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(3) Initials of the Referencer _____

MADRAS RECORD OFFICE.**Government of Madras.***Public Works* **DEPARTMENT.**

G.O. No.	<u>875</u>	Press
		Mis.
Dated	<u>30-3-62</u>	1804.

Not to be folded or roughly handled

19

**Proceedings of the Madras Government, Public Works Department,
30th March 1864.**

No. 540. Read the following letter from Lieutenant-Colonel O. W. S. CHAMBERS, R. E.,
Superintending Engineer, 1st Division, to Colonel C. A. ORR, R. E., Secretary to
Government, Public Works Department, dated Camp Dowlaishweram, 8th March 1864,
No. 2,300:—

SIR,

Superintending Engineer's letter to Go-
vernment, No. 2,220 of 18th February
1864.

1. I have previously had to intimate to Government
that the rates at which work is being carried on at Vizaga-
patam would have to be raised.

Original Estimates also submitted for com-
parison.

Deputy Chief Engineer, Northern Circle,
of 9th June 1862, No. 266.

2. I now beg to submit two revised Estimates for the completion of the Salt Platforms
of Balachervoo and Karassa in the neighbourhood of the
Town of Vizagapatam.

3. The Estimates for these works amounting to 1,500
Rupees and 630 Rupees respectively, were sanctioned on the
26th May 1862, No. 1,165.

4. These sums are now nearly expended* and the Platforms are still incomplete : as the
works are absolutely necessary to enable the Salt Depart-
ment to store the extra quantity of Salt they are making this
year, in fact the Salt is already being stored on the new Plat-
forms as fast as portions of them are completed, I have

* Up to 19th December last, Rupees
1,193-10-11 were spent at Balachervoo ;
and up to 1st December last, 610 Rupees
at Karassa.

taken upon myself to order their completion.

5. I have personally visited these Platforms and satisfied myself that the revised rate for
earthwork, proposed by Captain Beatty, one Anna a cubic yard is, considering the height the
earth has to be raised and the distance it has to be carried, still a very moderate charge.

6. The works are in Salt swamps removed from villages, consequently the price of labor
must be higher than that paid for work of an ordinary description : but even under the most
favorable circumstances, I believe that the rate sanctioned in the original Estimates, eight Pies
a cubic yard, must prove quite insufficient.

7. The excesses now requiring sanction are Rupees 824-2-11 and Rupees 300 respectively,
or Rupees 1,124-2-11 in toto. I purpose with the sanction of Government providing this
amount from the sanctioned allotments of the two Salt roads
of the Vizagapatam District leading from the Karassa Pans.

No. 541.

ORDER THEREON, 30th March 1864, No. 875.

	RS.	A.	P.
Balachervoo	824	2	11
Karassa	300	0	0
Total...	1,124	2	11

Under the circumstances represented in this letter,
Government sanctions a further sum of Rupees 1,124-2-11
on account of the Salt Platforms of Balachervoo and Karassa,
funds being provided as proposed in the concluding para-
graph.

(True Extract.)

(Signed) CHARLES A. ORR, Colonel, R. E.,
Secretary to Government.

To the Superintending Engineer, 1st Division.

„ Board of Revenue.
„ Controller and Auditor of Public Works Accounts.
„ Accountant General.

Exd. S. T. Augustin.

Revised Estimate of the probable cost of completing
the enlargement of the Karassu Gully Salt Platform

