(1) பக்கங்களின் எண்ணிக்கை 38

(2) புதுக்கித் திருப்பிய நாள் 8.3.90

(3) ஆதாரங்குறிப்பவர் சுருக்கொப்பம்

தமிழ்நாடு ஆவணக் காப்பகம்.

(4)

தமிழ்நாடு அரசு

P. W. D. துறை

அரசாணை எண்.
மு. கோப்புத் தாள் எண். 3084

அச்சகம்
பலவகை

நாள் : 1 - 11 - 1889 19

மடிக்கவோ கண்டபடி கையாளவோ கூடாது

19. Sheets

ஆவண. கா-1—18,006—15-6-87.

3084

1st November 1889, No. 3084 W., Public Works.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Military Works.

Read—the following paper:—

From Brigadier-General M. PROTHEROE, C.B., C.S.I., Quartermaster-General, to the Secretary to Government, Military Department, dated Ootacamund, 14th October 1889, No. 3531 A.

I am desired by the Commander-in-Chief to return the correspondence received with Reference Order, No. 6661, of the 30th ultimo, and in reply to state, that His Excellency approves of the estimate for excavating a well and constructing a trough at the north-west corner of the Transport lines at Calicut, it being considered supplemental to the general estimate sanctioned in G.O., No. 7273, of 1st November 1888.

No. 7116, Military.

Approved and transferred to the Public Works Department for disposal with reference to G.O., No. 3302 W., dated 17th October 1888.

Fort St. George,
17th October 1889.

(Signed) H. R. SHELLEY, Colonel,
for Secretary to Government.

Order—dated 1st November 1889, No. 3084 W., Public Works.

In G.O., No. 3302 W., dated 17th October 1888, an estimate of Rs. 11,265 was sanctioned for the construction of sheds for 22 bullocks, 10 ambulance carts, 20 mules, and 7 elephants at Calicut. On a representation made later on by the Commissary-General that the mule sheds would not be required, the estimate was reduced to Rs. 8,255—*vide* G.O., No. 675 W., dated 8th March 1889. The estimate of Rs. 475 now received for a well and trough in the Transport lines, Calicut, is sanctioned as supplemental to the estimate of Rs. 8,255 above referred to.

2. This sanction has been registered as Imperial No. 21 W. of 1889-90 and classified as Military, Original works.

(True Extract.)

Captain, R.E.,
Under-Secy. to Govt., P.W.D.

To the Superintending Engineer, IV Circle, with five enclosures.
„ Examiner, Public Works Accounts, with duplicate abstract estimate.
„ Military Department.

Exd. W. J. Lewis.
Spare Copies

Schedule of the probable requirements of the Madras Presidency on account of Military Works for 1890-91—*cont.*

