

CP 919⁰
Govt. of Madras.
PUBLIC WORKS.

3126 | P.W.D. | 6.12.1894

221173 4208 | S1 | 72

Redfern
19/6/72

Transfers

of Public

& Sub-

Registers

Contt. of

Working

to Officers

CURRENT No. 9190

2/11/91

General
Statistical

31265 d, 6 December 1889

Communicated to
officers of the Public
Works Dept. in con-
tinuation of G.O. 34720
6 December 1889.

35.c
Recd. 3/12/89

3500
4/12/91

C. E. Ford J.
C. E. Ford J.
S. E. Ford J.
C. E. Ford J.
S. E. Ford J.
E. A. Ford J.
E. A. Ford J.
L. E. Ford J.

RECEIVED
12 DEC 91

With order

3126w

Recd: 3.12.94

By B. L. C. P. Y.

[For General Distribution].
Circular No. 2 Public Works.
GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.
GENERAL.
RESOLUTION.
Transfers of charge of Public Works Divisions and Sub-Divisions.
Calcutta, the 23rd November 1894.

Read—
Government of India, Public Works Department, Circular No. 20 P. W., dated 23rd October 1889.

RESOLUTION.—In paragraph 4 of the Circular read above regarding transfers of charge of divisions and sub-divisions, it is laid down that, in the absence of any advice to the contrary, the Examiner of Accounts will assume that the transfer has been conducted with sufficient expedition, and will pass full salaries to both officers for the period occupied in carrying out the transfer. The Government of India are now pleased to order that the Superintending Engineer, who, in ordinary course, receives the report of the transfer of charge of a division or sub-division (*vide* Public Works Code, Volume II, Chapter II, paragraphs 231 and 239), shall, in every case, inform the Examiner of the dates on which the transfer began and ended, and, if he (the Superintending Engineer) considers that the time so taken is not excessive, that full pay for the period may be allowed to the relieving officer as if he were "on duty". If the Superintending Engineer, however, considers the time excessive, the relieving officer must be treated as if he were on leave or on joining time, etc., as the case may be. Full pay is subject to the proviso that no emoluments in the nature of acting allowance can be drawn by two officers at once, *vide* paragraph 3 of Public Works Circular No. 20 of 23rd October 1889.

2. The above rule forms an exception to the rule in Article 254 of the Civil Service Regulations, under which an officer begins to draw the full pay of an appointment from the day on which he assumes charge of an office.

- The Governments of Madras and Bombay (General and Railway), Bengal, the North-Western Provinces and Oudh, and the Punjab.
- The Chief Commissioners of the Central Provinces, Burma, Assam, and Coorg.
- The Resident at Hyderabad.
- The Agents to the Governor General for Central India, Rajputana, and Baluchistan.
- The Accountant General, Public Works Department.
- The Director General of Military Works.
- The Director General of Telegraphs (for information).
- The Director General of Railways.
- The Consulting Engineers to the Government of India for Railways, Calcutta, Lucknow, Central Division, and Assam.
- The Comptroller General (for information).

ORDER.—Ordered, that this Resolution be communicated to the Local Governments, Administrations and Officers noted on the margin for information and guidance.

W. B. Smith
Lieut.-Col., R. E.,
Secretary to the Govt. of India.

To
The Secy. to the Govt. of Madras, P.W. Department.

G. I. C. P. O.—No. 626 P. W. D.—24-11-94.—1,426.—J. N. D.

W. B. 300

GENERAL.
ESTABLISHMENT.

Govt. of Madras.
PUBLIC WORKS.

Dated December, 6th.

Recd.

Encl.

G.O., 6th Dec. 1894, No. 3126 W.

DECEMBER.

Transfers of charge of Public
Works Divisions and
Sub-Divisions

Resolution of the Government of India
regarding —, communicated to officers of
the Public Works Department.

[For General Distribution].

Circular No. 2 Public Works.
GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.
GENERAL.

RESOLUTION.

Transfers of charge of Public Works Divisions and Sub-Divisions.
Calcutta, the 23rd November 1894.

Read—

Government of India, Public Works Department, Circular No. 20 P. W., dated 23rd
October 1889.

RESOLUTION.—In paragraph 4 of the Circular read above regarding transfers of charge of divisions and sub-divisions, it is laid down that, in the absence of any advice to the contrary, the Examiner of Accounts will assume that the transfer has been conducted with sufficient expedition, and will pass full salaries to both officers for the period occupied in carrying out the transfer. The Government of India are now pleased to order that the Superintending Engineer, who, in ordinary course, receives the report of the transfer of charge of a division or sub-division (*vide* Public Works Code, Volume II, Chapter II, paragraphs 231 and 239), shall, in every case, inform the Examiner of the dates on which the transfer began and ended, and, if he (the Superintending Engineer) considers that the time so taken is not excessive, that full pay for the period may be allowed to the relieving officer as if he were "on duty". If the Superintending Engineer, however, considers the time excessive, the relieving officer must be treated as if he were on leave or on joining time, etc., as the case may be. Full pay is subject to the proviso that no emoluments in the nature of acting allowance can be drawn by two officers at once, *vide* paragraph 3 of Public Works Circular No. 20 of 23rd October 1889.

2. The above rule forms an exception to the rule in Article 254 of the Civil Service Regulations, under which an officer begins to draw the full pay of an appointment from the day on which he assumes charge of an office.

The Governments of Madras and Bombay (General and Railway),
Bengal, the North Western Provinces and Oudh, and the Punjab.
The Chief Commissioners of the Central Provinces, Burma, Assam, and
Coorg.
The Resident at Hyderabad.
The Agents to the Governor General for Central India, Rajputana, and
Baluchistan.
The Accountant General, Public Works Department.
The Director General of Military Works.
The Director General of Telegraphs (for information).
The Director General of Railways.
The Consulting Engineers to the Government of India for Railways,
Calcutta, Lucknow, Central Division, and Assam.
The Comptroller General (for information).

ORDER.—Ordered, that
this Resolution be com-
municated to the Local
Governments, Adminis-
trations and Officers noted
on the margin for in-
formation and guidance.

M. B. Bissh
Lieut.-Col., R. E.,
Secretary to the Govt. of India.

G. I. C. P. O.—No. 626 P. W. D.—24-11-94.—1,426.—J. N. D.

To The Lt. Secy: to the Govt: of Madras, P.W. Department
Railway Branch

ORDER—dated 6th December 1894, No. 3126 W., Public Works.

Communicated to officers of the Public Works Department in continuation of
G.O., No. 3472 W., dated 6th December 1889.

(True Extract.)

Under Secy. to Govt., P.W.D.

To the Chief Engineer for Irrigation.
„ the Consulting Engineer for Railways.
„ Superintending Engineers.
„ the Consulting Architect to Government.
„ the Superintendent of Works, Periyár Project.
„ the Examiner, Railway Accounts.
„ the Examiner, Public Works Accounts.

Pension Department.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read the following paper 8:—

From the Public Works Department, dated 23rd November 1894, No. 37656.Certificate and Report from the Examiner of P.W. Accounts, dated 15th Nov^r 1894, No. 103.

Order Thereon December 1894, No.

Under Government of India, Public Works Department, Resolution No. 2873 G, dated 2nd November 1893, the Right Honorable the Governor in Council is pleased to grant to Mr. Alfred Mason Hayes, late an Executive Engineer, 2nd Grade, Public Works Department, a special retiring pension of Rupees (2933-5-4) two thousand nine hundred and thirty-three annas five and pice four per Annum payable at the India Office, London, from 23rd September 1894, in consideration of his qualifying Superior Service of 13 years, 1 month and 8 days.

2. A copy of these Proceedings will be forwarded to the Government of India for information.

(True Extract.)

R. L. C. N.

Under Secretary to Government.

To
The Accountant-General
with Registrar.Examiner, P.W. Acc^t
P.W. D.

6TH DECEMBER 1894, No. 3126 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Establishment.

Read—the following paper:—

Resolution of the Government of India, Public Works Department (General), dated Calcutta, 23rd November 1894, Circular No. 2 P.W.

[Transfers of charge of Public Works Divisions and Sub-Divisions.]

Read—Government of India, Public Works Department, Circular No. 20 P.W., dated 23rd October 1889.

Resolution—In paragraph 4 of the circular read above regarding transfers of charge of divisions and sub-divisions, it is laid down that, in the absence of any advice to the contrary, the Examiner of Accounts will assume that the transfer has been conducted with sufficient expedition and will pass full salaries to both officers for the period occupied in carrying out the transfer. The Government of India are now pleased to order that the Superintending Engineer, who, in ordinary course, receives the report of the transfer of charge of a division or sub-division (*vide* Public Works Code, volume II, chapter II, paragraphs 231 and 239), shall, in every case, inform the Examiner of the dates on which the transfer began and ended, and, if he (the Superintending Engineer) considers that the time so taken is not excessive, that full pay for the period may be allowed to the relieving officer as if he were "on duty." If the Superintending Engineer, however, considers the time excessive, the relieving officer must be treated as if he were on leave or on joining time, &c., as the case may be. Full pay is subject to the proviso that no emoluments in the nature of acting allowance can be drawn by two officers at once—*vide* paragraph 3 of Public Works Circular No. 20 of 23rd October 1889.

2. The above rule forms an exception to the rule in article 254 of the Civil Service Regulations, under which an officer begins to draw the full pay of an appointment from the day on which he assumes charge of an office.

The Governments of Madras and Bombay (General and Railway), Bengal, the North-Western Provinces and Oudh, and the Punjab.
The Chief Commissioners of the Central Provinces, Burma, Assam and Coorg.
The Resident at Hyderabad.
The Agents to the Governor-General for Central India, Rajputana, and Baluchistan.
The Accountant-General, Public Works Department.
The Director-General of Military Works.
The Director-General of Telegraphs (for information).
The Director-General of Railways.
The Consulting Engineers to the Government of India for Railways, Calcutta, Lucknow, Central Division, and A-sam.
The Comptroller-General (for information).

Order.—Ordered that this Resolution be communicated to the Local Governments, Administrations and officers noted on the margin for information and guidance.

(Signed) W. S. S. BISSET, Lieut.-Col, R.E.,
Secy. to the Govt. of India.

To the Secretary to the Government of Madras,
Public Works Department.

6TH DECEMBER 1894, No. 3122 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers :—

From Major W. L. C. BADDELEY, R.E., Superintending Engineer, II Circle, to the Chief Engineer, I Works Department, dated Bezwada, 20th July 1894, No. 917 K.S. *hereon*

I have the honour to refer to G.O., No. 1953 W., dated 15th July 1891, an estimate of Rs. 10,212 was sanctioned for constructing a building for records for the Collector's office at Masulipatam.

2. When inspecting the work which is nearly completed, on the 12th June last, I noticed that the rolled iron joists which carry the roof and floor of the upper story, were sagged to a greater extent than permissible.

3. As the result of my enquiries, I enclose a copy of a letter from Mr. Smith, the Executive Engineer, and a table of the observed deflections in the joists. I also sent some notes based on my which show that the roof and floor must be redesigned. The notes *incil is for* proving that when beams are built into a wall, it is not safe unless special precautions have been taken, and further *yes, take an Exe* or caution in selecting rolled iron or steel beams from *the Works Department*

4. I now propose *of Rep* with an ordinary terrace roof carried on teak beams and joists of joists to strengthen the floor. The concrete which *or will be removed and 2 inch teak planking* substituted.

5. The *drack* will be arranged so that no joist has to bear the weight of more than *drack*, the total weight per foot run being under these conditions about 202 lb., which is well within the margin of safety.

6. The revised plans and estimates are under preparation and will be forwarded in due course.

7. I must point out that Mr. Smith is in no way responsible for the design of the roof and floor, but it would have been better if he had officially brought to notice the excessive sagging of the joists when he made his first observations of deflection in October 1893.

ENCLOSURE.

From the Executive Engineer, Kistna Eastern division, to the Superintending Engineer, II Circle, dated 7th July 1894, No. 1695.

With reference to your No. 686 K.S., dated 26th June 1894, and our subsequent conversation, I have the honour to enclose a statement of the deflections of the joists as taken by the Overseer, Sergeant Smith, and checked by me.

2. I have been through the records and enclose the demi-official order of Mr. Hannan, the Superintending Engineer, to use 8" x 4" joists instead of 10" x 6" according to estimate.

Govt. of {189} Madras.

PENSION.

To

Dated

Recd.

Enclosures.

Mis., G.O., dated *1st Dec* 1894, No. 1528.

Subject.

*Granting pensⁿ to Mr. A. M. Hayes,
late an Executive Engineer, 2nd Grade,
P.W.D., Madras.*

23-11-94 No. 3763.C
10-11-94 No. 3763.C
20-10-94 No. 3763.C
11-7-94 No. 3763.C
20-2-94 No. 3763.C
20-2-94 No. 3763.C
20-2-94 No. 3763.C
17-2-94 No. 3763.C
22-1-94 No. 3763.C
15-11-93 No. 2939W
13-10-93 No. 2604W

3125 W. 6 December 1894

10.

*Communicated
to Mr. Hayes
12/12/94*

at, Circle

regular read abo
d down that, in
will assume
pass full sale
The Govern
who, in
or sub-division
239), shall, in
transfer began and
time so taken is not exce
ieving officer as if he were
nsiders the time excessive, th
or on joining time, &c., as the
ments in the nature of
3 of Public

San

154 of the G.

154 of the G.