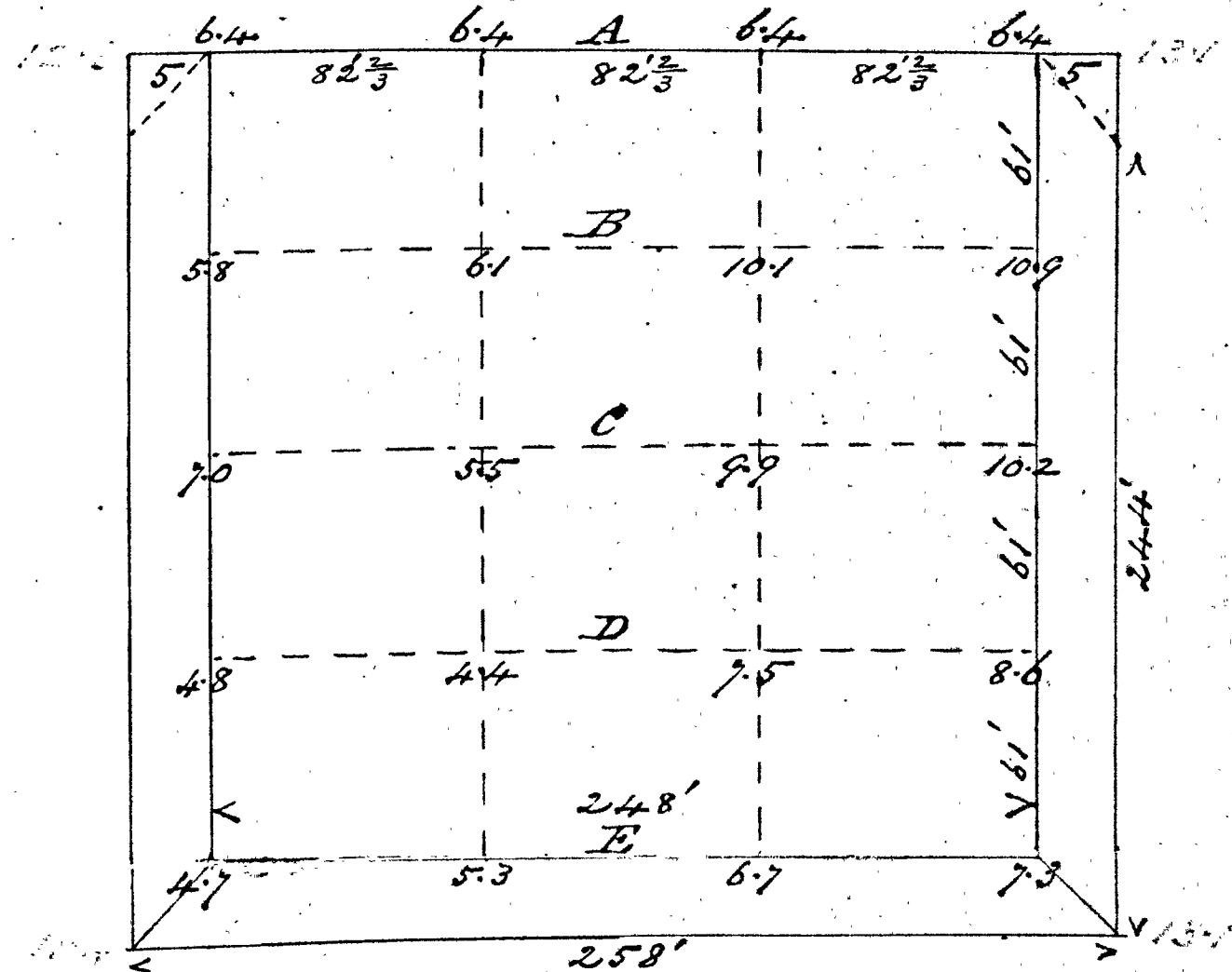
Number	Measure- ments				Particulars of work	Rate	How	Amount.	Total
	Length	Breadth	Height	Squares feet					
								R. a P. Per	R. a P. R. a P.
					12115½ Total Cyds Earthwork ac- -cording to sanctioned estimate				
					8897 Deduct for work done up to 17 th December 1863 -				
					3218½ Cyards Earthwork re- maining to be done -		1 - Cyd. 20126		
2492 - 498					Squares enclosing the Plat- form with prickly pear -	21 ½ Square	106 -		
27 - 6 - -					Pairs Gates -	34 - - each	68 - -		
4 - - - - -					Masonry Gate Posts -	3 - - do -	12 - -		
									29186
					Superintendence and Sundries -	10 - - Cent	- - -		2876
					Total cost of completing the work, Rupees -				320 - -
					Deduct balance of old Estimate remaining unexpended on 1 st December, 1863 -				20 - -
					Balance now requiring sanction Rupees -				300 - -

Executive Engineer's Office,
Waltair -
4th March 1864

W. Beatty - Capt. R. E.
Executive Engineer of
Vizagapatam

Orb Chambers Esq. R. E.
Superintending Engineer

Rough Plan of the Karassa Salt Platform En-
largement, showing the levels of that work, as taken
with a levelling instrument on 17th December 1863
before work had been recommenced -



Levels taken on the summit of the new work are given
in black ink; those at the surface of the ground in red.

