Initial Accounts records of Public Works Department

Session Overview
Audit of the Public Works Department is carried out by the C&A.G. of India under the powers delegated to him under CAGs (DPC) Act 1971. The powers includes the authority
- To inspect accounts of any office where initial and subsidiary accounts are kept
- To require production of accounts, books, papers and other relevant document and
- Call for such information as he may require

Audit conducted in the central office of the office of the Accountant General is carried out on the basis of the records furnished to by the divisional office. It is obvious that the original records i.e. initial accounts records, on the strength of which accounts are compiled for submission to audit office, is retained in the division. These initial records are checked in local audit. In short local audit is conducted to exercise checks on the initial records maintained in the division. During this session the matter regarding accounts records and registers kept in the division will be discussed.

Learning Objective
At the end of the session participants will be able to know the various record maintained in the divisional office. The knowledge will help them to understand the working of the division and how to examine those records.
Initial Records
1. Cash Book
2. Bill Register
4. Copies of chalans
5. Receipt book
6. Register of works (To indicate the Progress of Works)
7. Muster Rolls
8. Measurement Book (Used)
9. Measurement Books in stock for future use
10. Register of Public Works Advances
11. Purchase Register
12. Cash Settlement Suspense Account
13. Monthly Settlement with Treasury
14. Imprest Account
15. Material at site Account
16. Stores Account
17. Contractors ledgers
18. Transfer entry register
19. Stock Books
20. Issue of material to the contractor
21. Register of Deposits
22. Register of assets
24. Other records regarding execution of works

During the audit of the division, it is the duty of the auditor to exercise the detailed checks of all the initial records and co-relate it with each other to make the audit scrutiny effective.

Importance of the registers kept in PW department in view of audit.

Cash book:
Cash book is important record. Detailed procedure of drawal and disbursement of cash and procedure for writing of cash book, upkeep, balancing of cash book, certification of balances have been laid down in CPWD Account code.
It is the personal responsibility of the Divisional Officer to take care while handling cash. All monetary transactions should be entered in the cash book as soon as they occur and attested by the Head of the office. The cash book must be balanced on the date prescribed for
closing the cash accounts of the month. The DDO should check all the entries in his cash book as soon as possible after the date of their occurrence. In addition to this he should take following necessary care which are laid down in financial rules:

- Payments are made when there is cash for the same purpose for which payment is to be made
- Transactions are genuine
- Balances are correctly carried forward
- Payments should be made only in respect of correct transactions
- Remittances are made as soon as possible after the receipt of the cash

In addition to the care to be taken by the Divisional Officer while maintaining cash book. He has to take care of other relevant material also like:

- Opening of the cash chest
- Closing of account of imprest / Permanent advance
- Settlement of temporary advances
- Custody of cash
- Custody and use of cheque books and Receipt Books
- Custody of keys of cash chest.

To an auditor cash book is most important record and gives the idea of all transactions taken place in the division.

**Measurement Books**

This is a very important document and an original record. Mode of recording measurement has to be examined including checking of arithmetical accuracy of the recorded measurements.

**Muster Rolls**

In respect of CRT Establishment: This document indicate the labour payment made in respect of the work done through the daily wage workers. This is to be checked to ascertain the genuineness of the payments and to see whether the payment was made only after the work is completed.

**Register of works**:

This gives information about the works taken up, expenditure incurred to date and progressive stage of execution of works. Details such as Total Cost of works, stipulated time of completion of works, Name of agency etc. is also available in this register. On completion of works department is expected to give details of completion of the works along with completion certificate. This will provide the information of the works completed during the period of audit.

**Stores and stock accounts**:

The records relating to Stores and Stock indicate the requirement of material, assessment of required material, utilization of the material at appropriate place, unnecessary blocking of the material and as a result the funds. From this audit can verify whether material was purchased after assessing the requirement and no purchases were effected merely because the money was available. Material was procured as per the procedure laid down in contingent expenditure rules. Issue of material to the work site or to the contractor can also be checked to ensure correctness of the transaction. Audit can also verify the following things:

- Purchases are for the sanctioned works
- Purchases are as per need
- Not issued to the contractor so as to render him unauthorized aid.
- Used only for those works for which these were purchased
- Issue rate of the material fixed correctly.
- Cost of material issued to the contractor is recovered at the appropriated time from the bills paid to him
Material at site accounts and other returns

This record is important to investigate that the issue of material to the contractor is as warranted by the agreement and correct valuation has been done in order to effect recovery from the contractor. It can be seen that the unused material has been taken back from the contractor.

Contractor’s ledger:

Accounts relating to the contractor are kept in the ledger. Separate folios or set of folios are kept for all transaction with each contractor.

Transfer entries books.

Transfer entries are intended to transfer an item of receipt or charge from the account of a work in progress or of a regular head of account of another work or head and necessary

- In order to correct an error of classification in the original accounts
- In order to adjust by debit or credit to the proper head of account, an item outstanding in a suspense account of under debt or deposit head
- In order to bring out to account certain classes of transaction which do not pass through the cash or stock e.g. for credit to Public Works Deposits on account of balances due to contractors on closed accounts

All transfer entries are recorded in a transfer entry order book maintained in divisional office. Entries of a month are grouped separately and then incorporated in the monthly accounts. During audit it can be seen that whether wrong use of TE was made.

Register of MPWA

This register gives details of

a) Sales on credit
b) Expenditure incurred on deposit works in excess of deposit received
c) Expenditure incurred on deposit works in excess of deposit received
d) Losses, retrenchments, errors etc.
e) Other items pending recovery/investigation

Register of Deposits

This register is maintained to enter the transaction of deposits. Deposit received from the contractor or from supplier are entered in this register. Deposit received from the other organizations on behalf of whom the works are executed are also watched through this register. Timely clearance of deposit or crediting the lapsed deposit to revenue account needs to be watched.

All other initial records are to be checked in detail.

Summary

Initial records maintained in the department gives the clear idea of the transaction taken place in the department. These records are to be correlated while conducting the audit to ensure correct ness of the transaction. For details PWA Manual and PWA Code can be referred.
Deposit Works

3.1 The term 'Deposit works' is applied to works of constructions or repairs, the cost of which is not met out of Government funds, but being financed from Non-Government sources, which may either be deposited in cash or otherwise placed at the disposal of the Divisional Officer. Works executed for Municipalities and other Public bodies fall under this category, when the cost is chargeable either to cash deposits made for the purpose or to their credit balances at Treasuries. Such funds may be provided wholly or partly from:

(a) Funds of public nature, but not included in the financial estimates and accounts of the Union of India.
(b) Contributions from the public.

3.2.1 Where a work is to be carried out partly from funds provided in the estimates of the Department and partly from funds of the foregoing nature, the contribution should be considered as a lump sum in addition to the Government grant.

3.2.2 The work should be executed in accordance with the procedures laid down for the Central works. However, the norms regarding plinth areas and specifications of the client department may be adopted even if such norms are at variance with CPWD norms. In such cases the client should be informed about government norms.

