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(2) Date of repair 20-8-86  
(3) Initials of the Referencer GVV

# TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

P.W.D DEPARTMENT

|          |           |        |
|----------|-----------|--------|
| G.O. No. | 3466-W    | Press. |
| B.P. No. |           | Mis.   |
| Dated    | 31-8-1878 | 197    |

R.R.  
Not to be folded or roughly handled.

3466  
1

GOVERNMENT OF MADRAS.  
PUBLIC WORKS DEPARTMENT.

31st August 1878, No. 3,466 W.

Buildings and Roads.  
Civil Works.

Read the following paper:—

No. 357. From F. N. THOROWGOOD, Esq., Superintendent of the Madras Harbour Works, to the Secretary to Government, Public Works Department, Buildings and Roads, dated Madras, 22nd August 1878, No. 27 W.

I HAVE the honor to submit herewith a statement of expenditure on the Harbour Works up to 31st July 1878.

2. I regret that I should again send this statement in to Government at so late a date, but my regular Accountant is absent on two months' privilege leave, and the nature of the accounts is such that it takes some little time for the Acting Accountant to get accustomed to them.

3. The next month's accounts shall be submitted in proper time.

*Outlay on Madras Harbour Works up to 31st July 1878.*

| Heads of Estimate.                              | Cost for June 1878. | Cost for July 1878. | Cost to end of July 1878. | Total Cost.    | Estimate. |
|-------------------------------------------------|---------------------|---------------------|---------------------------|----------------|-----------|
| <i>Preliminary Works.</i>                       | RS. A. P.           | RS. A. P.           | RS. A. P.                 | RS. A. P.      | RS.       |
| Detailed survey, taking section, soundings, &c. | 86 10 0             | 104 3 0             | 4,206 13 0                | 10,067 11 5    | 5,000     |
| Marine survey ..                                | 120 8 3             | 31 5 6              | 5,860 14 5                |                |           |
| Recovery ..                                     | 35 0 0              | ..                  | ..                        | ..             | ..        |
| <i>Railways—</i>                                | ..                  | ..                  | 1,38,698 14 11            | 2,46,271 6 11  | 1,50,000  |
| Rails from England ..                           | ..                  | ..                  | 39,385 7 5                |                |           |
| Sleepers ..                                     | ..                  | ..                  | 68,187 0 7                |                |           |
| Formation..                                     | ..                  | ..                  | ..                        | ..             | ..        |
| Opening quarries ..                             | 17 11 9             | 7 8 7               | 2,432 8 11                | 2,432 8 11     | 10,000    |
| Preparing block-ground ..                       | 214 1 0             | 60 12 9             | 44,228 12 4               | 44,228 12 4    | 65,000    |
| Jetties for loading stone ..                    | 144 11 0            | 521 12 4            | 58,530 15 3               | 58,530 15 3    | 45,000    |
| Buildings ..                                    | ..                  | ..                  | 1,220 6 4                 | 1,220 6 4      | 75,000    |
| Land ..                                         | ..                  | ..                  | ..                        | ..             | 30,000    |
| <i>Plant.</i>                                   | ..                  | ..                  | 44,329 13 8               | 44,329 13 8    | 60,000    |
| Locomotive Engines ..                           | 785 10 0            | 975 1 1             | 15,415 7 9                | 15,415 7 9     | 35,000    |
| Rolling-stock ..                                | 134 11 8            | 517 14 3            | 1,40,630 12 4             | 1,40,630 12 4  | 1,45,000  |
| Floating plant ..                               | 768 10 10           | 5,860 2 5           | 2,66,544 15 7             | 2,66,544 15 7  | 1,25,000  |
| Machinery, cranes, &c. ..                       | 394 10 3            | 313 14 0            | 31,788 15 8               | 31,788 15 8    | 50,000    |
| Quarry and general tools ..                     | 0 8 0               | 40 2 0              | ..                        | ..             | ..        |
| Recovery ..                                     | 2 8 0               | ..                  | 716 10 9                  | 716 10 9       | 3,000     |
| Buoys and beacons ..                            | ..                  | 1 0 0               | 3,979 5 9                 | 3,979 5 9      | 2,000     |
| Office furniture ..                             | ..                  | ..                  | ..                        | ..             | ..        |
| <i>CONSTRUCTION OF PIERS.</i>                   | ..                  | ..                  | ..                        | ..             | ..        |
| <i>North Pier.</i>                              | ..                  | ..                  | 1,74,815 14 11            | 1,74,815 14 11 | 2,37,180  |
| Surf bank ..                                    | 4,805 8 7           | 8,683 13 5          | 81,310 7 1                | 81,310 7 1     | 4,82,680  |
| Rubble base ..                                  | 1,875 12 7          | 2,085 4 8           | 46,121 15 7               | 46,121 15 7    | 3,06,500  |
| Concrete block-setting ..                       | ..                  | ..                  | ..                        | ..             | 30,000    |
| Light-house ..                                  | ..                  | ..                  | 1,770 5 10                | 1,770 5 10     | 1,00,000  |
| Extra rubble ..                                 | ..                  | ..                  | ..                        | ..             | ..        |

