000	when funds are available
	[illegible] Miners					
	A Small [illegible] for the European Est. 3500	„	„	3,500	3,500	——— do ——— Native Inf
	Commissariat Department					
	A Cart Shed 90 [illegible] Chakkana ——— Est. 4500	„	„	4,500	4,500	——— do ——— Commissariat
	Quarters for a [illegible] Serjeant at or near the Public Cattle [illegible] ——— Est. 4000	„	„	4,000	4,000	——— do ——— Commissariat
	Saddle Room for [illegible] ——— Est. 7,000	„	„	7,000	7000	——— do ——— Do
	European Infantry					
	Quarters for Schoolmaster [illegible] ——— Est. 7,000	„	„	7,000	7,000	——— do ——— European Infantry
	Cavalry					
	1 Quarter for Band Master Serjeant ——— Est. 5,000	„	„	5,000	5,000	——— do ——— European Cavalry
	European Infantry					
	1 Quarter for Band Master Serjeant ——— Est. 5,000	„	„	5000	5,000	——— do ——— European Infantry
	Rifle Range					
	1000 Yards Rifle Range for European Infantry to North of Cavalry Range in Agram Ground Est. 2600	.	.	2400	2600	——— do ———
	New Latrines on Dry Earth System ——— Est. 3750	.	3750	.	3750	G.O. No 999 dated 25 March 1874
	A New Lock Hospital to be constructed in the Bazaar	Estimate sent See G.O. 12859 of 1876	12720	.	12720	G.O. No 859 dated 1 April 1874
	Bath Room [illegible] Est. 3,120	„	3120	„	3120	G.O. No 1470 dated 4 June 1874
Wellington	Stone drains to receive [illegible] from the Pipes to prevent the removal of earth [illegible] the foundation of the Barracks ——— Est. 4000	.		4000	4000	Very necessary work

Stations	Description of Buildings &c. and [illegible] Depart	Sanctioned works in actual progress for which an allotment in the Budget is required for Expenditure in 1878-79	Sanctioned works not commenced and for which an Allotment is now asked for Expenditure in 1878-79	New Works not yet sanctioned which in the opinion of the Commander in Chief are urgently required	Total Allotment required for each work in the Budget of 1878-1879	Orders of Government bearing reference to the Works, or remarks as to the necessity of the buildings.
Wellington	New Washhouse [illegible] boilers &c. drying and [illegible] for Married Quarters Estd. 3300	.	.	3300	3300	Very necessary work.
	Drinking Water [illegible] to be conveyed in pipes from [illegible] Storey of each Block of Barracks Estd. 8000	.	.	8000	8000	Strongly recommended on Sanitary grounds.
	[illegible] Brigade R.A					
	Gun Shed	.	17000	.	17000	G.O. No 3834 dated 10 August 1875. Wheeler and Collar makers shop and Store Room as part of a New Gun Shed approved. The Gun Shed part to be added hereafter when funds are available.
	Wheeler and Collar makers Shop	.	7000		7000	
	Store Room	.	5500	.	5500	
	43. [illegible] L.I.					
Bellary	Skittle Alley	.	4520	.	4520	G.O. No 3016 dated 13 Dec 1870
	Double Latrine	.	.	3000	3000	Recommended
	Two Cook Houses	.	.	5200	5200	Recommended
	Double Washhouse and Urinals	.	7645	.	7645	G.O. No 2118. 9 April 1877 G.O. No 2144 dated 4 May 1877
	Barracks.					
	New Pattern Punkahs	.	.	4300	4300	Recommended
	Marrd Quarters					
	Drainage	.	9390	.	9390	G.O. No 2385. 20 April 1877
	2nd [illegible] N.I.					
	2 Latrines to be [illegible] Regimental Lines	.	2860	.	2860	G.O. No 422. 24 March 1875. G.O. No 169. 14 April 1875 G.O. No 756. 22 March 1876.
Cannanore	Boarded Floors [illegible] for present brick ones in Marrd Quarters European Infantry Regiment Estd. 20570	.	.	20570	20570	Recommended.

[illegible]	Description of Buildings &c. and for what Department	Sanctioned works in actual progress for which an allotment in the Budget is required for 1877-78	Sanctioned Works not Commenced for which an Allotment is now asked for 1877-78		New Works not yet sanctioned which in the opinion of the Commander in Chief are urgently required	Total Allotment required for each work in the Budget of 1877-1878	Orders of Government bearing reference to the works, or remarks as to the necessity of the buildings	
	Fan Rakes for [illegible] with [illegible] 13500	.			13500	13500	By [illegible] dated [illegible] 1876	
	Painting [illegible] windows of Barracks Married [illegible] and Outhouses European Infantry [illegible] — Estd 4430	.	4430	✓	.	4430	By No 1348 19 April 1873 By No 134 6 May 1873	European Infantry
	A Double [illegible] Alley for European Infantry [illegible] — Estd 5400	.	.		5400	5400	Recommended	Do
	Two Additional Staff Sergeants Quarters for European [illegible] Infantry Regiment — Estd 7000	.	.	×	7000	7000	When funds are available	Do
Cannanore	Latrines and [illegible] Earth Stores for 2 Native Infantry [illegible] — Estd 7000	.	.	×	7000	7000	do	Native Infantry
	Enlarging Ablution Rooms European Infantry Regiment — Estd 4000	.	.	×	4000	4000	do	European Infantry
	European [illegible] Troops to be boarded in lieu of Stone flagging — Estd 6500	,	,	×	6500	6500	do	Do
	A Reading and Prayer Room for European Infantry Regiment — Estd 7000	.	,	×	7000	7000	do	Do
	Two Additional Cook Rooms for Commissariat Office — Estd 10,000	"	.	×	10,000	10,000	do	Commissariat General
Calicut	Additions and Alterations to Commissariat Stores — Estd 4130	.	"	✓	4130	4130	Recommended	Do
Mangalore	Three Latrines in [illegible] of the 3 imperfect ones for the Native Infantry Regiment — Estd 2700	.	.	×	2700	2700	When funds are available	Native Infantry
Vizianagram	Regimental Store Room to include Camp Equipage and [illegible]	.	.	×	5000	5000	When funds are available	

Quarter Master General's Office
Head Quarters Ootacamund
1st September 1877.

