

Public Works (1893) Department.

RAILWAY BRANCH.

G.O., No. 893R

DATED 18th May

[Despatch Abstract.]

Office and House accommodation for the Railway

Staff at Vizagapatam. — Orders of the Govt of

India on certain proposals for the provision and
Construction of —, Communicated to the Engineer
in-Chief, East Coast Railway, with instructions
as regards preparation of plans, &c, for temporary
accommodation at Waltair.

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.
	2335 R		29-9-92				
	551-2 R		15-3-93				

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

18TH MAY 1893, No. 893 R., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Railway.

Read the following paper :—

From the Secretary to the Government of India, Public Works Department (Railway Construction), to the Joint Secretary to the Government of Madras, Public Works Department, Railway Branch, dated Simla, the 4th May 1893, No. 452 R.C.

I am directed to acknowledge the receipt of your letter No. 552 R., dated 15th March 1893, forwarding, for orders, a letter from the Engineer-in-Chief of the East Coast State Railway containing proposals for the provision and construction of office and house accommodation for the railway staff at Vizagapatam (Waltair).

2. The Government of Madras recommend that Vizagapatam be recognized as

	RS.	
• For Manager	37,084	the head-quarters of the line and that
" Examiner	8,892	sanction be given to the construction of
" Storekeeper	8,892	office accommodation at that place to the
" Assistant to Manager	6,905	extent of Rs. 63,560, as provided in the
		revised estimates, and of officers' quarters
		at a cost of Rs. 61,773.*

3. It is observed that the construction of a house for the Manager at a cost of Rs. 37,084 has already been sanctioned by the local Government. On this point I am directed to invite attention to Public Works Department Code, volume I, chapter XI, paragraph 17, and I am to point out that this sum is altogether in excess of that admissible under the rules for the construction or purchase of residences for Government officials.

4. With regard to the general question I am to say that, in the opinion of the Government of India, it is premature to decide as to the best location for the permanent head-quarters of the East Coast Railway at present, and that, under the circumstances, it is advisable that only cheap temporary offices should be provided at Waltair and that cheap temporary staff quarters be built there for such of the staff as cannot be accommodated in buildings obtainable on rent.

5. It is desirable that the strictest economy should be exercised in the provision of even temporary accommodation. The main object to be aimed at is to get the line opened out to the greatest extent possible by means of the grants made available from time to time.

6. I am accordingly to request that the Engineer-in-Chief may be instructed to submit plans and estimates for the temporary accommodation which he may now propose to build at Waltair.

ORDER—dated 18th May 1893, No. 893 R., Public Works.

Communicated to Engineer-in-Chief, East Coast Railway, for early attention to para. 6.

(True Extract.)

Joint Secy. to Govt., P.W.D.,
Railway Branch.

To the Engineer-in-Chief, East Coast Railway.
,, Examiner of Accounts, East Coast Railway.

RAILWAY.

Govt. of {1893} Madras
PUBLIC WORKS.

Dated May, 18th.

Recd.

Encl.

G.O., 18th May 1893, No. 893 R.

MAY.

Office and House Accommodation for the Railway Staff at Vizagapatam

Orders of the Government of India on certain proposals for the provision and construction of —, communicated to the Engineer-in-Chief, East Coast Railway, with instructions as regards preparation of plans, &c., for temporary accommodation at Waltair.

No. 452 R. C.

GOVERNMENT OF INDIA.

All communications
should be addressed to
the Secretary.

PUBLIC WORKS DEPARTMENT.

RAILWAY Construction.

To
The Joint Secretary to the Government of
Madras, (Railway Branch),
Public Works Department.

Simla, the 4th May 1893.

Sir,

I am directed to acknowledge the receipt of your letter No. 552 R., dated 15th March 1893, forwarding for orders, a letter from the Engineer-in-Chief of the East Coast State railway containing proposals for the provision and construction of office and house accommodation for the railway staff at Vizagapatam (Waltair).

2. The Government of Madras recommend that Vizagapatam be recognized as the head quarters

quarters of the line; and that sanction be given to the construction of office accommodation at that place to the extent of Rs 63,560/-

as provided in the revised estimates, and of officers' quarters at a cost of Rs 61,773.

* For Manager	Rs 37,084
" Examiner	" 8,892
" Storekeeper	" 8,892
" Assistant to Manager }	" 6,905

3. It is observed that the construction of a house for the Manager at a cost of Rs 37,084 has already been sanctioned by the Local Government. On this point I am directed to invite attention to Public Works Department Code, Volume I, Chapter VI, paragraph 17, and I am to point out that this sum is altogether in excess of that admissible under the rules for the construction or purchase of residences for Government officials.

4. With regard to the general question I am to say that in the opinion of the Government of India it is premature to decide as to the best location for the permanent

permanent head quarters of the East Coast railway at present; and that under the circumstances it is advisable that only cheap temporary offices should be provided at Waltair, and that cheap temporary staff quarters be built there for such of the staff as cannot be accommodated in buildings obtainable on rent.

5. It is desirable that the strictest economy should be exercised in the provision of even temporary accommodation. The main object to be aimed at is to get the line opened out to the greatest extent possible by means of the grants made available from time to time.

6. I am accordingly to request that the Engineer-in-Chief may be instructed to submit plans and estimates for the temporary accommodation which he may

now

now propose to build at Wattair.

I have the honour to be,

Sir,

Your most obedient Servant,

H. O. Malloghan
Secretary.

Documents accompanying.

- Nil -

Recd: 10. 5. 93

125 e 8/14.1.93
200 140 e 8/14.1.93
200 551-278/15.3.93
4716 e 9/14.11.92
2335 e 8/29.9.92

12893 R 8/18 May/93.

16 May
Communicated to
Genl in C. East Coast
for enf attention to
para 6

W. H. L.
13/5

The Genl in Chief
C. of R. in command

13/5
12/5

EAST COAST RAILWAY.

VIZAGAPATAM DIVISION.

From Mile 195·006 to 252·032 and
Branch to Vizagapatam 6·705 Miles.

REVISED ESTIMATES.

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

FROM MILE 195.006 TO 252.032 AND BRANCH TO VIZAGAPATAM 6.705 MILES.

REVISED ESTIMATES.

5' 6" GAUGE.

GENERAL ABSTRACT.

Heads of Account.	SUB-HEADS.				MAIN HEADS	
	Material from England.	Expenditure in India.	Total Cost.	Rate per mile.	Total Cost.	Rate per mile.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
III. Formation ...	...	...	...	...	8,81,560	13,832.5
1. Earthwork ...	...	8,81,560	8,81,560	13,832.5		
IV. Bridge Work ...	...	...	...	...	16,38,359	25,707.4
1. Large Bridges ...	2,74,828	8,20,441	10,95,269	17,185.8		
2. Minor Bridges ...	28,301	5,14,789	5,43,090	8,521.6		
V. Fencing ...	...	...	...	...	3,14,786	4,939.2
1. Fencing ...	1,65,947	92,588	2,58,535	4,056.6		
2. Road Crossings ...	...	51,649	51,649	810.4		
3. Mile and Gradient Posts ...	...	4,602	4,602	72.2		
VII. Ballast and Per- manent Way ..	...	...	...	...	23,26,390	36,503.3
1. Ballast ...	...	3,84,827	3,84,827	6,038.3		
2. Permanent Way ...	8,47,115	10,94,448	19,41,563	30,465.0		
VIII. Stations and Buildings ...	...	...	...	...	8,44,482	13,250.7
1. Stations and Offices.	...	1,94,330	1,94,330	3,049.2		
3. Staff Quarters ...	...	4,84,067	4,84,067	7,595.5		
4. Station Machinery...	61,956	1,04,129	1,66,085	2,606.0		
IX. Plant ...	...	...	...	...	5,56,800	8,736.7
1. Engineering ...	...	39,913	39,913	626.3		
2. Locomotive ...	...	4,50,000	4,50,000	7,060.9	...	...
3. Carriage and Wagon	...	50,000	50,000	784.5	...	...
4. Station and Office Furniture ...	...	16,887	16,887	265.0		
XII. General Charges...	...	...	...	...	3,16,108	4,960.1
2. Engineering ...	...	3,16,108	3,16,108	4,960.1		
Total...	13,78,147	55,00,338	68,78,485	1,07,929.9	68,78,485	1,07,929.9
					Length of Division in miles... 63.731	
					Rate per mile, Rs... 1,07,929.9	

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head III.....FORMATION.

Sub-Head I Earthwork.

Amount Rs. 8,81,560. Equivalent to Rs. 13,832.5 per mile.

REFERENCES.

Type Drawing—No. R. 4.

Class of Earthwork.	Quantity.	Rate.	Per	Amount.	Total.
		Rs. A.		Rs.	Rs.
Banks ..	109,042,152 C. Ft.	4 8	1000	4,90,690	
Cuttings (sand and earth) ...	5,217,485 C. Ft.	5 0	1000	26,087	
Do Laterite and Murum ...	7,163,175 C. Ft.	15 0	1000	1,07,448	
Do Rock ...	390,259 C. Ft.	25 0	1000	9,756	
Do Ross Hill ..	2,937,147 C. Ft.	70 0	1000	2,05,600	
Total...				8,39,581	
Add Contingencies @ 5 per %...				41,979	
Grand Total, Rs...				...	8,81,560

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES

5' 6" GAUGE.

Abstract of Cost of Large Bridges.

No. of Bridge.	Mileage.	No of Spans.	Width of Span.	Amount.	Remarks.
				Rs.	
4	195.8	6	100' Girder	2,47,451	Anakapilly River.
166	237.8	5	100' do.	2,54,707	Bhumsinga do
220	251.9	4	100' do.	1,68,049	Nellimerla do.
3	195.5	1	40' do.	9,881	
52	210.2	9	40' do.	1,18,249	Narwa do.
167	238.4	2	40' do.	34,028	
67	213.4	3	20' do.	9,062	
87	217.6	5	20' do.	14,221	
97	219.3	6	20' do.	20,546	
115	221.1	4	20' do.	17,771	
128	224.6	3	20' do.	9,272	
36	205.1	4	20' Arch	18,516	
41	205.9	3	20' do.	8,707	
70	214.2	5	20' do.	15,475	
145	229.9	3	20' do.	12,563	
153	233.6	8	20' do.	47,002	
161	236.5	4	20' do.	15,962	
164	237.2	4	20' do.	19,189	
219	251.1	4	20' do.	19,425	
<i>Branch Line.</i>					
12	2.0	1	40' Girder	21,044	
18	3.8	3	20' do.	14,149	
Total Rs...				10,95,269	
Material from England, Rs...				2,74,828	
Expenditure in India. Rs ..				8,20,441	
Total, Rs...				10,95,269	

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head IV.....BRIDGE WORK.

Sub-Head 1.....Large Bridges.

Name of Work.....Bridge No. 4. Mileage 195.8. 6 Spans of 100' Girder.
Height of Bank 24'. Depth of Foundation 21'.

Amount Rs. 2,47,451.

REFERENCES.

Type Drawing—No. G. 5

Abstract.

Quantity.	Sub-Heads.	Rate.	Per	Amount.	Total.
		Rs. A.		Rs.	Rs.
670,000 C. Ft.	Wet Excavation ...	30 0	1000	20,100	
73,500 C. Ft.	Masonry ...	60 0	100	44,100	
2,452 C. Ft.	Coping ...	75 0	100	1,839	
375,000 C. Ft.	Pitching ...	10 0	100	37,500	
440.43 Tons.	Ironwork in Girders, English cost...	210 0	Ton	92,490	
440.43 Tons.	Do. Indian cost...	90 0	Ton	39,639	
Total...				2,35,668	
Add Contingencies @ 5 per %.				11,783	
Grand Total, Rs..				...	2,47,451
Material from England, Rs...				...	92,490
Expenditure in India, Rs...				...	1,54,961
Grand Total, Rs. ...				...	2,47,451

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head IV.....BRIDGE WORK.

Sub-Head 1.....Large Bridges.

Name of Work.....Bridge No. 166. Mileage 237.8. 5 Spans of
100' Girder. Height of Bank 28'. Depth
of Foundation 30½'. North abutment on
2-16' wells sunk 40' deep.

Amount Rs. 2,54,707.

REFERENCES.

Type Drawing—No. G. 5.

Abstract.

Quantity.	Sub-Heads.	Rate.	Per	Amount.	Total.
		Rs. A.		Rs.	Rs.
1,000,000 C. Ft.	Wet Excavation ...	45 0	1000	45,000	
16,084 C. Ft.	Well Sinking ...	15 0	100	2,413	
21,566 C. Ft.	Concrete... ..	16 0	100	3,451	
105,945 C. Ft.	Masonry ...	60 0	100	63,567	
11,545 C. Ft.	Do. in wells ...	45 0	100	5,195	
1,864 C. Ft.	Coping ...	75 0	100	1,398	
80,300 C. Ft.	Pitching ...	10 0	100	8,030	
11.39 Tons	16' Well curbs and bond rods	300 0	Ton	3,417	
367.025 Tons	Ironwork in Girders, English cost	210 0	Ton	77,075	
367.025 Tons	Do. Indian cost	90 0	Ton	33,032	
Total...				2,42,578	
Add Contingencies @ 5 per %...				12,129	
Grand Total, Rs...				...	2,54,707
Material from England, Rs...				...	77,075
Expenditure in India, Rs...				...	1,77,632
Grand Total, Rs....				...	2,54,707

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head IV.....BRIDGE WORK.

Sub-Head 1.....Large Bridges.

Name of Work.....Bridge No. 220. Mileage 251.9. 4 Spans of 100' Girder.
Height of Bank 30'. Depth of Foundation 30'.

Amount Rs. 1,68,049.

REFERENCES.

Type Drawing—No. G. 5.

Abstract.

Quantity.	Sub-Heads.	Rate.	Per	Amount.	Total.
		Rs. A.		Rs.	Rs.
375,000	C. Ft. Wet Excavation ...	40 0	1000	15,000	
23,100	C. Ft. Concrete... ..	16 0	100	3,696	
73,500	C. Ft. Masonry	60 0	100	44,100	
1,553	C. Ft. Coping	75 0	100	1,165	
80,000	C. Ft. Pitching	10 0	100	8,000	
293.62	Tons Ironwork in Girders, English cost.	210 0	Ton	61,660	
293.62	Tons Do. Indian cost...	90 0	Ton	26,426	
Total...				1,60,047	
Add Contingencies @ 5 per %...				8,002	
Grand Total, Rs...				...	1,68,049
Material from England, Rs...				...	61,660
Expenditure in India, Rs...				...	1,06,389
Grand Total, Rs....				...	1,68,049

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head IV.....BRIDGE WORK.

Sub-Head 1.....Large Bridges.

Name of Work.....Bridge No. 3. Mileage 195.5. 1 Span of 40' Girder.
Height of Bank 10'. Depth of Foundation 12'.

Amount Rs. 9,881.

REFERENCES.

Type Drawing—Government Type.

Abstract.

Quantity.	Sub-Heads.	Rate.	Per	Amount.	Total.
		Rs. A.		Rs.	Rs.
22,904	C. Ft. Wet Excavation	20 0	1000	458	
5,164	C. Ft. Concrete	16 0	100	826	
11,235	C. Ft. Masonry	40 0	100	4,494	
153	C. Ft. Coping	75 0	100	115	
6,660	C. Ft. Pitching	10 0	100	666	
9.95	Tons Ironwork in Girders, English cost.	190 0	Ton	1,891	
9.95	Tons Do. Indian cost...	45 0	Ton	448	
6.47	Cwts. Corrugated and petty ironwork ...	14 0	Cwt.	91	
105.3	C. Ft. Timber	4 0	C. Ft.	421	
Total...				9,410	
Add Contingencies @ 5 per %...				471	
Grand Total, Rs...				...	9,881
Material from England, Rs...				...	1,891
Expenditure in India, Rs...				...	7,990
Grand Total, Rs...				...	9,881

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head IV.....BRIDGE WORK.

Sub-Head 1.....Large Bridges.

Name of Work Bridge No. 52. Mileage 210.2. 9 Spans of 40' Girder.
Height of Bank 12 $\frac{3}{4}$ '. Depth of Foundation 29 $\frac{1}{2}$ '.

Amount, Rs. 1,18,249.

REFERENCES.

Type Drawing—No. G. 22.

Abstract.

Quantity.	Sub-Heads.		Rate.	Per	Amount.	Total.
			Rs. A.		Rs.	Rs.
950,000	C. Ft.	Wet Excavation				
80,850	C. Ft.	Masonry	30 0	1000	28,500	
1,476	C. Ft.	Coping	40 0	100	32,340	
250,000	C. Ft.	Pitching	75 0	100	1,107	
89.55	Tons	Ironwork in Girders, English cost.	10 0	100	25,000	
89.55	Tons	Do. Indian cost...	190 0	Ton	17,015	
56.95	Cwts.	Corrugated and petty ironwork	45 0	Ton	4,030	
957.3	C. Ft.	Timber	14 0	Cwt.	797	
			4 0	C. Ft.	3,820	
Total...					1,12,618	
Add Contingencies @ 5 per %...					5,631	
Grand Total, Rs...					...	1,18,249
Material from England, Rs...					...	17,015
Expenditure in India, Rs...					...	1,01,234
Grand Total, Rs...					...	1,18,249

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head IV.....BRIDGE WORK.

Sub-Head 1.....Large Bridges.

Name of Work..... Bridge No. 167. Mileage 238.4. 2 Spans of 40' Girder. Height of Bank 25'. Depth of Foundation 16 $\frac{3}{4}$ '.

Amount Rs. 34,028.

REFERENCES.

Type Drawing—No. G. 4.

Abstract.

