

(1) Number of pages _____

(2) Date of repair _____

(3) Initials of the Referencer _____

MADRAS RECORD OFFICE.

Government of Madras

Public Works DEPARTMENT

G.O. No.	3038-39	Press
B.P. No.		Mis.
Dated	13-11-195	26

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
13th November 1876. No. 3,039.*

No. 219. Read the following letter from Lieutenant-Colonel J. H. M. SHAW-STEWART, R.E., Consulting Engineer for Railways, to Major-General G. W. WALKER, R.E., Secretary to Government, Public Works Department, dated Madras, 10th November 1876, No. 549:—

In continuation of this office letter, No. 504, of the 23rd ultimo, and with reference

No. 113, of 18th July 1876.	to the Proceedings of Government as per
" " of 19th October 1876.	margin, I have the honor to enclose here-

with, for transmission to the Government

of India, three statements showing the weights, &c., of girders and bridges of 20 feet span and upwards on the Northern and Southern Extensions, and on the line from Negapatam to Erode of the South Indian Railway.

INDIAN RAILWAYS.
WEIGHTS OF GIRDERS AND BRIDGE COMPLETE.
South India Railway, Northern Extension.

Proceedings of the Madras Government, Public Works Department,
13th November 1876. No. 3,039.

DESCRIPTION OF BRIDGE.				ORDINARY ROADWAY FOR WHEELS OR FOOT TRAFFIC.				WEIGHT OF ONE SPAN.			Raile run on top flange of girders.
Name.	Distance on Railway.	Waterway.		Character of main Girders.	Supplied or not.	On top or between Girders.	FEEET.	TONS.	TONS.	TONS.	
		Span.	Clear Span.								
MILES.	NO.	FEET.	FEET.	NO.	...	...	...	...	...	...	...
Coom Bridge...	2 76	5	40	200	Plate ...	...	...	1.13	5.4	1.8	7.2
.....	3 9	1	20	20	Do.	...	...	1.34	1.6	.7	2.3
Adyar Bridge...	6 50	6	66	396	Lattice ...	...	...	.89	10.0	1.4	11.4
.....	21 78	5	20	100	Plate ...	...	...	1.34	1.6	.7	2.3
.....	23 51	4	20	80	Do.	...	...	1.34	1.6	.7	2.3
.....	33 74	6	20	120	Do.	...	...	1.34	1.6	.7	2.3
.....	42 9	4	20	80	Do.	...	...	1.34	1.6	.7	2.3
Palar Bridge ...	42 65	18	120	2,160	Lattice ...	...	...	.76	34.0	17.5	51.5
.....	44 34	1	20	20	Plate ...	...	...	1.34	1.6	.7	2.3
Thandalum Bridge ...	44 69	6	25	150	Do.	...	...	1.26	2.4	1.1	3.5
.....	45 30	4	20	105	Do.	...	...	1.34	1.6	.7	2.3
.....	45 46	1	20	20	Do.	...	...	1.34	1.6	.7	2.3
Karangooly ...	49 11	11	40	440	Do.	...	...	1.13	5.4	1.1	3.5
.....	58 16	1	20	20	Do.	...	...	1.34	1.6	.7	2.3
.....	58 38	1	20	20	Do.	...	...	1.34	1.6	.7	2.3
.....	63 57	4	20	80	Do.	...	...	1.34	1.6	.7	2.3
.....	64 43	3	25	75	Do.	...	...	1.26	2.4	1.1	3.5
.....	66 57	2	25	50	Do.	...	...	1.26	2.4	1.1	3.5
.....	69 34	2	30	60	Do.	...	...	1.24	3.5	1.5	5.0
.....	77 2	3	20	60	Do.	...	...	1.34	1.6	.7	2.3
.....	77 74	1	20	20	Do.	...	...	1.34	1.6	.7	2.3
.....	78 45	1	20	20	Do.	...	...	1.34	1.6	.7	2.3

Proceedings of the Madras Government, Public Works Department,
13th November 1876. No. 3,039.