*A. M. Hayes Esqr
1894
(Thompson India Office)*

To

Dated _____
Recd. _____

Enclosures.

Mis., G.O., dated 1st Decr 1894, No. 1528

Subject.

Granting pensⁿ to Mr^r A. M. Hayes,
late an Executive Engineer, 2nd Grade,
P.W.D., Madras.

23-11-94 № 3763.C
10-11-94 № 3764.C
20-10-94 № 3765.C
11-7-94 № 3766.C
20-2-94 № 3767.C
20-2-94 № 3768.C
20-2-94 № 3769.C
17-2-94 № 3770.C

N^o 3125 W. 4th Dec 1891

12

Communicated
by J. A. Hayes.
to the Committee on the
Revision of the

9. at, Circ

shall, in every
transfer began and ended, a
time so taken is not exces
ieving officer as if he were
nsiders the time excessive, th
or on joining time, &c., as the
ments in the nature o
h 3 of Public

51 of the Ci

A. i. Naves Sept
 A. i. Naves Sept
 (Strong India office)
 (Strong India office)

[21]

6TH DECEMBER 1894, No. 3122 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers:—

From Major W. L. C. BADDELEY, R.E., Superintending Engineer, II Circle, to
the Chief Engineer, I Works Department, dated Bezwada, 20th July
1894, No. 917 K.S. *5000*

I have the honour to inform you that in G.O., No. 1953 W., dated 15th July 1891, an estimate of Rs. 10,212 was sanctioned for constructing a building for records for the Collector's office at Masulipatam.

2. When inspecting the work which is nearly completed, on the 12th June last, I noticed that the rolled iron joists which carry the roof and floor of the upper story, were sagged to a greater extent than permissible.

3. As the result of my enquiries, I enclose a copy of a letter from Mr. Smith, the Executive Engineer, and a table of the observed deflections in the joists. I also sent some notes based on my which show that the roof and floor must be redesigned. The notes are showing that when beams are built into a wall, it is not safe unless special precautions have been taken, and further that or caution in selecting rolled iron or steel beams from the

4. I now propose to remove the teak beams and joists and substitute concrete which will be removed and 2 inch teak planking with an ordinary terrace roof carried on of joists to strengthen the floor. The

5. The *deck* will be arranged so that no joist has to bear the weight of more than *one* rack, the total weight per foot run being under these conditions about 202 lb., which is well within the margin of safety.

6. The revised plans and estimates are under preparation and will be forwarded in due course.

7. I must point out that Mr. Smith is in no way responsible for the design of the roof and floor, but it would have been better if he had officially brought to notice the excessive sagging of the joists when he made his first observations of deflection in October 1893.

ENCLOSURE.

From the Executive Engineer, Kistna Eastern division, to the Superintending Engineer, II Circle,
dated 7th July 1894, No. 1695.

With reference to your No. 686 K.S., dated 26th June 1894, and our subsequent conversation, I have the honour to enclose a statement of the deflections of the joists as taken by the Overseer, Sergeant Smith, and checked by me.

2. I have been through the records and enclose the demi-official order of Mr. Hannan, the Superintending Engineer, to use 8" x 4" joists instead of 10" x 6" according to estimate.

3. The same paper also shows Mr. Jopp's original calculations of the weight to be carried which he makes for the $8'' \times 4''$ joists $2\frac{1}{2}$ tons of concrete, and one ton for the weight of a crowd of people or altogether $3\frac{1}{2}$ tons.

4. Out of the 40 joists, half were obtained from Messrs. Richardson and Cruddas, Bombay, and the remainder from Messrs. Burn and Company, Calcutta, and from the table published by them in their printed catalogues, it will be seen that they give the safe distributed load for one

Superintending Engineer's remarks.

* Should be $3\frac{1}{2}$.

$8'' \times 4''$ joist with clear span 20 feet, as $3\frac{1}{2}$ * and 4 tons respectively. The actual load on each joist now is as follows:—

Flooring joists—

$20 \times 3 \times \frac{5}{8} \times 118 = 5,900$ lb. or 2.63 tons, or 295 lb. per running foot.

Roofing joists—

$21 \times 3 \times 1\frac{1}{2} \times 118 = 7,900$ lb. or 3.5 tons, or 395 lb. per running foot.

i.e., the weights in both cases are less than the safe loads given by the makers.

5. Of the above, the roof being completed, the joists are now loaded to their ultimate extent, the roof being composed as follows:—

Concrete in chunam 9 inches thick at ends and 11 inches in the centre. Three courses of flat tiles which may be assumed to give a total thickness of 2 inches. Three-quarter inch of cement plaster. Total average thickness is, therefore, $12\frac{3}{4}$ inches.

6. I inspected on the 19th June the record racks which are proposed to be kept in the new record-room, and found that the heaviest contents were books of Government Orders, &c., and the weight of a rack $8' 0'' \times 1' 6'' \times 12' 0''$ full of these books is 3,352 lb.

7. The record-room upper story is designed to carry these racks in such a way that there will be two racks immediately over each alternate joist, but assuming that the weight be distributed over all the joists as could easily be arranged, the weight of records to be carried by each joist will be 3,352 lb. = 1.5 tons.

8. This will make the total load to be carried by each floor joist $2.63 + 1.50 = 4.13$ tons, or very little in excess of the safe load as given by the makers.

9. If, as proposed by you, the concrete be removed and replaced by 2 inches teak planking, the weight to be carried by each joist will be as follows:—

	LB.
Weight of planking	440
Do. of joist	440
Do. of records	3,352
Total	4,232

= 1.88 tons, total weight, or 212.6 lb. per running foot.

10. It is obvious that the tables given by Messrs. Richardson and Cruddas and Burn and Company are not reliable, but if those quoted by you are taken, the floor joist with planking substituted for the concrete will be safe, but the roof will not be so.

11. There appears, therefore, to be nothing to be done except to demolish both roof and floor as you are not in favor of supporting the joists in the centre, and I have the honour to request early orders on the subject.

I wish to point out that the present state of affairs is entirely due to accepting the tables of safe loads given by the suppliers of the joists.

No. 2608 C.

MEMORANDUM.

Read—letter from the Superintending Engineer, II Circle, dated 20th July 1894, No. 917 K.S.

It is clear from the facts stated in the Superintending Engineer's letter and the papers accompanying it, that the joists used in the two stories of the record-room attached to the Collector's office at Masulipatam were much too weak for their work.

2. The weight of concrete is taken by the Superintending Engineer at 118 lb. per cubic foot; it is not stated whether this is an estimate or is derived from actual experiment. If the former it is probably below the mark. The weight of concrete depends greatly on the material of which it is composed, and on the amount of ramming given to it; the latter having a much greater influence than is commonly supposed. The concrete used in the Periyar dam has been found to weigh about 145 lb. per cubic foot, but this is very heavily rammed and is made with a rather heavy sienite. Concrete in a floor or roof would probably not be so heavily rammed, but would hardly weigh less than 140 lb. per cubic foot, if made with the Bezvada stone; if of broken brick it might be a good deal less, but the undersigned doubts whether decent concrete can weigh less than 128 lb. per cubic foot. This would raise the weight per running foot on the joists in question to from 440 to 460 lb.

3. The Superintending Engineer is perfectly right in his view that joists as used in an ordinary building must be considered as supported only, and not fixed, at both ends, but the tables given by the suppliers, Messrs. Richardson and Cruddas, may be presumed to take this fact into consideration.

4. It is rather a waste of labour to make elaborate calculations of the strength of ordinary commercial materials such as these, and in this case it is the less necessary as it is clear that from any point of view the joists are overstrained.

5. The makers' allowance is $3\frac{1}{2}$ tons on twenty feet or 420 lb. per running foot, and the weight of the structure alone as calculated above is more than this.

6. The undersigned, however, agrees with Major Baddeley in considering that the safe loads given by Messrs. Richardson and Cruddas are rather too high; without going into minute details, the strength of a joist of this kind depends practically on the depth and the weight per foot; for two joists equal in these points the difference of strength caused by any alteration in the distribution of material within practical limits is very slight.

7. Comparing the strength given by Messrs. Richardson and Cruddas with those for nearly similar sections given by Molesworth, it will be found that the former are considerably higher.

8. While it is clear that the structure must be strengthened, the undersigned does not see the necessity for the somewhat violent remedy of pulling it down and rebuilding it.

9. It is not clear why a longitudinal girder, supported on iron columns, should not be provided for both stories; the building apparently is a little over sixty feet in length and if there are no cross walls, four columns would divide the length into suitable bays. These with the girder would certainly cost less than pulling down the roof and floor and for a record-room the pillars would not cause an inconvenient obstruction.

10. The longitudinal girder might easily be wedged to the required height and the differences between the deflections of successive joists is so slight that a very small amount of packing would be necessary to give them a proper bearing upon the girder.

11. The deflection of the roof girders appears to have increased with somewhat alarming rapidity between the 9th October and the 18th June, and immediate steps should be taken for supporting temporarily both floors until the permanent additions can be made.

12. It is stated by the Executive Engineer, that the late Superintending Engineer ordered the reduction of the section of the girders from $10'' \times 6''$ "according to estimate" to $8'' \times 4''$; it is not clear whether this reduction was made before or after the estimate was sanctioned by Government. Information should be given on these points when the revised estimate is submitted.

3rd August 1894.

(Signed) J. PENNYCUICK, Colonel, R.E.,
Chief Engineer, P.W.D.

From Major W. L. C. BADDELEY, R.E., Superintending Engineer, II Circle, to the Chief Engineer, Public Works Department, dated Bezwada, 5th October 1894, No. 1514 K.S.

In reference to your No. 2608 C. of 3rd August 1894, I have the honour to forward alternative plans and estimates for rectifying the defects in the roofing of the record-room attached to the Collector's office at Masulipatam—

- (a) For demolishing the existing roofing and flooring, and replacing them as provided in the estimate of Rs. 4,020.
- (b) For supporting the joists by means of longitudinal girders and cast iron pillars, the estimate for which is Rs. 1,320.

2. When the defects were first noticed, I thought of supporting the joists, but on further consideration, it seemed not advisable to do this as owing to the sag in the joists, the roof and flooring will crack when the iron work is wedged up to take a proper bearing. Even if the pillars and girders are fixed so as to exert no upward pressure, the roof and floor will look very unsightly, and appear weak; and also owing to the strain the joists have already received, it is difficult to say whether they can safely be left in their strained condition. My original proposals, as now given in estimate (a) will, I think, be the most satisfactory, unless we find that any of the joists have a permanent set, when it will be a matter for consideration whether we can turn the joist so as to convert the sag into camber.

3. I find that concrete made with Bezwada stone 3 to 1 weighs 146 lb. a cubic foot, which is much heavier than I thought at the time I wrote my first letter; lately, however, some enquiries have been started regarding the weight, &c., of the building stones ordinarily used in this district, and the Bezwada stone proves to be heavier than would be expected from its appearance.

4. The alteration in the section of the girders was made after the estimate had been sanctioned, and if the trade catalogues had been reliable, the substitution of two girders 8" x 4" for one girder of 10" x 6" would have been successful.

Note by the Chief Engineer, Public Works Department.

It appears from Major Baddeley's second letter that his estimate of 118 lb. per cubic foot as the weight of concrete was supposed by the Chief Engineer, much below the actual truth, and also that the safe loads given in Messrs. Richardson and Cruddas' catalogues are somewhat higher than the truth; in fact that the conditions were very much as stated in the Chief Engineer's memo. No. 2608 C., dated 3rd August 1894.

2. Major Baddeley is of opinion that if the catalogues were correct, the reduction ordered by the late Superintending Engineer would have been safe, but the structure would have had a very small margin of strength, and an officer of Mr. Hannan's experience should have known better than to trust so implicitly to the statements of a manufacturer's catalogue.

3. I consider that Mr. Hannan was greatly to blame for reducing the section of the joists so much below what was provided in the estimate. The latter would have been by no means excessively strong; as it is they have been overstrained by the weight of the flooring above, without that of the records which they were intended to carry.

4. For the reason stated in paragraph 2 of Major Baddeley's letter, I agree with that officer that estimate (a) amounting to Rs. 4,020 must be adopted.

26th November 1894.

(Signed) J. PENNYCUICK, Colonel, R.E.,
Chief Engineer, P.W.D.

ORDER—dated 6th December 1894, No. 3122 W., Public Works.

His Excellency the Governor in Council accepts the conclusion arrived at by the Chief Engineer in paragraph 4 of his note of the 26th November above recorded, and sanctions the estimate of Rs. 4,020 for reconstructing the roof and floor of the record-room attached to the Collector's office at Masulipatam. This sum will be supplemental to the estimate of Rs. 10,214 sanctioned in G.O., No. 1953 W., dated 15th July 1891.

2. The work should be prosecuted with the least possible delay in anticipation of an allotment which will be made as soon as funds become available.

3. The papers will be communicated to Mr. J. Hannan, Superintending Engineer, for explanation of his action in reducing the section of the joists after the original estimate had been sanctioned.

4. The sanction accorded in paragraph 1 of this order has been registered as Provincial No. 81 W. of 1894-95 and classified as Civil Buildings, Original Works.

(True Extract.)

Under Secy. to Govt., P.W.D.

To the Superintending Engineer, II Circle, with eight enclosures.
" Examiner, Public Works Accounts.
" Revenue Department.
To J. Hannan, Esq., Superintending Engineer, IV Circle.

Exd. G. A. Lewis.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1894} Madras.
PUBLIC WORKS.

Dated December, 6th.

