

## CHAPTER II—WORKS

### A. CLASSIFICATION OF THE OPERATIONS OF THE PUBLIC WORKS DEPARTMENT.

88. The operations of the department are divided primarily into two classes—'original works' and 'repairs or maintenance'.

89. 'Original works' include all new constructions, whether of entirely new works or of additions and alterations to existing works except as hereinafter provided; also all repairs to newly purchased or previously abandoned buildings required to render them usable.

90. The expenditure on 'system works' for which capital and Revenue Accounts are kept, falls under "333. Irrigation etc., works (Commercial)" and the expenditure on 'non-system works' like tanks, etc., for which capital and revenue accounts are not kept falls under "333. Irrigation etc., works (non-commercial)". The expenditure on both the above two categories of work comes under "Revenue Accounts". All works, which either increase the efficiency of a system of work or its scope of action by an extension of or addition to it, are classified under the detailed head of appropriation 'Major works and Minor works' under the respective minor heads concerned. The circumstance in which irrigation expenditure can be charged to "Revenue Account" are explained in paragraph 379.

91. The term 'repairs or maintenance' includes all operations except the foregoing required to maintain in proper condition or to replace the wear and tear of buildings and works in ordinary use.

92. There are certain operations of the Public Works Department which fall under both the categories of 'original works' and repairs i, e., operations which are of the nature of both e. g. substitutions of a terraced for tiled roofing, substitutions of steel beams for damaged teak ones, dismantling and extending a verandah, etc. The classification and treatment of such mixed estimates for the purposes of this code will be determined by the principles in paragraph 93. Vide in this connection explanatory note 26 (3) and (4) in Appendix 4 to Tamil Nadu Public Works Account Code also.

93. When a portion of an existing structure is to be dismantled for the reason that it is structurally unsound, and is to be replaced by a work which is not in material essentials the same as the work dismantled, e.g. thatched roof replaced by tiled roof, or by an addition e.g. an extension of a building, the mixed work shall, for the purpose of determining the authority competent to sanction it, be treated as an original work. In the estimate and in the accounts, the following points should, however be observed :—

(a) If the new work costs more than the original cost of the work which it replaces, the whole cost should be first taken to original work but eventually the difference should be charged under 'original works' and the costs of the dismantled portion under 'repairs'. The costs of the dismantled portion should be taken at its original cost of construction plus the cost of any additions subsequently made, or where this is not known its estimated cost.

(b) If the new work does not cost more than the original cost of the dismantled portion, the difference between the two will be written off the capital accounts where they are kept and the entire cost of the new work charged under repairs.

NOTE 1.—If an existing structure dismantled for the reason that it is structurally unsound is replaced by work which is in material essentials the same as the work dismantled, the work is strictly of the nature of repairs unless it falls under the last clause of paragraph 89. If a work is dismantled and replaced not because it is structurally unsound but purely because of administrative reasons, the entire operation will be treated as an 'original work' and the whole cost debited to original works the cost of the dismantled work being written off the 'capital accounts'. The cost of dismantlement in either case should be charged to repairs.

NOTE 2.—The cost of restoration or special repairs shall not be added to capital cost or present value, unless such restoration or repairs add to accommodation or involve replacement of the existing type of work by work of a more expensive character.

*Illustrations.*—The cost of replacement of palmyra rafters by Karimarudu or of bamboo hurdeing by teakwood reapers or of country tiles by Mangalore tiles or of lime plastering by cement plastering should not be added to the capital

cost of a building. The cost of deepening a well in order to restore the normal water supply should not be added to the capital cost of a building but the cost of replacing a mud compound wall by a wall of brick in mortar plastered with cement and replacement of a cement floor by tiles should be dealt with in accordance with clauses (a) and (b) of this paragraph.

94. When an entire structure is reconstructed owing to the occurrence of fire, flood, earthquake, abnormal storm or other calamity or owing to wear and tear, the work should be treated as an original work and the cost of reconstruction as capital cost. On completion, the Government will decide what amount should be written off the original capital cost.