## • Outlay on Madras Harbour Works up to 31st July 1878—continued.

| Heads of Estimate.                                            | Cost for<br>June 1878. | Cost for<br>July 1878. | Cost to end of<br>July 1878. | Total Cost.     | Estimate. |
|---------------------------------------------------------------|------------------------|------------------------|------------------------------|-----------------|-----------|
| <i>South Pier.</i>                                            | RS. A. P.              | RS. A. P.              | RS. A. P.                    | RS. A. P.       | RS.       |
| Surf bank .. ..                                               |                        | 0 8 0                  | 66,274 7 0                   | 66,274 7 0      | 2,37,180  |
| Rubble base .. ..                                             | 7,125 6 6              | 6,390 5 0              | 77,868 10 5                  | 77,868 10 5     | 4,92,680  |
| Recovery .. ..                                                |                        | 4 0 0                  |                              |                 |           |
| Concrete block-setting .. ..                                  | 1,351 4 6              | 1,663 9 11             | 17,654 8 6                   | 17,654 8 6      | 3,06,500  |
| Light-house .. ..                                             |                        |                        |                              |                 | 30,000    |
| Extra rubble .. ..                                            |                        |                        |                              |                 | 1,00,500  |
| Concrete block-making for North<br>and South Piers.           | 12,011 2 2             | 29,141 10 4            | 3,78,421 1 7                 | 3,78,421 1 7    | 20,01,000 |
| Recovery .. ..                                                | 4 14 0                 | 9 7 0                  |                              |                 |           |
| <i>Establishment.</i>                                         |                        |                        |                              |                 |           |
| Salaries .. ..                                                | 2,783 9 9              | 2,780 0 0              | 1,30,821 1 3                 |                 |           |
| Office contingencies .. ..                                    | 63 7 8                 | 86 7 6                 | 2,182 11 5                   |                 |           |
| Travelling allowances .. ..                                   | 408 13 5               | 437 14 7               | 10,788 12 10                 | 1,52,961 5 11   | 2,45,690  |
| Medical .. ..                                                 |                        | 0 5 0                  | 168 12 6                     |                 |           |
| <i>Contingencies.</i>                                         |                        |                        |                              |                 |           |
| Protective works, north of Har-<br>bour.                      |                        | 346 9 6                | 8,211 10 3                   |                 |           |
| Other contingencies .. ..                                     | 1,131 15 3             | 2,179 7 6              | 18,508 13 7                  | 26,720 7 10     | 2,45,690  |
| Recovery .. ..                                                |                        | 34 7 7                 |                              |                 |           |
| Maintenance .. ..                                             |                        |                        |                              |                 | 2,45,690  |
| Materials at site for Specific<br>Works.                      | 34,066 7 0             | 61,099 7 9             | 18,90,376 14 4               | 18,90,376 14 4  |           |
| English Portland Cement and other<br>General Stores in Stock. | 2,808 7 1              | 5,397 14 6             | 10,505 15 7                  | 10,505 15 7     |           |
| Total .. ..                                                   | 56,667 10 2            | 72,685 14 7            | 20,62,151 12 10              | 20,62,151 12 10 |           |

MADRAS,  
22nd August 1878.(Signed) F. N. THOROWGOOD,  
Superintendent, Madras Harbour Works.

No. 358.

ORDER THEREON, 31st August 1878, No. 3,466 W.

ORDERED to be recorded.

