1. Number of pages 63
2. Date of repair. 18.6.8
3. Initials of Referencer.

M.R.O. 1—82,400—28-11-30.

MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

Con. 24 7 4 1857

G.O. No. 668 Press Mis.

26-27

Dated 2 4 1857

Not to be folded or roughly handled

No. 26. Read the following letter from Colonel C. E. FABER, Chief Engineer ; to H. FORBES, Esq., Acting Secretary to Government dated 3rd February 1857, No. 10005.

SIR,

1. I have had the honor to receive the orders of Government contained in Extract Minutes of Consultation No. 165 of the 22nd January, forwarding a copy of Lieutenant Colonel Bakers despatch regarding the partial authorization of the proposed permanent, Establishment for the D. P. W. forwarded to the Government of India on the 10th October 1856, and which dated the 19th December No. 5963 gives cover to a Resolution in the Financial Department by the Right Honorable the Governor General in Council No. 5300 under date the 12th December 1856.

2. As a more convenient medium of information. I beg to substitute the usual form of a letter for the memorandum prescribed in the 2nd para. of the orders now under acknowledgement.

3. Perhaps it is an inevitable sequel of very protracted discussions on any subject, that the objects originally sought, are by degrees more and more lost sight of. It would seem that the views and opinions set forth by the Most Noble the Governor General, in his Lordship's Minute of the 30th June 1854, upon the Reports of the Madras Commissioners on Public Works which were held to be of authoritative guidance when the despatch 96 from the Honorable Court of the 20th December 1854, was received, have now given place to other standards, which at an earlier era in the discussions, possessed none of the weight or importance at present ascribed to them.

4. But as the very delicate operation now in progress, though still incomplete, of a general substitution of voluntary for forced labour and the nessary concurrent transfer of the entire Executive from the Revenue authorities to a stipendiary Professional Agency, is the radical ground on which the projected reform of the D. P. W. is based, I cannot but respectfully submit both the wisdom and expediency of again having recourse to the labours of the Commissioners and to such of their recommendations as were supported by the Most Noble the Marquiss of Dalhousie and fully approved by the Honorable Court.

5. The numbers, designations and salaries of the Upper Subordinate Establishment and especially of the Sub Engineers were propounded by the Commisioners in no view of correspondence with the establishments that might be suited to the very different requirements of other parts of our territories, but referred exclusively and closely to the actual local demands of the Madras Presidency in its exceptional posture in regard to the tenure of land, and Revenue mostly dependant on artificial, numerous, and often costly works of Irrigation. It seems to me to be one thing to organize, an agency perfectly fitted for carrying into effect the large practical reform alluded to in the foregoing para. and quite a different thing to call a body into existence whose numbers and salaries shall symbolize with establishments for other portions of the Indian Empire, which, when themselves reported upon by special commissions for a cognate improvement of a system of Public Works, had suggested none of those peculiarities in the classes of employes that have at this late period been so largely disallowed by the Government of India.

6. The Minute of the Most Noble the Marquiss of Dalhousie to which I have referred (30th June 1856, and forwarded to the Honorable Court on the 11th August) educes 20 several Propositions from the Commissioners Report to which His Lordship solicits support, Prop : XVIII., is to the effect. "That the recommendations of the Commissioners regarding the "Subordinate Grades in the Department Public Works shall be adopted" and para. 20, of the reply of the Honorable Court is simply "approved." Thus for a period of almost two years the belief has been universal, that subject to whatever measure of delay, the favorable prospects held out in the Report of the Commissioners were on the eve of being realized; and it is certain that

authorized.

whilst some Uncovenanted gentlemen have been induced thereby to enter the Department, very many have *remained* in it, who otherwise might have directed their abilities and experience into more profitable channels of employment.

7. I do not presume to advance the necessity of strictly maintaining the *exact numerical* integrity of the Commissioners system or to deprecate such *modifications as the Government of* India may see fit to enforce, but the *substitution of 16 instead of 80 Sub Engineers* amounts as stated in para. *5, of the Extract Minutes of Consultation* of the 22nd January to the "almost "*whole annihilation of the grade of Sub Engineers* which the Madras Government regard as so "valuable."

8. "Liberal as is the numerical amount of the Engineer establishment," it falls very short of the number necessary for each of the Executive Ranges into which the Districts have to be subdivided on the transfer from the Revenue authorities being accomplished. If the Government were desirous, which is far from being the case, of withdrawing from the great change at present in progress, it is now too late to do so, so completely are old routines unsettled and the expiring system becoming effete. But many of the most able and experienced Revenue Officers in the service regard the alteration as an experiment of doubtful success and of no dubious danger to the security of the Revenue, and it were much to have been wished that the Agent's who are now about to take charge of Executive ranges with areas of from 1000 to 2000 square miles each, should not only have been remunerated proportionally to their large pecuniary responsibility and professional ability, but that they also should have had the prestige of a departmental designation which confirming their own self respect, should have ensured the deference and support of all classes of the Native community.

9. I have of course to admit that with but few exceptions, the same personal agency is available that I should have had if the scale laid down on the 10th October 1856, had been sanctioned with such minor modifications as might have been thought proper; but although to this extent the Government does profit by the retention of qualified agents who confidently awaited early substantial preferment, I cannot the less regret the denial both of the titles and salaries affording such strong guarantees for fidelity and zeal, and of the hopes of future promotion by the comparatively infinitesimal proportions of the higher prizes of the Department.

10. In all the details of the subordinate machinery for bringing about a practical universal abolition of forced labor, by dispensing with the services of the belted overseers of the Tahsildars, and trusting to the influence of prompt liberal payment by a stipendiary agency, the new system has been too partially established and for too short a time, to warrant my speaking with full confidence either as to the numbers, or the precise duties of the Lower Subordinate Establishment. But any reduction when on the threshhold of a change, which many regard as synonymous with defalcation of Land Revenue, and any alteration of numbers which represent the results of years of careful consideration and thought, cannot I think but seem as a voluntary possible imperilment of success at the most critical period of the experiment.

11. The least unsatisfactory mode of affording the information called for in para. 2 of No. 165, as required in the 8th para. of Colonel Baker's Despatch, that has occurred to me, is to select any one particular District for scrutiny under the application of the limited sanction now accorded, and for this purpose it may be well to take one from the second class, rather than either from the 1st or 3rd.

12. North Arcot is a second class District with an area in round numbers of 7,000 square miles, and a Land Revenue of 18½ lacs of Rupees, and I find from last years Budget (though the repairs assumed at 15 lacs by Mr. Bourdillon for 1855-56, amounted in actual expenditure to Rupees 18,27,887, and there is reason to believe that this important item on which the Revenue so greatly depends, should have a provision of fully 20 lacs) that the expenditure under all heads is Rupees 5,80,000. The total allotment of permanent establishment on the present scale

will not exceed Rupees 56,400 or about 10 per cent. on outlay. The full number of all classes for Superintendence cannot be more than 50, and with 5 Executive ranges for the whole District, this would place 10 in each range. From this number of 10 if the Executive Engineer and two of the Upper Subordinate grade be taken for the general control and direction of at least 70 different works in the range (I observe that during the last two years the total number under separate execution throughout the North Arcot District has even exceeded 350) scattered over a surface averaging 1,400 square miles, there will be left for each of the 7 Lower Subordinates 10 works a piece, and an average of 200 miles area. The exact duties of these seven men are such as under the supervision and orders of the Executive Agent and two Upper Subordinates shall suffice to lay out the 70 works, to procure materials, workmanship and labour, and keep the accounts, pay the workmen and complete the buildings in such wise as to admit of final Bills being sent in. To these actual Executive duties of the one season have to be added the preparation of plans and estimates for similar undertakings in the succeeding year, in order to which each of the seven individuals in his own 200 miles beat will necessarily have to inspect all the tanks, channels, roads, and buildings within his range, and by his reports to obtain timely repairs to every class of Public Works the numbers of which may be perhaps safely taken as ten times greater than those actually under treatment.

13. When it is remembered both that the safety of the land revenue depends on the safety of the works of irrigation that supply the water, and that we are now about to obtrude a stipendary agency which from the foregoing close practical examination allots but one Lower Subordinate to every 200 miles, whilst hitherto there have been at least two fiscal servants in nearly every village and hamlet in direct communication with the Tahsildar on the state of the tank or channel of the locality. I am forcibly led to the conviction, that if the substitution of voluntary labor, and the abolition of coersion are a necessity, so also is it a most imperative necessity that the District Professional authority shall have a Machinery at command, which shall ensure a prompt and complete knowledge of the circumstances of all the hydraulic constructions within the limits of the Province for which he is responsible. The only question is whether this Machinery is now provided.

14. I tender the assurance of my unconditional conformity to the orders of superior authority, but having felt that I cannot morally incur the responsibility of reducing the numbers which have been so long unchallenged, of the lower Subordinate establishment of the D. P. W. in the Madras Presidency, I have carefully impressed in a Circular letter* of instructions (of which a copy is enclosed) on each local authority how strongly the Government of India has called for a diminution of numbers and I have left to each District Engineer the responsible office of deciding whether any and what amount of reduction can be safely attempted, authorizing him at the same time to entertain conditionally on the final sanction of Government the entire number that can be allotted to each District of the present unreduced scale, according to the classification of the District, and I respectfully appeal to the Right Honorable the Governor in Council for his Lordships approval of the steps I have taken.

