

Public Works (1895) Department.

RAILWAY BRANCH.

G.O., No. 553R

DATED 29th August 1895

[Despatch Abstract.]

Tramways in the Madras Presidency within Municipal limits. — Orders placing under the Public Works Department, Railway branch, for the purposes of administration.

[illegible]

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

In his letter No. 1871, dated 17th June 1895, Mr. Palmer stated that at the time the experiments referred to above were made to ascertain the cause of disturbance to the telephone lines, Mr. Gadsley, the Electrician of the Tramway, consented to run a short trial length fitted on the overhead system in order to determine by actual trial whether it would overcome the existing disturbances. Mr. Palmer said he considered it very necessary that the promised trial should be made as soon as possible.

No. 553 Ry., 27th August 1895.

In his letter No. 2040, dated 22nd June 1895, Mr. Palmer brought to notice that on the 16th and 17th June the disturbances to the telephone lines had become serious. On inquiry by the Assistant Superintendent, Government Telegraph Department, it was found that the disturbances were due to the Tramway Company having run short of collectors and using old ones which had not been properly repaired. This however was rectified by the substitution of new collectors on receipt from England a few days after.

On the 25th June 1895, Mr. Palmer again reported that very serious disturbances were caused to the telephone lines on the 24th and 25th idem and requested that the Tramway be called upon to undertake the diversion of the telephone trunk lines, the running of the cars being stopped in the meanwhile if necessary. Mr. Gadsley, however, adopted certain measures which diminished the disturbances.

Messrs. Arbuthnot & Co. expect the material for running a trial overhead line to arrive from England this month. In their letter, dated 16th July 1895, Messrs. Arbuthnot write as follows:—

"It is necessary that we should push on with section No. II and finish it as soon as possible in order to keep the concession open; we shall then proceed at once with the re-equipment of No. I and simultaneously with the construction of No. III.

Sections Nos. II and III.

In G.O., No. 423 Ry., dated 23rd June 1895, Government sanctioned the construction of the above sections, after obtaining the approval of the Superintendent, Government Telegraph Department (his letter No. 1409, dated 24th May 1895), which was granted on certain conditions. The approval of the President, Municipal Commission, was also asked (letter No. 1953, dated 20th June 1895), Colonel Moore in reply stated that before he could give an opinion he should be informed of the position of the supporting posts. The Tramway Company was asked for a plan but it has not yet been received.

G. D. PLUMMER
20-7-95.

In the letter under reply it looks as if the Tramway Company meant to put off the overhead system on No. I Section to the last. We may remind them of the conditions under which the extension of time was granted, viz., that at the expiry of the extended period no further extensions would be granted but a "pucca" order would issue provided that Government is satisfied that interference with the other companies lines has ceased.

F. D. FOWLER.
22-7-95.

[Memorandum No. 2357, dated 22nd July 1895.]
[Memorandum No. 2401, dated 25th July 1895.]

From Messrs. Arbuthnot & Co., Attorneys to the Trustees for the debenture-holders, Madras Electric Tramways, dated 26th July 1895.

There seems no use in replying to this: if Messrs. Arbuthnot's statements are correct there will be no particular harm in extending the time again. I think we might send a copy of Superintendent, Telegraph, for favour of note as to the accuracy of facts stated.

F. D. FOWLER.
29-7-95.

From the Consulting Engineer for Railways, Bombay, dated 29th July 1895, No. 6198.

From the Consulting Engineer to the Government of India for Railways, dated 31st July 1895, Calcutta, No. 2416.

Put this file up with my request for Mr. Winter's Services - when returned from circulation.

F. R. Upcott

No. 553 Ry., 27th August 1895.

Note on Madras Electric Tramways.

I append a plan giving the lines of the Electric Tramway and the state of the case is as follows.

No. I section is open and an extension of time to remove all disturbances with the telephone and cable lines has been granted to 15th September.

Nos. II and III sections are sanctioned for construction.

We have received and are receiving constant complaints of interruption.

It is provided under the Electricity Act 13 of 1887 that if electrical power be used that telephone and telegraph lines shall be safeguarded.

From information—not being an expert—I gather that the overhead system, which will have no properly insulated return wire, is just as likely to cause interruption as the conduit system, because the voltage is very high (500 volts dynamo) and the rails taking the return current are insufficiently connected up and insulated.

Moreover in America and Europe much damage has been caused by the currents running along the cast iron water pipes rendering them soft by electrolysis.

This has not hitherto been brought to notice but as the tramways have been placed under me, I request the sanction of the Government to call in as my

Approved.

W[ENLOCK].

H. B[Liss].

J. G[ROSE]—9-8-95.

adviser Mr. Winter, Telegraph Engineer of the Madras Railway, who is, I am fully assured, of sufficient ability and

conversant with the most approved methods of removing these leakages.

I think the Tramway Company should bear any cost, which their defective arrangements entail. I think that the expenditure now proposed would come under "preliminary engineering expenses" under paragraph 39 of the notification *q.v.*

By this means I trust to safeguard all interests. His remuneration should, I suggest, be debited to the Local and Municipal Department.

F. R. URCOTT—5-8-95.

W[ENLOCK]—7-8-95.

H. B[Liss].

J. G[ROSE].

[Memorandum No. 87/O., dated 13th August 1895.]

To the Local and Municipal Department.

LOCAL AND MUNICIPAL DEPARTMENT.

From Messrs. Arbuthnot & Co., Attorneys to the Trustees for the debenture-holders, Madras Electric Tramway, dated 13th August 1895.

This is apparently a Public Works Department matter.

J. F. PRICE—14-8-95.

To the Public Works (Railway) Department.

PUBLIC WORKS (RAILWAY) DEPARTMENT.

From Messrs. Arbuthnot & Co., etc., dated 17th August 1895.

Two letters from the Madras Electric Tramway are submitted.

Letter (semi-official), dated 13th August: this contains a request for an extension of time to complete sections II and III. It is addressed to the Honourable the Chief Secretary.

As Messrs. Arbuthnot & Co. have questioned the powers of the Consulting Engineer in his capacity of Inspecting Officer for Railways, it would, I submit, be well if a Government Order were issued placing the Tramway under the Railway Branch of the Public Works Department for purposes of administration and permitting me to call in expert advice and to charge the same against the Company under paragraph 39 of the notification in accordance with the remark of His Excellency the Governor.

This will enable me to dispose of letter (semi-official) dated 17th August, which demurs as to the necessity of having expert opinion, concerning which I remark the Tramway Company were not asked for an opinion.

2-11/108

No. 553 R., 27th August 1895.
GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.
RAILWAY.

Read—the following papers:—

I
G.O., No. 668 M., dated 6th April 1892.

ABSTRACT.—Ordering with remarks the publication in the *Fort St. George Gazette* of the order authorising the construction by Messrs. Hutchinson & Co., London, of tramways in the City of Madras.

II

Letter—from Messrs. ARBUTHNOT & Co., Attorneys to the Trustees for the Debenture Holders, Madras Electric Tramways.
To—the Consulting Engineer for Railways, Madras.
Dated—Madras, the 16th July 1895.

We have to thank you for copy of a letter from the Superintendent, Eastern Extension Cable Company. You will have already learned from the copies of Sir Henry Mance's letters sent to you that he does not consider that anything like the expensive works indicated by the Superintendent, Eastern Extension Cable Company, are needed, and we believe that he is no mean authority, especially on cables such as the Eastern Extension Company's.

However we are glad to say that the subject need not be further discussed, as it has been quite decided by the Trustees that the overhead system shall be adopted on all the sections of the Tramway which the Superintendent thinks would do away with all disturbances.

It is necessary that we should push on with No. II and finish it as soon as possible in order to keep the concession open; we shall then proceed at once with the re-equipment of No. I and simultaneously with the construction of No. III.

III

Letter—from Messrs. ARBUTHNOT & Co., Attorneys to the Trustees for the Debenture Holders, Madras Electric Tramways.
To—the Consulting Engineer for Railways, Madras.
Dated—Madras, the 19th July 1895.

We have the honor to forward herewith copy of a letter we have written to Major H. D. Love, Principal of the College of Engineering, from which you will see that part of the interruptions to the Telephone and Cable Companies lately is due to the facts mentioned therein.

ENCLOSURE.

Letter—from Messrs. ARBUTHNOT & Co., Attorneys to the Trustees for the Debenture Holders, Madras Electric Tramways.
To—the Principal, Engineering College, Madras.
Dated—Madras, the 18th July 1895.