H. O'Connell Brig: General
Quarter Master General

4 O.K. Octr/55 1 Bk 28

List of Works (Military) Estimated at less than 1500 Rupees which are
mmended for execution from the Reserve in Budget allotment of 1878–79

Stations	[illegible] Buildings &c and for [illegible] Department needed	Sanctioned works in actual progress for which an allotment is required from the Reserve of 1878–79	Sanctioned works not commenced for which an allotment is asked from the Reserve of 1878–79	New works not yet sanctioned which are considered urgent for execution in 1878–79	Total allotment required from the Reserve in 1878–79	Orders of Government having reference to the works or remarks as to the necessity of the Building
Fort St. George	New [illegible] Soldiers Barracks			400	400	Recommended. the present railing is considered dangerous
	Improvement [illegible] Mess Kitchen			1000	1000	Recommended. This is a hired building
Madras	Government [illegible] alterations on the Mount Road		1200		1200	O.G. No. 1128 dated 21 April 1871
	Government [illegible] repairing existing Boiler		800		800	O.G. No. No. 1574 dated 13 June 1871 P.W.D.
	A Second Sle[illegible] room to the quarters of the Staff [illegible] at the Government Bakery. 16 x 14			350	350	There is only one sleeping room at present which is barely large enough for a man and his wife. If there are children they must be sheltered by ma screens erected in the open verandah, which is desirable during inclement weather
	For providing [illegible] the Magazine at the [illegible]		1100		1100	O.G. No 1501 dated 31 March 1875
Madras	A building for breaking down Machine for Mill Cake at the Gun Powder Factory			500	500	Urgently required. Machine was to be despatched in February last.
	A corrugated roof required to the coal godown (formerly) at the Gun Carriage Factory now workshop for tinmen and Copper Smiths as also containing the Punching and Shearing Machine			1500	1500	Recommended but not urgent
	Glass Shutters for the doors and windows of Lithographic and Drawing room at the Gun Carriage Factory			127	127	Recommended
	A Small portion of the South verandah of the Timber Shop required to be altered to prevent the rain from falling on the machinery at the Gun Carriage Factory			50	50	Recommended. the work apparently is require
	Brick drains at each end of the North half weight shed and in front of the west one, to carry the [illegible] from the guttering of the roof to the channel leading to the tank at the Gun Carriage Factory			1000	1000	Recommended. the work apparently is required
	A Small shed for [illegible] dry earth for use in the Hospital Latrine at Royapooram			300	300	Recommended

Station	[illegible] of Buildings & Department	Sanctioned works in actual progress for which an allotment is required from the Reserve 1878-79	Sanctioned works not commenced for which an allotment is now asked from the Reserve 1878-79	New Works not yet Sanctioned which are considered urgent for execution in 1878-79	Total allotment required from the Reserve in 1878-79	Orders of Government bearing reference to the Works or remarks as to the necessity of the Buildings
Madras	A School room [illegible] Royapooram	—		1300	1300	O.G. Nos. 2087 dated 23rd July 1875 P.W.D. and 1241 dated 10 April 1877 P.W.D.
	A School room in [illegible] ambore Lines	—		1300	1300	
St. Thomas' Mount	Shelves now made [illegible] the South Barracks	—		1500	1500	Recommended
	Family quarters South Barracks require Shelves and accoutrement pegs	—		500	500	Recommended – This work is of urgent necessity – the occupants of the quarters have no means of depositing of their kits or accoutrements which should be arranged in the same manner as they are in the Single Men's Barracks
	Cook room Royal Artillery Hospital to be altered and fitted with Duff's Cooking range	—		500	500	Recommended. The present System is the ordinary native style of cooking. Duff's range affords a constant supply of hot water and a less quantity of fuel is required
	Constructing [illegible] large Ventilators to the roof of the [illegible] canteen [illegible]	—	340	—	340	O.G. No. 158 dated 22nd April 1871
	New Family quarters South Barracks Iron rods to be attached to the punkah ropes	—		40	40	Recommended.
	Alterations to the roof of old Canteen for the use of a Library and Reading room, Horse Artillery Lines	—		700	700	The one at present used as a Library &c. is much too small and reported by Committees Proceedings. and the alterations now asked for are necessary.
	Designation Boards New Barracks C/20 Royal Artillery Horse Artillery Lines	—	125	—	125	O.G. No. 1984 dated 3rd August 1876 P.W.D.
	Providing Designation Boards to the European Barracks and Hospital	—	350	—	350	O.G. No. 2829 dated 24 November 1870.
Poonamallee	Commissariat Ration shed Tiled roof	—		1000	1000	There is no shelter in the yard for the meat or those who have to issue it in wet weather
	Boundary pillars round the Bazaar	—		65	65	Recommended.
	Floor of the Ash pit Brass Furnace requires to be raised 18 inches at the Gun Carriage Factory	—		250	250	Approved when funds are available