* dated 31st January 1857, No 9917.

15. It perhaps is not intended that I should offer any observations on the several paras. in the Financial Resolution of the Governor General in Council No. 5500 as I am not particularly instructed to do so, but as the 3rd para. alludes to the working of my own office Establishment, I think it cannot be improper to obeserve that the amount of current business in an Office of Public Works, is by no means in exact ratio to the aggregate money expenditure on the contrary I entertain the belief that there would have been less correspondence and less onerous demands on the members of the office establishment during the currency of the present budget, if no restrictions had been placed on the execution of the sanctioned Estimates, nor any fractional amount allotted for apportionment on selected works throughout the Presidency, notwithstanding that the actual outlay would probably have been at least double what it is now likely to amount to. In the Audit Department also it is within certain limits, less the amount of each Bill than the number and character of those which have to

be checked that regulate the demands on the Accountants and Auditors. But the most material point to be considered and which seems to have been entirely overlooked is that, although an intended expenditure of 76 lacs has been reduced to an actual outlay of 56 lacs, yet the whole of the professional and office work which that differential amount represents, have already been duly performed. Practically unfruitfully no doubt; but all the works intended to cost 20 lacs have been duly projected, planned, estimated for, checked, and reported upon and as it was impossible to forsee the reductions that are alluded to as having exercised a retrospective influence over the current operations of my office. I cannot do less than solicit the attention of Government to what would thus seen to have been a fallacious point of view on which to judge of the amount of ministerial labour, I have had to perform.

16. The amount of work done in the Central office of Public Works, is not conjectural, and its still and even rapidly increasing expansion and growth can be tested by the statistical returns usually held to be conclusive on such a point. I venture to think that the numbers of letters received and despatched, of estimates and Bills checked, examined and audited and of plans and maps drawn and transmitted, afford a more accurate guage of the substantial business of an office of Public Works, than the total amount of money granted within any particular period. One large project of 5 lacs must obviously call a much smaller amount of office machinery into play than 50 smaller undertakings of 10,000 Rupees or 500 works costing only 1000; and the prevailing feature of the Madras Presidency being the excessive number of its works of irrigation. I submit the strictly practical character of the explanatory observations, I have now presumed to place before you.

17. In answer to para 3 of the orders of Government of the 22nd of January which refers to para. 5 of the Financial Resolution 5,500 of the Right Honorable the Governor General in Council, I do myself the honor to point out that the exception taken to an assignment of Rupees 745-8 for the office of Garrison Engineer Fort Saint George (which is contrasted with an establishment of only Rupees 265-11-2 in Fort William) arises altogether from an oversight.

18. In point of fact, the item objected to is not liable to any reduction or revision whatever; as the amount of Rupees 1,491 admitted to be indispensable for the Superintending Engineer P. D. in the Financial Resolution by the Right Honorable the Governor General in Council No. 3645, of the 1st August last has simply been divided into equal allotments of Rupees 745-8 between the Civil Architect at the Presidency and the Garrison Engineer Fort Saint George.

19. It may of course admit of question whether the duties hitherto performed by the Superintending Engineer P. D. will be so exactly halved, as to make the present division of the authorized aggregate of Rupees 1,491 one precisely suited to the amount of work each Officer will have to perform. On the contrary, when the quinquennial statement of expeniture already called for under the two heads of Civil and Military are received, adjustments corresponding with the average outlay in each Department may be found necessary. But there seems to be no reason whatever for the expectation that any actual reduction can safely be made on the grant of the Government of India of 1st August 1856. The increase solicited by this Government after a very carefully scrutiny on the 22nd April last was Rupees 815, and in authorizing an extra expenditure of only Rupees 605, being Rupees 210 less than had been recommended, the Right Honorable the Governor General in Council is pleased to state expressly in para. 3 of the Financial Resolution 3645 "that the Madras Government will make an experiment" of the reduced rates. The only uncertainty therefore regarding a subject, otherwise finally disposed of, is whether the aggregate of 1491 as suggested by the Government of India has been found to be practically sufficient to meet the acknowledged requirements of the Superintending Engineer P. D. or whether on the contrary the full augmentation of Rupees 815; raising the total to Rupees 1701, is not essential to the efficient discharge of the duties to be performed in future jointly by the Civil Architect and Garrison Engineer.

20. It thus becomes open to obvious surmise that if the Tabular Statement of the 10th October 1856, had assigned the whole amount of Rupees 1491 to the Civil Architect, and alloted Rupees 265-11-2 to the Garrison Engineer, such establishments would not have failed to receive the confirmation of the Government of India; the former amount having been specifically authorized on the 1st August, and the latter having reference to the duties to be discharged by the Garrison Engineer.

21. This explanation will I hope suffice to shew that no reduction is at present practicable and that in the revised tabular statement about to be submitted by the Government of Madras a total of Rupees 1491 is the minimum to be alloted for the joint offices created by the new organization.

22. Nevertheless in deference to the strongly expressed wishes of the Government of India some relief *may* be found possible by admitting the claims of the Civil Architect and the Garrison Engineer to participate in the Upper and Lower Subordinate establishments of the D. P. W. notwithstanding that the numbers of those classes were fixed for the wants of the Irrigation Department in the Provinces primarily. But it would obviously be premature to now fix the amount of such contingent relief in an ostensible reduction of the changes at the Presidency, whilst really reducing the aggregate expenditure on the whole changes of the department, and this point should therefore stand over for future discussions and report.

23. In reply to para. 4 of the orders of Government in connexion with para. 6 of the Financial Resolution 5500, I do myself the honor to solicit attention to the circumstance that it has only been proposed to place so small a number as 23 Storekeepers on the permanent list of the establishment for the whole Madras Presidency with an aggregate pay of Rupees 890. If this amount be compared with the totals admitted for the lower or the North Western Provinces, I apprehend that the moderation of the proposed expenditure will be admitted. The Government are aware of the valuable nature of the mechanical apparatus and of the Engineering plant generally, which the Honorable Court have liberally supplied of late, and extensive additions to which are now on their way to Madras. The care and custody of this machinery, and of the professional Instruments generally of each District, in addition to the accounts of receipts and issues of the more common stores and building materials require, I think, it, must be allowed a man of respectability and integrity as a store keeper at the Central office and depôt of each District; and when it is known that it is for these positions only that salaries ranging from 50 to 30 Rupees are proposed, I hope that they will not be considered by any means too high. Having regard to the responsibility of the office, I am not prepared to report that duly qualified and honest agents could be obtained for a smaller amount.

24. In obedience to the orders contained in para. 9, of Extract Minutes Consultation No. 165, of the 22nd January 1857, I do myself the honor to enclose a general table of the Department Public Works as now authorized for the Madras Presidency shewing the proportional distribution of the "Engineer Establishment," the "Upper Subordinate Establishment" and the "Lower Subordinate Establishment," and which I hope will receive the approval of Government I also beg leave to enclose a table exhibiting the distribution as at present existing from which it will be seen that several alterations are required to rectify now prevailing inequalities, anomalies and irregularities. Under the principle enunciated by His Lordship in Council in the concluding part of para. 17 of the Notification appendend to Extract Minutes Consulta-

tion No. 211, of the 27th of January last, of a Departmental "gradation list" it appears to be impracticable to define the precise class to which every member of the Department shall belong in each District, the same individual acquiring different designations according to circumstances; and the most that can be done for that regulation and comparative uniformity which have long been so greatly required, is to have a fixed numerical strength of each of the three classes, into which the D. P. W., has been sub-divided.

25. It is hardly possible to over rate the benefit that may reasonably be expected from adhering to the unformity of distribution that will follow the open recognition of the equal claims according to classification of every part of the Presidency, especially the evils to which some Provinces have been subjected by their fair claims being practically over borne by more favored districts will be found to disappear; and instead of the local Officers being in doubt as to the numerical amount of the Departmental establishment, they can calculate upon, frequently to the derangement of executive ranges required by the circumstances of their districts, it will henceforth be in the power of each District Engineer to suit his arrangements to the strength of his Department and to make the most favorable allotment of works and duties that circumstances may admit.

26. In carrying this minor reform into early practical effect, there will no doubt be many remonstrances, and numerous special cases will be alleged in favor of departure from the normal distribution according to classification by Districts. All such representations may for the present I think be very fairly met by the 16 officers and gentlemen at present supernuemerary to the fixed establishment; and I would beg leave to propose therefore that the Departmental strength of each District should be finally settled by a perfectly equal distribution according to classification, and that when this has been fairly carried out, the supernumeraries should be assigned to particular Districts and Projects as the Government may direct.

27. Having now replied as fully as I am able to the orders of Government under acknowledgment, I have to solicit the early and particular attention of the Right Honorable the Governor in Council to the apparently accidental entire omission in the letter of the 10th October 1856, No. 1842 of the application contained in para. 3 of my own despatch No. 5552 of the 9th August 1856.