3.3 The Central PWD should decline to undertake as deposit work the maintenance of buildings which were not originally constructed by CPWD. It should also decline to undertake maintenance of mechanical / electrical equipment, which were not originally procured and installed by CPWD. Maintenance works of such buildings may be undertaken if it is in the interest of Government e.g. when the body or Institution is financed so largely from Government grants that defects in construction or maintenance might lead to demand for further financial assistance or where the buildings concerned are Government buildings, which if and when vacated by the body or Institution occupying the same could be used for Government purposes or leased at a profit.

Powers to Undertake Deposit Works

3.4.1 The Officers of the Central P.W.D. have been empowered to undertake deposit works as per powers delegated. (Appendix 1).

3.4.1.1 It is essential that an estimate should be sent to the client department fully ascertaining all necessary site details, technical feasibility, topographical details, ownership of land etc., before acceptance of any deposit by the Executive Engineer. In case any preliminary work like soil testing, site survey/contour etc., are to be done, a small estimate can be sent to client and deposits received. Otherwise no deposit should be accepted without completing the necessary formalities and obtaining written approval of the Chief Engineer concerned.

3.4.2 Chief Engineers in CPWD are fully authorised to accept/undertake deposit works irrespective of the monetary value of Food Corporation of India and Indian Council of Agricultural Research.

Realization of Contribution for Deposit Works

3.5.1 Whenever a deposit work is to be carried out, the contribution should be realised before any liability is incurred on account of the work. However, in cases where the Ministry is satisfied that money will be forthcoming, when required, it may authorise the recovery from the contributor by suitable instalments on fixed dates. 1% of the
anticipated project cost should be realised before preparation of Preliminary Estimates. In addition to the amount payable by contributors, departmental charges and also pensionary charges (as per CPWA Code) at such percentages, as are prescribed by the Government of India from time to time is also to be recovered in advance. No interest will be allowed on sums deposited as private contributions for works as per orders on the subject.

3.5.2 In cases of deposit works of autonomous bodies financed entirely from Government funds and whose receipt of money is assured 33-1/3% of the estimated cost of the work may be got deposited as advance. Thereafter, the expenditure incurred may be got reimbursed through monthly bills simultaneously with rendering of monthly accounts on the progress of work. The deposit of 33-1/3% obtained as the first instalment should be retained for adjustment against the last portion of the estimated expenditure.

3.5.3 Where delays are experienced in obtaining funds and where expenditure has to be incurred out of the 33-1/3% reserve to keep the works going, the matter should be brought to the notice of Superintending Engineer/Chief Engineer promptly for taking up the matter with client Department. It is reiterated that no expenditure is to be incurred on Deposit Works out of CPWD Grants and Vice-versa.

3.5.4 To enable client Department to provide additional funds in time, revised estimates should be submitted by the CPWD, at the appropriate stages during the execution of works wherever required.

3.5.5 With regard to Deposit works involving autonomous bodies/departments who have earlier defaulted in payments and where outstanding amount exceeds Rs. Ten lacs or where outlay is predominantly on purchase of capital equipment, the entire deposit including DC should be obtained in advance.

3.5.6 It should be ensured that in no case deposits received from one department are diverted to works of other department, nor moneys received in respect of one deposit work diverted to other deposit works.

3.6.1 The contributors or the authority on whose behalf the work is to be done is also to be made to understand clearly that the Central PWD does not bind itself to complete the work within the amount of estimate and that the authority depositing or administering the funds agree to finance the excess that may occur. An acknowledgement of this clear understanding is required to be obtained from the party concerned before the work is taken in hand.

3.6.2 It should be ensured that the expenditure is not more than the deposits received for the work. Where the Executive Engineers are doubtful about the timely receipt of the deposits, matter should be taken with the client Department by giving notice that if further deposit is not received, work will be stopped. Efforts should also be made by higher officers, if need be.

3.6.3 While submitting preliminary estimates for deposit works for obtaining administrative approval and expenditure sanction, a copy of the terms and conditions under which the works would be taken up by CPWD as given in Appendix 50 should also be enclosed with the Preliminary Estimate.

Execution of Deposit works

3.7.1 With regard to design, estimate and execution of work, instructions as contained in para 190 of the CPWD
Code should be followed. The scope of work should not be altered without written permission of the client.

3.7.2.1 Executive Engineers are required to send to Accounts Officer the Statement of Expenditure in (CPWA 65 A) along with Schedule of Deposit Works (CPWA 65) showing the progress of expenditure on deposit work setting forth the amount of the estimate, the total deposit received and the progressive expenditure for transmission to the depositor concerned. An advance copy of the statement should be invariably forwarded to the client department by the Executive Engineer directly.

3.7.2.2 Such statement should be sent by the various Executive Engineers regularly to enable the adjustment of outstanding amounts in the books of the depositors and to avoid difficulty in reconciliation of accounts, relating to the deposit works after passage of time.

3.7.3 Divisional Officers should send a quarterly report to the Client Organisations showing amount deposited and the expenditure incurred against different works endorsing a copy of the statement to the Director/Officer-in-charge concerned to enable him to pursue the matter with the Accounts Officer for settlement.

3.7.4 It is necessary that in respect of deposit works, the Department should settle their accounts against the deposits expenditure expeditiously so that the amount in the book of audit as well as Govt./Department /Agencies does not remain unaccounted for a considerable period.

Preparation of Estimates

Preliminary Estimate

4.1 Preliminary estimate is required to be prepared on the basis of plinth area or length of road etc. worked out on the rate per unit area, length or other such method adopted for ready and rough calculation, so as to give an approximate idea of the cost involved in the proposal. 4.2 For preparation of preliminary estimate, the requisite data should be collected from sponsoring Departments and Executive Engineers concerned by the Co-ordinator in the questionnaire placed at Appendix-2. Where required, sub-soil investigations and tests to determine the safe bearing capacity may be conducted.

4.3 The Co-ordinator shall consult representatives of all other disciplines for incorporating their requirements in the proposal.

4.4 Provision for services like sanitary, water supply, drainage and electric installations etc., should be made on the basis of plinth area rates.

Plinth areas for Residential Buildings

4.5.1 The plinth area scales indicated in the Appendix 3 should be followed for all construction works in the General Pool houses as well as houses for other Ministries/Departments where such norms are applicable.

4.5.2 Normally, no deviation from the prescribed scales should be made but in case it is desired that any deviation is to be made, this can be done only in semiurban and rural areas where only single storey construction is involved and proposal for such deviation should be sent to the Ministry of Urban Development for specific clearance.

4.6 While forwarding the estimate, proforma given in para 4.12 should be followed.

4.7.1 While forwarding estimates to Ministry of Urban Development in case of proposals under their administrative
control, it should specifically be mentioned in the forwarding letter, in addition to the information referred to above, whether the expenditure involved can be met:

(i) From within the sanctioned grant.
(ii) From the specific budget allotment during the current financial year.
(iii) By re-appropriation of funds and if so, source of re-appropriation should be indicated.

4.7.2 While forwarding the preliminary estimate to the client department for accord of administrative approval and expenditure sanction, an indication shall be given in the history sheet that the cost projected in the preliminary estimate is liable to revision due to probable escalation in cost of construction apart from reasons such as change in scope, area, design and specifications etc. desired by the client at a later date.