## B. WORKS ENTRUSTED TO DEPARTMENTS OTHER THAN THE PUBLIC WORKS DEPARTMENTS.

### I.—FOREST DEPARTMENT

95. The Forest Department is empowered to execute its own works whenever it is desirable to do so, instead of entrusting them to the agency of the Public Works Department owing to the special circumstances in which they are executed in out-of-the way localities, with which Forest Officers are better acquainted than those of the Public Works Department. The Forest Department has also got a special engineering staff. Such works are provided for in the Forest Department budget and the detailed rules regarding the preparation of plans and estimates and the maintenance of accounts are contained in the Forest Department Code. Works for which the agency of the Public Works Department is more suitable are executed by it in the usual manner in accordance with the rules in this Code and the Tamil Nadu Public Works Account Code, out of funds provided in the Public Works Department estimates.

### II.—EXCISE DEPARTMENT

96. A procedure similar to the one prevailing in the Forest Department is in force in the Excise Department also. The works are however, generally of such a nature as do not require the employment of skilled labour or professional supervision. Such works are provided for in the Excise Department

budget and the detailed rules regarding their execution and accounts are contained in the departmental manuals concerned. Works which the Public Works Department are called upon to execute are charged to the Public Works Department and are dealt with in accordance with the rules in this Code and the Tamil Nadu Public Works Accounts Code.

96.A (a) The acceptance of agreements of Civil Departments for original works requiring technical skill and which do not relate to petty construction and repair works shall be governed by the following limits:—

(1) Where the Civil Department (i.e. departments other than the Public Works Department) employ technically qualified Engineers of the rank of the Executive Engineers of the Public Works Department up to a maximum limit of Rs. 25,000 in the case of works for which estimates are sanctioned by higher authorities and up to Rs. 10,000 in other cases.

(2) Where the Civil Departments employ technically qualified Engineers of the rank of Assistant Executive Engineers of Public Works Department up to Rs. 2,500.

(b) The arbitrators in the case of disputes arising out of such agreements shall be the Superintending Engineers of the Public Works Department in respective areas in cases falling under (1) above and the Executive Engineers of the Public Works Department in whose area of jurisdiction the work lies in respect of cases coming under (2) above.

(c) The instructions in this paragraph will not apply to the Forest Department works and the works relating to irrigation and navigation under the Revenue Department.

### III.—PETTY CONSTRUCTION AND REPAIRS

97. The following works in connection with State buildings are assigned to the departments using or requiring such buildings:—

(1) Works of petty construction and repair of buildings originally constructed by the Public Works Department and borne on the Public Works Register in cases where such petty construction and repair are carried out by the department using or requiring the building under the rules in force from time to time.

(2) Works of petty construction and repair of Jail Warders' lines, Police Lines, huts and stations which do not form part of Taluk Offices, and other buildings originally constructed by the Public Works Department but not borne on the Public Works Register in pursuance of orders issued from time to time; and

(3) All works connected with buildings constructed by departments other than the Public Works Department and not borne on the Public Works Register. See also paragraphs 95 and 96 above and paragraph 256 below.

The following are the rules and conditions governing the execution of such works by the Departments concerned:—

(1) The construction of petty buildings and the execution of ordinary repairs to all Civil Buildings up to a limit of Rs. 10,000 shall ordinarily be undertaken by the Departments using or requiring them out of the funds placed at their disposal in the Civil Budget.

NOTE 1.—The construction of new rainuage pillars and the maintenance of rainuage shall be undertaken by the departments for which they are intended, from funds allotted in the budgets of the respective departments. The Officers of those departments may however, at their discretion seek the advice of the Public Works Department Officers.

NOTE 2.—When a building is occupied by more than one department the 'department' for the purpose of the above rule will be Revenue Department, if it be one of the occupants and if not the Government department occupying the major portion of the building, to be decided in each case by the Superintending Engineer concerned. Petty internal repairs may however be carried out by and at the cost of the occupying departments.

NOTE 3.—(i) In the case of works relating to judicial Second Class Magistrate's Offices which are located in the same building as the Taluk Office, the Revenue Department shall be deemed to be in-charge of the whole building, administrative approval to such works shall be accorded by the Officers of that department up to the limit of their powers, the expenditure being met from funds provided under 'General Administration'.