Head of classification.	Executive division.	Locality.	Item No.	Projects and Works.	Class.	Original Works. Major works. Works in progress.	Original Works. Major works. New works.	Original Works. Major works. Total.	Original Works. Minor works.	Original Works. Total.	Repairs.	Establishment.	Tools and plant.	Suspense.	Grand Total.	Remarks.
						Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
(1) Accommodation for troops—Buildings for European troops—*cont.*	Bellary ..	Bellary ..	11	Quarters for Farrier Sergeant, Royal Artillery, at Chief Veterinary hospital.	C	..	3,738	..	..	..	..	..	..	..	..	Estimate is awaited.
	Do. ..	Do. ..	12	Quarters for shoeing-smith and line orderly at Chief Veterinary hospital.	C	..	2,600	..	..	..	..	..	..	..	..	Do.
	Do. ..	Do. ..	13	Enlarging and improving Chief Veterinary hospital.	C	..	8,490	..	..	..	..	..	..	..	..	Do.
	Do. ..	Do. ..	14	Barrackmaster's quarters and out-houses.	C	..	3,500	..	..	..	..	..	..	..	..	Do.
	Do. ..	Do. ..	15	Barrack Sergeant's quarters and out-houses.	C	..	3,500	..	..	..	..	..	..	..	..	Do.
	Do. ..	Do. ..	16	Constructing a Mangalore tiled roof over the existing roof of the Station hospital.	C	..	4,647	..	..	..	..	..	..	..	..	Estimate of Rs. 4,647 was sanctioned in G.O., No. 1423 W., dated 29th May 1889.
	Do. ..	Do. ..	17	Infectious disease ward, cook-house and Station hospital.	C	..	6,140	..	..	..	..	..	..	..	..	Estimate of Rs. 6,140 was sanctioned in G.O., No. 320 W., dated 7th February 1884. Item No. 4, class C works, budget of 1889-90.
	Do. ..	Do. ..	18	Purveyor's quarters for the Station hospital.	C	..	3,046	..	..	..	..	..	..	..	..	Estimate of Rs. 3,046 was sanctioned in G.O., No. 771 W., dated 7th March 1888. Item No. 5, class C works, budget of 1889-90.
	Nilgiri ..	Wellington.	19	Constructing an office-room for the Station hospital.	C	..	3,000	..	..	..	..	..	..	..	..	Estimate is awaited.
	Do. ..	Do. ..	20	Constructing a laundry for the Station hospital.	C	..	3,000	..	..	..	..	..	..	..	..	Do.
	Do. ..	Do. ..	21	Constructing a block of officers' quarters to accommodate six bachelors of the British Infantry battalion.	C	..	40,000	..	..	..	..	..	..	..	..	Do.
	Do. ..	Do. ..	22	Constructing a block of officers' quarters for six bachelors of the Convalescent depôt.	C	..	40,000	..	..	..	..	..	..	..	..	Do.
	Do. ..	Do. ..	23	Quarters for an Assistant Apothecary.	C	..	6,000	..	..	..	..	..	..	..	..	Do.
	Do. ..	Do. ..	24	Quartermaster's stores and office for British Infantry regiment.	C	..	25,000	..	..	..	..	..	..	..	..	Estimate is awaited. Item No. 7, class C works, budget of 1889-90.
	Do. ..	Do. ..	25	A ward to accommodate 35 men, Station hospital.	C	..	20,000	..	..	..	..	..	..	..	..	Estimate is awaited. Item No. 8, class C works, budget of 1889-90.
	Do. ..	Do. ..	26	Quarters for three hospital purveyors.	C	..	4,750	..	..	..	..	..	..	..	..	Estimate of Rs. 4,750 was sanctioned in G.O., No. 615 W., dated 21st February 1888. Item No. 10, class C works, budget of 1889-90.
	Do. ..	Ootacamund.	27	Quarters for a Sub-Conductor attached to the Army Head-quarters.	C	..	7,500	..	..	..	..	..	..	..	..	Estimate is awaited. Item No. 12, class C works, budget of 1889-90.
	Do. ..	Do. ..	28	Converting the Sapper hospital building on Stonehouse Hill into quarters for two Sergeant-Instructors, N.V. Rifles.	C	..	3,600	..	..	..	..	..	..	..	..	Estimate of Rs. 3,600 was sanctioned in G.O., No. 1068 W., dated 9th April 1888. Item No. 13, class C works, budget of 1889-90.
	West Coast.	Calicut ..	29	Quarters for an Apothecary, West Hill Barracks.	C	..	5,000	..	..	..	..	..	..	..	..	Estimate is awaited.
	Do. ..	Mangalore.	30	Quarters for two Hospital Assistants.	C	..	5,500	..	..	..	..	..	..	..	..	Do.
	Presidency.	Bangalore.	31	Constructing a collar-maker's shop for the Royal Artillery.	C	..	3,040	..	..	..	..	..	..	..	..	Do.
	Do. ..	Do. ..	32	Battery office for one Field battery.	C	..	6,000	..	..	..	..	..	..	..	..	Do.
	Do. ..	Do. ..	33	Store-rooms for one Field battery.	C	..	5,000	..	..	..	..	..	..	..	..	Do.
	Do. ..	Do. ..	34	One new barrack for British Cavalry regiment.	C	..	32,500	..	..	..	..	..	..	..	..	Do.
	Do. ..	Do. ..	35	Bowling alley to be converted into a Skittle alley.	C	..	2,800	..	..	..	..	..	..	..	..	Do.
	Do. ..	Do. ..	36	Laundry and disinfecting-room for South Station hospital.	C	..	7,000	..	..	..	..	..	..	..	..	Do.
	Do. ..	Do. ..	37	Quarters for Farrier Sergeant, shoeing-smith, line orderly, and building for office, pharmacy, &c., Station Veterinary hospital.	C	..	9,230	..	..	..	..	..	..	..	..	Do.
	Do. ..	Do. ..	38	Brick-making shop, Queen's Own Sappers and Miners.	C	..	6,000	..	..	..	..	..	..	..	..	Do.
	Do. ..	Do. ..	39	One block of two quarters for two Sergeants, Queen's Own Sappers and Miners.	C	..	3,000	..	..	..	..	..	..	..	..	Estimate is awaited. Item No. 15, class C works, budget of 1889-90.
	Do. ..	Do. ..	40	Quarters for Schoolmaster and Schoolmistress, Royal Artillery.	C	..	10,240	..	..	..	..	..	..	..	..	Estimate of Rs. 10,240 was sanctioned in G.O., No. 2384 W., dated 20th September 1886. Item No. 16, class C works, budget of 1889-90.
	Do. ..	Do. ..	41	New orderly-room, or conversion of Quartermaster's stores into orderly-room and stores, 12th Lancers.	C	..	6,500	..	..	..	..	..	..	..	..	Estimate is awaited. Item No. 17, class C works, budget of 1889-90.
	Do. ..	Do. ..	42	Battery office for Royal Horse Artillery.	C	..	5,680	..	..	..	..	..	..	..	..	Estimate of Rs. 5,680 was sanctioned in G.O., No. 2906 W., dated 17th September 1888. Item No. 18, class C works, budget of 1889-90.

Schedule of the probable requirements of the Madras Presidency on account of Military Works for 1890-91—*cont.*