Recd.

Encl.

G.O., 6th Dec. 1894, No. 3122 W.

DECEMBER.

Collector's Office at
Masulipatam

Supplemental estimate of Rs. 4,020 for
reconstructing the roof and floor of the
record-room attached to the —, sanctioned
with remarks.

Engineer, P.W.D.

No. 917 MS

Superintending Engineer's Office,
Madras

II CIRCLE,

Dated 20th July 1894.

From, Major W. L. C. Baddely,
Esquire, R.E.,
Superintending Engineer,
II Circle.

To,

The Chief Engineer,
P. W. Department,
Madras.

Sir,

Encls. 3.

Notes

Copy of K.E.D.

E.C. letter

No. 1695
7.7.94

Table of deflections

I have the honor to inform you
that in G.O. No. 1953 W.
15.7.91, an estimate
of Rs. 10214 was sanctioned for construct-
ing a building for records for the
Collector's Office at Masulipatam.

2. When inspecting the work, which
is nearly completed, on the 12th June
last I noticed that the rolled iron
joists which carry the roof & floor of the
upper story, were sagged to a greater
than permissible.

As a result of my enquiries I
enclose copy of a letter from Mr. Smith

Exd. G. A. Lewis.
Spare Copies

the Executive Engineer and a table of the observed deflections in the joists. I also send some notes based on my calculations which show that the roof and floor must be redesigned. The notes are of some interest in proving that when beams are built into a wall, it is not safe to consider them as fixed unless special precautions have been taken, and further they indicate the necessity for caution in selecting rolled iron or steel beams from trade catalogues.

4. I now propose to provide the building with an ordinary terrace roof, carried on teak beams and joists, and to use the existing roof joists to strengthen the floor. The concrete which now forms the floor will be removed and 2" teak planking substituted.

5. The record racks will be arranged so that no joist has to bear the weight of more than one record rack, the total weight per foot run being under these conditions, about 202 lb, which is well within the margin of safety.

6. The revised plans and estimates are under preparation and will be forwarded in due course.

7. I must point out that Mr. Smith is in no way responsible for the ~~the~~ design of the roof and floor, but it would have been better if he had officially brought to notice the excessive sagging of the joists when he made his first observations of deflection in October 1893.

I have the honor to be,

Sir,

Your Most Obedt. Servant,

W. B. Baddeley Major R.E.,

Supg. Engineer, II Circle,

B.

19.7.94.

From
P. M. CORRESPONDENCE NO. 5470

No. 1953 Wd/15-7-94

The Supg Engineer,
Lao Linnell,

To

The Chief Engineer
P. W. Dept:
Madras.

No. 917 MS

Dated 20th July 1924

Encls: 3

Record Room for the
Collector's Office at
Masulipatam -
Forwarded Central
- Summaries in the
for orders.

From,

The Superintending Engineer,
II Circle.

To,

The

Dated

Received

18

Enclosures.

NO.

SUBJECT.

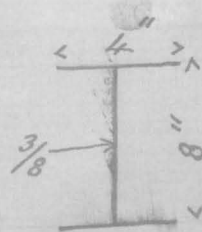
The revised plan
of structure proposed
by the Super Engineer
will be submitted.

S. G. H. Kingle
O. L. S. 226 R. 3/8

Enclosure to No. 717/24
20-7-94

Notes on the rolled iron joists
for
Record room of Collector's Office
Masulipatam

The rolled iron joists are of this section



weight about 22^{lb.}
per running foot

The joists are spaced 3' apart, in both
roof and floor, clear span 20.

Weight on each roof joist per foot run
+ taking the weight of 1' of concrete to
be 118 lbs. + including the weight of the joist

$$20' \times 3' \times \frac{14}{16} \times 118 + \text{weight of joist} \\ = 398 \text{ lbs per sq foot very nearly.}$$

1. If the joists are considered as fixed,
the working load would be 390 lbs
per foot run very nearly, and the
deflection would be 0.014 foot, so that
provided the joists are fixed, they are
theoretically just strong enough and are
stiff enough, as the maximum deflection

+ 140 lbs
should be
considered
as a
C.M.

about 22 lbs per foot run, span 20 feet
uniform load, joist supported at both
ends.

Tables. *RE Aide-Mémoire* Calculations

x	x	x
237	219	260

x weight of joist (22 lbs) not included. + Weight of joist included.

N.B. The trade catalogues give
from 420 to 448 lbs as the safe
load, but this is obviously too high.

5. As the formula in the *RE Aide-Mémoire*
gives a result within the margin of
safety, I give its details below.

a = area of flange in inches.

d = depth of section in inches.

L = length of span in feet.

W = Safe load distributed on C.Wts.
excluding the weight of the joist.

$$W = \frac{66 a d}{L}$$

In this formula the safe working
stress of iron in *compression* is
taken as 5 tons, and it is of course
only necessary to calculate the top

or *compression* flange, as the
flanges being equal in section, the
tension flange is always slightly
the stronger of the two.

6. In conclusion, I think it is clear
that unless very special precautions
are taken a joist built into a wall
cannot be considered as fixed
and when ~~using~~ ordering rolled iron beams,
they should always be considered
as supported, and the tables given
by the various dealers should not
be accepted without due caution.

Reckbaddley

Major R.E.,

Supy Engineer, II Circle
E.

19.7.94.

about
unifo
ends

To

2

x we

5.

gu

sap

5.

gu

sap

5.

gu

sap

5.

gu

sap

5.

gu

Encl to No 20.7.96

Table showing the deflection of the girders at
Record room recently constructed in compound
of Collectors' Bungalow at Masulipatam.

Roof girders.				First floor girders.			
Serial number commen ing at West end	Deflection in feet as measured on		Remarks	Serial number commen ing at West end	Deflection in feet as measured on		Remarks
	9.10.93	13.6.94			9.10.93	13.6.94	
1	0.085	0.07		1	0.05	0.035	
2	0.12	0.14		2	0.08	0.085	
3	0.10	0.115		3	0.095	0.08	
4	0.095	0.13	Edge of ventilator	4	0.055	0.07	edge of ventilator
5	0.08	0.105	Centre do	5	0.06	0.055	centre do
6	0.11	0.120	Edge do	6	0.055	0.055	edge do
7	0.11	0.135		7	0.07	0.08	
8	0.09	0.125		8	0.065	0.045	
9	0.095	0.13		9	0.075	0.075	
10	0.11	0.14	Edge of ventilator	10	0.08	0.09	edge of ventilator
11	0.07	0.11	Centre do	11	0.05	0.065	centre do
12	0.09	0.135	Edge of do	12	0.075	0.08	edge do
13	0.045	0.125		13	0.055	0.085	
14	0.06	0.13		14	0.065	0.09	
15	0.11	0.145		15	0.06	0.08	
16	0.095	0.12	edge ventilator	16	0.04	0.06	edge of ventilator
17	0.105	0.12	centre do	17	0.03	0.055	centre do
18	0.105	0.11	edge do	18	0.04	0.07	edge of do
19	0.085	0.11		19	0.05	0.045	
20	0.10	0.14		20	0.06	0.065	
21	0.06	0.115					

Span 21 feet

Span 20 feet

(True Copy)
K. B. Adarthy
Major R.E.
Subg. Engineer, Masulipatam
20.7.96

Print

Encls to No 917 MS
20.7.94

Letter from the Executive Engineer,
Kistna Eastern Division to the Supg.
Engineer II Circle dated 7th July 1894 No 1695.

With reference to your No 686 MS
26.6.94
and our subsequent conversation, I
have the honor to enclose a statement
of the deflections of the joists as taken
by the Overseer Sergeant Smith and
checked by me.

2. I have been through the records
and enclose the demi-official order of
Mr. Hannan, the Supg. Engineer to
use 8" x 4" joists instead of 10" x 6"
according to estimate.

3. The same paper also shows Mr. Jopp's
original calculations of the weight to
be carried which he makes for the
8" x 4" joists $2\frac{1}{4}$ tons of concrete, and
1 ton for the weight of a crowd
of people or altogether $3\frac{1}{4}$ tons.

by necessary to call

4. Out of the 40 joists, half were obtained from Messrs Richardson & Cruddas, Bombay and the remainder from Messrs Burn & Co., Calcutta and from the table published by them in their printed catalogues, it will be seen that they give the safe distributed load for one $8' \times 4'$ joist with clear span 20 feet, as $3\frac{15}{16}$ and 4 tons respectively. The actual load on each joist now is as follows.

Flooring joists
 $20 \times 3 \times \frac{5}{16} \times 118 = 5900 \text{ lbs or } 2.63 \text{ tons}$
 or 295 lbs per Running foot.

Roofing joists
 $21 \times 3 \times \frac{14}{16} \times 118 = 7900 \text{ lbs or } 3.5 \text{ Tons}$
 or 395 lbs per Running foot.

i.e., the weights in both cases are less than the safe loads given by the makers.

Of the above, the roof being completed, the joists are now loaded to their ultimate extent, the roof being

compounded as follows. 480
 concrete in chumam 9 inches thick at ends and 11 inches in the centre.
 3 courses of flat tiles which may be assumed to give a total thickness of 2 inches. $\frac{3}{4}$ inch of cement plaster. Total average thickness is, therefore, $12\frac{3}{4}$ inches.

6. I inspected on the 19th June the record racks which are proposed to be kept in the new record room, and found that the heaviest contents were books of Government orders &c and the weight of a rack $8'-0" \times 1'-6" \times 12'-0"$ full of these books is 3352 lbs.

7 The record room upper story is designed to carry these racks in such a way that there will be two racks immediately over each alternate joist, but assuming that the weight be distributed over all the joists as could easily be arranged, the weight of records to

to be carried by each joist will be
 $3,352 \text{ lbs} = 1.5 \text{ Tons}$.

8. This will make the total load
to be carried by each floor joist
 $2.63 + 1.50 = 4.13 \text{ Tons}$, or very ^{much} ~~little~~
 _{$3.2 + 1.5 = 4.7$} little in excess of the safe load ^(as given by makers)
by the makers.

9. If as proposed by you, the concrete
be removed and replaced by 2 inches
teak planking the weight to be carried
by each joist will be as follows:-

Weight of planking	440 lbs
do of joist	440 "
do of Records	3,352
	<hr/>
	4,232 lbs

= 1.88 Tons. total weight or
212.6 lbs per running foot.

10. It is obvious that the tables given
by Messrs. Richardson & Cruddas and
Burn & Co. are not reliable, but
if those quoted by you are taken,
the floor joist with planking

substituted for the concrete will be
safe, but the roof will not be so.

11. There, appears, therefore, to be nothing
to be done except to demolish both
roof and floor as you are not in
favor of supporting the joists in the
centre, and I have the honor to
request early orders on the subject.

I wish to point out that the
present state of affairs is entirely due
to accepting the tables of safe loads
given by the suppliers of the joists.

(True Copy)

McBadden Major R.E.
Subj. Engineer, 2nd level.

20/7/94.

2608C 4/30 August 1894
P. O. 9
Memorandum.

Letter from the Supt. Engineer II Circle No.
K.S. dated 20 July 1894.

It is clear from
the facts stated in the
Supt. Engineer's letter and
the papers accompanying
it that the joints used
in the two stories of the
second room attached
to the Collector's office
at Masulipatam were
much too weak for their
work.

2. The weight of
concrete is taken by
the Supt. Engineer at
118 lbs per cubic foot.
it is not stated whether
this is an estimate or is
derived from actual

experiment. If the
former it is probably
below the mark. The
weight of concrete depends
greatly on the material
of which it is composed,
and on the amount of
ramming given to it;
the latter having a much
greater influence than
is commonly supposed.
The concrete used in
the Perigar dam has
been found to weigh
about 145 lbs per cubic
foot, but this is very
heavily rammed and
is made with a rather
heavy pisenite. Concrete
in a floor or roof would
probably not be so
heavily rammed but
would hardly weigh
less than 140 lbs per

cubic foot if made with
the Bernado stone; if
of broken brick it might
be a good deal less,
but the undersigned
doubts whether decent
concrete can weigh
less than 128 lbs per cubic
foot. This would raise
the weight per running
foot on the joists in
question to from 440 to
460 lbs per running foot.
3. The Supt. Engineer is
perfectly right in his
view that joists as used
in an ordinary building
must be considered as
supported only, and not
fixed, at both ends,
but the tables given by
the suppliers, Messrs
Richardson & Cuddas,
may be presumed

to take this fact into consideration.

4. It is rather a waste of labor to make elaborate calculations of the strength of ordinary commercial materials such as these, and in this case it is the less necessary as it is clear that from any point of view the joints are overstrained.

5. The maker's allowance is $3\frac{3}{4}$ tons on twenty feet or 420 lbs per running foot, and the weight of the structure alone as calculated above is more than this.

6. The undersigned however agrees with Major Baddeley in

considering that the safe loads given by Messrs Richardson and Cuddas are rather too high; without going into minute details the strength of a joint of this kind depends practically on the depth and the weight per foot; for the joints equal in these points the difference of strength caused by any alteration in the distribution of material within ^{practical} prescribed limits is very slight.

7. Comparing the strength given by Messrs Richardson and Cuddas with those for

to nearly similar sections
given by Molesworth,
it will be found that
the former are considerably
higher.

7. While it is clear that
the structure must
be strengthened the
underground does not
see the necessity for the
somewhat violent
remedy of pulling it
down and rebuilding
it.