Quantity.	Sub-Heads.		Rate.	Per	Amount.	Total.
			Rs. A.		Rs.	Rs.
175,000	C. Ft.	Wet Excavation	20 0	1000	3,500	
15,750	C. Ft.	Concrete	16 0	100	2,520	
42,420	C. Ft.	Masonry	40 0	100	16,968	
500	C. Ft.	Coping	75 0	100	375	
33,420	C. Ft.	Pitching	10 0	100	3,342	
19.90	Tons	Ironwork in Girders, English cost	190 0	Ton	3,781	
19.90	Tons	Do. Indian cost	45 0	Ton	896	
12.78	Cwts.	Corrugated and petty ironwork	14 0	Cwt.	179	
211.8	C. Ft.	Timber	4 0	C. Ft.	847	
Total...					32,408	
Add Contingencies @ 5 per %...					1,620	
Grand Total, Rs...					...	34,028
Material from England, Rs...					...	3,781
Expenditure in India, Rs...					...	30,247
Grand Total, Rs...					...	34,028

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head IV.....BRIDGE WORK.

Sub-Head Large Bridges.

Name of Work.....Bridge No. 67. Mileage 213.4. 3 Spans of 20' Girder. Height of Bank 12'. Depth of Foundation 5'.

Amount Rs. 9,062.

REFERENCES.

Type Drawing—No. G. 3.

Abstract.

Quantity.	Sub-Heads.		Rate.	Per	Amount.	Total.
			Rs. A.		Rs.	Rs.
9,000	C. Ft.	Wet Excavation	20 0	1000	180	
9,530	C. Ft.	Masonry	40 0	100	3,812	
190	C. Ft.	Coping	75 0	100	143	
13,180	C. Ft.	Pitching	10 0	100	1,318	
10.02	Tons	Ironwork in Girders, English cost	190 0	Ton.	1,904	
10.02	Tons	Do. Indian cost	30 0	Ton.	301	
12.05	Cwts.	Corrugated and petty ironwork	14 0	Cwt.	169	
200.8	C. Ft.	Timber	4 0	C. Ft.	803	
Total...					8,630	
Add Contingencies @ 5 per % ...					432	
Grand Total, Rs....						9,062
Material from England, Rs....						1,904
Expenditure in India, Rs...						7,158
Grand Total, Rs....						9,062

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head IV.....BRIDGE WORK.

Sub-Head 1.....Large Bridges.

Name of Work Bridge No. 87. Mileage 217.6. 5 Spans of 20' Girder. Height of Bank 13'. Depth of Foundation 6 $\frac{3}{4}$ '.

Amount Rs. 14,221.

REFERENCES.

Type Drawing—No. G. 3.

Abstract.

Quantity.	Sub-Heads.		Rate.	Per	Amount.	Total.
			Rs. A.		Rs.	Rs.
16,000	C.Ft.	Wet Excavation	20 0	1000	320	
7,350	C.Ft.	Concrete	16 0	100	1,176	
10,920	C.Ft.	Masonry	40 0	100	4,368	
310	C.Ft.	Coping	75 0	100	233	
21,528	C.Ft.	Pitching	10 0	100	2,153	
16.7	Tons	Ironwork in Girders, English cost	190 0	Ton	3,173	
16.7	Tons	Do. Indian cost	30 0	Ton	501	
19.95	Cwts.	Corrugated and petty ironwork	14 0	Cwt.	279	
335.2	C.Ft.	Timber	4 0	C.Ft.	1,341	
Total...					13,544	
Add Contingencies @ 5 per % ...					677	
Grand Total, Rs....						14,221
Material from England, Rs....						3,173
Expenditure in India, Rs....						11,048
Grand Total, Rs....						14,221

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head IV.....BRIDGE WORK.

Sub-Head 1.....Large Bridges.

Name of Work Bridge No. 97. Mileage 219.3. 6 Spans of 20
Girder. Height of Bank 12½'. Depth of
Foundation 13'.

Amount Rs. 20,546.

REFERENCES.

Type Drawing—No. G. 3.

Abstract.

Quantity.	Sub-Heads.		Rate.	Per	Amount.	Total.
			Rs. A.		Rs.	Rs.
53,000	C.Ft.	Wet Excavation	30 0	1000	1,590	
7,875	C.Ft.	Concrete	16 0	100	1,260	
19,100	C.Ft.	Masonry	40 0	100	7,640	
273	C.Ft.	Coping	75 0	100	205	
25,194	C.Ft.	Pitching	10 0	100	2,519	
20.04	Tons	Ironwork in Girders, English cost	190 0	Ton	3,808	
20.04	Tons	Do. Indian cost	30 0	Ton	601	
23.90	Cwts.	Corrugated and petty ironwork	14 0	Cwt.	335	
402.4	C.Ft.	Timber	4 0	C. Ft.	1,610	
Total...					19,568	
Add Contingencies @ 5 per %...					978	
Grand Total, Rs....					...	20,546
Material from England, Rs....					...	3,808
Expenditure in India, Rs....					...	16,738
Grand Total, Rs....					...	20,546

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head IV.....BRIDGE WORK.

Sub-Head 1.....Large Bridges.

Name of Work.....Bridge No. 115. Mileage 222.1. 4 Spans of 20'
Girder. Height of Bank 18½'. Depth of
Foundation 9¾'.

Amount Rs. 17,771.

REFERENCES.

Type Drawing—No. G. 3.

Abstract.

Quantity.	Sub-Heads.		Rate.	Per	Amount.	Total.
			Rs. A.		Rs.	Rs.
60,000	C.Ft.	Wet Excavation	20 0	1000	1,200	
9,135	C.Ft.	Concrete	16 0	100	1,462	
17,955	C.Ft.	Masonry	40 0	100	7,182	
360	C.Ft.	Coping	75 0	100	270	
25,758	C.Ft.	Pitching	10 0	100	2,576	
13.36	Tons	Ironwork in Girders, English cost	190 0	Ton	2,538	
13.36	Tons	Do. Indian cost	30 0	Ton	401	
16.0	Cwts.	Corrugated and petty ironwork	14 0	Cwt.	224	
268.0	C.Ft.	Timber	4 0	C.Ft.	1,072	
Total...					16,925	
Add Contingencies @ 5 per %...					846	
Grand Total, Rs....					...	17,771
Material from England, Rs....					...	2,538
Expenditure in India, Rs....					...	15,233
Grand Total, Rs ...					...	17,771

Abstract.						Rate.		Per		Amount.		Total.	
Quantity.		Sub-Heads.				Rs. A.				Rs.		Rs.	
13,000	C.Ft.	Wet Excavation	...	...	...	20	0	1000		260			
4,725	C.Ft.	Concrete	...	...	...	16	0	100		756			
8,190	C.Ft.	Masonry	...	...	...	40	0	100		3,276			
188	C.Ft.	Coping	...	...	...	75	0	100		141			
12,196	C.Ft.	Pitching	..	...	...	10	0	100		1,220			
10-02	Tons	Ironwork in Girders, English cost	...		...	190	0	Ton		1,904			
10-02	Tons	Do. Indian cost	...		...	30	0	Ton		301			
12-05	Cwts.	Corrugated and petty ironwork	...		...	14	0	Cwt.		169			
200-8	C.Ft.	Timber	...	...	...	4	0	C.Ft.		803			
Total...										8,830			
Add Contingencies @ 5 per %...										442			
Grand Total, Rs...										...		9,272	
Material from England, Rs..										...		1,904	
Expenditure in India, Rs...										...		7,368	
Grand Total, Rs ..										...		9,272	

Quantity.		Sub-Heads.			Rate.	Per	Amount.	Total.
					Rs. A.		Rs.	Rs.
50,000	C.Ft.	Dry Excavation	...	...	10 0	1000	500	
2,100	C.Ft.	Concrete	...	...	16 0	100	336	
25,218	C.Ft.	Masonry	...	...	40 0	100	10,087	
3,088	C.Ft.	Do. in Arches	...	...	75 0	100	2,316	
559	C.Ft.	Coping	...	...	75 0	100	419	
39,762	C.Ft.	Pitching	...	...	10 0	100	3,976	
Total..							17,634	
Add Contingencies @ 5 per % ..							882	
Grand Total, Rs..							...	18,516
Material from England, Rs...							...	Nil.
Expenditure in India, Rs...							...	18,516
Grand Total, Rs...							...	18,516

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head IV BRIDGE WORK.

Sub-Head 1 Large Bridges.

Name of Work Bridge No. 41. Mileage 205.9. 3 Spans of
20' Arch. Height of Bank 15½'. Depth of
Foundation 5½'.

Amount Rs. 8,707.

REFERENCES.

Type Drawing—No. A. 9.

Abstract.

Quantity.	Sub-Heads.		Rate.	Per	Amount.	Total.
			Rs. A.		Rs.	Rs.
10,000	C.Ft.	Wet Excavation	...	...	200	
2,730	C.Ft.	Concrete	20 0	1000	437	
9,767	C.Ft.	Masonry	16 0	100	3,907	
2,316	C.Ft.	Do. in Arches	40 0	100	1,737	
356	C.Ft.	Coping	75 0	100	267	
17,436	C.Ft.	Pitching	75 0	100	1,714	
			10 0	100		
Total .					8,292	
Add Contingencies @ 5 per %					415	
Grand Total, Rs. .						8,707
Material from England, Rs. .						Nil
Expenditure in India, Rs. .						8,707
Grand Total, Rs. .						8,707

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head IV BRIDGE WORK.

Sub-Head 1 Large Bridges.

Name of Work Bridge No. 70. Mileage 214.2. 5 Spans of
20' Arch. Height of Bank 16'. Depth of
Foundation 13'.

Amount Rs. 15,475.

REFERENCES.

Type Drawing—No. A. 9.

Abstract.

Quantity.	Sub-Heads.		Rate.	Per	Amount.	Total.
			Rs. A.		Rs.	Rs.
33,000	C.Ft.	Wet Excavation	20 0	1000	660	
8,820	C.Ft.	Concrete	16 0	100	1,411	
16,755	C.Ft.	Masonry	40 0	100	6,702	
4,000	C.Ft.	Do. in Arches	75 0	100	3,000	
500	C.Ft.	Coping	75 0	100	375	
25,896	C.Ft.	Pitching	10 0	100	2,590	
Total...					14,738	
Add Contingencies @ 5 per %...					737	
Grand Total, Rs...						15,475
Material from England, Rs...						Nil
Expenditure in India, Rs...						15,475
Grand Total, Rs...						15,475

EAST COAST RAILWAY.

VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head IV.....BRIDGE WORK.

Sub-Head 1.....Large Bridges.

Name of Work.....Bridge No. 145. Mileage 229.9. 3 Spans of
20' Arch. Height of Bank 20'. Depth of
Foundation 5 $\frac{3}{4}$ '.

Amount Rs. 12,563.

REFERENCES.

Type Drawing—No. A. 10.

Abstract.

Quantity.	Sub-Heads.		Rate.	Per	Amount.	Total.
			Rs. A.		Rs.	Rs.
14,000	C.Ft.	Wet Excavation	...	20 0	1000	280
5,250	C.Ft.	Concrete	...	16 0	100	840
16,149	C.Ft.	Masonry	...	40 0	100	6,460
2,616	C.Ft.	Do. in Arches	...	75 0	100	1,962
271	C.Ft.	Coping	...	75 0	100	203
22,204	C.Ft.	Pitching	...	10 0	100	2,220
Total...					11,965	
Add Contingencies @ 5 per %...					598	
Grand Total, Rs...					...	12,563
Material from England, Rs...					...	Nil.
Expenditure in India, Rs...					...	12,563
Grand Total, Rs...					...	12,563

EAST COAST RAILWAY.

VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head IV.....BRIDGE WORK.

Sub-Head 1.....Large Bridges.

Name of Work.....Bridge No. 153. Mileage 233.6. 8 Spans
of 20' Arch. Height of Bank 26 $\frac{1}{2}$ '. Depth
of Foundation 11'.

Amount Rs. 47,002.

REFERENCES.

Type Drawing—No. A. 10.

Abstract.

Quantity.	Sub-Heads.		Rate.	Per	Amount.	Total.
			Rs. A.		Rs.	Rs.
90,000	C.Ft.	Wet Excavation	...	20 0	1000	1,800
15,750	C.Ft.	Concrete	...	16 0	100	2,520
56,700	C.Ft.	Masonry	...	50 0	100	28,350
6,910	C.Ft.	Do. in Arches	...	75 0	100	5,183
778	C.Ft.	Coping	...	75 0	100	584
63,270	C.Ft.	Pitching	...	10 0	100	6,327
Total...					44,764	
Add Contingencies @ 5 per % ...					2,238	
Grand Total, Rs...					...	47,002
Material from England, Rs...					...	Nil.
Expenditure in India, Rs...					...	47,002
Grand Total, Rs...					...	47,002

EAST COAST RAILWAY

VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head IV.....BRIDGE WORK.
 Sub-Head 1.....Large Bridges.
 Name of Work.....Bridge No. 161. Mileage 236.5. 4 Spans of 20'
 Arch. Height of Bank 20'. Depth of Founda-
 tion 8½'.

Amount Rs. 15,962.

REFERENCES
 Type Drawing—No. A. 10.

Abstract.

Quantity.	Sub-Heads.	Rate.	Per	Amount.	Total.
		Rs. A.		Rs.	Rs.
30,000	C.Ft. Wet Excavation...	20 0	1000	600	
8,925	C.Ft. Concrete ...	16 0	100	1,428	
18,898	C.Ft. Masonry ...	40 0	100	7,559	
3,455	C.Ft. Do. in Arches ...	75 0	100	2,591	
407	C.Ft. Coping ...	75 0	100	305	
27,186	C.Ft. Pitching ...	10 0	100	2,719	
Total...				15,202	
Add Contingencies @ 5 per %...				760	
Grand Total, Rs...				...	15,962
Material from England, Rs...				...	NIL.
Expenditure in India, Rs...				...	15,962
Grand Total, Rs...				...	15,962

EAST COAST RAILWAY.

VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head IV.....BRIDGE WORK.
 Sub-Head 1.....Large Bridges.
 Name of Work.....Bridge No. 164. Mileage 237.2. 4 Spans of 20'
 Arch. Height of Bank 18'. Depth of Founda-
 tion 16½'.

Amount Rs. 19,189.

REFERENCES.
 Type Drawing—No. A. 9.
Abstract.

Quantity.	Sub-Heads.	Rate.	Per	Amount.	Total.
		Rs. A.		Rs.	Rs.
65,000	C.Ft. Wet Excavation ..	20 0	1000	1,300	
8,925	C.Ft. Concrete ...	16 0	100	1,428	
25,537	C.Ft. Masonry ...	40 0	100	10,215	
3,455	C.Ft. Do. in Arches ...	75 0	100	2,591	
407	C.Ft. Coping ...	75 0	100	305	
24,362	C.Ft. Pitching ...	10 0	100	2,436	
Total ...				13,275	
Add Contingencies @ 5 per %...				914	
Grand Total, Rs...				...	19,189
Material from England, Rs...				...	NIL.
Expenditure in India, Rs...				...	19,189
Grand Total, Rs...				...	19,189

EAST COAST RAILWAY.

VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head IV.....BRIDGE WORK.
 Sub-Head I.....Large Bridges.
 Name of Work.....Bridge No. 219. Mileage 251.1. 4 Spans
 of 20' Arch. Height of Bank 22'.
 Depth of Foundation 10 $\frac{3}{4}$ '.

Amount Rs. 19,425.

REFERENCES.

Type Drawing—No. A. 10.

Abstract.

Quantity.	Sub-Heads.	Rate.	Per	Amount.	Total.
		Rs. A.		Rs.	Rs.
50,000 C.Ft.	Wet Excavation ...	20 0	1000	1,000	
12,600 C.Ft.	Concrete ...	16 0	100	2,016	
24,209 C.Ft.	Masonry ...	40 0	100	9,684	
3,389 C.Ft.	Do. in Arches ...	75 0	100	2,542	
326 C.Ft.	Coping ...	75 0	100	245	
30,138 C.Ft.	Pitching ...	10 0	100	3,013	
Total...				18,500	
Add Contingencies @ 5 per %...				925	
Grand Total, Rs...					19,425
Material from England, Rs.					Nil.
Expenditure in India, Rs...					19,425
Grand, Total Rs...					19,425

EAST COAST RAILWAY.

VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head IV.....BRIDGE WORK.
 Sub-Head I.....Large Bridges.
 Name of Work.....Bridge No. 12. Mileage 2.0. Vizagapatam
 Branch. Double Line. 1 Span of 40'
 Girder. Height of Bank 19 $\frac{1}{4}$ '. Depth of
 Foundation 5'.

Amount Rs. 21,044.

REFERENCES.

Type Drawing—No. G. 4.

Abstract.

Quantity.	Sub-Heads.	Rate.	Per	Amount.	Total.
		Rs. A.		Rs.	Rs.
44,000 C.Ft.	Wet Excavation ...	20 0	1000	880	
9,660 C.Ft.	Concrete ...	16 0	100	1,546	
24,941 C.Ft.	Masonry ...	40 0	100	9,976	
240 C.Ft.	Coping ...	75 0	100	180	
17,600 C.Ft.	Pitching ...	10 0	100	1,760	
19.90 Tons.	Ironwork in Girders, English cost	190 0	Ton.	3,781	
19.90 Tons.	Do. Indian cost	45 0	Ton.	896	
12.94 Cwts.	Corrugated and petty ironwork	14 0	Cwt.	181	
210.6 C.Ft.	Timber ...	4 0	C. Ft.	842	
Total...				20,042	
Add Contingencies @ 5 per %...				1,002	
Grand Total, Rs...					21,044
Material from England, Rs...					3,781
Expenditure in India, Rs...					17,263
Grand Total, Rs...					21,044

EAST COAST RAILWAY.

VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head IV.....BRIDGE WORK.

Sub-Head 1.....Large Bridges.

Name of Work.....Bridge No. 18. Mileage 3.8. Vizagapatam
Branch. Double Line. 3 Spans of 20' Girder.
Height of Bank 8½'. Depth of Foundation 5'.

Amount Rs. 14,149.

REFERENCES.

Type Drawing—Government Type.

Abstract.