Name.	Distance on Railway.	Waterway.		Character of main Girders.	Supplied or not.	On top or between Girders.	Total rolling load provided for per foot run.	Main Girders.	Cross Girders and Brac- ing.	Raile run on top flange of Girders.
		MILES.	NO.	FEET.				TONS.	TONS.	
Thundyar or Chendur.	84 16		3	25	...	...	1.26	2.4	1.1	3.5
Gingee...	84 29		2	100	...	...	.79	25.1	12.5	37.6
.....	85 68		{ 11 2 }	{ 30 15 }	...	...	1.24	3.5	1.5	5.0
.....	92 14		5	30	...	...	1.24	3.5	1.5	5.0
.....	92 21		1	25	...	...	1.26	2.4	1.1	3.5
.....	93 64		2	20	...	...	1.34	1.6	.7	2.3
.....	97 3		3	30	...	...	1.24	3.5	1.5	5.0
.....	97 29		1	25	...	...	1.26	2.4	1.1	3.5
.....	99 54		1	25	...	...	1.26	2.4	1.1	3.5
.....	100 72		1	25	...	...	1.26	2.4	1.1	3.5
.....	102 8		1	25	...	...	1.26	2.4	1.1	3.5
.....	102 71		2	25	...	...	1.26	2.4	1.1	3.5
.....	102 76		2	25	...	...	1.26	2.4	1.1	3.5
.....	103 41		3	40	...	...	1.13	5.4	1.8	7.2
.....	103 77		1	20	...	...	1.34	1.6	.7	2.3
.....	104 40		4	25	...	...	1.26	2.4	1.1	3.5
Panar ...	105 3		17	100	...	...	.79	25.1	12.5	37.6
.....	106 13		3	25	...	...	1.26	2.4	1.1	3.5
.....	106 29		4	25	...	...	1.26	2.4	1.1	3.5
.....	106 37		1	20	...	...	1.34	1.6	.7	2.3
.....	106 50		1	25	...	...	1.26	2.4	1.1	3.5
.....	107 58		1	20	...	...	1.34	1.6	.7	2.3
.....	108 38		1	20	...	...	1.34	1.6	.7	2.3
.....	111 47		2	20	...	...	1.34	1.6	.7	2.3
.....	113 72		1	20	...	...	1.34	1.6	.7	2.3
Guddalur ...	124 4		10	100	...	...	.79	25.1	12.5	37.6
.....	127 34		1	70	...	...	.89	13.0	8.0	21.0
On branch to wharf ...	0 17		1	20	...	...	1.34	1.6	.7	2.3
.....	134 48		1	40	...	...	1.13	5.4	1.8	7.2
.....	134 68		3	30	...	...	1.24	3.5	1.5	5.0
Paravanur ...	136 42		2	150	...	...	.76	48.0	24.0	72.0
.....	140 79		1	30	...	...	1.24	3.5	1.5	5.0
.....	145 39		4	150	...	...	.76	48.0	24.0	72.0
.....	146 30		1	100	...	...	.79	25.1	12.5	37.6
.....	147 51		1	25	...	...	1.26	2.4	1.1	3.5
.....	151 27		1	30	...	...	1.24	3.5	1.5	5.0
.....	151 78		1	30	...	...	1.24	3.5	1.5	5.0

Note.—Weight excludes bed plates.

Proceedings of the Madras Government, Public Works Department,
13th November 1876. No. 3,039.

South India Railway, Northern Extension—(Continued).