We have the honour to inform you that our Engineer complains that on Tuesday last a party of your students while surveying along the line of our section amused themselves by frequently dropping their chains into the conduit thus causing short circuits and consequent interruptions to the Telephone and Eastern Cable system. As it is of the utmost importance to us to avoid any interference with these two lines, we shall be much obliged if you will take steps to prevent a recurrence of such misconduct and, if possible, direct that these field parties shall work somewhere else in future.

We are also told that the young men were extremely impertinent to the Tramway Overseer when he remonstrated with them.

We would suggest that it would probably be as well to remind the students that under clause 23 of the Indian Tramways Act, XI of 1886, under which we come, interference with the line is punishable by a fine which may extend to Rs. 500 for each person whether an actual culprit or only an abettor.

No. 553 Rv., 27th August 1895.

IV
Letter—~~from P. D. Fowles Esq.~~ Consulting Engineer for Railways, Madras. F.R. Upcott/
To—the Consulting Engineers for Railways, Bombay and Calcutta.
Dated—Madras, the 22nd July 1895.
No.—2357.

I have the honour to enquire whether the ^{Bombay}~~Calcutta~~ tramways within municipal limits are under the charge of the Consulting Engineer and whether he inspects them previous to opening. Cap.

V
Letter—~~from P. D. Fowles Esq.~~ Consulting Engineer for Railways, Madras. F.R. Upcott/
To—the Madras Electric Tramways.
Dated—the 25th July 1895.
No.—2401.

I beg to acknowledge your letter of 16th July 1895, and to remind you of the conditions under which an extension to 15th September in working No. I section was given, ~~in order~~ to enable you to make such arrangements as would enable me to open the line permanently provided the Government is satisfied that all interference with other existing companies has ceased.

No further temporary extensions of time can be granted after 15th September.

VI
Letter—~~from Messrs. ARBUTHNOT & Co., Attorneys to the Trustees for the~~
Debenture Holders, Madras Electric Tramways.
To—the Consulting Engineer for Railways, Madras.
Dated—Madras, the 26th July 1895.

In reply to your No. 2401 of the 25th instant we have the honour to again point out to you that if the measures for protection have not been agreed upon, it is impossible for us to carry them out. These are now under discussion and both Telephone and Extension Companies have consented to suspend action until the effect of the overhead system, which we are now pushing on with as fast as we can, shall have been tried.

You are therefore asking more than the parties to be protected require, and we must beg you to reconsider your decision that no further temporary extension of time shall be granted.

We may mention that recent modifications instituted by our Superintending Electrical Engineer have had a very favourable effect on the disturbances, which have on some days been almost entirely absent.

VII
Letter—~~from the Consulting Engineer for Railways, Bombay.~~
To—the Consulting Engineer for Railways, Madras.
Dated—the 29th July 1895.
No.—6198.

With reference to your letter No. 2357, dated 22nd July 1895, I have the honour to inform you that the Bombay tramways within municipal limits are not under the control of the Consulting Engineer, and that he does not inspect them previous to opening. Cap.

VIII
Letter—~~from the Consulting Engineer to the Government of India for Railways,~~
Calcutta.
To—the Consulting Engineer for Railways, Madras.
Dated—Calcutta, the 31st July 1895.
No.—2416.

In reply to your letter No. 2357 of the 22nd instant, I have the honour to inform you that the Calcutta tramways within municipal limits are not under my charge, nor have they ever been inspected by an officer of this department. Cap.

Messrs. Arbuthnot & Co. Attorneys to
the Trustees for the Debenture Holders,
Madras.

Messrs. Arbuthnot & Co., Attorneys to the
Trustees for the Debenture holders

No. 553 Bx., 27th August 1895.

Letter—~~from F. D. Fowles, Esq., Consulting Engineer for Railways, Madras.~~
To—the Madras Electric Tramway Company.
Dated—the 13th August 1895.
No.—87/O.

In reply to your letter of 26th July, I have the honour to say that, in order to enable me to protect the interests of all parties, I have requested permission of Government to call in the services of Mr. Winter, Telegraph Engineer of the Madras Railway.

This has been granted and I, therefore, request that under clause 39 of G.O., No. 668 of 6th April 1892, you will bear the cost of Mr. Winter's report and will give him all facilities to prepare it.

If it should appear that a further extension of time is necessary to ascertain the effect of the overhead system it will be granted.

Letter—~~from Messrs. Arbuthnot & Co., Attorneys to the Trustees for the Debenture Holders, Madras Electric Tramways.~~
To—the Chief Secretary to Government.
Dated—~~Madras~~, the 13th August 1895.

It will doubtless be in your recollection that on taking in hand the construction of sections ii and iii of the above it was considered desirable—in view of the reports of the Superintendent, Government Telegraphs, regarding the disturbances and interruptions of the Telephone and Eastern Extension Cable services attributed to the adoption of the conduit system on section i—that these sections should be equipped on the overhead system as being more likely than any other to obviate all further complaints. This change of plan of course involved the furnishing of entirely new plant from England with corresponding delay in the completion of the line.

We had nevertheless hoped to carry the work through within the time allowed by Government, but the proposed alignment having been necessarily altered to meet the new system which has involved corresponding changes of detail the work of construction has not progressed as rapidly as we had expected and we are beginning to fear that we may be compelled to exceed the time allowed though there is still a possibility of our being within it. We think it better however to run no risks and therefore have now the honour to request that His Excellency will be pleased to grant us a further extension of six weeks time i.e., till 20th October.

We need not say that we are using every endeavour to push forward the works by every means in our power.

Soliciting the favour of an early reply.

Letter—~~from Messrs. Arbuthnot & Co., Attorneys to the Trustees for the Debenture Holders, Madras Electric Tramways.~~
To—the Consulting Engineer for Railways, Madras.
Dated—~~Madras~~, the 17th August 1895.

We have the honour to acknowledge receipt of your No. 87/O., of 13th instant and beg to thank you for your willingness to extend the period of our running powers, if it should appear that further time is necessary to ascertain the effect of the overhead system. We cannot, however, see that Mr. Winter's report can affect the matter one way or the other inasmuch as we have not yet received the cable and some other appliances necessary. The poles have arrived and we are expecting to receive the cables and other material by every steamer.

No. 553 Ry., 27th August 1895.

We therefore think that a report by Mr. Winter is unnecessary and we venture to submit that the matter may safely be left to the discretion of the Government Telegraph Department and the companies interested without putting us to the expense of any special report for which, as we have pointed out above, matters are not yet ripe.

Order—No. 553 Ry., dated 27th August 1895.

Under the provisions of Act XI of 1896 and Act XIII of 1897, His Excellency the Governor in Council directs that Tramways in the Madras Presidency within Municipal limits be placed under the Public Works Department, Railway Branch, for the purposes of administration and that the inspection of such Tramways shall be conducted by the Government Inspector of Railways who is authorized where electricity is the motive power to call in such expert opinion as he may deem necessary. In the case of the Madras Electric Tramway Company the Consulting Engineer is authorized to charge the expenses of the same against the Promoters as laid down under their agreements (Act XIII of 1897, paragraph 4, section (2)).

(True Extract.)

F. R. Upcott

F. D. Fowles
Secretary to Government.

To the Local and Municipal Department.
" Madras Electric Tramway Company.
" President, Madras Municipality.

G.O., No. 553 Ry., 27th August 1895.

Tramways in the Madras Presidency within Municipal limits.

Orders placing — under the Public Works Department, Railway Branch, for the purposes of administration.

4

Local & Mural Departe

Rep

It is submitted that the proof of
G.O. no 553. Ry. dated 27th August
1895 ~~with~~ with notes, may be
forwarded to the P.W.D. (Rys) for
favor of check & return.

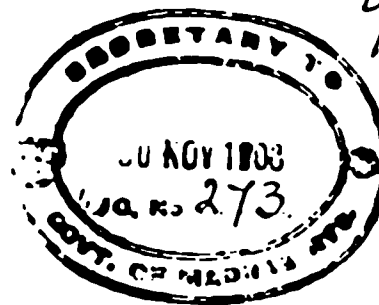
Ca
26/11/08

PM
26/11/08

P.W.D. (Rys) no.

Let. no. 4198-M
27/10/08

P.W.D. (Railway)



Checked and returned.

Rec.
4/12

Let. no.

J.M. 9/12/08

Ref. no 640
9.12.08



Q.R.
10/11/08

Press

please strike off 20 copies

Ca
11/12/08

Ca
11/12/08

In these circumstances it is for consideration whether
sanction may be accorded to the proposal of the
Council to employ his ass't.

~~P.W. (Ry) Sept~~

Notes connected with Sp. 553 Ry dated 27-2-95

[Subject - termination of tramways in the
Madras Presidency].

