

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following letter from H. B. GRIGG, Esq., M.A., Director of Public Instruction, to the Chief Secretary to Government, dated Madras, 20th November 1883, No. 7799:—

I have the honor, in submitting two letters from the Principal, Kumbakónam College, forwarding approximate estimates, amounting to Rs. 12,600 and Rs. 27,130, for additional accommodation to be provided in connection with the college building, to request that the Consulting Architect to Government may be instructed to prepare complete plans and estimates for the works. I beg also that he may be instructed to consider the best location for the additions in view of the architectural effect of the building. Considering the importance of the work, the Executive Engineer thinks that the design should be prepared by that officer. The need of a laboratory and science lecture room is very great, and should be provided as soon as possible.

ENCLOSURES.

From G. H. STUART, Esq., Principal, Kumbakónam College, to the Director of Public Instruction, dated Kumbakónam, 17th September 1883, No. 180.

I have the honor to forward, herewith, an approximate estimate, amounting to Rs. 12,600, for a laboratory, lecture room and apparatus room for this college. The estimate has been prepared by Mr. Hughes, Executive Engineer of this division, in accordance with a sketch furnished by Dr. Wilson, of the Presidency College, in his letter, dated 30th April 1883, to the Acting Director of Public Instruction; the sketch is herewith returned.

Mr. Hughes thinks that the design ought to be made by the Government Architect.

Approximate estimates for the other necessary additions to the college will be forwarded shortly.

From the same Officer, dated Kumbakónam, 15th October 1883, No. 212.

I have the honor to enclose provisional estimate, amounting to Rs. 27,130, for additions to this college. This estimate has been prepared by Mr. Hughes, Executive Engineer, Tanjore. The design is a two-storied building comprising six rooms—three below and three above. Of these, one is a consulting library, one a private room for the Principal, and the other four are class rooms, viz., one for English professor, one for Assistant English lecturer, one for logic, and one for history. I enclose a sketch of the existing building showing the proposed arrangement of classes. The examination hall has hitherto been used as a class room instead of being kept to its proper use for examinations. The room marked 1 C is a very dark room and is a thoroughfare to 1 B, 2 A and 1 A. It would only be used when the first class becomes so large that it must be put into three divisions. The sketch shows that every room will be fully occupied, including the new rooms, and so gives some idea of the present crowded state of the class rooms—a state which must be injurious to the health of the students.

No. 2298, Educational.

Approved and transferred to the Public Works Department for further disposal.

27th November 1883.

(Signed) E. S. LAFFAN,
Acting Under Secretary.

ORDER—dated 29th November 1883, No. 3417 W., Public Works.

Communicated to the Consulting Architect to Government, who will submit the requisite detailed plans and estimates.

(True Extract.)

(Signed) J. SHAW-STEWART, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Consulting Architect to Government, with five enclosures.

„ Superintending Engineer, Sixth Circle.
„ Educational Department.

Exd. P. L. Pereira.

Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of (1883) Madras.

PUBLIC WORKS.

Dated November, 29th.

Recd.

Encl.

G.O., 29th Nov. 1883, No. 3417 W.

NOVEMBER.

Kumbakonam College

Detailed plans and estimates for certain additions to the —, ordered to be prepared by the Consulting Architect to Government.

27TH MARCH 1884, No. 835 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following letter from Major J. L. L. MORANT, R.E., Officiating Consulting Architect to Government, to the Chief Engineer, Public Works Department, dated Madras, 25th March 1884, No. 1693 :—

I have the honor to inform you that I asked the Chemical Examiner of Madras to be so good as to examine the efflorescence found on the walls of the Public Works offices, Chépâk, and to suggest a remedy. He most kindly thoroughly examined our lime, sand, mortar, burnt bricks, and the clay from which they are made, and after a careful investigation and mature consideration reports that the efflorescence is due mainly to the mortar. He suggests the following preventive remedies :—

- (1) Removing the salt in the sea-shells by having them washed in soft water before they are burnt for lime.
- (2) The introduction of damp proof courses in the walls at a convenient level above the ground.
2. Perhaps you may see fit to order the Government officer, in whose charge the burning of shells for lime is, to adopt the first proposed remedy.
3. The Calcutta Engineers have lately taken to building into their walls at about basement level a course of vitrified stoneware bars, called "Taylor's patent damp proof course," obtained from the Broomhall Tile and Brick Company, Cox's Wharf, Upper Ground Street, Blackfriars, London. These might, in the first instance, be obtained from that firm, and perhaps afterwards they might be manufactured in India. The vitrified bars are shaped something like double-headed railway rails and, when laid together in cement, allow an air passage between the hollow chambers thereby formed.

4. That the efflorescence complained of is not solely an Indian product the following extract from a London professional paper will show :—

"The extensive use of red bricks, which have been made of late years for houses and public buildings, has caused a good deal of attention to be paid to a curious disfigurement to which such structures are liable, in the form of a kind of white mould which is apt to creep over their surfaces. The best of buildings are quite as subject to this disfigurement as the worst, the new Technical College at South Kensington, for instance, being just now covered in places with this objectionable kind of eruption, which is not very generally understood, and for which no remedy has yet been found except time. An American paper publishes one or two scientific opinions on the matter, one being that of the President of the Academy of Natural Science. According to this authority, the white efflorescence is simply ordinary Epsom salts, or sulphate of magnesia, and the production of it on brick surfaces must be regarded as evidence of the presence of sulphuric acid in the air, the result of coal burning. There is magnesia in the mortar with which the walls are built, and there is sulphuric acid in the air and in the presence of moisture a chemical combination takes place, the result being sulphate of magnesia. This dissolves in the rain and runs down over the bricks, and evaporation leaves the white deposit. Another chemist agrees that this is the way in which the efflorescence is produced, but thinks that it is potash with which the sulphuric acid combines, and that the white is sulphate of potash, while another authority considers it to be sulphate of lime. All agree, however, that it is the sulphuric acid in the air which causes this disfigurement, and this is really the important aspect of the matter."

5. I append a copy of the Chemical Examiner's letter.

ENCLOSURE.

From T. K. ROGERS, Esq., M.B., F.R.C.S., F.I.C., AND F.C.S., Lond., Chemical Examiner, to the Consulting Architect to Government, dated Madras, 29th January 1884, No. 1586.

In reply to your letter, No. 1389, dated 19th January 1884, I have the honor to state that the efflorescence has been found to be chiefly composed of carbonate of soda.

2. It was found that soda carbonate was present in one of the bricks and also in both samples of clay, but the quantity found was so trifling that it is improbable that the efflorescence could have been to any important extent due to the bricks. The following facts also support this view of the case :—

- (1) Bricks after simple exposure for many weeks do not show efflorescence beyond a trifling amount.
- (2) Bricks frequently wetted with distilled water and allowed to dry gave a similar result.
3. On examining the samples of chunam and cement it was found that they both contained soda and soda carbonate in considerable amount. I think therefore that the chunam and cement are to be regarded as the important sources of the efflorescence of soda carbonate.
4. The preventive measures which I would suggest are as follows, viz. :—
 - (1) The removal of the common salt mixed with the sea-shells used for making chunam or cement. This can probably be done by simply washing the shells with soft water before burning them.
 - (2) The use of dry courses at a convenient level above the ground. This suggestion is made because it is believed that in certain places a good deal of water rises into the walls from the ground. And when water contained in walls evaporates, a considerable portion of the salts which were in solution is deposited on the surface.