Head of classification.	Executive division.	Locality.	Item No.	Projects and Works.	Class.	Original Works.					Repairs.	Establishment.	Tools and Plant.	Suspense.	Grand Total.	Remarks.
						Major works.			Minor works.	Total.						
						Works in progress.	New works.	Total.								
						Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
(3) Commissariat buildings.	Bellary ..	Bellary ..	72	Shelter for Transport carts, &c.	C	..	3,600	..	..	..	..	..	..	..	..	Estimate is awaited.
	Nílgiri ..	Wellington.	73	Quarters for a Milling Engineer, Commissariat department.	C	..	7,500	..	..	..	..	..	..	..	..	Estimate is awaited. Item No. 49, class C works, budget of 1889-90.
	West Coast.	Malapuram.	74	Cattle shed for the Commissariat department.	C	..	4,000	..	..	..	..	..	..	..	..	Estimate is awaited. Item No. 51, class C works, budget of 1889-90.
	Do. ..	Do. ..	75	Sheds for 12 bullocks and 10 mules.	C	..	2,824	..	..	..	..	..	..	..	..	Estimate of Rs. 2,824 was sanctioned in G.O., No. 1245 W., dated 27th April 1888. Item No. 52, class C works, budget of 1889-90.
	Presidency.	Bangalore .	76	Two quarters for Warrant officers of the Commissariat department.	C	..	11,000	..	..	..	..	..	..	..	..	Estimate is awaited.
	Do. ..	Do. ..	77	Quarters for a Conductor, Transport department.	C	..	5,800	..	..	..	..	..	..	..	..	Estimate of Rs. 5,800 was sanctioned in G.O., No. 992 W., dated 16th April 1886. Item No. 61, class C works, budget of 1889-90.
	Do. ..	Do. ..	78	Quarters for an Ambulance Sergeant near Cattle lines, Transport department.	C	..	3,000	..	..	..	..	..	..	..	..	Estimate is awaited. Item No. 62, class C works, budget of 1889-90.
	Do. ..	Fort St. George.	79	New iron record shelves for the office of the Examiner, Commissariat Accounts.	C	..	7,790	..	..	..	..	..	..	..	..	Estimate of Rs. 7,790 was sanctioned in G.O., No. 2636 W., dated 21st September 1889.
	Do. ..	Madras ..	80	Workshops and sheds for carts and cattle, Transport department.	C	..	20,000	..	..	..	..	..	..	..	..	Estimate is awaited. Item No. 56, class C works, budget of 1889-90.
	Do. ..	Do. ..	81	Quarters for two Staff Sergeants at Pudupet.	C	..	3,600	..	..	..	..	..	..	..	..	Estimate is awaited. Item No. 58, class C works, budget of 1889-90.
	Do. ..	Do. ..	82	Quarters for a Conductor, Commissariat department.	C	..	4,000	..	..	..	..	..	..	..	..	Estimate is awaited. Item No. 59, class C works, budget of 1889-90.
	Do. ..	Do. ..	83	Constructing a wheat godown at Teynampet.	C	..	5,950	..	..	..	..	..	..	..	..	Estimate is awaited. Item No. 60, class C works, budget of 1889-90.
	Chingleput.	Guindy ..	84	Quarters for the station butcher attached to the slaughter-house.	C	..	3,600	..	..	..	..	..	..	..	..	Estimate of Rs. 3,600 was sanctioned in G.O., No. 1259 W., dated 30th April 1888. Item No. 54, class C works, budget of 1889-90.
	Do. ..	Saidápet ..	85	Constructing a new road from the Mount Road direct to the slaughter-house.	C	..	3,468	..	..	..	..	..	..	..	..	Estimate of Rs. 3,468 was sanctioned in G.O., No. 534 W., dated 16th February 1888. Item No. 55, class C works, budget of 1889-90.
(7) General Cantonment Works.	..	..	86	Improving the sanitation of lines of Native troops.	A	..	20,000	..	..	..	..	..	..	..	..	Estimates are awaited.
	Bellary ..	Guntakal.	87	New rest-house and site for the rest camp.	B	..	8,040	..	..	..	..	..	..	..	..	Estimate is awaited. Item No. 65, class C works, budget of 1889-90.
	Nílgiri ..	Wellington.	88	Connecting, by means of iron pipes, the drinking-water well with the barracks.	B	..	4,715	..	..	..	..	..	..	..	..	Estimate of Rs. 4,715 was sanctioned in G.O., No. 1198 W., dated 6th May 1889.
	Presidency.	Bangalore.	89	Drainage of Royal Horse Artillery, Grass-cutters' lines at Ulsoor and preventing the fouling of the adjacent nullah.	C	..	2,846	..	..	..	..	..	..	..	..	Estimate of Rs. 2,846 was sanctioned in G.O., No. 1261 W., dated 1st May 1888. Item No. 66, class C works, budget of 1889-90.
	Do. ..	Do. ..	90	Drainage, British Infantry barracks.	C	..	8,112	..	..	..	..	..	..	..	..	Estimate of Rs. 8,112 was sanctioned in G.O., No. 2615 W., dated 24th August 1888. Item No. 67, class C works, budget of 1889-90.
	Do. ..	Do. ..	91	Constructing box drains east and west of Parade barracks.	C	..	4,184	..	..	..	..	..	..	..	..	Estimate is awaited.
	Do. ..	Fort St. George.	92	Remodelling the drainage ..	C	..	10,000	..	..	..	..	..	..	..	..	Estimate is awaited. Item No. 68, class C works, budget of 1889-90.
	Do. ..	Madras ..	93	Flushing drains of Native Infantry lines at Ráyapuram.	C	..	4,300	..	..	..	..	..	..	..	..	Estimate of Rs. 4,300 was sanctioned in G.O., No. 1297 W., dated 4th June 1884. Item No. 69, class C works, budget of 1889-90.
	Chingleput.	St. Thomas' Mount.	94	General improvements to the drains of the cantonment.	C	..	10,000	..	..	..	..	..	..	..	..	Estimate is awaited. Item No. 70, class C works, budget of 1889-90.
(8) Fortifications.	North Arcot.	Vellore ..	95	Draw-bridge and gate for the Fort.	B	..	6,500	..	..	..	..	..	..	..	..	Estimate of Rs. 6,500 was sanctioned in G.O., No. 1963 W., dated 20th July 1889. Item No. 72, class C works, budget of 1889-90.
	West Coast.	Malápuram.	96	Constructing a fortified post.	C	..	8,248	..	..	..	..	..	..	..	..	Estimate of Rs. 8,248 was sanctioned in G.O., No. 3114 W., dated 18th November 1887. Item No. 71, class C works, budget of 1889-90.
	Presidency.	Fort St. George.	97	Demolition of Wallajah ravelin and two lunettes.	C	..	7,426	..	..	..	..	..	..	..	..	Estimate is awaited. Item No. 73, class C works, budget of 1889-90.
	Do. ..	Do. ..	98	Constructing a draw-bridge at the North gate.	C	..	4,487	..	..	..	..	..	..	..	..	Estimate of Rs 4,487 was sanctioned in G.O., No. 2447 W., dated 13th August 1888. Item No. 74, class C works, budget of 1889-90.
	Do. ..	Do. ..	99	Demolition of out-houses, clearance of ditch, and completion of walls.	C	..	10,000	..	..	..	..	..	..	..	..	Estimate is awaited. Item No. 75, class C works, budget of 1889-90.
(4) Staff and Miscellaneous.	Nílgiri ..	Ootacamund.	100	Constructing a latrine for the boys at the Lawrence Asylum.	C	..	3,000	..	..	..	..	..	..	..	..	Estimate of Rs. 3,000 was sanctioned in G.O., No. 2159 W., dated 14th July 1888. Item No. 64, class C works, budget of 1889-90.
	..	..	..	Reserve with the Government for incomplete Major works.	..	11,768	..	..	..	..	..	..	..	..	..	....
				Total ..		84,833	8,75,167	9,60,000	1,70,000	11,30,000	3,20,000	3,33,500	21,500	..	18,05,000	

List of Military Works estimated to cost Rs. 2,500 each or under, and for which funds are required in the Public Works budget for 1890-91.