P.W. (Ry) 1/4/95

From Secy. to Govt. of Madras to Secy. to Govt. of India
dated 11-11-94
do do do 11-11-94
do do do 11-11-94

Over

Please find here the matter for 11-11-94

P.W. (Ry) 1/4/95
11-11-94
11-11-94

✓ ✓ Manila Electric Tramway
Section No. 1
Opening of line

The right-hand track was inspected in March 1895, the left hand track in April 1895. Provisional sanction was given to open the section for one month from the 6th Mar 1895. Time was afterwards extended to 15 June, and subsequently to the 15th September 1895.

Interference with Oriental Telephone and Cable Telegraph lines

Shortly after the opening of this section which is constructed on the Conduit system it was found that the high currents employed for working the tramcars injuriously affected the Oriental Telephone & Cable Telegraph lines.

The Cable Company temporarily overcame the disturbances by giving up the use of the earth at their office, and using instead earth at their cable house.

As in connection with the interference caused to the O. Telephone by certain experiments were carried on by the electricians of the Tramway, Cable Co. & it was found that the disturbances were due to induction in the lines running parallel with the Tramway Company's rails and that they could be removed either by (1) metallic circuits i.e. by using return wires or (2) by the diversion of the telephone lines. Mr. Palmer the Sup. of the Telephone Co. recommended the adoption of the first of these means, and considered the diversion of the telephone lines should be carried out at the cost of the latter being repaid by the Tramway Co.

their subscription to the same, having agreed to the same. Extension was granted. In his letter no 1871 of 17. 6. 95 Mr Palmer stated that at the time the experiments he bore to, a bona were made to ascertain the cause of disturbance to the Telephone lines, Mr. Paddy the Electrician of the Tramway consented to run a short trial length fitted on the over head system in order to determine by actual trial whether it would overcome the existing disturbance. Mr. Palmer said he considered it very necessary that the premises trial should be made as soon as possible. In his letter no 2040 of 22. 6. 95 Mr. Palmer brought to notice that on the 16 and 17. June the disturbance

In the letter under copy it looks as if the Treasury Co
meant to put off the overhaul system on No. 1 section to
the last. We may remind them that of the conditions
under which the extension of off time was granted
us that at the expiry of the extended period no further
extensions would be granted but a "pucker" order would
be provided that Govt is satisfied that compliance
with the other companies lines has ceased.

Press
Please find here
the matter in the
paper.

68

1/4 22/7 P.T.C

Section II and III
 In G.O. No 423 R. dt 23 June 1955
 Govt sanctioned the construction of the
 above sections, after obtaining the
 approval of the Sub-Inf. Tel. Dept (his
 letter No. 1409 dt 24.5.55) and the
 which was granted on certain con-
 ditions. The expenditure of the project
 (Municipal Commr. was also involved)
 (letter 1953/206.95) but it is also in-
 stated that before he could give his
 opinion he should be informed of the
 position of the supporting posts. The
 Tramway Co. was asked for a plan
 but it has not yet been received.

[Revenue No. 2352 dt 22-7-95]

Revenue No. 2401 dt 25-7-95
 Revenue No. 2402 dt 25-7-95
 Revenue No. 2403 dt 25-7-95

Please provide here the
 with reference to the consent

From the Consulting Engg. for the City, Bombay No 6198 dt 29-7-95
 dt 10/8/95 for Railway, Calcutta No 2416 dt 31-7-95

Note
 on Madras Electric Tramway.

I append a plan giving the line
 of the Electric tramway and the state
 of the case is as follows.

No. 1 section is open and an ex-
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 lines has been granted to 15th Septem-
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Nos. 2 and 3 sections are sanction-
 ed for construction.

We have received and are receiv-
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It is provided under the Elec-
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From information - not being an
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Moreover in America and Europe
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have been placed under me, I request the sanction of the Government to call in as my adviser Mr. Winter, Telegraph Engineer of the Madras Railway who is, I am fully assured, of sufficient ability and conversant with the most approved methods of removing these leakages.

By this means I trust to safeguard all interests. His remuneration-- should, I suggest, be debited to the -- Local and Municipal Department.

F.R. Upcott.
Free
5/8 R.

This Exceeding the former
from Mr. Bliss
from Mr. Jones.

[Memorandum 87 d/13-E-95]

Local & Municipal Dept.

From Messrs. Robertson & Co., 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

This is a copy of a P.W.D. memo.

J. F. P. 14-6-95

28th P.W.D. 14-6-95

Amended 5/9/95 R. 10/95

approved
Mr. G. S. 9/8

I think the Tramway Co. should bear any cost, wh. their defective arrangements entail - I think that the expenditure now proposed would come under "preliminary engineering expenses" under para 39 of the notification g.v.

H.B. W. 25/8/95

From Messrs. Robertson & Co. 17-6-95

The Tramway Co. says that it is content to abide by the opinion of the Joint Telegraph Dept. & the (Electric) Companies interested, who are the persons who have made complaints. If the Tramway Co. is then content to dispense with an independent opinion, which might be in its favour, I don't quite see why we need insist upon giving it.

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Please see former note I fear damage to the foot iron water mains as has happened elsewhere & without expert opinion I may be allowing leakage of current - all these can be readily obviated I believe and it is my desire to protect all parties - The telegraph

P.W.D. 17-6-95 No. 65
2 letters from the Tramway Co. are submitted -

Letter d/13 Aug - This contains a request for an extension of time to complete sections II and III - It is addressed to the Hon. the Chief Secretary -

As Messrs. Robertson & Co. have questioned the powers of the Comm. Engr. in his capacity of inspecting officer for Railways, it would I think suit be well if a P.O. were issued placing the Tramway under the P.W.D. for purposes of administration - and permitting me to call in expert advice and to charge the same against the Co under para 39 of the notification as a condition with the removal of this Exceeding the former note -

This will enable me to dispose of letter d/1 Aug. which demands so to the necessity of having expert opinion, concerning which I remind the Tramway Co. were not asked for an opinion -

There was no limit of time laid down in the P.W.D. sanctioning the Comm. Engr.

Current No., dated 190

G.O., No. 553 by, dated 27-8-1895

Number of MS. pages sent { Correspondence including order or orders
(b) (b¹) 9 17+1 = 18
NotesDocket: Administration of the Tramways
in the Madras PresidencyNumber (a) of copies required when struck off (not including
copies for volumes and orders' table which are retained
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and orders.

Notes

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[P.T.O.]

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(a) If a paper is marked to be printed urgently, the Superintendent of the section concerned should sign the Press slip. The Superintendent should exercise a careful discretion in the matter.

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(c) For rules regarding printing of notes, see the rules in G.O., No. 1220, Public, dated 30th November 1900.

(c) The number of copies and the details of distribution should be filled in by the Superintendent or Referencer concerned.

(d) In the absence of special instructions to the Press to keep matter standing for a specified period, ordinary papers of 8 pages and under will be kept standing for one week, and larger papers for two weeks only. The type of notes and of all confidential papers is distributed immediately after striking.

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INSTRUCTIONS FOR THE PRESS.

(a) If, in the opinion of the Superintendent of the Press, a paper has been marked urgent unnecessarily, he should send the Press slip to the Registrar with a remark to that effect.

(b) Unless a note to the contrary is made against the matter, pencil entries should not be printed. The Superintendent of the Press may bring to the notice of the Registrar any instance of incomplete or careless editing.

(c) Signature copies of letters to the Secretary of State or to the Government of India should be printed on hand-made paper.

(d) This slip should be returned by the Press to the Secretariat when proofs are furnished; it will be sent back to the Press when proofs are returned corrected and should be finally returned to the Secretariat when struck-off copies are supplied.

(e) The names of the Secretary and Members should be printed in full when they occur on the right hand side, but only the first time when they appear on the left side, the initials alone being printed later.

Instructions of Stationer II and III of the Tramway lines, but a limit of time - up to 15 Sept has been given to the Tramway Co. requiring them to adopt means to put a stop to interference with their telephone and cable companies - I append an order for approval

7-8-95

Lie.

In forwarding the proposed
from Mr. Blair
from Mr. Price.

I understood they wish to
attend this limit Sep. 15
to Oct. 20. I suppose
there is no objection.