ORDER—dated 27th March 1884, No. 835 W., Public Works.

The Consulting Architect will make trial of the remedies recommended, and report thereon in due course.

(True Extract.)

(Signed) J. SHAW-STEWART, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Consulting Architect to Government.
„ Superintending Engineer, V Circle.

Exd. E. Fernandez.
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BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of 1884 Madras.

PUBLIC WORKS.

Dated March, 27th.

Recd.

Encl.

G.O., 27th March 1884, No. 835 W.

MARCH.

Public Works Offices, Chepak

The Consulting Architect directed to make trial of the remedies recommended for removing the efflorescence found on the walls of the —.

30TH JULY 1883, No. 2064 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers :—

From C. VINCENT, Esq., Officiating Consulting Architect to Government, to the Chief Engineer, Public Works Department, dated Chepauk, 22nd June 1883, No. 327.

With reference to the concluding sentence of your memorandum, No. 982 C., of the 18th May, I have the honor to report on the subject of the piece of ground between Messrs. Parry and Company's

Offices and the Grant School suggested for the stabling required in connection with the new Post Office.

2. The first of the accompanying plans shows the general position of the block of ground in question, and the second is a regular site plan showing how the ground is now occupied.

3. There will, I believe, be no difficulty regarding the giving up of the piece of ground marked in the plan as in the occupation of the "Executive Engineer Department." The accompanying copy of a letter will show you how the case stands as regards the piece of ground marked as in the occupation of the Commissariat Department, but for which the Quartermaster-General appears to be responsible. That officer regrets his inability to give up the piece of ground, but from General Stewart's letter it seems that if similar accommodation is provided elsewhere no objection would be raised, and I am personally informed that an addition to the existing mule stables on the beach would probably be accepted. I have addressed the Quartermaster-General again on this point, but it may, I think, be taken for granted that this would satisfy the military authorities concerned.

4. The whole block would be of just the right size for the required stabling, and after further inquiry and search I have failed to discover any other piece of ground in the neighbourhood available for the purpose, and I therefore recommend that the sanction of Government to the transfer of this block may be obtained.

5. Soliciting the favor of early orders, I have, &c.

ENCLOSURE.

From Brigadier-General R. C. STEWART, C.B., Commanding Eastern District, to the Quartermaster-General, dated Fort St. George, 18th June 1883, No. 195 G.

With reference to your endorsement, No. 4331, of 10th June 1883, forwarding for report letter from the Consulting Architect to Government, and requesting to know if the piece of ground lying between Grant School and Messrs. Parry and Company's Offices could be made available for stabling for the new Post Office, &c., on the beach, I have the honor to state that the piece of ground in question cannot be given up unless the district is provided with other stabling on an equally convenient site.

2. The stabling referred to is much needed by this department for the conservancy and also for the sick and platform carts and bullocks required for the troops embarking and disembarking at this port.

No. 4409.

True copy forwarded for information with reference to his letter, No. 298, dated 14th instant, and with an expression of regret of the Quartermaster-General that, under the circumstances, the site in question cannot be made available for stabling for the new Post Office.

(By Order.)

(Signed) D. J. S. McLEOD, Major,
Offg. Dy. Quartermaster-General.

No. 1198 C., Public Works.

Referred to the Military Department, with request that the site in question may be made over to the Public Works Department, on the understanding that similar accommodation for the Commissariat cattle will be provided as an addition to the mule stables on the beach.

(By Order.)

(Signed) C. BOWEN, Major, R.E.,
Under Secy. to Govt., P.W.D.

25th June 1883.

No. 3607, Military.

Referred to His Excellency the Commander-in-Chief.

OOTACAMUND,
28th June 1883.

(Signed) E. L. HANKIN, Colonel,
Secretary to Government.

From Lieutenant-Colonel R. C. STEWART, Quartermaster-General, to the Secretary to Government, Military Department, dated Fort St. George, 9th July 1883, No. 4913.

In returning the papers received under Reference Order, No. 3607, dated 28th June 1883, I am desired to state that the piece of ground in question can be dispensed with by this department if equally good and convenient stabling and shelter for Ambulance Transport carts is provided elsewhere.

2. The site indicated in the letter of the Government Architect adjoining the mule stables on the beach would answer the purpose well, but as heavy carts will have to be moved to and fro from it to the road, it is necessary that a hard metalled approach should connect it with the road and a level crossing be provided over the lines of the Beach Railway.

3. It would also be requisite that the pipes by which the present stables are supplied with water from the Seven Wells should be extended across the road to the new site.

No. 3882, Military.

Transferred to the Public Works Department and the referred papers returned.

There is no objection in the Military Department to the transfer of the site referred to on the conditions specified by the Quartermaster-General.

(By Order.)

(Signed) E. L. HANKIN, Colonel,
Secretary to Government.

OOTACAMUND,
12th July 1883.

From C. VINCENT, Esq., Officiating Consulting Architect to Government, to the Chief Engineer, Public Works Department, dated Chepauk, 11th July 1883, No. 393.

In continuation of my letter, No. 327, of 22nd June 1883, regarding the site for the Post Office stables on the beach, I have the honor to forward, herewith, true copy of a letter received from the Quartermaster-General's Department, from which it will be seen that no objection is made to giving up the piece of ground referred to, so long as equally good accommodation is provided in connection with the existing mule stables. The Executive Engineer, Presidency, having also no objection to giving up his portion of the ground, I beg to be allowed to recommend that the site may be sanctioned for the Post Office stabling in view of the preparation of the necessary plans.

ORDER—dated 30th July 1883, No. 2064 W., Public Works.

The Consulting Architect to Government will submit the requisite plans and estimates for stabling required in connection with the new Post Office on the site indicated, and for stabling and shelter for Military Ambulance Transport on the plot of ground adjoining the mule stables on the beach.

2. The points noted in paragraphs 2 and 3 of the Quartermaster-General's letter should receive attention.

(True Extract.)

(Signed) R. H. SANKEY, Major-General, R.E.,
Secretary to Govt., P.W.D.

To the Consulting Architect to Government, with two Enclosures.
„ Postmaster-General.
„ Military Department.

Exd. A. F. Goodall.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of 1883 Madras.

PUBLIC WORKS.

Dated July, 30th.

Recd.

Encl.

G.O., 30th July 1883, No. 2064 W.

JULY.

Stabling for the new Post
Office, Madras

The Consulting Architect to Government to submit the requisite plans and estimates for —, and for stabling and shelter for Military Ambulance Transport near the mule stables on the beach.

19TH MAY 1884, No. 1261 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers:—

Remarks of the Committee appointed under G.O., No. 3464 W., Public Works, dated 3rd December 1883.

In pursuance of G.O., dated 3rd December 1883, No. 3464 W., Public Works, the committee therein nominated met on 21st January 1884.

The different sites alluded to in the Consulting Architect's letter were inspected, viz.:—

1. The proposed site on beach road near Messrs. Parry and Co's office.
2. The site marked A.
3. The site marked B known as Mofuskhan's gardens, and C close to Post and Telegraph offices.
4. The present mule stables.

