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MADRAS RECORD OFFICE.

Government of Madras.

DEPARTMENT.

G.O. No. 6 Press Mis.

Dated 18

Not to be folded or roughly handled

No. 183. Read the following letter from the Acting Superintending Engineer, *5th Division, to the Secretary to* Government, Public Works Department, dated Cuddalore, 21st February 1872, No. 256:—

I HAVE the honour to offer for your consideration a suggestion, the carrying out of which would I am sure add very much to the efficiency of the department, while it need not entail the extra outlay of a single rupee; on the other hand, as regards a greater out-turn and better quality of work, it would effect a very great saving. I allude to the attachment to each division of a Survey Establishment (quite distinct from the establishments allowed for the investigation of special works) and proportioned to the requirements and importance of divisions.

2. My reasons for this are as follow:—

1*st*.—A Range Officer is allowed three lascars, and Overseer two lascars; how is it possible that surveying and levelling can be carried on with such an establishment. If he suggests this, he is probably told he may employ coolies; is it any wonder, under such circumstances, that work is slowly and badly done.

2*nd*.—Range Officers and Overseers should be as much as possible engaged in inspection of work, and should be as much as possible relieved of accounts and paper work, and of work such as that alluded to, which can be far better performed as I propose. In a country like this where one cannot have the smallest confidence in any part of a structure which he has not seen laid or built, the duty of frequent inspections cannot be too strongly urged.

3. It is notorious that the best surveying and levelling work was executed by the old Survey Department, and the reason is very intelligible. With constant practice in the use of instruments, and with a sufficient and trained gang of lascars accustomed to work together, work would be done twice as fast and twice as well.

4. If there is one thing that can be better practically taught at the Civil Engineering College than another, it is the branches to which I allude, and it is worthy of remark that after some years of field service these men would furnish to the department a valuable class of Overseers (of one class or another), for during this period they must have acquired much local knowledge, and must have picked up a great deal of information which would prove very valuable to them as Overseers.

5. As things are now, Executive Officers have their time so much occupied with accounts and returns that the performance of their more important duties is inevitably much neglected, and the constant scramble to finish off work and spend allotments is tending to a most unsatisfactory state of things; works are gradually falling into disrepair, and it is becoming daily more and more difficult to overtake the work that has to be done.

6. There are many most important points deserving attention, which can receive none from the already over-worked establishments; of these I would mention "carrying the mean sea level throughout all districts"—a work of paramount importance which has been most strangely neglected—the improvement of river beds to facilitate the discharge of floods and protect cultivation, and last, but not least, the improvement of tanks which it is proposed to retain. All these are points

worthy a great deal of attention; the last, indeed, is of importance that can scarcely be over-rated, but which seems to me to have been sadly neglected in favour of larger and more spacious projects, in regard of which I would ask—

Is there one that has been completed without at least one supplemental estimate?

Is there one that has come up to the anticipations of its projectors?

Is there one to which, even after being (as supposed) completed, extra works have not been added, the necessity for which was not foreseen? The charging to a project everything which fairly belongs to it is a thing that should be very narrowly watched, an idea that seems to have dawned on the mind of the Accountant-General, *vide* his Circular recorded in G. O., No. 386 of 8th February 1872.

7. My own firm conviction is that these projects are not nearly so remunerative as proposed, and that the improvement of tanks, as requiring few new works and as enabling us to dispose of and store an immensely increased portion of flood waters, is, comparatively speaking, a much more remunerative work. My impression is that by a very moderate outlay the aggregate capacity of tanks could be doubled, a result it must be considered of stupendous magnitude.

8. By planting nanul and other grasses and shrubs and trees (such as the Nír Núnchí) that thrive in, and near, water on the slopes and at the bottom of the slopes of tanks, a very great deal might be done, and expensive stone revetments might be saved. It seems to me this is one of the proper and most important duties of the village servants, and I have called the attention of the Collector of this district to it.

9. In conclusion of this part of the subject, I will merely say that assuming the average depth of tanks to be one yard, the raising the water level by considerably less than half a yard would in reality double the capacity and more than double the duty.

10. This may seem a digression from the more obvious purpose of this letter, but I consider the matter worthy of great consideration, and I am anxious to show that there is, and will be for years, plenty of work for such an establishment as I propose; work that can by no possibility be done by the present arrangements.

11. The last thing I have to do—and Government may consider it the most important of all—is to show that no increased money cost is involved. I would simply diminish the number of ranges, and take steps to relieve Executive Officers as much as possible of desk-work. If this were done, and the proposal I have made carried out, an Executive Engineer might well supervise a larger range, and very probably funds would be available for increasing the number of Overseers, a step that is also much required.

No. 184. ORDER THEREON, 8th March 1872, No. 645.

ESTABLISHMENT, No. 20.

THE Government will be glad to receive from Captain Vertue a carefully prepared statement of the whole establishment that would be required for any one district of the 5th Division framed

Proceedings of the Madras Government, Public Works Department,
8th March 1872.

on the principle advocated by him including the re-arrangement of the Executive Ranges.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

To the Superintending Engineer, 5th Division.

No. 256.

Royal Engineer's Office, 3rd Div.
Canterbury, 21st February 1870.

Sir,

Captain A. Foster R.E.
Royal Engineers
3rd Division.