28. It was in conformity to para. 4 of the G. O. G. G. No. 117 of the 17th June 1856, that I respectfully claimed on behalf of the Corps of Sappers and Miners in the Madras Presidency, the like proportional amount of Warrant promotion that has been so liberally bestowed on the Bengal Army. His Lordship in Council and His Excellency the Commander-in Chief are fully aware on how disadvantageous a position compared will Bengal and Bombay, the European Non Commissioned Officers of the Madras Sappers and Miners have long been placed with but a single Warrant Officer at Regimental Head Quarters throughout the whole Corps. If I do not greatly mistake Deputy Commissaries, Assistant Commessaries, and Deputy Assistant Commissaries, have already been appointed under the G. O. G. G. 17th June 1856; and feeling sure that the Madras Government will vigorously support the just pretensions thus brought forward I now respectfully renew my application of the 9th of August last, and I trust that His Lordship in Council will recommend the Warrant Commissions to bear the same date in the Madras Presidency, that they already do in Bengal.

No. 27. ORDER THEREON, No. 608; dated 2nd April 1857.

On 10th October 1856, the amended scheme for a new Establishment for the Public Works Department for this Presidency was submitted to the Government of India. In an Extract from their Proceedings No. 5500 dated December 12th, 1856, the Supreme Government, after agreeing in most particulars to the proposals made, expressed an opinion that the salaries of the upper Subordinates were too high, and the number of the lower Subordinates too large. They also thought the Garrison Engineers' Establishment too large, and the salaries of the District Storekeepers excessive.

2. With reference to these opinions, Government in Extract Minutes Consultation of 22nd January 1857, called for a Memo. from the Chief Engineer upon the duties of the members of the lower Subordinate Department; Colonel Faber was at the same time desired to reconsider the number proposed for that Department, to revise the list of the Establishment of the Garrison Engineer, and to state what reduction could properly be made in the salaries of the District Store keepers. In his letter of 3rd February 1857, No. 10005, Colonel Faber replies to the above requisitions. He sets out by shewing that the radical grounds on which the reform of the Department of Public Works was based, and in accordance with which the recommendations of the Commissioners were made, are lost sight of by the Supreme Government now, though such recommendations were supported by the late Governor General, and fully approved of by the Hon'ble Court. All the Commissioners' recommendations, Colonel Faber remarks, were made exclusively and closely with reference to the actual local demands of the Madras Presidency, and the object of all was to organize an agency perfectly fitted to carry into effect the large practical reform of substituting voluntary for forced labour, and transferring the whole of the executive duties to a professional agency. One of these plans proposed was the formation of a large class of Sub Engineers; the recommendation was strongly supported by the Marquis of Dalhousie, and approved in express terms by the Government of India, and by the Honorable Court. The Madras Government, laying great stress on the importance of this class, proposed 80 as the number;—the Supreme Government would reduce it to 16. The Governor in Council agrees with Colonel Faber that any attempt to symbolize the numbers and salaries of the Department in Madras with those in other parts of the Indian Empire, thus ignoring the local peculiarities so eminently existing in this Presidency, must be abortive; and the Government will lay before the Supreme Government the very strong arguments adduced in paras. 8 and 10 of the Chief Engineer's letter. Certain it is that with the vastly increased duties and responsibility of the Department, with interests of such immense importance depending upon them, any measures whatever tending to weaken the guarantees for fidelity and zeal which the titles, salaries, and hopes of promotion, held out to the members of the department, should be most strongly deprecated.

3. In the 12th and following paragraphs, Colonel Faber furnishes the details called for relative to the duties of the lower Subordinate Establishment. He states that he cannot speak with full confidence as to their precise duties at such an early stage; but he selects a 2nd Class District, North Arcot, in order to scrutinize the duties of those Officers under the limited sanction now accorded. "North Arcot contains, he says, about 7,000 square miles, and affords a Land Revenue of 18½ lacs of Rupees, the expenditure under all heads is Rupees 5,80,000. The total allotment of permanent establishment on the present scale will not exceed Rupees 56,100, or 10 per cent. on the outlay. There are 5 executive ranges for the whole District, and 50 persons altogether available for superintendence i. e. 10 in each range. The total number of works performed during the last 2 years in North Arcot exceeds 350, giving an average of 70 for each range. Deducting then for general control the Executive Engineer and 2 of the upper Subordinates in each range, 10 works a piece on an area averaging 200 miles, would be left for each of the 7 lower Subordinates. The exact duties of these men are, laying out the 70 works, procuring materials, workmanship and labour, keeping accounts, paying workmen, and completing the Buildings so as to admit of final Bills being sent in; and to these actual executive duties have to be added the preparation of plans and estimates for similar works in the succeeding year, in order to do which, each of the 7 individuals will necessarily have to inspect all the Tanks, Channels, Roads and Buildings, and to obtain timely reports of all Public Works within his range,

the number of which may be safely taken at ten times greater than that actually under the treatment. On the efficient performance of these duties the safety of the Land Revenue will depend." These views are fully concurred in by Government and they cannot sum up their view of the case better than in Colonel Faber's own words that "now that all labour is voluntary, it is absolutely necessary that the District professional authority shall have some machinery at command, which shall ensure a prompt and complete knowledge of all the hydraulic constructions within the limit of the province for which he is responsible."

The Chief Engineer has it appears dispatched a Circular to his subordinates directing them te report what amount of reduction can in their opinion be safely attempted in the proposed lower subordinate Department, but under the circumstances detailed, and in the face of their own strong convictions, the Government are unable to take upon themselves the responsibility of asserting that any, even the least reduction is compatible with the well being of the Country, the safety of the Revenue, and the general good of the people.

4. In para. 3 of the Extract from the Proceedings of the Government of India in the Financial Department above quoted, the duties of the Chief Engineer's Office are touched upon. The remark made was, that whereas sanction was given to the present establishment with the idea that it would have to superintend the expenditure of 76 Lacs, that establishment must be excessive as only 56 Lacs were really expended. On this Colonel Faber remarks that, to hold the amount of expenditure exclusively as a standard of work involved, is fallacious; and he thinks that, had no restrictions been placed on the execution of the works contained in the Budget of 1856-57 there would have been less correspondence and less onerous demands on his establishment than was the case under the circumstances that occurred. This appears to Government self evident. When a work is sanctioned and the order for its execution has emanated from the Chief Engineer's office, he has no more trouble beyond inspecting the Diaries and Progress Reports until he audits the Bill, whereas on an occasion like that of last year's Financial restriction, a very large amount of extra labor is entailed upon the Central Office, in apportioning the fractional amount on selected works throughout the Presidency; to do this, repeated references to the District Engineers and to Government were rendered necessary. It is further to be observed that the principal part of the labor of the Central Office bestowed on every project, is so bestowed *before* the submission of the Project to Government, so that even setting the above argument aside the Central office was this year at least as much occupied as if the whole of the 76 Lacs had been expended. In auditing Bills likewise, the amount of the Bills up to a certain extent has less to do with increasing the work, than the number of the Bills. The true standard in the opinion of Government whereby to judge of the amount of work in an office is the number of letters received and despatched, the number of Bills audited, Estimates checked, and Maps and Plans drawn. The prevailing feature of the Madras Presidency, it will be pointed out to the Government of India, is the large number of the works of irrigation; and a number of small works call into action a much larger amount of Office machinery than one large work of the same aggregate cost.

5. In para. 17, the Chief Engineer replies to para. 3 of the orders of Government of January 22nd which refer to the Garrison Engineer's Establishment. It appears that on 1st August 1856, the Government of India sanctioned a modified scale of increased Establishment for the Superintending Engineer's office at Madras, amounting to Rupees 1,491 per mensem. The Madras Government had recommended a larger increase than was allowed, but it was ordered that the rates sanctioned should be introduced as an experiment at the same time that the increase granted was admitted to be indispensable. The sum thus sanctioned has been divided into two equal portions of Rupees 745-8 and the two portions assigned respectively to the Garrison Engineer and the Civil Architect. The amount applied for by the Madras Government has

thus been already once reduced; and the Governor in Council is of opinion that no further reduction can reasonably be expected; it is indeed, as Colonel Faber shews matter for surmise whether, had an Establishment for the Garrison Engineer properly so called of Rupees 265-11-2 similar to the one at Fort William been applied for, it would not have been granted *in addition* to that of the Superintending Engineer already sanctioned by the Governor General in Council.

This will be pointed out to the Government of India. When experience has enabled the Chief Engineer to decide upon the amount of labor involved by the duties assigned to the Civil Architect and the Garrison Engineer, a division can be made between the two Officers of the aggregate sum sanctioned.

6. The next point adverted to is the reduction of the salaries of the Storekeepers. In para. 6 of the Financial Resolution above quoted, the pay of the Storekeepers, ranging from 30 to 50 Rupees, was said to be too high, and revision of the scale was suggested. Colonel Faber now contrasts the Establishment of these functionaries in Bengal and the North West Provinces with that asked for, for Madras, in order to shew the moderation of the demand made. He shews that the Engineering plant over which the Storekeepers will have charge, is of a very valuable description; that expensive machines have been, and will again be, supplied by the Hon'ble Court, and that in addition to this, the accounts of the receipt and issue of all professional Instruments have to be kept. That a man of respectability and integrity is required for the office is manifest, and the Government agree with the Chief Engineer that it is unlikely that a duly qualified and honest agent could be obtained for a less amount of pay than has been fixed upon; and a representation on the subject will be made to the Government of India.