	Description of Buildings &c and for what Corps or Department needed	Sanctioned works in actual progress for which an allotment is required from the Reserve of 1878-79	Sanctioned works not commenced for which an allotment is now asked from the Reserve 1878-79	New works not yet sanctioned which are considered urgent for execution in 1878-79	Total allotment required from the Reserve in 1878-79	Orders of Government having reference to the works or remarks as to the necessity of the Buildings
	The East and West Ends of the 2 Smithies require to be enclosed [illegible] as in their present state the workmen at the Ends of the Smithies are exposed to the Sun in the morning & evening, at the Gun Carriage Factory	—	—	350	350	Approved when funds are available
	The Verandahs of the 20 horse power Boiler house require to be covered with corrugated Iron at the Gun Carriage Factory	—	—	240	240	
	The cistern for feeding the 20 horse-power Boilers require to be covered with wood at the Gun Carriage Factory	—	—	90	90	
	Barrel machinery [illegible] painting outside and inside and also [illegible] to be [illegible]	—	—	1550	1550	
Madras	The main catch drain from the Timber shed to the tank and the one from the North side meeting the catch drain require to be built of brick, as the sides wash down during the rain, at the Gun Carriage Factory	—	—	500	500	Approved when funds are available
	The two Gun sheds require to be provided with new front Verandahs at the Gun Carriage Factory	—	—	1500	1500	
Poonamallee	Coach house and Stable for 1st Class Apothecary	—	—	2000	2000	
	A latrine of 8 seats, according to standard plan circulated in C. O. No. 17 of 31 May 1877 D. P. W., for Males European Detail Hospital	—	—	2130	2130	Very necessary
Trichinopoly	A Latrine of 3 Seats according to Standard plan circulated, in [illegible] May 1877 P. W. D. for females European Detail Hospital	—	—	730	730	Very necessary
	A Urinal in the vicinity of the Horse and Sick Lines	—	—	500	500	Necessary for use of men while at Stables and those working in the Forge. At present the men have to use the Barrack Urinal, which is about 300 yards off
	Steps to the Building in use with Battery of Artillery, Viz: to Verandahs Nos. 2 and 3 Sleeping Barracks	—	—	159	159	Necessary

Station	[illegible] of Buildings [illegible] corps or Department	Sanctioned works in actual progress for which an allotment is required from the Reserve of 1878-79	Sanctioned works not commenced for which an allotment is now asked from the Reserve of 1878-79	New works not yet sanctioned which are considered urgent for execution in 1878-79	Total allotment required from the Reserve in 1878-79	Orders of Government bearing reference to the Works or remarks as to the necessity of the Buildings
Trichinopoly	Substantial [illegible] the grand Magazine			680	680	Recommended as it is stated that the Inspr Genl of Ord. & Magazines considers it necessary to prevent the great lateral danger which would ensue in the event of an explosion
	A new cook [illegible] the families of Detachment British Infantry			500	500	Very necessary the detachment cook room part of which is used by the families being too distant from the Family Quarters.
	Covering with [illegible] the ventilators of the Military [illegible]			182	182	O.G. no. 1622 d/16 June 1871.
	An American Bowling alley for the Detachment British Infantry		2000		2000	O.G. no. 814 d/3rd June 1869.
	Constructing a Verandah Bengal roof in rear of both ranges of the Artillery Family Quarters			1624	1624	Necessary. During the wet season the back rooms are very damp in consequence of its being impossible under the present arrangements to keep out the rain.
	Constructing a verandah Bengal roof in rear of both ranges of Staff Serjeants Quarters. Royal Artillery			320	320	Necessary until superior quarters are provided for Staff Serjeants.
	Quarters for the Nurse at the European Detail Hospital			1800	1800	Approved when funds are available
Palamcottah	Four Boundary pillars for Regimental Bazaars 37th Grenadiers			20	20	Necessary.
Bangalore	**Royal Horse Artillery** For certain drainage to [illegible] Barracks from the forage yard and water trough		2060		2060	O.G. no. 865 d/18 February 1876.
	Royal Artillery. Agram Barracks For constructing another latrine for use of Native [illegible] Batteries		280		280	O.G. no 2240 d/18 September 1875.
	Stable for the Medical Subordinate attached to the Royal Artillery		500		500	Approved when funds are available
	Arsenal - Fort For providing racks in Ordnance Gun Powder Magazine. Bangalore		2500		2500	O.G. no. 2744 d/18 August 1874 O.G. no. 2745 d/30 September 1874. P.W.D.

Station	Name of Buildings or [illegible] Depôts	Sanctioned works in actual progress for which an allotment is required from the Revenue of 1877-78	Sanctioned works not commenced for which an allotment is required from the Revenue 1877-78	New works not yet sanctioned which are considered urgent for execution in 1877-78	Total allotment required from the Revenue in 1877-78	Orders of Government bearing reference to the works or remarks as to the necessity of the buildings
Bellary	[illegible] hand stand			300	300	Required for the use of the patients in the upper [illegible] at present there are no arrangements to [illegible]
	Punkahs [illegible] Barracks			1600	1600	These two blocks have not as yet been supplied with punkahs
	[illegible] Cook house [illegible] 27th N.I. Hospital			1000	1000	The roof of the present building is in a dangerous state and the walls being reported not strong enough to bear a new roof Native Infantry
	17th [illegible] Latrine		1430		1430	O.G. no 735 of 22nd March 1876. Native Infy
	Commissariat Depôt Alterations required for the Artillery Barracks Godown to convert it into a liquor store			1375	1375	O.G. no 1985 d/15 August 1876. [illegible] Commissariat
	Alterations to the Infantry Barrack Godown - Viz - additions for five iron grating doors and [illegible]		550		550	European Infantry
	Ordnance Department 2 privies for Staff Sergeants' Quarters		700		700	Buildings for staff purposes
Ramandroog	**Depôt Ramandroog** Enlargement of the Hospital Latrine to admit of the dry earth being stored in it.			150	150	
	Constructing fire places to Cook houses and married men's Quarters			100	100	[illegible] for General purposes
	Weather Boards for the window of the reading room			100	100	
	Improvements to the cistern at the west side of the Hill			152	152	
	Improvements [illegible] the cistern on the South-west side [illegible] the Hill			202	202	
	Renewing roof of the Barrack verandah		1147		1147	O.G. no. 961 d/20 March 1877
	Fire places in the enclosed verandah of the Barracks		146		146	O.G. no 253 d/26 January 1877
	Improvement [illegible] ventilation of the Guard [illegible] Prisoners room			100	100	