Detailed Estimate

4.8 The preparation of detailed estimate and drawings and designs should be taken up after the Co-ordinator obtains an assurance from the Department/Ministry sponsoring the proposal, that the site is available.

4.9 As soon as Administrative Approval and Expenditure Sanction for work is received, Senior Architect, will be informed for furnishing detailed drawings. The Superintending Engineer (Planning)/ Executive Engineer (Planning)/Executive Engineer will examine the abstract of cost of the preliminary estimate and intimate to the authority, competent to sanction the estimate of the highest value component of the preliminary estimate, to sanction estimates for all the component parts included in the project/preliminary estimate. It shall be ensured that total planning i.e. preparation of detailed estimate, designs and tender documents etc. of all the sub-heads in the project/preliminary estimate shall be done by that authority, irrespective of the value of each sub-head. He will also indicate the authority responsible for preparation of detailed estimate, designs and tender documents for Electrical, Air-conditioning Acoustics and Horticultural parts etc. to see that planning in respect of these components is also done without any loss of time.

4.10 The detailed estimate shall consist of a report (Form PWD I Appendix-4) plans, specifications and a detailed statement of measurements (PWD-2 Appendix-5) quantities and rates (PWD 3 Appendix-6) etc. with an abstract showing the total estimated cost of each item. In the case of a project consisting of several works, the report may be a single document for all the works and likewise the specifications, but details of measurements and abstracts of costs may conveniently be prepared for each work, supplemented by a general abstract bringing the whole together.

4.11 The estimates for projects, should be comprehensive, supported by complete details and based on drawings and calculations of design, where necessary. In order to ensure this, they should be prepared under the following heads:-

(i) Buildings, including internal service installations for example water (filtered and unfiltered) supply, sanitary, electrical, Air-conditioning and furniture.
(ii) Main road outside the boundary wall of the buildings under construction, as may be considered necessary for the layout.
(iii) Boundary walls or fences, gateways, roads and paths, grassing
shrubbery, and trees connected with garden layout.
(iv) Electrical power connected with mains or service connections outside the boundary of the compounds.
(v) Irrigation supply in connection with channels, pipes or canals outside the boundary of the compound.
(vi) (a) Water Supply, (b) Storm Water Drains, (c) Sewerage.
(vii) Special services such as acoustics, public address system, stage lighting, fire fighting services etc.
(viii) Special tools and plant (Machinery and equipment) i.e. those required not for general purposes but for a specific work, which may be necessary during construction.
(ix) Stock and suspense account, where it may be necessary to open up in connection with the project.
(x) Miscellaneous works such as levelling, dismantling of old buildings and other items which do not fall under the above heads.
(xi) Departmental charges when necessary.
(xii) Land acquisition.

4.12 Reports on estimates should be prepared in a lucid form understandable by non-technical officers of the administrative Ministry/Department. It should be comprehensive enough under each sub-head as mentioned below.
(i) History: - Particular relating to the initiation of and reasons leading up-to the proposal and its general purposes including reference to previous correspondence, documents and specifications, where necessary.
(ii) Design: - A description of the original proposals and those finally adopted particularly with regard to location, sitting and design, also with reference to specifications, calculations and drawings, where necessary.
(iii) Scope: - An explicit statement as to what work is and is not covered by the estimate, also a reference to what arrangements are being made for any portions which are not included in the estimates.
(iv) Rates: - Particulars as to how the rates have been arrived at giving references to the standard schedule of rates and also to the details accompanying the estimates, where necessary, with any special explanation connected therewith.
(v) Cost: - Cost of the work and a comparison with the amount originally provided under any previous administrative sanction or detailed estimates in case of revision.
(vi) Method: - The method proposed for carrying out the work whether by lump-sum contract, item rate, or percentage rate, tender, petty contract or daily labour or any combination of these.
(vii) Establishment: - Details of any provision made in the estimate for work-charged establishment, when necessary.
(viii) Construction Plant: - Any special methods of construction to be adopted with reference to specifications, etc. and details of the arrangements that have been made for necessary construction Plant tools etc.
(ix) Land: - Arrangements for acquisition of land, when necessary.
(x) Time: - Estimated time of completion from the date of receipt of A/A & E/S.

4.13 Full reference should be given in respect of the plans accompanying the estimates in support of the details submitted therein.

4.14 Any other points of importance which demand knowledge of local conditions must be incorporated.

4.15 The abstract of the detailed estimates should be framed to show merely the quantity and cost of each
completed item of work e.g. brick work or it may be framed to show the cost of labour and materials separately. The adoption of either form of abstract should be determined with reference to the mode in which it is proposed to carry out the work.

Schedule of Rates

4.16 To facilitate the preparation of estimates, as also to serve as a guide in settling rates in connection with contract agreements, a schedule of rates for each kind of work commonly executed should be maintained in the Division and Department up-to-date. It should be prepared on the basis of the rates prevailing in each station and necessary analysis of the rates for each description of work and for the varying conditions thereof should, so far as practicable, be recorded.

4.17 The Schedule of Rates for different areas shall be issued under the authority of DG(W) for Delhi/ADGs for their respective Regions except Delhi. These shall be revised at least once in 2 years. The rates entered in the estimates should generally agree with the scheduled rates, but where due to any reason, the latter are not available, market rates may be considered. No cost index shall be added over the scheduled rates for the purpose of detailed estimate.

Provision for contingencies

4.18 In addition to the provision for all expenditure which can be foreseen for a work, a provision of contingency shall be as follows:

(a) Estimated cost upto Rs. 1 crore 5%
(b) Estimated cost more than Rs. 1 crore 3% subject to the minimum of Rs. 5 lacs

This provision is also intended to cover the cost of work-charged establishment for which no provision should be made separately except in the case of annual maintenance estimate, where provision is made for such establishment under a separate sub-head of the estimate.

The amount provided for contingencies shall be utilised as per directions of the officers of the rank of Superintending Engineer and above.

4.19 The detailed estimate should invariably contain the following information:-

(i) Necessary details in support of the lump-sum provision against cost of civil construction works made in the estimate.

(ii) Basis on which the rates have been provided i.e. name of the schedule of rates of the locality adopted project schedule of rate etc.

(iii) A brief note on the special construction difficulties, if any, that are likely to be encountered during the project construction stage.

4.20 No estimate should be technically sanctioned unless the proforma at Appendix - 7 is submitted along with the estimate to enable the competent authority to see that the detailed estimate prepared takes into account all aspects of planning and that no point has escaped notice.

Recasting of Estimate

4.21 After an estimate has been technically sanctioned, it may be decided to make a change in the method originally contemplated for execution of the work. In such a case, the original abstract should be recast in accordance with the instruction laid down in para 4.15 above.

4.22 The details of cost and quantities already approved by competent authority should be re-arranged and the revised abstract should be approved by the Division Officer and thereafter treated as the sanctioned abstract of the estimate for all accounts purposes.