The lower subordinate establishment of the Public Works Department was not originally demanded, without full and careful consideration, and every argument now adduced by the Chief Engineer, has strengthened the conviction of the necessity under which the demand was made. The executive of some of the Provinces has been already transferred, and it is hoped that by the commencement of the next Official year the charge of the whole of the Public Works in this Presidency will be in professional hands. The Government could not look without anxiety and alarm to such very important interests being left without due supervision, and under the full conviction that the establishment demanded for this Presidency is in no respect larger than the wants of the country and the vast interests at stake most imperatively demand, they resolve to act upon the permission given in para. 7 of the Financial Resolution of the Government of India dated the 12th of December last, "to appoint, pending further orders, any part of the establishments applied for that may be urgently required," and to authorize the Chief Engineer to carry out the distribution of the lower Subordinate Establishment, according to the Statement contained in his letter now under review.

7. In paras. 27 and 28 of his letter, the Chief Engineer calls the attention of Government to the omission in the letter from this Government to the Government of India dated 10th October 1856, No. 1842, of the application contained in his former letter of 9th August 1856, No. 5652, that the like proportional amount of Warrant promotion that has been bestowed on the Bengal Army should be accorded to the Madras Corps of Sappers and Miners. Copies of the para. of the Notification of the 17th June 1856, and of paras 27 and 28 of Colonel Faber's present letter and of para. 3 of his former letter, will be furnished to the Military Department for consideration and disposal.

Para 4.

(Signed) H. FORBES,
Acting Secretary to Government.

No. 28. Ordered in consequence that the following letter be despatched.

From H. FORBES, Esq., Acting Secretary to the Government of Fort Saint George; to Lieutenant Colonel W. E. BAKER, Secretary to the Government of India, D. P. W. dated 2nd April 1857, No. 609.

SIR,

I am directed by the Right Honorable the Governor in Council to reply to your letter of December 19th 1856, No. 5963, forwarding for the information of this Government, a copy of a Resolution of the Government of India in the Financial Department No. 5500 dated 12th December 1856, relative to the establishment proposed for the Public Works Department of this Presidency. In the above mentioned Resolution the Supreme Government expressed agreement in most particulars with the proposals made, but they considered the salaries of the Upper Subordinate Department as too high, and the number of the lower Subordinates too large. They also noticed the Office establishment proposed for the Garrison Engineer as being very large; and were of opinion that the salaries proposed for the District Storekeepers were excessive. I am directed to notice each of these remarks in the order in which they were made.

2. The Governor in Council much regrets the reduction required by the Government of India in the numbers of the higher ranks of the Upper Subordinate Department,—a reduction which will almost wholly annihilate the grade of Sub Engineers, which this Government regards as so valuable. The very large proportion in the lowest grade also is looked upon as open to objection, as greatly reducing the expectation of advancement to the higher posts. And I am directed to observe that inasmuch as the Subordinate Department proposed has been approved of in express terms by the late Governor General, by the Government of India, and by the Honorable Court, this Government were unprepared for the reduction now made; and are of opinion that the Supreme Government must have overlooked the radical ground on which the reform of the Public Works Department was based, and in accordance with which the recommendations of the Commissioners were made. The establishment now objected to was framed exclusively and closely with reference to the actual local demands of the Madras Presidency. The design in view was to organize an agency perfectly fitted to carry into effect the large practical reform of substituting voluntary for forced labour, and transferring the whole of the executive duties to the professional Department. The change is no slight one, and the Chief Engineer remarks in his letter to this Government No. 10005 of 3rd February 1857, that "many of the most able and experienced Revenue Officers in the service regard the alteration as an experiment of doubtful success, and of no dubious danger to the security of the Revenue"; "it were much to have been wished," Colonel Faber goes on to say, "that the agents who are now about to take charge of executive ranges with areas of from 1,000 to 2,000 Square miles each, should not only have been remunerated proportionably to their large pecuniary responsibility and professional ability but that they should also have had the prestige of a Departmental designation which, confirming their own selfrespect, would have ensured the deference and support of all classes of Natives." The great changes to be effected here are the transfer of the Executive to a professional agency, and the substitution of wholly voluntary labor for that which has hitherto been, more or less, provided by the authority of the Revenue Officers; the success of the former measure depends on the sufficiency of the Departmemt in point of numbers to superintend our almost countless Hydraulic works, and that of the latter, almost wholly, upon the prompt and undiminished payment of the work people, to be secured only by the employment of an agency sufficiently numerous to attend punctually on every work in progress, and sufficiently honest to give confidence that no part of the laborers' wages shall be withheld from its proper recipient.

Minute by the M. N. the G. G. 30th June 1854, paras. 37 and 49. Despatch from Honorable Court 20th December 1854, No. 96, para. 20.

Paras. 8, 9, 10.

It is the opinion of this Government that any attempt to symbolize the numbers and salaries of the Department in Madras, with those in other parts of the Indian Empire, (thus ignoring the local peculiarities so eminently existing in this Presidency) by so great a modification as is proposed of a scheme which is the result of years of most careful consideration, will be not only to "voluntarily imperil the success" of the whole experiment, but will cripple the efficiency of the whole staff of the Department, by almost wholly removing the strong guarantees for fidelity and zeal which would be presented by the titles, salaries, and hopes of future promotion, afforded by the scheme proposed by this Government. With these remarks, the Government desire to leave the matter in the hands of the Right Honorable the Governor General in Council.

3. In para. 8 of the letter under reply, information was called for, with reference to the exact duties on which it is intended that the members of the lower Subordinate Department shall be employed. I am directed to append to this letter an Extract from one from the Chief Engineer under date 3rd February 1857, which contains the required details; North Arcot, a second class District being the one which has been selected for scrutiny. Subjoined to the Extract will be found a table shewing the classification of the Districts of the Presidency under the new regime, and the size of each. With reference to this part of the subject, the Governor in Council does not consider it necessary to do more than to state his entire concurrence with the sentiments contained in the last sentence of the Extract from Colonel Faber's letter, viz., that "if the substitution of voluntary for compulsory labour, be a necessity, so also it is a most imperative necessity that the "District professional authority shall have ample machinery at command to ensure a prompt and "speedy knowledge of the circumstances of all the hydraulic constructions within the limits of "the province for which he is responsible."

Paras. 11-12-13.

4. In sending up their revised Establishment list on the 10th October, this Government dwelt on the great extent of the charges entrusted to the District Engineers under this Presidency, as compared with the executive divisions in Bengal. In para. 9 of your letter under reply, it is mentioned that the Executive Divisions of Bengal are rarely confined to one Collectorate, and more often than otherwise range over three or four. The Governor in Council cannot but feel, that in this, as in other instances, this Presidency is placed at a disadvantage in its communications with the Supreme Government, because the same terms signify different things in the Madras territories and in Bengal. A Madras District contains on an average 6,800 Square miles; while in Bengal it contains only 3,222, and in the North West Provinces only 2,322, the former being one half and the latter one third of a Madras District. Some districts in Madras, as Bellary, Cuddapah and Madura contain areas varying from four to five times the size of a Bengal district and the difference in the work to be done, even in proportion to area, is still greater; I am directed to refer you to the following para. of Mr. Secretary Pycroft's letter to the Government of India of 10th of October last; "It has been pointed out on more than one occa- "sion that the Collectorates of this Presidency are far larger in respect both to extent, population "and Revenue than those of the N. W. Provinces and are at the same time covered with "Government works of irrigation to an extent quite unknown there; thus any inference respect- "ing these districts drawn from a comparison with the requirements of those under the Agra "Government would be deceptive. In Bengal Proper, the Collectorates are only half "the extent of those of Madras, while in population they are almost equal but they "contain no Government works except the main roads and buildings; *here again there- "fore the comparison would be wholly inapplicable and fallacious.*" The Governor in Council was in hopes that this explanation would have made the matter clear to the

Government of India; he much regrets to find that still, because the thing intended is indicated by the word District or Collectorate, the great difference really existing is lost sight of, and that the idea is arrived at that what suffices for a district in Bengal must also suffice and be suitable for a District in Madras. In the passage now under remark, it is admitted indeed that the works under an Executive officer in Bengal are hardly comparable with those under such an officer in these Provinces; still however, the fact above quoted is put forward as negativing the argument urged by this Government.

5. In para. 3 of the Financial Resolution under notice, the Government of India remark that, whereas sanction was given to the present establishment for the Chief Engineer under the idea that he would have to control the expenditure of 76 lacs, that Establishment must be excessive as only 56 lacs were expended during the year with reference to which the estimate was framed. I am directed to submit, that to hold amount of expenditure exclusively as a standard of work involved, is fallacious. Colonel Faber is of opinion that had no restrictions been placed on the execution of the works contained in the Budget of 1856-57, there would have been less correspondence, and less demand on the resources of his office, than was the case under the circumstances that occurred, and this appears to the Governor in Council to be obvious; when a work is sanctioned, and the order for its execution has emanated from the Chief Engineer's office, he has no more to do with it beyond inspecting the Engineers' Diaries and Progress Reports, until he finally audits the Bill, whereas, upon an occasion like that of last year's financial restriction, a very large amount of extra labour was entailed upon the Central office in apportioning the fractional amount on selected works throughout the Presidency; to do this, repeated references to the District Engineers and to Government were necessary. It is further to be observed that the principal part of the labour bestowed in the Central office upon each project, is so bestowed before the submission of the project to Government, so that even if it be held that no additional work was entailed upon the Chief Engineer by the financial check imposed, it must be admitted that, except the auditing the Bills for the unexpended amount (a considerable part of which labour would not have been performed during the year), the office was worked as hard as if the whole of the 76 lacs had been expended.