(ii) Works relating to Judicial Second Class Magistrate's Offices which are located in separate or detached buildings eventhough situated in the same compound with other buildings shall be deemed to be in-charge of the Judicial Department; administrative approval to the proposal shall be accorded by that department up to the limit of their powers, the expenditure being met from funds provided under the head 'Administration of Justice'.

(2) When the works described in rule (1) above involve structural alterations and additions to buildings in-charge of the Public Works Department, Civil Officers should obtain the concurrence of the Executive Engineer to such alterations and additions and should also communicate to the Executive Engineer the actual cost incurred so that the capital accounts of the buildings may be correctly maintained. While giving his concurrence to the proposals of Civil Officers, the Executive Engineer should consider whether the work will require technical advice of a skilled nature or professional supervision and if so inform such officers that the necessary technical advice or assistance will be given by the Public Works Department Officers during the course of construction and that for this purpose timely intimation should be given of the date of commencement of the work.

(3) When the works undertaken by Civil Officers do not involve structural alterations or additions to buildings in-charge of the Public Works Department, such Officers should not requisition the services of officers of the Public Works Department unless in their opinion, the works require technical advice of a skilled nature or professional supervision. The reasons for their reaching this opinion should in every case be communicated to the Public Works Department Officer whose assistance is requisitioned. If however the Public Works Department Officer is of the opinion that the work does not require such skilled advice or professional supervision he may return the requisition with full reason for his opinion.

**NOTE 1.**—As regards classification of expenditure connected with building works the expenditure will be generally debited to the department in which the administrative control of the building vests irrespective of the agency of execution. For example, in the case of the Civil Department even if the execution is taken up by the Public Works Department for any reason the expenditure should be debited to the Civil Department. As an exception to

the above rules when a Civil Department using a building which is under the administrative control of the Public Works Department incurs expenditure on petty construction and repairs connected with the building up to an amount not exceeding Rs. 5,000 for any one work, it should be shown on contingency expenditure of the Civil Department carrying out the work. Expenditure on petty construction and repairs connected with a building which is under the administrative control of the Civil Department should be debited to the minor head "works" under the relevant Departmental major head if the expenditure on any work exceeds Rs. 5,000. If the expenditure is within that limit, it should be shown as contingent expenditure of the Civil Department concerned.

NOTE 2.—All petty works of the Fisheries Department which require technical advice of a skilled nature and professional supervision should be executed by the Public Works Department irrespective of the cost of such works.

(4) In the case of a building occupied partly by a Panchayat Union Council Office along with one or more Government Offices, the cost of the annual repairs should not exceed  $1\frac{1}{2}$  per cent or any other rate that may have been sanctioned on the capital cost of the building.

(5) Rules (1) to (4) above do not apply to the following buildings, the maintenance and repairs of which irrespective of the cost, devolve on the Public Works Department:—

(i) All buildings in the Madras City (excluding certain City State Hospitals—vide note—(1) under clause (ii) below the Penitentiary and the Government Press to which rules (1) to (4) apply, subject in the case of the Government Press to a limit of Rs. 500).

(ii) All Medical Colleges, Hospitals and Primary Health Centres in Tamil Nadu State.

NOTE 1.—The Heads of Departments as in para 438 may authorise their subordinates to carryout departmentally up to a limit of Rs. 1,000 (Rupees one thousand only) in each year, urgent petty works and repairs such as those noted below (including hostels and residential buildings) which require no technical skill or supervision by the officers of Public Works Department. This delegation does not authorise the execution of repairs of buildings, if such repairs will increase the capital cost

thereof. The Executive Engineer should be consulted in doubtful cases: —

1. Renewing broken tiles and stopping of leakages in roof.
2. Renewing broken glass panes of doors and windows.
3. White washing in patches whenever dirty.
4. Repairing chimneys.
5. Renewing hooks, hasps and staples and hinges and petty repairs to fixtures in buildings.
6. Painting portions of doors and windows wherever dirty.
7. Repairing floors.
8. Repairing fly proof fittings.
9. Gravelling pathways here and there to prevent water stagnating.
10. Repairs and renewals of a minor nature to the water closet system.
11. Leakage in gas and water pipes.
12. Minor repairs to drains. All petty constructions and repairs not of an urgent nature will continue to be executed by the Public Works Department as now.
13. Petty electrical works (the cost of petty electrical works executed at a time should not exceed Rs. 50).