Quantity.	Sub-Heads.		Rate.	Per	Amount.	Total.
			Rs. A.		Rs.	Rs.
18,000	C.Ft.	Wet Excavation ...	20 0	1000	360	
10,290	C.Ft.	Concrete ...	16 0	100	1,646	
9,501	C.Ft.	Masonry ...	40 0	100	3,800	
210	C.Ft.	Coping ...	75 0	100	158	
11,592	C.Ft.	Pitching ...	10 0	100	1,159	
20 04	Tons	Ironwork in Girders, English cost	190 0	Ton	3,808	
20 04	Tons	Do. Indian cost	30 0	Ton	601	
24 1	Cwts.	Corrugated and petty ironwork	14 0	Cwt.	337	
401 6	C.Ft.	Timber ...	4 0	C.Ft.	1,606	
Total...					13,475	
Add Contingencies @ 5 per %...					674	
Grand Total, Rs...					...	14,149
Material from England, Rs...					...	3,808
Expenditure in India, Rs...					...	10,341
Grand Total, Rs...					...	14,149

EAST COAST RAILWAY.

VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

MINOR BRIDGES.

5' 6" GAUGE.

Main Head IV—BRIDGE WORK.

Sub-Head 2—Minor Bridges.

Amount Rs. 5,43,090. Equivalent to Rs. 8,521.6 per mile.

EAST COAST

VIZAGAPATAM

REVISED

MINOR

Depth of Foundations in Ft.	Type.	Mileage.	Chainage.	Serial Number of Bridges.	Number of Spans.	Particulars.	Height of Bank.	Excavating foundations and filling and backing.				Concrete at Rs. 16 per 100 C. Ft.		Masonry at Rs. 30 per 100 C. Ft.	
								Excavation, Dry at Rs. 10 per 1000 C. Ft.		Excavation, Wet at Rs. 20 per 1000 C. Ft.		Quantity.	Cost.	Quantity.	Cost.
								Quantity.	Cost.	Quantity.	Cost.				
3 1/2	New	195-2	416,900	1	2	2 ft. SD	7 1/2	3,000	30	...	...	945	151	1,785	536
5 1/2	New	195-2	418,000	2	2	20 ft. G	7 1/2	10,000	100	...	...	3,990	638	3,658	1,097
4	New	195-9	420,920	5	1	20 ft. A	24	90,000	900	...	...	9,555	1529	14,741	4,423
3	New	196-2	422,320	6	1	2 ft. SD	8	2,800	28	...	...	805	129	1,072	322
15 3/4	New	196-3	423,100	7	1	20 ft. G	10 1/2	...	...	93,170	1963	3,078	492	23,101	6,930
3	New	196-7	425,000	8	1	2 ft. SD	3	2,332	23	...	...	679	109	2,323	697
5	New	196-8	425,373	9	1	6 ft. G	6	3,600	36	...	...	905	145	833	250
3	New	196-9	426,000	10	1	2 ft. SD	4	2,332	23	...	...	679	109	833	250
3	New	196-9	426,400	11	1	2 ft. SD	4	2,332	23	...	...	679	109	1,150	345
6	New	197-4	428,500	12	1	2 ft. SD	4	2,332	23	...	...	868	139	4,396	1,319
3	New	197-5	429,100	13	1	12 ft. SD	8 1/2	3,030	30	...	...	721	115	1,305	392
8 1/2	New	197-8	430,600	14	1	2 ft. G	9	6,713	67	...	...	994	159	8,128	2,438
6 1/2	Old	197-9	431,200	15	2	12 ft. SD	11	3,500	35	...	...	7,455	1193	9,790	2,937
7 1/2	New	198-4	433,650	16	4	12 ft. G	12	23,000	230	...	...	3,780	605	5,010	1,503
7	Old	198-5	434,700	17	1	6 ft. A	14	26,000	260	...	...	3,040	806	7,989	2,397
3	New	198-9	436,450	18	2	12 ft. A	15	22,000	220	...	...	2,520	403	917	275
4	New	199-2	438,000	19	1	2 ft. A	13 1/2	19,000	190	...	...	679	109	1,773	532
5 1/2	New	199-3	439,070	20	1	12 ft. SD	6	2,332	23	...	...	1,050	168	3,473	1,042
4 1/2	New	199-9	442,100	21	1	12 ft. G	4 1/2	1,000	40	...	...	2,100	336	5,992	1,798
6	New	200-3	441,050	22	1	12 ft. G	7 1/2	8,000	80	...	...	2,940	470	5,999	1,620
3	New	200-6	445,700	23	1	12 ft. G	12	15,000	150	...	...	2,625	420	669	201
4	New	200-8	446,800	24	1	12 ft. G	10 1/2	9,000	90	...	...	1,209	193	994	298
6 1/2	Old	200-9	448,200	25	1	2 ft. SD	8	2,800	28	...	...	1,050	168	5,973	1,792
8	New	201-5	448,900	26	1	12 ft. SD	6	3,000	30	...	...	1,890	302	15,770	4,731
3	Old	202-0	450,300	27	3	12 ft. A	12 1/2	2,000	30	60,000	1200	11,550	1848	1,050	315
8	New	202-2	452,900	28	1	2 ft. SD	17 1/2	...	...	...	...	1,365	218	4,778	1,433
2	Old	202-8	453,900	29	1	12 ft. SD	7	3,000	30	...	...	2,205	353	5,193	1,558
6	New	203-2	456,900	30	2	12 ft. A	11	6,000	60	...	...	...	...	2,664	799
4	New	203-5	459,500	31	2	12 ft. G	6	10,000	100	...	...	...	...	2,685	806
6	New	203-6	460,900	32	1	12 ft. G	6 1/2	10,000	100	...	...	1,052	168	917	275
4 1/2	New	203-7	461,200	33	1	12 ft. G	6	4,125	41	...	...	802	128	6,981	2,094
8	Old	203-9	461,800	34	2	12 ft. SD	4	3,000	30	...	...	1,260	202	13,512	4,054
6 1/2	New	205-2	462,800	35	2	20 ft. G	10 1/2	10,000	100	...	...	3,675	588	5,116	1,544
3	New	205-5	469,600	37	1	6 ft. A	13 1/2	10,000	100	...	...	...	...	4,666	1,400
3	New	205-6	471,600	38	1	6 ft. A	18	5,000	50	...	...	...	...	1,558	467
6 1/2	New	205-8	472,900	39	2	2 ft. SD	7 1/2	8,000	80	...	...	1,150	184	1,383	415
6	Old	206-0	474,000	40	1	2 ft. SD	9	3,532	35	...	...	1,057	169	2,159	648
3	New	206-1	474,700	43	1	6 ft. G	12	3,725	37	...	...	2,520	403	3,646	1,094
6 1/2	Old	206-6	476,600	45	1	6 ft. G	7 1/2	6,000	60	...	...	1,134	181	182	55
5 1/2	Old	207-5	482,600	46	3	10 ft. RO	1	530	5	...	...	339	54	11,130	3,339
2	New	207-9	484,350	48	5	10 ft. A	15	10,000	100	13,000	260	2,625	120	8,820	2,646
7 1/2	New	208-3	486,600	49	2	12 ft. SD	14	2,000	20	19,000	380	4,935	790	8,820	2,616

RAILWAY.

DIVISION.

ESTIMATES.

BRIDGES.

Arch Masonry at Rs. 75 per 100 C. Ft.	Coping at Rs. 75 per 100 C. Ft.	Flooring at Rs. 10 per 100 C. Ft.	English Material Girder Iron at Rs. 190 per ton.	Girder Iron Indian charges at Rs. 30 per ton.	Corrugated Iron and Petty Iron Work at Rs. 14 per Cwt.	Timber at Rs. 4 per C.Ft.	Total.	Contingencies @ 5 per %	Grand Total.
Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
...	...	200	150	...	...	...	...	...	867
...	...	147	110	5,517	552	6.68	1269	6.68	200
1737	1303	234	176	10,914	1091	...	...	...	...
...	...	157	118	...	...	...	...	...	...
...	...	146	110	4,242	424	3.34	635	3.34	100
...	...	129	97	...	...	...	...	...	...
...	...	106	80	828	83	0.79	150	0.79	24
...	...	129	97	...	...	...	...	...	...
...	...	129	97	...	...	...	...	...	...
...	...	171	128	...	...	...	...	...	...
...	...	130	98	2,286	229	1.49	283	1.49	45
...	...	199	149	...	...	...	...	...	...
...	...	174	131	5,658	566	2.98	566	2.98	89
2036	1527	292	219	13,604	1360	...	...	...	...
627	470	93	74	1,632	163	...	...	...	...
1018	764	212	159	8,684	868	...	...	...	...
...	...	129	97	...	...	...	...	...	...
...	...	98	74	1,158	116	1.49	283	1.49	45
...	...	122	92	1,968	197	1.49	283	1.49	45
...	...	162	122	3,798	380	1.49	283	1.49	45
...	...	146	110	2,994	299	1.49	283	1.49	45
...	...	157	118	...	...	...	...	...	...
...	...	143	107	...	...	...	...	...	...
509	382	159	119	5,616	562	...	...	...	...
2783	2087	213	160	10,668	1067	...	...	...	...
...	...	143	107	...	...	...	...	...	...
509	382	159	119	4,496	450	2.98	566	2.98	89
...	...	92	69	2,643	264	2.98	566	2.98	89
...	...	106	80	4,260	426	2.98	566	2.98	89
...	...	106	80	1,404	140	1.49	283	1.49	45
...	...	125	94	...	...	...	...	...	...
...	...	166	125	5,094	509	2.98	566	2.98	89
1544	1158	331	248	17,222	1722	...	...	...	...
797	598	98	74	1,848	185	...	...	...	...
...	...	122	92	1,248	125	0.79	150	0.79	24
...	...	259	194	...	...	...	...	...	...
...	...	213	160	...	...	...	...	...	...
...	...	84	63	2,360	236	0.79	150	0.79	24
...	...	122	92	1,248	125	0.79	150	0.79	24
...	...	43	32	...	...	...	...	...	...
1400	1050	240	180	12,336	1234	...	...	...	...
2250	1688	260	195	14,716	1472	...	...	...	...
...	...	200	150	...	...	...	...	...	...
650	488	160	120	3,780	378	...	...	...	...
Carried over							1,31,584	6,577	1,38,161

Depth of Foundations in ft.	Type.	Mileage.	Chainage.	Serial Number of Bridges.	Number of Spans.	Particulars.	Height of Bank.	Excavating foundations and filling and backing.				Concrete at Rs. 16 per 100 C. Ft.		Masonry at Rs. 30 per 100 C. Ft.			
								Excavation Dry at Rs. 10 per 1000 C. Ft		Excavation Wet at Rs. 20 per 1000 C. Ft		Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.
								Quantity.	Cost.	Quantity.	Cost.						
									Rs.		Rs.		Rs.		Rs.		
3	New	209.9	494,500	50	1	2 ft. SD	6 1/2	2,000	20	...	...	1,050	168	735	221		
10 3/4	New	210.1	495,600	51	1	12 ft. G	11 1/2	...	...	28,000	560	18,375	2940	6,930	2,079		
4	New	210.4	497,100	53	1	2 ft. SD	10	2,000	20	...	...	1,470	235	1,155	347		
7 1/4	Old	210.5	497,900	54	1	12 ft. G	9 1/2	5,000	50	...	...	1,785	286	4,935	1,481		
3 3/4	New	210.6	498,500	55	1	2 ft. SD	9 1/2	2,000	20	...	...	1,470	235	1,155	347		
4	New	210.7	499,500	56	1	2 ft. SD	8 1/2	3,000	30	...	...	1,470	235	1,150	345		
7 1/4	New	210.8	499,600	57	1	6 ft. A	14 1/2	...	...	10,000	200	4,515	722	4,435	1,331		
3	New	211.1	501,300	58	1	2 ft. SD	9	3,000	30	...	...	868	139	1,150	345		
4 1/4	New	211.3	502,000	59	1	2 ft. SD	7 1/2	2,000	20	...	...	1,365	218	1,072	322		
4 1/4	New	211.5	502,950	60	1	2 ft. SD	12	5,000	50	...	...	1,785	286	1,680	504		
5 1/4	Old	211.6	503,400	61	1	12 ft. G	12	6,000	60	...	...	1,365	218	5,452	1,636		
6	Old	211.7	504,400	62	1	3 ft. A	8 1/2	5,000	50	...	...	1,680	269	1,898	569		
6 1/4	New	211.9	505,200	63	1	3 ft. A	8 1/2	7,000	70	...	...	2,205	353	2,010	603		
7 1/4	New	212.0	505,800	64	1	12 ft. G	4 1/2	5,000	50	...	...	1,575	252	2,465	740		
6	Old	212.3	1,278	65	1	6 ft. A	9 1/2	8,000	80	...	...	4,095	655	3,570	1,071		
6	Old	212.6	2,300	66	1	10 ft. A	13	6,000	60	...	...	...	...	5,775	1,733		
6	Old	213.7	8,395	68	1	10 ft. A	11 1/2	5,000	50	...	...	3,045	487	3,780	1,134		
6	Old	214.1	10,640	69	1	6 ft. A	12 1/2	5,000	50	...	...	3,045	487	3,885	1,166		
6	Old	214.5	12,620	71	1	10 ft. A	12 1/2	7,000	70	...	...	3,885	622	4,200	1,260		
5	Old	214.9	14,790	72	1	6 ft. G	7 1/2	5,000	50	...	...	...	...	3,150	915		
2	Old	215.0	15,415	73	1	10 ft. A	12	7,000	70	...	...	...	...	3,780	1,134		
7	Old	215.3	16,740	74	1	12 ft. G	11 1/2	6,000	60	...	...	...	...	4,725	1,418		
4	Old	215.5	18,030	75	2	20 ft. G	12	6,000	60	...	...	...	...	7,455	2,237		
2	New	215.7	18,900	76	1	2 ft. SD	4 1/2	2,332	23	...	...	679	109	917	275		
2	New	215.8	19,800	77	1	2 ft. SD	3	2,332	23	...	...	679	109	748	224		
5	Old	215.9	20,168	78	2	12 ft. G	8	5,000	50	...	...	2,100	336	3,465	1,040		
3	New	216.0	20,900	79	1	2 ft. RO	1	530	5	...	...	339	54	182	55		
4	Old	216.3	22,324	80	2	20 ft. G	11	9,000	90	...	...	...	...	6,510	1,953		
6 1/4	Old	216.4	23,000	81	1	6 ft. A	8 1/2	...	...	4,000	80	2,415	386	2,100	630		
3	Old	216.6	23,600	82	1	2 ft. SD	4	1,000	10	...	...	525	84	630	189		
3	Old	217.1	26,205	83	1	2 ft. SD	6 1/2	1,000	10	...	...	525	84	630	189		
6	Old	217.2	27,185	84	1	20 ft. G	12 1/2	...	...	6,000	120	3,465	554	4,935	1,481		
4	Old	217.5	28,400	86	1	3 ft. A	7 1/2	3,000	30	...	...	1,680	269	1,365	410		
5	Old	217.8	30,000	88	1	3 ft. A	8	3,000	30	...	...	1,890	302	2,310	693		
4	Old	217.9	30,634	89	1	3 ft. A	9	3,000	30	...	...	1,890	302	2,205	662		
5	Old	218.1	31,600	90	1	3 ft. A	9	3,000	30	...	...	1,470	235	2,310	693		
6	Old	218.3	33,000	91	1	12 ft. G	8 1/2	4,000	40	...	...	1,995	319	2,415	725		
4 1/4	Old	218.7	34,838	93	1	6 ft. A	11	...	...	4,000	80	2,100	336	2,910	882		
6	Old	218.9	35,833	94	2	12 ft. G	10 1/2	...	...	6,000	120	3,150	504	4,200	1,260		
6	Old	219.1	36,780	96	1	3 ft. A	9	4,000	40	...	...	2,100	336	2,520	756		
3	Old	219.5	39,200	99	2	2 ft. SD	3 1/2	1,000	10	...	...	630	101	630	189		
6	Old	219.8	40,525	100	1	12 ft. G	7 1/2	5,000	50	...	...	2,205	353	2,415	725		
3	Old	219.9	40,800	101	2	2 ft. SD	5	2,000	20	...	...	840	134	1,050	315		
5	Old	220.0	41,630	102	1	20 ft. G	8 1/2	6,000	60	...	...	2,625	420	3,360	1,008		
6	Old	220.2	42,450	103	1	3 ft. A	9 1/2	3,000	30	...	...	1,680	269	2,520	756		
5	Old	220.3	43,515	104	1	20 ft. G	6 1/2	3,000	30	...	...	1,785	286	2,100	630		

BRIDGES.