The true standard, in the opinion of this Government, whereby to judge of the amount of work in an office, is the number of Letters received and despatched, the number of Bills audited, Estimates checked, and Maps and Plans drawn. The prevailing feature of the Public Works of the Madras Presidency is the number of works of irrigation; and a number of small works call into action a much larger amount of office machinery than one large work of the same aggregate cost.

6. In the latter part of para. 5 of the enclosure in your letter under reply, the Establishment of the Garrison Engineer of Fort Saint George, is considered to be excessive. I am directed to point out that the Government of India are under a misconception regarding this point. On the 1st August 1856, the Government of India sanctioned a modified scale of increased Establishment for the Superintending Engineer's office at Madras, amounting to Rs 1,191 per mensem. The Madras Government had recommended a larger increase, but it was directed that the rates sanctioned should be introduced as an experiment, at the same time that the increase was admitted to be indispensable. The sum thus sanctioned has been divided into two equal portions of Rs. 745-8, and the two portions have been assigned respectively to the Garrison Engineer and the Civil Architect. Under these circumstances, I am desired to remark that had an Establishment, similar to that of the Garrison Engineer at Fort William, been applied for, in addition to the above, which was sanctioned for the Superintending Engineer Presidency

Division, it would have been in all probability allowed by the Government of India; and it is hoped that this explanation of what is apparently an oversight, will prove satisfactory to the Governor General in Council. The references to the correspondence in the case are given marginally.

Madras Government to Government of India, 12th April 1856, No 545.
Extract Proceedings Governor General, Financial Department 10th August 1856, No. 3645.
Madras Government Extract Minutes Consultation 8th September 1856, No. 1602.

7. The last part of the proposed scale objected to in the Financial Resolution (para. 6) is the rate of salaries of the District Storekeepers. The Chief Engineer, to whom this question was referred for an opinion as to what reduction could best be made, replies that the Engineering plant of which these Storekeepers will have charge, is of a very valuable description; costly machines have been, and are being, supplied by the Honorable Court, and in addition to the custody of these, and the whole of the ordinary District implements, the accounts of the receipt and issue of all professional instruments will be kept by the Storekeepers. For such duties as these, a man of respectability and integrity is required and the Chief Engineer considers it unlikely that a duly qualified and honest Agent could be obtained for a smaller salary than has been fixed upon. I am further directed to point out that the Storekeepers proposed by this Government are all to hold that situation in relation to an extensive District or a large department; these twenty three servants therefore will be all among the highest of the class of Storekeepers and the lower of the range of salaries given in the Notification of the 17th June will obviously not apply to them. In accordance with para. 23 of that Notification Storekeepers will be appointed to particular works where required, but the only persons of this class whom it is thought necessary to entertain permanently are those above referred to.

Letter October 10th 1856, No. 1842, para. 16.

8. In submitting these observations for the consideration of the Government of India, I am directed to request that you will assure the Governor General in Council that this Government are fully mindful of the Financial position of the country, and are actuated by every desire to meet his Lordship's wishes; but that inasmuch as an anxious consideration of the whole subject has only led to the strongest conviction that it is wholly impossible, consistently with the efficiency of the entire Public Works Department, the safety of the revenue, and the good of the people, to effect any reduction in the scheme as at first proposed, they are unable to take upon themselves the responsibility of recommending any diminution; in submitting therefore the revised Establishment called for by the Government of India they would be understood as acting not on their own convictions, but with a desire to meet the wishes of the Governor General in Council.

9. The executive of some of the Provinces in this Presidency has been already transferred, and it is hoped that the measure will be general at the opening of the next Official year. The Government could not look without anxiety and alarm upon such important interests being left without due superintendence, and in accordance with the permission given to this Government in the 7th para. of the Financial Resolution of the Government of India dated the 12th December last to appoint, pending further orders, any part of the Establishment applied for that may be urgently required, and with the declaration made in the 8th para. of your letter under reply, that no exception had been taken to it, they have authorized the Chief Engineer to entertain the lower subordinate Establishment as conditionally sanctioned by the Governor General in Council.

PUBLIC WORKS DEPARTMENT—STATEMENT OF INCREASE TO ESTABLISHMENT IN OF INDIA.

No.	Extract from Home Department of Govt. of India. Date	Office to which the proposition refers.	Year.	Charges. Ordinary.	Extraordinary.	Total.	Nature of charge. Present Scale.	Totol of Officers' salary and establishment. Rupees. A. P.	Proposed Scale.	Rate per For Military Officers. Rs. A. P.
		Public Works Department of the Madras Presidency.					1 Chief Engineer.....	3,415 1 4	1 Chief Engineer	2,250 „ „
							1 Adjutant of Engineers.		3 Superintending Engineers.....	1,000 „ „
							1 Secy. Board of Revenue D. P. W.....	2,479 2 8	1 Assistant to the Chief Engr...	500 „ „
							1 Assistant do. ...		1 Civil Architect at the Presidency	700 „ „
							1 Supt. of Trunk roads...	2,112 „ „	10 District Engineers or Superintendents of more than one Executive charge.....	700 „ „
							Engr. Dept. Mily. Board	576 „ „	10 do. do.	600 „ „
							1 Supg. Engr. Presidency		1 Supt. East Coast Canal.....	700 „ „
							1 Assist to do. ...	2,171 „ „	1 Garrison Engineer.....	500 „ „
							2 Overseers...		20 Executive Engineers 3rd class..	400 „ „
							4 Executive Engrs.... ...	2,430 „ „	26 do. do. 4th do...	300 „ „
							12 Civil Engineers...		32 Assistant Engineers.....	200 „ „
							Do. Apprentices.....	12,156 „ „		
							18 1st Assist. Civil Engrs.	6,536 „ „	Total...	... ...
							28 2nd do. do.	6,224 „ „		
							31 Executive Officers.....	6,052 „ „ 106		
							4 Overseers from England	1,200 „ „		
							2 Revenue Surveyors.....	451 8 „		
							5 2nd class do.	881 4 „		
							14 3rd do. do.	1,977 8 „	Upper Subordinates.	
							11 Sub Assist. Surveyors..	1,016 7 4	3 Sub Engineers 1st Class... ...	250 „ „
							2 Assist. Supervisors.....	230 „ „	5 do. 2nd do.....	200 „ „
							4 Overseers.....	415 12 4	8 do. 3rd do.....	150 „ „
							105 Assist. Overseers.....	5,733 15 9	12 Supervisors.....	120 „ „
							10 Marahmut Supts. and Sibbendy charges... ...	9,097 4 „	20 Assist. do.	100 „ „
							6 Uncovenanted Assist. Civil Engineers...		40 Overseers.....	85 „ „
							7 English professional Civil Engineers	3,096 „ „	116 Assist. de.....	70 „ „
								4,725 5 8	204	
							280		Total...	... ...
									Lower Subordinates.	
									Sub Overseers.	
									24 First class above 10 years standing	„ „ „
									32 Do. above 5 do. ...	„ „ „
									40 Do. others	„ „ „
									63 Second class above 10 years standing	„ „ „
									84 Do. above 5 do. ...	„ „ „
									105 Do. others	„ „ „
									85 Third class above 10 years standing...	„ „ „
									114 Do. above 5 do. ...	„ „ „
									113 Do. others	„ „ „
									690	
							Carried over...	73,036 5 1	Total.....	... ...
									Carried over.....	... ...

THIS DEPARTMENT RECOMMENDED FOR THE SANCTION OF THE GOVERNMENT

Mensem. For persons not in the Military service. Rs. A. P.	Total for each grade. For Military Officers. Rs. A. P.	For persons not in the Military service. Rs. A. P.	Grounds of proposition.	Local Government's recommendation.	Orders of the Government of India. Home Department. Remarks.	Financial Department. Remarks.	Financial Department. Orders.
2,250 „ „	2,250 „ „	2,250 „ „					
1,100 „ „	3,000 „ „	4,200 „ „					
750 „ „	500 „ „	750 „ „					
1,000 „ „	700 „ „	1,600 „ „					
1,000 „ „	7,000 „ „	10,000 „ „					
900 „ „	6,000 „ „	9,000 „ „					
1,000 „ „	700 „ „	1,000 „ „					
750 „ „	500 „ „	750 „ „					
600 „ „	8,000 „ „	12,000 „ „					
500 „ „	7,800 „ „	13,000 „ „					
250 „ „	6,400 „ „	8,000 „ „					
... ...	42,850 „ „	61,950 „ „					
400 „ „	750 „ „	1,200 „ „					
300 „ „	1,000 „ „	1,500 „ „					
250 „ „	1,200 „ „	2,000 „ „					
200 „ „	1,440 „ „	2,400 „ „					
150 „ „	2,000 „ „	3,000 „ „					
100 „ „	3,400 „ „	4,000 „ „					
80 „ „	8,120 „ „	9,280 „ „					
... ...	17,910 „ „	23,380 „ „					
60 „ „	1,440 „ „	1,440 „ „					
50 „ „	1,600 „ „	1,600 „ „					
40 „ „	1,600 „ „	1,600 „ „					
35 „ „	2,205 „ „	2,205 „ „					
30 „ „	2,520 „ „	2,520 „ „					
25 „ „	2,625 „ „	2,625 „ „					
25 „ „	2,125 „ „	2,125 „ „					
20 „ „	2,280 „ „	2,280 „ „					
15 „ „	2,145 „ „	2,145 „ „					
... ...	18,540 „ „	18,510 „ „					
... ...	79,300 „ „	1,03,870 „ „	609.	See letter of this day's date No. 609. Favorable.			

authorized.