DESCRIPTION OF BRIDGE.				ORDINARY ROADWAY FOR WHEELED OR FOOT TRAFFIC.			Total rolling load provided for per foot run.	WEIGHT OF ONE SPAN.			Remarks.
Name.	Distance on Railway.	Spans.	Clear Span.	On top or between Girders.	Supplied or not.	On top or between Girders.		Main Girders.	Cross Girders and Bracings.	Total Span complete.	
MILES.	FEET.	NO.	FEET.	FEET.	NO.	FEET.	TONS.	TONS.	TONS.	TONS.	
162 61	1	1	40	40	...	...	1.13	5.4	1.8	7.2	Rails run on top flange of girder.
154 15	2	100	200	200	...	...	.79	25.1	12.5	37.6	do. bottom
155 52	14	150	2,100	2,100	...	...	.78	48.0	24.0	72.0	do. do.
156 21	1	25	23	23	...	...	1.26	2.4	1.1	3.5	do. do.
159 39	1	30	30	30	...	...	1.24	3.6	1.5	5.0	do. top
161 48	1	20	20	20	...	...	1.34	1.6	0.7	2.3	do. bottom
163 78	1	40	40	40	...	...	1.13	2.4	1.1	3.5	do. top
168 69	3	25	25	25	...	...	1.26	2.4	1.1	3.5	do. bottom
174 14	1	25	25	25	...	...	1.26	2.4	1.1	3.5	do. do.
174 36	1	25	25	25	...	...	1.26	2.4	1.1	3.5	do. do.
185 77	4	40	40	40	...	...	1.20	3.5	1.5	5.0	do. do.
194 59	4	40	40	40	...	...	1.34	1.6	0.7	2.3	do. do.
201 6	3	30	30	30	...	...	1.13	5.4	1.8	7.2	do. do.
201 29	6	30	30	30	...	...	1.24	3.5	1.5	5.0	do. do.
210 53	1	20	20	20	...	...	1.34	7.5	2.5	10.0	do. bottom
211 44	4	50	50	50	...	...	1.20	3.5	1.5	5.0	do. top
211 48	1	30	30	30	...	...	1.34	1.6	0.7	2.3	do. bottom
212 8	1	25	25	25	...	...	1.26	2.4	1.1	3.5	do. do.
213 14	1	25	25	25	...	...	1.34	1.6	0.7	2.3	do. do.
213 28	2	25	25	25	...	...	1.26	2.4	1.1	3.5	do. do.
214 9	1	25	25	25	...	...	1.26	2.4	1.1	3.5	do. do.
214 23	6	50	50	50	...	...	1.20	7.5	2.5	10.0	do. top
214 33	1	30	30	30	...	...	1.24	3.5	1.5	5.0	do. do.
214 48	1	30	30	30	...	...	1.24	3.5	1.5	5.0	do. do.
215 24	4	4	4	4	...	...	1.24	3.5	1.5	5.0	do. do.
216 3	1	25	25	25	...	...	1.28	2.4	1.1	3.5	do. bottom

Note.—Weight excludes bed plates.

Proceedings of the Madras Government, Public Works Department,
13th November 1876. No. 3,039.

WEIGHTS OF GIRDERS AND BRIDGES COMPLETE.
South India Railway, Southern Extension.