The committee are of opinion that Messrs. Parry and Co's objection to having a stable located just under their office and the neighbouring school is a valid one and should, if possible, be respected.

The site marked A is, on inquiry, found likely to entail a much greater outlay than the amount mentioned in the Consulting Architect's letter, viz., Rs. 25,000; it would more nearly approach 75,000.

But a small piece of ground not alluded to in the paper, close by the Post office marked C might be acquired for (Rs. 3,000 ?) and on it suitable stables might be erected for the officials only. The stabling for the service horses to be placed on the piece of ground called Mofuskhan's garden. The two would cost, including building, about Rs. 47,000.

Then there remains the present mule stables which come under consideration because the Executive Engineer, a member, informs the committee that he is in want of space for 500 mules, and that it will be necessary considerably to enlarge the present building. As Messrs. Parry and Co. already object to the comparatively small establishment, their objection to 500 would, of course, be much stronger. It will probably therefore be necessary presently to erect stables for mules in some other locality, and the present stables would have either to be pulled down or utilized in some other way. Why not convert them at once into stables for the Post office? The cost would be, including accommodation for the horses and carriages of officials, about Rs. 22,000, a probable saving of Rs. 25,000 to Government and their proximity to the Post office makes the site a desirable one.

Convenience and economy are on the side of converting the present mules stables into Post office stables. Against this it is urged that as the Harbour and Port of Madras become developed it is not probable that stables will be allowed to occupy such a site, the land will be wanted for more important buildings. This is a point Government would probably be able to decide better than the present committee.

The choice seems therefore to lie between Mofuskhan's garden and the present mule lines. In Appendices X and Y attached are given the approximate cost of each site, and a tracing showing the different localities accompanies this report.

MADRAS,
29th January 1884.

(Signed) M. C. FURNELL, M.D., F.R.C.S.,
Sanitary Commissioner.

(„) J. L. L. MORANT, Major, R.E.,
Offg. Consulting Architect.

(„) S. SULLEN,
Presidency Postmaster.

As there appears to be no probability of Government allowing any large extension of the present mules stables now capable of containing 75 mules, &c., and as the Commissariat and Quartermaster-General's Departments require much larger accommodation so as to contain in addition to the above, 144 bullocks, 59 carts, 4 dhoolies, 20 trollies, 169 cattle attendants and families, 1 gram boiling shed and other buildings, I am of opinion there is no choice in the matter but for these mule stables to be either pulled down, or handed over to the Post office authorities for whose purposes they are apparently very suitable and can be adapted.

The early selection of a new site for Commissariat cattle lines elsewhere will then be necessary.

(Signed) W. H. BURTON, Lieut.-Col., R.E.,
Executive Engineer, Presidency Division.

No. 375 C., Public Works.

Referred to the Military Department, for favor of information whether His Excellency the Commander-in-Chief and the Government have any objection to the proposal to convert the mule lines on the beach into Post office stables.

CHEPÁK,
16th February 1884.

(Signed) J. SHAW-STEWART, Colonel, R.E.,
Secretary to Government, P.W.D.

No. 791, Military.

Referred to the Commissary-General for report through His Excellency the Commander-in-Chief (Quartermaster-General's Department).

(By Order.)

FORT ST. GEORGE,
18th February 1884.

(Signed) A. R. KENNEY-HERBERT, Lieut.-Col.,
Offg. Secretary to Government.

From Colonel B. H. W. MAGRATH, Commissary-General, to the Quartermaster-General, Ootacamund, dated Madras, 28th March 1884, No. 7926.

The committee appointed in G.O., No. 3464 of 3rd December 1883, to select a site for the Post office stables at Madras advocate the conversion of the present mule lines for that purpose, on the grounds of economy and convenience, and as their recommendation will probably meet with the approval of Government, I have the honor to enclose, for submission to His Excellency the Commander-in-Chief, a sketch of some Government land on which I believe it would, from every point of view, be most advantageous to locate the transport establishment of this district.

2. For many years this question has been cropping up but no definite solution has ever been arrived at.

3. Originally it was intended to make lines for all the cattle and their attendants at Washermanpettah: plans and estimates were prepared by the Public Works Department, but that fell through.

4. Subsequently Government sanctioned the erection of the present mule lines, and it was intended to concentrate all the transport in the same place: this scheme has also fallen through.

5. Nothing can be more unsatisfactory than the state of affairs now; the draught bullocks with their carts and attendants are at Washermanpettah where the transport officer cannot exercise a proper supervision over them; the mules are on the beach, but their attendants live two miles away; the non-commissioned officer who should superintend the feeding of all the cattle daily cannot do so as the two lines are so far apart; the bullocks have on an average to go three miles to their work and after their work is over have to return the same distance, thus entailing much additional labor which the cattle should be spared; it is impossible to comply promptly with emergent requisitions the cattle lines being so far away from indenting officers; in fact, there can be no method, no supervision and no economy, as long as the transport cattle are kept where they are.

6. His Excellency will see by a reference to the plan that the land required by this department for mule, bullock and attendant lines is but a small corner, the alienation of which for this purpose cannot injuriously interfere with any one.

7. The situation is very central and in every respect the best available in Madras; it is a mile closer to the Fort than Washermanpettah, and nearly five miles closer to the Bakery, St. Thomas' Mount, Pallavaram and Poonamallee; it is further from the Commissariat stores where transport cattle have a good deal of work, but even this one drawback will cease if my suggestion of moving the office of the Executive Commissariat officer, Madras, into the Fort is carried out.

8. I trust His Excellency will be pleased to apply to Government for this land and that he will be good enough to use his influence to have the lines erected as soon as possible.

From Colonel B. H. W. MAGRATH, Commissary-General, to the Secretary to Government, Military Department, Fort St. George, dated Madras, 21st February 1884, No. 2662 T.B. (through the Quartermaster-General).

In returning the proceedings of a committee appointed to select a site for the stables of the new Post office, referred for report under your endorsement, No. 791, dated 18th February 1884, I have the honor to state, with reference to the proposal therein made, that, with the following provisos, there is no objection to the present mule stables being surrendered for that purpose.

2. In appendix Y, it is estimated that a sum of Rs. 14,000 would be sufficient to erect similar mule stables elsewhere. This estimate will require confirmation when the new site has been selected.

3. An estimate of about Rs. 81,770 has been sanctioned by Government for the erection of stables and quarters for animals and attendants as per margin, and plans have been submitted by the Chief Engineer, and approved of by this office, for their construction; the site of the new mule lines should therefore be chosen so as to admit of the proposed additions being carried out when funds are allotted. The committee have been misinformed that extra accommodation is required for 500 more mules; such is not the case.

4. The present mule stables cannot be given up until the proposed stables in their stead have been actually built upon an approved site. For if they were given up now there would be no shelter for the mules while new stables were under construction, and it is more than likely that there would be considerable delay in even allotting funds for the purpose.

No. 2112.

Forwarded, with the suggestion of His Excellency the Commander-in-Chief that, whatever amount may be required for new stabling for mules of the transport department be provided from funds which are available from the grant for the Post office buildings, the present mule stabling in the beach being made over for Post office purposes when the new ones are completed.

2. The cost of acquiring a site for the new mule stables, &c., should likewise be met from the grant for the Post office buildings, the site originally set apart for these stables being now required for Post office purposes.