Division or district.	Station.	Description of buildings, &c., and for what corps or departments needed.	Approximate estimate of cost.	Remarks by the Commander-in-Chief.
			Rs.	
Madras District.	Fort St. George.	I. room alterations for theatre.	1,000	When funds are available.
	Do. ...	Pipes to carry off main water from the barracks—Officers' quarters, &c.	990	Recommended.
	Do. ...	Improvements to military prison.	810	When funds are available.
	Do. ...	Constructing two solitary cells in the military prison.	2,445	Very urgently required.
	Do. ...	Constructing a verandah in front of the choultry gate now used as the Commissariat ration shed.	650	Necessary.
	Do. ...	D. block family quarters to be converted into permanent quarters for three Sergeant Instructors, Madras Volunteer Guards and Volunteer Artillery.	566	Approved.
	Madras ...	Huts, infectious disease—Station hospital.	750	When funds are available.
	Do. ...	Regimental school—Perambúr lines, Madras Infantry.	1,375	
	Do. ...	Shed to hold fire-engine at the Government Bakery.	820	Approved.
	Do. ...	Iron railings to passage in the Storekeeper-General's record-room — Commissary-General's office.	670	
	Do. ...	Drainage—Bakery premises ...	950	When funds are available.
	Do. ...	Gram-boiling shed—Mule lines.	1,500	
	Do. ...	Latrine for hospital—Ráyapuram lines.	1,000	
	Do. ...	Converting one Sub-Conductor's quarters, Commissariat Department, to Conductors' quarters by adding one room 18′ × 16′.	576	Approved.
	Do. ...	Store-room to 3 Warrant officers' and 4 Sergeants' quarters—Commissariat Department.	1,000	
	Do. ...	Additional latrine accommodation—Army Clothing Department.	536	
	Do. ...	Laying on Red Hills water in pipes to the quarters of the Conductor and Mechanical Engineer at the Government Bakery, Teynampet.	560	
	Do. ...	Constructing sick shed (50′ × 12′)—Transport Department.	1,200	Necessary.
	Do. ...	Constructing a weighing-shed (30′ × 20′)—Transport line, Pudupet.	1,200	
	Do. ...	Constructing a cistern to hold Red Hills water at the Government Bakery.	530	When funds are available.
	Do. ...	Constructing a slinging shed in the Body Guard lines.	836	

List of Military Works estimated to cost Rs. 2,500 each or under, &c.—*cont.*

Division or district.	Station.	Description of buildings, &c., and for what corps or departments needed.	Approximate estimate of cost.	Remarks by the Commander-in-Chief.
			Rs.	
Madras District—*cont.*	Madras ...	Constructing verandahs in continuation of the existing verandahs of place-of-arms attached to (IX M.I.) the Ráyapuram lines.	2,310	Approved.
	Do. ...	Constructing an additional verandah to the wheat store-room of the Government Bakery at Teynampet	690	
	Do. ...	Latrine—Transport lines ...	950	
	St. Thomas' Mount.	Commissariat—Wells, &c., public cattle depôt.	1,200	When funds are available.
	Do. ...	Royal Artillery—Lightning-conductor, Magazine.	1,500	Most important.
	Do. ...	Closing up archway, gun-shed—P. Battery, 1st Brigade.	560	Very necessary.
	Do. ...	Constructing a second verandah to the harness-room attached to east barracks, Royal Artillery.	1,170	When funds are available.
	Do. ...	Constructing two store-rooms and two cook-rooms to recreation room, library and coffee-shop, east barracks.	700	Approved.
	Do. ...	Drains in stables, east barracks.	800	
	Do. ...	Coating the pillars of Royal Artillery stables, east and west barracks.	880	
	Do. ...	Constructing three line-gear rooms for Royal Artillery stables, east barracks.	1,140	
	Do. ...	Converting the vacant family quarters, south barracks, into quarters for medical subordinates doing duty at the station hospital.	1,070	
	Do. ...	Providing granite-stone flooring to the verandahs of the harness-rooms, west barracks.	540	When funds are available.
	Do. ...	A shed for shelter of bullocks...	700	Approved.
	Pallávaram ...	Tiled-shed	636	When funds are available.
	Do. ...	Store-room for regimental camp equipage—Madras Infantry Regiment.	1,500	Approved.
	Do. ...	Improvements to Sergeant Major's quarters.	1,300	When funds are available.
	Poonamallee...	Wall, new—Family quarters ...	1,000	When funds are available.
	Do. ...	Constructing new walls between the latrines of the family quarters.	730	
	Do. ...	Providing lightning-conductor to the station hospital.	2,400	
	Do. ...	Improving drains in cantonment.	1,500	Approved.
	Do. ...	Bullocks' shed—Commissariat Department.	510	
	Vizianagrum.	New magazine—Madras Infantry.	1,530	Very necessary.
	Do. ...	Improvements to hospital—Madras Infantry.	515	When funds are available.
	Do. ...	Improvements to ventilation—Madras Infantry.	545	

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List of Military Works estimated to cost Rs. 2,500 each or under, &c.—*cont.*