8. It is not clear why
a longitudinal girder
supported on piers
columns should not be
provided for both
stories; the building
apparently is a little
over sixty feet in length

and if there are no
cross walls four columns
would divide the length
into suitable bays.
These with the girders
would certainly cost less
than pulling down
the roof and floor.
and for a second room
the ^{pillars} ~~spacing~~ would not
cause an inconvenient
obstruction.

9. The longitudinal
girder might easily be
wedged to the required
height and the difference
between the deflections
of successive joints is so
slight that a very
small amount of packing
would be necessary to
give them a proper

to bearing upon the
girder.

The deflection of
the roof girders appears
to have increased with
somewhat alarming
rapidity between the
9th October and the 18th
June, and immediate
steps should be taken
for supporting temporarily
all the floors until the
permanent additions
can be made.

It is stated by the
Executive Engineer that
the late Supt. Engineer
ordered the reduction
of the section of the
girders from 10" x 6"
according to estimate
to 8" x 4"; it is not

clear whether this
reduction was made
before or after the
estimate was sanctioned
by Government. In-
formation should be
given on these points
when the revised
estimate is submitted.

S

End

C100

7

Ch. C. C.

End of 2. 17

however the diagrams of
Messrs Richardson & Cradock
(see 12) however will show
the flange to be half as thick
again as the web and this
would appreciably alter the
amount of deflection permissible

Major Baddley appears to
be well within the mark in
his calculation that the
safe deflection under a
working load of 260 lbs per
foot run is 0.047 foot.

Let d = deflection of joist in inches

$$\text{Then } d = \frac{3S^2P}{ED}$$

where P = stress in tons per square inch

E = modulus of elasticity in tons

which may be taken at 10,000 tons

S = span in feet = 20

D = depth of joist in feet = .66

P may be taken for compression at 4

$$\text{Then } d = \frac{3 \times 400 \times 4}{10000 \times .66} = \frac{48}{66} = 0.72$$

= 0.06' or at 5' according to Board of Trade

If $P = 5$

$$d = \frac{3 \times 400 \times 5}{10000 \times .66} = \frac{60}{66} = 0.9$$

= 0.075'

Note. I discredit the
supposition that Messrs
Richardson & Cradock
statement as to safe

Superintending Engineer's Office,

Beyrwada

II CIRCLE,

Dated 5th October 1894.

W. L. C. Baddley, R.E.

Esquire,

Superintending Engineer,

II Circle.

Chief Engineer,

P. W. Department,

Madras.

reference to your No. 2608C of 3.8.94

I have to forward alterna

and estimates for rectifying

in the roofing of the record

led to the Collector's Office

atam

For demolishing the existing

roofing and flooring, and

replacing them as provided in

the estimate of Rs. 4020,

For supporting the joists

by means of longitudinal

girders & cast iron pillars,

the estimate for which is
Rs. 1320.

load is incorrect. It is true that if the flange is no thicker than the web the safe load does not exceed $2\frac{1}{2}$ tons - But the flange is considerably thicker than the web, and Messrs Richardson & Maddas, being practical men, have probably tested their joists by weights and have satisfied them as to their being equal to support a safe load of $3\frac{3}{4}$ tons. I expect that the actual load imposed is nearer 5 tons than 3 and three quarters. Major Daddely admits having surcharged them with upwards of $3\frac{1}{2}$ tons taking a cubic foot of concrete at 118 lbs. But this is taking the weight of a cubic foot of concrete very low indeed. It is true the weight of good concrete is no less than

Superintending Engineer's Office,
Bengal

II CIRCLE,

Dated 5th October 1894.

W. L. C. Baddely, R.E.
Esquire,

Superintending Engineer,

II Circle.

Chief Engineer,
P. W. Department,
Madras.

Reference to your No. 2608C of 3-8-94
I have the honour to forward alternate
and estimates for rectifying
in the roofing of the record
shed to the Collector's Office
Kattam

For demolishing the existing
roofing and flooring, and
replacing them as provided in
the estimate of Rs. 4020.
For supporting the joists
by means of longitudinal
girders & cast iron pillars,
the estimate for which is
Rs. 1320.

130 to 160 lbs per cubic foot,
dry. So it is quite
possible that the joints
are actually carrying
a ton & a half or so
more than is supposed.
As a remedy I would
suggest supporting the
joints by girders. It
will probably be necessary
to strip off the concrete
laid, so that the joints
may all take a bearing
on the girder. But it
would be interesting to
see what that concrete
weighs.

C. W. M.

$\frac{27}{7} 94$

Superintending Engineer's Office,

Berzabada

II CIRCLE,

Dated 5th October 1894.

W. L. C. Boddely, R.E.

Esquire,

Superintending Engineer,

II Circle.

Chief Engineer,

P. W. Department,

Madras.

Reference to your No. 2608C of 3.8.94
I have the honour to forward attached
and estimates for rectifying
in the roofing of the record
shed to the Collector's Office
Kattam.

For demolishing the existing
roofing and flooring, and
replacing them as provided in
the estimate of Rs. 4020.

For supporting the joints
by means of longitudinal
girders & cast iron pillars,
the estimate for which is
Rs. 1320.

"according to estimate"
of the joists June 10th 6th
to 8th 4th; it is not clear
whether this selection was
made before or after the
estimate was sent to I
present - Informing
that the plan on the
joists from the revised
estimate is submitted -

S
27

Superintending Engineer's Office,
Bengalada

II CIRCLE,

Dated 5th October 1894.

W. L. C. Baddley, R.E.
Esquire,

Superintending Engineer,
II Circle.

Chief Engineer,
P. W. Department,
Madras.

Reference to your No. 2608C of 3.8.94
to honour to forward alternate
and estimates for rectifying
in the roofing of the record
shed to the Collector's Office
Katan.

For demolishing the existing
roofing and flooring, and
replacing them as provided in
the estimate of Rs. 4020.

For supporting the joists
by means of longitudinal
girders & cast iron pillars,
the estimate for which is
Rs. 1320.

When the defects were first noticed, I thought of supporting the joists, but on further consideration, it seemed not advisable to do this as owing to the sag in the joists, the roof and flooring will crack when the iron work is wedged up to take a proper bearing. Even if the pillars and girders are fixed so as to exert no upward pressure, the roof and floor will look very unsightly, and appear ~~weak~~ ^{weak}, and also owing to the strain the joists have already received, it is difficult to say whether they can safely be left in their strained condition. My original proposals as now given in estimate (a) will I think be the most satisfactory, unless we find that any of the joists have a permanent set, when it will be a matter for consideration whether we can turn the joist so as to convert the sag into camber.

3 I find that concrete made with Bezawada stone 3 to 1 weighs 146 lbs a cubic foot, which is much heavier than I thought at the time I wrote my first letter; lately, however some

enquiries have been started regarding the weight ^{&c} of the building stones ordinarily used in this district, & the Bezawada stone proves to be heavier than would be expected from its appearance.

4. The alteration in the section of the girders was made after the estimate had been sanctioned, and if the trade catalogues had been reliable, the substitution of two girders 8" x 4" for one girder of 10" x 6" would have been successful.

I have the honour to be,
Sir,
Your most obedient servant,

W. B. Baddley

Major R.E.
Supg. Engineer, II Circle
27.9.94.

From

The Sub Engineer,
2nd Circle.

To

The Chief Engineer
P. W. D.
Madras

Encls: 4

No 1514 MS

Dated 5 October 1894.

Record room in the
Compound of Collector's
Office, Masulipatan
— Forwarded
alternative plans and
estimates for the
with remarks.

From,

The Superintending Engineer,

II Circle.

To,

The

Dated

Received

18

Enclosures.

NO.

SUBJECT.

Let^r from the Super^r Eng^r — Circle No 917 K.S. dated 20/7/94
— do — from the — do — " 1514 K.S. " 5/10/94

Note by the Chief Engineer
P.W. Dept: —

It appears from Major
Baddley's second letter
that his estimate of 118
per cubic foot as the weight
of concrete was as supposed
by the Chief Engineer much
below the actual truth,
and also that the safe
loads given in Messrs
Richardson & Maddas'
catalogues are somewhat
higher than the truth;
in fact that the conditions
were very much as stated
in the Chief Engineer's
Memo: No 2608 C dated
3^d August 1894.
2. Major Baddley is of
opinion that if the
catalogues were correct

the reduction ordered by the late Supt. Engineer would have been safe, but the structure would have had a very small margin of strength, and an officer of Mr. Hannan's experience should have known better than to trust so implicitly to the statements of a manufacturer's catalogue.

23 I consider that Mr. Hannan was ^{greatly} ~~grossly~~ to blame for reducing the section of the joists so much below what was provided in the estimate. The latter would have been by no means excessively strong; as it is they have been overstrained by the weight of the



flooring alone, without that of the records, which they were intended to carry.

4 For the reasons stated in para 2 of Major Biddle's letter I agree with that officer that estimate (a) amounting to £4020 must be adopted.

J. E. L.

26

cross
2/24

2/24

1612116
No 3122 W. d. 6 December 1894

P. W. DEPARTMENT.

Read the following:—

Note by the Chief Engineer P.W.D. d/26 Nov 94

FOR ORDERS. as to whether
explanation should be
called for from Mr.
Hannan; I think it
should, as it certainly
appears that a very
stupid mistake has
been made by him.

2. In the meantime
the estimate may, it is
requested, be sanctioned
as the work is urgently
required.

Sanctioned.

Mr. Hannan sh^d. be called
on for an explanation.
I do not understand the
alteration he is said to
have made after the estimate
had been sanctioned. W.

30 Nov

26

H.R.

FOR ORDERS.

Estimate for rectifying defects
in the record room of the
Collector's office at
Masulipatam.

3122W

Public Works Department.

Current No. 1693

Letter No. 1514 Ks.

Dated 5th October 1894.

From the Super Engineer II Circle.

NOTE BY TECHNICAL SECTION.

Name of work. Record room in the Compound
of the Collector's office - Masulipatam.

With reference to this office memo
No. 2608 C dated 3rd August 1894, the
S.E. II Circle submits alternative
plans & estimates for rectifying
the defects in the roofing of the
Record room attached to the Co-
lector's office at Masulipatam
in the Krishna District.

Estimate amounting to Rs 402
provides for demolishing the ex-
isting terrace roof & floor of the
building & replacing the same
with a new terrace roof &
boarded floor. The terrace
roof ornamental parapets or
ventilators & the solid iron joist
will be removed & a new terrace
roof carried on teakwood girders
of a section 11" x 15" with joists 3" x 7"
substituted with the ventilators
& parapets rebuilt as before.
The concrete floor of the upper
will be removed & the iron joist
removed from the terrace roof.

inserted between the existing ones
so as to reduce the span between
joists from 3' to 1'6" from centre
centre & a flooring provided a
2" teak planking.

Estimate amounting to Rs 132
provides for supporting the iron
joists which are of a section
& 3 feet apart from centre to centre
by a girder running down the
centre of the building, one to each
floor and carried on 4 cast iron
columns. The lower storey girder
will be of a section 12" x 8" weight
70 lbs per foot run & carried
on cast iron columns 7 1/2" dia. &
secured at the base by bolted
cut steel beams 2'6" x 2'6" x 1"
and embedded in concrete
to 4'6" x 4'6" x 3'0". The upper
storey girder will be of a section
11" x 5 1/2" weighing 40 lbs per foot
& will be carried by cast iron
6 1/2" dia. bolted to the upper
floor rolled iron joists.

The Sd in submitting
alternative estimates of
the originally thought of
raising the joists but on further
consideration deemed it not
advisable, owing to the
joists, as the roof & floor
crack when the iron is
up, he further states
pillars & girders are
to erect an upward
roof & floor will look
unsightly & appear
therefore suggests that

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read the following

From the Suptg. Engineer II Circle No. 917 K.S. dated 20th July 1894.
Memorandum by the Chief Engineer, P.W.D. No. 2608 C d/ 3rd August 1894.
From the Suptg. Engineer II Circle No. 1514 K.S. dated 5th October 1894.
Note by the Chief Engineer, P.W.D. dated 26th November 1894.

His Excellency the Governor in Council
accepts the conclusion arrived at
by the Chief Engineer in para 4 of
his note of the 26th November above
recorded, and sanctions the estimate
of Rs 4020 for reconstructing the
roof and floor of the record room
attached to the Collectors office
at Masulipatam. This sum will
be supplemental to the estimate
of Rs 10,214 sanctioned in G.O. No.
1953 W. dated 15th July 1891.

2. The work should be prosecuted

with the least possible delay
anticipation of an allotment
which will be made as soon
as funds become available.

3. The papers will be communi-
cated to Mr. J. Hannon, Suptg.
Engineer, for explanation of his
action in reducing the section
of the joists after the original
estimate had been sanctioned.

4. The sanction accorded in
para 1 of this order has been
registered as Provincial No.
81 of 1915 and classified
as Civil Buildings, Original work.

DEPATCHED
17 DEC 94

To
The Suptg. Engineer II Civil
with 8 enclosures
& Enclaves. P.W. acco
Revenue Department
J. Hannon Esquire
Suptg. Engineer II Civil

No. 7030.

India, in the Military
3072-B.

Special reference to

appointments, or
or experimental
of India are to
with appointment
or an invention,
the approval
their respective

Description of

as a matter
circumstances
the following

in Council,
upon such
of the case,

service, and
led by the

be had by
originating,
entor may
nts require

depart-
Military

India.

with the least possible delay

CP 7623
Govt. of Madras.

PUBLIC WORKS.