W. Fendley

One
clear point here
the note of striking
& the note of striking
the left half of the
document.

superior has dealt only
with the telegraphs &
I don't think he is so
competent to advise
on dam age. To water
main as Mr. White

Frank Carr

Received
25/8/95

23-8-95

T. 80 20 5-3 R. 8 27-8-95

W. Fendley 21-8-95

22-8

Yes the Cabinet has been
referred to me and others may be

7. R. Upcott 23.8.95

A	B	C
Please send proof in triplicate. The papers have been carefully edited.	Proof returned corrected. Please strike off and send number of copies as indicated.	As the matter is clear manuscript and has been carefully edited, (b) proof need not be sent. Please print and supply number of copies as indicated.
Type may be released after usual interval at once.	Type may be released after usual interval at once.	Type may be released after usual interval.
Clerk.	Clerk.	Clerk.
Supdt.	Supdt.	Supdt.

(b) Three copies of proof of all notes should be sent for approval, except when instructions are given to the contrary.

SPECIAL INSTRUCTIONS.

Please note that the proof of the
 G.O. & notes of this Railway G.O. should
 be sent to the Local & Municipal
Deptt & not to the Railway Deptt

TO BE FILLED IN BY THE PRESS.

Diary.	Initials of Press official.
Received in Press on.....	7/11/08
First proof furnished on.....	12/11/08
Call for revised proof received on.....	
Revised proof furnished on.....	
Corrected proof received for striking on.....	
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1. & 2. 29
 12,000-10-10-00.

Local & Munl. (190) Department.

MISCELLANEOUS.
 ROUTINE.

G.O., No. 682 668 m

DATED 6.4.92

[Despatch Abstract.]

Ordering with remarks the publication in the
 Fort St George Gazette of the order authorising
 the construction by Messrs Hutchinson & Co, London
 of tramways in the City of Madras.

Madras Electric Tramways.

Madras, 16 July

1898-

To
A-II The Consulting Engineer for Railways
to the Government of Madras
Madras



Sir

We have to thank you for copy of a letter from the Superintendent, Eastern Extension Cable Company. You will have already learned from the copy of Sir Harry Francis's letter sent to you that he does not consider that anything like the expensive works indicated by the Superintendent, Eastern Extension Cable Company are needed, and we believe that he is no mean authority, especially on cables such as the Eastern Extension Company.

However we are glad to say that the subject need not be further discussed, as it has been quite decided by the Trustees that the overhead system shall be adopted on all the sections of the Tramway, which the Superintendent Trusts would do away with all disturbances.

It is necessary that we should push on with n° II and finish it as soon as possible in order to keep the Conclusion open; we shall then proceed at once with

with the re-equipment of No. 1 and simultaneously
with the construction of No. III.

We have the honor to be
Sir

your most obedient servants
J. M. L. L.

Attorneys to the Trustees
for the Delaware Holders of S.T.

(Pens)
To be printed
in the notes

SAR. price
Please make price of
There are two currents No. 1
section and the corres-
ponding about interference
with telephone cable
and the (2) the opening of
the other sections. The training
Co. seem to contemplate
leaving No. 1, as it is for the
present but I don't think
that will do. The other
No. 16/

Recd

Madras Electric Tramways.

37

Madras, 19th July 1915

SERIAL

No. 50

To

The Consulting Engineer for Railways
to the Government of Madras
Madras

Sir

We have the honor to forward herewith
copy of a letter we have written to Major H. D. Loe
Principal of the College of Engineering, from which
you will see that part of the interruptions to the
Telephone and Cable Companies lately is due
to the facts mentioned therein.

Yours

We have the honor to be

Sir

your most obedient servant

Attorneys to the Trustees
for the De Courcey Holdings &c.

We have the honor to inform you that your letter complaining that on Tuesday, last, a party of your people were loitering along the line of our Indian Reservation, and dropping their arms with the intention of attacking the soldiers and capturing the train, has been received. The Government has taken prompt action in the premises, and the necessary measures have been taken to prevent any further such acts.

Rev

5/9

L.S.P.

The 1886 order
in this case, which was made in
accordance with a plan which was entered in
the records of the court for the purpose of
the case in this case.

your most obedient servant
J. R. M.
According to the Tenth
in the Substantive Evidence in 25

A recurrence of such misconduct and, if possible,
direct that these field parties shall work somewhere
else in future.

We are also told that the young men were
extremely impertinent to the Framery Government when he
remonstrated with them.

We would suggest that it would probably be as
well to remind the students that under clause 29 of the
Indian Framery Act, 1886, under which we come under
penalty with the line is punishable by a fine which may
extend to 500 Rupees for each person whether an actual

Culprit or only an abettor.

No 2357 dy 22.7.95

6 10 From

SERIAL
No. 57

7. SR Bombay 7 P
Calcutta

A-IV

Sir
I have the to

Engine whether the

Bombay tramways in the
Calcutta

Municipal Councils are
under the charge of the
Comptroller Engineer &
whether he inspects them
prior to opening

W.A.
22/7

Put this file up with
my report for the winter
service - when returned
from Cal. Free &
2

SERIAL
No. 55

No 2401 of 25.7.95
The adias Selectus Highway

I beg to acknowledge
your letter of 16 July 1895
& remind you of the
conditions under which
an extension ^{to 15 Sept} in working
No 1 section was given,
were able for to make
such arrangements as
would enable me to open
the line permanently pro-
vided the post. is satisfied
that all interference with
other existing Companies
has ceased -

~~If time for the overhead
system is not at work
& inter~~

No further temporary
extensions of time can
be granted after 15 Sept.

Wm
24
7 95

By Hf 24/2

Recd

A-IV

711

Read
Madras Electric Tramways.

SERIAL

No. 55

Madras, 26 July 1895

To

The Consulting Engineer for Railways
to the Government of Madras
Madras

Sir

In reply to your n^o 8401 of the 25th inst. we have the honour to again point out to you that if the measures for protection have not been agreed upon it is impossible for us to carry them out. These are now under discussion and both the Telephone and Extension Companies have consented to suspend action until the effect of the overhead system, which we are now pushing on with as fast as we can, shall have been tried.

You are therefore acting more than the parties to be protected require, and we must beg you to reconsider your decision that no further temporary extension of time shall be granted.

We may mention that recent modifications instituted by our Superintending Electrical Engineer have had a very favourable effect on the disturbances, which have on some days been almost entirely absent.

Yr.
H.C.

13.9

(He)

He leave the honor to be
his

your most obedient servants 10 P

M. M. M. M. M.

Attorneys to the Trustees
for the Debenture Holders in D.T

Q.P.
note

To be printed
in the notes

J.P.

There seems no use in
replying to this: if Mr. A's
statement is correct
there will be no per-
ticular harm to do.
Pending the time again
I think we might send
a copy of Subj. Tel
for favor of note as to
the accuracy of facts
stated

J.P.
10/17



OFFICE OF CONSULTING ENGINEER FOR RAILWAYS

Bombay, 27th July 1895.

10 16/6/98 of 1895.

To

The Consulting Engineer
for Railways.
Madras.

Sir.

With reference to your letter No 2357 dated 22nd July 1895, I have the honor to inform you that the Bombay Tramways within Municipal limits are not under the control of the Consulting Engineer, and that he does not inspect them previous to opening.

I have the honor to be.

Sir.

Your Most Obedt Servant.

M. J. M. M. M.
for Consulting Engineer
for Railway

Enclosure.

None.

Amended
21-11-95

3337
21.7.95

SERIAL
No. 58

128

From

The Consulting Engineer to the Government of India
for Railways, Calcutta,

To

A - VITE Consulting Engineer for Railways
Madras

Calcutta, the 31st July 1895.

Sir,

In reply to your letter No 2357
of the 22nd instant, I have the honor to inform
you that the Calcutta Tramways within Muni-
cipal limits are not ^{under} my charge, nor have they
ever been inspected by an officer of this depart-
ment.

I have the honor to be
Sir,

Yours most obedt servt

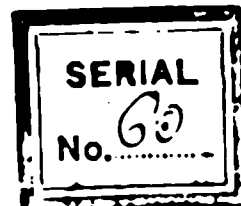
W. L.
S. L.

W. L. S. L.

For Consulting Engineer
to the Govt of India & India

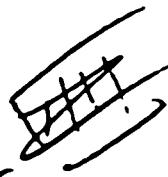
A. B.