Division or district.	Station.	Description of buildings, &c., and for what corps or departments needed.	Approximate estimate of cost.	Remarks by the Commander-in-Chief.
			Rs.	
Madras District—*cont.*	Vizianagrum.	Contagious disease shed ...	917	Approved.
	Berhampore...	Building for Commissariat stores and office.	1,200	When funds are available.
	Do. ...	Extension of the main drains, Regimental lines.	1,000	Necessary.
	Do. ...	Construction of two wells ...	1,000	When funds are available.
	Arkónam ...	Improving drains outside the compound of the rest-house.	560	Approved.
	Bangalore ...	Royal Artillery—Latrine, Staff Sergeants' quarters, Royal Horse Artillery.	2,100	Very necessary on sanitary grounds.
	Do. ...	Quarters, Battery—Quartermaster Sergeant, Royal Horse Artillery	1,100	Desirable.
	Do. ...	Cook-house—Sergeants' mess, field batteries.	1,470	Necessary.
	Do. ...	Latrine for men—Stables, field batteries.	620	Do.
	Do. ...	Board floor, recreation room—Royal Horse Artillery.	1,240	
	Do. ...	Stone-floor to gun-shed, &c. ...	1,160	
	Do. ...	Two Riding schools	1,156	Necessary. Estimate already sanctioned by Government.
	Do. ...	Latrine—Six seats for men at stables.	600	Very desirable.
	Do. ...	Camp equipage stores—Connecting with water-supply.	1,170	When funds are available.
	Do. ...	Latrine for followers	1,600	Necessary.
	Do. ...	South Station Hospital—Quarters for men of Army Hospital, Native Corps.	924	
	Do. ...	North Station Hospital—Quarters for men of Army Hospital, Native Corps.	756	
	Do. ...	Improving place-of-arms and hospital	700	
	Do. ...	Improving Staff Sergeants' quarters.	2,000	When funds are available.
	Do. ...	Improving road from race-course barracks to slaughter-house.	1,400	
	Do. ...	Additions to accommodation in Transport lines.	1,545	Urgently required.
	Do. ...	Converting Sergeants' quarters into Sub-Conductors' quarters.	1,000	Very necessary.
	Do. ...	Two grass-sheds for the two field batteries.	920	Unauthorised, but desirable.
	Do. ...	Constructing a stone drain in forage yard and levelling ground.	1,440	Approved.
	Do. ...	Providing a boarded floor in the room now used as a fencing-room.	800	
	Do. ...	Lining with stone the drain east and west of barrack limits, parade barracks.	1,538	Desirable.
	Do. ...	New drains in Transport lines to carry off water.	1,100	Approved.
	Do. ...	A room suitable for an office for the Quartermaster at north end of Quartermaster's stores, British Infantry.	2,160	
Bangalore District.				

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List of Military Works estimated to cost Rs. 2,500 each or under, &c.—*cont.*

Division or district.	Station.	Description of buildings, &c., and for what corps or departments needed.	Approximate estimate of cost.	Remarks by the Commander-in-Chief.
			Rs.	
Bangalore District—*cont.*	Bangalore ...	Drains around the Married and Staff Sergeants' quarters, &c., British Infantry at St. John's Hill Barracks.	710	Approved.
	Do. ...	Two horse-stables for Staff Sergeants' quarters, Commissariat Department.	570	Necessary.
	Do. ...	Two Servants' quarters for Commissariat Department.	637	
	Do. ...	Quarters for one first-class Purveyor, North Station Hospital.	800	
	Do. ...	Quarters for one second-class Purveyor, North Station Hospital.	600	
	Do. ...	Providing glazed slashes to the Staff and Married Sergeants' quarters, "Queen's Own" Sappers and Miners at St. John's Hill.	575	When funds are available.
	Do. ...	Repairs to Theatre of Royal Horse Artillery.	2,500	
	Do. ...	Shoemaker's shop for one Field Battery, Royal Artillery.	2,000	Approved.
	Do. ...	Quarters for two Hospital Assistants of "Queen's Own" Sappers and Miners.	2,165	
	Do. ...	Quarters for two Hospital Assistants for East Hutting lines.	2,165	
	Do. ...	Quarter-guard and Defaulter's room, East Hutting lines.	1,620	
	Do. ...	Quarter-guard and Defaulter's room, West Hutting lines.	1,620	
	Do. ...	Garrison Hospital—Conversion of old Apothecaries' quarters into quarters for six Hospital Assistants.	1,000	
	Do. ...	Alterations to Infirmary Stables.	747	
	Do. ...	Providing stone-flooring for working the guns in the bastions of the Agram entrenchment.	993	
	Matigiri ...	Rebuilding the partition walls between the stalls of the forty horse-stables, Remount Depôt.	890	Necessary.
	Bellary ...	Renewing floor, No. II Magazine, Fort.	616	Very necessary.
	Do. ...	Reflooring Commissariat Storerooms with asphalte.	670	
	Do. ...	Drain pipes required to be fitted around the buildings to carry off rain-water from the roofs.	1,690	Desirable.
	Do. ...	Skittle alley	1,600	When funds are available.
	Do. ...	Compound wall for the quarters of the Army Hospital Corps.	1,346	
	Do. ...	Compound wall with two gates to enclose female hospital attached to Station Hospital.	1,300	
	Do. ...	Compound wall for Medical subordinates' quarters—Station Hospital.	535	
Belgaum District.				

List of Military Works estimated to cost Rs. 2,500 each or under, &c.—*cont.*

Division or district.	Station.	Description of buildings, &c., and for what corps or departments needed.	Approximate estimate of cost.	Remarks by the Commander-in-Chief.
			Rs.	
Belgaum District—*cont.*	Bellary ...	Enlarging a well in the cantonment.	854	When funds are available.
	Do. ...	Improving present Armourers' shop, Native Cavalry, by adding a browning room and opening a large window.	700	Very necessary.
	Do. ...	Skittle alley for British Infantry.	1,600	When funds are available.
	Do. ...	Masonry wall around Madras Cavalry Regiment Magazine.	800	
	Do. ...	Alterations and improvements to the garrison Provost prison.	2,144	Very necessary; should be executed, if possible, in coming year.
	Wellington ...	Renewing floors of latrines and school block.	1,680	Necessary.
	Do. ...	Enlarging Purveyor's stores ...	2,000	Very necessary.
	Do. ...	Supplying cooking stove, Sergeants' mess.	800	Desirable.
	Do. ...	Shed for dhooly-bearers and dhooly.	2,300	Approved, but estimate seems very high.
	Do. ...	A building for manufacturing blank ammunition.	1,000	Necessary.
	Do. ...	A ward for lunatic men in the Station Hospital.	850	
Southern District.	Do. ...	Diverting the surplus water of the reservoir from old channel to new, under road-way at south-east end of staff block.	880	Approved.
	Do. ...	Fixing iron hand rails to the stair cases of the night latrine of barracks.	705	
	Do. ...	Improvements to the Station Hospital and its water-supply.	530	
	Do. ...	Room for attendant on bed-ridden patients.	1,000	
	Cannanore ...	Alterations and improvements to the Government Bakery.	2,117	Desirable.
	Do. ...	Constructing quarters for the Hospital Purveyer.	1,326	Approved.
	Calicut ...	Stable and harness-room for 12 mules for the Commissariat Department at West Hill barracks.	1,900	Approved, but something on a cheaper scale should be provided.
	Do. ...	Road to Transport lines ...	1,000	Approved, if such a road is found necessary when a site for the new lines is finally settled.
	Do. ...	Extension of present wash and bath houses for the detachment.	750	Approved.
	Do. ...	Servants' houses and stables for Apothecary's quarters, West Hill.	990	
	Do. ...	Lines for Native Army Hospital for eight men.	1,056	
	Do. ...	Quarters for Hospital Purveyor, West Hill barracks.	1,163	Necessary.
	Malapuram ...	Converting beer godown into a gymnasium for detachment.	790	Very necessary.
	Do. ...	Providing a platform and pump to well.	1,110	