3. A letter, No. 7926, dated 28th instant, from the Commissary-General on the subject of a site for the new stabling, &c., is herewith forwarded for the consideration of Government.

(By Order.)

OOTACAMUND,
1st April 1884.

(Signed) R. C. STEWART, Brigadier-General,
Quartermaster-General.

No. 1685, Military.

Transferred to the Public Works Department and the referred papers returned.

The Government in the Military Department have no objection to the arrangement, provided the expenditure already incurred on the present mule stables be written back to Military.

2. The site proposed by the Commissary-General for cover for the whole of the Military transport located at Madras is approved.

(By Order.)

FORT ST. GEORGE,
8th April 1884.

(Signed) A. R. KENNEY-HERBERT, Lieut.-Col.,
Offg. Secretary to Government.

From W. R. CORNISH, Esq., F.R.C.S., C.I.E., Surgeon-General with the Government of Madras, to the Chief Engineer, Public Works Department, dated Ootacamund, 7th May 1884, No. O-47.

With reference to your letter, No. 86 E., dated the 5th instant, I have the honor to inform you that in my opinion the site proposed for the erection of stables for the Commissariat mules on the Pudupet maidan will not inconvenience the new ophthalmic hospital, if arrangements are made for proper conservancy.

2. The plan is herewith returned as requested.

ORDER—dated 19th May 1884, No. 1261 W., Public Works.

After careful consideration of the various proposals which have been made for providing the requisite stabling accommodation in connection with the new Post office at Madras, the Government are of opinion that the present Commissariat mule stables on the beach should be availed of, other accommodation being provided from Postal funds for the Commissariat mules on the Pudupet maidan the property of Government. The Surgeon-General is of opinion that the proposed site on the Pudupet plain will be unobjectionable so far as the new ophthalmic hospital in the same locality is concerned, provided arrangements are made for proper conservancy.

2. The Consulting Architect to Government will now, in communication with the Commissary-General, frame the requisite estimates for new mule stables, the cost of which should be added to separate estimates which should be drawn up for adapting the existing mule stables for Postal purposes.

3. The new mule stables should first be taken in hand, and, on their completion, the stables on the beach will be vacated and the requisite alterations to them carried out.

(True Extract.)

(Signed) J. SHAW-STEWART, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Consulting Architect to Government, with plans and estimates.
" Superintending Engineer, V Circle.
" Military Department.
" Financial
" Examiner, Public Works Accounts.

Exd. A. Aubert.

Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of (1884) Madras.

PUBLIC WORKS.

Dated May, 19th.

Recd.

Encl.

G.O., 19th May 1884, No. 1261 W.

MAY.

Stables

Estimates called for for adapting the present Commissariat mule stables on the beach as — for the new Post office, Madras; and for building fresh ones for the mules on the Pudupet maidan.

5TH JANUARY 1883, No. 2, EDUCATIONAL.

GOVERNMENT OF MADRAS.

EDUCATIONAL DEPARTMENT.

READ—the following paper :—

From H. B. GRIGG, Esq., M.A., Director of Public Instruction, to the Chief Secretary to Government, dated Ootacamund, 16th September 1882, No. N-546.

I have the honor to submit the papers noted in the margin for the orders of Government.

Letter from the Acting Principal, Medical College, 27th June 1882, No. 173.
Letter from the Surgeon-General, 5th July 1882, No. O-318.
Letter from the Acting Principal, Medical College, 12th July 1882, No. 196.
Letter from the Acting Principal, Medical College, 19th July 1882, No. 215.
Letter from the Surgeon-General, 26th July 1882, No. O-389.

2. In the first letter noted, Dr. Keess forwards a letter from Surgeon W. G. King, Acting Professor of Hygiene, making certain proposals for the formation of a Museum of Hygiene. This letter was referred to the Surgeon-General, whose remarks thereon are recorded in his letter, No. O-318, and the Acting Principal's observations on Dr. Cornish's recommendations in his No. 196.

3. In his letter, No. 215, Dr. Keess submitted, for favorable consideration, certain proposals of Surgeon-Major Sibthorpe for improving the department of Anatomy. The remarks which Dr. Cornish has favored me with in this matter will be found in his No. O-389.

4. I send up the papers with one covering letter as the proposals involve the extension of the existing buildings, and it is well, I think, as proposed by the Surgeon-General, that all such improvements should be considered at the same time.

5. In the matter of Hygiene it is pointed out that much of the teaching is lost on the students from their not being able to see and handle many of the objects described. If the teaching is of a more practical character, the result will probably in every way be more satisfactory, and the medical students on passing out to fulfil the duties of their calling be more capable of dealing intelligently and effectively with the various sanitary difficulties which they will meet with. Dr. King remarks in his letter, No. 1 (enclosed), that on questioning his class of thirty-nine students, only two had ever seen a pump; none had seen even an agricultural tile drain or vitrified pipe; only one had an idea of how iron pipes are joined. He proceeds: "It is evident that much that may be said in lecturing must be simply wasted, when matters with which an audience is not acquainted are alluded to, for it is not possible for the speaker to fathom the depth of ignorance which may exist as to practical points. As well might the Anatomist attempt to teach Anatomy without the aid of demonstrations on the human body, as a Hygienist to treat his without being able * * * to exhibit the objects immediately concerned." Diagrams, with which the Principal has promised to supply him, though good, will not suffice. He, therefore, desires to establish a museum of sanitation objects, attached to the Medical College, for the use of students and open to public inspection on the plan of the Parkes' Museum of Hygiene in London, the synopsis of which is herewith submitted. He remarks that the museum might be taken advantage of, as in the case with the Parkes' Museum, by manufacturers and publishers for purposes of exhibition and advertisement.

6. In his letter, No. 5 (enclosed), Dr. King estimates the initial outlay independent of accommodation at Rs. 10,000, and the up-keep at Rs. 5,000, which includes an establishment costing Rs. 182. With this letter he also submits a list of such objects as may be required in each section of the museum.

7. Dr. Keess to give effect to these proposals suggests the erection of a suitable building within the College compound, after designs to be prepared by the Government Architect in communication with the Principal, and remarks that the cost of maintenance need not be so large as suggested by Dr. King, as much of the work could be undertaken by the present College establishment.

8. Dr. Cornish cordially approves the suggestion of Dr. King "to commence the formation of a Museum of Hygienic apparatus and appliances, not only as a means of practically illustrating the lectures of the Professor of Hygiene, but for the benefit of the public at large." If the scheme be approved by Government he recommends that the Secretary of State be moved to communicate the general plan of the museum to leading manufacturers of sanitary appliances, and to facilitate the transmission of articles sent for exhibition. In this way and by encouraging local contributions he considers that gradually a valuable museum might be formed without great outlay. As regards buildings he advises caution and suggests the renting of a place or the temporary accommodation of the exhibits and objects in the Central Museum. Meanwhile the Government Architect might design and estimate for a suitable building. In paragraph 4 he points out that the department of Human and Comparative Anatomy needs additional accommodation if a proper museum is to be provided, and also that the Chemical Examiner needs more room, and suggests that the College Council should be required to consider the whole subject.

9. Dr. Keess reports on these suggestions that he considers it, for reasons stated, essential that the museum should be in the neighbourhood of the College, and states that Surgeon Sibthorpe requires only a dissecting-room, whilst any extra accommodation required by the Chemical Examiner should not be provided in this department. He further notes with reference to the Surgeon-General's remarks on the Anatomy teaching, that there will be considerable increase to the present museum of Anatomy so soon as more room becomes available, but does not mention how this is to be effected.