Supplementary Estimate
4.23 Any development of a project thought necessary, while a work is in progress, which is not fairly contingent on the proper execution of the work as first sanctioned, must be covered by a supplementary estimate, accompanied by a full report of the circumstances, which render it necessary. The abstract must show the amount of the original estimate and the total of the sanction required including the supplementary amount.

Revised Estimate

4.24 When an excess over the sanctioned estimate is foreseen and there is likely to be unavoidable delay in the preparation of a revised estimate an immediate report of the circumstances should be made to the authority, whose sanction will ultimately be required. When a revised estimate is submitted, it must be accompanied by a statement in Form PWD 4 (Appendix 8) comparing it with the latest existing sanction of the competent authority and by a report showing the progress made up-to-date.

Remunerative and Non-Remunerative Works

4.25 In respect of Government Development works on Government owned land in New Delhi, the expenditure on works required for the provision of Municipal Services will be allocated as under:

(a) Such works expenditure will be classified as either remunerative or unremunerative.
(b) Remunerative works will include:
   (i) Electrical works other than street lighting.
   (ii) Filtered water supply works.
   (iii) One half the cost of sewerage installation works.
(c) Un-remunerative works will include:
   (i) Street lighting.
   (ii) Roads and grassing.
   (iii) Storm water drains.
   (iv) One half the cost of sewerage installation works.
(d) Government will pay for un-remunerative works as defined above and the remunerative works will be a charge on the New Delhi Municipal Committee.

4.26 All expenditure on Government "Development" works, whether remunerative or un-remunerative, which will be executed by the Central PWD will be charged in the first instance against the department budget heads. The amounts which will be recoverable from the Municipal Corporation of Delhi/New Delhi Municipal Committee under the above principles of allocation, will be separately recovered, if possible, during the same financial year in order to avoid inflation in the accounts.

4.27 The share of the expenditure which is debitable to Government should be accounted for under the Minor Head "Grants-in-aid etc." subordinate to Major Head 2059 Public Works or 2216 Housing and the expenditure which is ultimately recoverable from the Municipal Corporation of Delhi/New Delhi Municipal Committee should be accounted for under Minor Head "Suspense" of the same Major Head.

4.28 The allocation should be shown on each estimate of the work according to the allotment of funds made by the administrative Ministry/Department. In case of works of Government Development activities in New Delhi allocation of the share of Municipal Expenditure chargeable to "Suspense" and "Grants-in-aid" should be shown to permit separate provision being included in the budget, on this account and adjustments being regulated accordingly. Additions and alterations estimates
4.29 No additions and alteration should be carried out without the concurrence of the Chief Architect/the Senior Architect in writing. While submitting estimates containing the proposals for additions and alterations, the fact that the concurrence of the Chief Architect or Sr. Architect has been obtained should be stated explicitly. This will, however, not include addition/alteration to the electrical fittings, fixtures, power points etc. executed at the request of the occupants.

4.30 No work of addition/alteration which involves structural changes in the residential buildings shall be carried out. The works of addition/alteration shall be classified into three distinct categories and the allottees shall be required to pay 10%, 20% or 100% of the cost of the works depending upon the nature of the work. These works shall also be subject to the annual limits according to the type of the residence. The list of works pertaining to the civil and electrical items, which may be carried out on the allottee paying the specified percentage of the cost of work and the annual limits for different type of residences are given in Appendix-51.

These instructions shall not apply in respect of general pool accommodation allotted to Ministers/ Members of Parliament and ineligible categories of persons such as artists, freedom fighters etc. and residences allotted to Members of Parliament from the Lok Sabha/Rajya Sabha pool.

4.31 Additional licence fee is to be charged in cases where additions/alterations, involve increase in covered area only. In cases where additional amenities i.e. provision of wash basin or sink etc. are only involved, no additional licence fee is to be charged. The Superintending Engineer/Executive Engineer/ Assistant Engineer while according permission shall simultaneously indicate the additional licence fee to be charged and also the date from which to be charged under information to Estate Office.

4.32 While submitting estimates for additions and alterations to various residential buildings owned by the Government, capital cost thereof should invariably be furnished in the forwarding letter along with the following information:

(i) Complete justification for each item of additions and alterations, desired by the requisitioning authority with comment on the necessity or otherwise thereof.

(ii) It should be specifically indicated whether such work has already been carried out in any other residence of the same type and if so agreed by the Ministry. Reference in such cases should be quoted.

(iii) Whether acceptance of the proposal is likely to have repercussions.

(iv) In the case of residence of M.Ps it should be clearly stated whether the proposal has the approval of the Housing Committee.

(v) Whether the proposed additions and alterations will result in increases of the prescribed scale of that item. The existing number or area, sanctioned scale for similar type or house and maximum or minimum number or the area of requirement provided elsewhere should also be supplied.

(vi) If the additions and alterations result in increase of the plinth area, what will be the additional licence fee. In such cases, pay of the Officer occupying the house and the pooled standard licence fee of the house may be indicated.

4.33 In addition, the information as referred to in para 4.2 above should also
be furnished while forwarding the estimate to indicate availability of funds to finance the proposal.

4.34 Where a portion of the house/premises is required to be demolished, the estimate should provide for the cost of dismantling. Credit for the value of dismantled materials should be given to the estimate and report of the estimate should contain proposals for utilising the useful materials obtained from the dismantled material and for disposal of unserviceable items.

4.34.1 The DG(W) is empowered to approve estimates involving changing of the existing cables and augmentation of service connection capacity for enhanced load in residences in respect of the following categories upto Rs.1 lacs.
(a) Ministers,
(b) Judges of Supreme court/High Court,
(c) Members of Parliament,
(d) Secretaries/Addl.Secretaries & equivalent officers.

No power is delegated to officers below the rank of DG(W). The cases of above, the financial limit of Rs.1 lac shall be sent to the Ministry for sanction. All estimates shall be scrutinized in the office of the DG(W). This power shall apply where the category wise maximum load is as under:-
(a) Ministers 30KW
(b) Judges, MP’s and senior Officers of the rank (i) 15 KW for D1/C-II/C-I
 of Addl.Secretary & above. (ii) 25 KW for Type VII & VIII bungalows.
The cost of changing the cable in such cases shall be borne by the CPWD and the expenditure to be incurred shall not be counted towards the prescribed ceiling.

Petty works

4.35 In case of new petty works, which do not come under ordinary repairs, a requisition for the same in Form CPWA. 32 is required to be furnished by local head of the Department asking for execution of the same subject to their competence. In case of works of other classes the Officer of the Central PWD proposing the work should fill in the form.

4.36 The Divisional Officer or an Assistant Engineer or Junior Engineer empowered by him to act in such cases will record on the requisition, thus received, his opinion as to what work should be done and give on the face of the requisition a rough estimate in lump sum or otherwise of the probable cost of each item of the work asked for.

Estimates for Road Works

4.37 Projects for the construction of new roads must be accompanied by the following documents:-
(i) Report, including a brief note on the proposed gradients.
(ii) Abstract estimate of cost.
(iii) Index map.
(iv) A detailed survey and longitudinal section and cross section at suitable intervals, which should show not only the existing ground levels, but also proposed formation levels.
(v) Quarry charts showing the various quarries from where road metal is proposed to be obtained.
(vi) Drawings of all masonry, concrete, iron or timber works in the order in which they occur in the line of the road.
(vii) Detailed estimates sheets.