(iii) All Official Residences.

NOTE 1.—Quarters of Sub-Inspectors of Police and Reserve Superintending Inspector of Police not situated in Madras City or falling under exception (v) below, may however, be maintained by the Police Department.

NOTE 2.—Quarters provided for employees in interior service and for compounders in the Veterinary Department not situated in the Madras City may be maintained by the departments concerned.

NOTE 3.—Gazetted Officers occupying Government residences are empowered to execute very urgent petty repairs such as the replacement of window-panes or stoppage of leaks subject to an upper limit of Rs. 50 annually (the actual amount being fixed by the heads of departments concerned) when Public Works Department Officers are not immediately available to



arrange for such repairs being done. The expenditure should be reported to the Public Works Department Officers concerned as soon as it is incurred, so that he may checkmeasure the work done as soon as he returns to headquarters or visits the station as the case may be.

In such cases the money required for expenditure should be advanced by the Gazetted Officers from their permanent advances and recouped from the Public Works Department Section Officers concerned who will debit the expenditure to "259. Public Works- (d) Maintenance and repairs and to 283. Housing (e) Maintenance and Repairs."

(iv) Buildings in which offices of the departments of the Central Government or Official residences are located along with one or more other Government offices.

(v) All other Government buildings borne on the Registers of Public Buildings maintained by the Public Works Department.

(vi) State buildings which are occupied wholly by the departments of the Central Government and for which rent is recovered.

#### IV.—PUBLIC WORKS EXECUTED BY CIVIL OFFICERS ACTING AS PUBLIC WORKS DISBURSERS.

98. The Administration of all public works other than those assignees of the departments concerned under paragraphs 95 to 97 above falls within the functions of the Public Works Department but even such works, may, by a mutual understanding between the Public Works Department and the department concerned, be executed by the latter on behalf of the former, the charges being debitable to the Public Works grants. In actual practice the system is combined mainly to (1) Industries and (2) the Agricultural Departments. In the case of (1) and (2) the presence of departmental engineering staff renders the arrangement advantageous to both departments.

NOTE 1.—The heads of offices of the Agricultural Department are authorised to carryout, as Public Works Disbursers, ordinary and Special repairs to residential buildings of the department borne on the registers of the Public Works Department subject to the conditions:—

(i) that the services of the engineering staff of the Agricultural Department are secured when necessary;

(ii) a Statement is furnished to the Executive Engineers concerned from time to time showing the actual expenditure incurred on special repairs which would increase the capital value of the buildings, so as to enable the Executive Engineers to regulate the rents of the buildings; and

(iii) the heads of offices of the Agricultural Department should also forward to the Executive Engineers concerned:—

(a) a statement after the close of the official year, of actual expenditure incurred on ordinary and special repairs to such buildings; and

(b) an annual statement of the amounts spent by them on each building whether on ordinary or special repairs to enable the Public Works Department, to keep a check on the amount and also to see that the buildings are not neglected for years together.

**NOTE 2.**—The rules relating to minor irrigation works in-charge of Civil officers will be found in paragraph 384.

**NOTE 3.**—The system should not be adopted in the case of jail works costing over Rs. 10,000 which should be carried out by the Public Works Department. When however, should employed by the contractors on all unskilled work connected with the contract as far as possible. Therefore when tenders are called for, for the work, it should be stipulated in the tender notice that the contractor should employ jail labour on all unskilled items of work connected with the contract if such labour is available with the Jail Department and that Jail labour, if supplied will be charged for at the rate of 37 paise per man per day. A similar procedure should be adopted in regard to jail works executed departmentally by the Public Works Department. In cases in which jail labour is not employed on a work for the reason that the Jail Department is not able to supply it, a written statement from the Jail Superintendent to that effect should be obtained and recorded by the Public Works Department Officers. In regard to adjustment of cost of Jail labour to the work concerned see para. 488 of Tamil Nadu Public Works Account Code.