Over
8/12/94

G.O. 6/12 1894 No. 3/224

Collectors office at
Mudalipattam

Supplemental estimate

Rs 40.20 for reconstruction

of the roof & floor

of the record room

attached to the

Sanatorium with

annexes.

70/10.9
100

MILITARY DEPARTMENT, 13TH NOVEMBER 1894, No. 7030.

GOVERNMENT OF MADRAS.

MILITARY DEPARTMENT.

Special and Miscellaneous.

Read the following paper:—

No. 137. Extract from the Proceedings of the Government of India, in the Military Department; dated Simla, the 3rd November 1894, No. 3072-B.

Read—

The Inventions and Designs Act, 1888 (Act No. V. of 1888), with special reference to sections 16 and 17 thereof.

Resolution.—All officers or subordinates holding staff appointments, or employed in any administrative, instructional, manufacturing, or experimental department under the Military Department of the Government of India are to understand that one of the conditions subject to which they hold such appointment or employment, is that they shall not acquire an exclusive privilege for an invention, or apply for leave to file a specification thereof, without first obtaining the approval of the Governor-General in Council, by application through their respective commanding officers or heads of their departments.

2. Each application for such approval must contain a general description of the invention for which protection is desired.

3. Permission to acquire an exclusive privilege will not be granted as a matter of course, but each application will be dealt with according to the circumstances of the case. Should permission be granted, it will be subject to the following conditions, from which there shall be no appeal by the applicant:—

- (a) That, if it be at any time desired by the Governor-General in Council, the exclusive privilege shall be absolutely assigned to him, upon such terms as, after full consideration of all the circumstances of the case, His Excellency may decide.
- (b) That the invention may be used by or for Her Majesty's service, and that terms of payment, if any, for such use, shall be decided by the Governor-General in Council.
- (c) In settling terms, either for assignment or use, regard will be had by the Governor-General in Council to any facilities in originating, working out, and perfecting the invention, which the inventor may have enjoyed by reason of his official position. All payments require the sanction of the Governor-General in Council.

Order.—Ordered, that a copy of this Resolution be forwarded to the departments of the Government of India, and to all departments under the Military Department of the Government of India.

(Signed) E. H. H. COLLEN,
Secretary to the Govt. of India.

No. 3072-B.

Special and Miscellaneous.

Copy of the above forwarded to the Secretary to the Government of Madras,
Military Department.

* * * *

(By order.)

SIMLA,
3rd November 1894.

(Signed) A. E. JONES,
Asst. Secy. to the Govt. of India.

No. 138.

ORDER THEREON, 13th November 1894, No. 7030.

Communicated to Military Departments generally and to Departments of the
Secretariat.

(True Extract.)

(Signed) D. J. S. McLEOD, Colonel,
Offg. Secretary to Government.

To the Adjutant-General.

- „ Quarter Master General.
- „ Deputy Judge Advocate-General.
- „ Principal Medical Officer, Madras Army.
- „ Inspector-General of Ordnance.
- „ Commissary-General.
- „ Controller of Military Accounts.
- „ Superintendent, Army Clothing.
- „ Superintendent of Pensions.
- „ Superintendent, Reserve Remount Depot, Hosur.
- „ Surgeon-General with the Government of Madras.
- „ Military Secretary to His Excellency the Commander-in-Chief.
- „ Public, &c., Departments.
- „ Revenue Department.
- „ Public Works Department.

Gobt. of {1894} Madras.
MILITARY.

To
THE ADJUTANT-GENERAL,
&c., &c., &c.

Dated November, 13th.

Issued

Recd.

Encl.

G.O., 13th November 1894, No. 7030.

NOVEMBER.
Nos. 137-138.

Special and Miscellaneous.

Exclusive privilege for an invention.—Intimation from the Government of India that all officers or subordinates holding staff appointments, or employed in any other department under the Military Department of the Government of India, are to understand that one of the conditions subject to which they hold such appointment or employment is that they shall not acquire an —, or apply for leave to file a specification thereof, without first obtaining the approval of the Governor-General in Council by application through their respective commanding officers or heads of their departments.

31216 d, 5 December 1894
Communicated to officers of
the Public Works Department.
(Sd) J.P. W

ch: E. for d
C.E. for Rep.
S. E.S.
Ca. to hon.
Sof W.P.P.
Learn. P.W.D.
Learn. R.P.C.

MILITARY DEPARTMENT, 13TH NOVEMBER 1894, No. 7030.

GOVERNMENT OF MADRAS.

MILITARY DEPARTMENT.

Special and Miscellaneous.

Read the following paper:—

No. 137. *Extract from the Proceedings of the Government of India, in the Military Department; dated Simla, the 3rd November 1894, No. 3072-B.*

Read—

The Inventions and Designs Act, 1888 (Act No. V. of 1888), with special reference to sections 16 and 17 thereof.

Resolution.—All officers or subordinates holding staff appointments, or employed in any administrative, instructional, manufacturing, or experimental department under the Military Department of the Government of India are to understand that one of the conditions subject to which they hold such appointment or employment, is that they shall not acquire an exclusive privilege for an invention, or apply for leave to file a specification thereof, without first obtaining the approval of the Governor-General in Council, by application through their respective commanding officers or heads of their departments.

2. Each application for such approval must contain a general description of the invention for which protection is desired.

3. Permission to acquire an exclusive privilege will not be granted as a matter of course, but each application will be dealt with according to the circumstances of the case. Should permission be granted, it will be subject to the following conditions, from which there shall be no appeal by the applicant:—

- (a) That, if it be at any time desired by the Governor-General in Council, the exclusive privilege shall be absolutely assigned to him, upon such terms as, after full consideration of all the circumstances of the case, His Excellency may decide.
- (b) That the invention may be used by or for Her Majesty's service, and that terms of payment, if any, for such use, shall be decided by the Governor-General in Council.
- (c) In settling terms, either for assignment or use, regard will be had by the Governor-General in Council to any facilities in originating, working-out, and perfecting the invention, which the inventor may have enjoyed by reason of his official position. All payments require the sanction of the Governor-General in Council.

Order.—Ordered, that a copy of this Resolution be forwarded to the departments of the Government of India, and to all departments under the Military Department of the Government of India.

(Signed) E. H. H. COLLEN,
Secretary to the Govt. of India.

No. 3072-B.

Special and Miscellaneous.

Copy of the above forwarded to the Secretary to the Government of Madras,
Military Department.

*

*

*

*

*

(By order.)

SIMLA,
3rd November 1894.

(Signed) A. E. JONES,
Asst. Secy. to the Govt. of India.

No. 138.

ORDER THEREON, 13th November 1894, No. 7030.

Communicated to Military Departments generally and to Departments of the
Secretariat.

(True Extract.)

(Signed) D. J. S. McLEOD, Colonel,
Offg. Secretary to Government.

To the Adjutant-General.

- „ Quarter Master General.
- „ Deputy Judge Advocate-General.
- „ Principal Medical Officer, Madras Army.
- „ Inspector-General of Ordnance.
- „ Commissary-General.
- „ Controller of Military Accounts.
- „ Superintendent, Army Clothing.
- „ Superintendent of Pensions.
- „ Superintendent, Reserve Remount Depot, Hosur.
- „ Surgeon-General with the Government of Madras.
- „ Military Secretary to His Excellency the Commander-in-Chief.
- „ Public, &c., Departments.
- „ Revenue Department.
- „ Public Works Department.

Pr B
13

Gobt. of {1894} Madras.
MILITARY.

To
THE ADJUTANT-GENERAL,
&c., &c., &c.

Dated November, 13th.

Issued

Recd.

Encl.

G.O., 13th November 1894, No. 7030.

NOVEMBER.

Nos. 137-138.

Special and Miscellaneous.

Exclusive privilege for an invention.—Intima-
tion from the Government of India that all
officers or subordinates holding staff appoint-
ments, or employed in any other department
under the Military Department of the Govern-
ment of India, are to understand that one of the
conditions subject to which they hold such
appointment or employment is that they shall
not acquire an —, or apply for leave to file a
specification thereof, without first obtaining the
approval of the Governor-General in Council by
application through their respective command-
ing officers or heads of their departments.

Ch. Sec. for I.
C.E. for K.P.
S. E.
Ca to Govt.
Saf. W.P.P.
Ex. P.W.
Ex. R.P.

to the Division

3. The Superintending Engineer
will report at once what
additional clerical estab-
-lishment he considers
necessary submitting in the
usual form a proposition
statement for sanction

S
26.11

comd
1294

31296 dy 7 December 1894

S.A.W.
C.M.B.
E.H.

DESPATCHED
7 DEC. 94

To
The Chief Engineer for Irrigation
" Suptg. Engr., I Circle
" Examiner P.W. accounts

2.12
1894

Pr D
13

Gobt. of {1894} Madras.
MILITARY.

To
THE ADJUTANT-GENERAL,
&c., &c., &c.

Dated November, 13th.

Issued

Recd. Encl.

G.O., 13th November 1894, No. 7030.

NOVEMBER.
Nos. 137-138.

Special and Miscellaneous.

Exclusive privilege for an invention.—Intima-
tion from the Government of India that all
officers or subordinates holding staff appoint-
ments, or employed in any other department
under the Military Department of the Govern-
ment of India, are to understand that one of the
conditions subject to which they hold such
appointment or employment is that they shall
not acquire an —, or apply for leave to file a
specification thereof, without first obtaining the
approval of the Governor-General in Council by
application through their respective command-
ing officers or heads of their departments.

3121 by 5 December 1894
Communicated to officers of
the P.W. Department.

Ch. Sec. for I
C. Sec. for P.W.
S. E. S.
C. Sec. for P.W.
S. of W. P.
Ex. P.W.
Ex. P.W.

No. 2628.

EXECUTIVE ENGINEER'S OFFICE,
GODAVARI ^{Western} EASTERN DIVISION.
Chellipetti
Dowlaisheram 19 Aug 1894

From *J. E. Paul Esq*
The Executive Engineer,
Godavari Eastern Division.

To
The Superintending Engineer
First Circle.

Enclosures.

Sir,

I have the honor to bring to your notice
that having now held charge of this Division
for four months, I have to confess that the
management of it is far beyond my powers
and I request you will, if you consider it
necessary, propose that the Public Works
Divisions in the Godavari be again increased
to three as they were constituted until 1890—

2. The mere regulation of the water for
4,000 acres by a corrupt Agency to a
corrupt people with no rules and with daily
lessening power is, I contend, a perfectly
impossible task for one Executive and three
Sub Divisional offices.

3. Beside this, the river Conservancy act
will be in force, I believe, next year and the
Anumullanka Project which is a very promi-
sing work has to be entirely revised.

4. I was in charge of the Godavari
Eastern from 1887-89 and the old Kistna
Western from 1889-91 and, although I was
in charge of a portion of this Division, the

Govt. of {1894} ²
MILITARY

To THE ADJUTANT
&c.,

Dated November, 13th

Issued

Recd.

G.O., 13th N

ari Western, from 1882-87, &
you are well acquainted with the
Western Delta, I find this Division far
heavier than either of the two, I have men-
tioned.

5. The Central Delta with the conver-
sion of the Pasista, Pinategam &
Vidha Gontami would be of itself a
heavy division considering that the
Project, especially, as regards the drainage
arrangements and the efficient distri-
bution of water, is far from complete.

6. This would leave for the Western
Division the Western Delta & the upland
Talugs Ellore & Yernagudem where the
Kimmullanka Project is situated and
a large number of tanks which have been
neglected for years.

7. The direct additional cost for
extra Establishment would not be heavy
and would be principally the pay of an
Additional Accountant and another
Sub Divisional officer for the Central
Delta; This would without doubt
be covered over and over again by the
indirect profit obtained by more effici-
ent management and supervision.

8. The necessity for carrying out the
proposal appears to me to be so evident
that I have not gone into any detail
but if you wish me to do so, I will

endeavour to draw up a more complete
note on the subject.

I have &c &c
(Sd) J. E. Paul
Engineer.

(True Copy)

Forwarded

Sup & Eng. 1st Circle.

No. 304 S.

EXECUTIVE ENGINEER'S OFFICE,
GODAVARI EASTERN DIVISION.
Chettipet
Dowlaisheram 22nd Sept 1894

From J. E. Paul Esq
The Executive Engineer, Western
Godavari Eastern Division.
To
The Superintending Engineer
First Circle.

sures.

Sir, In continuation of my No. 262 S.
dated 19th August 1894, I wish to add a few
more remarks with the hope of convincing
you of the absolute and immediate necessity
of the reconstitution of the former Central
Delta. It is, I conclude, needless to show that
the former Western Delta, which includes a Delta
irrigation of 350,000 acres, a system of tanks
in the Ellore and Yernagudem Taluqs, that
has been neglected more or less for years,
and the investigation of the Annamalai
Project, would be in itself a very heavy Delta.
Of the proposed Central Delta it seems
necessary to report rather more at length.
The ultimate irrigable area of the
Central Delta is 130,000 acres. The actual
areas of first crop irrigated of late years
are as follows:-

1890-91	122,679	acres.
1891-92	118,255	"
1892-93	116,162	"
1893-94	114,361	"

These figures, not only do not show
the

FROM

THE EXECUTIVE ENGINEER
GODAVARI EASTERN DIVISION

TO

THE SUPERINTENDING ENGINEER
FIRST CIRCLE.

DATED
DESPATCHED
RECEIVED

189

No. 262 S.

ENCLOSURES.

SUBJECT.