PUBLIC WORKS DEPARTMENT—STATEMENT OF INCREASE TO ESTABLISHMENT IN THE PUBLIC WORKS DEPARTMENT OF THE MADRAS PRESIDENCY.

No.	Extract from Home Department Govt. of India. Date	Office to which the proposition refers.	Year.	Charges. Ordinary.	Extraordinary.	Total.	Nature of charge. Present Scale.	Total of Officers salary and establishment. Rs.	A.	P.	Proposed Scale.	Rate per For Military Officers. Rs.	A.	P.
							Brought over...	73,036	5	1	Brought over...	.....	...	...
											ESTABLISHMENTS.			
											1 Chief Engineer...	6,836	„	„
											3 Superintending Engineers...			
											1 Assistant Chief Engineer...			
											1 Civil Architect at the Presidency	745	8	„
											DISTRICT ENGINEER ESTABLISHMENTS.			
											1 Supt. East Coast Canal... ...	393	„	„
											20 { 5 Districts first class... ...	393	„	„
											7 do. second do. ...	359	„	„
											8 do. third do. ...	309	„	„
											1 Garrison Engineer... ...	745	8	„
											20 Executive Engineers 3rd class.	150	„	„
											26 do. 4th do.	101	„	„
											32 Assistant Engineers... ...	69	„	„
											10 Sub Engineers 1st class... ...	53	„	„
											30 do. 2nd do. ...	53	„	„
											10 do. 3rd do. ...	53	„	„
											30 Supervisors... ...	33	„	„
											30 Assist. do. ...	33	„	„
											32 Overseers... ...	33	„	„
											20 Assist. do. ...	33	„	„
											12 Probationary.. ...	6	„	„
											6 Storekeepers... ...	50	„	„
											8 do.	40	„	„
											9 do.	30	„	„
											23 Total of establishments...	.....	...	...
							Total per mensem...	73,036	5	1	Total per mensem...	.....	...	...
							54 Engineer apprentices.....	378	„	„	54 Engineer apprentices... ...	.....	...	...
							Total per mensem...	73,414	5	1	Grand Total per mensem...	.....	...	...
							Total per annum...	8,80,971	13	„	Grand Total per annum...	.....	...	...
											Deduct present charge...	.....	...	...
											Net increase...	.....	...	...

Fort Saint George,
2nd April 1857.

THIS DEPARTMENT RECOMMENDED FOR THE SANCTION OF THE GOVERNMENT

Mensem. For persons not in the Military service. Rs.	A.	P.	Total for each grade. For Military Officers. Rs.	A.	P.	For persons not in the Military service. Rs.	A.	P.	Grounds of proposition.	Local Government's recommendation.	Orders of the Government of India. Home Department. Remarks.	Financial Department. Remarks.	Financial Department. Orders.
.....	...	...	79,300	„	„	1,03,870	„	„					
„	„	„	6,836	„	„	„	„	„					
„	„	„	745	8	„	„	„	„					
„	„	„	393	„	„	„	„	„					
„	„	„	1,965	„	„	„	„	„					
„	„	„	2,513	„	„	„	„	„					
„	„	„	2,472	„	„	„	„	„					
„	„	„	745	8	„	„	„	„					
„	„	„	3,000	„	„	„	„	„					
„	„	„	2,704	„	„	„	„	„					
„	„	„	2,208	„	„	„	„	„					
„	„	„	530	„	„	„	„	„					
„	„	„	1,590	„	„	„	„	„					
„	„	„	2,120	„	„	„	„	„					
„	„	„	810	„	„	„	„	„					
„	„	„	810	„	„	„	„	„					
„	„	„	864	„	„	„	„	„					
„	„	„	540	„	„	„	„	„					
„	„	„	72	„	„	„	„	„					
			30,918	„	„	„	„	„					
„	„	„	300	„	„	„	„	„					
„	„	„	320	„	„	„	„	„					
„	„	„	270	„	„	„	„	„					
.....	...	...	31,808	„	„	31,808	„	„					
.....	...	...	1,11,108	„	„	1,35,678	„	„					
.....	...	...	378	„	„	378	„	„					
.....	...	...	1,11,486	„	„	1,36,056	„	„					
.....	...	...	13,37,832	„	„	16,32,672	„	„					
.....	...	...	8,80,971	13	„	8,80,971	13	„					
.....	...	...	4,56,860	3	„	7,51,700	3	„	Favorable.	See letter of this day's date No. 609.			

(Signed) H. FORBES,
Acting Secretary to Government.

Circular

No. 9917.

19

To,

The Civil Architect at the Presidency,
the Garrison Engineer, all District Engrs,
and the Supt. Eastern Coast Canal.

Sir,

The Government having been pleased in paras. 18 and 19 of Gl. O.G. 28th Jany. 1857 to direct the preparation of Recommendation Rolls agreeably to the annexed form, for completing the fixed establishment of the newly organized D.P.W. for the Madras Presidency, and to authorize your actual entertainment, pending the final confirmation of Govt., of such 2nd and 3rd Class Sub Overseers, as you consider to be fully qualified for employment in the public service, I do myself the honor to forward a scheme for your guidance, in which the numbers are duly tabulated that each Officer has been considered entitled to.-

2 Enclosures

2. I must acquaint you however, that in conformity with the desire of the Rt. Hble the Govr. Genl. in Council, the Madras Govt. has already in G.M.C., No. 165 of the 22nd Jany. 1857, called upon me to report what numerical reduction can be safely effected in the lower subordinate establishment, the number of which, 690, has been considered excessive.- On the eve or in the midst of an operation of such delicacy and importance as the transfer of the P.W. Executive from the much more extensive agency of the Revenue Authorities, to the far less numerous stipendiary professional body which has just been organized, I do not feel at liberty to recommend that any attempt should be made to weaken the strength that has just been conceded, however reluctantly, and I have therefore not withheld from you, who would justly be held responsible for any future defective establishment, the option of engaging the full numbers allotted to you in a scheme so carefully eliminated, and so frequently considered as that now finally authorized.

authorized. That however which it might be unwise and even hazardous to prescribe from the Central Office of G.H. may possibly be undertaken with perfect safety and even success by the local Officers in the Provinces, whose fuller judgement will be guided by considerations of place and people, that the Chief Engineer has not equal access to.

3. Being practically therefore upon what has been stated in the foregoing para: you will be pleased to consider that it is not your duty by any means to engage all the additional numbers of the subordinate servants entered on the accompanying Estimate, but only such proportions of them as upon most anxious deliberation and conference with the Officers you may believe to be indispensable to meet the requirements of the public service. Of course in a bonâ fide belief that the full complement of Sub Overseers is essential both to the maintenance of the works of irrigation on which the great bulk of the Revenue depends, and to that improvement of the communications and development of the material resources to which the liberal policy of our enlightened Government is directed, you will not hesitate to recommend the confirmation of the whole numbers asked for, but I am even desirous to place before you the strongly expressed sentiments of the Govt of India in favor of reduction, and at the same time to instruct you to loyally carry these views into effect so far as you can do so without compromising the efficiency of your department, the interests of Govt, or the welfare of the people. I have only further to add, with reference to paras 15 and 19, that it is by no means obligatory to defer the actual entertainment of any of the 2nd & 3rd Class Sub Overseers, until the entire number shown in the column of totals, or that reduced number which you may deliberately represent to be adequate to the wants of your district has been engaged; on the contrary, insisting always on a due standard of qualification, until the acquirements and knowledge

indispensable for admission are authoritatively determined by Govt, you will be pleased, on your own personal responsibility as to the fitness of each employé, to send in a monthly list shewing the parties engaged until the maximum is reached. A final Recommendation Roll will then be compiled in the Central Office and submitted for confirmation and publication in G.G.G. with dates of employment.