3404



65

12

X -  IX

No. 27 of 13 Aug 1905

Meadow Electric Trans-
way Co - 13 P

In reply to your letter
of 26 July - I have the
honor to say that, in
order to enable me to
protect the interests of
all parties - I have re-
quested permission ^{of foot} to
call in the services of
Mr. Winters Telephonic
Engineer of the Meadow
By ~~to visit me in~~

This has been granted
& I therefore request that
under clause 39 of by-laws
668 of 6 April 92 you
will bear the cost of
Mr. Winters report and
will give him all facilities
to prepare it -

If it should appear
that a further collec-
tion of time is necessary
to ascertain the effect
of the overhead system
it will be granted

F. R. M.
12
8 95

Done for 13/8/95

Madras Electric Tramways.

urgent

13
Madras, 13th August 1895



A
The Deputy Secretary
to the Government of Madras
Coloanumund
Sir, Mr. F. R.
Madras Electric Tramways

It will doubtless be in your recollection that on taking in hand the construction of Sections II & III of the above it was considered desirable in view of the reports of the Superintendent Government Telegraphs regarding the disturbances and interruptions of the Telephone and Eastern Extension cable service attributed to the adoption of the conduit system on Section I - that these sections should be equipped on the Overhead system as being more likely than any other to obviate all further complaints - This change of plan of course involved the furnishing of entirely new plant from England with corresponding delay in the completion of the line.

We had nevertheless hoped to carry the work through within the time allowed by Government, but the

20th 158

The proposed alignment having been necessarily altered to meet the new system which has involved corresponding changes of detail the work of construction has not progressed as rapidly as we had expected and we are beginning to fear that we may be compelled to exceed the time allowed though there is still a possibility of our being within it. We think it better however to run no risks and therefore have now the honour to request that His Excellency will be pleased to grant us a further extension of six weeks time i.e. till 20th October.

We need not say that we are using every endeavour to push forward the works by every means in our power soliciting the favour of an early reply.

We have the honour to be
Sir

Your Most Obedient Servants
Wm. H. Smith

attorneys to the Trustees for the
Debtors Holders N.C.T.

Madras Electric Tramways

16
21/15
Madras, 17: August 1895

To. A

The Consulting Engineer for Railways
to the Government of Madras

SERIAL

62

Madras

Sir,

Madras Electric Tramways

We have the honor to acknowledge receipt of your L^t of 13: instants and beg to thank you for your willingness to extend the period of our running power, if it should appear that further time is necessary to ascertain the effect of the overhead system. We cannot however see that Mr Winter's report can affect the matter one way or the other inasmuch as we have not yet received the cables and some other appliances necessary. The poles have arrived and we are expecting to receive the cables and other material by every steamer.

We therefore think that a report by Mr Winter is unnecessary and we venture to submit that the matter may safely be left to the discretion of the

22/16

174

(2)

The Government Telegraph Department and the
Comptroller is interested without putting us to the expense
of any special reports for which, as we have pointed
out above, matters are not yet ripe.

Wm

We have the honor to be
Sir

Your most obedient servants
Wm. L. Hunt
Attorneys to the Trustees for the
Debtors Holders re. S. T.

1

N^o 553 R dated 24.8.95
of 1010 & Act XLI of 1897
H. H. H. f. O. 66 & M. 27
6 April 1892. 18.9

SERIAL
1895

A

This would give
several powers.
for the Calicut
Tramway has now
been referred to
& others may be still
22/9

This is a special case, &
I think have a
pane to itself.

(3) W
(2) W
(1) W

order under the provisions of Act
of 1010 & Act XLI of 1897
This is in accordance with the
in Council directs that
Tramways in the Madras
Presidency within unincor-
porated limits be placed
under the P. W. Dept. By
branch for the purposes
of administration and
that the inspection of such
Tramways shall be con-
ducted by the Inspector
of Railways who is authorized
where electricity is the source
the power to call in such
expert opinion as he may
deem necessary (and to
Electric Tramway Co. the P. W. is authorized
to charge the expenses of the
same against the Promo-
tors as laid down under
their agreements (Act VIII
of 87) para 4 section (2).

THU

27/8/95
The Local & Municipal Board - 28/8/95
Electric Tramway Co. - 27/8/95
President, Madras Municipality - 30/8/95

20/9/10

B/-

Nº 553. R delat 27.8.95

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Government of Madras.

PUBLIC WORKS DEPARTMENT.

Recd.

Regd.

1903.

Enclosures

Spare copies

G.O., No. 553 Ry., 27th August 1895.

Tramways in the Madras Presidency within Municipal limits.

Orders placing — under the Public Works Department, Railway Branch, for the purposes of administration.

553 Railway

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.
RAILWAY.

Read—the following papers:—

I

G.O., No. 668 M., dated 6th April 1892.

ABSTRACT.—Ordering with remarks the publication in the *Fort St. George Gazette* of the order authorising the construction by Messrs. Hutchinson & Co., London, of tramways in the City of Madras.

II

Letter—from Messrs. ARBUTHNOT & Co., Attorneys to the Trustees for the Debenture Holders, Madras Electric Tramways.
To—the Consulting Engineer for Railways, Madras.
Dated—the 16th July 1895.

We have to thank you for copy of a letter from the Superintendent, Eastern Extension Cable Company. You will have already learned from the copies of Sir Henry Mance's letters sent to you that he does not consider that anything like the expensive works indicated by the Superintendent, Eastern Extension Cable Company, are needed, and we believe that he is no mean authority, especially on cables such as the Eastern Extension Company's.

However we are glad to say that the subject need not be further discussed, as it has been quite decided by the Trustees that the overhead system shall be adopted on all the sections of the Tramway which the Superintendent thinks would do away with all disturbances.

It is necessary that we should push on with No. II and finish it as soon as possible in order to keep the concession open; we shall then proceed at once with the re-equipment of No. I and simultaneously with the construction of No. III.

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Letter—from Messrs. ARBUTHNOT & Co., Attorneys to the Trustees for the Debenture Holders, Madras Electric Tramways.
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Dated—the 19th July 1895.

We have the honor to forward herewith copy of a letter we have written to Major H. D. Love, Principal of the College of Engineering, from which you will see that part of the interruptions to the Telephone and Cable Companies lately is due to the facts mentioned therein.

ENCLOSURE.

Letter—from Messrs. ARBUTHNOT & Co., Attorneys to the Trustees for the Debenture Holders, Madras Electric Tramways.
To—the Principal, Engineering College, Madras.
Dated—the 18th July 1895.

We have the honour to inform you that our Engineer complains that on Tuesday last a party of your students while surveying along the line of our section amused themselves by frequently dropping their chains into the conduit thus causing short circuits and consequent interruptions to the Telephone and Eastern Cable system. As it is of the utmost importance to us to avoid any interference with these two lines, we shall be much obliged if you will take steps to prevent a recurrence of such misconduct and, if possible, direct that these field parties shall work somewhere else in future.

We are also told that the young men were extremely impertinent to the Tramway Overseer when he remonstrated with them.

We would suggest that it would probably be as well to remind the students that under clause 29 of the Indian Tramways Act, XI of 1886, under which we come, interference with the line is punishable by a fine which may extend to Rs. 500 for each person whether an actual culprit or only an abettor.

IV

Letter—from Mr. F. R. URCORR, Consulting Engineer for Railways, Madras.
To—the Consulting Engineers for Railways, Bombay and Calcutta.
Dated—the 22nd July 1895.
No.—2357.

I have the honour to enquire whether the ^{Bombay} tramways within Municipal limits are under the charge of the Consulting Engineer and whether he inspects them previous to opening.

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Letter—from Mr. F. R. URCORR, Consulting Engineer for Railways, Madras.
To—Messrs. Arbuthnot & Co., Attorneys to the Trustees for the Debenture Holders, Madras Electric Tramways.
Dated—the 25th July 1895.
No.—2401.

I beg to acknowledge your letter of 16th July 1895, and to remind you of the conditions under which an extension to 15th September in working No. I section was given, were to enable you to make such arrangements as would enable me to open the line permanently provided the Government is satisfied that all interference with other existing companies has ceased.

No further temporary extensions of time can be granted after 15th September.

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Letter—from Messrs. ARBUTHNOT & Co., Attorneys to the Trustees for the Debenture Holders, Madras Electric Tramways.
To—the Consulting Engineer for Railways, Madras.
Dated—the 28th July 1895.

In reply to your No. 2401 of the 26th instant we have the honour to again point out to you that if the measures for protection have not been agreed upon, it is impossible for us to carry them out. These are now under discussion and both Telephone and Extension Companies have consented to suspend action until the effect of the overhead system, which we are now pushing on with as fast as we can, shall have been tried.

You are therefore asking more than the parties to be protected require, and we must beg you to reconsider your decision that no further temporary extension of time shall be granted.

We may mention that recent modifications instituted by our Superintending Electrical Engineer have had a very favourable effect on the disturbances, which have on some days been almost entirely absent.

VII

Letter—from the Consulting Engineer for Railways, Bombay.
To—the Consulting Engineer for Railways, Madras.
Dated—the 29th July 1895.
No.—6198.