Ramandroog	Ash pits for [illegible] married Quarters, [illegible] Apothecary's Quarters, and Commissariat Staff Sergeants [illegible]	100	100	
	Extension of Lavatory drain near the [illegible]	388	388	
	Extension of Lavatory from Barrack Wa[illegible]	100	100	District Engineer is carrying out the work in anticipation of Sanction as an emergent work
	Paving the ground [illegible] slabs the floors of the cook house attached to married Quarters	157	157	
Cannanore	Constructing a bullock run to the Royal [illegible] Plunge bath	460	460	
	Extending Native Infantry Rifle Range to 800 yards	1980	1980	O.G. no: 1685 d/21 March 1877
	A covered passage from no: 1 Family Quarters to Orderly room and constructing a new Latrine for European Infantry Regiment	1492	1492	O.G. nos: 1072 d/25 March 1873, 3218 d/29 September 1873 and 1697 dated 24 January 1874
	Dismantling Guard room, Prison room, Guard Latrines and covered passage to Court martial room for European Infantry Regiment	390	390	
	Constructing gymnastic apparatus for European Infantry Regiment	890	890	
	Supplying glass windows to recreation room of European Infantry Regiment	1533	1533	
	Asphalting floors of Latrines of European Infantry Regiment	1200	1200	The existing mud floors are considered objectionable on Sanitary grounds
	Asphalting Bath rooms, Latrines and Dead House of male and female Hospitals of European Infantry Regiment	425	425	

80160

	[illegible]	[illegible] granted from the [illegible]	Orders of Government having reference to the works or [illegible]
Boarded [illegible] Mess and Kitchens [illegible] Infy Regiment	980	980	The present floor is [illegible] and unsuitable for dancing
Ashes for [illegible] and other carts of the Commis[illegible] Department	500	500	There is no shelter available
Construct[illegible] to Commissariat Office	250	250	Considered necessary especially during the Monsoon
Improved [illegible] in Ophthalmic Prisoners and [illegible] Hospitals for European Troops	350	350	Necessary on Sanitary grounds
Constructing [illegible] room for	1500	1500	Approved when funds are available
Urinaries for [illegible] Infantry Barracks fitted with non porous Slabs and a covered drain to the Sea	2000	2000	
Verandah of School rooms European Infantry Regiment to be paved similarly to that outside Orderly Room	2285	2285	
Verandah on west side of Barracks European Infantry Regiment to be paved similarly to that outside Orderly room	2460	2460	
Constructing a drain in rear of the married Quarters	460	460	O.G. no 1055 d/28 March 1877
Introducing dry Earth System for the Detachment	75.3	75.3	Considered [illegible]
[illegible] Ventilation of Prisoners	135	135	The ventilators being defective, the doors have to be kept open at night
[illegible] floors of Hospital Lavatory [illegible] cement	160	160	The floor is much broken and the water does not run off properly
[illegible] Guard Room	80	80	The men on guard have to go 100 yards to a latrine which is objectionable during the rains

Station	[illegible] of Building	Sanctioned works in actual progress for which an allotment is required 1878-79	Sanctioned Works not Commenced for which an allotment is required from the Reserve 1878-79	New works now asked for which are considered urgent from the Reserve in 1878-79	Total allotment required from the Reserve in 1878-79	Orders of Government having [illegible]
Vizianagram	Punkahs in [illegible]		1566		1566	G.O. No. 3591 [illegible] 1868 and [illegible] January 1869
	Punkahs in [illegible]		1584		1584	do — do — do — do
	A Latrine of Standard plan for Barrack Guard and Prisoners			270	270	The ones in use are merely temporary ones
	Extension of Rifle Range to 800 yards		545		545	G.O. Nos 2370 d/20 April 1877 and 2948 d/21 May 1877. Urgently required the 41st N.I. now at Vizianagram being armed with Snider Rifles.
	Completion of wall round Regimental Hospital			286	286	The present wall encloses only 3 sides of the hospital. If wall be completed ingress and egress would be confined to the regular Entrance and a better watch kept over the patients
	Three public Latrines, viz. one for men in Left Wing [illegible] one in each wing [illegible] System			2235	2235	Much required.
Vizagapatam	Extension of Rifle Range to 800 Yards		545		545	G.O. No. 2948 d/21 May 1877. In anticipation of the Native Infantry Regt. at Vizagapatam being armed with Snider Rifles.
	Wall round the Regimental Magazine			550	550	Approved when funds are available
Berhampore	Wall to the Military Hospital			1016	1016	

Quarter Master General's Office
Head Quarters. Ootacamund 1st September 1877

M. O'Connell Brigr. General
Quarter Master General.

Detail of estimate for repairs for the year 1878/79.