(True Extract.)

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

(True Copy.)

Major, R.E.,  
Under Secy. to Govt., P.W.D.To the Superintendent, Madras Harbour Works.  
" Examiner of Public Works Accounts.Exd. T. D. Ryan.  
Spare Copies

BUILDINGS AND ROADS  
CIVIL WORKS.

Govt. of (1878) Madras.

PUBLIC WORKS.

THE SUPERINTENDENT,  
MADRAS HARBOUR WORKS.  
&c., &c., &c.

Dated August 31st.

Issued

Recd.

Encl.

G. O., 31st August 1878, No. 2,466 W.

AUGUST.

No. 357-359.

Madras Harbour Works.—The Statement  
of expenditure on the — for July 1878,  
recorded.

29/8

Outlay on Madras Harbour Works up to 31st July 1878

Heads of Estimate

Cost for June 1878 Cost for July 1878 Cost for end of July 1878 Total Cost Estimate

Remarks

PRELIMINARY WORKS

|                                 |          |          |              |             |        |
|---------------------------------|----------|----------|--------------|-------------|--------|
| Detailed Survey taking sections |          |          |              |             |        |
| Soundings &c &c                 | 86 10 "  | 104 3 "  | 4206 13 "    | 10067 11 5  | 5000   |
| Marine Survey                   | 120 8 3  | 31 6 6   | 5860 14 5    |             |        |
| Railways                        |          |          |              |             |        |
| Rails from England              |          |          | 138698 14 11 | 246271 6 11 | 150000 |
| Sleepers                        |          |          | 39385 7 5    |             |        |
| Formation                       |          |          | 68187 7      |             |        |
| Opening Quarries                | 17 11 9  | 7 8 7    | 2432 3 11    | 2432 3 11   | 10000  |
| Preparing Block ground          | 214 1 "  | 60 12 9  | 44228 12 4   | 44228 12 4  | 65000  |
| Jetty for loading stone         | " " "    | " " "    | " " "        | " " "       | 15000  |
| Buildings                       | 146 11 " | 521 12 4 | 58530 15 3   | 58530 15 3  | 75000  |
| Land                            | " " "    | " " "    | 1220 6 4     | 1220 6 4    | 30000  |

PLANT

|                          |           |          |             |             |        |
|--------------------------|-----------|----------|-------------|-------------|--------|
| Locomotive Engines       |           |          | 44329 13 8  | 44329 13 8  | 60000  |
| Rolling Stock            | 785 10 "  | 975 1 1  | 15415 7 9   | 15415 7 9   | 35000  |
| Floating Plant           | 134 11 8  | 517 14 3 | 140630 12 4 | 140630 12 4 | 140000 |
| Machinery & cranes &c    | 768 10 10 | 5860 2 6 | 266544 15 7 | 266544 15 7 | 125000 |
| Quarry and General Tools | 394 10 3  | 313 14 " | 31788 15 8  | 31788 15 8  | 50000  |
| Buoys and Beacons        | 2 8 "     | " " "    | 716 10 9    | 716 10 9    | 8000   |
| Office Furniture         | " " "     | 1 " "    | 3979 5 9    | 3979 5 9    | 2000   |

CONSTRUCTION OF PIERS

North Pier

|                       |           |           |              |              |        |
|-----------------------|-----------|-----------|--------------|--------------|--------|
| Surf Banks            |           |           | 174815 14 11 | 174815 14 11 | 237180 |
| Rubble Base           | 4895 8 7  | 8683 13 5 | 81310 7 1    | 81310 7 1    | 82650  |
| Concrete Block piling | 1675 12 7 | 2083 4 8  | 46121 15 7   | 46121 15 7   | 306500 |
| Lighthouse            | " " "     | " " "     | " " "        | " " "        | 30000  |
| Extra Rubble          | " " "     | " " "     | 1770 5 10    | 1770 5 10    | 100000 |

South Pier

|                       |          |           |            |            |        |
|-----------------------|----------|-----------|------------|------------|--------|
| Surf Banks            |          | 6 "       | 66274 7 "  | 66274 7 "  | 27180  |
| Rubble Base           | 7125 6 6 | 6389 5 "  | 77868 10 5 | 77868 10 5 | 82650  |
| Concrete Block piling | 1351 4 6 | 1662 9 11 | 17954 8 6  | 17954 8 6  | 30000  |
| Lighthouse            | " " "    | " " "     | " " "      | " " "      | 30000  |
| Extra Rubble          | " " "    | " " "     | " " "      | " " "      | 100000 |