With reference to your letter No. 2357, dated 22nd July 1895, I have the honour to inform you that the Bombay tramways within Municipal limits are not under the control of the Consulting Engineer, and that he does not inspect them previous to opening.

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Letter—from the Consulting Engineer to the Government of India for Railways,
Calcutta.
To—the Consulting Engineer for Railways, Madras.
Dated—the 31st July 1895.
No.—2416.

In reply to your letter No. 2357 of the 22nd instant, I have the honour to inform you that the Calcutta tramways within Municipal limits are not under my charge, nor have they ever been inspected by an officer of this department.

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Letter—from Mr. F. R. Upcott, Consulting Engineer for Railways, Madras.
To—Messrs. Arbutnot & Co., Attorneys to the Trustees for the Debenture Holders, Madras Electric Tramway Company.
Dated—the 13th August 1895.
No.—87/O.

In reply to your letter of 26th July, I have the honour to say that, in order to enable me to protect the interests of all parties, I have requested permission of Government to call in the services of Mr. Winter, Telegraph Engineer of the Madras Railway.

This has been granted and I, therefore, request that under clause 39 of G.O., No. 668 of 6th April 1892, you will bear the cost of Mr. Winter's report and will give him all facilities to prepare it.

If it should appear that a further extension of time is necessary to ascertain the effect of the overhead system it will be granted.

X

Letter—from Messrs. Arbutnot & Co., Attorneys to the Trustees for the Debenture Holders, Madras Electric Tramways.
To—the Chief Secretary to Government.
Dated—the 13th August 1895.

It will doubtless be in your recollection that on taking in hand the construction of sections ii and iii of the above it was considered desirable—in view of the reports of the Superintendent, Government Telegraphs, regarding the disturbances and interruptions of the Telephone and Eastern Extension Cable services attributed to the adoption of the conduit system on section i—that these sections should be equipped on the overhead system as being more likely than any other to obviate all further complaints. This change of plan of course involved the furnishing of entirely new plant from England with corresponding delay in the completion of the line.

We had nevertheless hoped to carry the work through within the time allowed by Government, but the proposed alignment having been necessarily altered to meet the new system which has involved corresponding changes of detail the work of construction has not progressed as rapidly as we had expected and we are beginning to fear that we may be compelled to exceed the time allowed though there is still a possibility of our being within it. We think it better however to run no risks and therefore have now the honour to request that His Excellency will be pleased to grant us a further extension of six weeks time, i.e., till 20th October.

We need not say that we are using every endeavour to push forward the works by every means in our power.

Soliciting the favour of an early reply.

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To—the Consulting Engineer for Railways, Madras.
Dated—the 17th August 1895.

We have the honour to acknowledge receipt of your No. 87/O., of 13th instant and beg to thank you for your willingness to extend the period of our running powers, if it should appear that further time is necessary to ascertain the effect of the overhead system. We cannot, however, see that Mr. Winter's report can affect the matter one way or the other inasmuch as we have not yet received the cable and some other appliances necessary. The poles have arrived and we are expecting to receive the cables and other material by every steamer.

We therefore think that a report by Mr. Winter is unnecessary and we venture to submit that the matter may safely be left to the discretion of the Government Telegraph department and the companies interested without putting us to the expense of any special report for which, as we have pointed out above, matters are not yet ripe.

Order—No. 553 Ry., dated 27th August 1895.

Under the provisions of Act XI of 1896 and Act XIII of 1887, His Excellency the Governor in Council directs that Tramways in the Madras Presidency within Municipal limits be placed under the Public Works Department, Railway Branch, for the purposes of administration and that the inspection of such Tramways shall be conducted by the Government Inspector of Railways who is authorized where electricity is the motive power to call in such expert opinion as he may deem necessary. In the case of the Madras Electric Tramway Company the Consulting Engineer is authorized to charge the expenses of the same against the Promoters as laid down under their agreements (Act XIII of 1887, paragraph 4, section (2)).

(True Extract.)

F. R. UPCOTT,
Secretary to Government.

To the Local and Municipal Department.
.. Madras Electric Tramways Company.
.. President, Madras Municipality.

NOTES CONNECTED WITH G.O., No. 553 Ry., DATED
27TH AUGUST 1895.

[SUBJECT.—Administration of Tramways in the Madras Presidency.]

Public Works Department (Railway).

From Messrs. Arbuthnot & Co., Attorneys to the Trustees for the debenture-holders of
the Madras Electric Tramways, dated 16th July 1895.

From Messrs. Arbuthnot & Co., Attorneys to the Trustees for the debenture-holders of
the Madras Electric Tramways, dated 19th July 1895.

Please make précis of case. There are two currents—No. (1) section and the
correspondence about interference with telephone and cable and No. (2) the opening
of the other sections. The Tramway Company seem to contemplate leaving No. (1) as
it is for the present but I don't think that will do.

F. D. FOWLER.
16-7-95.

MADRAS ELECTRIC TRAMWAYS.

Section No. I.

Opening of line.—The right hand track was inspected in March 1895, the left
hand track in April 1895. Provisional sanction was given to open the section for
one month from the 6th May 1895. Time was afterwards extended to 15th June,
and subsequently to the 15th September 1895.

Interference with Oriental Telephone and Cable Telegraph lines.—Shortly after
the opening of this section, which is constructed on the conduit system, it was found
that the high currents employed to work the tramcars injuriously affected the
Oriental Telephone and Cable Telegraph lines.

The Cable Company temporarily overcame the disturbances by giving up the
use of the earths at their office, and using instead earths at their cable-house.

In connection with the interference caused to the Oriental Telephone Company
certain experiments were carried out by the electricians of the Tramway and Cable
Companies and it was found that the disturbances were due to induction on the
lines running parallel with the Tramway Company's rails and that they could be
removed either by (1) metallic circuits, i.e., by using return wires or (2) by the
diversion of the telephone lines. Mr. Palmer, the Superintendent, Government
Telegraphs, does not recommend the adoption of the first of these means, and
considers the diversion of the telephone lines should be carried out, the net cost of the
alteration being defrayed by the Tramway Company.

In the meantime the Tramway Company requested that the provisional order
permitting them to work may be extended to the 15th September, by which time
they expected to begin the re-equipment of the line on the overhead system which,
it was considered, would effectually do away with the disturbances.

The Cable Telegraph and Oriental Telephone Companies agreed to the extension
being granted on certain conditions. The Cable Company stipulated that, if the
Tramway Company wished to continue working beyond the 15th September, it should
undertake to pay the cost (estimated first at £1,000 and subsequently at £3,000,
the former sum being the cost of the duplication of the pipe line and the latter including

this expenditure plus an additional £2,000 for two lengths of cable and cable ship expenses) of permanently fixing the Cable Company's "earths" a little distance out at sea. The Oriental Telephone on condition that the disturbances did not increase and that the Tramway makes good any loss of revenue sustained by withdrawal of subscribers. Messrs. Arbutnot & Co. having agreed to the above, the necessary extension was granted.

In his letter No. 1871, dated 17th June 1895, Mr. Palmer stated that at the time the experiments referred to above were made to ascertain the cause of disturbance to the telephone lines, Mr. Gadsley, the Electrician of the Tramway, consented to run a short trial length fitted on the overhead system in order to determine by actual trial whether it would overcome the existing disturbances. Mr. Palmer said he considered it very necessary that the promised trial should be made as soon as possible.

In his letter No. 2040, dated 22nd June 1895, Mr. Palmer brought to notice that on the 16th and 17th June the disturbances to the telephone lines had become serious. On inquiry by the Assistant Superintendent, Government Telegraph Department, it was found that the disturbances were due to the Tramway Company having run short of collectors and using old ones which had not been properly repaired. This however was rectified by the substitution of new collectors on receipt from England a few days after.

On the 25th June 1895, Mr. Palmer again reported that very serious disturbances were caused to the telephone lines on the 21st and 25th idem and requested that the Tramway be called upon to undertake the diversion of the telephone trunk lines, the running of the cars being stopped in the meanwhile if necessary. Mr. Gadsley, however, adopted certain measures which diminished the disturbances.

Messrs. Arbutnot & Co. expect the material for running a trial overhead line to arrive from England this month. In their letter, dated 16th July 1895, Messrs. Arbutnot write as follows:—

"It is necessary that we should push on with section No. II and finish it as soon as possible in order to keep the concession open; we shall then proceed at once with the re-equipment of No. I and simultaneously with the construction of No. III.

Sections Nos. II and III.