#### **B-1 ROAD WORKS ENTRUSTED TO DEPARTMENTS OTHER THAN THE HIGHWAYS DEPARTMENT AND LOCAL BODIES**

**98A.**—The Government have allowed the works relating to the following classes of roads to be executed by the department using or requiring such roads:—

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(1) Works relating to maintenance of roads not handed over to the Highways Department by the Public Works Department.

(2) Construction of roads in connection with Irrigation Projects and Construction of bridges, culverts, diversion roads etc., on roads of Highways Department by Public Works Department, and the Tamil Nadu Electricity Board to meet their needs.

98-B. *The execution of the works by departments other than the Highways referred to in the preceding paragraph is subject to the following condition:—*

(1) The expenditure incurred by the Public Works Department should be met out of the allotment of funds placed at their disposal by the Highways Department. For this purpose the Budget estimate and the final modification proposal relating to these works will be submitted by the Superintending Engineers, Public Works Department concerned, to the Chief Engineer (Highways) for incorporation in the Highways estimate for funds. These works should be treated as falling under Article 182 of the Tamil Nadu Account Code, Volume III and the expenditure may be passed on to the nearest Highways Division and amount settled through cash settlement suspense.

(2) In special circumstances, works relating to the construction of roads and bridges connected with the Irrigation Projects are executed by the Public Works Department by agreement with the Highways Department. The execution of such work is subject to the following conditions:—

(a) the cost should be fully borne by the department concerned;

(b) the standards adopted for roads, bridges, etc., should conform to the standards prescribed by the Government for the roads, bridges, and culverts etc., in the Highways Department; and

(c) Prior to the execution of works, copies of detailed plans and estimates should be sent to the Divisional Engineers (Highways) concerned to enable the officers of the Highways Department to raise objections, if any.

In connection with the project works involving construction bridges of various classes, the designs, the detailed calculations, the report specifying the standards and the estimate indicating the kilometre and the type, etc. for the first bridge under each of the clauses to be taken up for construction will have to be sent to the appropriate officer of the Highways Department for approval of standard before the construction is taken up. As regards the bridges to be constructed subsequently the respective officers of the Public Works Department will intimate, to the corresponding officer, of the Highways Department regarding the kilometre and types of bridges proposed to be adopted giving also reference to the first bridge of similar type etc., approved by him previously and proceed with the construction work unless any point raised by him promptly. The Superintending Engineer (Highways) and Divisional Engineer (Highways) should as usual intimate the first about these works to the Chief Engineer (Highways). However, in the case of all works on National Highways prior approval of the Chief Engineer (Highways) should be obtained for cutting up the National Highways. These orders apply *mutatis, mutandis* to such works executed by the Electricity Board.

### C—ADMINISTRATIVE APPROVAL AND TECHNICAL SANCTION

99. For every work proposed to be carried out, except petty works and repairs the cost of which does not exceed Rs. 5,000 a detailed estimate must be prepared by the Public Works Department for the sanction of competent authority; this sanction is known as the technical sanction to the estimate. Except where definite provision is made in this Code to the contrary such sanction can only be accorded by Government or where power has been delegated to them by officers of that department. Sanction accorded to the construction of a work by any other department of Government is merely an administrative approval of the work, which is in effect an order to the Public Works Department to execute a certain specified work for the department at a stated cost.

100. No estimate should be prepared for any work except on the basis of a detailed investigation on the site. A standard and exhaustive check list covering all aspects of investigation as shown below should be prepared:—

(a) An area plan to the scale of 1 c. m. = 1 k. m. or 1 mm = 0.5 km. showing the location of the site in relation to the general area surrounding it.

(b) A survey plan to scale 1 c. m. = 50 m. or 1/500 scale indicating the survey number and subdivision number. extents and boundary measurements and also indicating the location of pathways, wells, streams and structures.

(c) A contour plan for the site and its environs at intervals of 15m/30m.

(d) Trial pit particulars.

(e) A site plan showing the location of trial pit, bore holes for soil samples and the places where plate bearing tests were conducted.