3084

List of Military Works estimated to cost Rs. 2,500 each or under, &c.—*cont.*

Division or district.	Station.	Description of buildings, &c., and for what corps or departments needed.	Approximate estimate of cost.	Remarks by the Commander-in-Chief.
			Rs.	
Southern District—*cont.*	Malapuram ...	Quarters for Hospital Purveyor.	1,250	Necessary.
	Do. ...	Quarters for 7 men of the Army Hospital Native Corps.	2,030	
	Do. ...	Converting the old contagious disease ward into quarters for the Commissariat Sergeant.	2,270	
	Do. ...	Raising the roof and improving theatre.	700	Approved.
	Do. ...	Renewing asphalte floor to the Racquet Court.	600	
Belgaum District.	Quilon ...	Renewing floor of hospital ...	1,970	Desirable.
	Do. ...	Two solitary cells	1,245	Approved.
	Mangalore ...	Reflooring hospital—Madras Infantry.	2,489	When funds are available.
	Do. ...	Additions to Armourers' work-shop.	695	
	Do. ...	Putting a tar composite floor in place-of-arms in lieu of the existing wooden floor—Native Infantry.	790	
	Do. ...	Constructing parapet walls to two wells, erecting nine dust-bins and providing six designation boards for hospital ward—31st Light Infantry.	653	Approved.
	Do. ...	Constructing a well in the compound of the Native Infantry Hospital.	671	
	...	Lump-sum provision for works costing below Rs. 500 each.	500	
			17,027	
		Total ...	1,70,000	

3084

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Military Works.

READ—the following paper :—

From Brigadier-General M. PROTHEROE, C.B., C.S.I., Quartermaster-General, to the Secretary to Government, Public Works Department, dated Ootacamund, 9th September 1889, No. 2773-A.

I have the honor, by direction of the Commander-in-Chief, to forward, for submission to Government, the schedules of Military works' requirements in connection with the Imperial Military Works Budget estimate of the Public Works Department for the ensuing official year.

2. The works have been classified in the usual manner, those enumerated in class C being such major works as are required in addition to those printed in the schedule circulated with the final issue of the current year's budget, as it will stand after the works enumerated in class D have been removed from it. Similarly the list (E) will be understood to show what minor works are required in addition to those of the list at pages 7—11 of appendix to G.O. No. 3105 W. of 4th October 1888, as to will stand after the works enumerated in list F have been eliminated therefrom.

3. Only those major works have been entered in the class A list which this office has reason to believe will require allotments during the coming year, and of these the following seem to call for remarks :—

I. New Barracks at Poonamallee.—The Government of India in their Resolution recorded in Proceedings of Madras Government No. 1159 W. of 1st May 1889, considered the current year's budget allotment of Rs. 30,000 for this work inadequate. The proposed grant for the coming year has accordingly been increased to Rs. 50,000 and His Excellency trusts that the balance of the grant that will be required for the completion of the barracks will be provided in the following year.

II. Institutes of British Corps.—His Excellency hopes to be able to submit to Government, at an early date, the revised proposals called for in Public Works Department No. 1602 C. of 27th March 1889, in view to the utilization, as far as possible, of the current year's budget allotment for regimental institutions. The proposed grant of Rs. 35,000 for the coming year is to admit of a commencement being made on the new institutes it is in contemplation to construct at Wellington and St. Thomas' Mount, and which are very much required.

III. Sanitation of Native Lines.—The necessity for a yearly grant being set apart for the sanitation of Native lines is explained in the correspondence ending with my letter No. 2266-B. of 12th August 1889, recorded in Proceedings of Madras Government, Military Department, No. 6019, of 2nd September 1889, and no further comments regarding this item appear necessary.

IV. Public buildings for a Madras Cavalry Regiment, Bangalore.—His Excellency trusts that a sufficiently large grant may be set apart for this work to admit of all, or as many as possible, of the public buildings for the Madras Cavalry regiment at Bangalore being completed before the close of the ensuing official year.

4. No provision has been made in the ensuing year's budget for the new barracks at Malapuram, as it is understood that the grant set apart for the work in the Military Works budget of 1889-90 will admit of its completion during the current official year.

5. The works in class B (which have been entered in the list in their order of urgency) requiring special notice are the following:—

I. Officers' Mess-house at Wellington.—The communication quoted in the remarks column against this work will show its urgency.

II. A new Barrack for 30 men at Calicut.—The existing barracks do not contain sufficient space for the present garrison, and the extra accommodation is, therefore, very urgently required.

III. Water-supply, Wellington.—In view of the large saving to the State that would be effected by the carrying out of this work, His Excellency would recommend its early execution on these, as well as on sanitary grounds.

IV. Constructing Hut Barracks at Wellington.—The normal garrison of the station of Wellington is considerably augmented for a great portion of the year, owing to a large number of young soldiers from Secunderabad and Bangalore being sent up annually to the hills. The existing barrack accommodation is insufficient for the increased strength, and some men have, consequently, to be accommodated in tents, an arrangement which, especially during the monsoons, is considered a very undesirable one. His Excellency trusts, therefore, that it may be found possible to provide the extra accommodation required at an early date.