DATED
DEPART
RECEIVED

the healthy growth that might be expected after the completion of a project, but actually a steady decrease. For the current year 1894-95 the transplantation even yet is not quite complete and a further decrease must be expected.

4 This most unsatisfactory state of affairs is due to the working of the Delta by a most inadequate staff and to the very incomplete state of the irrigation works.

For example 1. Many large channels & sluices are not yet constructed, nor innumerable small sluices to replace the spouts, with which at present the banks of the Main Canals are riddled. the consequence is that it is impossible to pass sufficient water to the ends of the Main Canals.

2 The drainage scheme for the large area between the Razole Road, Bank Canal & Amalapuram Canal & the sea is not yet investigated nor even have levels been taken for that purpose, for want of drains in this tract nearly every year there is a considerable loss to Government and much suffering and disappointment to the ryots. This tract of country comprises nearly a quarter

of the whole of the Central Delta.

iii The cultivators of the Amalapuram Taluk are particularly difficult to deal with; consequently much work in connection with the distribution of water and other matters, that in the Western Delta is settled by a Delta Supt. and without further trouble, should be settled in the Central Delta by a Sub-Divisional Officer, in order to prevent the ryots bringing a medley of false & true accusations against the Delta Supt. and to prevent future litigation.

iv Many of the arrangements of the existing distributaries require a thorough overhauling, especially the removal of numerous unnecessary spouts placed during years of negligent supervision which render it impossible to pass water to the ends of channels when the water is most urgently required. Work of this kind, it is needless to say, is of the most tiresome and tedious description and requires the exercise of much tact and patience.

5. I further contend that it is not wise, especially now that the water tax has been and I conclude may further be increased, to neglect

DATE
DEPT
RECEIVED

Deltas on the plea that the Project works are completed and I fully believe that if the Central Delta is now properly manned, there will be very soon an increase of 10,000 acres or an annual increase of revenue from water tax alone of half a lac of rupees.

Service in the Godavari is not now popular and the staff of upper Subordinates in the District is with a very few exceptions decidedly weak; the Delta Superintendents are admitted to be as a class most unsatisfactory; I am therefore afraid that, if things are to go on, as they are at present, that the present deterioration will take so deep a root that the Central Delta will take a long time to recover from its present neglect.

The suicidal policy of only providing sufficient officers in large and remunerative undertakings such as the Madras Deltas to merely attend to routine matters and with no time to devote to a more thorough supervision of their

works and to deal more scientifically, than at present, with the distribution of water, has been so ably put forward in the note printed with G.O. 20 March 1894 No 778 W. that it is unnecessary for me to dwell further on that point, than to say that nearly all the reasons given therein are applicable to the case that I now bring to your notice.

Finally, I sincerely hope that you will address Government on the subject.

I have &c
(Sd) J. E. Paul
Executive Eng^r

(True Copy)

Adm^d
Sup^r Engineer, Circle

FROM
1000
TO
THE EXECUTIVE ENGINEER
Western
GODAVARI DIVISION
THE SUPERINTENDING ENGINEER
FIRST CIRCLE
DATED
DESPATCHED
RECEIVED
22
September
1894
No. 3048
ENCLOSURES.
SUBJECT.

No. 1450 G.D.

FROM

A. H. Garrett Esq

SUPERINTENDING ENGINEER

FIRST CIRCLE.

Enclosures.

TO

THE Chief Engineer

P. Works Department

2.
Copies of Enclaves
sent to 12625 & 3048
15-10-94 22/10

Campalladha-saborda
DOWLAISHWARAM, 28 October 1894.

SIR,

I have the honor to forward copies of two letters received from Mr. Paul in which he represents his inability to do justice to his present charge, and suggests that the Central Delta should be formed into a separate Division.

2. Taking into account Mr. Paul's services and his long acquaintance with the Godavari Western Delta Division it must be granted that his opinion is entitled to every consideration.

3. The Central Delta was a separate Division till 1878 when it was made a Sub-Division of the Eastern Delta Division.

4. After the preparation of the Revised Godavari Delta Estimates by Colonel Hasted in 1882 the Central Delta again became a separate Division, and continued as such till 1890 when the arrangements now in force were made.

In dealing with Mr. Paul's proposals it would be of great service to know the precise circumstances under which the Central Delta Dr. was twice converted into a Sub Division but I regret that I am unable to obtain the information from my office records.

The only paper relating to the subject which I have on my file is G.O. No. 1959 of 20th July 1889 in which the reason assigned for the amalgamation of the Western & Central Delta Divisions is that the Re-ject works were approaching completion.

I think Mr. Paul has clearly shown that even now a great deal of absolutely necessary work remains to be done, and without accepting his views regarding the want of proper establishment in late years it is impossible to explain the steady decline in the cultivation since 1890.

It may sometimes happen that wet cultivation is given up owing to the land becoming exhausted and requiring a rest, but this explanation does not apply to the present case. I have made enquiries and find that all the land which has been given up is land the proper irrigation of which requires much careful investigation and the construction of numerous works.

The land was taken up in the first instance under the impression that these works would not be long delayed and has now been abandoned as no steps appear likely to be taken for its

the arrangements for its proper supply & drainage. The subject cannot be dealt with by the present Establishment and if matters are allowed to continue in their present extremely unsatisfactory state it is quite possible that there will be a still further loss of revenue. Not only could this be avoided but a very large increase of Revenue secured by the appointment of a proper staff to investigate the requirements of the Delta.

If the Central Delta was made a separate Division I should propose placing Mr. Howley in executive charge with one Sub-Div. officer and a slightly increased office Establishment.

The extra cost of the proposed arrangement would be as follows:-

Mr. Howley (Extra pay)	100-0-0
Do (Extra J.A.)	30-0-0
Sub Division officer (pay)	200-0-0
Do (J.A.)	90-0-0
1 Accountant	60-0-0
1 Clerk	50-0-0
Do	20-0-0
1 Draughtsman	50-0-0
	600-0-0

For one year - 7,200-0-0

12.- It is possible that another upper subordinate might be found necessary but even supposing the extra cost of establishment to reach Rs. 10,000 for a few years, the money would be well spent seeing that when proper arrangements have been made the area irrigated in the Central will certainly be as large as it was in 1890.

13. I have therefore no hesitation in giving Mr. Paul's proposals my strongest support.

I have the honor to be,
Sir,
your most obedient servant,
Sup^d Engr^d, 1st Circle

P. W. CURRENT No. 8479

P. T. L. 500-31-7-94

212

FROM

A. H. Gassett Esq
SUPERINTENDING ENGINEER

TO

FIRST CIRCLE

THE Chief Engineer
Public Works Dept

No 3544 Cd/10 - Nov

To E. J.

DATED

DESPATCHED

RECEIVED

28th October
3rd November 1894

No. 1450 Cd.

ENCLOSURES, 2

SUBJECT

For favour
of remittance

+ with C. H. 8611
S. A. W. 12-11-94

C. H. 8611
11/94

S

E. J.

8.11

with file - to
be returned.

No 292 of 12 11. 94

7. E. J.

Mr Paul has I think
clearly shown the advantage to
be derived from the reconstitution
of the Central Delta Godown into
a separate Division, and the reasons
he has given for the serious falling
off in irrigation in that Delta may
be accepted. The necessity
for increased care in the distribution
of the supply, owing to the increase
in this Dept. is substantiated by the fact
that the water rate in the Godown
Delta has very lately been increased,
and equal demands that proper
measures for distribution should
be taken. To do this a considerable
staff of experienced officers is re-
quired. The establishment proposed
I consider hardly enough to

Advising Central Delta
forward with strong
recommendation copies
letters from Mr Paul
of great importance - should
be formed into a separate
division.
provided.

Recd
12/11/94

Government of Madras.

1894

P. W. DEPARTMENT.

CURRENT No. 8680

From

The Chief Engineer
for Irrigation.

ENCLOS.

No. 292

Dated 12. 11. 94

Received 13. 11. 94

SUBJECT.

Godavari Central Delta:
Remarking on the proposals
of Mr Paul for the formation
of a separate
division.

6.6.94 1395W 6.2.93 292W
3.4.94 906W 29.3.89 739W
20.3.94 778W 27.6.88 1921W
19.2.94 473W 31.5.88 1587W
28.4.94 1846C 25.6.88 1873W
28.3.93 547W 3.5.88 1307W
20.7.89 1959 12.6.88 1733W
18.4.87 1078W 4.5.87 1225W
No. dated 28.3.87 942W

File with Mr. 8745 of 94
and now in circulation

(By the recommendation of the
Engineer Establishment)

No. 330.

Central Delta Sub-Div. office,
Godavari Western Div
Cheltipett 15 October 1894.

From

W. J. Howley Esq
Assistant Engineer Central Delta

To

The Executive Engineer
Godavari Western Div

Sir,

With reference to your verbal inquiry,
I have the honor to report that the decrease
of wet cultivation in the Central Delta, which
commenced practically with the large & premature
reduction of Establishment at the abolition of
the Godavari Central Div is due mainly to two
causes: (1) insufficient and imperfect drainage;
& (2) Want of proper arrangements for the regula-
tion and minor distribution of water.
Thus in 1889-90, the last year of the late Central
Division, the area of paddy cultivation irrigated
was larger than in any previous year.
In 1890-91, there was a temporary increase of
1272 acres for the whole Delta; 1187 acres of this
increase being under Samaram Canal & 565
acres under Bank Canal. All the other Cen-
tral Delta Canals, however, showed for that year
a decrease from the ~~area~~ irrigated in 1889-90.
In 1891-92, the total area irrigated in the
Central Delta was 1494, and in 1892-93, 4210
acres less than in 1889-90. In examining into
the details of this decrease of 4210 acres, it will
be noted that there has been a reduction
of 3405 acres under the following two heads
alone:

1. Lolla high level channel; and (2) Sama-

lapuram Canal I reach.

The irrigation under these two heads was as follows:-

	year			
	1889-90	1890-91	1891-92	1892-93
1 Lolla high level ch.	acres 902	acres 870	acres 147	acres 6
2 Anulapuram Canal	7470	6916	5190	4961
1 st reach	8372	7786	5337	4967
Total				

From

The

In the case of Lolla high level channel, the lands can be, and are easily supplied with water; but the entire absence of any provision for their drainage has compelled the ryots to completely abandon wet cultivation in favor of dry. The improvements here required, and already suggested, (vide Memo written in 1890 by the Ex Engineer, late Government Central Division) are:

(1) Thorough repairs to and enlargement of Palincha Drain; (2) a drainage under tunnel to be constructed under Anulapuram Canal near Ralli Surplus weir; (3) Anulapuram Canal left bank. In the case of the irrigation under Anulapuram Canal I reach, the state of affairs is just the contrary. The lands suffer, not from excess water, but from deficiency of supply. The old brick sluices in this reach require to be entirely rebuilt (as Memo referred to above) with their sills at proper levels, and what is still more important, Ambajipeta branches should be provided with suitable regulators & dams.

and partly reconstructed, especially in the case of Karendrapuram branch of Ambajipetta channel. The irrigation under this one branch channel, which was 1688 acres in 1889-90, was only 1378 acres in 1890-91, 1224 acres in 1891-92, 1112 in 1892-93 & 1037 in 1893-94. This steady decrease is due to the ryots converting their wet land into dry owing to the difficulty of obtaining sufficient water for paddy cultivation. I have taken the above cases as typical, and shall not go into any further details. They will show that the decrease which has occurred can be fully explained: that it is due, not to any unwillingness on the part of the ryots to use canal water, but to the incompleteness and insufficiency of the delta works, more especially those connected with drainage.

I have &c
1891 W. J. Howley
Assistant Engineer

(True Copy)
(Ed) Dr. Paul
Es Engineer.

(True Copy)
C. R. M. S.
Supr Engr, Ambajipeta

25/6/11

Statement showing area irrigated which includes waste
 itted -

year-	Western		Central	
	1 st Crop-	2 ^d Crop-	1 st Crop	2 ^d Crop-
1883-84	280,116	9,993	100,380	1,750
1884-85	285,244	9,780	97,590	3,208
1885-86	306,204	13,557	102,456	4,249
1886-87	322,763	19,861	106,059	3,533
1887-88	320,535	-	110,628	-
1888-89	323,659	21,607	117,550	1,891
1889-90	329,364	33,441	120,385	5,301
1890-91	335,369	30,363	122,679	3,453
1891-92	342,371	52,011	118,255	13,978
1892-93	343,071	38,364	116,162	7,835
1893-94	341,581	-	114,361	-

(Sd) J. E. Paul
 Ex Engineer

* These are only for rice -

(True Copy)

Sup & Eng^r 1st Divⁿ

On S. 4
 86 11/94

No 325

C. D. W.

Central Wells Sule Office, Godavery
Western Division
Station Chittipelli.
Dated 13th October 1894.

From.

W. J. Howley Esquire
Assistant Engineer
Central Wells Sule Division

To.

The Executive Engineer
Godavery Western Division.

Sir,

I have the honor to bring to
your notice again the absolute necessity
of some further increase, at an early
date, to the Establishment - both clerical
and Executive, in this Sub Division.
Otherwise I fear it will be impossible
to carry on work much longer without
a complete breakdown.

Every Clerk and subordinate is now
worked up to the limit of human en-
durance; and it is very disheartening
to them to be continually reprimanded
and found fault with for not doing
a quantity of work that in my opinion
is

is beyond the power of any person to do;
as a dillā Superintendent has more than
once put it to me "Of what use to the
the bullock that is borne down by the
weight of his load?"