	Estimate 1878/79.		Estimate 1877/78.	
	Amount	Total	Amount	Total.
	Rs.	Rs.	Rs.	Rs.
Ganjam. Repairs to Obelisks. Poondy.	150	150	150	150
— Do. — Do. — Bavanapadu	50	50	50	50
— Do. — to flagstaff. Sonapore.	150	150	"	"
Godavery — Do. to Lighthouse Hope Island.	200	200	200	200
Nellore. — Do. — Do. — Armeghon.	200	200	"	"
Chingleput. — Do. — Do. — Pulicat.	200	200	"	"
Madura — Do. — Do. — Paumben.	200	200	200	200
Tinnevelly. — Do. — Do. — Muttum.	100	100	"	"
Total Rupees.	1250	1250	600	600

Madras
Marine Office
27th September 1877.

J W Taylor
Master Attendant
Administrative Departt.

Detail of estimate for repairs for the year 1878/79.

		Estimate 1878/79.		Estimate 1877/78.	
		Amount	Total	Amount	Total
		Rs.	Rs.	Rs.	Rs.
Ganjam.	Repairs to Obelisks. Poondy.	150	150	150	150
	— Do. — Do. — Baranapadu	50	50	50	50
	— Do. to flagstaff. Sonapore	150	150	"	"
Godavery.	— Do. to Lighthouse Hope Island.	200	200	200	200
Nellore.	— Do. — Do. — Armeghon	200	200	"	"
Chingleput.	— Do. — Do. — Pulicat.	200	200	"	"
Madura	— Do. — Do. — Paumben.	200	200	200	200
Tinnevelly.	— Do. — Do. — Muttum	100	100	"	"
	Total Rupees	1250	1250	600	600

Madras
Marine Office
27th September 1877

J W Taylor
Master Attendant
Administrative Department

Original

Detail of estimate for original works for the year 1878/79.

Division	No.	Projects Locality	 Description	Amount of Estimate	computed expenditure up to 31st March 1877.	Estimate 1878/79	No.	Remarks or References
						Rs.		
Kistna	1	False Point Divi	Construction of Beacon	"	"	5,000	1	
Tinnevelly	2	Muttum	Do. of Lighthouse	"	"	75,000	2	
			Total Rupees			80,000		

Madras
Marine Office
27th September 1877

J W Taylor
Master Attendant
Administrative Department

NM

ADMINISTRATIVE DEPARTMENT.

MADRAS,
Marine Office,
No. 6831 27th September 1877.

From

THE MASTER ATTENDANT,
ADMINISTRATIVE DEPARTMENT,
MADRAS,

To

The Secretary to Government
Public Works Department
Fort Saint George

Sir

I have the honor to forward the accompanying Imperial Fund Budget Estimates for Marine works (original) and repairs for the official year 1878/79.

I have the honor to be
Sir
your most Obedt Servant
W H Taylor
Master Attendant
Administrative Department

No. 4144

From

E. R. Douglas Esqr.
Offg. Deputy Director General of the
Post office of India

To

The Secretary to the Government of
Madras
Public Works Department
Simla 20 September 1877.

Sir,

Govt. of India P.W.D. No. 422-39 A.G. 8 7/8/73.

In accordance with the orders contained in the Resolution of Government described in the margin I have the honor to note below the demands of this department for Postal Works in Madras during the official year 1878-79

Major Works

New Post office at Coombaconum	Rs 4,000
Minor Works	9,000
Total	Rs 13,000

I have the honor to be,
Sir,
Your most obedient Servant
E. R. Douglas
Offg. Dy. Dir. Genl. of the P.O. of India

G.O. 1st October 77 No. 28

From
The Master Attendant
Administrative Department
to
The Secy. to Government
Public Works Department
Fort Saint George.

Dated 27th } Sept 77
Recd }

No. 6831

Subject

Forwards the Accy. Budget
and Budget Estimate for
Marine Works (Original) and
repairs for the Official Year
1878/79

Schedule of the probable requirements of the Madras Presidency on account of Imperial Works for 1878-79

Executive Division	Projects			Amount of Estimate	Computed expenditure up to 31st March 1878	Estimate 1878-79	No.	Remarks or References
	No.	Locality	Description					
			Military Original Works					
Bellary	1	Bellary	Double latrine for the European Infantry Regiment	"	"	3,000	1	Estimate awaited.
do	2	do	Double wash-houses and urinals for — do	7,640	"	7640	2	G.O. No. 2170 of 4th May 1877.
do	3	do	Drainage of the married Quarters of the European Regiment	9390	"	9390	3	Estimate under consideration. Work approved in G.O. No. 2385 of 20th April 1877 Military Department.
			Carried over			20,030		

			Brought forward			20,030		
Bellary	4	Bellary	Two latrines for the lines of the 21st Regt. Native Infantry	4290	"	2860	4	G.O. No. 735 of 22nd March 1876. Three latrines were sanctioned, only two are recommended for 1878-79.
do	5	do	Water Supply Project	144628	136670	5,000	5	G.O. No. 3118 of 2nd Novr. 1874. Item No. 10 of Budget of 1877-78.
Presidency	6	Fort St. George	Additional storey to the quarters occupied by the Commissary of Ordnance	"	"	7100	6	Estimate awaited. Called for in G.O. No. 1101 of 3rd May 1876.
do	7	~~Vyasarpady~~	Enlarging existing quarters of millmen and Supervisors for residence of Master Worker and Master Refiner at the Gun Powder Factory	10170		10,000	7	G.O. No. 73 of 12th June 1876.
do	8	do	A building for charcoal pulverizing, sulphur grinding mixing Machine, 8 horse power engine and two boilers at do	"	"	16,500	8	Estimate awaited. Called for in G.O. No. 119 of 19th January 1874.
do	9	do	do for Press, Pumps with gear for do granulating Pebble powder making 8 horse power engine, and two boilers at do	"	"	57,300	9	do do
do	10	do	do for glazing, dusting separating two 12 horse power engines and 2 boilers at do	"	"	96,700	10	do do
			Carried over			215,490		