In G.O., No. 423 Ry., dated 23rd June 1895, Government sanctioned the construction of the above sections, after obtaining the approval of the Superintendent, Government Telegraph Department (his letter No. 1409, dated 24th May 1895), which was granted on certain conditions. The approval of the President, Municipal Commission, was also asked (letter No. 1953, dated 20th June 1895), Colonel Moore in reply stated that before he could give an opinion he should be informed of the position of the supporting posts. The Tramway Company was asked for a plan but it has not yet been received.

G. D. PLUMMER.
20-7-95.

In the letter under reply it looks as if the Tramway Company meant to put off the overhead system on No. I Section to the last. We may remind them of the conditions under which the extension of time was granted, viz., that at the expiry of the extended period no further extensions would be granted but a "pucca" order would issue provided that Government is satisfied that interference with the other companies lines has ceased.

F. D. FOWLER.
22-7-95.

[Memorandum No. 2357, dated 22nd July 1895.]

[Memorandum No. 2401, dated 25th July 1895.]

Put this file up with my request for Mr. Winter's services — when returned from circulation.

F. R. URCOTT.

From Messrs. Arbutnot & Co., Attorneys to the Trustees for the debenture-holders, Madras Electric Tramways, dated 26th July 1895.

There seems no use in replying to this: if Messrs. Arbutnot's statements are correct there will be no particular harm in extending the time again. I think we might send a copy to Superintendent, Telegraph, for favour of note as to the accuracy of facts stated.

F. D. FOWLER.
29-7-95.

From the Consulting Engineer for Railways, Bombay, dated 23rd July 1895, No. 6198.

From the Consulting Engineer to the Government of India for Railways, dated 31st July 1895, Calcutta, No. 2416.

Note on Madras Electric Tramways.

I append a plan giving the lines of the Electric Tramway and the state of the case is as follows.

No. I section is open and an extension of time to remove all disturbances with the telephone and cable lines has been granted to 15th September.

Nos. II and III sections are sanctioned for construction.

We have received and are receiving constant complaints of interruption.

It is provided under the Electricity Act 13 of 1887 that if electrical power be used that telephone and telegraph lines shall be safeguarded.

From information—not being an expert—I gather that the overhead system, which will have no properly insulated return wire, is just as likely to cause interruption as the conduit system, because the voltage is very high (500 volts dynamo) and the rails taking the return current are insufficiently connected up and insulated.

Moreover in America and Europe much damage has been caused by the currents running along the cast iron water pipes rendering them soft by electrolysis.

This has not hitherto been brought to notice but as the tramways have been placed under me, I request the sanction of the Government to call in as my adviser Mr. Winter, Telegraph Engineer of the Madras Railway, who is, I am fully assured, of sufficient ability and conversant with the most approved methods of removing these leakages.

Approved.
W[INTERLOCK].
H. B[LIND].
J. G[ROSE]—9-8-95.

I think the Tramway Company should bear any cost, which their defective arrangements entail. I think that the expenditure now proposed would come under "preliminary engineering expenses" under paragraph 39 of the notification &c.

W[INTERLOCK]—7-8-95.
H. B[LIND].
J. G[ROSE].

[Memorandum No. 87/O., dated 13th August 1895.]

To the Local and Municipal Department.

LOCAL AND MUNICIPAL DEPARTMENT.

From Messrs. Arbutnot & Co., Attorneys to the Trustees for the debenture-holders, Madras Electric Tramway, dated 13th August 1895.

This is apparently a Public Works Department matter.

J. F. PRICE—14-8-95.

To the Public Works Department (Railway).

Government of Madras.

PUBLIC WORKS DEPARTMENT.

No. 553 Ry., 27th August 1895.

PUBLIC WORKS DEPARTMENT (RAILWAY).

From Messrs. Arbutnot & Co., etc., dated 17th August 1895.

Two letters from the Madras Electric Tramway are submitted.

Letter, dated 13th August: this contains a request for an extension of time to complete sections II and III. It is addressed to the Honourable the Chief Secretary.

As Messrs. Arbutnot & Co. have questioned the powers of the Consulting Engineer in his capacity of Inspecting Officer for Railways, it would, I submit, be well if a Government Order were issued placing the Tramway under the Railway Branch of the Public Works Department for purposes of administration and permitting me to call in expert advice and to charge the same against the Company under paragraph 39 of the notification in accordance with the remark of His Excellency the Governor.

This will enable me to dispose of letter, dated 17th August, which demurs as to the necessity of having expert opinion, concerning which I remark the Tramway Company were not asked for an opinion.

There was no limit of time laid down in the Government Order sanctioning the construction of sections II and III of the tramway lines, but a limit of time up to 15th September has been given to the Tramway Company requiring them to adopt means to put a stop to interferences.

I understand they wish to extend this limit—September 15th to October 20th. I suppose there is no objection.

W[ENLOCK].

with the Telephone and Cable companies.
I append an order for approval.

Yes: the Calicut Tramway has now been referred to me and others may be.

F.R.U.—23-8-95.

F.R.U.—19-8-95.

The order as now drafted would give general powers.

W[ENLOCK]—21-8-95.

J. G[ROSS]—22-8-95.

The Tramway Company says that it is content to abide by the opinion of the Government Telegraph Department and of the (Electric) companies interested, who are the persons who have made complaints. If the Tramway Company is thus content to dispense with an independent opinion, which might be in its favour, I don't quite see why we need insist on procuring it.

H. B[Liss]—22-8-95.

Please see former note. I fear damage to the cast iron water mains as has happened elsewhere and without expert opinion. I may be allowing leakage of current—all these can be readily obviated. I believe and it is my desire to protect all parties. The Telegraph Engineer has dealt only with the telegraphs and I don't think he is so competent to advise on damage to water mains as Mr. Winter.

F.R.U.—23-8-95.

Very well.

H. B[Liss]—25-8-95.

Issue.

F.R.U.—27-8-95.

[Issued as G.O., No. 553 Ry., dated 27th August 1895.]

Recd.

Regd.

1908.

Enclosures

Spare copies

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We therefore think that a report by Mr. Winter is unnecessary and we venture to submit that the matter may safely be left to the discretion of the Government Telegraph department and the companies interested without putting us to the expense of any special report for which, as we have pointed out above, matters are not yet ripe.

Order—No. 553 Ry., dated 27th August 1895.

Under the provisions of Act XI of 1896 and Act XIII of 1887, His Excellency the Governor in Council directs that Tramways in the Madras Presidency within Municipal limits be placed under the Public Works Department, Railway Branch, for the purposes of administration and that the inspection of such Tramways shall be conducted by the Government Inspector of Railways who is authorized where electricity is the motive power to call in such expert opinion as he may deem necessary. In the case of the Madras Electric Tramway Company the Consulting Engineer is authorized to charge the expenses of the same against the Promoters as laid down under their agreements (Act XIII of 1887, paragraph 4, section (2)).

(True Extract.)

F. R. Upcott,
 Secretary to Government.

To the Local and Municipal Department.
 Madras Electric Tramways Company.
 President, Madras Municipality.

NOTES CONNECTED WITH G.O., No. 553 Ry., DATED
27TH AUGUST 1895.

[SUBJECT.—Administration of Tramways in the Madras Presidency.]

Public Works Department (Railway).

From Messrs. Arbuthnot & Co., Attorneys to the Trustees for the debenture holders of
the Madras Electric Tramways, dated 16th July 1895.

From Messrs. Arbuthnot & Co., Attorneys to the Trustees for the debenture-holders of
the Madras Electric Tramways, dated 19th July 1895.

Please make précis of case. There are two currents—No. (1) section and the
correspondence about interference with telephone and cable and No. (2) the opening
of the other sections. The Tramway Company seem to contemplate leaving No. (1) as
it is for the present but I don't think that will do.

F. D. FOWLER.
16-7-95.

MADRAS ELECTRIC TRAMWAYS.

Section No. I.

Opening of line.—The right hand track was inspected in March 1895, the left
hand track in April 1895. Provisional sanction was given to open the section for
one month from the 6th May 1895. Time was afterwards extended to 15th June,
and subsequently to the 15th September 1895.

Interference with Oriental Telephone and Cable Telegraph lines.—Shortly after
the opening of this section, which is constructed on the conduit system, it was found
that the high currents employed to work the tramcars injuriously affected the
Oriental Telephone and Cable Telegraph lines.

The Cable Company temporarily overcame the disturbances by giving up the
use of the earths at their office, and using instead earths at their cable-house.

In connection with the interference caused to the Oriental Telephone Company
certain experiments were carried out by the electricians of the Tramway and Cable
Companies and it was found that the disturbances were due to induction on the
lines running parallel with the Tramway Company's rails and that they could be
removed either by (1) metallic circuits, i.e., by using return wires or (2) by the
diversion of the telephone lines. Mr. Palmer, the Superintendent, Government
Telegraphs, does not recommend the adoption of the first of these means, and
considers the diversion of the telephone lines should be carried out, the net cost of the
alteration being defrayed by the Tramway Company.