Sectional Area at A = $6.3 \times 255 = 1606$ Square Feet

Do at B = $4.3 \times 255 = 1096$

Do at C = $4.3 \times 255 = 1096$

Do at D = $6.0 \times 255 = 1530$

Do at E = $6.3 \times 255 = 1606$

Estimate of the work done up to 17th December

Between A & B, $1096 \times 61 = 66856$

Do B & C, $1096 \times 61 = 66856$

Do C & D, $1313 \times 61 = 80093$

Do D & E, $1568 \times 61 = 95648$

Add two thirds filling in old ditch = 8874

Total work done, cubic feet, $31,8327 = 11,790$ Cuyards

Deduction for former level of the ground = 2893 Cuyds.

Total Expenditure deducting } Total work done = 8,897 Cuyds

10 per cent for superin- } Rs. 549 Cost per Cuyard. $11 \frac{7}{8}$ Pies

tendence &c

Copy of the sanctioned Estimate
 Estimate of the probable cost of enlarging the
 Platform at Karapa Gully as to contain 45 ad-
 ditional Salt heaps.

Number	Measurements = present Cont.					Particulars of Works	Date	Per Item	Amount	Total
	Length	Breadth	Height	Square Feet	Radical Content					
83	83	2 $\frac{1}{10}$	.	144	66 $\frac{9}{10}$	Enlarging Platform				
7	4	1 $\frac{1}{2}$	.	49		Entrances				
83	3 $\frac{3}{10}$	1 $\frac{8}{10}$	.	493		Filling in the old ditch				
					15008 $\frac{9}{10}$					
83	83	$\frac{42}{100}$	.	2893 $\frac{4}{10}$		Deduction for present level				
						Bygt. of Earth work for enlarging Platform		8 $\frac{1}{2}$	5043.	
249	2	.	498			Squares enclosing the Platform with brick pier	2	140 $\frac{1}{2}$	106.	
2	7	.	6	.		Pairs of Oak wood $\frac{1}{2}$ pannelled $\frac{1}{2}$ banded Gates with Iron fastenings	34		68.	
4	.	.	.	.		Complete				
						Masonry Gate Posts	3	00	12.	5953.
						Extra Establishment				
						Sundries including framing	5	100		3413.
						Total Rupees				650.

W. H. Baird
 22. January
 1882

Signed C. P. Maloney Capt.
 Lt. Col. A. D. Macpherson
 Signed J. S. Stewart Major
 True copy Lt. Col. Macpherson
 J. Beattie Capt. R.E.
 Executive Engineer

Copy of the variations
estimate for en-
larging Kanawha
salt flat form -

42/09/11 Mch

Sanctioned Estimate.
Estimate of the Probable Expenses for enlarging the Platform
at Balaheeros Salt pans so as to accommodate all the
Kallinoo Kos salt and have only one Platform for both
sets of Pans.

Number	Measurements			Superficial Content		Particulars of Work	Rate	Per Item	Amount	Total
	Length	Breadth	Height	Square	Feet					
100	200	70	3			Kallinoo Kos & Balaheeros Platform Continued				
	12	8	1 1/10			Enlarging Platform				
	70	7 1/2	2			Entrances				
						Filling in the old ditch				
	200	70	8 1/10			43155 1/10				
						112.00 Reductions for present level				
						31955 1/10				
	470		4 1/2	21	15	Cy. of Earth work for Enlarging Platform	8	133	179	
	470	2		9	40	Squares Surging to the top	3	2	66	16
						Squares Enlarging the Platform with thickly pear	1	7	14	4
6						Masonry Gate posts	3		18	
2	7		6			Pairs of Teak wood 1/2				
						Pannelled and 1/2 barred				
						Gates with Iron fix.	3	4	68	
						• Lures &c. Complete				
						Extra Establishment and Sundries including fractions	5			1498 43
						Deduct the value of 2 Gates at Kallinoo Kos Platform & carriage to Balaheeros				69 39
						Total Expenses				1567 8
										87 8
										1500