V. Rest-house and Camp at Guntakal.—It was hoped that funds would have been available for the execution of this important work during the current official year, but the urgency of the demands on other military works has been so pressing, that no allotment of funds for it could be secured. In view of the necessity and importance of this work, however, I am to express the hope that funds may be found for its execution, at all events during the coming official year.

6. There are many important works in the schedule of class C works which have not been included in the class B list, owing to the limit necessarily placed on the latter.

7. In conclusion, I am to suggest that, should the proposals made in para. 2 of my letter No. 2537-A., of 23rd August 1889, to the Secretary to Government, Military Department, meet with the approval of Government, the grant placed at the disposal of the Commissary-General may be for the execution of all minor works costing Rs. 2,500 and less, instead of only for works costing Rs. 500 and under, thus bringing the procedure into conformity with that now adopted in the case of the Minor Works grant placed at the disposal of General Officers Commanding Districts, which would thus be available for purely military works alone.

Office note from the Examiner, Public Works Accounts, dated 14th September 1889, No. 1322.

ORDER—dated 30th September 1889, No. 2730 W., Public Works.

Ordered that the schedule of requirements on account of Imperial Military works in the Madras Presidency for 1890-91 be forwarded to the Government of India in the Military Department.

2. The sanctioned estimate for the construction of public buildings for a Madras Cavalry regiment at Bangalore is Rs. 30,533 and the current year's budget grant for

the work is Rs. 20,000. The balance of the estimate which will have to be provided for expenditure in 1890-91 will therefore be Rs. 10,533. As the Quartermaster-General reports that a sum of Rs. 20,000 should be provided to admit of all the buildings connected with the Madras Cavalry regiment at Bangalore being completed before the close of the ensuing official year, that sum has been included in the schedule. The Quartermaster-General will be requested, under the orders of His Excellency the Commander-in-Chief, to state whether any additions to the sanctioned project are under contemplation.

3. An estimate of Rs. 11,265 for the construction of sheds for 22 bullocks, 10 ambulance carts, 20 mules and 7 elephants, was sanctioned in G.O. No. 3302 W., dated 17th October 1888, but the Commissary-General having reported that the mule sheds were not necessary, the estimate was reduced by Rs. 3,010—*vide* G.O. No. 675 W., dated 8th March 1889. Funds have been provided in the current year for the completion of all the sheds excepting those for the mules. As the Quartermaster-General now proposes to allot for the next official year, the balance of the original estimate of Rs. 11,265, that officer will be requested to report whether the mule sheds are now required.

4. The Superintending Engineers concerned will lose no time in submitting plans and estimates for the unsanctioned works included in the schedule, as none of them can find place in the budget estimates for 1890-91 under plans and estimates for them have been previously sanctioned.

5. With reference to para. 7 of his letter above recorded, the Quartermaster-General will be informed that the suggestion contained in para. 2 of his letter, No. 2537-A., dated 23rd August 1889, was approved in G.O. No. 2610 W., dated 20th September 1889, and that the grant placed at the disposal of the Commissary-General will be for the execution of all minor works costing Rs. 2,500 and below.

(Here enter No. 2731 W., dated 30th September 1889.)

(True Extract.)

(Signed) R. R. E. DRAKE-BROCKMAN, Lt.-Col., R.E.,
Ag. Joint Secy. to Govt., P.W.D.

To Superintending Engineers.
" the Examiner, Public Works Accounts.
" the Director-General of Ordnance.
" the Military Department.
" the Financial Department.

LETTER—to the Secretary to the Government of India, Military Department, dated Fort St. George, 30th September 1889, No. 2731 W.

In forwarding, herewith, a copy of the Proceedings of this Government, No. 2730 W., dated 30th September 1889, and the schedule of requirements on account of Imperial Military works for 1890-91, I am directed to request that a liberal grant may be assigned in order that the many important works now held in abeyance for want of funds may be undertaken next year.

2. A sum of Rs. 20,000 has been included in the schedule for improving the sanitation of Native lines with reference to my letter No. 2605 W., dated 20th September 1889.

3. The demands on account of Ordnance works have not been included in the schedule and it is presumed that a special grant will as usual be provided for those works on the application of the Director-General of Ordnance.

(Signed) R. R. E. DRAKE-BROCKMAN, Lt.-Col., R.E.,
Ag. Joint Secy. to Govt., P.W.D.

Exd. P. L. Pereira
Spare Copies

BUILDINGS AND ROADS.
MILITARY WORKS.

Govt. of {1889} Madras.

PUBLIC WORKS.

Dated September, 30th.

Recd. *Encl.*

G.O., 30th Sept. 1889, Nos. 2730, 2731 W.

SEPTEMBER.

Imperial Military Works

Forwarding schedule of requirements on account of — for 1890-91.

3084

No. 6661.

GOVERNMENT OF MADRAS,
Military Department,
Fort Saint George 30th Sept 1889.

To

The Quarter master General

Referred to His Excellency the Commander-in-Chief. with advertence to P.G. No. 7273 dated 1st Nov!

(By Order.)

H Shuttleworth Col,
~~Brigdr. General~~,
for Secretary to Govt., Mily. Dept.

N.B.—Reply *may* be endorsed on this docket.

Encl 1
PW 9588
89

3884

Form No. 7 B.

HEADING Commissariat Buildings

3084

QUARTER MASTER GENERAL'S OFFICE,
Ootacamund,
14th October 1889.

It is requested that the heading, number, and date of this communication may be quoted in any subsequent correspondence on this subject.

No. 3531 A.

From

BRIGADIER-GENERAL M. PROTHEROE, C.B., C.S.I.,
QUARTER MASTER GENERAL,

To

THE SECRETARY TO GOVERNMENT,
MILITARY DEPARTMENT.

SIR,

I am desired by the Commander-in-Chief to return the correspondence received with Reference order No. 6661 of the 30th ultimo, and in reply to state that His Excellency approves of the estimate for excavating a well and constructing a trough at the north-west corner of the Transport-lines at Calicut, it being considered supplemental to the general estimate sanctioned in O.G. No. 7273 of 1st November 1888.