Arch Masonry at Rs. 75 per 100 C. Ft.		Coping at Rs. 75 per 100 C. Ft.		Flooring at Rs. 10 per 100 C. Ft.		Material from England. Girder Iron at Rs. 190 per ton.		Expenditure in India. Girder Iron at Rs. 80 per ton.		Corrugated Iron and Petty Iron Work at Rs. 14 per Cwt.		Timber at Rs. 4 per C. Ft.		Total.	Contingencies @ 5 per %	Grand Total.	
Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.				
	Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	Rs.	Rs.	Rs.	
														Brought forward	1,31,584	6,577	1,38,161
...	...	113	107	...	...	1-49	283	1-19	45	2-28	32	42-5	170	516	26	542	
...	...	156	117	3,384	338	1-49	283	1-19	...	...	...	...	...	6,564	328	6,892	
...	...	185	139	...	...	...	...	...	...	...	...	...	...	711	37	778	
...	...	114	86	3,984	398	1-49	283	1-19	45	2-28	32	42-5	170	2,831	142	2,973	
...	...	185	139	...	...	...	...	...	...	...	...	...	...	741	37	778	
...	...	171	128	...	...	...	...	...	...	...	...	...	...	738	37	775	
627	470	98	74	1,632	163	...	...	...	...	...	...	...	...	2,969	148	3,108	
...	...	171	128	...	...	...	...	...	...	...	...	...	...	642	32	674	
...	...	157	118	...	...	...	...	...	...	...	...	...	...	678	34	712	
...	...	213	160	...	...	...	...	...	...	...	...	...	...	1,000	50	1,050	
...	...	126	95	5,010	501	1-49	283	1-49	45	2-28	32	42-5	170	3,043	152	3,195	
146	110	100	75	375	38	...	...	...	...	...	...	...	...	1,111	56	1,167	
201	151	67	50	463	47	...	...	...	...	...	...	...	...	1,274	64	1,338	
...	...	98	74	1,158	116	1-49	283	1-49	45	2-28	32	42-5	170	1,762	88	1,850	
360	270	130	98	825	83	...	...	...	...	...	...	...	...	2,257	113	2,370	
360	270	140	105	5,304	530	...	...	...	...	...	...	...	...	2,698	135	2,833	
360	270	160	120	4,714	474	...	...	...	...	...	...	...	...	2,535	127	2,662	
360	270	140	105	825	83	...	...	...	...	...	...	...	...	2,161	108	2,269	
360	270	170	128	5,304	530	...	...	...	...	...	...	...	...	2,880	144	3,024	
...	...	120	90	2,360	236	0-79	150	0-79	24	1-60	22	32-8	131	1,648	82	1,730	
360	270	160	120	4,714	474	...	...	...	...	...	...	...	...	2,068	103	2,171	
...	...	120	90	5,040	504	1-49	283	1-49	45	2-28	32	42-5	170	2,602	130	2,732	
...	...	180	135	9,702	970	6-68	1269	6-68	200	8-1	113	133-6	531	5,518	276	5,794	
...	...	129	97	...	...	...	...	...	...	...	...	...	...	504	25	529	
...	...	129	97	...	...	...	...	...	...	...	...	...	...	453	23	476	
...	...	130	98	1,796	480	2-98	566	2-98	89	5-15	72	85-8	343	3,074	154	3,228	
...	...	43	32	...	...	...	...	...	...	0-7	10	11-33	45	201	10	211	
...	...	140	105	8,906	891	6-68	1269	6-68	200	8-1	113	133-6	531	5,155	258	5,413	
220	165	110	83	825	83	...	...	...	...	...	...	...	...	1,427	71	1,498	
...	...	110	83	...	...	...	...	...	...	...	...	...	...	366	18	384	
...	...	110	83	...	...	...	...	...	...	...	...	...	...	366	18	384	
...	...	110	83	...	...	...	...	...	...	...	...	...	...	4,035	202	4,237	
100	75	180	135	6,864	686	3-34	635	3-34	100	4-15	58	66-4	266	897	45	942	
100	75	100	75	375	38	...	...	...	...	...	...	...	...	1,213	61	1,274	
100	75	100	75	375	38	...	...	...	...	...	...	...	...	1,182	59	1,241	
100	75	100	75	375	38	...	...	...	...	...	...	...	...	1,146	57	1,203	
100	75	100	75	375	38	...	...	...	...	...	...	...	...	2,054	103	2,157	
...	...	120	90	3,504	350	1-49	283	1-49	45	2-28	32	42-5	170	1,636	82	1,718	
220	165	120	90	825	83	...	...	...	...	...	...	...	...	3,719	186	3,905	
...	...	140	105	6,596	660	2-98	566	2-98	89	5-15	72	85-8	343	1,328	66	1,394	
110	83	100	75	375	38	...	...	...	...	...	...	...	...	435	22	457	
...	...	180	135	...	...	...	...	...	...	...	...	...	...	2,054	103	2,157	
...	...	120	90	3,056	306	1-49	283	1-49	45	2-28	32	42-5	170	604	30	634	
...	...	180	135	...	...	...	...	...	...	...	...	...	...	3,095	155	3,250	
...	...	130	98	4,496	450	3-34	635	3-34	100	4-15	58	66-4	266	1,251	62	1,313	
110	83	100	75	375	38	...	...	...	...	...	...	...	...	2,453	123	2,576	
...	...	130	98	3,504	350	3-34	635	3-34	100	4-15	58	66-4	266				
Carried over..														2,19,200	10,959	2,30,159	

EAST COAST VIZAGAPATAM REVISED MINOR

Depth of Foundations in ft.	Type.	Mileage.	Chainage.	Serial No. of Bridges.	Number of Spans.	Particulars.	Height of Bank.	Excavating foundations Filling and Backing.				Concrete at Rs. 16 per 100 C. Ft.		Masonry at Rs. 30 per 100 C. Ft.	
								Excavation, Dry at Rs. 10 per 1000 C. Ft.		Excavation, Wet at Rs. 20 per 1000 C. Ft.					
								Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.
									Rs.		Rs.		Rs.		Rs.
5	Old	220-5	44,400	105	1	3 ft. A	7	3,000	30	...	...	1,575	252	1,365	410
6	Old	220-6	45,000	106	1	3 ft. A	6 1/2	3,000	30	...	...	1,995	319	1,365	410
3	Old	220-6	45,225	107	2	2 ft. SD	7 1/2	2,000	20	...	...	945	151	1,155	347
5 1/2	Old	220-7	45,574	108	1	6 ft. G	4 1/2	3,000	30	...	...	1,470	235	1,732	520
5	Old	220-9	46,400	109	1	3 ft. A	6 1/2	...	...	3,000	60	1,890	302	1,155	347
6	Old	221-0	47,208	110	1	3 ft. A	7	...	...	...	...	2,100	336	1,575	473
6	Old	221-2	48,200	111	1	3 ft. A	6 1/2	...	...	...	...	2,100	336	1,155	347
6	Old	221-4	49,000	112	1	12 ft. G	6	3,000	30	...	...	1,890	302	1,890	567
3	New	221-8	51,400	113	2	2 ft. RO	5 1/2	700	7	...	...	444	71	234	70
8	Old	222-0	52,233	114	1	3 ft. A	1	2,000	20	...	...	945	151	1,050	315
3	Old	222-2	53,480	116	1	3 ft. A	10 1/2	5,000	50	...	...	2,520	403	3,045	914
3	Old	222-7	55,825	117	3	2 ft. SD	5	2,000	20	...	...	945	151	1,155	347
3	Old	222-9	56,886	118	3	2 ft. SD	4 1/2	2,000	20	...	...	945	151	1,050	315
3 1/2	New	223-1	58,000	119	1	2 ft. SD	4 1/2	2,000	20	...	...	945	151	182	55
6 1/2	Old	223-3	59,276	120	1	20 ft. RO	7 1/2	530	5	...	...	339	54	3,675	1,103
6	Old	223-4	60,018	121	2	10 ft. A	12	7,000	70	...	...	1,155	185	5,565	1,670
6	Old	223-7	61,394	122	2	10 ft. A	13	...	...	9,000	180	4,830	773	5,565	1,922
6	Old	223-9	62,521	123	2	10 ft. A	13	10,000	100	...	...	4,515	722	6,405	1,922
2	New	224-1	63,600	124	1	3 ft. A	7	4,000	40	...	...	1,890	302	1,890	567
2	New	224-4	65,200	126	1	2 ft. SD	4 1/2	2,332	23	...	...	679	109	917	275
6	Old	224-8	65,580	127	1	2 ft. SD	4 1/2	2,332	23	...	...	679	109	917	275
6	Old	224-9	67,080	129	1	3 ft. A	6	3,000	30	...	...	1,785	286	1,260	378
6	Old	224-9	67,844	130	1	3 ft. A	5	3,000	30	...	...	1,785	286	1,260	378
4	Old	225-0	68,345	131	1	3 ft. A	9 1/2	4,000	40	...	...	1,785	286	2,100	630
6	Old	225-3	69,856	132	1	3 ft. A	13 1/2	...	...	...	...	1,785	286	4,515	1,355
6	Old	225-6	71,275	133	1	20 ft. A	15	...	...	5,000	100	1,680	269	6,825	2,043
5	New	226-2	74,440	134	1	12 ft. A	17 1/2	...	...	8,000	160	3,990	638	6,825	2,043
2	New	226-3	75,200	135	1	12 ft. A	17 1/2	...	...	7,000	140	4,515	722	7,560	2,244
2	Old	226-4	75,800	136	1	1 ft. RO	0	2,000	20	...	...	1,260	202	1,680	512
4	Old	226-5	76,200	137	1	12 ft. G	7	2,000	20	...	...	339	54	2,415	745
5 1/2	Old	226-6	76,500	138	1	2 ft. SD	6 1/2	3,000	30	...	...	1,050	168	994	294
5 1/2	Old	227-9	83,600	139	2	20 ft. A	16	...	...	...	...	1,260	202	10,035	3,010
3	New	228-8	88,315	140	2	20 ft. A	16	...	...	10,000	200	5,250	840	4,594	1,377
2	New	228-9	88,740	141	2	20 ft. G	10	7,000	70	...	...	2,625	420	5,042	1,513
5	New	229-4	91,300	142	2	2 ft. RO	10	...	...	9,000	180	2,205	353	5,234	1,570
6 1/2	Old	229-5	92,000	143	1	2 ft. RO	1	700	7	...	...	441	71	182	55
5	Old	230-1	95,200	144	1	2 ft. RO	0	530	5	...	...	339	54	833	250
6 1/2	Old	232-1	105,800	145	1	3 ft. S	4	2,332	23	...	...	679	109	2,020	606
5	Old	232-5	108,000	148	1	3 ft. A	10	5,000	50	...	...	2,205	353	2,042	613
4	Old	232-8	109,360	149	1	10 ft. A	11	5,000	50	...	...	2,730	437	7,990	2,397
7	Old	233-1	111,160	151	1	20 ft. A	17	8,000	80	...	...	4,620	739	19,475	5,842
4	Old	233-3	112,200	152	1	10 ft. A	24	...	...	16,000	320	5,775	911	15,000	4,500
4	Old	233-8	114,555	154	1	6 ft. A	24	10,000	100	...	...	1,620	251	1,620	486
5	Old	234-1	116,200	155	1	3 ft. A	11	4,000	40	...	...	1,365	211	1,365	410
5	Old	234-2	117,020	156	1	3 ft. A	10	5,000	50	...	...	1,575	252	1,575	473

RAILWAY. DIVISION. ESTIMATES.

BRIDGES.

Arch Masonry at Rs. 75 per 100 C. Ft.	Coping at Rs. 75 per 100 C. Ft.	Flooring at Rs. 10 per 100 C. Ft.	Material from England, Girder Iron at Rs. 190 per ton.	Expenditure in India, Girder Iron at Rs. 30 per ton.	Corrugated Iron and Petty Iron Work at Rs. 14 per cwt.	Timber at Rs. 4 per C. Ft.	Total.	Contingencies at 5 per 100	Grand Total.
Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
110	83	100	75	375	38	...	...	...	...
110	83	100	75	375	38	...	...	...	...
...	...	180	135	...	...	...	...	...	...
...	...	100	75	1352	135	0-79	150	0-79	24
110	83	100	75	375	38	...	...	...	...
110	83	100	75	375	38	...	...	...	...
110	83	100	75	375	38	...	...	...	...
...	...	110	83	2256	226	1-49	283	1-49	45
...	...	59	44	...	...	...	...	...	...
110	83	100	75	375	38	...	...	...	...
110	83	100	75	375	38	...	...	...	...
...	...	240	180	...	...	...	...	...	...
...	...	240	180	...	...	...	...	...	...
...	...	43	32	...	...	...	...	...	...
...	...	120	90	3984	398	3-34	635	3-34	100
850	638	200	150	6964	696	...	...	...	...
850	638	200	150	7644	764	...	...	...	...
110	83	100	75	375	38	...	...	...	...
...	...	129	97	...	...	...	...	...	...
...	...	129	97	...	...	...	...	...	...
110	83	100	75	375	38	...	...	...	...
110	83	100	75	375	38	...	...	...	...
110	83	100	75	375	38	...	...	...	...
110	83	100	75	375	38	...	...	...	...
850	638	232	174	8240	824	...	...	...	...
500	375	151	113	8776	878	...	...	...	...
...	...	110	83	1158	116	1-49	283	1-49	45
...	...	43	32	...	...	...	...	...	...
...	...	120	90	2640	264	1-49	283	1-49	45
...	...	143	107	...	...	...	...	...	...
210	158	150	113	750	75	...	...	...	...
1544	1158	294	221	13206	1321	...	...	...	...
...	...	137	103	8142	814	6-68	1269	6-68	200
...	...	137	103	8142	814	6-68	1269	6-68	200
...	...	59	44	...	...	...	...	...	...
...	...	43	32	...	...	...	...	...	...
...	...	129	97	...	...	...	...	...	...
159	119	100	75	375	38	...	...	...	...
212	159	100	75	375	38	...	...	...	...
434	326	178	134	7864	786	...	...	...	...
850	638	324	243	16016	1602	...	...	...	...
434	326	270	203	13576	1358	...	...	...	...
812	609	90	68	825	83	...	...	...	...
173	130	100	75	375	38	...	...	...	...
159	119	100	75	375	38	...	...	...	...
159	119	100	75	375	38	...	...	...	...
Carried over ...							3,13,002	15,650	3,28,652

EAST COAST VIZAGAPATAM REVISED

Minor

Depth of Foundations in ft	Type.	Mileage.	Chainage.	Serial No. of Bridges.	Number of Spans.	Particulars.	Height of Bank.	Excavating Foundations, Filling and Backing.				Concrete at Rs. 16 per 100 C. Ft.		Masonry at Rs. 20 per 100 C. Ft.		
								Excavation, Dry at Rs. 10 per 1000 C. Ft.		Excavation, Wet at Rs. 20 per 1000 C. Ft.		Quantity.	Cost.	Quantity.	Cost.	
								Quantity.	Cost.	Quantity.	Cost.					
								Rs.		Rs.		Rs.		Rs.		Rs.
4	Old	234-6	119,150	157	1	3 ft.	A	10	6,000	60	...	...	1,785	286	1,547	464
5 1/4	Old	235-2	121,800	158	1	12 ft.	A	14	6,000	60	...	...	3,150	501	5,321	1,596
5 1/4	Old	235-6	124,000	159	2	10 ft.	A	12	6,000	60	...	...	2,520	403	4,818	1,445
4 1/2	Old	236-3	127,800	160	1	6 ft.	A	10	3,000	30	...	...	1,575	252	2,682	805
10	Old	236-7	130,000	162	1	6 ft.	A	9	...	...	10,000	200	3,465	554	3,719	1,116
15 1/2	Old	236-9	130,800	163	3	10 ft.	A	11	...	...	40,000	800	5,985	958	10,302	3,091
4 1/2	New	237-7	135,590	165	1	2 ft.	S	12	3,000	30	...	...	1,470	235	1,680	504
6 1/2	Old	238-6	140,220	168	1	10 ft.	A	17	...	...	8,000	160	3,045	487	9,303	2,810
5 3/4	Old	238-8	141,320	169	1	12 ft.	G	8	4,000	40	...	...	2,100	336	2,446	734
4	New	239-1	142,600	170	2	2 ft.	S	4	3,000	30	...	...	1,050	168	840	252
8 1/2	Old	239-5	144,400	171	1	6 ft.	A	7	...	...	8,000	160	2,940	470	2,205	662
7 1/4	Old	239-7	145,870	172	1	10 ft.	A	10	...	...	5,000	100	2,205	353	3,675	1,103
4 3/4	Old	239-9	147,130	173	1	3 ft.	A	6	3,000	30	...	...	840	134	1,470	441
2	New	240-7	151,300	174	2	2 ft.	R O	0	630	6	...	...	444	71	234	252
3 1/4	New	240-9	152,000	175	2	2 ft.	S	4	2,000	20	...	...	630	101	840	252
2 1/4	Old	241-0	152,600	176	1	20 ft.	R O	16	...	...	16,000	320	6,090	974	9,765	2,930
2	New	241-4	154,700	177	2	1 ft.	S	2	630	6	...	...	397	64	312	94
10 1/4	Old	242-1	158,560	178	1	2 ft.	A	10	2,000	20	...	...	630	101	840	252
6 1/4	New	242-2	159,200	179	2	10 ft.	S	5	...	...	10,000	200	3,255	521	4,725	1,418
8 1/2	Old	242-7	161,600	181	1	2 ft.	A	14	3,000	30	...	...	1,470	235	1,260	373
6 1/4	Old	242-9	162,400	182	2	10 ft.	A	15	8,000	80	...	...	3,150	504	7,140	2,142
5 1/2	Old	243-6	166,400	183	1	10 ft.	A	11	8,000	80	...	...	4,620	739	7,245	2,174
4	New	243-7	166,900	184	2	3 ft.	A	4	5,000	50	...	...	2,415	386	2,940	882
5	Old	243-9	167,900	185	1	2 ft.	S	10	3,000	30	...	...	840	134	735	221
4	Old	244-8	173,000	186	1	3 ft.	A	10	5,000	50	...	...	2,415	386	1,830	549
4 1/2	Old	244-9	173,400	187	1	6 ft.	A	8	3,000	30	...	...	1,470	235	2,549	765
4	New	245-1	174,200	188	2	3 ft.	S	4	3,000	30	...	...	1,260	202	1,525	458
8 1/2	Old	245-2	175,000	189	1	2 ft.	A	12	15,000	150	...	...	3,885	622	5,692	1,708
11 1/2	Old	246-1	180,075	190	1	20 ft.	S	15	...	...	14,000	280	2,940	470	11,248	3,374
4	Old	246-2	180,400	191	2	2 ft.	A	4	3,000	30	...	...	630	101	832	250
5 1/2	Old	246-6	182,400	192	1	20 ft.	A	18	...	...	15,000	300	2,730	437	12,614	3,784
5	Old	247-5	187,000	193	1	20 ft.	A	18	...	...	7,000	110	2,520	403	11,059	3,318
4 3/4	Old	247-6	187,600	194	1	2 ft.	S	13	3,000	30	...	...	1,260	202	1,461	438
4	Old	247-7	188,200	195	1	3 ft.	A	15	5,000	50	...	...	2,520	403	1,496	449
4 1/2	Old	247-8	188,850	196	1	10 ft.	A	15	...	...	5,000	100	2,730	437	1,897	569
8	Old	247-9	189,300	197	1	2 ft.	S	7	2,000	20	...	...	945	151	994	298
6 1/2	Old	248-0	189,800	198	1	3 ft.	A	14	5,000	50	...	...	2,730	437	1,775	533
4 1/2	Old	248-1	190,600	199	1	2 ft.	S	9	2,000	20	...	...	3,465	554	1,163	349
4	Old	248-2	191,000	200	2	20 ft.	A	10	21,000	210	...	...	1,050	168	1,150	345
3 1/2	Old	248-4	192,200	201	1	6 ft.	A	16	5,000	50	...	...	3,990	638	12,614	3,784
6	Old	248-7	193,400	202	1	6 ft.	A	15	7,000	70	...	...	2,730	437	3,238	971
4	Old	248-8	193,600	203	1	10 ft.	A	11	...	...	5,000	100	2,625	420	4,974	1,492
6	Old	248-9	194,200	204	1	2 ft.	S	4	2,000	20	...	...	630	101	832	250
7 1/2	Old	249-0	194,900	205	1	6 ft.	A	15	...	...	...	...	...	...	...	...
4 1/2	Old	249-1	195,778	206	1	6 ft.	A	11	...	...	...	...	...	...	...	...
4 1/2	Old	249-2	196,150	207	1	2 ft.	S	4	2,000	20	...	...	...	...	...	...