4.38 Estimate for new lines of road should include the cost of all dwellings and inspection houses intended to be built along it for accommodation of subordinates and others.
4.39 Necessary provision should also be made for shifting of pipe line, drainage
and electric poles and cables, telephone lines, if any coming in the way of new alignment.

Estimates for furniture
4.40.1 Estimates for interior decoration, furniture and furnishing shall be prepared based on client requirements.
4.40.2 The cost of furniture in cases of CPWD offices will be chargeable to the contingent grant of the office of Chief Engineers and Superintending Engineers, Divisional and Sub- Divisional Offices as the case may be.

Note: The maintenance of numerical account of office furniture is entrusted to the Superintendents and Head Clerks of the Circle and Divisional Offices. The annual physical verification should be conducted by an AEE/AE and correct certificate should be recorded by the Officer.

4.41 The supply of and repairs to furniture for any of the Government Inspection Bungalows in charge of the Central PWD, Hotels and Hostels managed by Government of India and for such portion of the Civil Airport Terminal Buildings as is intended for public use, will be carried out by the Central PWD. The first supply of such furniture should be charged to the estimate of the building for which the same is required and subsequent repairs and renewals should be treated as repairs to the buildings in question.

4.42 The furniture in the Parliament House, Rashtrapati Bhawan, MPs flats, specified and entitled officers bungalows and residences at Delhi and Guest House at Stations outside Delhi will be provided and maintained by the Central PWD.

4.43 All expenditure on table fans, refrigerators, coolers and furniture etc. stocked by the CPWD for supply to non-residential buildings, MP's Hostels, Circuit Houses, etc. not let out as regular residential accommodation should be debited to the minor head "Furnishings" under the "Major Head 2059 PW " and to "2216 Housing" in respect of residences.

Purchase of buildings
4.44 In case of purchases of built up accommodation to house the offices of Government of India/UT Admn. wherever authorised by the Ministry, separate estimates are required to be prepared after a survey and valuation report of the Executive Engineer is submitted to the Ministry/Administrator and concurrence thereto obtained from Ministry of Finance.

4.45 The maintenance of such buildings will be carried out on the same plinth area rates/percentages basis as laid down in case of other Government buildings as referred to above.

Repairs to leased and requisitioned properties
4.46 The Government takes on rent/lease or by requisition some buildings if and when considered necessary, for residential and office accommodation. The repair estimate for these buildings should be prepared on the same plinth area rates/percentages basis as outlined above.

4.47 While submitting estimates for repairs or additions and alterations to such buildings, following information should invariably be furnished in the report of the estimate.
(i) Whether or not the building in question is a leased or requisitioned one.
(ii) In case the building is a leased or requisitioned one the following further information should be furnished:
(a) Whether the proposed repairs or additions and alterations are due to Structural defects or not.
(b) Whether or not the land lord was approached and he has consented to
Carrying out of the repairs or additions and alterations in question.
(c) If the landlord had not consented to the proposed repairs etc. how the Government is interested in carrying out the proposed work.
(d) Whether the proposed work is inescapable or otherwise and cost of Additions and alterations may be carried out at Government expenses.
(e) What expenditure will be incurred for restoration of the building to its original condition.

4.48 In case of additions and alterations, in such cases if any portion of the building is to be demolished necessary credit for the dismantled materials should be afforded to in the estimate, as done in case of Government Buildings.
4.49 If the landlord refuses to meet the cost of repairs or additions and/or alterations, if any required, non recurring expenditure and recurring expenditure as per powers in Appendix-1 may be incurred by the DGW/CE and expenditure in excess thereto with the approval of the M.O. Urban Development subject to the condition that at the time the building is released, the Government will have the right to remove such installations or material/articles as added to the building/premises.

Hiring of Accommodation
4.50.1 For hiring of all private accommodation required by any Civil Department of the Central Government at Delhi, the Executive Engineer (Licence Fee), CPWD, is the Chairman of the hiring committee, the other members being the concerned Assistant Director of Estates and Assistant Director (Finance), Ministry of UAE. The requisitioning Department shall, in the first instance, apply for a no objection certificate from the Directorate of Estate. On receipt of NOC, the requisitioning department shall apply for fair rent certificate to EE(LF). The EE(LF) shall in turn issue the fair rent certificate. The agreement for hiring accommodation and payment of rent etc. are to be borne directly by the requisitioning department.
4.50.2 For cities like Calcutta, Mumbai, Chennai and Nagpur, similar hiring committees exist and same procedure is followed.
4.50.3 For places where there is a Superintending Engineer (Civil) posted at the station, the rent assessment shall be done by a hiring committee headed by the Superintending Engineer, with the local Assistant Estate Manager of the Directorate of Estate and an Executive Engineer (Civil) co-opted by the Superintending Engineer as members and certificate of reasonable rent shall accordingly be issued by the Superintending Engineer.
4.50.4 In case there is no officer of the Directorate of Estate at the station, the Executive Engineer/Assistant Engineer doing the estate function shall be co-opted as a member. In case, there is no such estate function involved, the Superintending Engineer shall co-opt an Executive Engineer or Assistant Engineer as the second member.
4.50.5 In case there is more than one Superintending Engineer (Civil) at the station, the concerned Chief Engineer shall nominate one of the Superintending Engineers to head the committee.
4.50.6 For all other areas, the rent assessment shall be done by the concerned Executive Engineer (Civil) under whose jurisdiction the building proposed to be hired stands. He may, however, seek assistance of an Assistant Engineer/Junior Engineer (Civil), if needed.
The procedure for calculating rent is given in Annexure - I.

4.51 In cases where the rent is to be paid by the Central PWD due to branch of Estates Directorate being not there, the payment will be made against specific estimates to be prepared for the purpose.

4.52 In case, where the Administrative Departments using such premises hire the houses themselves and request CPWD for issue of certificates as referred to above, they may be charged fees at the rates as are charged by the State Government for the purpose.

Powers for hiring accommodation

4.53 The financial powers of hiring accommodation for Civil Departments of Government of India as delegated to the Central PWD officers are given in Appendix 1.

4.55 Executive Engineers and Superintending Engineers are competent to rent private accommodation for storage purposes, provided the expenditure is within the provision of the sanctioned estimate.

Measurement Books

General

7.1 Expenditure on the construction or maintenance of a work may be divided broadly into two classes viz. (i) Cash (ii) Stock Charges. In addition to the main charges, there are other charges affecting the cost of work. For example there may be charges incurred in other Divisions, Departments or Government, materials received from them or services rendered by them, or there may be cash receipts such as are taken in reduction of expenditure in accordance with the rules. To account for all these charges affecting cost of work, separate accounts are maintained in Sub-Division/Divisional Offices for recording (i) the cost of individual works and (ii) the transactions of individual Contractors/Suppliers. These are known as works accounts. The accounts of manufacture operations and non-government works are maintained in the same manner as for Govt. works (Refer to para 10.1.1 of CPWA code).