DESCRIPTION OF BRIDGE.				ORDINARY ROADWAY FOR WHEELED OR FOOT TRAFFIC.			Total rolling load provided for per foot run.	WEIGHT OF ONE SPAN.			Remarks.
Name.	Distance on Railway.	Spans.	Clear Span.	On top or between Girders.	Supplied or not.	On top or between Girders.		Main Girders.	Cross Girders and Bracings.	Total Span complete.	
MILES.	FEET.	NO.	FEET.	FEET.	NO.	FEET.	TONS.	TONS.	TONS.	TONS.	
78 22	1	1	20	20	...	...	1.95	1.6	1.4	3.0	Rails run on bottom flange of girder.
78 42	3	20	20	20	...	...	1.95	1.6	1.4	3.0	do. do.
81 31	5	30	30	30	...	...	2.06	4.0	2.0	6.0	do. top
81 70	4	20	20	20	...	...	1.95	1.6	1.4	3.0	do. bottom
83 16	1	20	20	20	...	...	1.95	1.6	1.4	3.0	do. do.
90 48	1	20	20	20	...	...	1.95	1.6	1.4	3.0	do. do.
95 27	4	20	20	20	...	...	1.95	1.6	1.4	3.0	do. do.
102 37	3	20	20	20	...	...	1.95	1.6	1.4	3.0	do. do.
109 51	5	20	20	20	...	...	1.95	1.6	1.4	3.0	do. do.
114 3	2	20	20	20	...	...	1.95	1.6	1.4	3.0	do. do.
117 46	3	20	20	20	...	...	1.95	1.6	1.4	3.0	do. do.
122 52	1	30	30	30	...	...	1.95	1.6	1.4	3.0	do. top
123 15	1	20	20	20	...	...	1.95	1.6	1.4	3.0	do. do.
129 56	2	30	30	30	...	...	2.06	4.0	2.0	6.0	do. bottom
132 28	6	30	30	30	...	...	2.06	4.0	2.0	6.0	do. do.
135 61	1	20	20	20	...	...	1.95	1.6	1.4	3.0	do. do.
140 11	1	20	20	20	...	...	1.95	1.6	1.4	3.0	do. do.
140 73	2	20	20	20	...	...	1.95	1.6	1.4	3.0	do. do.
143 11	1	20	20	20	...	...	1.95	1.6	1.4	3.0	do. do.
146 55	1	20	20	20	...	...	1.95	1.6	1.4	3.0	do. do.
153 15	1	20	20	20	...	...	1.95	1.6	1.4	3.0	do. do.
159 7	1	20	20	20	...	...	1.95	1.6	1.4	3.0	do. do.
170 26	2	20	20	20	...	...	1.95	1.6	1.4	3.0	do. do.
174 34	15	70	70	70	...	...	1.04	16.0	8.0	24.0	do. top

Note.—Weight excludes bed plates.

Proceedings of the Madras Government, Public Works Department,
13th November 1876. No. 3,039.

South India Railway, Southern Extension—(Continued).

Description of Bridges.				Character of main Girders.	Ordinary Roadway for wheeled or foot traffic.			Total rolling load provided for per foot run.	Weight of one Span.			Remarks.
Name.	Distance on Railway.	Waterway.			NO.	FEET.	On top or between Girders.		Width Gauge.	Main Girders.	Cross Girders and Bracing.	
		MILES.	NO.	FEET.				TONS.				TONS.
.....	174 53	1	20	20	Plate	...	...	1.95	1.6	1.4	3.0	Rails run on bottom flange of girder.
Gundar	186 69	7	30	210	Do.	...	...	2.06	4.0	2.0	6.0	Do. top
Chevaray Collay	191 65	6	30	180	Do.	...	...	2.06	4.0	2.0	6.0	Do. do.
.....	193 30	2	30	60	Do.	...	...	2.06	4.0	2.0	6.0	Do. do.
.....	199 48	2	20	40	Do.	...	...	1.95	1.6	1.4	3.0	Do. bottom
.....	203 47	9	30	270	Do.	...	...	2.06	4.0	2.0	6.0	Do. top
Yiraduputhi river	208 31	1	20	20	Do.	...	...	1.95	1.6	1.4	3.0	Do. bottom
.....	208 69	2	20	40	Do.	...	...	1.95	1.6	1.4	3.0	Do. do.
.....	210 10	4	20	80	Do.	...	...	1.95	1.6	1.4	3.0	Do. do.
Kalangsapalay	210 18	3	20	60	Do.	...	...	1.95	1.6	1.4	3.0	Do. do.
Vachakrapatty	213 26	5	70	350	Do.	...	...	1.95	1.6	1.4	3.0	Do. top
Gunnacherry	217 39	5	50	250	Do.	...	...	1.95	1.6	1.4	3.0	Do. do.
.....	219 30	12	70	840	Do.	...	...	1.95	1.6	1.4	3.0	Do. do.
Sattur	219 69	1	20	40	Do.	...	...	1.95	1.6	1.4	3.0	Do. bottom
.....	222 73	2	20	60	Do.	...	...	1.95	1.6	1.4	3.0	Do. do.
.....	223 41	3	20	120	Do.	...	...	1.95	1.6	1.4	3.0	Do. do.
.....	226 68	4	30	120	Do.	...	...	1.95	1.6	1.4	3.0	Do. do.
Nulli	244 26	3	20	60	Do.	...	...	1.95	1.6	1.4	3.0	Do. top
.....	245 51	3	20	60	Do.	...	...	1.95	1.6	1.4	3.0	Do. bottom
.....	258 49	2	20	40	Do.	...	...	1.95	1.6	1.4	3.0	Do. do.
.....	260 15	3	50	150	Do.	...	...	1.95	1.6	1.4	3.0	Do. do.
.....	261 36	4	50	200	Do.	...	...	1.95	1.6	1.4	3.0	Do. top
.....	261 53	1	20	30	Do.	...	...	1.95	1.6	1.4	3.0	Do. do.
.....	272 64	1	30	30	Do.	...	...	2.06	4.0	2.0	6.0	Do. bottom top
Branch line from Mettachee to Tinnelvely.	259 21	1	20	20	Do.	...	...	1.95	1.6	1.4	3.0	Do. bottom