RAILWAY. DIVISION. ESTIMATES BRIDGES.

Arch mason-ry at Rs. 75 per 100 C. Ft.		Coping at Rs. 75 per 100 C. Ft.		Flooring at Rs. 10 per 100 C. Ft.		Material from England, Girder Iron at Rs. 190 per ton.		Expenditure in India, Girder Iron at Rs. 30 per ton.		Corrugated Iron and Petty Iron Works at Rs. 14 per Cwt.		Timber at Rs. 4 per C. Ft.		Total.	Contingencies, at 5 per %	Grand Total.
Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.			
	Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	Rs.	Rs.	Rs.
Brought forward ...													3,13,002	15,650	3,28,652	
159	119	100	75	375	38	...	...	...	...	...	...	...	...	1,042	52	1,094
509	382	172	129	6,224	622	...	...	...	...	...	...	...	...	3,293	165	3,458
864	648	181	136	6,964	696	...	...	...	...	...	...	...	...	3,388	169	3,557
385	289	90	68	825	83	...	...	...	...	...	...	...	...	1,527	76	1,603
342	257	90	68	825	83	...	...	...	...	...	...	...	...	2,278	114	2,392
1302	977	221	166	8,416	842	...	...	...	...	...	...	...	...	6,834	342	7,176
...	...	213	160	...	...	...	...	...	...	...	...	...	...	929	47	976
434	326	178	134	7,864	786	...	...	...	...	...	...	...	...	4,703	235	4,938
...	...	84	63	3,056	306	1-49	283	1-49	45	2-28	32	42-5	170	2,009	100	2,109
...	...	207	155	...	...	...	...	...	...	...	...	...	...	605	30	635
240	180	90	68	825	83	...	...	...	...	...	...	...	...	1,623	81	1,704
450	338	129	97	3,720	372	...	...	...	...	...	...	...	...	2,363	118	2,481
120	90	100	75	375	38	...	...	...	...	...	...	...	...	808	40	848
...	...	59	44	...	...	...	...	...	...	1-05	15	18-33	73	279	14	293
...	...	207	155	...	...	...	...	...	...	...	...	...	...	528	26	554
900	675	232	174	8,976	898	...	...	...	...	...	...	...	...	5,971	299	6,270
...	...	51	38	...	...	...	...	...	...	...	...	...	...	257	13	270
...	...	207	155	...	...	...	...	...	...	...	...	...	...	528	26	554
450	338	129	97	3,720	372	...	...	...	...	...	...	...	...	2,946	147	3,093
...	...	207	155	...	...	...	...	...	...	...	...	...	...	798	40	838
450	338	156	117	5,896	590	...	...	...	...	...	...	...	...	3,771	189	3,960
850	638	164	123	9,100	910	...	...	...	...	...	...	...	...	4,664	233	4,897
150	113	100	75	375	38	...	...	...	...	...	...	...	...	1,544	77	1,621
...	...	207	155	...	...	...	...	...	...	...	...	...	...	540	27	567
159	119	100	75	375	38	...	...	...	...	...	...	...	...	1,217	61	1,278
385	289	90	68	825	83	...	...	...	...	...	...	...	...	1,490	75	1,565
133	100	100	75	375	38	...	...	...	...	...	...	...	...	903	45	948
...	...	207	155	...	...	...	...	...	...	...	...	...	...	605	30	635
434	326	141	106	4,744	474	...	...	...	...	...	...	...	...	3,386	169	3,555
850	638	220	165	8,240	824	...	...	...	...	...	...	...	...	5,751	288	6,039
...	...	129	97	...	...	...	...	...	...	...	...	...	...	478	24	502
1544	1158	307	230	15,150	1515	...	...	...	...	...	...	...	...	7,424	371	7,795
850	638	245	184	10,544	1054	...	...	...	...	...	...	...	...	5,737	287	6,024
...	...	227	170	...	...	...	...	...	...	...	...	...	...	840	42	882
199	149	100	75	375	38	...	...	...	...	...	...	...	...	1,164	58	1,222
226	170	100	75	375	38	...	...	...	...	...	...	...	...	1,389	69	1,458
434	326	164	123	6,520	652	...	...	...	...	...	...	...	...	3,982	199	4,181
...	...	143	107	...	...	...	...	...	...	...	...	...	...	576	29	605
212	159	100	75	375	38	...	...	...	...	...	...	...	...	1,292	65	1,357
226	170	100	75	375	38	...	...	...	...	...	...	...	...	1,236	62	1,298
...	...	171	128	...	...	...	...	...	...	...	...	...	...	661	33	694
1544	1158	307	230	15,150	1515	...	...	...	...	...	...	...	...	7,535	377	7,912
641	481	90	68	825	83	...	...	...	...	...	...	...	...	2,090	105	2,195
598	449	90	68	825	83	...	...	...	...	...	...	...	...	2,343	117	2,460
434	326	129	97	4,216	422	...	...	...	...	...	...	...	...	2,857	143	3,000
...	...	129	97	...	...	...	...	...	...	...	...	...	...	468	23	491
Carried over													4,19,654	20,982	4,40,636	

BRIDGES.[illegible]

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head V.....FENCING.

Sub-Head 1.....Fencing.

Amount Rs. 2,58,535. Equivalent to Rs. 4,056.6 per mile.

Quantity.	Item.	Rate.	Per	Amount.
		Rs. A.		Rs.
129.545 Miles.	Wire Fencing ...	1,417 0	Mile	1,83,565
6800 Yards.	Stone wall ...	10 8	Yard	71,400
	Add Contingencies on latter item @ 5 per%			3,570
	Total, Rs...			2,58,535
	Material from England, Rs...			1,65,947
	Expenditure in India, Rs...			92,588
	Total, Rs...			2,58,535

Abstract of Cost of one Mile.

Quantity.	Item.	Material from England.		Expenditure in India.		Total Cost
		Rate per Ton.	Amount.	Rate per Mile including all charges.	Amount.	
		Rs.	Rs.	Rs.	Rs.	Rs.
1.025 Tons	Straining posts	85	87			
0.775 Tons	Stiffening posts	130	101			
0.900 Tons	Sockets for do.	80	72			
2.575 Tons	Ordinary posts	118	304			
4.075 Tons	Sockets for do.	80	326			
0.074 Tons	Wedges	225	17			
0.125 Tons	Straining eye bolts	320	40			
1.575 Tons	Wire	212	334			
	Total...		1,281	69	69	1,350
	Add Contingencies @ 5 per %...					67
	Grand Total, Rs...					1,417

EAST COAST RAILWAY VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head V.....FENCING.

Sub-Head 1.....Fencing.

Abstract of quantities in one mile of Fencing.

Item.	Unit.	Weight in lbs.	Number of units per mile.	Total weight per mile in Tons.
Straining Posts	each	287.00	8	1.023
Stiffening posts	do.	34.72	50	0.775
Sockets for do.	do.	40.32	50	0.900
Ordinary posts	do.	12.27	470	2.575
Sockets for do.	do.	19.42	470	4.075
Wedges	do.	0.29	570	0.074
Straining eye bolts	do.	3.50	80	0.125
Wire	...			1.575
Total weight of one Mile...				11.124

EAST COAST RAILWAY.

VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head V.....FENCING.

Sub-Head 2.....Road Crossings.

Amount Rs. 51,649. Equivalent to Rs. 810.4 per mile.

REFERENCES.

Type Drawing—No. Q. 8.

Abstract of cost of A and B Class Crossings.

Quantity.	Item.	Rate.	Amount.	Total.
		Rs.	Rs.	Rs.
18	A.-Class Crossings ...	915	16,470	
43	B.-Class Crossings ...	699	30,057	
1	Overbridge ...	4,676	4,676	
17	Stiles ...	25	425	
Total ...				51,628
Add Contingencies on last item @ 5 per %...				21
Grand Total, Rs...				51,649

Overbridge in Vizianagrum.

Quantity.	Item.	Rate.	Per	Amount.	Total.
		Rs.		Rs.	Rs.
9,115 C. Ft.	Excavation ...	5	1,000	46	
3,798 C. Ft.	Concrete ...	15	100	570	
12,957 C. Ft.	Masonry ...	25	100	3,239	
997 C. Ft.	Arching ...	60	100	598	
Total...				4,453	
Add Contingencies @ 5 per %...				223	
Grand Total, Rs.				4,676	

EAST COAST RAILWAY.

VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head V.....FENCING.

Sub-Head 2.....Road Crossings.

Abstract of Estimate for A Class Crossing provided with a Gate-keeper's Hut and Gate.

Quantity.	Item.	Rate.	Per	Amount.	Total.
		Rs. A.		Rs.	Rs.
414 C. Ft.	Excavation...	5 0	1000	2	
16,008 C. Ft.	Earthwork ...	4 0	1000	64	
386 C. Ft.	Rammed Filling ...	6 0	1000	2	
414 C. Ft.	Concrete ...	15 0	100	62	
721 C. Ft.	Masonry ...	25 0	100	180	
3,041 C. Ft.	Metalling ...	6 0	100	182	
48 L. Ft.	Old Rails ...	1 0	L.Ft.	48	
340 S. Ft.	White-washing ...	0 4	100	1	
21 S. Ft.	Doors ..	1 8	S.Ft.	32	
143 S. Ft.	Roof (terraced) ...	30 0	100	43	
100 S. Ft.	Flooring (Rammed Kunkur) ...	5 0	100	5	
1 Pair	Gates including erection ...	250 0	pair.	250	
Total...				871	
Add Contingencies @ 5 per %...				44	
Grand Total, Rs...				...	915

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

5' 6" GAUGE. REVISED ESTIMATES.

Main Head V.....FENCING.

Sub-Head 2.....Road Crossings.

Abstract of Estimate for Class B Crossing provided with posts and chains.

Quantity.	Item.		Rate.	Per	Amount.	Total.
			Rs. A.		Rs.	Rs.
414	C. Ft.	Excavation...	5 0	1000	2	
16,008	C. Ft.	Earthwork ...	4 0	1000	64	
386	C. Ft.	Rammed Filling ...	6 0	1000	2	
414	C. Ft.	Concrete ...	15 0	100	62	
721	C. Ft.	Masonry ...	25 0	100	180	
3,041	C. Ft.	Metalling ...	6 0	100	182	
48	L. Ft.	Old Rails ...	1 0	L.Ft.	48	
340	S. Ft.	White-washing ...	0 4	100	1	
21	S. Ft.	Doors ...	1 8	S.Ft.	32	
143	S. Ft.	Roof (terraced) ...	30 0	100	43	
100	S. Ft.	Flooring (Rammed Kunkur) ...	5 0	100	5	
1	Pair	Posts and Chains ...	45 0	pair	45	
Total...					666	
Add Contingencies @ 5 per %...					33	
Grand Total, Rs....					...	699

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head V.....FENCING.

Sub-Head 3.....Mile and Gradient Posts.

Amount Rs. 4,602. Equivalent to Rs. 72.2 per mile.

Abstract of cost of Mile and Gradient Posts.

Quantity.	Item.		Rate.	Cost.	Total.	Average rate per mile
			Rs.	Rs.	Rs.	Rs.
63	Mile posts	...	12	756		
191	Quarter mile posts	...	12	2,292		
89	Grade posts	...	15	1,335		
Total...				4,383		
Add Contingencies @ 5 per % ..				219		
Grand Total, Rs...				...	4,602	72.2

Cost of Mile Posts, &c.

Item.		Cost delivered at site.	Cost of erection.	Cost complete
		Rs.	Rs.	Rs.
Mile post	...	11	1	12
Quarter mile post	...	11	1	12
Grade post	...	14	1	15

Cost of									
Quantity.		Item.	Cost landed at Port.		Carriage.		Hand-ling at Re. 1 per ton.	Laying at As. 12 per yard.	Total.
			Rate per ton.	Cost.	Rate per ton at 6 pies per mile.	Cost.			
			Rs.	A.	Rs.	Rs.	Rs.	Rs.	Rs.
118·12	Tons	Rails ...	79	0	9,331				
4·665	Tons	Fish plates ...	120	0	560				
1·712	Tons	Fish bolts ...	210	0	360				
2·88	Tons	Spikes ...	182	8	526				
1·71	Tons	Bearing plates...	114	0	195				
		Total Material from England...			10,972				
2000	No.	Sleepers ...	each	5/8	11,000				
329·087	Tons	Total...			21,972	1	329	329	1,320 23,950

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head VII.....BALLAST AND PERMANENT WAY.

Sub-Head 2 Permanent Way.

Permanent Way 5' 6" Gauge.

With flat-footed steel rails 75 lbs. per yard on transverse timber sleepers.

Items.	Unit adopted and weight in lbs.		Actual number of units in one mile of single track.				Per cent extra allowed for loss.	Quantities to be delivered per mile of single track.		
	Unit.	Lbs.	With 30' Rails.	With 24' Rails.	With assorted Rails.			Number of units.	Weight in tons.	Total weight in ton.
Rails 30' ...	each	750	352	...	330.9	...		332	111.16	118.120
Rails 24' ...	each	600	...	440	26.4	...		26	6.96	
Fish plates ...	pair	27.5	352	440	358	6		380	4.665	6.377
Fish bolts with nuts and washers ...	set of 5	10.1	352	440	358	6		380	1.712	
Sleepers ...	each	224	2000	2000	2000	...		2000	200.0	200 000
Bearing plates ...	pair	9.8	372	372	372	5		391	1.71	1.710
Dog spikes ...	set of 4	2.77	2,112	2200	2118	10		2,330	2.88	2.880
Total weight of Material for one mile of single track...										329.087

EAST COAST RAILWAY: VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head VIII.....STATIONS AND BUILDINGS.

Sub-Head 1.....Stations and Offices.

Amount Rs. 1,94,330. Equivalent to Rs. 3049.2 per mile.

REFERENCES.

Type Drawings—Nos. O. 1; O. 2; O. 3; O. 6; O. 13; and Q. 8.

Abstract of Cost of Stations and Offices.

Item.	Anaka-palli.	Waltair.	Vizaga-patam.	Simha-chelum.	Kotta-vals.	Alam-anda.	Viziana-grum.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Station Buildings ...	11,276	18,515	11,023	10,372	9,583	9,297	26,584	96,650
Passenger Platforms ...	1,944	2,229	1,635	2,061	1,428	1,428	4,980	15,705
Goods Sheds ...	5,728	...	14,594	2,770	2,979	2,889	5,730	34,690
Do. Platforms ...	2,539	...	3,125	716	716	886	1,784	9,766
Approach Roads & Platforms.	7,165	3,888	6,339	1,610	2,550	3,692	8,402	33,646
Platform Latrines ...	301	492	301	301	301	301	492	2,489
Pointsmen's Huts ...	139	550	139	139	139	139	139	1,384
Total, Rs...	29,092	25,674	37,156	17,969	17,696	18,632	48,111	1,94,330

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Main Head VIII.....STATIONS AND BUILDINGS.
 Sub-Head 1.....Stations and Offices.

**EAST COAST RAILWAY.
VIZAGAPATAM DIVISION.**

"GAUGE.
W. H. J. VIII

[illegible]

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Sub-Head 1 Stations and Offices.
ation Buildings.

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Simlachelum Station Buildings.

[illegible]

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head VIII.....STATIONS AND BUILDINGS. Sub-Head I.....Stations and Offices.
Kottavalasa Station Buildings.