			Brought forward			2,15,490		
Presidency	11	Madras	Corrugated roof to one of the gun sheds now used as a Painter's shop at the Gun Carriage Factory	"	"	5,500	11	Estimate awaited
do	12	do	Entire new set of lines at Poodoopett for the Native Infantry Regiment now stationed at Vepery	"	"	50,000	12	Estimate awaited. Approved by Govt. of India. G.O. No. 2967 of 4th November 1876
do	13	Veysarpady	Additional group of incorporating mills for the Gun Powder Factory	54,010	40,000	14,000	13	G.O. No. 655 W. of 27th August 1877. Item No. 1 of Budget of 1877-78.
Chingleput	14	Poonamallee	New double storied Barracks for 200 men with out-houses	2,23,070				
			New Quarters for 30 families with do	20,150				Estimate of Rs. 2,63,370 forwarded to Govt. of India with letter No. 2221 of 22nd August 1876 has been generally approved by that Govt. G.O. No. 452 of 16th February 1877. Items 7 to 11 of Preliminary Issue of Budget of 1877-78.
			do for Artillery	7,150	7,610	40,000	14	
			Alterations to existing buildings and demolitions	13,000				
			New Fives and Racket Court					
Bangalore	15	Bangalore	Additional works in connection with Ulsoor Water Supply Project	66,598	12,500	40,000	15	Sanctioned by Govt. of India Register No. 35 M.W. of 1877-78. G.O. No. 589 W. of 16th August 1877. Item No. 9 of Budget of 1877-78.
			Carried over			3,64,990		

			Brought forward	3,64,990				
Bangalore	16	Bangalore	Constructing quarters for Qr. Mr. Sergeant R. H. A. Ulsoor Barracks	4,220	"	4,220	16	G. O. No. 1670 of 14 June 75. Item No. 3 of Class C. Works of Budget of 1877-78.
do	17	do	Cost of road from Trinity Church to Agram Barracks	9,200		9,200	17	Sanctioned by the Govt. of India Reqn. to No. 8 W 70 of 1874-75. G. O. No. 1541 of 11th June 1874 and No. 653 of 10th March 1875. Item No. 8 of Class C. Works of Budget of 1877-78.
do	18	do	Drainage of Native Infantry Lines	14,400	6,400	5,000	18	G. O. No. 126 of 26th May 1873. Item No. 7 of do.
do	19	do	Constructing a school for Royal Horse Artillery and Royal Artillery	11,700	"	11,700	19	Estimate under consideration.
do	20	do	Improvement to Dumloor Tank	Approximate 20,000	"	10,000	20	G. O. No. 524 of 25th February 1876.
do	21	do	Latrines for the Sappers and Miners. 2 for Males and 2 for females	"	"	5,040	21	Estimate awaited.
do	22	do	Lining with stone drains east and west of European Infantry Barrack limits	"	"	4,000	22	do
do	23	do	Plunge Bath for the Cavalry	"	"	5,300	23	do
do	24	do	Drainage of Royal Horse Artillery Barracks	"	"	4,400	24	do
do	25	do	School houses and furniture for 4 N. I. Regiments	4,800	"	4,800	25	G. O. No. 3354 of 23rd Novr. and No. 151 of 18th December 1875.
			Carried over			4,28,650		

			Brought forward	4,28,650				
Bangalore	26	Bangalore	Hospital Sergeants Quarters for 3rd Pavilion Race Course	5,700	"	5,700	26	G.O. No. 573 of 27th February 1871 and No. [illegible] of 10th March 1875. Item No. 5 of Class C Works in the Final Issue of Budget of 1877-78.
do	27	do	Quarters for Resident Medical Officer	5,440	"	5,440	27	Sanctioned by the Govt. of India Register No. 16 P.W. of 1871-72. G.O. No. 1891 of 23rd June 1871.
do	28	do	Providing [illegible] in the Ordnance [illegible] Powder Magazine	2,460	"	2,460	28	G.O. No. [illegible] of 28th October 1875. Item No. 6 of Class C works of Budget of 1877-78.
do	29	do	[illegible] Magazine for Native Infantry Regiment and guard room	7,300	"	7,300	29	G.O. No. 219 of 21st March 1876. [illegible] awaited
Trichinopoly	30	Trichinopoly	A new latrine according to the Standard plan for men of the Royal Artillery	"	"	3,400	30	Estimate awaited
do	31	do	Extending Barrack accommodation for do	4,000	"	4,000	31	G.O. No. 1871 of 24th July 1876.
Neilgherries	32	Wellington	Additions to the Hospital guard room for prisoners	4,590	"	4,590	32	G.O. No. 4571 W. of 20th July 1877.
do	33	do	Completing the 3rd Block Married Quarters	3,720	"	3,720	33	do
do	34	do	Bath rooms to wash-houses	3,120	.	3,000	~~34~~ 34	G.O. No. 1472 of 4th June 1874.
			Carried over	4,68,260				

			Brought forward			4,68,260		
Nilgherries	35	Wellington	Stone drains to receive water from the pipes to prevent the removal of earth from the foundation of the Barracks.	"	"	4,000	35	Estimate awaited
do	36	do	New wash-house fitted with boilers &c. drying and ironing rooms for Married Quarters.	"		3,300	36	do
do	37	do	Drinking water supplied to be conveyed in pipes from outlet to the lower storey of each block of Barracks.			1,000	37	do