7.2 Cash charges of works consist of payments to (i) labourers and members of the work-charged establishment of their wages and (ii) contractors and others for work done or other services rendered. The cost of materials procured specially for work is charged to the accounts of works by transfer credit to the "Material Purchase Settlement Suspense Account". The payments to suppliers are governed by the same rules as payments to contractors for work done (Refer para 10.2.1 of CPWA code).

7.3 The payments to the work charged staff are made monthly in the same manner as it is made to the regular staff but on a different bill form CPWA 29 and are charged direct to the work on which the labour is actually employed.

7.4 The payments to contractors and others for the work done or other services rendered are made on the basis of measurements recorded in the Measurement Book. Subsidiary instructions regarding maintenance of the measurement books including standard Measurement Books and review of measurement books are given in subsequent paras here under.

Writing of Measurement Book

7.5 The measurement book is the basis of all accounts of quantities whether of works done by Contractors or by Labourers employed departmentally or materials received. It should be so written that the transactions are readily traceable.

7.6 These books should be considered as very important accounts records and
maintained very carefully and accurately as these may have to be produced as evidence in a court of law, if and when required.

7.7 All the Measurement Books belonging to a Division, should be numbered serially. A register should be maintained in form CPWA 92 showing the serial number of each book, on receipt, Sub-Division to which it is issued, the date of issue, date of its return to the Divisional Office and date of its record after the required review in the Divisional Office has been completed.

7.8 A similar register should be maintained in the Sub-Divisional Office showing the names of person i.e. Assistant Engineer/Assistant Executive Engineer and Junior Engineer whom the measurement books are issued.

7.9 The Books, no longer to be used in the Sub-Division or with the Junior Engineer should be with drawn promptly even though not completely written up and re-issued.

7.10 The Measurement Books are required to be reviewed by Divisional Accountant under the supervision of Executive Engineer. The Assistant Engineers are required to submit the Measurement Books in use in the Sub-Divisions to the Divisional Office, from time to time, so that at least once a year the entries recorded in each of the Books are subjected to a percentage check. The Divisional Officer should ensure that this annual review is conducted regularly and positively every year.

7.11 When an Assistant Engineer or Junior Engineer in charge of the work or stores is transferred he should hand over the Measurement Books issued to him to his successor and these should be shown as received back from him and reissued to the relieving Officer. The transfer should also be recorded in the Measurement Book after the last entry in each book under dated signature of the relieving Officer and relieved Officer.

Recording of Measurement

7.12 Each set of measurements to be recorded should commence with entries stating:-

(i) In the case of bills for works done:
   (a) Full name of work as given in the agreement/Estimate.
   (b) Situation of work.
   (c) Name of contractor.
   (d) Number and date of agreement.
   (e) Date of written order to commence work.
   (f) Date of actual completion of work.
   (g) Date of recording measurements.
   (h) Reference to previous measurements.

(ii) In the case of bills for supply of materials:
   (a) Name of supplier.
   (b) Number and date of supply order/agreement.
   (c) Purpose of supply in one of the following forms as applicable to the case.
   (i) Stock (for all supplies for stock purpose).
   (ii) "Purchase" for direct issue to the work (full name of the work as given in the estimate may be mentioned).
   (iii) "Purchase" for (full name of work as given in estimate) for issue to contractor ...... on...... :
   (d) Date of written order to commence the supply.
   (e) Date of actual supply; and
   (f) Date of recording measurements.

7.13 A suitable abstract should then be prepared which should collect in the case of measurement for works done, the total quantities of each distinct item of work relating to each sanctioned sub-head. The measurement books meant for this
purpose contain pages in singleton. Details of quantities, rate and amount of each item for every bill are entered in this Measurement Book in a tabular form.

7.14.1 For recording measurements and also for preparing abstract, the agreement item No. both in words as well as in figure should be given neatly, instead of writing the description of the item in full or in abbreviated form which would not be necessary.

7.14.2 In case of extra/substituted item of work that is not covered in the agreement, the full nomenclature shall be reproduced in the M.B. and the bill form.

7.14.3 The full nomenclature of the items shall be adopted in preparing abstract of final bill in the measurement book and also in the bill form for final bills.

7.15 If the measurements are taken in connection with a running contract, a reference to the last set of measurements, if any, should be recorded. If the entire job or contract has been completed, the date of completion should be duly noted in the prescribed place. If the measurements taken are the first set of measurements on a running account, or the first and final measurements, this fact should be suitably noted against the entries in the Measurement Book and in the latter case, the actual date of completion should be noted in the prescribed place.

7.16.1 All measurements should be recorded neatly in the Measurement Book. The signature of the contractor or his authorised representative should be obtained in the measurement book for each set of measurements.

7.16.2 Clause 6 of Clauses of Contract in General Conditions of Contract 2001 which provides that before taking any measurement of any work, the Engineer-in-Charge or a subordinate deputed by him shall give 3 days notice to the contractor. If the contractor fails to attend at the measurements after such notice or fails to countersign or to record objection within a week from the date of measurement, then the measurements recorded in his absence by the Engineer-in-Charge or by the subordinate deputed by him as the case may be shall be deemed to have been accepted by the contractor.

It happens that sometimes when the measurements recorded by the Junior Engineer are not accepted by the contractor, the fact is not brought to the notice of his superior officers i.e. Assistant Engineer/Executive Engineer immediately with the result that prompt action under clause 6 of contract form CPWD 7/8 cannot be taken. The idea of clause 6 is to bind the contractor to file objection, if any, on his side to the measurement recorded by the Departmental Officers within a definite period so as to avoid any disputes later on. It has been decided that in all cases of works executed on contract forms CPWD 7/8, when the contractor fails to attend at the time of measurements or to countersign the measurement books in token of his having accepted the measurements recorded therein, or to record the difference, the Junior Engineer/Assistant Engineer taking the measurements should report this fact within 72 hours to the Assistant Engineer/Executive Engineer, in writing. The latter on receipt of such a report should take immediate action under clause 6 ibid and inform the contractor, in writing that the measurements as taken by the Junior Engineer/Assistant Engineer are final as per clause 6 of form CPWD 7/8 and no claim
whatever on this account shall be entertained.

7.17 The measurements shall be recorded in ink. No entry shall be erased or overwritten. If a mistake is made, it should be corrected by crossing out the incorrect words or figures and inserting the correction, the correction thus made shall be initialed and dated by officer recording/checking measurements. The person recording the measurements should record a dated certificate "Measured by me" over his full signature in the Measurement Book.

7.18 The pages of the MBs should be machine numbered. Entries should be recorded continuously and no blank page left or torn out. Any pages or space left blank inadvertently should be cancelled by diagonal lines, the cancellation being attested and dated.

7.19 When any measurements are cancelled or disallowed these must be endorsed by the dated initials of the Officer ordering the cancellation or by a reference to his orders, initialled by the Officer who made the measurements, the reasons for cancellation being also recorded.