Particulars.	Rate.		Station Building, 4th Class.		Passenger Platform wall.		Goods Shed, 48' long.		Goods Platform, 100' long.		Approach Roads and Platforms.		Platform Latrines.		Pointsmen's Huts.	
	Rs.	A.	Per	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	
Excavation	5	0	1000 C.Ft.	3,426	Rs. 17	3,744	Rs. 19	1,016	Rs. 5	1,890	Rs. 9	2,29,598	Rs. 1,033	221	Rs. 1	
Earthwork in Platforms and Roads	4	8	1000 C.Ft.	8,189	49	...	...	5,560	33	...	...	...	...	17	1	
Rammed Filling	10	0	100 C.Ft.	2,284	343	3,714	374	677	102	327	139	...	...	74	11	
Dry Stone Filling	15	0	100 C.Ft.	9,236	2,771	1,815	554	2,512	753	1,955	407	...	...	391	117	
Concrete	80	0	100 C.Ft.	1,008	605	551	413	...	...	89	67	...	...	...	...	
Masonry	75	0	100 C.Ft.	2,586	517	...	...	1,608	322	...	...	...	...	...	...	
Coping	60	0	100 C.Ft.	6,857	274	...	...	...	...	...	...	...	...	24	1	
Arching	20	0	100 S.Ft.	6,857	17	...	...	...	...	...	...	...	...	140	1	
Flooring	5	0	100 S.Ft.	8,991	1,197	...	...	2,025	1,418	...	...	...	...	...	...	
Do. (Rammed Kunkur)	4	0	100 S.Ft.	...	...	...	...	...	...	...	...	...	...	...	...	
Plastering	30	0	100 S.Ft.	...	...	...	...	...	...	...	...	...	...	...	...	
White-washing	70	0	100 S.Ft.	...	...	...	...	...	...	...	...	...	...	...	...	
Roofing (tiled)	25	0	100 S.Ft.	...	...	...	...	...	...	...	...	...	...	...	...	
Do (Corrugated Iron)	1	0	100 S.Ft.	51	51	...	...	...	...	...	...	...	...	...	...	
Corrugated Iron	4	0	C.Ft.	632	2,528	...	...	19	76	...	...	...	...	19	76	
Stone Blocks	2	0	8 Ft.	132	264	...	...	20	40	...	...	...	...	450	113	
Timber Work	1	8	8 Ft.	23	35	...	...	24	36	...	...	...	...	...	...	
Doors and Windows (glazed panel)	1	8	100 S.Ft.	2-6	4	...	...	...	...	...	...	...	...	...	...	
Doors (batten)	0	8	L.Ft.	311	171	...	...	101	52	...	...	...	...	...	...	
Painting and Varnishing	0	8	L.Ft.	205	103	...	...	...	...	...	...	...	...	...	...	
Surface Frames	6	0	100 C.Ft.	...	...	...	...	...	...	...	...	...	...	80	80	
Eave Gutters	1	0	L.Ft.	...	...	...	...	...	...	...	...	...	...	...	...	
Metalling	100	0	each	1	100	...	...	...	...	...	...	...	...	...	...	
Old Rails	1	8	L.Ft.	11	21	...	...	...	...	...	...	...	...	...	...	
Counters	1	8	L.Ft.	3	60	...	...	...	...	...	...	...	...	...	...	
Punkas	20	0	each	...	...	...	...	...	...	...	...	...	...	...	...	
Lamps, Platform	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Total	...	...	...	...	9,127	...	1,360	...	2,837	...	682	...	2,429	...	132	
Add Contingencies @ 5 per %	...	...	...	...	456	...	68	...	142	...	34	...	121	...	7	
Grand Total, Rs.	...	...	...	...	9,583	...	1,428	...	2,979	...	716	...	2,550	...	139	
Area in square feet.																
Rate per square foot, Rs.																

EAST COAST RAILWAY. VIZAGAPATAM DIVISION

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head VIII.....STATIONS AND BUILDINGS. Sub-Head I.....Stations and Offices.
Attamunda Station Buildings.

Particulars.	Rate.		Station Building, 3rd Class.		Passenger Plat- form wall.		Goods Shed, 48' long.		Goods Platform, 100' long.		Approach Roads and Platforms.		Platform Latrines.		Pointsmen's Huts.	
	Rs.	A.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.
Excavation	5	0	2,284	Rs. 11	3,744	Rs. 19	677	Rs. 3	2,835	Rs. 14	2,20,398	Rs. 1,033	221	Rs. 1	221	Rs. 1
Earthwork in Platforms and Roads	4	8	7,973	48	3,744	374	5,163	31	31	...	...	...	17	1	17	1
Rammed Filling	10	0	2,284	343	3,744	374	667	100	1,390	209	...	...	74	11	74	11
Dry Stone Filling	15	0	8,350	2,505	1,845	554	2,242	673	1,617	494	...	...	391	117	391	117
Concrete	30	0	1,008	605	551	413	...	...	89	67	...	...	...	...	...	...
Masonry	75	0	2,586	517	...	...	1,607	322	...	...	...	...	...	...	...	...
Coping	60	0	6,856	274	...	...	...	...	...	...	...	...	24	1	24	1
Arching	20	0	6,856	17	...	...	...	...	...	...	...	...	140	1	140	1
Flooring (Rammed Kunkur)	4	0	8,991	1,197	...	...	2,023	1,418	...	...	...	...	...	...	...	...
Plastering	30	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...
White-washing	70	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Roofing (tiled)	25	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...
To. (Corrugated Iron)	1	0	51	51	...	...	...	...	...	...	...	...	...	...	...	...
Corrugated Iron	1	0	632	2,528	...	...	...	...	...	...	...	...	...	...	...	...
Stone Blocks	4	0	132	264	...	...	...	...	...	...	...	...	...	...	...	...
Timber Work	2	0	23	35	...	...	...	...	...	...	...	...	...	...	...	...
Doors and Windows (glazed-panel)	1	8	286	4	...	...	...	...	...	...	...	...	...	...	...	...
Doors (batten)	1	8	341	171	...	...	...	...	...	...	...	...	...	...	...	...
Painting and Varnishing	0	8	205	103	...	...	...	...	...	...	...	...	...	...	...	...
Surface Frames	0	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Eave Gutters	6	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Metalling	1	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Old Rails	100	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Counters	1	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Punkas	20	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lamps, Platform	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total..	...	...	...	8,854	...	1,360	...	2,751	...	844	...	3,516	...	287	...	132
Add Contingencies @ 5 per %.	...	...	...	443	...	68	...	138	...	42	...	176	...	14	...	7
Grand Total, Rs..	...	...	...	9,297	...	1,428	...	2,889	...	886	...	3,692	...	301	...	139
Area in square feet.	...	...	...	3,327	...	...	...	1,768	...	...	...	...	...	...	...	...
Rate per square foot, Rs	...	...	...	2-8	...	...	...	1-6	...	...	...	...	...	...	...	...

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

5' 6" GAUGE.

REVISED ESTIMATES.

Main Head VIII.....STATIONS AND BUILDINGS. Sub-Head I.....Stations and Offices.
Vizianagaram Station Buildings.

Particulars.	Rate.		Per	Station Building, 1st Class.		Passenger Platform wall.		Goods Shed, 98' long.		Goods Platform, 300' long.		Approach Roads and Platforms.		Platform Latrines.		Pointmen's Huts.	
	Rs.	A.		Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.
Excavation	5	0	1000 C.Ft.	16,131	Rs. 81	3,744	Rs. 19	3,157	Rs. 10	4,118	Rs. 21	10,98,850	Rs. 4,915	...	Rs. ...	221	Rs. 1
Earthwork in Platforms and Roads	4	8	1000 C.Ft.	46,907	...	...	...	83,025	...	...	...	...	...	...	...	...	...
Rammed Filling	15	0	1000 C.Ft.	7,400	...	8,744	...	1,953	...	1,362	...	...	...	...	...	17	...
Concrete	30	0	100 C.Ft.	39,573	1,110	562	...	1,953	203	1,362	204	...	...	225	31	74	11
Masonry	75	0	100 C.Ft.	...	11,873	12,498	9,719	4,675	1,403	4,053	1,217	...	...	...	...	301	117
Coping	60	0	100 C.Ft.	1,538	...	551	413	...	...	263	197	...	...	...	...	...	...
Arching	20	0	100 C.Ft.	4,631	923	...	...	...	...	...	...	...	...	...	...	...	...
Flooring	5	0	100 S.Ft.	13,334	553	...	...	8,207	653	...	...	...	...	...	...	...	...
Plastering	4	0	100 S.Ft.	13,834	35	...	...	...	...	...	...	...	...	...	...	21	1
White-washing	30	0	100 S.Ft.	8,201	2,400	...	...	3,900	2,730	...	...	...	...	...	...	110	1
Roofing (tiled)	70	0	100 S.Ft.	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Co. (Corrugated Iron)	25	0	100 S.Ft.	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Corrugated Iron...	1	0	100 S.Ft.	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Stone Blocks	4	0	C.Ft.	91	91	...	...	...	...	...	...	...	...	...	...	...	...
Timber Work	2	0	C.Ft.	1,229	4,916	...	...	...	...	...	...	...	...	...	...	...	...
Doors and Windows (glazed-panel)	1	8	S.Ft.	474	948	...	...	19	76	...	...	...	...	...	...	...	...
Doors (batten)	1	8	S.Ft.	194	201	...	...	20	40	...	...	...	...	...	...	...	...
Painting and Varnishing	1	8	S.Ft.	1,181	18	...	...	24	36	...	...	...	...	...	...	...	...
Surface Drains	0	8	L.Ft.	477	239	...	...	...	...	...	...	...	...	...	...	...	...
Eave Gutters	0	8	L.Ft.	390	195	...	...	...	...	...	...	...	...	...	...	...	...
Metalting	6	0	L.Ft.	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Old Rails	1	0	L.Ft.	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Counters	1	0	L.Ft.	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Punkhas	1	0	L.Ft.	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lamps, Platform	20	0	each	1	100	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	each	28	42	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	each	12	210	...	...	...	...	...	...	...	...	...	...	...	...
Total	...	...	...	...	25,318	...	4,743	...	5,457	...	1,889	...	8,032	...	469	...	132
Add Contingencies @ 5 per cent.	...	...	...	...	1,266	...	237	...	273	...	85	...	400	...	23	...	7
Grand Total Rs.	...	...	...	...	26,584	...	4,980	...	5,730	...	1,784	...	8,402	...	492	...	139
Area in square feet...	...	...	...	...	6,226	...	...	...	8,408	...	...	...	...	...	...	...	...
Rate per square foot, Rs.	...	...	...	...	4.2	...	...	...	1.6	...	...	...	...	...	...	...	...

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EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head VIII.....STATIONS AND BUILDINGS.

Sub-Head 3.....Staff Quarters.

Amount Rs. 4,84,067. Equivalent to Rs. 7,595.5 per mile.

REFERENCES.

Type Drawings—Nos. O. 4; Q. 1; Q. 3; Q. 6; Q. 9; Q. 10; Q. 12; Q. 16.

Abstract of Cost of Staff Quarters.

Number.	Item.	Rate.	Total Cost.	Area in Square feet.	Cost per Square foot.
			Rs.	Rs.	Rs.
1	Chief Engineer's house ...	37,084	37,084	6,695	2.2
1	Chief Engineer's Office ...	14,210	14,210	6,680	2.1
1	Combined Manager's Stores and Examiner's office ...	lump sum	40,000	...	...
1	District Engineer's office ...	9,350	9,350	3,000	3.1
4	1st Class Staff Quarters ...	17,826	71,304	4,703	3.8
6	2nd Class do. ...	8,892	53,352	2,562	3.4
16	3rd Class do. ...	6,905	1,10,480	2,026	3.4
1	Institute ...	lump sum	30,000	...	...
10	Station Master's Quarters...	4,599	45,990	1,819	2.5
12	Porters' Lines ...	2,869	34,428	1,323	2.1
11	Permanent Gangs' Quarters	2,079	22,869	993	2.1
1	Hospital ...	lump sum	15,000	...	...
	Total...		4,84,067		

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head VIII.....STATIONS AND BUILDINGS.

Sub-Head 3.....Staff Quarters.

Name of Work Chief Engineer's House and Office.

Particulars.	Rate.			Chief Engineer's House.		Chief Engineer's Office.	
	Rs.	A.	Per	Quantity.	Cost.	Quantity.	Cost.
Excavation ...					Rs.		Rs.
Rammed Filling ...	5	0	1000 C.Ft.	22,435	112	11,120	31
Concrete ...	6	0	1000 C.Ft.	7,145	43	5,226	834
Masonry ...	15	0	100 C.Ft.	10,355	1,553	5,560	4,103
Plastering ...	25	0	100 C.Ft.	62,033	15,508	16,411	278
White-washing ...	4	0	100 S.Ft.	38,614	1,546	6,960	17
Flooring, pukka ...	0	4	100 S.Ft.	38,614	97	6,960	544
Roof (tiled) ...	20	0	100 S.Ft.	4,776	955	2,720	2,562
Do. (terraced) ...	30	0	100 S.Ft.	5,329	1,599	8,511	
Doors (glazed panel) ...	55	0	100 S.Ft.	1,701	936		210
Do. (batten) ...	2	0	S.Ft.	1,302	2,604	105	126
Windows ...	1	8	S.Ft.	140	210	84	640
Timber ...	2	0	S.Ft.	450	900	320	3,416
Cast Iron Columns ...	4	0	C.Ft.	872	3,488	854	
Do. Railing ...	1	0	L.Ft.	94	94		
Eave Boarding ...	1	4	L.Ft.	143	179		
Cornice ...	0	8	L.Ft.	143	72		
Venetians ...	0	10	L.Ft.	980	613		
Ceiling, 4" deal ...	1	12	S.Ft.	216	378		
Painting and Varnishing ...	30	0	100 S.Ft.	1,500	450		
Rolled iron beams ...	3	10	100 S.Ft.	3,312	121		
Punkhas ...	160	0	Ton	4	680		216
Out-houses ...	1	8	L.Ft.	120	180	144	500
Lump sum.					3,000		
Total...					35,318		13,533
Add Contingencies @ 5 per %...					1,766		677
Grand Total, Rs...					37,084		14,210

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head VIII.....STATIONS AND BUILDINGS.

Sub-Head 3.....Staff Quarters.

Name of Work ... District Engineer's Office and 1st Class Staff Quarters.

Particulars.	Rate.		District Engineer's Office.		1st Class Staff Quarters.	
	Rs. A.	Per	Quantity.	Cost.	Quantity.	Cost.
Excavation ...	5	0	1000 C. Ft.	3,726	18	...
Do. Rock ...	20	0	1000 C. Ft.	...	...	9,163
Rammed Filling ...	6	0	1000 C. Ft.	4,264	26	8,426
Concrete ...	15	0	100 C. Ft.	2,607	391	5,498
Masonry ...	25	0	100 C. Ft.	11,202	2,801	21,511
Plastering ...	4	0	100 S. Ft.	5,118	205	11,616
White-washing ...	0	4	100 S. Ft.	5,118	13	11,646
Flooring (Pukka) ...	20	0	100 S. Ft.	2,132	426	3,371
Roof (tiled) ...	30	0	100 S. Ft.	4,836	1,451	6,210
Ceiling (cloth) ...	8	0	100 S. Ft.	2,716	217	2,539
Doors and windows ...	2	0	S. Ft.	406	812	874
Punkhas ...	1	8	L. Ft.	70	105	70
Timber ...	4	0	C. Ft.	282	1,128	738
Out-houses ...	...	...	...	...	500	...
Well ...	...	...	...	...	812	...
Total..				8,905	...	16,977
Add Contingencies @ 5 per %...				445	...	819
Grand Total, Rs.				9,350	...	17,826

EAST COAST RAILWAY.

VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head VIII.....STATIONS AND BUILDINGS.

Sub-Head 3 Staff Quarters.

Name of Work.....2nd and 3rd Class Quarters.

Particulars.	Rate.		Staff Quarters, 2nd Class.		Staff Quarters, 3rd Class.	
	Rs. A.	Per	Quantity.	Cost.	Quantity.	Cost.
Excavation ...	5	0	1000 C.Ft.	3,000	15	2,700
Rammed Filling ...	6	0	1000 C.Ft.	3,789	23	2,834
Concrete ...	15	0	100 C.Ft.	3,000	450	1,800
Masonry ...	25	0	100 C.Ft.	8,540	2,135	7,827
Plastering ...	4	0	100 S.Ft.	6,264	251	4,635
White-washing...	0	4	100 S.Ft.	6,264	16	4,635
Flooring (pucka) ...	20	0	100 S.Ft.	1,863	373	1,417
Roof (double tiled) ...	25	0	100 S.Ft.	3,203	801	2,651
Doors (glazed)...	2	0	S.Ft.	302	604	115
Do. (batten) ...	1	8	S.Ft.	91	136	91
Windows ...	2	0	S.Ft.	38	76	38
Timber ...	4	0	C.Ft.	416	1,664	378
Punkhas ...	1	8	L.Ft.	24	36	24
Stone Blocks ...	1	0	C.Ft.	34	34	44
Ceiling Cloth ...	8	0	100 S.Ft.	1,313	105	829
Out-houses ...	Lump sum.			1,750		1,200
Total...				8,469		6,576
Add Contingencies @ 5 per %...				423		329
Grand Total, Rs...				8,892		6,905

EAST COAST RAILWAY.

VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head VIII.....STATIONS AND BUILDINGS.

Sub-Head 3 Staff Quarters.

Name of Work.....Station-Master's Quarters, &c.

Particulars.	Rate.		Station Master's Quarters.		Porters' Lines.		Permanent Gangs' Huts.	
	Rs. A.	Per	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.
Excavation ...	5	0	1000 C.Ft.	3,300	17	2,373	12	2,132
Rammed Filling ...	6	0	1000 C.Ft.	2,578	15	5,370	32	2,717
Concrete ...	15	0	100 C.Ft.	1,650	248	2,373	356	2,132
Masonry ...	25	0	100 C.Ft.	5,985	1,496	4,298	1,075	3,289
Plastering ...	4	0	100 S.Ft.	4,414	177	3,419	137	...
White-washing ...	0	4	100 S.Ft.	4,414	11	3,419	9	2,926
Flooring (Pucka) ...	20	0	100 S.Ft.	1,289	258	...	...	...
Do. (Rammed Kunkur) ...	5	0	100 S.Ft.	2,448	612	...	...	1,596
Roof (double tiled) ...	25	0	100 S.Ft.	...	...	1,659	166	...
Do. (single tiled) ...	10	0	S.Ft.	115	230	...	...	...
Doors (glazed) ...	2	0	S.Ft.	148	222	153	230	147
Do. (batten) ...	1	8	S.Ft.	29	58	...	...	...
Windows ...	2	0	C.Ft.	252	1,008	...	...	...
Timber ...	4	0	C.Ft.	...	...	218	654	51
Do. ...	3	0	L.Ft.	110	28	80	20	...
Varanda Posts ...	0	4						
Total...				4,380		2,732		1,980
Add Contingencies @ 5 per %...				219		137		99
Grand Total, Rs...				4,599		2,869		2,079

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

5' 6" GAUGE.

REVISED ESTIMATES.

Main Head VIII.....STATIONS AND BUILDINGS.