100 Apts. Dist. Eng. Office
Bazapatam Range
Baltair 29th January/12

(Signed) L. V. Malhotra Capt.
At. 100 Apts. Dist. Eng.
Bazapatam Range

(Signed) Shaw Stewart Ship.
Line (copy) At. Dist. Eng.
Bazapatam Range
L. Beatty. Capt. R.S.

Executive Engineer
Bazapatam Range

Revised Estimate

Estimate of the probable expense of completing the enlargement of the Palacheruvu salt platform according to the dimensions given in the sanctioned estimate.

Number-	Length	Breadth	Depth	Sq. ft.	Cubic contents	Particulars of the work required	Rate	per	Amount	Total.
						3195 5 ¹ / ₁₀ Cys. earthwork for enlarging platform				
						17191 = (17014 + 177) Deduction for work done up to 19 th December 1864 -				
						14764 ⁶ / ₁₀ Cys. earthwork still to be done				
470	4 1/2	21	15			Squaring turning	32		1 - Cys 922 12/10	
470	2	9	40			Squares Prickly Pear work	19		do. 14 11 "	
6						Masonry gate posts	3		each 18 "	
2	7	6				Pairs Teakwood gates	34		do. 88 "	
						Superintendence and sundries	10		per cent	
										10899 4
										10868
										1198

Deduct value of Villu-mukku gates less carriage

Total Rupees 11308

Deduct balance of sanctioned estimate remaining on 19th December 1863 - 30651

Balance now requiring sanction Rupees 8242 11

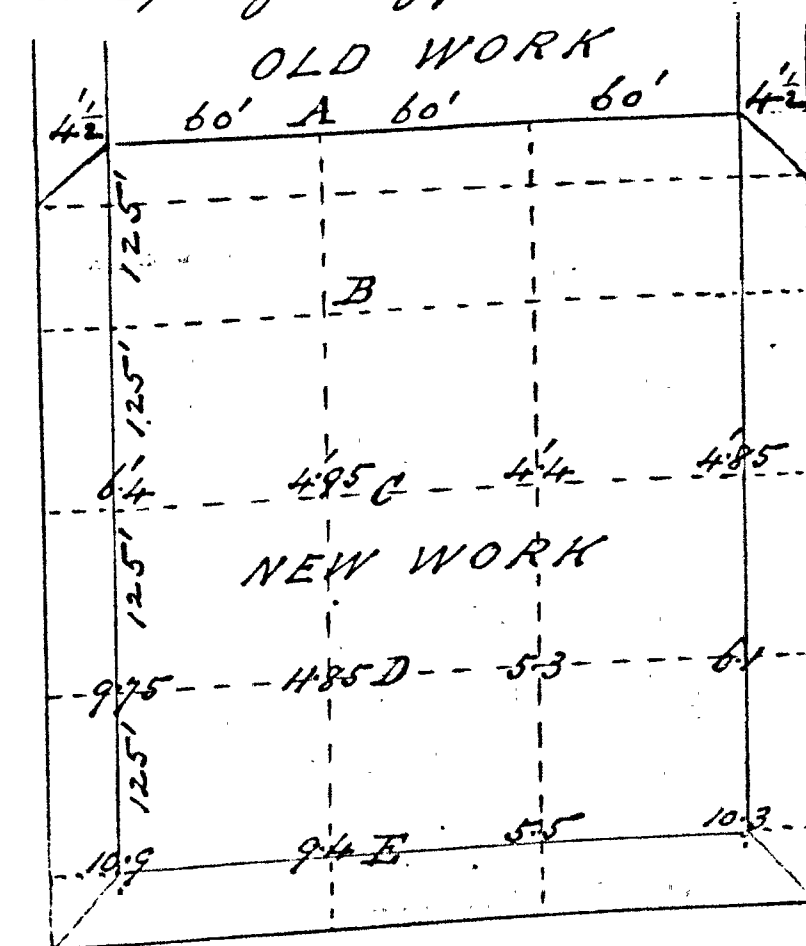
Wattai's - 30th Jan. 1864

Ob. Chamber Executive Engineer Vicapattam

Hence, Cost per Cubic Yard, 12 1/23 pios.

