

Public Works (1898) Department.

G.O., No. 1093 &c.

DATED 2 May 1898.

3/5/98

[Despatch Abstract.]

Collector's Office at Coimbatore, Estimate  
of Rs. 10,300 for improving the —, sanctioned  
and the amount appropriated from the  
Provincial Reserve.

110/6

Government {1898} of Madras.  
PUBLIC WORKS.

*Spare copies*

**MAY.**

Estimate of Rs. 10,300 for improving the —, sanctioned and the amount appropriated from the Provincial reserve.

## GOVERNMENT OF MADRAS.

## PUBLIC WORKS DEPARTMENT.

Buildings and Roads.  
Civil Works.

Read—the following papers :—

G.O., Mis. No. 1394, Revenue, dated 19th March 1898.

Read—the following Proceedings of the Board of Revenue (Land Revenue), Ref. No. 124, dated 4th February 1898 :—

Read—letter from the Collector of Coimbatore, to the Secretary to the Commissioners of Land Revenue, Madras, dated 8th January 1898, Ref. on C. No. 3977 Rev. of 1897.

Reference on the above, No. 124, dated 4th February 1898.

The plans and estimate, amounting to Rs. 10,300, for improving the Collector's office at Coimbatore and the attached buildings are submitted for the sanction of Government with reference to G.O., No. 493, Revenue, dated 10th March 1897.

2. The estimate includes a provision of Rs. 630 for constructing small roofed latrines of the sub-jail pattern, and another sum of Rs. 2,030 for completing the compound wall on the same pattern as the portion already constructed. The Board considers that the latter improvement is clearly desirable. From the ground plan the provision of three latrines at Rs. 210 each appears calculated to promote the convenience of different branches of the several establishments occupying the compound, but, considering the dryness of the Coimbatore climate, it would seem to deserve consideration whether latrines without a roof would not, on the whole, be preferable as well as cheaper. The saving would, however, be inconsiderable.

Order—Mis. No. 1394, Revenue, dated 19th March 1898.

The plans and estimates are approved and will be transferred to the Public Works Department for sanction.

2. The expediency of laying asphalt over the planks in the upper verandah of the Collector's office and in the room above the English record-room will be considered in the Public Works Department.

(True Extract.)

(Signed) N. E. MARJORIBANKS,  
for Ag. Secretary to Government.

Note by the Chief Engineer, Public Works Department.

The estimate of Rs. 10,300 for improving the Collector's office and the attached buildings at Coimbatore is recommended for sanction with the following alterations :—

(a) In the estimate for the additional room with verandahs in the main building, provision is made for concrete foundations  $3' \times 3'$ . These have been altered to  $4\frac{1}{2}' \times 2'$ .

(b) Steel girders,  $9\frac{7}{8} \times 6$ , weighing 41 lb. per foot, have been substituted for the four wooden beams.

(c) The estimate provides for laying asphalt flooring  $\frac{3}{4}"$  thick over the planks on three sides of the verandah of the upper floor, as great inconvenience has been felt owing to rain water finding its way through the joints of the planks into the room below and as caulking has been tried without success. The undersigned considers that the planking should first be removed from a portion of the verandah and relaid with plain butt joints  $\frac{1}{8}"$  apart, and should then be caulked by a boat builder from Calicut. If this is not effective, the asphalt provided in the estimate can be tried.

(d) The foundations provided for the combined stable and coach-house appear to be too deep for such buildings. The depth of concrete has been reduced from  $3'$  to  $2'$ , and of brickwork from  $2'$  to  $1\frac{1}{2}'$  under side walls. A similar reduction has been made in the case of centre wall, but the width of the concrete has been increased from  $2\frac{1}{2}'$  to  $3'$ .

(e) The foundations of the latrines have been reduced from  $3' \times 3'$  to  $2\frac{1}{2}' \times 2'$ .

2. The above modifications do not alter the amount of the estimate.

(Signed) W. B. DEWINTON,  
Ag. Chief Engineer.

25th April 1898.

ORDER—No. 1093 W., dated 2nd May 1898.

The estimate, amounting to Rs. 10,300, for improving the Collector's office and the attached buildings at Coimbatore, is sanctioned, and the amount is appropriated from the Provincial reserve.

2. Attention is drawn to the Chief Engineer's note read above.

3. This sanction has been registered as Provincial No. 8 W. of 1898-99, and classified as Civil Buildings, Original Works.