The matter has already been brought
in detail to your notice, as well as to that
of your predecessors Mr. Joyent, Mr. Sreeni-
-leasa Sengar and Mr. young; and,
as far as I can judge from personal
conversations with them, they were all three
fully satisfied as to the unwieldiness of
the Sule Division and the urgent necessity
of increasing the strength of the establish-
ment.

x

x

x

x

x

During my absence on privilege leave,
the Supervisor lately in charge of Amalapur
Section was also acting as sub. off. officer;
but the extra work was of course too much
for one person and as a result I was handed,
on my return, a large bundle of the most
urgent references which the Supervisor had
not been able to find time to dispose of.
Ever since I returned, I have been doing
little else but office work, often extending
far into the night, and without any
intermission, even on Sundays. Nevertheless
instead of my growing

reference list seems almost to grow longer.
There are ^{now} with me a very large number
of references about land statements, most
of them dating from about May last.

These references are chiefly to reports
of occupation of different lands;
but such is the confusion in every office,
due to overwork and complete change
of establishment that the dates reported
to me by my subordinates are in almost
every case, from my personal knowledge,
incorrect.

For some of these there is perhaps an
excuse, as in those cases where dates of
occupation of lands are asked for for
works completed even before I came
to the Central Dillā, although that was
at the beginning of 1891. I have also
with me several important references
which are delayed, not for want of
sufficient information, but simply because
I cannot find time to write the necessary
reports.

I beg to submit that; from your per-
sonal experience of the amount of corres-
pondence you daily receive from me,
you will acknowledge that I have not
been neglecting my office work. At the
same

Sometime you will note what a large
number of unanswered references (many
of them from the Superintending Engineer)
is still with me awaiting disposal.

Under the above circumstances, I
feel regretfully constrained to report -
that, after honestly doing myself as
much work as I can, and seeing that all
servicing under me are made to do even more
than might be fairly expected from them,
I am unable, without further assistance
exclusive of course of the relief of Supervisor
Abraham Modilian, to carry on the
sub-work of the Sub Division.

(True extract)

I have

(Signed)

W. J. Howley
A.E.

(Signed)

J. E. Paul

(True Copy)

Ex Engineer

Attest

Superintending Engineer

Letter No 353 S dated the 19th October
1894 from the Executive Engineer Godavari
Western D^o to the Sup^g Eng^r 1st Circle

In continuation of my ³⁰⁴ No 340 S
dated 22nd September 1894, I have the
honor to forward a copy of Mr. W. J.
Howley's No 330 d/15th October 1894, which
will, I think, conclusively prove that
the decrease in the irrigation in the
Central Delta of late years is due to
the mistake that was made in 1890,
in abolishing the Godavari Central
Division.

2. For ready reference I also
enclose a statement of the total
irrigation in the Western & Central
Deltas for the 1st & 2nd crops from 1883-84
to date. This clearly shows the rise
and fall in the first crop of the
Central Delta.

3. The enclosed extract of Mr.
Howley's No 325 d/13th October 1894
in my opinion, a very accurate account
of the working of the Central Delta, as
Sub Division. I should mention

that Mr. Howley is an exceptionally
able and hard working officer and
has a thorough knowledge of the Central Delta,
where he has been for many years.

(True Copy)

For Supg. Engr. 1st Circle
Ex. Engineer

No. 1479 A.D.

FROM

A. H. Garrett Esq
SUPERINTENDING ENGINEER

FIRST CIRCLE.

THE CHIEF ENGINEER

PUBLIC WORKS DEPARTMENT.

Camp ~~Langkai~~ ^{Langkai} ~~Langkai~~ ^{Langkai} 30th October 1894.

Enclosures, 4

TO

Mr. H. H. Garrett Esq

3535 110-10-14

330

18-10-14

Mr. H. H. Garrett Esq

330

18-10-14

SIR,

In continuation of my No. 1450 A.D. 28th
Oct. 1894 I have the honor to submit copies of another
letter received from Mr. Paul and its enclosures.
2. These papers make the case already present-
ed a still stronger one.

3. It has I consider been conclusively shown
that owing to the present defective arrangements as
regards the drainage and water distribution in the
Central Delta there has been a large decrease in the
area under wet cultivation, accompanied of
course by a falling off in the revenue.

4. As the water rate has lately been raised
it is only reasonable to expect that still more up-
land will be given up.

5. It is perfectly certain that the present staff
which is already overworked cannot give the
time necessary for carrying out the improvements
which are so urgently required.

6. The state of affairs has become so grave
that even if the Central Delta is not made a se-
parate Division it will I trust be conceded that it
is absolutely necessary to reinforce the strength
of the present establishment in the Western Delta

There is only $2\frac{1}{2}$ feet depth of water on the floor on the River side; I greatly fear therefore that the flap shutters will as usual dash themselves to pieces again. The velocity of the out-

flow cannot be much less than 9 feet per second.

The country to the left of Annapur Canal drained by Kummara drain is also flooded and on the 22nd the water in the drain was only 1 ft. below the top of the left side wall of the aqueduct (at Annapur Canal 3 1/4 mile.)

Annapur Main branch has, as usual, been breached at the old aqueduct site and also just above Katre-nikona channel sluice. Ellagan channel has been cut at the usual place ^{near} Somadevara palem although 2 drainage box sluices, each 3 feet square were put in this year at this place, at considerable expense.

There are, of course, innumerable minor breaches to channel banks.

It is improbable that there will have been any total loss of crop, as the rains appear to have quite ceased now.

The above report will show the state of things in the Central Delta after a not very excessive fall of rain. It will be seen what a lot more still remains to be done here especially with

regard to drainage improvements. The existing establishment is, however, barely able to cope even with current work, and indeed is unable to do so properly; so much so that for the present, not only are all improvements at a stand still, but even the area irrigated in 1890 or 1891 cannot be maintained.

No 381 S.

Copy forwarded to the Superintending Engineer 1st Circle for information.

(Sd) J. E. Paul
Es Engineer.

No 1552 G.D.

Copy submitted to the Chief Eng. in continuation of this Office No. dated 30th October 1894

x C.N. 8611 Supts to
S.A.W. 12-11-94
Re reformation of
Central Delta
Sundar as a
separate Div.

S.P.
23-11-94

It will be seen from this report that owing to the very inefficient drainage arrangements in the Central Delta anything approaching a heavy fall of rain is likely to cause a loss of crops and seriously affect the already greatly reduced revenue.

W. M. M.

Sup^r Eng^r 1st Circle.

Camp Berhampur }
15 November 94
Sd/20

Sd/20

FROM

A. J. Garrett
SUPERINTENDING ENGINEER

FIRST CIRCLE

TO,

THE CHIEF ENGINEER
PUBLIC WORKS DEPARTMENT
MADRAS.

DATED
DESPATCHED
RECEIVED

13 } November 1894
20 }

No. 1552 G.D.

ENCLOSURES.

SUBJECT.

Overseas in the Godavari
Central Delta. - Howland
copy of Mr. Howley's letter
reporting the ——— caused
owing to late rains.

O.W.D.
CN 8680
8011

31294 d 7 December 1894

Note by the Chief Engineer O.W.D.

I am satisfied
that the desirability of
an early separation of
the Godavari District
into three executive
divisions instead of into
two as at present is
proved.

2. A similar distribution
has been conclusively
shown to be necessary
in the neighbouring
District of the Krishna,
the circumstances of
which and the extent
of work to be done
by this Department are
very similar to those
of the Godavari.

3. At the same time
I regret to say that
that the establishment
of the Department being
so short of its proper
strength, I cannot re

Commenced the immediate
constitution of a new
Division.

4 Our permanent staff
is short by 5 of the
sanctioned scale, and
although one officer
will shortly be ap-
pointed from the Madras
College and another
to the Provincial

Establishment under
sanction recently re-
ceived from the Govern-
ment of India, this will
only afford a partial
relief; moreover the
number of absentees is
at this moment (exclusive
of officers on privilege
leave) 20 against a
provision of 5 in the
sanctioned scale.

5 There are or will
shortly be urgent de-
mands for officers for

improvement of the
canal, the investigation
of proposals for improve-
ments in the Kurnool and
Sangre Districts, and it
will be with the greatest
difficulty that the de-
mands can be met.

6 It is probable that
an economy in
establishment may
shortly be obtained
by the amalgamation
of the Rushikulya and
Sangre Divisions, a
point to which Mr
De Morgan has been
directed to give his
attention, and at a some-
what later period a
strong staff will be
set free by the completion
of the Periyar Works, but
for the present I consider
the formation of a new
Division impracticable.

7 The Superintending
Engineer is altogether
in error in the estimate
of the probable cost
of the new Division

given in para 10 of his
 letter of the 28th October
 1894, in deed if his estimate
 were correct the proposal
 might at once be negated,
 as it implies that all
 that is wanted is the em-
 ployment of a single ad-
 ditional subordinate.
 8. If a new Division
 is wanted at all, as I
 think it is, it must be
 a complete Division
 with a proper staff
 of Officers and Subor-
 dinates, and the actual
 cost of such a Division
 will be nearer
 30,000 than Rs. 7,200
 which it is estimated
 W. Garrett.

L
 W
 19.11

CX28
 2/4

P. W. DEPARTMENT.

3129 W. d. 7 December 1894
 Read the following:-

Letter from the S.E. I Circle No. 1450 L. S. d/28.10.94
 Office note by the C. E. M. M. 292
 Letter from the S.E. I Circle " 1479
 Note by the Chief Eng^r P. W. Dept^t
 FOR ORDERS.

d/12.11.94
 d/30.10.94
 d/19.11.94

L
 W
 19.11

CX28
 2/4

It is very evident that something
 must be done to improve matters
 in the Godaveri Delta - and that
 at once. But the Chief Engineer
 not being able to make suitable
 provision for a complete new division
 does not see his way to make any
 proposal, although he admits the
 necessity.

Considering the fact that the
 water rate has been raised, it
 behoves us to do something to
 improve the situation, and I
 must begin in consultation
 with the C. E. for I. to see if some
 arrangements cannot be made at
 once in the required direction, even

if they do not go as far as could be
 wished. Some assistance to the
 clerical department sh^d. anyhow
 be possible, and the addition of
 two upper subordinates might help
 to tide over till the full strength
 can be turned on. I do earnestly
 hope that some suggestions can be
 made.

L
 W
 2.11

P. W. &

3129 W. 47th December 1894

FOR ORDERS.

Formation of a Central
Godavari Division.

for His Excellency the Governor

My note of the 19th Instant
dealt only with the specific
proposal of constituting a
third Division in the Godavari
District, and did not touch
upon the question of strengthening
the staff of the existing
Eastern Division, because that
was a matter which could be
dealt with by the Chief
Engineer and it was ^{not} necessary
to trouble His Excellency on the
subject.

I did not get this from the
note. Hence my remarks.

W.
3 Dec

2. The draft submitted here
with will it is thought meet
the case

S

20.4 W

cross
to 94

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read the following

from the Supdy. Engr. Ibricle No. 1450 G.D. d/28th Octr. '94
Note by the Ch. Engr. for Irrigation No. 292 d/12th Novr. '94 1894
from the Supdy. Engr. Ibricle No. 1479 d/30th Octr. '94
from the Engrs. P.W.D. dated 19th November 1894
by the Ch. Engr.

His Excellency the Governor
in Council regrets that for
the reasons stated in the
Chief Engineer's Note, it is
not practicable to cons.
titute a third division in
the Godavari district at
present.

2. The need of strengthening
the existing staff of the Godavari
Eastern Division is however
admitted, and the Chief
Engineer will arrange for
the immediate posting of two
experienced Upper Subordinates

Increase of staff of
Godavari Eastern Division

Mr
S. W. P.

Western

with

to the Division

3. The Superintending Engineer will report at once what additional clerical establishment he considers necessary submitting in the usual form a proposition statement for sanction.

S
20.11

com
1294

31296 of 7 December 1894

S.A.W.
C.B. B.
E. 22

DEPARTED
2 DEC 94

To The Chief Engineer for Engrs
" Suptg. Engrs, I &
" Examiner, P.W. ac

2. 11/12

CURRENT No. 9226

5. 11/12
3

31336 of 7 December 1894

Recorded.

Order H. 12

com
1294

S

S.E. Arch

LS

DEPARTED
31 DEC 94
P.W. D

with order

INDEXED
2. 11/12

L 22. (1 foolscap).

GOVERNMENT TELEGRAPH DEPARTMENT.

From *The Superintendent of Telegraphs*

To *The Secretary to the Government of Madras*

No. *1292* Dated *26 November 1894*

Encls. *Belgaum.*

INDEX No.

OF 189 -9

ABSTRACT.

PRECIS.



Sir,

With reference to your letter No.

189, I have the honour to

, dated the

3rd class combined (Post and Telegraph) office was opened at Bantval, South Kanara District on the 25 November 1894.

I have the honor to be,

Your most obedient servant

H. Hemphill
Superintendent

Secretary

Govt. of {1894} Madras.

Educational Dept

To

The Public Works Dept

Communicated to the Consulting Architect for the preparation of the required estimate.

S. S. S. 2/94

Proceedings, dated *28 Nov: 1894*
No. *911*.

Subject.

Authorizing the Consulting Architect to prepare estimates for an ornamental iron gate and compound wall for the Medical College.

The CA.

L.S.

DESPATCHED
2 DEC 94

With order

Educational Department.



PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read the following paper:—

From the Director of Public Instruction, Madras, dated 15th November 1894, No. 10968.