10. In his letter of the 19th July, however, the Acting Principal submits Dr. Sibthorpe's proposals. They are as follows:—

- "(a). A dissecting-room for twelve tables, say fifty feet long by twenty-five feet in breadth, which would allow about one hundred and four superficial feet to each table.
- "(b) A preparation-room in which the bodies could be made ready for dissection.
- "(c) A lavatory and urinal for the students.
- "(d) A small room for the Professor and Assistant to the Professor.
- "(e) A museum which might be built partially over the preparation-room and partially over the Professor's room with galleries of light iron work round the dissecting-room.
- "(f) A lecture theatre for one hundred and thirty students.
- "(g) Water should be laid on throughout the building.
- "(h) There should be a good verandah around the building."

11. The Acting Principal generally supports these recommendations if funds are available, but says, if they are not, that "the present place used as a dissecting-room be improved by the substitution of teak instead of junglewood and bamboos for posts and roofing, that the roof be raised and tiled, and that arrangements be made for the admission of light through the roof as well."

12. The Surgeon-General quite agrees that a dissecting-room, fitted with all modern appliances, is much wanted, but he advises caution in regard to incurring expenditure for a new Museum of Human Anatomy and an Anatomical theatre. He recommends again that the whole question of the College accommodation should be carefully considered by the College Council in view of their submitting a detailed scheme of what they consider necessary, and that the Government Architect should be associated with that body in considering how use may be best made of the present accommodation and what extension is necessary.

13. Since these letters were received the Order of Government, No. 228, dated 23rd August 1882, sanctioning the erection of an operating theatre, has been communicated to me.

14. The scheme of establishing a Museum of Hygiene is, I think, deserving of the favorable consideration of Government, as also Dr. Sibthorpe's proposals to improve the facilities for teaching Anatomy, but these schemes, including other changes which may be necessary in view of the partial reorganization of the teaching sanctioned in the Order of Government above quoted, if carried out in their integrity, will, as pointed out by the Surgeon-General, involve large outlay; and as they have not been dealt with by the Acting Principal as a whole, and as in consequence of the College vacation they could not well be referred by me to the College Council, I beg to recommend the whole subject of the improvement of the facilities for medical instruction in each branch be referred to the College Council for consideration and report, and that when reporting they be required to submit plans and estimates of the additions to and alterations in the College buildings which they deem essential for the efficient teaching of each of the great branches of knowledge included in the College scheme. It may not be necessary that all the works should be carried out at once, but if the scheme were sanctioned as a whole, it could be carried out gradually, as funds become available, according to the comparative necessity of each portion. In the long run this arrangement will probably prove less expensive than if the necessities of each department are provided for piecemeal. Should this proposal be approved, I beg to recommend that the Consulting Architect be directed to aid the Council in the manner suggested by the Surgeon-General.

ENCLOSURES.

From Surgeon-Major J. KEESS, M.D., Acting Principal, Medical College, Madras, to the Director of Public Instruction, dated Madras, 27th June 1882, No. 173.

I have the honor to forward two letters from Surgeon W. G. King, M.B., Acting Professor of Hygiene, on the subject of forming a Museum of Hygiene in connection with the Medical College, and to recommend his proposal for your favorable consideration.

2. Much of the teaching of Hygiene is lost to the students owing to the fact of their not seeing and handling the various objects described in lectures and books; whereas, if they saw, in their daily visits to the College and as illustrations to lectures, the various means by which public health is maintained and promoted, it is highly probable that our students who thus become practically acquainted with the art of Hygiene, will be able to spread more effectually, than heretofore, the many advantages of which they are the fortunate recipients.

3. The practical lessons thus taught will leave a lasting impression on the students' minds, and enable them, in after life, to suggest more effectually measures for correcting the numerous sanitary evils that abound in this country.

4. In order to give effect to Dr. King's proposals, I would suggest the erection of a suitable building within the College compound, after a design to be prepared by the Government Architect, in consultation with the Professor of Hygiene and Principal of the Medical College. The expense for maintenance, indicated in paragraph 3 of Dr. King's letter, need not be so large, as a considerable portion of the work in connection with the museum can be undertaken by the present College Establishment.

5. The Museum of Hygiene will not only be a valuable addition to the Medical College, but, by being thrown open to the general public, it will become an effectual means for the diffusion of practical knowledge on a subject of the deepest interest to the community at large.

From Surgeon W. G. KING, M.B., Acting Professor of Hygiene, to the Acting Principal, Medical College, Madras, dated Madras, — May 1882, No. 1.

I have the honor to point out that in teaching Hygiene in this College, I labor under considerable disadvantage, in that no means are at my disposal to reach the imagination of my pupils either by illustrations or exhibitions of specimens. I find on questioning my class that of thirty-nine two only have ever seen a pump, one ten years ago, when he regarded it with too much awe to approach it; none have ever seen an agricultural tile drain; none have seen vitrified pipes; all have seen iron-water pipes at a distance, but only one has any idea of how the joints

are formed. These are small examples, but are sufficient to convey my meaning. It is evident that much that may be said in lecturing must be simply wasted, when matters with which an audience is not acquainted are alluded to; for it is not possible for the speaker to fathom the depth of ignorance that may exist as to practical points. As well might the Anatomist attempt to teach Anatomy without the aid of demonstrations on the human body, as the Hygienist to treat his without being able to calculate upon preconceived notions, or to exhibit the objects immediately concerned.

2. A valuable way of coping with the difficulty alluded to is the use of diagrams and plans, and you have kindly promised to place at my disposal the College draughtsman for this purpose. But you will, I think, agree with me that, where possible, for teaching the object is more useful than the shadow.

3. To meet the required indications, I have the honor to suggest that Government be moved to sanction the necessary funds for the establishment of a Museum of Hygiene attached to the Medical College.

4. I would not wish to confine the use of such an institution merely to the teaching purposes of the Medical School; its utility would be vastly extended by permitting it to be open to inspection by the public. In this way, if a descriptive catalogue were furnished, or descriptive labels were attached to carefully chosen objects, a rapid advance of sanitary knowledge amongst the general public may be looked for. Such a result has undoubtedly attended similar efforts in London, in the case of the Parkes' Museum of Hygiene. I am convinced that until such opportunities are offered, neither students of the College nor the native public are likely to have any but superficial ideas of sanitation. Under the present system, it is a well-known fact that, even when thoroughly acquainted with theoretical details of Hygiene, "the educated native" rarely puts them into practice. They have been taught the science as a mere vapour of words, expressive of eccentric western notions that should now and then embellish an official report. But, in the presence of practical demonstration, it is calculable that such half-faith would shortly disappear.

5. To convey some idea of the scope and character I would wish to give to the suggested museum, I enclose a synopsis prepared by the Committee of the Parkes' Museum. I do not think a better general plan of operations could be prepared, although doubtless modifications of illustrative subjects would be necessary, in view of the difference of climates and diseases incident to this country.