Proceedings of the Madras Government, Public Works Department,
13th November 1876. No. 3,039.

.....	259 32	1	20	20	1	20	20	Do.	...	...	...	...	1.95	1.6	1.4	3.0	do.
.....	260 69	3	20	60	3	20	60	Do.	...	...	...	...	1.95	1.6	1.4	3.0	do.
.....	263 32	10	70	700	10	70	700	Do.	...	...	...	...	1.95	1.6	1.4	3.0	do.
.....	272 13	2	30	60	2	30	60	Do.	...	...	...	...	1.95	1.6	1.4	3.0	do.
.....	272 61	1	20	20	1	20	20	Do.	...	...	...	...	1.95	1.6	1.4	3.0	do.

NOTE.—Weight excludes bed plates.

WEIGHTS OF GIRDERS AND BRIDGE COMPLETE.
South India Railway, Negapatam and Erode Section.

*Proceedings of the Madras Government, Public Works Department,
13th November 1876. No. 3,039.*

DESCRIPTION OF BRIDGE.				ORDINARY ROADWAY FOR WHEELED OR FOOT TRAFFIC.			Total rolling load provided for per foot run.	WEIGHT OF ONE SPAN.			Remarks.
Name.	Distance on Railway.	Waterway.		Character of main Girders.	On top or between Girders.			Main Girders.	Cross Girders and Bracings.	Total Span complete.	
		Spans.	Clear Span.		Supplied or not.	Width.					
	MILES.	NO.	FEET.	FEET.	Plate	NO.	FEET.	TONS.	TONS.	TONS.	Rails run on bottom flange of girders.
.....	0 57	7	30	210				3.24	3.38	4.21	7 59
.....	4 70	3	30	90	Do.			3.24	3.38	4.21	7 59
.....	19 74	2	30	60	Do.			3.24	3.38	4.21	7 59
.....	28 69	9	30	270	Do.			3.24	3.38	4.21	7 59
.....	29 74	5	30	150	Do.			3.24	3.38	4.21	7 59
.....	30 38	5	30	150	Do.			3.24	3.38	4.21	7 59
.....	31 8	3	20	60	Do.			2.63	1.25	1.03	2.28
.....	42 36	10	20	200	Do.			2.63	1.25	1.03	2.28
.....	61 74	3	30	90	Do.			3.24	3.38	4.21	7 59
.....	62 55	4	30	120	Do.			3.24	3.38	4.21	7 59
.....	63 9	4	30	120	Do.			3.24	3.38	4.21	7 59
.....	64 17	4	30	120	Do.			3.24	3.38	4.21	7 59
.....	65 9	8	30	240	Do.			3.24	3.38	4.21	7 59
.....	78 5	1	20	20	Do.			2.63	1.25	1.03	2.28
.....	78 22	3	20	60	Do.			2.63	1.25	1.03	2.28
.....	81 63	2	20	40	Do.			7.38	2.67	1.75	4.43
.....	82 25	6	30	180	Do.			4.79	4.54	6.68	11.22
.....	96 57	5	30	150	Do.			4.79	4.54	6.68	11.22
.....	125 54	20	50	1,000	Do.			3.63	10.17	10.27	20.44
.....	...	1	20	20	Do.			3.58	2.16	3.84	6.00
.....	139 52	6	50	300	Do.			3.63	10.17	10.27	20.44
.....	144 76	8	20	160	Do.			3.58	2.16	3.84	6.00
.....	152 24	1	20	20	Do.			3.58	2.16	3.84	6.00

(Signed) **R. WHITE,**
Acting Chief Engineer.