(f) Collection of soils at various depths by making a grid of bore holes.

(g) The results of plate bearing tests.

(h) Sub-soil water levels and sub-soil water quality.

(i) Water yield in the wells in the site.

(j) Wind direction, wind force, rainfall date, temperature and humidity data.

(k) Road and retail links and cost involved in providing the same.

(l) Distance to low tension and high tension power supply points.

(m) Distance to the nearest water supply point and costs of conveying water to site.

(n) Lead charts for local materials.

(o) Availability of contractors, labour and residential accommodation for the staff and labour.

(p) Existing trees and structures in the site and cost of demolition and likely value of receipts by the sale of materials; and

(q) Flood level of the site, facilities for normal and sewage drains and special features affecting drainage and sewage disposal costs.

**NOTE 1.**—The expenditure on the construction of buildings left entirely to the charge of the Public Works Department, should invariably be debited to the Public Works Budget either under. "259.

Public Works" or under "459, 488, 477, 430, 482, 510, 505, 480, 481, 282, 305, 310, 288, 277, 280, 283, 313, 312, 278, 335, 484, 483, 514, 285, 370, 339, 485, 535 as the case may be and such buildings entered in the Public Works Department register of buildings irrespective of whether these buildings are in the occupation of the Public Works Department or any other departments of the State Government or other agencies permitted by Government.

NOTE 2 —When the Public Works Department executes any buildings works for any other department of State Government etc., centage charges at the prescribed rates should be paid to the Public Works Department for execution of the works.

NOTE 3.—When the Officers of the Public Works Department prepare plans and estimates for administrative approval, they should invariably include therein information as to whether the Buildings are to be borne on the Public Works Department Register of Buildings or on the Departmental Register. In the case of buildings to be borne on the departmental register the estimate should include centage charges at the prescribed rates and clearly indicate the head of account to which the expenditure is debitable.

101. Except to the extent delegated in this code, all works require the administrative approval of Government in the department concerned in consultation with the Finance Department. Administrative Approval should not be accorded by an authority until the Finance Department have stated that there is a reasonable prospect of funds being provided in the same or succeeding year.

NOTE.—A similar procedure will be applicable for works required for the Public Works Department except that both the Administrative Approval and Technical Sanction will be accorded in the same department.

102. In all cases of works and schemes costing up to Rs. 5 lakhs a detailed estimate should be prepared in the manner described in paragraph 100 above. In such cases, the Executive Engineer should satisfy himself that the proposed work is necessary and is likely to be sanctioned. In all cases of works and schemes costing more than Rs. 5 Lakhs preparation of detailed estimates should be taken up only on issue of a memo/letter of intent by the authority competent to accord administrative sanction to the schemes and works.

On receipt of the memo/letter of intent the user department will take action to select a suitable site as laid down below.

Selection of sites for individual buildings costing more than Rs. 5 lakhs shall be made after inspection by a team of officers headed by the Collector of District including a representative of the user department and the building department.

After the selection of a site, the Public Works Department will conduct the site investigation as contemplated under paragraph 100 above.

The Public Works Department will then prepare detailed plans, designs and estimate for civil and electrical works (vide also paragraph 255 of this Code) making provision for escalation in cost that may take place between the dates of sanction and execution on account of increase in the cost of labour and materials. The detailed estimate when prepared will be accorded provisional technical sanction by the competent authority in the Public Works Department and submitted to the Government in the Administrative Department for according administrative approval.

Once plans and estimates are technically sanctioned and administratively approved by the authority competent there shall be no deviation from approved estimates, even if the user department asked for it, Unless it is approved by the authority which sanctioned the estimate.

If in the preparation of detailed estimates it is found that the cost will exceed the estimate administratively approved by more than 10 percent, revised administrative approval must be obtained before technical sanction can be accorded.

103. In the case of civil works in-charge of civil officers acting as Public Works Disburses under paragraph 98, the estimate should be prepared by them in the forms adopted in the Public Works Department, together with the plans, where necessary and the necessary technical sanction of competent authority in the Public Works Department should be obtained. Standard designs should be adopted as far as possible, with such modifications as local or other circumstances may necessitate.