By Command of Major General H. Ewart
Inspecting Field Officer
Eastern Military District.

I have the honor to offer for your consideration a suggestion for carrying out of which I would beg to state would very much facilitate the duties of the Sergeants of Engineers, and have also a good effect in many other respects, if carried out.

I would propose that the Sergeants of Engineers should be allowed to live in Quarters in the Barracks where their Companies are stationed, instead of being obliged to find lodgings in the town, as at present.

I am Sir
Your obedient Servant
[illegible] Major Royal Engineers
in charge 3rd Division

an Officer 2 Sergeants three or four Corporals Drummers
Surveying and Levelling may be carried on
with much Ease and Celebrity. If the Engineer
thinks he is probably called to occupy himself
a Day wander another Week perambulating
that work is Slowly carried on by three
2nd Class Officers two Clerks & Draftsmen
& as much as the Public Engineer is employed
of work and should be at most as Secretary
Clerk of Accounts and Engineer would spend
much Work as they could perform by
be for better Employment as Draftsmen &
a Country where there is one Officer
the Assistant employed in making Plans
Sketches which he has not Time to finish
the duty of Inspection performed
to be strongly urged

3 If it is proposed that the Work
surveying and Levelling would be executed
by the old Surveys Department and the
Reason is very intelligible. Both Corps
Practice in the use of Instruments and with
a sufficient and trained Gang of Labourers
accustomed to work together, work would be
done twice as fast and twice as well.

4 If there is one thing that could

better practically taught at the Civil Engineering College than another it is the Construction & which Railroads and it is evident that after some years of Field Service those Officers would great benefit to the Department a valuable class of Engineers for one Clerks or Draftsmen for drawing these Plans they would have gained much Knowledge and would have better Pay & Prospects in the Service.

5 The Surveys are more Expeditiously carried on by Officers than by Draftsmen & Clerks. Officers have their Pride in getting Work done quickly & well & Draftsmen & Clerks have not. Officers are trained to Habits of Diligence, Method & Punctuality & Draftsmen & Clerks are not. Officers are trained to Habits of Command & Draftsmen & Clerks are not. Officers are trained to Habits of Obedience & Draftsmen & Clerks are not. Officers are trained to Habits of Responsibility & Draftsmen & Clerks are not. Officers are trained to Habits of Self-Reliance & Draftsmen & Clerks are not. Officers are trained to Habits of Self-Control & Draftsmen & Clerks are not. Officers are trained to Habits of Self-Denial & Draftsmen & Clerks are not. Officers are trained to Habits of Self-Sacrifice & Draftsmen & Clerks are not. Officers are trained to Habits of Self-Devotion & Draftsmen & Clerks are not. Officers are trained to Habits of Self-Abnegation & Draftsmen & Clerks are not. Officers are trained to Habits of Self-Mortification & Draftsmen & Clerks are not. Officers are trained to Habits of Self-Crucifixion & Draftsmen & Clerks are not. Officers are trained to Habits of Self-Immolation & Draftsmen & Clerks are not. Officers are trained to Habits of Self-Sacrifice & Draftsmen & Clerks are not. Officers are trained to Habits of Self-Devotion & Draftsmen & Clerks are not. Officers are trained to Habits of Self-Abnegation & Draftsmen & Clerks are not. Officers are trained to Habits of Self-Mortification & Draftsmen & Clerks are not. Officers are trained to Habits of Self-Crucifixion & Draftsmen & Clerks are not. Officers are trained to Habits of Self-Immolation & Draftsmen & Clerks are not.

distinctly marked by those Parcels remaining
Carrying the Heavy else Lord Exceptions
of Districts a work of Improvement rare
perfection, which has been much changed
neglected, the Confinement of River Beds
to preside the Exchange of Floodwaters
protect Cultivation, and Land both
the Improvement of Towns which it
is proposed to Extend. All these are points
worthy a great deal of Attention and should
be most seriously considered in framing any
such Act. Nothing can be more unwise
than to neglect the Opinions of Persons
who have had much Experience in these
matters.

Is there any Land that has been supplied
with Water from Rivers?

Is there any Land that has ceased to be
supplied? Specify the Cause.

Is there any Land that has been injured
by Irrigation? Specify the Cause.

Is there any Land that would be benefited
by Irrigation

average depth of Water to be over-ayard the Raising the Water Level by considerably less than half a yard would in reality double the capacity and more than double the duty.

10 This may seem a digression from the more obvious purpose of this letter, but I consider the matter worthy of great consideration, and I am anxious to show that there is, and will be for years to come, plenty of work for such an Establishment as I propose – work that can by no possibility be done by the present arrangements.

11 The last thing I have to do, and Government may consider of the most importance of all – is to show that no additional money could be required. I would shortly diminish the number of Rangers and take steps to relieve Executive Officers as much as possible of Clerk work. If this were done, and the proposal I have made, carried out, an Executive Engineer might well Superviser a larger Range, and very gradually Funds would be available for increasing the number

of Overseers as step that is also much required.

I have the honor to be
Sir
Your most Obd. Servant
Edward Nagle Capt. R.E.
Deputy Inspr. Engrs. 5th Do

Recd. Insp. 5th Div.
March 11/52

average depth of Tanks to be one yard, the

[illegible]

[illegible]

[illegible]

PUBLIC WORKS.