6. Experience in the Parkes' Museum has shown that manufacturers willingly send specimens for exhibition, as they thereby secure a good advertisement. Publishers also have proved themselves equally generous in contributing to the formation of a library. I believe that if the passage of articles to this country were paid by Government, the Madras Museum of Hygiene would be similarly fortunate. As regards clothing of British and native soldiers, prisoners, of various foods, of hospital equipment, plans of drainage and irrigation works, and matters of an allied nature, Government could readily, without incurring any but nominal expense, contribute.

7. Should the general proposal meet with approval, I should, on your informing me that you would be able to place a room at my disposal at the Medical College, be prepared to submit an estimate of probable expenditure.

From Surgeon W. G. KING, M.B., Acting Professor of Hygiene, to the Acting Principal, Medical College, Madras, dated Madras, 26th June 1882, No. 5.

ABSTRACT.—Forwards lists of objects he considers it desirable to collect to form a Museum of Hygiene, and offers remarks as to the cost.

From Surgeon-General W. R. CORNISH, F.R.C.S., C.I.E., Surgeon-General with the Government of Madras, to the Director of Public Instruction, dated Ootacamund, 5th July 1882, No. O-318.

In returning the papers connected with your letter, No. N-169 of 1st July, I have the honor to state that I cordially approve of the suggestion of Surgeon W. G. King, M.B., to commence the formation of a Museum of Hygienic apparatus and appliances, not only as a means of practically illustrating the lectures of the Professor of Hygiene, but for the benefit of the public at large.

2. If the scheme should find favor with Government, I would suggest that the Right Honorable the Secretary of State might be moved to communicate the general plan of it to the leading manufacturers of sanitary appliances, and to facilitate the receipt and transmission of articles presented to the museum or sent for exhibition. In this way, and in encouraging local contributions, a museum might gradually be formed of great value for educational and other purposes, without any great outlay.

3. In regard to building I should advise caution. It would be easy to rent a place suitable for exhibition of specimens, or to find temporary accommodation, probably in the Madras Central Museum, but it would not be prudent to incur considerable expenditure for special buildings, until some experience had been gained as to the readiness of manufacturers to contribute to a Sanitary Museum. Meanwhile the Government Architect could design and estimate the cost of a suitable building.

4. In regard to the museum accommodation of the Medical College, I may say that while the Materia Medica and the Pathological collections are fairly good, the departments of Human and Comparative Anatomy are inadequately represented, and that the collection needs additions and better arrangement, to serve educational purposes. The whole of the large entrance room of the College would not be too much for the departments of Human and Comparative Anatomy, while the Pathological Museum would be better placed in a separate room. I understand also that the Chemical Examiner to Government needs better accommodation than he is at present provided with in the Medical College, and probably the best arrangement would be for the College Council to consider carefully, what further additions are required to the College buildings, and to submit their proposals, including space for the proposed Museum of Hygiene, to the Government Architect.

From Surgeon-Major J. KEESS, M.D., Acting Principal, Medical College, Madras, to the Director of Public Instruction, dated Madras, 12th July 1882, No. 196.

In returning letter from the Surgeon-General with the Government of Madras to your address, No. 318, dated 5th July 1882, referred to me with your No. 189 of the 6th instant, I have the honor to state that it seems to me essentially necessary that a building should be erected in close proximity to the College. It is intended that the place erected should be used as a lecture-room and a museum as well. Its nearness to the College building would be a convenience to the Professor and particularly to the students of the class of Hygiene (most of whom reside in the neighbourhood) and to other students also of the College who may be anxious to become familiar with the mechanism of the apparatus and appliances exhibited. After the hour of lecture by the Professor of Hygiene, the room being near will be available for the use of any Professor or Assistant in the College to lecture to his class or instruct in any other way, should there be, by any re-arrangement of the time table or modification of the curriculum of study, a necessity for his doing so. Moreover, as the lecture-room would be built in the crowded portion of the city, it would be near at hand to the classes of people who, it is expected, would, by their frequent visits to the place and attendance at the lecture there by the Professor of Hygiene, acquire sound ideas of sanitary science. The Central Museum, where the Surgeon-General suggests that the apparatus might be kept, would doubtless be suitable, if the object be simply to exhibit them to the general public; but it must be borne in mind that they are primarily wanted for class instruction at the Medical College. Apart from the inconvenience to our students on account of distance, it would not be practicable even to assemble a College class in the lecture-room attached to the Central Museum, during nine months in the year, as the students, if they have to attend there, would virtually be absent from the College nearly three hours out of the five now taken up here for the delivery of all lectures the class has to attend. Nor would it be feasible to have apparatus, &c., that may be needed to illustrate lectures, at the College, daily conveyed backwards and forwards from the Central Museum.

2. For the foregoing reasons, I would strongly urge that a suitable building be erected on the College grounds.

3. Surgeon-Major Sibthorpe purposes submitting a requisition for a separate dissecting-room, as the present one, for many reasons, is unsuited. No other addition to the College building, as far as I can judge, is at present contemplated by the College Professors. Any additional room required by the Chemical Examiner is not obtained through the Educational Department.

4. As regards the Surgeon-General's allusions to the collections in the Anatomical Museum (the exact bearing of which on the proposal now before you I do not clearly see), I beg to state that they were, with fresh specimens which I was able to obtain, ample for the purposes of illustration when I lectured on Human and Comparative Anatomy. Additions are being made to the museum, and as soon as more room becomes available for the purpose, there will be a considerable increase to the present collection.

From Surgeon-Major J. KEESS, M.D., Acting Principal, Medical College, Madras, to the Director of Public Instruction, dated Madras, 19th July 1882, No. 215.

I have the honor to submit, for your favorable consideration, proposals embodied in a demi-official letter* addressed to me by Surgeon-Major C. Sibthorpe.

* Extracts from which are appended.

2. As Mr. Sibthorpe, who is Acting Surgeon of the General Hospital instead of Surgeon-Major Cockerill on privilege leave, will, in all probability, fill the chair of Anatomy from the commencement of next Session in October, I suggested his submitting a requisition for what may be required for the department of Anatomy. His proposals are as follow:—

1. To erect a separate dissecting-room with lecture and other rooms attached, instead of the thatched building, now used as a dissecting-room, one compartment of which was put up when I was away on furlough some years ago, and the other, about two years back when the numbers of the classes were considerably increased. Financial considerations, I understand, led to only a temporary shed being erected for a dissecting-room, instead of a permanent one, and I am not sure whether now funds are available for the erection of a substantial masonry room of the kind suggested by Surgeon-Major Sibthorpe; but if the outlay can be incurred, I would beg to recommend that steps be taken to have the required rooms erected as early as practicable. The Surgeon-General is also aware of the unsuitability of the present rooms for our purposes as, at his official visits to the College, I took the opportunity of pointing out their drawbacks to him. If funds are not available for such an undertaking, I would respectfully urge that Government be moved to order that the present place used as a dissecting-room be improved by the substitution of teak instead of the junglewood and bamboos for posts and roofing, that the roof be raised and tiled, and that arrangements be made for the admission of light through the roof as well.

2. To be supplied with three air-tight boxes in which to keep dead subjects surrounded by an atmosphere of alcohol vapour to retard putrefaction, so that, when the body is injected with the usual preservative fluids in the College, there would be some likelihood of its keeping longer and its dissection got through more thoroughly than heretofore. When I was Professor of Anatomy I pointed out the necessity of having air-tight boxes for this purpose, kept for dead subjects, one at the General Hospital and another at the Triplicane Dispensary from which Institutions we obtain our largest supplies of dead subjects, and Dr. King, the then Principal of the College, ordered their construction, and it is likely they will be ready for use during the coming term.