In the meantime the Tramway Company requested that the provisional order
permitting them to work may be extended to the 15th September, by which time
they expected to begin the re-equipment of the line on the overhead system which,
it was considered, would effectually do away with the disturbances.

The Cable Telegraph and Oriental Telephone Companies agreed to the extension
being granted on certain conditions. The Cable Company stipulated that, if the
Tramway Company wished to continue working beyond the 15th September, it should
undertake to pay the cost (estimated first at £1,000 and subsequently at £3,000,
the former sum being the cost of the duplication of the pipe line and the latter including

this expenditure *plus* an additional £2,000 for two lengths of cable and cable ship expenses) of permanently fixing the Cable Company's "earths" a little distance out at sea. The Oriental Telephone on condition that the disturbances did not increase and that the Tramway makes good any loss of revenue sustained by withdrawal of subscribers. Messrs. Arbutnot & Co. having agreed to the above, the necessary extension was granted.

In his letter No. 1871, dated 17th June 1895, Mr. Palmer stated that at the time the experiments referred to above were made to ascertain the cause of disturbance to the telephone lines, Mr. Gadsley, the Electrician of the Tramway, consented to run a short trial length fitted on the overhead system in order to determine by actual trial whether it would overcome the existing disturbances. Mr. Palmer said he considered it very necessary that the promised trial should be made as soon as possible.

In his letter No. 2040, dated 22nd June 1895, Mr. Palmer brought to notice that on the 16th and 17th June the disturbances to the telephone lines had become serious. On inquiry by the Assistant Superintendent, Government Telegraph Department, it was found that the disturbances were due to the Tramway Company having run short of collectors and using old ones which had not been properly repaired. This however was rectified by the substitution of new collectors on receipt from England a few days after.

On the 25th June 1895, Mr. Palmer again reported that very serious disturbances were caused to the telephone lines on the 21st and 25th idem and requested that the Tramway be called upon to undertake the diversion of the telephone trunk lines, the running of the cars being stopped in the meanwhile if necessary. Mr. Gadsley, however, adopted certain measures which diminished the disturbances.

Messrs. Arbutnot & Co. expect the material for running a trial overhead line to arrive from England this month. In their letter, dated 16th July 1895, Messrs. Arbutnot write as follows:—

"It is necessary that we should push on with section No. II and finish it as soon as possible in order to keep the concession open; we shall *then* proceed at once with the re-equipment of No. I and simultaneously with the construction of No. III:

Sections Nos. II and III.

In G.O., No. 423 Rr., dated 23rd June 1895, Government sanctioned the construction of the above sections, after obtaining the approval of the Superintendent, Government Telegraph Department (his letter No. 1409, dated 24th May 1895), which was granted on certain conditions. The approval of the President, Municipal Commission, was also asked (letter No. 1953, dated 20th June 1895), Colonel Moore in reply stated that before he could give an opinion he should be informed of the position of the supporting posts. The Tramway Company was asked for a plan but it has not yet been received.

G. D. PLUMMER.

20-7-95.

In the letter under reply it looks as if the Tramway Company meant to put off the overhead system on No. I Section to the last. We may remind them of the conditions under which the extension of time was granted, viz., that at the expiry of the extended period no further extensions would be granted but a "pucca" order would issue provided that Government is satisfied that interference with the other companies' lines has ceased.

F. D. FOWLER.
22-7-95.

[Memorandum No. 2357, dated 22nd July 1895.]

[Memorandum No. 2401, dated 25th July 1895.]

Put this file up with my request for Mr. Winter's services — when returned from circulation.

F. R. URCOTT.

From Messrs. Arbutnot & Co., Attorneys to the Trustees for the debenture-holders, Madras Electric Tramways, dated 26th July 1895.

There seems no use in replying to this: if Messrs. Arbutnot's statements are correct there will be no particular harm in extending the time again. I think we might send a copy to Superintendent, Telegraph, for favour of note as to the accuracy of facts stated.

F. D. FOWLER.
29-7-95.

From the Consulting Engineer for Railways, Bombay, dated 29th July 1895, No. 6198.

From the Consulting Engineer to the Government of India for Railways, dated 31st July 1895, Calcutta, No. 2416.

Note on Madras Electric Tramways.

I append a plan giving the lines of the Electric Tramway and the state of the case is as follows.

No. I section is open and an extension of time to remove all disturbances with the telephone and cable lines has been granted to 15th September.

Nos. II and III sections are sanctioned for construction.

We have received and are receiving constant complaints of interruption.

It is provided under the Electricity Act 13 of 1887 that if electrical power be used that telephone and telegraph lines shall be safeguarded.

From information—not being an expert—I gather that the overhead system, which will have no properly insulated return wire, is just as likely to cause interruption as the conduit system, because the voltage is very high (500 volts dynamo) and the rails taking the return current are insufficiently connected up and insulated.

Moreover in America and Europe much damage has been caused by the currents running along the cast iron water pipes rendering them soft by electrolysis.

This has not hitherto been brought to notice but as the tramways have been placed under me, I request the sanction

Approved.

W[ATLOCK].

H. B[LISS].

J. G[ROSE]—9-8-95.

of the Government to call in as my adviser Mr. Winter, Telegraph Engineer of the Madras Railway, who is, I am fully assured, of sufficient ability and

conversant with the most approved methods of removing these leakages.

By this means I trust to safeguard all interests. His remuneration should, I suggest, be debited to the Local and Municipal Department.

F. R. URCOTT—5-8-95.

I think the Tramway Company should bear any cost, which their defective arrangements entail. I think that the expenditure now proposed would come under "preliminary engineering expenses" under paragraph 39 of the notification *q.v.*

W[ATLOCK]—7-8-95.

H. B[LISS].

J. G[ROSE].

[Memorandum No. 87/O., dated 13th August 1895.]

To the Local and Municipal Department.

LOCAL AND MUNICIPAL DEPARTMENT.

From Messrs. Arbutnot & Co., Attorneys to the Trustees for the debenture-holders, Madras Electric Tramway, dated 13th August 1895.

This is apparently a Public Works Department matter.

J. F. PRICE—14-8-95.

To the Public Works Department (Railway).

PUBLIC WORKS DEPARTMENT (RAILWAY).

From Messrs. Arbuthnot & Co., etc., dated 17th August 1895.

Two letters from the Madras Electric Tramway are submitted.

Letter, dated 13th August: this contains a request for an extension of time to complete sections II and III. It is addressed to the Honourable the Chief Secretary.

As Messrs. Arbutnot & Co. have questioned the powers of the Consulting Engineer in his capacity of Inspecting Officer for Railways, it would, I submit, be well if a Government Order were issued placing the Tramway under the Railway Branch of the Public Works Department for purposes of administration and permitting me to call in expert advice and to charge the same against the Company under paragraph 39 of the notification in accordance with the remark of His Excellency the Governor.

This will enable me to dispose of letter, dated 17th. August, which demurs as to the necessity of having expert opinion, concerning which I remark the Tramway Company were not asked for an opinion.

There was no limit of time laid down in the Government Order sanctioning the construction of sections II and III of the tramway lines, but a limit of time up to 15th September has been given to the Tramway Company requiring them to adopt means to put a stop to interferences.

with the Telephone and Cable companies.
I append an order for approval.

F.R U.—19-8-95.

Yes: the Calicut Tramway has now been referred to me and others may be.

The order as now drafted would give general powers.

F.R.U.—23-8-95.

W. ANLOCK } - 21-8-95.

J. G[ROSE]—22-8-95.

The Tramway Company says that it is content to abide by the opinion of the Government Telegraph Department and of the (Electric) companies interested, who are the persons who have made complaints. If the Tramway Company is thus content to dispense with an independent opinion, which might be in its favour, I don't quite see why we need insist on procuring it.

H. B[LISS]—22-8-95.

Please see former note. I fear damage to the cast iron water mains as has happened elsewhere and without expert opinion I may be allowing leakage of current—all those can be readily obviated. I believe and it is my desire to protect all parties. The Telegraph Engineer has dealt only with the telegraphs and I don't think he is so competent to advise on damage to water mains as Mr. Winter.

F.R.U.—23-8-95.

Very well.

U. B[LISS]—25-8-95.

Issue.

F.R.U.—27-8-95.

[Issued as G.O., No. 553 Ry., dated 27th August 1895.]

[illegible]