(Signed) **W. S. BETTS,**
Agent.

TRICHINOPOLY,
4th November 1876.

*Proceedings of the Madras Government, Public Works Department,
13th November 1876. No. 3,039.*

No. 220. ORDER THEREON, 13th November 1876, No. 3,038.

RAILWAY, No. 33.

ORDERED to be forwarded to the Government of India, in continuation of docket, No. 2,856, dated the 26th October 1876.

(True Extract.)

(Signed) **G. W. WALKER,** Major-General, R.E.,
Secretary to Government.

No. 221. (Docket No. 3,039, dated 13th November 1876.)
Copy of the above forwarded to the Government of India.
(True Extract.)

Major-General, R.E.,
Secretary to Government.

Exd. E. C. Shunker.
Spare Copies

RAILWAY DEPARTMENT.

CONSULTING ENGINEER'S OFFICE,

Madras, 10th November 1876.

No. 549

From

LIEUT.-COLONEL J. H. M. SHAW-STEWART, R.E.,

Consulting Engineer for Railways,

To

MAJOR-GENERAL G. W. WALKER, R.E.,

Secretary to Government,

Public Works Department,

Fort Saint George.

SIR,

In continuation of
this Office letter N^o 547 of the
23rd ultimo and with reference
N^o 113 of 18th July 1876 to the Proceedings of Government
as per margin, I have the honour
N^o 113 of 19th October 1876 to enclose herewith, for transmission
to the Government of India, three
statements shewing the weights &c.
of girders and bridges of 20 feet
span and upwards on the
Northern and Southern extensions
and on the line from Nagap-
tam to Erode of the South

Indian

Indian Railway.

I have the honore to be

Sir

Your most obedient servant

W. Smith Major, R.E.

Secy. Genl. Engineer for Railway.

My dear Sir
I have the honor to acknowledge the receipt of your letter of the 14th inst. in relation to the proposed extension of the railway from the station at ... to the station at ... and in reply to inform you that the same has been forwarded to the proper authorities for their consideration.

I am, Sir, very respectfully,
Your obedient servant,
W. Smith
Major, R.E.
Secy. Genl. Engineer for Railway.

W. Smith

P.W.D.

11 NOV 76

No 8138

No 3038 of 13 Nov 76

Ordered to be for-

warded to the Government
of India in continuation
of docket No 2856 dated
the 26th October 1876

(H.E. No 3039 of 13 Nov 76)

Copy of the above
forwarded to the
Government of India

W.H.

After Pyp
drop 24-11-76

RAILWAY DEPARTMENT

The Consulting Engineer

for Railways

To

The Secretary to Government,
P. W. Department,
Fort Saint George.

Dated 10th

Received

Encl: No 5749

Submittance

219-221
statements for transference
to the Dept of P. W. Department
regarding the proposed
of 20 feet span and
made on the different
sections of the South
Indian Railways

758
Govt. of 1876 Madras.

PUBLIC WORKS.

To

the Com. Eng. for W.

2/4/77

Dated

Issued

Recd

Encl.

G. O., 13th Dec 1876, No. 1

2038
2039

Nos. 219-221

*Forwarding Statements
showing the heights of ridges
Veridger of 20 feet span
upwards on the C. & P. Ry.*

*Weights of ridges & ridges
of 20 feet span upwards
on the South. C. & P. Ry.
Ordered that the state-
ments showing the — be
forwarded to the Govt
of Madras.*