7.20 On completion of the abstract, the book should be submitted to the Sub-Divisional Officer who after carrying out his test check should enter the word "Check and bill" with his dated initials. The Sub-Divisional Clerk should then check the calculation of quantities in the abstract, and the bill in case of work carried out by contract, and should then place the measurement book and the bill before the Sub-Divisional Officer who, after comparing the two, should sign the bill and the measurement book at the end of the abstract. From the measurement book all quantities should be clearly traceable into the documents on which payments are made. When a bill is prepared for a work or supplies every page containing the detailed measurements must be invariably scored out by a diagonal red ink line. When the payment is made, an endorsement must be made in red ink, on the abstract of measurements, giving a reference to the number and date of the voucher of payment.

7.21 Any corrections to calculations or rates made in the Sub-Divisional or Divisional Office should be made in red ink and brought to notice of the Sub-Divisional Officer or the Divisional Officer, as the case may be and of the person recording the original measurements. In the case of final bills, payment should be deferred until the corrections have been accepted by the person making the measurements. All corrections made by the clerical staff should be in red ink.

7.22 When work which is susceptible of measurement is carried out by daily labour, similar plan should be adopted, the quantities of work done as shown on the Muster Roll being compared with the entries in the Measurement book before payment is authorised.

7.23 Measurement books should be sent only by Registered post or by Special Messenger.

7.24 Measurements should be recorded only by Executive Engineer, Assistant Executive Engineer, Assistant Engineer or Junior Engineer in-charge of the work and to whom the Measurement Book has been issued for this purpose.

7.25 All items of work in a project irrespective of their cost, shall be measured and recorded by the Junior Engineer-in-charge of the work. It is, however, open to the Assistant Engineer/Assistant Executive Engineer
7.26 In case of works of repetitive type detailed measurements of 20% of the total number of units, subject to a minimum of 20 Units, need only be recorded.

7.27 In case of supply of steel, the measurements should be recorded.

(i) On actual weight basis for bars upto 10 mm dia and

(ii) On standard sectional weight basis for bars above 10 mm dia. In the case of latter the measurements should indicate the total number with length of bars in each bundle, total number of bundles, standard weight running meter weight, of each bundle, total weight of all bundles etc. The entry should not be a copy from the invoice issued by the firm. The issues will also be made in the same manner in the two cases.

Test checking of Measurements

7.28 The Assistant Executive Engineer/Assistant Engineer must satisfy himself before passing a bill for payment or before submitting it to the Divisional Officer for payment that the work or supply billed for has actually been carried out/completed in accordance with the terms and conditions of the contract. He should personally inspect all works of any magnitude before authorising final payments in connection therewith.

7.29.1 In addition to the above, he is required to check measure the works in his charge as below: For the purpose of test check, "measurements" means the "corresponding monetary value of measurements of work done." This, however, does not apply to "Levels" in which case the test check has got to be based on the number of levels recorded.

7.29.2 In case of works at headquarters of the Sub-Division, he should check measure not less than 50% of the value of the measurements recorded by his Junior Engineer before any running/final bill is paid.

7.29.3 In case of works outside headquarters of the Sub-Division, the Assistant Executive Engineer/Assistant Engineer should check measure upto 50% of the value of work done and before preparing final bills or before making payment of alternate running/final bills.

7.29.4 While test checking the work, the Assistant Engineer (Electrical)/Assistant Executive Engineer (Electrical) should test check 100% of all items of at least one unit, taken at random, besides test checking isolated and individual items in other units to bring the total extent of check measurement to the desired limit of 50% of value of work done.

7.30 In the case of works, outside the headquarters of the Sub-Division, costing upto the limit as per Appendix-1, check measurements by the AEE/AE need not be insisted upon. He will, however, have to accept general responsibility for the correctness of the bill as a whole.

7.31.1 The EE should test check 10% of the measurements recorded by his subordinates at least every alternate bill for works at his headquarter and at least every third bill for works outside his headquarter. In respect of final payment of works, depending upon the limits prescribed in Appendix-1 for works at and outside the headquarters of the Division, the EE may, in his discretion, authorise payment without any test check by him. He will, however, have to accept general responsibility for the correctness of the bill as a whole.

7.31.2 Test check of the Executive Engineers shall also include at least 10% test check of the measurements of RCC
items so as to ensure structural safety of building.

7.32.1 In the case of receipt of steel the EE shall test check 10% of the total consignment received, in a month. Any consignment test checked by EE should be checked by him 100%. Permitted variation between the quantities as per suppliers bills and as received and accounted for in stock account, is 0.5% in the steel bars upto and including 12 mm dia and 1% in the case of steel bars of higher dia.

7.32.2 If in any consignment the variation on lower side exceeds the aforesaid limits, 100% check of the measurements by Executive Engineer shall be carried out and detailed investigation into the reasons for the shortage recorded.

7.33 In case of road work when consolidated tenders have been called:
(i) The stacks shall be uniformly distributed along the road. The collection of stone metal shall be completed for the entire work or for complete length of 1 km or as directed by the Engineer-in-Charge and measured before the work of laying and consolidation is taken up in hand.
(ii) The AE must check 50% and the Executive Engineer 10% of the supply of materials in each length of 1 km before the work of laying is started.

7.34 The individual items checked should be clearly shown in the Measurement book and the result recorded by the officer concerned. The items thus checked should be attested by the dated initials of the checking Officer.

7.35 A collective record of all the check carried out from time to time will be prepared in each measurement book in the following tabular form: -
(i) Date of check.
(ii) Page recording measurements subject to test check.
(iii) Value of measurements checked.
(iv) Result of the check exercised.
(v) Dated initials and designation of the checking officer.

The result will be indicated by the word "Satisfactory" or "Unsatisfactory" as judged at the time on merits of each case.

Recording measurements for Earth levelling work

7.36 In case of levelling operations and earthwork, measurements are required to be recorded in level books in addition to Measurement Books. The level books should be numbered accounted for and handled like Measurement Books.

7.37 Before starting the earth work, the following steps should be taken:-
(i) Original ground levels should be recorded in the level book in the presence of the contractor,
(ii) A suitable baseline should be fixed with permanent masonry pillars @ 150 metres to provide a permanent reference line,
(iii) Circuit should be closed by taking final levels of the starting point or any other point, the R.L. of which was previously determined,
(iv) Plans showing initial levels, location of bench marks and reduced levels, should be prepared and signed by both the parties and attached to the agreement. Work should be done according to the Specification.

7.38 The Assistant Executive Engineer/Assistant Engineer should exercise test check at least to the extent of 50% and the Executive Engineer at least to extent of 10% where the value of this item of work exceed the limit given in Appendix I. The test check of the levels should be carried out independently by each officer and
readings should be recorded in the prescribed level book in the red ink against the old levels which should be neatly scored out wherever necessary. If the test checking carried out reveals serious mistakes in the original levels, these should be taken or retaken and rechecked. The test check by an Officer should be as representative as possible for the entire work done.