I have the honor to be,
Sir,
Your obedient Servant,

M Protheroe
Brigadier-General,
Quarter Master General.

Jno

12

Military (1889) Department.

No. 7519

From

THE QUARTER MASTER GENERAL,

To

THE SECRETARY TO GOVERNMENT,

MILITARY DEPARTMENT.

G.O 3302 W dt 17.X.88
" 549 W dt 22.2.89
" 675 W dt 8.3.89
" 2730-W dt 30.9.89

No. 3531 A.

Dated 14th
Received 16th October 1889.

Recd 19.10.89.

Military Department
Fort St George 17th Octr. 1889

~~No. 3531 A dated 14th October 1889~~
No 7116. Approved and transferred to the Public Works Department for disposal with reference to G.O. No 3302 W. dated 17 October 1888.

H Shulen bol.
for Secretary to Govt.

ENCLOSURES.

Inform that We the Contr
approves of the estimate for excavating
a well and constructing a trough at
the North west Corner of the Transport
lines at Calicut & to be considered
Supplemental to the general Estimate
sanctioned in G.O. No 7273 of 1st Novr 88.

SECRETARY TO GOVERNMENT, P.W. DEPARTMENT, MADRAS. 19 OCT 89

2.

No. J 1629

3084

Const. Form Local No. 155.

COMMISSARY-GENERAL'S OFFICE,
Transport Branch,
Madras, 2 September 1889.

FROM

Colonel J. C. Gunning.
COMMISSARY-GENERAL,

To

THE SECRETARY TO GOVERNMENT,
MILITARY DEPARTMENT.
Fort Saint George.

SIR,

I have the honor to forward the enclosed letter No 252/M of 14th Sept. 1889 from the Superintending Engineer 4th Circle together with a Supplemental Estimate of ~~Rs~~ 475 / ~~Rs~~ 11,265 / sanctioned in P.G. No 7273 dated 1st November 1888 for the construction of sheds for transport animals at Calicut / for excavation of a well at the North West Corner of the Transport building site, the necessity for which was only recently brought to notice by the Officer in Commt. charge at Cannanore.

2. I request therefore you will be good enough to obtain the sanction of Government to the supplemental estimate in question.

I have the honor to be,
Sir
Your most Obdt. Servant,
Colonel
For Commissary General.

15/-

mdy 1889/Depts

P.C. 1. 11. 1888 No 7273R

No $\frac{J}{1629}$ No 6918

3084

From

The Commissary Genl
Madras

To

The Secy to Govt Mil Dept
Fort St George

Dated 23
Recd 24 } Septr 89.

E.4

Requests to obtain the
Sanction of Govt to
the Supplemental estimate
for the Construction of
bullocks Sheds @ Calicut

referred

Encl
26.9.89

16

3084

Public Works Department.

Current No. 9868

Letter No. 7116

Dated 17-10-89

From the Military Deptt.

NOTE OF REMARKS.

The plan & estimate under review amounting ~~Rs~~ 475 are supplemental to the estimate of ~~Rs~~ 11265 for Transport Lines at Calicut sanctioned in G.O. No. 3302 W dy 17-10-88.

The estimate now submitted is for a well & trough proposed to be excavated at the North West corner of the Transport build[ing] site & it has been prepared at the request of the Commissariat Officer in charge of the Lines.

No provision was made for a well in the original estimate.

The nature of the work will be as follows:-

1 Sinking a well for a depth

depths of 10ft + 6ft inner
diam^r with laterite in
clay + 18 3/4 ft above it
& 6ft inner diam^r
up to top of parapet, flooring
& retaining wall around
the well are to be built
with laterite in cham
& plastered the inside
of well with Portland
cement to a depth of
15ft + outside & top of
well &c.

Jungle wood posts &
beam & pulleys with iron
bars &c (for the well) are
provided in the plan
& estimate.

The rates are fair.
Contingencies & Superin-
-tendence are charged at 2½%.

The plan & estimate
have been countersigned
by the Military authorities
& appropriated and transferred
by the Military Deptt
to the P-W. Deptt for
disposal & with reference
to G-O No. 3302 W d/ 17-10-88.

G.M.
22-10-89.

B^t R
Engy wks.

A/

No. 3084 W 38 PUBLIC WORKS DEPART

PROCEEDINGS OF THE MADRAS GOVERNM

October
November

READ the followi

From the Quarter Master
General. No. 3531 c & d/ 11th Oct. 1889.

Endorsement thereon in
the Military Department. No. 7116 d/ 17th Oct. 1889.

3P

In G.O. No. 3302 W
dated 17th October 1888.
an estimate for Rs 11,265
was sanctioned for the
construction of sheds for
22 bullocks, 10 ambulance
carts, 20 mules, and 7
elephants at Calicut.
On a representation now made
later on by the Commissary
General that the mule
sheds would not be
required, the estimate
was reduced to Rs 8,255
vide G.O. No. 675 W dated
8th March 1889. The
estimate of Rs 475 now receive for
~~Sanctioning~~ a well and
~~construction~~ trough
~~in~~ the Transport Lines,
Calicut, ~~received with~~
is

18 20

clay ~~as above named~~,
stowed as supple-
d to the estimate
£ 8255 above referre-
to.

2. This sanction has
been registered as Imperial
No. 20 of 1889-90 and
classified as Military
Original Works.

Mem
30.10.89

Rec'd
30.10.89

No. 3084 Wap Nov 1. 1889
Encl
1/11/889
15 Maj

To
The Supty Engineer & Cashier
with 5 enclosures.
" Examr P. W. accounts
with dup: abstr: estimate
" Military Department.

28/11

H.W. 30.x.89
M. 41

3084

4

19

Govt. of {18 } Madras.

PUBLIC WORKS.

2/11

Read

Read

Read

G.O. / Nov 18 No. 3084 W

Well & Bungla at the
=
Transport lines
=
at Calicut
=

Estimate — Rs. sanctioned

~~as Estimate~~

100/6

(19)

2/13

2/11