3. To be furnished with glass cases to exhibit mounted specimens of bones, with an arrangement to make these revolve, as well as a stand, and a table on wheels. These can be supplied and the cost defrayed out of funds provided under Furniture in the Budget Estimate of 1882-83. Estimate for a table on wheels, a stand, and glass cases for your sanction will follow.

EXTRACT from a demi-official letter received from Surgeon-Major C. Sibthorpe, dated 12th July 1882.

"2. I think that there can be no question that the present huts erected some time ago as dissecting-rooms are not satisfactory, they are too small, not properly lighted or ventilated, and are a constant source of expense for repairs.

3. I would suggest that you move Government to erect a suitable permanent building, which should contain the following rooms:—

- (a) A dissecting-room for twelve tables, say fifty feet long by twenty-five feet in breadth, which would allow about one hundred and four superficial feet to each table.
- (b) A preparation-room in which the bodies could be made ready for dissection.
- (c) A lavatory and urinal for the students.
- (d) A small room for the Professor and Assistant to the Professor.
- (e) A museum which might be built partially over the preparation-room and partially over the Professor's room with galleries of light iron work round the dissecting-room.
- (f) A lecture theatre for one hundred and thirty students.
- (g) Water should be laid on throughout the building.
- (h) There should be a good verandah around the building.

4. The present anatomical theatre is too far away from the dissecting-rooms, much too small for the class, and badly lit for the purposes of demonstrating dissections. The formation of a museum in the anatomical buildings would be a great advantage, might be done at a slight additional cost, and would give room in the present museum for extension of the already important branches of Materia Medica and Pathology.

5. I think also that sanction should be sought for the purchase of a table on wheels, so that bodies dissected in the outer room could be rolled into the lecture theatre.

6. If Government wishes, I will have much pleasure in putting myself in communication with the Consulting Architect and explaining to him the requirements in order that he may make out plans and estimates.

7. There is, at present, one air-tight metal tank in the College, three more are required—one for the College, one to be sent to the dead-house of the General Hospital, and one to Triplicane Dispensary, so that unclaimed bodies should be placed at once in them after death with some alcohol in order to preserve them better.

8. When attending the meeting of the International Medical Congress last year, I saw in the museum an admirable system of preparing bones for students to study from. They were selected specimens, well marked, and kept in glass cases so arranged that they could be thoroughly examined without being touched. I would suggest that we may be provided with almirahs in which such specimens could be placed in the Anatomical Museum, each specimen to be on a bar and cog wheel, which could be easily made in the Gun Carriage Factory at little cost.

9. A wooden framework for tying the body up when demonstrating the perinæum is also wanted.

10. I may add that these suggestions are founded on what I saw in the new dissecting-rooms of the Medical School of St. Bartholomew's Hospital, Trinity College, in Dublin and other Medical Schools which I visited when on furlough. Your own long connection with the Professorship of Anatomy in our College will enable you at once to judge of their fitness to the wants of the school."

From Surgeon-General W. R. CORNISH, F.R.C.S., C.I.E., Surgeon-General with the Government of Madras, to the Director of Public Instruction, dated Ootacamund, 26th July 1882, No. O-389.

With reference to your letter, No. N-285, of the 22nd instant, I have the honor to state that the inadequacy of the present arrangements for teaching Practical Anatomy in the Medical College is well-known to me. I quite agree with Dr. Sibthorpe that a new dissecting-room filled with all modern appliances is much wanted.

2. But the proposition goes much beyond this and includes a new Museum of Human Anatomy and Anatomical theatre, and if approved of by Government, will cause a large expenditure. Quite recently, you were good enough to submit to me a proposition for building a Museum of Hygiene, and I recommended caution in regard to building expenses.

3. I think the time has come when the accommodation of the Medical College should be reconsidered very carefully in all its departments, and my advice is that the College Council should be instructed to take up the whole question, and to submit a scheme for carrying out the additions and alterations that are essential to the well-being and repute of the College.

4. It might be an instruction to the College Council to limit its requisitions to such additions and improvements as are necessary to efficiency, and to omit anything that may be merely ornamental.

5. It seems to me that if a new Anatomical Department including theatre was decided upon, that the present College buildings might find accommodation for the proposed Museum of Hygiene, and allow of better accommodation for the Materia Medica and Pathological collections. The Professor of Physiology will probably require some place also, where he can demonstrate practically his teaching of Histology.

6. Should Government refer the subject to the College Council, I would suggest that the Government Architect be associated with that body, in considering the accommodation at present afforded by the College buildings, and the necessary extensions.

There are certain considerations to be borne in view in planning a dissecting-room for India, which I will put before the Government Architect, if the building is determined upon.

ORDER—dated 5th January 1883, No. 2, Educational.

As suggested by the Surgeon-General and recommended by the Director of Public Instruction, the subject of the improvement of the facilities for instruction in Anatomy, Hygiene, and the other branches of medical study will be referred to the Council of the Medical College for consideration and report, and for the submission of plans and estimates of the additions to, or alterations in, the College buildings which they deem essential for efficient teaching.

2. The Consulting Architect to Government will be associated with the College Council in their consideration of the matters now referred to them.

(True Extract.)

Quaster
Chief Secretary.

To the Director of Public Instruction.

- „ Surgeon-General with the Government of Madras.
- „ Consulting Architect to Government.
- „ Public Works Department.

870
Exd. J. Wright.

No. 246 Wd/20 January 1883/

Govt. of (1883) Madras.

EDUCATIONAL.

Communicated to the
Consulting Architect to
Government, and to the
Supt. Engr. Fifth Circle.

Clk
19.1.83

Att

19.1.83

Issued

Recd.

Encl.

G.O., 5th January 1883, No. 2.

No. 246 Wd/20 January 1883/

JANUARY.

Medical College.

Referring to the Council of the —, for consideration and report, the subject of the improvement of the facilities for instruction in Anatomy, Hygiene, and the other branches of medical study.

CA to Govt.

SE Circle

24.1.83

20/1/83

Encl. in Receipt Book

With order.

17TH MAY 1884, No. 1252 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following letter from H. B. GRIGG, Esq., M.A., Director of Public Instruction, to the Chief Secretary to Government, dated Madras, 5th April 1884, No. 2194 :—

I have the honor to submit, for the very favorable consideration and orders of Government, the accompanying letter from the Consulting Architect to Government, forwarding with reference to G.Os., dated 5th January and 20th April 1883, Nos. 2 and 230, Educational, respectively, plans and estimates for additions and improvements to the Medical College buildings. The estimate consists of the following items, aggregating Rs. 75,326 :—

	RS.
(1) Dissecting house	36,830
(2) Improving light and ventilation of and adding galleries to the three lower rooms of north wing	9,026
(3) Improving lighting and ventilation of present anatomical theatre	196
(4) Erecting galleries, &c., in library	5,425
(5) Adding an upper-story to the north wing	13,999
(6) Completing verandah round front and sides of building	8,775
(7) Improving out-house rooms	1,075
Total	75,326

2. The Surgeon-General with the Government of Madras agrees with the Principal of the Medical College in considering that all the improvements noted above should be carried out in the year, and that when they are completed, no further additions will be necessary for many years to come. The work should be provided for in the Public Works Budget.