(True Extract.)

Under Secretary to Government.

To the Superintending Engineer, IV Circle, with plans and estimates.  
" Examiner, Public Works Accounts.  
" Revenue Department.

Public Works DEPARTMENT.

Papers to be read in proceedings:—

Again G.O., dated

Again G.O., dated

Current No. 2690

" "

" "

189 , No.

189 , No.

of 1898, dated 23<sup>rd</sup> March, from the Revenue Department.  
 " 189 , " April , " the Chief Insp. P.W.D.  
 " 189 , " : "

ORDER. No. 1093 Wof 2-5-98.

The estimate amounting to Rs. 10,300, for improving the Collector's office and the attached buildings at Coimbatore, is sanctioned, and the amount is appropriated from the Provincial reserve.

2. Attention is drawn to the Chief Engineer's note read above.

3. This sanction has been registered as Provincial No. 6 Wof 1898-99, and classified as Civil Buildings, Original Works.

APK  
25.4.

*[Signature]*  
W. H. C.

To The S. E. IV Circle with plans and estimates.

Examiners P. W. Dept.

Revenue Department.

*[Signature]*  
B. P. S.

Note. This estimate is dealt with in the accompanying technical note. As the building in its present state,

is reported to be unsafe vide collector's letter No: 4596 d/11 January 1897 (Flagged A), it is proposed to provide funds for the work from the Provincial reserve.

ASH  
25.2.98.

W. H. G. 98

May

Note by the Chief Engr. P.W.D.

The estimate of Rs. 10,300 for improving the collector's office and the attached buildings at Coimbatore is recommended for sanction with the following alterations:-

- (a) In the estimate for the additional room with verandah in the main building, provision is made for concrete foundations 3' x 3'. They have been altered to 4 1/2' x 2' 9 3/8' x 6, weighing 41 lbs per ft.
- (b) Steel girders have been substituted for the 4 wooden beams. It is proposed to lay asphalt flooring 3/4" thick over the planks on 3 sides of the verandah of the upper floor, as great inconvenience has been felt owing to rain water finding its way through the joints of the planks into the room below, and as caulking has been tried without success. The undersigned considers that the planking should first be removed from a portion of the verandah and relaid with plain laths joints 1/8" apart, and then caulked by a boat builder from Calicut.

If this is not effective, the asphalt provided in the estimate can be ~~used~~ tried.

(d) The foundations provided for the combined stable and coach house appear to be ~~much~~ <sup>the depth of</sup> too deep for such buildings. Concrete has been reduced from 3' to 2', and brickwork from 2' to 1½' under side walls. A similar reduction has been made in the case of centre wall, but the <sup>increased</sup> height of the concrete has been ~~raised~~ from 2½' to 3'.

(e) The foundations of the latrines have been reduced from 3' x 3' to 2½' x 2'.

2. The above modifications do not alter the amount of the estimate.

Ack  
25.4.

W. H. S.  
E. W.  
18.7.50

May

## Calculation

Height of Terrace

$$18 \times 6 \frac{2}{3} \times 9 \times 120 = 10800$$

Joists

$$18 \times 6 \frac{2}{3} \times 3 \times 5 \times 50 = 451$$

$$\text{Live load} = 1000$$

$$\text{Total lbs } 12251$$

$$\text{or } 5 \frac{1}{2} \text{ tons.}$$

I understand that it is usual in the Technical section to allow 80 lbs per sq. ft. for live load over a terrace roof.

Allowing this

$$18 \times 6 \frac{2}{3} \times 80 = 9600$$

$$\text{Weight of terrace} = 10800$$

$$\begin{array}{r} \text{Joists} \quad \quad \quad 451 \\ \hline 2,085 \text{ lbs} \\ \text{or } 9 \frac{1}{4} \text{ tons} \end{array}$$

$$D = L \times M$$

$$= 18 \times 5 \frac{1}{2} = 99.$$

In page 67 Dorman and Douglass have book a girder 12" x 5" of 39 lbs per foot run is provided.

Multiplying total distributed D. M. load of 9¼ tons by 19.5; the distance from centre to centre of bearing, we get for the constant for load C.C. 450 W of 1.3.95/181. The result section to this is

9 7/8" x 6" rolled steel beams, having a weight of 41 lbs per lineal foot.