Malabar	38	Cannanore	Painting doors and windows of Barracks Married Qrs. and Out-house &c.	4,430	"	4,430	38	G.O. No. 126 of 8th May 1872. Item No. 1 of Class C. Works in the Final Issue of Budget of 1877-78.
do	39	Calicut	Asphalting verandahs and boarding floors of Officers Quarters at West Hill	2,700	"	2,700	39	G.O. No. 1866 of 3rd July 1875. Item No. 2 of Class C. Works of Budget of 1877-78
Tinnevelly	40	Palamcottah	Latrines for Male and females in the lines of the 24th Regiment N.I. with earth store and cart shed.	"	"	2,000	40	Estimate awaited
do	41	Quilon	Latrines for N.I. Regiment with well	"	"	3,150	41	do
			Carried over			4,96,440		

			Brought forward				4[illegible]440		
innevelly	42	Quilon	New Magazine for Native Infantry Regiment		"	"	3,560	42	Estimate awaited
							500,000		
	43		Grant for Minor Works the estimated cost of which does not exceed Rs. 2,500 each		"	"	150,000	43	
	44		Repairs				250,000	44	
			Total Military				900,000		

			Original Works Civil Buildings Postal Buildings						
Presidency	45	Madras	New Post Office	245,010	"		50,000	45	Sanctioned by Govt. of India Register No. 365 of 1876-77. G.O. No. 1135 of 8th May 1876.
Tanjore	46	Combaconum	do		"	"	4,000	46	Estimate awaited.
							54,000		
	47		Grant for Minor Works the estimated cost of which does not exceed Rs 2,500 each		"	"	9,000	47	
	48		Repairs		"	"	*5,000	48	* The amount allotted for Postal Repairs for 1877-78 having been found insufficient, Rs. 5,000 are now applied for
			Total Postal Buildings				68,000		

Telegraph Buildings

Presidency	49	Madras	Telegraph Office	27192	"	100000	49	Sanctioned by Govt of India Register No. 36 B of 1876-77 G.O. No. 1138 of 8th May 1876.
Neilgherries	50	Ootacamund	do	"	"	10,000	50	Estimate awaited. Item No. 15 of Budget of 1877-78.
						1,10,000		
	51		Grant for Minor Works the estimated cost of which does not exceed Rs: 2,500 each.	"	"	10,000	51	
	52		Repairs	"	"	5,000	52	
			Total Telegraph Buildings			1,25,000		

Salt Works.

Vizagapatam	53	Ruppilly Vizianagram	Constructing Salt Superintendent's Cutcherry at Ruppilly	2790	"	2790	53	Rev. Bd. Pro. No. 1728 of 25 May 1875.
do	54	Karasa do	do a tiled building and a raised ground near the platform for the protection of the salt establishment during floods at Karasa	"	"	3,500	54	Estimate awaited
do	55	Karasa do	do puckha head sluice at the mouth of the supply channel at Karasa	"	"	2,300	55	do
Kistna	56	Chinnaganjam	Police lines	"	"	4,580	56	do
do	57	Nizampatam	do			3,560	57	do
			Carried over			16,730		

Brought forward. 4?0,440

				Brought forward		16930		
tna	58	Pondraca	Police lines	"	"	4500	58	Estimate awaited
do	59	Nizampatam	Improvements to the Salt Cutcherry	"	"	2700	59	do
do	60	Chinnaganjam	Salt Cutcherry	"	"	3000	60	do
Nellore	61	Tummalapenta	Making a road from the Trunk Road near Kavaly to Tummalapenta Salt plat form	22,580	9996	10,000	61	G.O. No. 1022 of 26th April 1876. Item No. 17 of Budget of 1877-78.
do	62	Dugarazpatam	Constructing new Police lines for the Salt guard	4,200	1495	2700	62	G.O. No. 3428 of 3rd [illegible] of 4th August 1875.
do	63	Bommugunta	Making an approach to the North platform	"	"	4,000	63	Estimate awaited
do	64	do	do from Bommugunta to Devarampadu	"	"	5,000	64	do
do	65	do	Palisade with stone pillars in chunam and palmyrah rails to 3 Salt platforms	"	"	4,000	65	do
do	66	do	Salt road from 178 mile great northern road to Kanuparthy	"	"	5,000	66	do
South Arcot	67	Harigosti	Harigosti Project	"	"	50,000	67	do. Papers connected with this Project were submitted to the Govt of India with G.O. No. 1580 of 23rd June 1876.
do	68	Merpanam	Completing Palayankal catch drain	4985	3900	1000	68	G.O. No. 1274 of 4th April 1877. Item No. 18 of Budget of 1877/78.
Tanjore	69	Tanjore	Improving the Vadarniem Canal	10,000	7000	3,000	69	G.O. No. 755 of 20th Sept 1877. Item No. 19 of do.
				Carried over		111,830		