Sub-Head 4.....Station Machinery.

Amount Rs. 1,66,085. Equivalent to Rs. 2,606-0 per mile.

REFERENCES:—Type Drawings—Nos. L. 13; L. 35; O. 8; O. 10; O. 30;
O. 33; B. 2; B. 4; M. 1; M. 9.*Abstract of Cost of Station Machinery.*

Items.	Anakapalli Station.	Waltair Station.	Vizagapatam Station.	Simhachelum Station.	Kottavalasa Station.	Alamanda Station.	Vizianagaram Station.	Total Cost.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Engine Shed	...	40,873	...	...	...	...	...	40,873
Tank House	...	9,989	...	...	...	...	2,937	12,926
Ashpits	...	7,219	...	...	...	...	2,407	9,626
Wells	550	2,989	550	550	550	550	1,439	7,178
Piping	...	1,595	...	...	...	...	3,503	5,098
Pump and House	...	2,794	...	...	...	...	626	3,420
Signals	1,813	2,183	1,813	1,813	1,813	1,813	1,813	13,361
Goods Weighing Machine	200	200	200	200	200	200	200	1,400
Parcels do.	200	200	200	200	200	200	200	1,400
Crossings and Switches...	5,264	15,252	7,166	1,458	1,458	1,458	5,264	37,320
Turn Table	...	9,863	...	...	...	...	...	9,863
Weigh Bridge	...	3,444	...	...	...	...	...	3,444
Loading Gauge	...	74	...	...	...	...	...	74
Fuel Platform	...	525	...	...	...	...	...	525
Buffer Stops	84	252	504	84	84	84	84	1,176
Scotch Blocks	231	672	315	63	63	63	231	1,638
Dating Presses	34	34	34	34	34	34	34	238
Carriage Examining Pit..	...	11,278	...	...	...	...	...	11,278
Water Columns	...	3,148	...	...	...	...	2,099	5,247
Total...	8,376	1,12,881	10,782	4,402	4,402	4,402	20,837	1,66,085

Material from England, Rs. 61,956
Expenditure in India, Rs. 1,04,129

Total Rs. 1,66,085

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

5' 6" GAUGE.

REVISED ESTIMATES.

Main Head VIII.....STATIONS AND BUILDINGS.

Sub-Head 4.....Station Machinery.

Name of Work.....3 Units Engine Shed with Ash Pits for
12 Engines at Waltair.REFERENCES.
Type Drawing—No. O. 8.

Quantity.	Particulars.	Rate.	Per	Amount.
		Rs. A.		Rs.
27,555	C.Ft. Excavation	5 0	1000	138
39,716	C.Ft. Rammed Filling	5 0	1000	199
25,542	C.Ft. Concrete	15 0	100	3,832
35,130	C.Ft. Masonry	25 0	100	8,785
1,896	C.Ft. Archwork	60 0	100	1,138
1,404	S.Ft. Open work in Windows	6 0	100	85
10,086	S.Ft. Flooring (pukka)	20 0	100	2,018
20,160	S.Ft. Corrugated Iron Roofing	70 0	100	14,112
732	C.Ft. Timber	4 0	C.Ft.	2,928
888	lbs. Ironwork	0 4	lb.	222
120	L.Ft. Drain Pipes	0 8	L.Ft.	60
576	S.Ft. Bench work	0 8	S.Ft.	288
12	No. Funnels	100 0	each.	1,200
1	No. Smithy	1,000 0	lump sum.	1,000
552	C.Ft. Cornice	60 0	100	332
2,295	C.Ft. Pavement in Ash Pits	40 0	100	918
222	L.Ft. 6" Piping, Material from England	1 12	L. Ft.	388
	Do. Handling and carriage to site	0 1	L. Ft.	14
	Do. Laying	0 3	L. Ft.	42
6	Do. Bends, Material from England	18 0	each.	108
	Do. Handling and carriage to site	1 0	each.	6
	Do. Fixing	1 0	each.	6
6	Tee pieces, Material from England	23 0	each.	138
	Do. Handling and carriage to site	1 0	each.	6
	Do. Fixing	1 0	each.	6
6	Hydrants, Material from England	150 0	each.	900
	Do. Handling and carriage to site	5 0	each.	30
	Do. Fixing	5 0	each.	30
Total...				38,927
Add Contingencies @ 5 per %...				1,946
Grand Total, Rs...				40,873
Material from England, Rs....				1,534
Expenditure in India, Rs....				39,339
Grand Total, Rs....				40,873

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head VIII... STATIONS AND BUILDINGS.

Sub-Head 4... Station Machinery.

Name of Work... Tank Houses at Waltair and Vizianagram.

REFERENCES.

Type Drawing—No. O. 10.

Particulars.	Rate.		Tank House at Waltair.		Tank House at Vizianagram.		
	Rs.	A.	Per	Quantity.	Cost.	Quantity.	Cost.
					Rs.		Rs.
Excavation	5	0	1000 C.Ft.	3,568	18	900	5
Rammed Filling	6	0	1000 C.Ft.	1,501	9	2,074	12
Concrete	15	0	100 C.Ft.	2,676	401	675	101
Masonry	30	0	100 C.Ft.	13,869	4,161	1,848	554
Arching	60	0	100 C.Ft.	1,429	857	...	...
Plastering	4	0	100 S.Ft.	3,066	123	...	...
White-washing	0	4	100 S.Ft.	3,066	8	...	...
Flooring	20	0	100 S.Ft.	395	79	...	...
Doors (batten)	1	8	S.Ft.	48	72	...	..
Windows (glazed)	2	0	S.Ft.	90	180	..	...
Timber	4	0	C.Ft.	...	...	106	424
Old Rails	1	0	L.Ft.	5	5	141	141
Ironwork	0	4	lb.	...	...	240	60
Ladder	100	0	each	1	100	1	100
Tanks (Material from England) ..	290	0	each	10	2,900	4	1,160
Do. (Carriage)	10	0	each	10	100	4	40
Do. (Erecting and Painting)...	50	0	each	10	500	4	200
Total...				...	9,513	...	2,797
Add Contingencies @ 5 per %...				...	476	...	140
Grand Total, Rs...				...	9,989	...	2,937
Material from England, Rs...				...	2,900	...	1,160
Expenditure in India, Rs...				...	7,089	...	1,777
Grand Total, Rs...				...	9,989	...	2,937

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head VIII... STATIONS AND BUILDINGS.

Sub-Head 4... Station Machinery.

Name of Work... Ashpits at Waltair and Vizianagram.

REFERENCES.

Type Drawing—No. O. 33.

Type Drawing—No. O. 33.										
Particulars.				Rate.		Waltair.		Vizianagram.		
				Rs.	A.	Per	Quan- tity.	Cost.	Quan- tity.	Cost.
				Rs.		Rs.		Rs.		
Excavation	...	...	...	5	0	1000 C.Ft.	15,912	80	5,304	27
Concrete	...	...	...	15	0	100 C.Ft.	16,294	2,444	5,431	815
Masonry	...	...	...	30	0	100 C.Ft.	4,803	1,441	1,601	480
Pavement	...	...	...	40	0	100 C.Ft.	1,530	612	510	204
Timber	...	...	...	4	0	C.Ft.	516	2,064	172	688
Ironwork	...	...	...	0	4	lb.	636	159	212	53
Drain Pipes	...	...	...	0	8	L.Ft.	150	75	50	25
Total...							...	6,875	...	2,292
Add Contingencies @ 5 per %...							...	344	...	115
Grand Total, Rs...							...	7,219	...	2,407

EAST COAST RAILWAY VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head VIII.....STATIONS AND BUILDINGS.

Sub-Head 4.....Station Machinery.

Name of Work.....Wells.

Particulars.	Rate.		16' diameter Well at Waltair.		12' diameter Well at Vizianagrum.		6' diameter Well at Vizagapatam.	
	Rs. A.	Per	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.
Masonry ...	30 0	100 C.Ft.	4,359	Rs. 1,308	2,024	Rs. 607	884	Rs. 265
Curbs 16' diam...	500 0	each	1	500	...	...	...	...
Do. 12' do.	300 0	each	...	...	1	300	...	...
Do. 6' do.	100 0	each	...	...	...	...	1	100
Excavation (sinking) ...	10 0	100 C.Ft.	10,392	1,039	4,626	463	1,591	159
Total...				2,847	...	1,370	...	524
Add Contingencies @ 5 per %..				142	..	69	...	26
Total ...				2,989	...	1,439	...	550
Add for four more ...				...	...	...	...	2,200
Grand Total, Rs...				2,989	...	1,439	...	2,750

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head VIII.....STATIONS AND BUILDINGS.

Sub-Head 4.....Station Machinery.

Name of Work.....Piping at Waltair and Vizianagrum.

Type Drawing—No. O. 30.

Particulars.	Rate.		Piping at Waltair.		Piping at Vizianagrum	
	Rs. A.	Per	Quantity.	Cost.	Quantity.	Cost.
11" Piping.	4 8	L. Ft.	150	Rs. 675	71	Rs. 320
Material from England...	0 2	L. Ft.	150	19	71	9
Handling and carriage to site ...	0 6	L. Ft.	150	56	71	27
Laying ...	2 0	L. Ft.	150	372	71	2,400
Piping	0 1	L. Ft.	186	12	1,200	75
Material from England...	0 3	L. Ft.	186	35	1,200	225
Handling and carriage to site ...	0 3	L. Ft.	186	90	4	72
Laying ...	18 0	each	5	5	4	4
4 Bends	1 0	each	3	69	1	23
Material from England...	1 0	each	3	3	1	1
Carriage to site ...	23 0	each	3	3	1	170
Laying ...	1 0	each	3	170	1	1
Tee Pieces.	1 0	each	1	170	1	170
Material from England...	1 0	each	1	170	1	170
Carriage to site ...	170 0	each	1	170	1	170
Laying ...	4 0	each	1	170	1	170
Sluice valve.	1 0	each	1	170	1	170
Material from England...	1 0	each	1	170	1	170
Carriage to site ...	170 0	each	1	170	1	170
Laying ...	4 0	each	1	170	1	170
Total .				1,519	...	3,336
Add Contingencies @ 5 per %...				76	...	167
Grand Total, Rs...				1,595	...	3,503
Material from England, Rs...				1,376	...	518
Expenditure in India, Rs...				219	...	...
Grand Total, Rs..				1,595	...	3,503

EAST COAST RAILWAY.

VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head VIII STATIONS AND BUILDINGS.

Sub-Head 4 Station Machinery.

Name of Work Pumps at Waltair and Vizianagrum.

Steam Pump at Waltair.

Quantity.	Item.		Rate.	Per	Amount.	Total.
			Rs. A.		Rs.	Rs.
300	C.Ft.	Excavation	5 0	1000	2	
300	C.Ft.	Concrete	15 0	100	45	
200	C.Ft.	Masonry	25 0	100	50	
96	C.Ft.	Timber	4 0	C.Ft.	384	
400	S.Ft.	Roofing, Thatch	15 0	100	60	
1	No.	Steam Pump, Material from England	1,900 0	each	1,900	
1	No.	Do. Carriage to site and Handling	20 0	each	20	
1	No.	Do. Erecting and Fixing	200 0	each	200	
Total...					2,661	
Add Contingencies @ 5 per %...					133	
Grand Total, Rs...					...	2,794
Material from England, Rs...					...	1,900
Expenditure in India, Rs...					...	894
Grand Total, Rs...					...	2,794

Hand Pump at Vizianagrum.

Quantity.	Item.		Rate.	Per	Amount.	Total.
			Rs. A.		Rs.	Rs.
24	C.Ft.	Timber...	4 0	C.Ft.	96	
1	No.	Hand Pump, Material from England	465 0	each.	465	
1	No.	Do. Carriage to site and Handling	5 0	each.	5	
1	No.	Do. Erecting and Fixing	30 0	each.	30	
Total...					596	
Add Contingencies @ 5 per %...					30	
Grand Total, Rs...					...	626
Material from England, Rs...					...	465
Expenditure in India, Rs...					...	161
Grand Total, Rs....					...	626

EAST COAST RAILWAY.

VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head VIII.....STATIONS AND BUILDINGS.

Sub-Head 4 Station Machinery.

Name of Work.....Signals at Waltair.

Quantity.	Item.		Rate.	Per	Amount.	Total.
			Rs. A.		Rs.	Rs.
700	C.Ft.	Excavation	5 0	1000	4	
500	C.Ft.	Concrete	15 0	100	75	
200	C.Ft.	Masonry	30 0	100	60	
1	No.	Home Signal, Material from England...	380 0	each	380	
1	No.	Do. Carriage to site & Handling.	5 0	each	5	
3	No.	Distant Signals, Material from England	350 0	each	1,050	
3	No.	Do. Carriage to site & Handling.	5 0	each	15	
4	No.	Erecting, Fitting and Painting Signals	30 0	each	120	
3,750	Yds.	Wire, Material from England	9 0	100	338	
3,750	Yds.	Do. Carriage to site	1 0	100	37	
225	No.	Stakes	0 12	each	169	
225	No.	Pulleys, Material from England..	0 7	each	98	
225	No.	Do. Carriage and Fixing	0 1	each	14	
Total...					2,365	
Add Contingencies @ 5 per %...					118	
Grand Total, Rs. ...					...	2,483
Material from England, Rs. ...					...	1,866
Expenditure in India, Rs....					...	617
Grand Total, Rs....					...	2,483

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head VIII.....STATIONS AND BUILDINGS.

Sub-Head 4.....Station Machinery.

Name of Work.....Signals at Anakapalli.

Quantity.	Item.	Rate.	Per	Amount.	Total
		Rs. A.		Rs.	Rs.
525	C.Ft. Excavation	5 0	1000	3	
375	C.Ft. Concrete	15 0	100	56	
150	C.Ft. Masonry	30 0	100	45	
1	No. Home Signal, Material from England	380 0	each	380	
1	No. Do. Carriage to site, etc....	5 0	each	5	
2	No. Distant Signals, English Material	350 0	each	700	
2	No. Do. Carriage to site & handling.	5 0	each	10	
3	No. Erecting, fitting & painting Signals.	30 0	each	90	
2,500	Yds. Wire, Material from England ...	9 0	100	225	
2,500	Yds. Do. Carriage to site ...	1 0	100	25	
150	No. Stakes	0 12	each	113	
150	No. Pulleys, Material from England ...	0 7	each	66	
150	No. Do. Carriage, fixing, &c. ...	0 1	each	9	
Total...				1,727	
Add Contingencies @ 5 per %...				86	
Total...				1,813	
Add for five more...				9,065	
Grand Total, Rs...				...	10,878
Material from England, Rs...				...	8,226
Expenditure in India, Rs...				...	2,652
Grand Total, Rs...				...	10,878

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head VIII.....STATIONS AND BUILDINGS.

Sub-Head 4.....Station Machinery.

Name of Work.....Goods and Parcels Weighing Machines.

Number.	Item.	Rate.	Per	Amount.	Total.
		Rs. A.		Rs.	Rs.
<i>Goods Weighing Machine.</i>					
1	Material from England	180 0	each	180	
1	Expenditure in India	10 0	each	10	
Total...				190	
Add Contingencies @ 5 per % ...				10	
Total ...				200	
Add for six more ...				1,200	
Total, Goods Weighing Machine...				..	1,400
<i>Parcels Weighing Machine.</i>					
1	Material from England	180 0	each	180	
1	Expenditure in India	10 0	each	10	
Total...				190	
Add Contingencies @ 5 per %...				10	
Total...				200	
Add for six more...				1,200	
Total, Parcels Weighing Machine...				...	1,400
Grand Total, Rs....				...	2,800
Material from England, Rs...				...	2,520
Expenditure in India, Rs...				...	280
Grand Total, Rs...				...	2,800

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head VIII.....STATIONS AND BUILDINGS.

Sub-Head 4 Station Machinery.

Name of Work Crossings and Switches, Waltair Station.

REFERENCES.

Type Drawing.—No. L. 35.

Quantity.	Item.	Rate.	Per	Amount.	Total
		Rs. A.		Rs.	Rs.
1,100	C.Ft. Timber in Sleepers	2 8	C.Ft.	2,750	
32	Sets. Switches, Material from England ...	172 0	Set.	5,504	
32	Sets. Do. Expenditure in India, all charges.	30 0	Set.	960	
32	Sets. Crossings, Material from England ...	136 0	Set.	4,352	
32	Sets. Do. Expenditure in India, Fixing, &c.	30 0	Set.	960	
Total...				14,526	
Add Contingencies @ 5 per %...				726	
Grand Total, Rs...				...	15,252
Material from England, Rs...				...	9,856
Expenditure in India, Rs...				...	5,396
Grand Total, Rs...				...	15,252

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head VIII.....STATIONS AND BUILDINGS.

Sub-Head 4.....Station Machinery.

Name of Work.....Crossings and Switches at Anakapalli.

REFERENCES.

Type Drawing—No. B. 2.

Quantity.	Item.	Rate.	Per	Amount.	Total.
		Rs. A.		Rs.	Rs.
386	C.Ft. Timber in Sleepers	2 8	C.Ft.	965	
11	Sets Switches, Material from England ...	172 0	Set	1,892	
11	Sets Do. Expenditure in India ...	30 0	Set	330	
11	Sets Crossings, Material from England ...	136 0	Set	1,496	
11	Sets Do. Expenditure in India ...	30 0	Set	330	
Total...				5,013	
Add Contingencies @ 5 per %...				251	
Total...				5,264	
Add for one more at Vizianagaram...				5,264	
Grand Total, Rs...				...	10,528
Material from England, Rs...				...	6,776
Expenditure in India, Rs...				...	3,752
Grand Total, Rs...				...	10,528

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head VIII.....STATIONS AND BUILDINGS.

Sub-Head 4 Station Machinery.

Name of Work Crossings and Switches at Simhachelum.

REFERENCES.

Type Drawing—No. B. 4.