2 beams of 9 7/8" x 6" will be sufficient

Ack

22.4.

P.T.C.

The alterations ordered by Mr. have been attended to. As regards the substitution of girders for wooden beams to the main hall of collector's Office I beg to point out that 2 girders for each hall have been provided instead of one at the crown of the arch. The estimates have

have accordingly been altered in pencil and will be inked in after approval. The original amount is left unaltered.

21/4/98.

If the beams are not added thro' the India Office, an addition of  $\frac{1}{5}$ th to the strength should be made as I remember that suppliers in India complain that they are unable to supply steel of the standard of 60 480 W of 1 March/95.

Alterations approved and shall be embodied in a Chief Engr's note  
AOK

22.4.

The funds are always submitted through the Indian office.

22/4/98.

C. No. 2690

P. W. Secretariat.

Note by Budget Section.

Work Improvements to the Collector's Office at Coimbatore

|                              |                    |
|------------------------------|--------------------|
| Fund                         | Provincial         |
| Service Head                 | .. Civil Buildings |
| Departmental Head            | .. Original Works  |
| Amount of Estimate           | Rs. 10,300         |
| Expenditure in previous year | ..                 |
| Allotment in current year    | ..                 |
| Balance required to complete | ..                 |
| Total Rs                     | ..                 |

Note of available Funds.

No grant has been provided for this work in the Preliminary issue of the Provincial Civil Works Budget for 1898-99. The work is shown as item No 27 under class B works

P. H. S.  
16/4/98.

Current No. 2690

Letter No. 1394 Misc

Dated 19<sup>th</sup> March 1898

From the Revenue Dept.

## NOTE BY TECHNICAL SECTION.

Name of work... Estimate for improving  
the Collector's Office and  
attached buildings at  
Coimbatore.

Amount of Est. Rs 10,300

The Board of Revenue in their  
Proceedings No 343 Misc dated  
26<sup>th</sup> January 1897 sub-  
mitted for the orders of  
Govt. a proposal from the  
Collector for the extension  
of the Collector's Office, and  
for the construction of  
Stables and a latrine  
in the compound.

Govt. in their order No 931  
Misc dated 16<sup>th</sup> Feb 1897  
transferred the matter  
to the P. W. Dept. for the  
issue of the necessary order  
and the Chief Engineer  
in his order No 624 W of  
4<sup>th</sup> March 1897 commu-  
nicated the same to the  
Suprs Engineer IV Circle

Draftsman. Ch 2690  
Coimbatore Litcherry

## Note by Budget Section.

Mr Burtin tells me that,  
as a crowd of people may  
at times come on a tenanted  
roof, it has been the  
practice in Mr's Office to  
allow 80 lbs per sq ft  
for line load.

2. Allow this in  
Coimbatore Litcherry, &  
let me know

- (1) Distributed load in tons  
that each pider has to  
carry
- (2) Distance in feet from  
centre to centre of bearing  
and I will then

calculate the required  
dimensions of the piders

AsK

22.4.

for submission of the necessary plans and estimates.

The Ag Collector of Coimbatore in his letter No 3977 of 9/97  
Reo  
dated 8th January 1898  
submits through the Land Revenue Dept an estimate amounting to Rs 10,300 received from the Sup<sup>s</sup> Engineer II Circle for the necessary improvements and attached buildings for the sanction of Govt. and allotment of funds.

The estimate amount of Rs 10,000 is divided as follows:-

|                                                                         |           |
|-------------------------------------------------------------------------|-----------|
| 1/ Improvements to the Collector's Office.                              | 4265      |
| 2/ Do. to Sheristadar's Office.                                         | 470       |
| 3/ Constructing a tiled Verandah to the Treasury Dy Collector's Office. | 485       |
| 4/ -do- do- to the Head Quarter Dy Collector's Office.                  | 880       |
| 5/ A combined stable and Coach House for the Collector's Office.        | 1485      |
| 6/ Do. three latrines 2 at 210 each.                                    | 630       |
| 7/ Improving the Limerator in the Collector's Office.                   | 55        |
| 8/ Completing Compound wall of the Collector's Office.                  | 2030      |
| Contingencies 5% of 486.                                                | 486       |
| Petty Supervision 2 1/2% of 249.                                        | 249       |
| Grand Total                                                             | Rs 10,300 |

Particulars of improvements to the Collector's Office.