			Brought forward			118,830		
Tanjore	70	Adrampatam	One head Constables and 14 Constables huts	1950	3597	3,000	70	G.O. No. 1391 of 5th June 1876
— do —	71	Vadarniem	Two head Constables and 19 — do —	"	"	3,000	71	Estimate awaited.
— do —	72	Cuttumavedy	One head Constables and 9 — do —	"	"	2,000	72	— do —
— do —	73		Constructing a bridge on the road No. 36 over the extension of the Vadarniem Canal	"	"	1570	73	— do —
Madura	74	Muttupettah, Tyravuadpatam, Attengarai and Mercolam	Masonry buildings for salt Offices, each @ Rs. 1900	7600	"	7600	74	[illegible] No. 9023 of [illegible] and No. [illegible] of 25th March 1876 and No. 4316 of 28th May 1876
— do —	75	Mercolam	Construction of tunnels and side dams in the cross road from Mercolam Salt Station to the road between Madura and Ramnad	2450		2450	75	[illegible] No. 3464 of 26th April 187[illegible]
— do —	76	Attengarai	Cutting a channel from the Sea to the pans for supplying sea water for the manufacture of salt	"	"	5,900	76	Estimate awaited.
						1,44,350		
	77		Grant for Minor Works the estimated cost of which does not exceed Rs 2,500 each	"	"	15,650	77	
	78		Repairs	"	"	20,000	78	
			Total Salt Works			1,80,000		

Miscellaneous

Kistna	79	False Point Divi	Construction of Beacon	"	"	5,000	79	Estimate awaited
Tinnevelly	80	Muttum	— do — of Light-house	"	"	75,000	80	— do —
						80,000		
	81		Grant for Minor Works the estimated cost of which does not exceed Rs. 2500	"	"	1,000	81	
	82		Repairs	"	"	1,250	82	
			Total Miscellaneous			82,250		

Statement showing the probable amount that will be required in the Madras Presidency on account of Imperial works &c. for 1878-79 under each head of Service.

	Original works Major Works	Minor Works	Total	Repairs	Establishment	Tools	Total
Military	500000	150000	650000	250000	225000	30000	1155000
Other Services							
Postal Buildings	54,000	9000	63,000	5000	17000	2,040	87040
Telegraph Buildings	110,000	10,000	120000	5000	31250	3750	160000
Salt Works	144,350	15,650	160,000	20,000	45,000	5,400	230400
Miscellaneous works	80,000	1000	81,000	1250	20,680	2,590	105,520
	888350	185650	1074,000	281250	338930	43660	1737720

Fort St. George,
8th Feby 1879.

Signed C. S. Hood Colonel R.E.
Secretary to Government P.W.D.

74 [illegible]

Draft.

× "Original Works"

* These amounts are as follows
In 1873-74 - Rs 1,64,000
" 1874-75 - 2,27,000
" 1875-76 - 2,00,000
" 1876-77 - 2,95,000
" 1877-78 - 2,22,600

RA

Note

In considering the
and in bringing [illegible]
of appointments [illegible]
[illegible]
the [illegible]
[illegible]
that [illegible] the building
the Punjab [illegible]
[illegible]
[illegible] the high [illegible]
[illegible] at the
[illegible] be brought [illegible]
[illegible]
Saying that the [illegible]
[illegible] by the Government
of India for the [illegible]
[illegible]
the Punjab [illegible]
[illegible]
[illegible]

owing to Famine be still less, it has not been thought advisable to make a demand for a larger sum than that asked for in the current year - viz:- Rs 5,00,000.

In the selection of works the following considerations have been kept in view.

(1) Sanitary requirements
(2) Fortification, or buildings accessory thereto.
(3) Accommodation for troops.

The majority of the works eliminated are unsanctioned.

E. A. Ward Col. R.E.
Secy. to Government
P. W. D.

Fort St George
1877

No. 2441.

Public Works Department

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the 1st October 1877.

Read the following :—

From the Dt. Engr. Vizagapatam (H.E. No 1293 d/ 5th Sept. 1877)
Do. Kistna (" No — " 7th " ")
Do. Nellore (" " 37 " 7th " ")
Do. South Arcot (" " 119 " 5th " ")
Do. Tanjore (" " 1485 " 31st Augt ")
Do. Malabar (" " 72 " 13th Augt ")
Do. South Canara (" " 45 " 28th Augt ")
Do. Madura (" " — " 1st Sept ")
Do. Tinnevelly (" " 72 " 19th Augt ")
From the Dr. Genl. of Telegraphs in India (" " 1977 " 7th Sept ")
" The Government of India (" " 696 A.G. " 15th Sept.)
Procgs. M. G. in the Military Departt. (" " 6087 " 10th Sept)
From the Master Attendant (" " 6831 " 27th do)
Offg. Dy. Director Genl. of the Post Office of India (" " 4444 " 20 " ")

Ordered that the Schedule be forwarded to the Government of India and circulated to District Engineers who will lose no time in preparing and submitting the necessary plans and estimates for all works for which Estimates are awaited.

Unless plans and Estimates are duly submitted before 15th December

December next when the regular Budget will be compiled for submission to the Government of India, appropriation of funds cannot be relied on

No. 825 W dated 1st October 77 -

To The Secretary to the Government of India

Sir,

With reference to Public Works Dept Resolution No 452 A.G. dated 7th August 1873, I am directed to forward herewith a schedule of the Imperial requirements on account of Public Works for the year 1878-79.

WT Wh 29.9.77

Fair Copy Desp 1-10-77 with 1 Schedule

To Civil Engrs ✓ 132

Military Dept ✓ 15

Financial " ✓ 7

Revenue " ✓ 21

Office 20

G of India - 25

D: [illegible] 10-77

[illegible] 2002-77 [illegible]

[illegible] of 1877 [illegible]

PUBLIC WORKS.

To

Dated Sub. of Precedin

Issued

Recd. Encl.

G. O. [illegible] 1877, No. 826 W.
825 W

Nos. 28 · 29 · 30

Schedule of Imperial re-quirements on account of Public Works for the year 1878-79 forwarded to the Govt. of India and circulated with [illegible] to District Engineers.

Forwards schedule of the Imperial requirements on account of Public Works for the year 1878-79.

Ed. Dr. Rep.
10.10.77