ENCLOSURE.

From Major J. L. L. MORANT, R.E., Officiating Consulting Architect to Government, to the Director of Public Instruction, dated Madras, 30th January 1884, No. 1447.

With reference to Educational G.Os., No. 2, dated 5th January 1883 and No. 230, dated 20th April 1883, I have the honor to forward, herewith, detailed plans in four sheets and estimates for additions to, and improvements in, the Medical College buildings at Madras.

2. The plans have been prepared, with, first, in communication with each individual medical officer concerned; secondly, in consultation with the college principal; thirdly, by being laid before the college council, and, fourthly, they have been approved of generally by the Surgeon-General, Indian Medical Department.

3. The plans and estimates, which in all amount to Rs. 75,326, have been signed by the Principal of the Medical College on behalf of the college council.

4. The additions and improvements consist of the following details :—

- (1) A new dissecting house containing a dissecting room for male and female students, a preparation room, a lecture theatre for 130 students with gallery for prepared anatomical specimens, an anatomical museum, a small office room for the professor, and a lavatory.
- (2) In the present pathological museum room and in the room temporarily occupied by the Chemical Examiner, it is proposed to erect galleries on iron pillars approached by circular stairs, to improve their light and ventilation, and to re-arrange the cases end on to the walls, increasing their number and height. In this way the museum of pathology, hygiene and botany can all be accommodated in the three rooms forming the lower-story of this north wing.

- (3) To improve the lighting and ventilation of the present anatomical theatre.
- (4) To erect galleries and improve the lighting and ventilation of the college library room.
- (5) To erect an upper-story on the north wing of the college thus providing for a histological theatre, a room for the professor of ophthalmic medicine, surgery, and physiology, and an office for the principal's clerk, who is now (most inconveniently) in the same room with the principal.
- (6) To take advantage of the platform and parapet now running round the front and sides of the college building and to erect over it a terraced roof on iron pillars thus forming a verandah.
- (7) To improve the small out-house rooms now used by lady students and others, by adding a small bracketed verandah and clear-story windows for light and ventilation.

5. The cost of these proposals will be as follows:—

	RS.
(1) Dissecting house	36,830
(2) Improving light and ventilation of and adding galleries to the three lower rooms of north wing	9,026
(3) Improving lighting and ventilation of present anatomical theatre.	196
(4) Erecting galleries, &c., in library	5,425
(5) Adding an upper-story to the north wing	13,999
(6) Completing verandah round front and sides of building...	8,775
(7) Improving out-house rooms	1,075
Total ...	75,326

6. The completion of the verandah round the building is made necessary because the provision of galleries to the large rooms of the college necessitates more light in these rooms, and from the want of the verandah the lower doors of these rooms cannot be now opened, for they admit too much direct sunlight and rain. There are also other college rooms which are now very dark for the same reason.

No. 907, Educational.

Approved and transferred to the Public Works Department.

(By Order.)

OOTACAMUND,
25th April 1884.

(Signed) J. D. REES,
Acting Under Secretary.

ORDER—dated 17th May 1884, No. 1252 W., Public Works.

The plans with estimate, amounting to Rs. 75,326, for improvements and additions to the Medical College buildings at Madras, are sanctioned for execution by the Consulting Architect when funds are available.

2. The component parts of the estimate are detailed in the letter from the Director of Public Instruction recorded above.

3. This sanction has been registered as Provincial No. 36 W. of 1884-85 and classified as Civil Buildings, Original Works.

(True Extract.)

(Signed) J. SHAW-STEWART, Colonel, R.E.,
Secretary to Govt, P.W.D.

To the Consulting Architect to Government.
" Superintending Engineer, V Circle.
" Examiner, Public Works Accounts.
" Educational Department.

Exd. A. Aubert.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Gobt. of {1884} Madras.

PUBLIC WORKS.

Dated May, 17th.

Recd.

Encl.

G.O., 17th May 1884, No. 1252 W.

MAY.

Madras Medical College

The plans and estimate of Rs. 75,326 for improvements and additions to the —, sanctioned for execution by the Consulting Architect when funds are available.



No 612

List of Orders of Government received up to 31st March 1884 remaining unanswered on the 1st July/84

No	year, month & date	Subject	Explanation of cause of delay in forwarding reply and the probable date when it will be furnished.
216	30 th August 1875	Abandonment of High Court buildings	Ordered to be over
1837	13 th June 1878	Plan for reformatory schools	Subject at present before Government (?) for further orders
167	24 th November/76	Agreements with aliade	in progress - will be reported on by and by.
616	11 th March 1881	Chandragiri Palace preparations	Set aside for the present
801 & 26	September/82	The several works to be undertaken in connection with Government House	Completed for the season.
2139	19 th August 1882	Hygiene &c	Plans and Estimate submitted on the 30 th January 1884 and sanctioned vide P. M. G. O. 1 st 1252 M dated 17 th May 1884.
348	1 st February 1883	Establishing the medical college for	Dequeto permission to substitute for this Order P. M. G. O. 1 st 1261 M dated 27 th May/84
2143 & 11	11 th November 1882	Establishing the medical college for	Dequeto permission to substitute for this Order P. M. G. O. 1 st 1261 M dated 27 th May/84
246	20 th January 1883	Establishing the medical college for	Dequeto permission to substitute for this Order P. M. G. O. 1 st 1261 M dated 27 th May/84
3064	30 th July 1883	Establishing the medical college for	Dequeto permission to substitute for this Order P. M. G. O. 1 st 1261 M dated 27 th May/84
66	10 th January 1884	Establishing the medical college for	Dequeto permission to substitute for this Order P. M. G. O. 1 st 1261 M dated 27 th May/84
170	19 th January/84	Establishing the medical college for	Dequeto permission to substitute for this Order P. M. G. O. 1 st 1261 M dated 27 th May/84

Long Arch's Office

Chapman 18th July/84.

to

The Chief Engineer

P. M. Department.

1884

J. K. Morant?

Major P. E.

Off. Long Arch's Office.

P. W. D.

Roads and Buildings.

From

THE CONSULTING ARCHITECT

TO THE GOVERNMENT OF MADRAS,

To

The Chief Engineer
Public Works
Dept.

No. 612

Dated 15th July 1884

Received 16th

No. 1842 W/19-7-84

No. of ENCLOSURES.

Subject.

List of Orders not complied
with till the 1st July 1884.

Roads and Buildings

No. 1842 W

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the

29th July 1884

Read the following

From the Consulting Architect
to Government

H.E. No. 612 of 15th July 1884

G.O. No. 1261 W

dated 19th May 1884, may
be substituted for G.O.
No. 2064 W dated 30th July
1883, and G.O. No. 246 W
dated 20th January 1883.
may be omitted from
future returns.

2. The following
Orders have not been
included in the statement.

No. 3417 W of 29th Nov. 1883

" 835 W of 27th March 1884

To

The Cong. Architect
to Govt.

29/7

21.7.84

22.7.84

31

Mr. J.
Geo. 1842 Wa/29-7-84

24.86/4. 1/16
Log. 24.86/4. 1/16
24.86/4. 1/16
24.86/4. 1/16