Quantity.	Item.	Rate.	Per	Amount.	Total.
		Rs. A.		Rs.	Rs.
114	C.Ft. Timber	2 8	C.Ft.	285	
3	Sets. Switches, Material from England	172 0	Set.	516	
3	" Do. Expenditure in India	30 0	"	90	
3	" Crossings, Material from England	136 0	"	408	
3	" Do. Expenditure in India	30 0	"	90	
Total..				1,389	
Add Contingencies @ 5 per %..				69	
Total...				1,458	
Add for two more at Kottavalsa and Alamanda...				2,916	
Grand Total, Rs...				...	4,374
Material from England, Rs...				...	2,772
Expenditure in India, Rs...				...	1,602
Grand Total, Rs...				...	4,374

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head VIII.....STATIONS AND BUILDINGS.

Sub-Head 4 Station Machinery.

Name of Work Crossings and Switches at Vizagapatam Station
and Ghat Sidings.

REFERENCES.

Type Drawings—Nos. L. 13 and B. 4.

Quantity.	Particulars.	Rate.	Per	Amount.	Total.
		Rs. A.		Rs.	Rs.
522	C. Ft. Timber in Sleepers	2 8	C. Ft.	1,305	
15	Sets Switches, Material from England	172 0	Set.	2,580	
15	" Do. Expenditure in India	30 0	"	450	
15	" Crossings, Material from England	136 0	"	2,040	
15	" Do. Expenditure in India	30 0	"	450	
Total..				6,825	
Add Contingencies @ 5 per %...				341	
Grand Total, Rs...				...	7,166
Material from England, Rs...				...	4,620
Expenditure in India, Rs...				...	2,546
Grand Total, Rs....				...	7,166

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head VIII.....STATIONS AND BUILDINGS.

Sub-Head 4.....Station Machinery.

Name of Work.....Turntable at Waltair.

REFERENCES.

Type Drawing—No. M. 1.

Quantity.	Item.	Rate.	Per	Amount.	Total.
		Rs. As.		Rs.	Rs.
12,534	C.Ft. Excavation	...	5 0	1000	63
6,267	C.Ft. Concrete	...	15 0	100	940
2,736	C.Ft. Masonry	...	30 0	100	821
226	C.Ft. Do. Ashlar	...	100 0	100	226
1,626	S.Ft. Flooring	...	10 0	100	63
1	No. Turntable, Material from England	6,500 0	each.	6,500	
1	No. Do. Carriage to site and handling	170 0	each.	170	
1	No. Do. Erecting and painting...	510 0	each.	510	
Total...				9,393	
Add Contingencies @ 5 per %...				470	
Grand Total, Rs....				...	9,863
Material from England, Rs....				...	6,500
Expenditure in India, Rs....				...	3,363
Grand Total, Rs....				...	9,863

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head VIII.....STATIONS AND BUILDINGS.

Sub-Head 4.....Station Machinery.

Name of Work.....Weigh-Bridge at Waltair.

Quantity.	Item.	Rate.	Per	Amount.	Total.
		Rs.		Rs.	Rs.
1	Weigh-Bridge, Material from England	2,500	each.	2,500	
1	Do. Expenditure in India, including handling and carriage to site.	30	each.	30	
1	Do. Erecting, painting, etc., and foundations	750	each.	750	
Total...				3,280	
Add Contingencies @ 5 per %...				164	
Grand Total, Rs....				...	3,444
Material from England, Rs....				...	2,500
Expenditure in India, Rs....				...	944
Grand Total, Rs....				...	3,444

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head VIII STATIONS AND BUILDINGS.

Sub-Head 4.....Station Machinery.

Name of Work.....Loading Gauge and Fuel Platform at Waltair.
Loading Gauge.

Quantity.	Item.	Rate.	Per	Amount.	Total.
1	Loading Gauge, including erection...	Rs. 70	lump sum.	Rs. 70	Rs. 70
	Add Contingencies at 5 per %...	...	...	...	4
	Grand Total, Rs...	...	...	...	74

Fuel Platform.

Quantity.	Item.	Rate.	Per	Amount.	Total.
1	Fuel Platform ...	Rs. 500	lump sum.	Rs. 500	Rs. 500
	Add Contingencies at 5 per %...	...	...	...	25
	Grand Total, Rs...	...	...	...	525

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head VIII.....STATIONS AND BUILDINGS.

Sub-Head 4.....Station Machinery.

Name of Work Buffer Stops, Scotch Blocks and Dating Presses.
Cost of one Buffer Stop and one Scotch Block.

Quantity.	Item.	Cost.	Contingencies at 5 per 100.	Total.
1	Buffer Stop	Rs. 80	Rs. 4	Rs. 84
1	Scotch Block	20	1	21

Abstract of cost of Buffer Stops and Scotch Blocks.

Names of Stations.	Buffer Stops.			Scotch Blocks.		
	No.	Rate.	Amount.	No.	Rate.	Amount.
Anakapalli ...	1	Rs. 84	Rs. 84	11	Rs. 21	Rs. 231
Waltair ...	3	84	252	32		261
Vizagapatam ...	6	84	504	15		126
Simhachelum ...	1	84	84	3		25
Kottavalsa ...	1	84	84	3		25
Alamanda ...	1	84	84	3		25
Vizianagrum ...	1	84	84	11		231
Total...	...		1,176			1,638

Abstract of cost of Dating Presses.

Quantity.	Item.	Rate.	Per	Amount.	Total.
1	Dating Press, Material from England	Rs. A. 30 0	each	Rs. 30	Rs. 30
1	Do. Expenditure in India	2 0	each	2	2
	Total ...			32	
	Add Contingencies @ 5 per %...			2	
	Total ...			34	
	Add for 6 more ...			204	
	Grand Total, Rs...			...	238
	Material from England, Rs...			...	210
	Expenditure in India, Rs...			...	28
	Grand Total, Rs...			...	238

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head VIII.....STATIONS AND BUILDINGS.

Sub-Head 4.....Station Machinery.

Name of Work.....Carriage Examining Pit at Waltair.

Quantity.	Item.	Rate.	Per	Amount.	Total.
		Rs. A.		Rs.	Rs.
36,600	C.Ft. Excavation ...	5 0	1000	183	
20,340	C.Ft. Concrete ...	15 0	100	3,051	
20,436	C.Ft. Masonry ...	25 0	100	5,109	
513	C.Ft. Timber ...	4 0	C.Ft.	2,052	
1,381	lbs. Ironwork ...	0 4	lb.	346	
Total...				10,741	
Add Contingencies @ 5 per %...				537	
Grand Total, Rs...				...	11,278

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head VIII.....STATIONS AND BUILDINGS.

Sub-Head 4.....Station Machinery.

Name of Work.....Water Cranes at Waltair and Vizianagrum.

REFERENCES.

Type Drawing—No. M. 9.

Particulars.	Rate.		Water Cranes at Waltair.		Water Cranes at Vizianagrum.	
	Rs. A.	Per	Quantity.	Cost.	Quantity.	Cost.
				Rs.		Rs.
Excavation ...	5 0	1000 C. Ft.	1,230	6	820	4
Concrete ...	15 0	100 C. Ft.	657	99	438	66
Masonry ...	30 0	100 C. Ft.	324	97	216	65
Earthenware Pipe Drains ...	0 8	L. Ft.	60	30	40	20
Iron Gratings ...	2 0	each.	3	6	2	4
<i>Water Columns 8".]</i>						
Material from England ...	800 0	each.	3	2,400	2	1,600
Do. Expenditure in India ...	20 0	each.	3	60	2	40
Do. Erecting and Fixing ...	100 0	each.	3	300	2	200
Total ...				2,998	...	1,999
Add Contingencies @ 5 per % ...				150	...	100
Grand Total, Rs. ...				3,148	...	2,099
Material from England, Rs. ...				2,400	...	1,600
Expenditure in India, Rs. ...				748	...	499
Total, Rs. ...				3,148	...	2,099

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head IX.....PLANT.

Sub-Head 1 Engineering.

Amount Rs. 39,913. Equivalent to Rs.626.3 per mile.

Number.	Item.	Cost.	Amount.
		Rs.	Rs.
1 No.	Hand Derrick Crane		
1 "	Portable Engine...	3,200	3,200
5 "	Do. Forges...	6,000	6,000
1 "	Mortar Mill	150	750
24 sets.	Platelayer's Tools	1,200	1,200
2 "	Carpenter's Tools	350	8,400
10 "	Riveter's Tools	100	200
2 "	Blacksmith's Tools	100	1,000
2 No.	Anvils	80	160
630 "	Ballast Hammers	100	200
50 "	Sledge do.	2	1,260
2 "	Swage Blocks	15	750
24 "	Grind Stones	45	90
1 "	Tool Grinder	40	960
20 "	Saws of sorts	550	550
3 "	Vices	5	100
20 "	Levels	30	90
190 "	Phaoras	2	40
100 "	Picks	1	190
10 "	Pulley Blocks	4	400
2 "	Jacks	50	500
1 "	Rail Straightening Press	110	220
4 "	Ramps	600	600
2 "	Winches	200	800
50 "	Augers of sorts	450	900
	Trollies	3	150
	Camp Equipage...		2,250
	Instruments		790
	Contingencies and Small Tools at Rs. 100 per mile...		1,700
	Grand Total, Rs..		6,373
			39,913

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head IX.....PLANT.

Sub-Head 2 Locomotive.

Amount Rs. 4,50,000. Equivalent to Rs. 7,060.9 per mile.

Number.	Item.	Cost.	Amount.
		Rs.	Rs.
1	Lump Sum	4,50,000	4,50,000

5' 6" GAUGE.

Main Head IX.....PLANT.

Sub-Head 3 Carriage and Wagon.

Amount Rs. 50,000. Equivalent to Rs. 784.5 per mile.

Abstract of cost of Station and Office Furniture.

Number.	Item.	Cost.	Amount.
		Rs.	Rs.
1	Lump Sum	50,000	50,000

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head IX.....PLANT.

Sub-Head 4.....Station and Office Furniture.

Amount Rs. 16,887. Equivalent to Rs. 265.0 per mile.

Abstract of Cost of Station and Office Furniture.

Number.	Item.	Cost.	Amount.
		Rs.	Rs.
2	1st Class Stations ...	2,355	4,710
1	2nd Class Station ...	1,629	1,629
4	3rd Class Stations ...	887	3,548
1	Refreshment Room (lump sum) ...	1,000	1,000
1	Chief Engineer's Office (lump sum) ...	2,500	2,500
1	Combined Manager's, Stores and Examiner's Office (lump sum) ...	2,500	2,500
1	District Engineer's Office (lump sum) ...	1,000	1,000
	Total ...	...	16,887

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head IX.....PLANT.

Sub-Head 4.....Station and Office Furniture.

First Class Station Furniture.

Quantity.	Item.	Cost.	Amount.
		Rs. As.	Rs.
	BATH ROOM.		
4	Commodos ...	8 0	32
4	Tubs ...	8 0	32
4	Pots ...	2 0	8
	DRESSING ROOM.		
2	Dressing Tables ...	16 0	32
2	Washing Tables ...	20 0	40
4	Towel Racks ...	3 0	12
2	Glasses ...	10 0	20
2	Lamps ...	10 0	20
2	Chairs ...	4 8	9
	WAITING ROOM.		
2	Large Tables ...	40 0	80
4	Side Tables ...	16 0	64
2	Couches ...	25 0	50
2	Chairs, Easy ...	16 0	32
2	Chairs, Ordinary ...	4 8	54
12	Almiras ...	40 0	80
2	Lamps ...	15 0	60
4	Tumblers ...	0 8	3
4	Tables ...	20 0	80
6	Chairs ...	4 8	27
2	Stools ...	3 0	6
2	Almiras ...	40 0	80
1	Safe ...	150 0	150
1	Ticket Press ...	120 0	120
2	Clocks ...	70 0	140
3	Benches ...	20 0	60
6	Notice Boards ...	8 0	48
1	Filter ...	20 0	20
2	Surai Stands ...	3 0	6
6	Tumblers ...	0 8	3
10	Padlocks ...	1 0	10
4	Lamps, Verandah ...	20 0	80
3	Do. Table ...	10 0	30
6	Do. Porter's ...	8 0	48
3	Do. Ticket Collector's ...	4 0	12
6	Do. Hand Signal ...	8 0	48
2	Oil Drums ...	25 0	50
6	Flags, sets ...	3 0	18
6	Platform Barrows ...	30 0	180
1	Station Bell ...	40 0	40
Total...			1,884
Add Contingencies @ 25 per %...			471
Grand Total, Rs...			2,355

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head IX.....PLANT.

Sub-Head 4.....Station and Office Furniture.

2nd Class Station Furniture.

Quantity.	Item.	Cost.		Amount.
		Rs.	As.	Rs.
BATH ROOM.				
2	Commodes	8	0	16
2	Tubs	8	0	16
2	Pots	2	0	4
DRESSING ROOM.				
1	Dressing Table	16	0	16
1	Washing Table	20	0	20
2	Towel Racks	3	0	6
1	Glass	10	0	10
1	Lamp	10	0	10
2	Chairs	4	8	9
WAITING ROOM.				
1	Large Table	30	0	30
1	Side Table	16	0	16
1	Couch	25	0	25
1	Chair, Easy	16	0	16
6	Chair, Ordinary	4	8	27
1	Almirah	40	0	40
2	Lamps	15	0	30
4	Tumblers	0	8	2
3	Tables	20	0	60
4	Chairs	4	8	18
2	Stools	3	0	6
1	Almirah	40	0	40
1	Safe	150	0	150
1	Ticket Press	120	0	120
2	Clocks	70	0	140
2	Benches	20	0	40
5	Notice Boards	8	0	40
1	Filter	20	0	20
2	Surai Stands	3	0	6
4	Tumblers	0	8	2
6	Padlocks	1	0	6
3	Lamps, Veranda	20	0	60
2	Do. Table	10	0	20
3	Do. Porters'	8	0	24
3	Do. Ticket Collectors'	4	0	12
6	Do. Hand Signal	8	0	48
2	Oil Drums	25	0	50
6	Flags, sets	3	0	18
3	Platform Barrows	30	0	90
1	Station Bell	40	0	40
Total...				1,303
Add Contingencies @ 25 per %...				326
Grand Total, Rs...				1,629

EAST COAST RAILWAY. VIZAGAPATAM DIVISION.

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head IX.....PLANT.

Sub-Head 4.....Station and Office Furniture.

3rd Class Station Furniture.

Quantity.	Item.	Cost.		Amount.
		Rs.	A.	Rs. A.
BATH ROOM.				
1	Commode	8	0	8 0
1	Pot	2	0	2 0
WAITING ROOM.				
2	Tables	4	8	13 8
3	Chairs	3	0	6 0
2	Stools	40	0	40 0
1	Almira	150	0	150 0
1	Safe	60	0	60 0
1	Ticket Press	70	0	70 0
1	Clock	20	0	20 0
1	Bench	8	0	32 0
4	Notice Boards	20	0	20 0
1	Filter	3	0	6 0
2	Surai Stands	0	8	1 0
2	Tumblers	1	0	4 0
4	Padlocks	20	0	40 0
2	Lamps, Veranda	10	0	20 0
2	Do. Table	8	0	24 0
3	Do. Porter's	4	0	8 0
2	Do. Ticket Collector's	8	0	32 0
4	Do. Hand Signal	25	0	25 0
1	Oil Drum	3	0	18 0
6	Flags, sets	30	0	30 0
1	Platform Barrow	40	0	40 0
1	Station Bell			
Total ..				709 8
Add Contingencies @ 25 per %...				177 8
Grand Total, Rs....				887 0

EAST COAST RAILWAY. **VIZAGAPATAM DIVISION.**

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head XII.....GENERAL CHARGES.

Sub-Head 2.....Engineering.

Amount Rs. 3,16,108. Equivalent to Rs. 4,960.1 per mile.

Abstract.

Number of miles.	Particulars.	Rate per mile.	Amount.
		Rs.	Rs.
63-731	Salaries and Allowances ...	3,600	2,29,432
63-731	Office Accommodation ...	100	6,373
63-731	Instruments ...	100	6,373
63-731	Office Expenses ...	300	19,119
	Quarters ...	lump sum	41,746
	Contingencies on first four items ...	...	13,065
	Grand Total, Rs....	...	3,16,108

EAST COAST RAILWAY. **VIZAGAPATAM DIVISION.**

REVISED ESTIMATES.

5' 6" GAUGE.

Main Head XII.....GENERAL CHARGES.

Sub-Head 2.....Engineering.

Name of Work.....Temporary Staff Quarters.

Particulars.	Rate.		Assistant Engineer's Quarters, No. 2.		Subordinates' Quarters, No. 4.		
	Rs.	As.	Per	Quantity.	Cost.	Quantity.	Cost.
					Rs.		Rs.
Excavation	5	0	1000 C.Ft.	11,356	57	9,060	45
Rammed Filling	6	0	1000 C.Ft.	11,104	67	12,552	75
Concrete	15	0	100 C.Ft.	4,842	726	6,048	907
Masonry	20	0	100 C.Ft.	23,990	4,798	29,760	5,952
Timber	4	0	C.Ft.	840	3,360	1,500	6,000
Doors and Windows	2	0	S.Ft.	614	1,228	1,140	2,280
Plastering	4	0	100 S.Ft.	14,932	597	23,924	953
White-washing	0	4	100 S.Ft.	14,932	37	23,824	60
Ceiling Cloth	8	0	100 S.Ft.	2,860	229	4,572	366
Flooring	20	0	100 S.Ft.	4,404	881	6,276	1,255
Roof (Double tiled)	30	0	100 S.Ft.	7,306	2,192	15,128	4,538
Punkhas	1	8	L.Ft.	48	72	96	114
Veranda Posts	0	4	L.Ft.	220	55	336	84
Out-houses	Lump sum		...	...	1,600	...	1,200
Total...				...	15,899	...	23,859
Add Contingencies @ 5 per %...				...	795	...	1,193
Grand Total, Rs...				...	16,694	...	25,052
Total Quarters, Rs...				...	...	...	41,746