Order: 28th November 1894, No. 911.
The Consulting Architect will be authorized to prepare estimates for an ornamental iron gate and compound wall for the Medical College.

/Enc Extract/

Abdulla
Under Secretary
for Chief Secretary

The Public Works Department
Director of Public Instruction

NT No. 9156

of pa

From

The Supt^r Engineer
V. circle.

To

The Chief Engineer
P. W. D.

This, Mr. Engineer P. W. D.

No 60574

Dated 10th November 1894
Despd - 12th

Order: 1.12.94

Such 1.

Old Sahag butchery at
Srinivasthnam:—

Requesting sanction
of Govt. to the reduced ^{monthly} rent of
Rs 3 fixed by the Dist. Board
for a portion of the — oc-
cupied by the Union Sam-
chayats as its office.

1/11
2/11

22-5-89 No 1367 W
22-9-88 No 2981 W
6-4-93 No 903 W

No. 4710 d/30-11-94

To E.W.

Forwarded.

2. The reduced rate of rent may
be sanctioned by Government.

H30/11
C.

29/11

No 3134 W. d/7-December 1894

No
1/11

Sanctioned.
Sanctioned

Sm

1/11

DESPATCHED
8 DEC 94

on St. II Circle
S. II Circle
Ex. P. W. D.
Sanctioned

2/11

Educational Department.



PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read the following paper:—

*From the Director of Public
Instruction, Madras, Dated 15th
November 1894, No. 10968.*

Order: 28th November 1894, No. 911.

*The Consulting Architect will
be authorised to prepare estimates
for an ornamental iron gate and
compound wall for the Medical
College.*

/Sd/- Extract/

*Abdulla
Under Secretary
for Chief Secretary*

*The Public Works Department
Director of Public Instruction*

Statement giving data for calculation of rent for a portion of the old Taluk Cutcherry occupied by the Srivai.
 ————— Koutham Union Panchayat as its office —————

18 NOV 1894
 W. ACCOUNT

Item No.	Name of Building	Official designation and salary of occupant	Whether permanent or temporary (P or T)	Date of completion or purchase.	Capital cost.			Total.	= 4% on Capital cost (9)	Actual average cost of repairs (per 100) by G.O. No. 1367 of 22-10-89	10% on Estimated cost of repairs	Tools & plant	Total.	Estimated cost of repairs under actual average is not taken	Normal rate of rent on basis of foregoing data.		Rent paid prior to 7 th September 1888.	Rent to be charged.	
					Cost of construction	or purchase	Cost of site								Annual 10+13.00-10+14.	Monthly 1/2 of 15.		Yearly	Monthly
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
1.	Old Taluk Cutcherry used as office by the Union Panchayat Srivai Kutham	P	1848	867	..	63	930	37	..	..	26	63	5	..	60	5			

(Signe

Remarks.

20. This building is known on the register of public buildings as item 1 under Provincial. It is occupied by the Revenue and police departments as sub Magistrate's office and Police station. The western portion of the building is now occupied by the Union office.

* Taken at 3% with reference to Code para 28, rule I (d) — Chapter II. Volume II

(Signed) C. W. Wood.
 Executive Engineer
 Tenali Division
 5-11-1894.

(True Copy)

Major R. E.
 Engineer, VI Circle.

Superintending

Letter from C. W. Wood Esqr, Executive
Engineer, Financially Division, to the Su-
perintending Engineer 6th Circle, dated
5th November 1894, No. 3366: -

NOV 1894
ACCOUNTS

closure: /

Statement: -

I have the honor to state that a por-
tion of the old taluq cutcherry at Srivai-
-kumtham is occupied by the Union Pancha-
-yat as its office on a monthly rental
of Rs 3 which is stated to have been
fixed by the District Board.

2

The President Taluq Board, Tuti-
-corin, has since made a reference
to this office as to whether it is possible
to reduce the rent as the Chairman ob-
-jects to pay such a high rate of
rent, the panchayat being very poor,
to which, he was informed in this
office No. 3009, dated 3rd October 94 -
that it is not possible to reduce it as
the rate fixed by the District Board
is far below the normal rate of rent
payable for the building under existing
rules.

3. As the cutcherry is a government
building

Ques 1
9.56/94

Such N: 1 5856 N: 6050
10.11.94

and borne on the divisional register of public buildings and the rent realised credited to this department through the Civil exchange accounts. I have the honor to request your approval to the rate of rent fixed by the District Board.

4. A statement showing rent assessable for the building under existing rules is also enclosed for information.

No 6857N- 10/

Copy, together with copy of the enclosure, is submitted to the Chief Engineer, P.W. Department, through the Examiner of P.W. Accounts for sanction of Government, to the reduced rent of Rs 3, under the circumstances stated in the foregoing letter.

The building appears as item 1, in the Register of public buildings under Provincial, Tenkarai Taluk.

Enclosure: 1 Statement

Supt. Insp. of P.W.
Trichinopoly
10 Novem

09. 012/-

6410. 2
1094 3

16-5-94

works on the place

9/56/94

16/5/94

RENT No. 9/56

of pa
From
The Supt Engineer
W circle.

The Chief Engineer
P. W. D.

No 60574
Dated 10th
Sept. 12th November 1894
Order: 1.12.94
Encls 1.

Old Sahag butchery at
Srinivastharam:-

Requesting sanction
of Govt. to the reduced rent of
Rs 3 fixed by the Dist. Board
for portion of the - oc-
cupied by the Union San-
chayth as its office.

22-5-89 No 1367 W
22-9-88 No 2981 W
6-4-93 No 903 W

M. 4710 D d/30-11-94

To E.W.

Forwarded.

2. The reduced rate of rent may
be sanctioned by Government.

11/30/11
C.

22/11/94

No 3134 W d/7 December 1894

M
L

Sanctioned.
Sanctioned

Sm

CPWD
12/5/94

DESPATCHED
3 DEC 94

in Sd. II Circle
18 Dec 94

Government of (1894) Madras.

Public Works
Department

4.12.94

28th November 1894

Subject
The Messrs. Newman
the supply of
Indian Bradshaw during
to the officers specified
R. No. 838 d/29-11-93

16/12/16

No 3136 W d/7 December 1894

B

Recorded
with reference to
No 3123 W d/9 4-
1893.

5th

19-11-94 No 3666.C
11-4-94 No 1632.C
20-3-94 No 784 W
10-3-94 No 669 W
23-2-94 No 837.C
4-12-93 No 3123 W
6-3-93 No 588 W
16-11-92 No 4755.C
with enc 3009/95

Mar. P.W. Dept
10/12/94

18/12/94

INDEXED

Financial Department.



PROCEEDINGS OF THE MADRAS GOVERNMENT.

READ the following paper:—

Endorsement of the Public Works Department, dated 19th November 1894, No. 8686C, transferring a letter from Messrs. Newman & Co. dated 10th November 1894.

ORDER, dated 28th November 1894, No. 1141.

Messrs. Newman & Co. will be requested to continue the supply of the "Indian Bradshaw" during 1895 to the Officers specified in G. O. dated 24th November 1893, R. No. 838.

(True Extract).

As Assistant Secretary,
for Chief Secretary.

To
The Public Works Department,
Messrs. Newman & Co. Calcutta.

Govt. of 1894 Madras.
PUBLIC WORKS.

G.O. 7/12 3137N

Records

The proposals of the
Secy. to Govt. P.W.D.
for the destruction of
original documents
of the P.W.
Department, approved.

150
16

Financial Department.



PROCEEDINGS OF THE MADRAS GOVERNMENT.

READ the following paper:—

Endorsement of the Public Works Department, dated 19th November 1894, No. 3666C, transferring a letter from Messrs. Newman & Co. dated 10th November 1894.

O R D & R, dated 28th November 1894, No. 1141.

Messrs. Newman & Co. will be requested to continue the supply of the "Indian Bradshaw" during 1895 to the Officers specified in G. O. dated 24th November 1893, R. No. 858.

(True Extract).

As Assistant Secretary,
for Chief Secretary.

The Public Works Department,
Messrs. Newman & Co. Calcutta.

7TH DECEMBER 1894, No. 3137 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

General,
Establishment.

READ—the following paper:—

Note by the Secretary to Government, Public Works Department.

Adverting to G.O., No. 2901 W., dated 13th November 1894, in which it is intimated that further proposals will be awaited as to what original documents on the Secretariat records can be destroyed, it is thought that the following original papers may, with advantage, be destroyed after the period noted against each:—

1. All periodical returns that have been printed—after one year.
2. All periodical returns that have not been printed—after one year.
3. All statements other than periodical returns that have been printed—after one year.
4. Reports regarding change of appointment—after one year.

Note.—A separate record of this information is kept in registers.

5. Applications for leave—after one year.

Note.—This information is also separately recorded.

6. Budget estimates of other Governments—after five years.
7. Administration reports of other Governments—after five years.
8. Budget estimates of municipal and district boards—after one year.
9. Annual reports of municipal and district boards—after one year.
10. Lists of surplus stores—after one year.
11. Unanswered reference lists—after one year.
12. Indian daily weather reports—after one year.
13. Madras daily weather reports—after one year.

It is possible that during the progress of the work other items will suggest themselves, and in this case further orders of Government will be solicited.

It is proposed to communicate to other departments of the Secretariat all Proceedings in this matter in the Public Works Department, and it would be useful if those departments would reciprocate.

26th Nov. 1894.

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

ORDER—dated 7th December 1894, No. 3137 W., Public Works.

The proposals of the Secretary to Government, Public Works Department, are approved.

(True Extract.)

Under Secy. to Govt., P.W.D.

To the Public, &c., Departments.
" Revenue Department.
" Chief Engineer for Irrigation.
" Consulting Engineer for Railways.

Exd. Shaik Karim.
Spare Copies

GENERAL.
ESTABLISHMENT.

Govt. of {1894} Madras.
PUBLIC WORKS.

Dated December, 7th.

Recd.

Encl.

G.O., 7th Dec. 1894, No. 3137 W.

DECEMBER.

Records

The proposals of the Secretary to Government, Public Works Department, for the destruction of original documents on the — of the Public Works Secretariat, approved.

P. W. DEPARTMENT.

No. 3137 W. dt 7th December 1894

Read the following:—

Note by the Secretary to
Government, P. W. Dept.

FOR ORDERS.

I shd. be obliged if the
C. E. would bring this up
after Council on Tuesday
next.

W
29 Nov

Approved
as altered

W

4 Dec

Adverting to G.O. 2901 W,
dt 13 November 1894, in which
it is intimated that further
proposals will be awaited
as to what original docu-
ments on the Secretariat
records can be destroyed;
it is thought that the
following original papers
may, with advantage, be
destroyed after the period
noted against each:—

1. All periodical returns
that have been printed
after one year.
2. All periodical returns
that have not been printed
after one year.

3. All statements other than periodical returns that have been printed - after one year.

4. Reports regarding change of appointment - after one year -

Note - A separate record of this information is kept in Registers.

5. Applications for leave - after one year -

Note - This information is also separately recorded

6. Budget Estimates of other Governments - after five years.

7. Administration Reports of other Governments - after five years.

8. Budget Estimates of Municipal and District Boards - after ^{one year} five years.

9. Annual Reports of Municipal and District Boards - after ^{one year} five years.

10. Lists of Surplus Stores - after one year.

11. Unanswered Reference Lists - after one year.

12. Indian Daily Weather Reports - after one year.

13. Madras Daily Weather Reports - after one year.

It is possible that during the progress of the work other items will suggest themselves, and in this case further orders of Govt. will be solicited.

It is proposed to communicate to other Depts. of ^{the} Secretariat all proceedings in this matter in the P.W. Department, and it would be useful if those Departments would reciprocate.

S

20/4 W

CONF
27/4

RS

RS

FOR ORDERS.

Destruction of original documents on the Secretariat Records

13.11.1901
H. S. 2901 w d / 13 Nov 94. It is said that further proposals will be invited as to what original documents can be destroyed.
It is accordingly suggested that the following may be destroyed.

1. All periodical returns that have been printed - after one year.
2. All periodical returns that have not been printed - after five years.
3. All statements other than periodical returns that have been printed - after one year.
4. Reports regarding change of appointment - after one year - note - a separate record of this information is kept in Register.
5. Applications for leave - after one year - note This information is also separately recorded.

6. Budget estimates of other Govts - after 5 years.
7. Administration reports of other Govts - after 5 years.
8. Budget estimates of Municipal & District Boards - after 5 years.

PUBLIC WORKS DEPARTMENT.

December 1894

THE MADRAS GOVERNMENT.

Read the following

W. S. D. d / 16 Nov 94

The proposals of the Secretary to Government are approved.

C. W. S.
5/12/94

6.11

no 3137 W d T December 1894

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read the following

Note by the Secretary to Govt. P.W.D. d/26 Nov-94

37

The proposals of the
Secretary to Government
P.W. Dept are approved.

CWBB

5/12/94

D 6.11

RECEIVED
14 DEC. 94

To,
The Public Works Dept
Revenue Dept
C. E. for special
C. E. for Sup.

It would also be useful
if other Depts. would com-
municate what they are
doing in this direction. the
P.W. Dept during the same.
For orders.

C.S.

23 Nov 94

CWBB
23/11/94

Govt. of Madras.

PUBLIC WORKS.

7/12-94

7/12 31374

Records

The proposals of the
Secy. to Govt. P.W. &
for the destruction of
original documents
in the — of the P.W.
Department, approved.

150
16