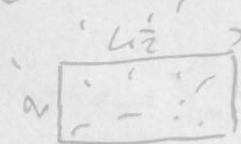
1/ Constructing an additional room 48' x 20' with a verandah all round; The top of the roof of this room coincide with the floor level of the upper verandah adjoining. The beams will be laid so as to give the surface of the roof a slope of 3" to the outside. The floor of the room will be formed of stone squares laid on 4" of concrete. The floor of the near or west verandah where there is little traffic, will be of concrete and the South verandah will be floored with gravel. The double window in the South wall of existing room will be removed and the wall below them cut down to floor level. This can be done as there is an elliptical arch over each pair of windows. The windows will be replaced in the outside wall of the new room.

The depth of foundation is to be 5 1/4 ft i.e. 3 feet of concrete and 2 1/4 ft brick in mortar. The surface soil for a depth of 1' is alluvial, then Red Loam for 2 1/2 ft, gravel 1 foot below, and rocky underneath.

The basement will be 2 1/4 ft high of brick in mortar.

The substructure walls will be 13 1/2 ft high of brick in mortar with circular arches over doors

make the concrete



wt 3' x 3' 4 1/2'

and windows, plastered with 2 coats of Chumam plaster. Roofing. South room & East Verandah will be terraced - West Verandah tiled.

In the main room 4 beams & joists are provided, but by using 2 iron joists instead of the 4 wooden beams & joists of increased scantling a saving of Rs 59 will be effected - vide calculation sheet attached.

It is proposed to lay a layer of asphalt  $\frac{3}{4}$ " thick over the planks forming the floor on 3 sides in the verandah of the upper floor as great inconvenience has been felt owing to rain water finding its way through the joints of the planks into the room below. Caulking was tried without success - As the wood is seasoned it is thought that with the joints carefully closed asphalt would answer, as is evidenced in the draw bridges over the moat at the Salis of Fort. St. George.

Saving is too small to warrant consideration, particularly as price of iron varies so much that it may altogether disappear.

I want to substitute iron to steel for wood in beams where possible. Please do where - Do to check calculation.

This is a somewhat novel proceeding. It may be tried, as caulking is said to have been ineffective.

The caulking must have been best of me. Look at a ship deck. Say in the note that the planing

5  
Should first be removed from a plank & cement into plain lute points  $\frac{1}{4}$ " apart then caulked by a hot ladder from Chen Office. If this is not effective the asphalt may be used in the estimate and

3  
The doors & windows are to be of teak according to the description given in plan estimate -

Stone slabs will be substituted for concrete floor in the lower floor of the Collector's Office.

(2) Converting the Sheristodai's room into a vernacular room so as to allow of the existing vernacular record room being used as a store room for articles now stored in the Treasury building. The skylights and ridge ventilators in the roof will be removed and the roof made continuous & secure. Iron bars will be provided to the windows when necessary. Substituting stone slabs for concrete floor in the verandah of the new vernacular record room. Asphalt flooring  $\frac{3}{4}$ " thick over the plank flooring of upper story over the English record room is also proposed.

(3). Constructing a tiled verandah on the northern side of the Dy Collector's Office. This tiled verandah was

constructed in 1896 when the  
 bands were removed after  
 the fire as an urgent work.

(4) Constructing a tiled veran-  
 dah on the Southern part  
 of the Eastern sides of the  
 office of the Head Asst Dy  
 Collector as desired by the  
 Collector.

(5) Constructing a combined  
 Stable and Coach house on  
 the site shown in Survey.  
 In the accommodation of  
 6 horses and carriages. To  
 prevent the out-houses getting  
 into bad order, & to avoid  
 frequent repairs to the roof,  
 corrugated iron with a double  
 layer of pot tiles will be used.  
 This will also keep the Stables  
 tolerably cool. Surface soil  
 sand for  $1\frac{1}{2}$ ' - sub. soil loose  
 gravel in  $2\frac{1}{2}$ ' below, & 1 foot  
 decayed rock followed by  
 good rocky soil below this.

(6) Constructing <sup>3</sup> latrines on  
 site shown on Survey plan.  
 There is, at present, only one  
 latrine in a remote corner.  
 It is situated too remote to  
 be of use, & is in very bad order.  
 The sub soil pattern being  
 simple, cheap, & effective  
 has been adopted.