4. I avail myself of the present occasion to draw your attention to other portions of the G.O. G. in their practical working, and it may save misunderstanding and future correspondence to point out that the very liberal grants authorized as marching allowances under Paras: 4, 5 and 6 will be most carefully scrutinized in the Central Office, and that they are never to be issued without pre-audit. It is far from being intended that these sums should be granted indiscriminately, or as an usual component part of the aggregate receipts attached to each departmental grade. On the contrary you will have the goodness to thoroughly satisfy yourself in each separate case, that the claim is bonâ fide, valid under one or other particular clause, which must invariably be stated to facilitate examination, check, and pre-audit in the Central Office. In any case, when the Inspection Lists required by Clause VII of Para: 4 fail to distinctly exhibit the validity of a charge, the claim will be invariably disallowed. In short, whilst of course no obstruction will be offered to the full issue of the advantages now held out, I must pointedly solicit your zealous co-operation, alike by personal example and scrutiny of each individual claim, to prevent any abuse of the liberality of Government. In respect to para: 5, the first five Clauses will as a general rule be imperative, and Clause VI will commonly regulate the allowances to the upper Subordinate grades

grades, and in all doubtful cases more especially in the Eastern Coast Canal Department, as Establishment Diary or Itinerary, may be found the most convenient vouchers with a declaration on honor subjoined like that prescribed in Clause VI. para: 4. In like manner with para: 6, it is the latter portion of the order which for the most part will be found applicable to the "Lower Subordinate Establishment" and to the usual manner in which its members are engaged.-

5. Finally as the Gl. O. Gl of the 28th January 1857 has retrospective effect from the 1st January, it is desirable that all claims for marching allowance during the month, should be submitted for pre-audit without delay, and I beg that you conform to the instructions now circulated as carefully as you can.-

Central Office of P. W.
Fort St. George,
31st January 1857.

I have the honor to be,
Sir,
Your most obedt Servt

A. W. Fraser Colonel,
Chief Engineer

Distribution of the Sub Overseers of the 2d and 3d Classes.

District.		63 Sub Overseers at Rs. 35	84 Sub Overseers at Rs. 30	105 Sub Overseers at Rs. 25	85 Sub Overseers at Rs. 25	114 Sub Overseers at Rs. 20	143 Sub Overseers at Rs. 15	Total	
Classes		2d	2d	2d	3d	3d	3d		
Tanjore	1st Class	5	7	9	6	9	12	48	
Rajahmundry	1st Class		6	8	6	10	11	41	
Masulipatam	1st Class		6	8	7	9	11	41	
Bellary	1st Class	2	6	7	6	7	10	38	
Cuddapah	1st Class	5	6	7	6	8	11	43	211
North Arcot	2d Class	4	4	4	4	4	6	26	
South Arcot	2d Class	3	5	6	5	6	7	32	
Nellore	2d Class	3	4	4	3	5	7	26	
Coimbatore	2d Class	3	5	5	5	7	8	33	
Tinnevelly	2d Class	8	4	5	4	5	8	34	
Guntoor	2d Class	3	5	5	5	6	8	32	
Madura	2d Class	3	4	5	4	6	7	29	212
Ganjam	3d Class	5	2	3	2	4	4	20	
Viragapatam	3d Class	1	2	4	2	3	5	17	
Chingleput	3d Class	2	2	3	3	4	4	18	
Kurnool	3d Class	2	2	4	2	3	4	17	
Trichinopoly	3d Class		3	5	4	3	4	19	
Salem	3d Class	2	3	3	3	4	3	18	
Canara	3d Class	2	2	3	2	3	4	16	
Malabar	3d Class	2	2	4	3	4	4	19	
Civil Architect	3d Class	2	1	1	1	2	2	9	
E.C. Canal	3d Class	4	2	1	1	2	2	12	
Garrison Engineers	3d Class	2	1	1	1	"	1	6	171
Total		63	84	105	85	114	143		594

Recommendation Roll by the District Engineer of South Arcot / for the following Candidates as Sub Overseers, under Gy. O. Gy 28th January 1857.-

Names of Candidates or Nominees.	Class to which provisionally appointed.-	Age.	Religion.	Bodily health	Previous employment or trade.-	Qualifications.-								
						General education or intelligence.-	Speaking reading and writing English.	Do. Do. Vernacular Language	Arithmetic.	Geometry.	Plan drawing.	Estimate making.	Surveying.	Use of Instrument.	Knowledge of Building.-
P. Chinniah.-	2nd Class Sub Overseer, 1st Grade.	35	Hindoo	Robust	Bricklayer Maistry and Talook Maistry since 1845.-	All quick intelligent men with moderate education.-	Reads and writes English papers only.	Reads and speaks Tamil and Telugu.	As far as Rule of Three.-	Little or none.-	Can copy a simple plan.-	Can make common Estimates.-	Is now learning.-	Can rule, set out with compass.-	Knows good from bad material.-

Memorandum.

The Acting Superintending Engineer Northern Circle, in charge of the Central Office of P. W., has the honor to state that, the despatch of the Chief Engineer's letter No. 10005, dated 3d February 1856, has been delayed, pending the preparation of the two tabular statements referred to in para 24.

Central Office of P.W.
Fort Saint George
6th February 1857.

I have the honor Captain
A.d. Sup.g Engr. North.n Circle
in charge of the Central Office of P.W.

To
The Secretary to Government
Public Works Depart.t

Copy of this letter with its enclosures forwarded to the Chief Engineer for information.

(Signed) W. Caldwell
Secretary.

Public Works Office
Fort St. George
8th April 1857.

Proposed

Distribution Table of Officers, Upper and Lower Subordinates. Store Keepers and Apprentices.

29

District	Number of Taluks	Establishment of Officers	Upper Subordinates	Lower Subordinates	Store Keepers	Apprentices	Remarks
Tanjore	17	6	14	57	1	5	
Rajahmundry	19	17	24	40	1	5	
Masulipatam & Guntoor	27	9	21	85	2	8	
Bellary	17	6	16	45	1	4	
Cuddapah	14	5	13	40	1	4	
North Arcot	13	6	11	30	1	3	
South Arcot	13	4	9	33	1	3	
Nellore	10	4	12	33	1	3	
Coimbatore	15	6	13	36	1	3	
Tinnevelly	15	4	4	37	1	3	
Madura	12	2	11	31	1	2	
Ganjam	11	3	6	26	1	1	
Vizagapatam	16	3	4	10	1	1	
Chingleput	10	2	7	24	1	1	
Kurnool	9	2	4	19	1	1	
Trichinopoly	8	4	9	22	1	1	
Salem	14	3	6	23	1	1	
Canara	12	3	6	19	1	1	
Malabar	10	2	7	22	1	1	
Eastern Coast Canal	"	2	2	14	1	3	
Civil Architect	"	"	2	9	1	"	
Garrison Engineer	"	"	3	9	1	"	
Survey School	"	1	"	"	"	"	
Total	"	94	204	690	23	54	

Central Office of P. Works
Fort Saint George
3d February 1857

Upton Capt.
Actg Superintending Engr Northern Circle
& Ch. of the Central Office of Works

Compd
Shaw

Public Works Dept.

33

№ 608

Extract from the Minutes of Consultation

Under date the 20 April 1857

Read the following

Letter from the Chief Engineer

Recd. & entered 3d. February 1857.

№ 10,005

On 10. October 1856

the amended Scheme

for a new Establishment

for the Public Works De-

-partment for this Pre-

-sidency was submitted

to the Govt. of India.

In an Extract from their

Proceedings № 5500 dated

December 12. 1856, the

Supreme

Secretariat Table

From the Chief Engineer

& Secretary to Govt.

Right of Way

Bridges

Public Works Dept.

Bombay Castle

lost sight of by the Supreme Govt now, though such recommendations were supported by the late Governor General, and fully approved of by the Honble Court. All the Commissioners recommendations, Colonel Faber remarks, were made exclusively and closely with reference to the actual demands of the Madras Presidency, and the objects of all was to organize an agency perfectly fitted to carry into effect the largest practicable reform of substituting voluntary for forced labour, and transferring the whole of the executive duties to a professional agency.

agency. One of these plans proposed was the formation of a large class of Sub Engineers, the recommendation was strongly supported by the Marquis of Dalhousie, and approved in express terms by the Government of India, and by the Honorable Court. The Madras Govt laying great stress on the importance of this Class, proposed 80 as the number, and the Supreme Govt would reduce it to 16. H.E. Governor in Council agrees with Govt that the [illegible]

numbers and salaries of the Department in Madras with those in other parts of the Indian Empire, thus ignoring the local peculiarities so eminently existing in this Presidency must be abortive; and the Govt will lay before the Supreme Govt the very strong arguments adduced in Paras 8 and 10 of the Chief Engineer's letter. Certain it is that with the vastly increased duties and responsibility of the Dept, with interests of such immense importance depending upon them, any measures whatever

whatever tending to weaken the guarantees for fidelity and zeal which the titles, salaries, and hopes of promotion, held out to the members of the department, should be most strongly deprecated.