Rough Plan of the Malacheruvu salt flat-
form enlargement, showing the levels of that
work taken on 19th December 1863 - 79

Datum Level, surface of ground about the platform, 11.26



Sectional area at A = 1284 Sq. feet
Do. at B = Do. at C = 1127 - do -
Do. at D = 555 - do -
Do at E = 412 - do -

$$1205 \times 125 = 150125$$

$$1127 \times 125 = 140875$$

$$841 \times 125 = 105125$$

$$483 \times 125 = 60375$$

$$\text{Filling in part of old ditch} = 28350$$

$$\text{Total Cft. of } 484850, \text{ or}$$

$$\text{Cubic yards} = 17957$$

$$\text{Deduct according to estimate } 943 = \left(\frac{5}{8} \text{ths. of } 1120\right)$$

Total quantity of earthwork done up to 19th December } 17,014 Cubic yards

Cost of the work deducting 10 per cent for superintendence and sundries = Rs. (1193.10.11 - 119.5.10) = Rs. 1074.5.1

Hence, Cost per Cubic Yard, 12.123 pice.

Superintending Engineer
Office of the Dy. Camp Dowlaiswami
No 2300
8th March 1864. &

From

Lieut. Col. Chambers R.E.

To

Superintending Engineer

Colonel C. A. Orr R.E.

Secretary to Government

Encls. 1.

Sir,

Madras.

Supy. Engr's letter
to Govt No. 2220
of 18th Feb'y/64

I have previously had to in-
-form the Government that the
rates at which work is being carried
on at Vinagapatam would have
to be raised.

Original Esti-
-mates also sub-
-mitted for
Comparison

2. I now beg to submit two re-
-vised Estimates for the completion
of the sub. platforms of Balacherr-
-am and Narassa in the neigh-
-borhood of the town of Vinaga-
-patam.

3. The Estimates for these works
amounting to 1500 Rs and 630 Rs
respectively

respectively, were sanctioned on the 26th May 1862, No. 1165.

D. J. Chief Engr.
N. C. of G. S. S. S.
1862, No. 266.

4. These sums are now nearly expended and the platforms are still incomplete: as the works are absolutely necessary to enable the Salt Department to store the extra quantity of salt they are making this year - in fact the salt is already being stored on the new platforms as fast as portions of them are completed. I have taken upon myself to order their completion.

* up to 19th Decem.
= per salt.
1198-10-11 more
spent at Bala-
cheroo and
up to 1st Decem. last
610 Rs. at Kharas
= salt.

5. I have personally visited these platforms and satisfied myself that the revised rates for earthwork, proposed by Captain Beatty, one anna a cubic yard, is, considering the height the earth has to be raised, and the distance it has to be carried, still a very moderate charge.

6. The works are in salt swamps

95
removed from villages, consequently the price of labor must be higher than that paid for work of an ordinary description: but even under the most favorable circumstances, I believe that the rates sanctioned in the original Estimate, 8 pice a cubic yard, must prove quite insufficient.

7. The expenses now requiring sanction are Rs. 824-2-11 and Rs. 300-0-0 respectively or Rs. 1124-2-11 in total. I propose with the sanction of Government providing this amount from the sanctioned allocations of the two Salt Roads of the Vikragapatnam District leading from the Karaikal pass.

G. O. No. 2963
of 13th Oct. 1862

Sir I have the honor to be
Your most obedt. Servt.

R. B. Chambers
Superintending Engineer 1st Div.

No. 4 June 1820-1825-76
 1820-1825-244
 1820-1825-161-182

1820-1825-244
 1820-1825-161-182

The Sup. Engineer
 of the Division
 of the Army to Grant

Re: 1820-1825-244
 1820-1825-161-182

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