Hard Kunkur is met with  $3\frac{1}{2}$ '  
 in depth in 2 latrines & hard gravel  
 at  $3\frac{1}{2}$ ' in 3rd latrine.

5' Found no much too  
 deep for such a building  
 Reduce concrete to  
 2' a brickwork to  
 $1\frac{1}{2}$ ', under side walls  
 under centre wall, & to  
 but make concrete 3'  
 wide

make foundation  $2\frac{1}{2} \times 2$   
 1912

7) Improving Linerator.  
 An iron grating will be fixed  
 1 foot above ground level so  
 as to make the Linerator  
 more effective.

8) Constructing a compound  
 wall with gates in a length  
 of 400 ft on the North, 410  
 ft on the West, and 662 ft  
 on the South side as shown  
 on site plan.

The wall will be  $4\frac{1}{2}$  ft to  
 top of coping,  $1\frac{1}{2}$  ft thick  
 with 2 ft foundation &  
 will be built of rough stone  
 in mud, except coping  
 which is to be built of  
 brick in Chumam & plastered.  
 The walls will be pointed  
 on both sides. An ornamental  
 iron gate will replace  
 the existing broken wooden  
 one at the main entrance  
 and two hand gates will  
 be provided - one on the  
 Railway Station path &  
 the other on the North-  
 Western corner. A suitable  
 wooden gate will be put  
 up at the entrance opposite  
 the Registrar's Office.

The doors & windows are to  
 be of teak painted with  
 2 coats of bitumastic chocolate paint.

The roof timbers are to be of teak  
 in the Collector's Office, and  
 for attached buildings for  
 the wood wrought & put up  
 stained with 2 coats of  
 wood oil.

The Scantings are correct.

Rates - The rates are fair  
 & detailed data has been  
 furnished for Concrete, Rough  
 Stone in Chumam, Mat form  
 moulded bricks in mortar,  
 granite paving Stone of masonry,  
 masonry, & corrugated  
 iron roofing with hot tiles  
 & Chumam borders.

The Estimate has been con-  
 sidered by the Ag Collector  
 & approved in the Revenue  
 Dept.

16-7-11.  
 16.4.98

1/ This line load is the same  
 as for a bridge, whereas an  
 ordinary terrace roof never  
 has any line load at all.  
 Has no standard ever been  
 laid down for line loads  
 for roofs with no floor above  
 & not ordinarily intended  
 to be used for any line load?

Ask  
 22.4

# Calculation sheet

Weight of Terrace

$$18 \times 10 \times 9' + 120 = 16200$$

Joints

$$13 \times 10 \times 3' \times 6' + 46 = 748$$

Line load

$$18 \times 10 \times 120 = 21600$$

Total lbs 38548

Tons 17.

$$W = L \times w$$

$$= 18 \times 17 = 306$$

In Chap 29 Dorman, Long. Ho.  
 hand book opposite 317.34

a pider 14" x 6" of 57 lbs to the

foot run will suffice.

$$\text{Two piders } 20\frac{1}{4}' \times 57 \text{ lbs} = 221\frac{1}{4} \text{ lbs}$$

$$= 11 \text{ Cwt.}$$

11 Cwt at 10 1/2 lbs per Cwt including

$$\text{delivery & fixing} = 115\frac{1}{2} \text{ say } 116 \text{ R.}$$

$$\text{Joints. } 2 + 13 + 21\frac{1}{2} + \frac{1}{4} + \frac{1}{2} = 70 \text{ lbs}$$

$$70 \times 3-12-0 \text{ per Cub Foot} = 262\frac{1}{2} \text{ R.}$$

$$262 + 116 = 388\frac{1}{2} \text{ R.}$$

$$4 \text{ beams & joints as per Estimate}$$

$$119.25 \text{ Cub Ft} \times 3-12-0 \text{ per Cub}$$

$$\text{Foot} = 447\frac{1}{4}$$

$$447\frac{1}{4} - 388\frac{1}{2} = 58\frac{3}{4}$$

$$\text{So that there will be a saving}$$

$$\text{of } 58\frac{3}{4} \text{ by using Steel piders}$$

$$\text{instead of wooden}$$

$$\text{beams & joints.}$$

$$16-7-11.$$

$$16.4.98$$

Public Works (1898) Department.

CURRENT No. 2690

10974

From

The Revenue Department.

Order

No. 1391/1

Dated 19 Mar /98.