3. In the 12th and following Paragraphs, Colonel Taber furnishes the details called for relative to the duties of the lower Subordinate Establishments. He states that he cannot speak with full confidence as to their precise duties at such an early stage; but he selects a 2nd Clerk

Dietrich

District, North Arcot,
in order to scrutinize
the duties of those Officers
under the limited sanction
now accorded. "North Arcot
contains, he says, about
7000 square miles, and
affords a land Revenue
of 8½ lacs of Rupees.
The Expenditure under
all heads is Rupees 580,000.
The total allotment
of permanent Esta-
blishment on the
present scale will not
exceed Rupees 56,400, or
10 per cent on the outlay.
There are 6 executive
ranges for the whole
District, and 50 persons
altogether available
for superintendence
i.e. 10 in each range.
The total number of
works performed during the
last

last 2 years in North
Arcot exceeds 350, giving
an average of 70 for each
range. Deducting three
for general control the
Executive Engineer and
2 of the upper Subor-
dinates in each range,
10 works a piece on an
area averaging 200 miles,
would be left for each
of the 7 lower Subordinates.
The exact duties of
these men are, laying
out the 70 works, pro-
curing materials, work-
manship and labour,
keeping accounts, pay-
ing workmen, and
completing the Build-
ings so as to admit of
final Bills being sent
in; and to these detail
by executive duties have

to be added the preparation of plans and Estimates for similar works in the succeeding year, in order to do which, each of the 7 individuals will necessarily have to inspect all the Tanks, Channels, roads, and buildings, and to obtain timely reports of all Public Works within his range, the number of which may be safely taken at ten times greater than that actually under treatment. On the efficient performance of these duties the safety of the Land Revenue will depend. These views are fully concurred in by Govt. and they cannot sum up their view of the case better than in Col. Faber's words that

now

that all labour is voluntary, it is absolutely necessary that the District professional authority shall have some machinery at command which shall ensure a prompt & complete knowledge of all the hydraulic constructions within the limit of the province for which he is responsible.

The Chief Engineer has it appears despatched a circular to his subordinates directing them to report what amount of reduction can in their opinion be safely attempted in the proposed lower

The remark made was, that whereas sanction was given to the present Establishment with the idea that it would serve to superintend the expenditure of 76 Lacs, that Establishment must be excessive as only 56 Lacs were really expended. Sir Alex Colvin Taber remarks that, to hold the amount of expenditure exclusively as a standard of work involved, is fallacious, he thinks that, had no restrictions been placed on the execution of the Works contained in the Budget of 1856/57 there would have been less correspondence

and

lower Subordinate Dept.s, but under the circumstances detailed, and in the face of their own strong conviction, the Govt. are unwilling to take upon themselves the responsibility of asserting that any, even the least reduction is compatible with the well being of the Country, the safety of the Revenue, and the general good of the people.

4 In Para 3 of the Extract from the proceedings of the Government of India in the Financial Department above quoted, the duties of the Chief Engineers Office are touched upon.

The

and lef over our demands
on his Establishment
than was the case under
the circumstances that
occurred. This appears
to Government self evi-
dent: When a work is
sanctioned and the
order for its execution
has emanated from
the Chief Engineer's
Office, he has no more
trouble beyond inspect-
ing the diaries and
Progress Reports until
he audits the Bill., where-
as on an occasion like
that of last years fi-
nancial restriction,
a very large amount
of Extra labor is entailed
upon

47

upon the Central Office
in apportioning the
fractional amount
on selected Works throug-
out the Presidency;
to do this, repeated
references to the Dis-
trict Engineers and to
Government were
rendered necessary.
It is further to be ob-
served that the prin-
cipal part of the
labor of the Central
Office bestowed on
every Project, is so
bestowed before or
the submission of the
Project to Government,
so that even setting the
above argument aside
the

the Central Office was this year at least as much occupied as if the whole of the 76 Lacs had been expended. In auditing Bills likewise, the amount of the Bills up to a certain Extent has less to do with increasing the work, than the number of the Bills. The true standard in the opinion of Government whereby to judge of the amount of work in an Office is the number of letters received and despatched, the number of Bills audited, Estimates checked, and Maps and

Plans drawn. The prevailing feature of the Madras Presidency, it will be pointed out to the Govt. of India, is the large number of Works of irrigation, and a number of small works call into action a much larger amount of Office machinery than one large work of the same aggregate cost.

5 In Para 17 the Chief Engineer replies to Para 3 of the orders of Govt. of January 22nd which refer to the Garrison Engineer's Establishment.

If

It appears that on 1st. August 1856 the Govt. of India sanctioned a modified scale of increased Establishment for the Superintending Engineer's Office at Madras, amounting to Rupees 1491-- -- per mensem. The Madras Govt. had recommended a larger increase than was allowed, but it was ordered that the rates sanctioned should be introduced as an experiment, at the same time that the increase granted was admitted to be indispensable. The sum thus sanctioned

sanctioned has been divided into two equal portion of Rupees 745-8 A.P. -- and the two portions assigned respectively to the Garrison Engineer and the Civil Architect. The amount applied for by the Madras Govt has thus been already once reduced; and the Governor in Council is of opinion that no further reduction can reasonably be expected; it is, indeed, as Col. Taber shews, matter for just consideration whether, had an Establishment for the Garrison Engineer properly so called of

Rupees

Rupees 265-11-2. similar to the one at Fort William been applied for, it would not have been granted in addition to that of the Superintending Engineer already sanctioned by the Governor General in Council. This will be pointed out to the Govt. of India. When Experience has enabled the Chief Engineer to decide upon the amount of labor involved by the duties assigned to the Civil Architect and the Garrison Engineer, a division can be made between

between the two Officers of the aggregate sum sanctioned.

6 The next point adverted to is the reduction of the Salaries of the Store keepers. In para 6. of the Financial Resolution above quoted, the pay of the Storekeepers, ranging from 30 to 50 Rupees, was said to be too high, and a revision of the scale was suggested. Col: Faber now contrasts the establishment of these functionaries in Bengal and the North West Provinces with that

asked

asked for, for Madras, in order to shew the moderation of the demand made. He shews that the Engineering plant over which the storekeepers will have charge, is of a very valuable description; that Expensive Machines have been, and will again be, supplied by the Honble Court, and that, in addition to this, the accounts of the receipt and issue of all professional Instruments have to be kept.

That

that a man of respectability and integrity is required for the office is manifest, and the Govt agree with the Chief Engineer that it is unlikely that a duly qualified and honest Agent could be obtained for a less amount of pay than has been fixed upon, and a representation on the Subject will be made to the Government of India.

The lower subordinate Establishment of the Pub Works Depart was not originally demanded without full and careful consideration, and every argument now adduced by the Chief Engineer, has strengthened the conviction of the necessity

necessity under which the demand was made. The execution of some of the Promises has been already transferred, and it is hoped that by the commencement of the next Official year the charge of the whole of the Public works in this Presidency will be in proper hands. The Government could not look without anxiety and alarm to such a very important interests being left without due supervision, and under the full conviction that the Establishment demanded for this

Presidency is in no respect larger than the wants of the Country and the most interests of state most urgently demand they resolve to act upon the permission given in para 7 of the Financial resolution of the Govt of India dated the 12 of December last, "to appoint, pending further orders, any part of the Establishments applied for that may be urgently required", and to authorize the Chief Engineer to carry out the distribution of the lower Subordinate Establishment according to the statement contained

tained in his letter now
under review.

7. In paras 27 and
28 of his letter, the
Chief Engineer calls
the attention of Govt
to the omission in the
letter from this Govt
to the Govt of India
dated 10 Octr 1856
No 1842, of the appli-
cation contained in
his former letter of
9 August 1856 No 3653,
that the like proport-
ional amount of
Warrant promotion
that has been bestow-
ed on the Bengal
Army should be ac-
corded to the Madras
Corps of Sappers
and Miners. Copies
of

6 para 4

of the para of this Secy.
Application of the 17th
June 1856 and of paras
27 and 28 of Colonel
Talbots present letter
and of para 3 of his
former letter, will be
furnished to the Mil.
Fin. Departt for
consideration and
disposal.

Ordered that the
following letter be
despatched.

To The Secy: to the Govt
of India

(Mem entered 2 April 5 pp.
609.)

W.H.
March 20. H.D.

9 Copies to the Chief Engr.
Disp. 24.

P. 708 to the Bribery Dep.
with the papers referred to Disp. 4.

Pub. Works 1857 Depart.
to Cons. 7th April

1/5
294-691
46-

No. 608.

Extract Mins of Cons.
Dated 2. April 57.

From Secy Mil. Depart
Dpt. Dated 8th April 1857
Rec'd 12 May

Agreeing with Colonel Fabert that the attempts of the superintending Engineers proposed to be employed in the D.P.W. of this Presidency are as fair with those in other parts of this Indian Empire must be overlooked concurring with Col. Fabert in the views expressed by him regarding the duties performed by Sub Divisional

Under the circumstances represented by the Subordinate Department unwilling to take upon themselves to assert that any, even the greatest reduction is compatible with the well being of the Country and the safety of the Revenue

Coinciding with the Chief Engineer in opinion that the Establishment of the Central Offices of the Department be reduced for reasons stated and laying down the Standard whereby the judge of the amount of work in each office

Stating that no reduction can be made in the Superintending Establishment and in the Salaries of the Storekeepers

The Honble the Chief Engr to communicate to the Subordinate Establishments accordingly

The Salaries mentioned in the letter

Ex. Pro. of the Govt of India in the Financial Dept dd 4/11/57
No 1852 to Cons 27 Oct 57
No 79-80.

No 26-27.

C.21 Much