Concrete Blockmaking for  
North and South Piers

|  |          |           |            |            |         |
|--|----------|-----------|------------|------------|---------|
|  | 1204 2 2 | 2841 11 4 | 378421 1 7 | 378421 1 7 | 2001000 |
|--|----------|-----------|------------|------------|---------|

Spurred over 29718 9 1 55303 3 3 1710695 7 1710695 7

Heads of Estimate      Cost for June 1878      Cost for July 1878      Cost to end July 1878      Total Cost      Estimate      Remarks

No. 271r.

3466/5

From

THE SUPERINTENDENT,  
MADRAS HARBOUR WORKS.

To

Colonel C. A. Ford, R. E.  
 Secretary to Government P. W. Deptt.  
 Buildings & Roads  
 Fort St. George, MADRAS, 22<sup>nd</sup> August 1878.

SIR,

I have the honor to submit herewith  
 a Statement of expenditure on the Harbour  
 Works up to July 31<sup>st</sup> 1878.

2. I regret that I should again send  
 this statement in to Government at so late  
 a date, but my regular Accountant is  
 absent on two months privilege leave  
 and the nature of the accounts is  
 such that it takes some little time for  
 the Acting Accountant to get accustomed  
 to them.

3. The next month's accounts shall  
 be submitted in proper time.

I have the honor to be  
 Sir  
 Your most Obedient Servant  
 J. H. Morrowgood.  
 Superintendent  
 Madras Harbour Works.

J. H. Morrowgood.  
 Superintendent  
 Madras Harbour Works

Madras Harbour Works Office  
 22<sup>nd</sup> August 1878

Duff  
 22/8

ESTABLISHMENT

|                       |          |          |             |                      |
|-----------------------|----------|----------|-------------|----------------------|
| Salaries              | 2783 9 9 | 2780 - - | 1308 11 3   | } 152561 5 11 245640 |
| Office Contingencies  | 53 7 6   | 86 7 6   | 2152 11 5   |                      |
| Travelling Allowances | 108 13 5 | 137 14 7 | 19758 12 10 |                      |
| Medical               | - - -    | - - -    | 168 12 5    |                      |

CONTINGENCIES

|                                     |           |            |                     |              |
|-------------------------------------|-----------|------------|---------------------|--------------|
| Protection Works North of Harbours. | 346 9 6   | 82 11 10 8 | } 26720 7 10 245640 |              |
| Other Contingencies                 | 1121 15 3 | 2179 7 6   |                     | 18508 13 7   |
| Maintenance                         |           |            |                     |              |
|                                     | 34036 7   | 81099 7 9  | 1890376 14 4        | 1890376 14 4 |

|                                      |            |            |              |
|--------------------------------------|------------|------------|--------------|
| Materials at Site for Specific Works | 5297 14 5  | 12505 15 7 | 10505 15 7   |
| English Portland Cement and other    | - - -      | - - -      | - - -        |
| General Stores on Stock              | 25289 10 3 | 6188 8 5   | 161269 14 11 |

Total      56667 10 2      72685 14 7      2062151 12 10      2062151 12 10

S.O. 297010 - 23.7.78

7-19614  
Buildings & Roads

From The Superintendent  
Madras Harbour Works

No 2711.

Dated 22<sup>nd</sup> August 1878

No of Enclosures 1

No 3466 Wg 31 Aug 78.  
Recorded  
out 26/8

Supt. M. H. Marks  
E. S. D. & Coeff 16-9-78.  
Expenditure

Submits Statement of Expenditure  
for July 1878 and regrets the  
delay

To 204 24.8.78

On 26.8.78. Cdt. 31.8.78

9417

Govt. of (1878) Madras.

PUBLIC WORKS.

To

Suplt. Harbour Works

Dated

Issued

Recd.

Encl.

G. O., 31 Aug 1878, No. 34662

Nos. 35745-358

Madras Harbour works

Statement of Expen-  
diture on the — for Aug 78.  
Recorded

Intro. in Repts.