Received

Registered

Enclosures

Spare copies

23. 3. 98

13 (7 plans)

SUBJECT.

Approving & transmitting  
to the Public Works Dept for  
sanction plans & estimates  
for improving the Collector's  
office Comptroller.

2 Sanction  
C.M.  
94/3/98.

100 29 32/5

BACK PAPERS.

| No.  | Date.  |
|------|--------|
| 624W | 4-3-97 |

FURTHER PAPERS.

| No. | Date. |
|-----|-------|
|     |       |

Roc No. 3977 of '97  
Rev.

Coimbatore COLLECTOR'S OFFICE,  
dated 8<sup>th</sup> January 1897.

FROM

A. Butterworth, Esq.,  
Ag. COLLECTOR OF Coimbatore,

TO

THE SECRETARY TO THE COMMISSIONERS OF

Law Revenue,  
Madras.

SIR,

I have the honour to forward herewith  
an estimate with plans amounting to Rs 10,300  
received from the Superintending Engineer,  
IV circle, for improving the Collector's Office  
and attached buildings at Coimbatore and  
to request that the same may be trans-  
mitted to Government for sanction and  
allotment of funds.

2. Some of the items of the estimate referred  
to

to in the report of the Executive Engineer, ac-  
companied the estimate and amounting to

Rs 6,380, have been sanctioned by Government

in G.O. no 624, W., dated 1<sup>st</sup> March 1897, G.O. 493  
10.3.97

Communicator in B.P., no 1034, Mis., dated

19<sup>th</sup> March 1897, while the others have been

suggested to the Executive Engineer from time

to time.

3. It is requested that the estimate & plans  
may be returned with the necessary sanction.

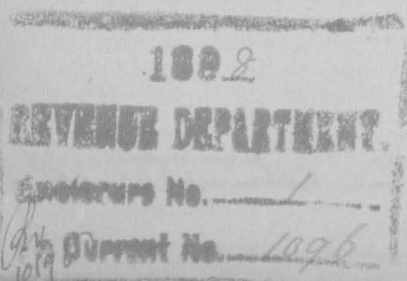
I have the honor to be,

Sir,

Your most obedient servant,

For ag Collector.

05/03/97  
2632



Copy of Proceedings of the Board of Revenue,  
Land Revenue, Reference No. 124 dated 4th Febr. 1898.

Read letter from the Collector of Coimbatore, to the  
Secretary to the Commissioners of Land Revenue, Madras, R.  
O.C. No. 3977/Rev. of '97 dated 8th January 1898.

Reference thereon, dated 4th Febr. 1898, No. 124.

The plans and estimate amounting to Rs. 10,300  
for improving the Collector's office at Coimbatore and  
the attached buildings, are submitted for the sanction of  
Government with reference to Government Order, No. 493  
Revenue, dated 10th March 1897.

2. The estimate includes a provision of Rs. 630 for con-  
structing small roofed latrines of the Sub-jail pattern,  
and another sum of Rs. 2030 for completing the compound  
wall on the same pattern as the portion already constructed.  
The Board considers that the latter improvement is clearly  
desirable. From the ground plan the provision of three  
latrines at Rs. 210 each appears calculated to promote  
the convenience of different branches of the several esta-  
blishments occupying the compound, but considering the  
dryness of the Coimbatore climate it would seem to deserve  
consideration whether latrines without a roof would or not  
on the whole be preferable as well as cheaper. The saving  
would however, be inconsiderable.

(True Copy)

Ag. Under Secy. to Govt.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read the following paper:-

Copy attached.

(22)  
Proceedings of the Board of Revenue, No. 124 Ref.  
dated 4th February 1898.

That

ORDER THEREON, No. 1394 Mis., dated 19th March 1898.

The plans and estimates are approved and will be transferred to the Public Works Department for sanction.

2. The expediency of laying asphalt over the planks in the upper verandah of the Collector's Office and in the room above the English Record Room will be considered in the Public Works Department.

(True Extract)

*W. M. A. M. S.*

for Ag. Secretary to Government.

To the Public Works Department with papers. ✓

" Board of Revenue, Land Revenue.

85/0592  
93570

R

Gobt. of {189 } Madras.  
REVENUE.

To

Dated

Recd.

Encl.

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Mis. G.O.,                      189 , No.  
R.

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SUBJECT.