

D. Rubble Base. \$719863 is the estimate for the whole of the base of South Pier.

E. 306500 is the estimate for setting the concrete blocks in the whole length of South Pier.
 Estimate for completed Pier. length built being 3174 feet

This sum for extra rubble is not included in Mr. Parker's Estimate

J. H. Mowgood,
 Superintendent
 Harbor Works

Sub-heads of Estimate	Cost for September 1880	Cost for October 1880	Expenditure to end of October 1880	Total	Estimate as arranged in Budget in last P.W. Anti Office	Mr. Parkes' Estimate	Remarks
PRELIMINARY WORKS							
Marine Surveys	"	"	6408 2 2				
Railways							
Rails from England	"	"	138198 14 11				
Sleepers	"	"	39402 7 5				
Formation	"	"	69020 8 1				
Black Ground Original	"	"	48031 15 5				
do. South Pier	"	"	8306 1 2				
Buildings	"	"	64284 6 6	370352 7 8	380,000		
TOOLS AND PLANT USED ON PRELIMINARY WORKS							
Locomotive Engines	"	"	55171 3 8				
Rolling Stock	"	2824 15 9	26024 4 9				
Flaking Plant	"	"	143334 8 3				
Cranes & Machinery &c	"	"	242124 14 2				
General Tools	"	"	31605 9 8				
Office Furniture	"	"	4029 14 9	502490 7 3	420,000		
	299 6	642 10 6	6789 13 1	6789 13 1 A			
Total Plant & Preliminaries				879632 12	800,000		
CONCRETE BLOCK MAKING							
Blocks made 11595	6738 15 3	6593 12 5	1843951 15 3		200,000		
credit by 5716 blocks used on North Pier and 4862 used on South Pier			1408531 9 4				
Cost of blocks in yard 1006 in number				133420 5 11 B			
CONSTRUCTION OF PIERS							
North Pier							
Surf Bank complete	"	"	176586 4 9				
Rubble Base							
Stone tipped 33904 9/4 tons	12277 5	23461 15 4	664090 13 6				
Railway Extension	168 10	176 14	2166 8 3				
Land for quarrying	"	"	1056 5 11	883380 5	719,863		
Concrete Blocks 5716 set	"	"	761128 11 3				
Setting do 3587 1/2 bat. feet	4898 1 7	3807 6 11	157290 12 7	918414 7 10	306,500		
				1801794 8 3	2026863		
Carried over	84882 1 3	93207 10 11		2816847 10 2	3827363	2826863	

A. This sum of Rs 6789 not being for Plant used on Preliminary Works should be deducted from the total Rs 879632 in comparing the latter with Mr. Parkes' estimate of Rs 800,000

Estimate for total concrete Blocks on both Piers

B. Value of concrete Blocks in Stock at date

Estimate for total rubble base on North Pier (exceeded)

C. Rs 306500 is the estimate for setting Blocks on the whole North Pier

Estimate for complete North Pier to 3870 feet length built being 3587 feet, leaving 283 ft. to be built

Sub heads of Estimate	Estimate for September 1880			Estimate for October 1880			Expenditure to end of October 1880			Total			Estimate as arranged in P.M. Audit Office			Dr. Per. to Line	
Brought forward	84,882	1	3	93,207	10	11				281,684	10	2			382,736	1	28,26
South Pier																	
Surf Bank complete	"	"	"	"	"	"	6,935	9	3								
Rubble Base																	
Stone tipped 300700 3/4 tons	51,967	6	7	20,102	4	4	54,123	14	8								
Railway Extension	"	"	"	"	"	"	7,740	3	"								
Land for quarrying	"	"	"	"	"	"	1086	5	10								
Concrete Blocks 4862 set	"	"	"	"	"	"	6,740	14	1	61,799	2	9			71,980	3	D
Sitting 50 307 1/2. Unit fat	5,469	8	"	4,291	"	7	13,010	12	3						306,500	5	E
										7,774	18	10	4		13,984	10	1
																	20,268
Two Light houses	"	"	"	"	"	"	"	"	"	"	"	"	"	"	60,000	1	60,000
CONTINGENCIES																	
Protective Works North of Harbour and Groynes on beach	1246	5	2	573	"	1	68,218	1	9								
Intercepting Suer	914	14	10	455	15	2	22,742	4	1								
Other Charges	475	15	5	4,554	7	9	58,672	5	1	14,963	10	11					
Purchase of Mrs. Sadler's land	"	"	"	1,400	"	"	1,400	"	"	1,400	"	"			15,103	2	11
																49,137	49,137
ESTABLISHMENT																	
Office contingencies	10	9	6	4	"	"	3644	4	4								
Travelling Allowances	66	5	8	89	8	"	29,162	15	5								
Medical	"	"	"	"	"	"	359	15	8								
Expenses in Surveys	"	"	"	"	"	"	5,119	11	11								
Estimate for Extra public	"	"	"	"	"	"				282,544	10	5			282,544	10	5
	14,908	3	5	12,765	5	7				46,458	35	10	7		58,507	90	51,50
MATERIALS IN STORE																	
Small Stores							2929	2	3								
Building Materials							70	6	"								
English Cement							104,958	3	5								
Indian do							3917	8	9								
Twine							8972	2	3								
Metals							19,298	8	5								
Fuel							24,464	12	11								
Thatchers' Materials							"	"	"								
Painters' Stores							2826	"	10								
House Fittings							5	12	"								
Cordage							4221	3	"								
Miscellaneous							5421	9	4								
Spare gear for machinery							6400	"	"	189,485	5	2					
	14,908	3	5	12,765	5	7				482,932	15	9					

20.12.1880

J. M. 1865/80

24th November 1880.
J. M.

W
We are now in
communication with
Mr. Thos. Ford re
the expenses on in-
dividual subvents -

S¹⁵/m

No immediate
action. Another time is
being taken in morning

Atty

16.12.80

16/12/80
L. J. J. J.

P. W. C. No 7865.

FROM THE EXAMINER P. W. ACCOUNTS,

MADRAS.

TO THE CHIEF ENGINEER,

P. W. DEPARTMENT.

NO. 31/10-11.

DATED 11 DECEMBER 1880.

RECD. 14/12/80
No 292 W of 27 Feb 1881

Recorded

S¹⁵/m

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ENCLOSURE I.

MADRAS HARBOR WORKS---FORWARDING
THE STATEMENT OF OUTLAY UP TO END
OF SEPTEMBER 1880 ON THE---
October

FROM MAJOR D.H. TRAIL R.E.

OFFG. EXAMINER P.W. ACCOUNTS,

MADRAS.

TO THE CHIEF ENGINEER,

PUBLIC WORKS DEPARTMENT.

NO. 31 E.W.

MADRAS, 11th DECEMBER 1880.

Supd B

SIR,

I HAVE THE HONOR TO FORWARD THE STATEMENT, SHEWING
THE OUTLAY ON THE MADRAS HARBOR WORKS UP TO END OF OCTOBER
1880, DULY CHECKED AND SLIGHTLY ALTERED TO AGREE WITH THE
BOOKS OF THIS OFFICE, AND REQUEST THE FAVOR OF EARLY
ORDERS ON THE EXCESSSES OVER CERTAIN INDIVIDUAL SUB-HEADS,
REFERRED TO IN MY NO. 21 E.W. DATED 10th. OCTOBER 1880.

I HAVE THE HONOR TO BE,

SIR,

YOUR MOST OBEDIENT SERVANT.

D. H. Trail

MAJOR R. E.

OFFG. EXAMINER P.W. ACCOUNTS.