7.39 On completion of work, the levels should again be recorded in the level book and the contractor's signatures obtained. These levels should also be test checked by the AE/AEE/EE to the same extent as indicated above within one month of the date of completion of the earth work and according to the procedure as laid down in the case of initial levels as indicated above. The formation levels as per final execution of the work should be compared with the proposed formation levels and work got rectified within permissible tolerance.

7.40 Every fourth running bill and the final bill should be paid on the basis of levels.

7.41 Intermediate payments can, however, be made on the basis of borrow pit measurements. The Executive Engineers should take care that the quantities thus assessed are not in any case more than the actual work done.

7.42 In case of large scale levelling works involving both cutting and filling, an accurate site plan should be prepared before the work is commenced. The portions requiring cutting and filling shall then be divided into squares and corresponding squares into filling, which are complementary to the squares in cutting given the same number. A table may be written upon the plan showing leads involved between the various complementary squares. This would form a lead chart for the work to be done. Before the work of levelling is commenced, the lead chart shall be checked by a responsible officer of the department not below the rank of an AE/AEE in presence of the contractor or his authorised representative and his signatures shall be obtained on the same. This should form an integral part of the contract and should be duly signed by both the integral parties before commencement of the work. The quantity payable for earthwork shall be lower of the quantity derived from cutting or filling. The payment for lead shall be based on lead chart prepared in the aforesaid manner.

7.43.1 In case of earth to be imported, the area from where the earth is to be imported, should be carefully predetermined before the start of the work and wherever feasible, average lead should be worked out and stipulated in the tender. After this is determined, initial levels of this area should be recorded along with the initial levels of the area to be filled. The levels should be properly checked during the progress of work and on completion, measurements of earthwork should be recorded in both places to determine correctly the earth excavated and carted. Payment for the earth work shall be made on the basis of the lesser of the quantity in filling or cutting. Distances between the two places should be measured correctly which should also be test checked.

7.43.2 In respect of import of sweet earth required for horticulture operations, the quantity of good earth required is very small and there is no single source from where the agriculture soil is readily available. Also, good earth is lifted by contractors for different works from the same source and as such it is not possible to take levels of the area from where the earth is imported. However,
Provision of 7.43.1 will not apply in respect of Horticulture works. The payments in such cases will be made on the basis of levels of the area where earth is to be filled.

7.44 Similar procedure as in para 7.43.1 should be followed while recording measurements of disposal of earth.

7.45 In case of small works, borrow pit measurements and stack measurements of earth may be recorded indicating clearly the place of borrowing or disposal, as the case may be so that the distances can be verified.

Review of Measurement Books

7.46 All the Measurement Books in use in a Division should be collected once in the month of September each year for review by the Divisional Accountant in the following respects:-

(i) To compare the books in use with part I of the register of measurement books maintained in CPWA form 92 and to note necessary corrections in the register.

(ii) To see that no original sheet is torn out of a book nor any entry erased or disfigured and that the corrections made therein are initialled.

(iii) To see that pencil entries are not inked over.

(iv) To test check the accuracy of calculations and to ensure that the instructions regarding writing of measurement books, recording of measurements and their test check are being followed properly.

7.47 On receipt of the Measurement Books in the Divisional Office, the Executive Engineer should indicate in column 2 of the "Review Notes" in each measurement book as referred to in para 7.48 below as to which of the calculations are test checked by the Divisional Accountant. The extent of this check will be determined by the Executive Engineer having regard to the result of the last review and should cover complete set of measurements. Payments based on the entries reviewed should be traced into various accounts and verified. Similarly, supplies or issue of materials should be traced into the various accounts, and contractor's ledger etc. and verified.

7.48 The defects, discrepancies, etc. noticed should be communicated to the AEE/AE concerned and summarised in the following form in the measurement book, which has been test audited:

Review Notes by Divisional Accountant

7.49 The Measurement Book completed and returned for record during the year should also be similarly examined prior to their final record in the Divisional Office.

Loss of Measurement Books

7.50 When a measurement book is lost, an FIR should be lodged with the police. An immediate report of the facts of the case together with an explanation of all parties concerned responsible for the loss should also be made promptly to the Chief Engineer, who is empowered to sanction the write off of the lost Measurement Books. Such losses for write off should be reported in the proforma as at Appendix 9. It is also necessary that the measurements in the lost M.B should be re-constructed at the earliest

Contracts and Forms

What is a Contract

13.1.1When two or more persons have common intention communicated to each other to create some obligation between them there is said to be an agreement. An agreement which is enforceable by law is a "Contract."

13.1.2According to Section 10 of the Indian Contract Act, 1872 only those
agreements are enforceable by law which are made by the free consent of parties competent to contract, for a lawful consideration and with a lawful object and, are not expressly declared to be void. This is subject to any special law according to which a contract should be in writing and attested by witnesses.

13.1.3 The following are the essential ingredients of a contract:
(a) Offer made by one person called the "Promisor".
(b) Acceptance of an offer made by the other person called the "Promisee".
(c) Doing of an act or abstinence from doing a particular act by promisor for promisee called consideration.
(d) The offer and acceptance should relate to something which is not prohibited by law.
(e) Offer and acceptance constitute an agreement, which when enforceable by law, become a contract.
(f) In order to make a valid and binding agreement, the party entering into such an agreement should be competent to make such agreement.

13.1.4 For the purpose of an agreement, there must be a communication of intention between the parties thereto. Hence in the forms of a Contract there is:
(a) A proposal.
(b) Communication of the proposal.
(c) A communication of the acceptance of the proposal.

13.1.5 The communication of acceptance of the proposal completes the agreement. An offer may lapse for want of acceptance or be revoked before acceptance. Acceptance produces something which cannot be recalled or undone. A contract springs up as soon as the offer is accepted and imposes an obligation upon the person making the offer. It has been opined by the Ministry of Law that before communication of acceptance of an offer the tenderer would be within his right to withdraw, alter and modify his tender before its acceptance, unless there is a specific promise to keep the offer open for a specific period backed by a valid consideration.

Forms to be used for contracts
13.2 The following forms shall be used for agreements with the contractors for the purpose noted against each. Standard clauses of various forms have been approved by the competent authority and should not be altered/violated on any account except with the previous approval of that authority.

P.W.D. Form No.6
13.2.1 This is Notice Inviting Tender Form and in brief known as NIT. It is required to be invariably issued in respect of works for which tenders are to be called. The salient feature of this Form is that it includes name of work, estimated cost put to tender, period of completion, time and date of receipt and opening of tenders and other relevant conditions. Care is required to be taken with regard to Clause 4 which provides two alternatives, viz.(i) the site for the work is available or (ii) the site for the work shall be made available in parts as specified. Only one of these two alternatives is required to be retained.

P.W.D. Form No.7 Percentage Rate Tender
13.2.2 Form PWD 7 (percentage rate tender) could be used in respect of levelling and development works including such works as storm water drainage, water supply and sewer lines and repetitive types of works such as construction of residential quarters of various types as per standard design and drawing.
In other cases, use of this form should be restricted to works estimated to cost upto Rs. 1,00,000/- where the Department have their own schedule of rates and upto Rs. 40,000/- where the Department do not have schedule of rates of their own and have to follow the district or State PWD schedule of rates.

The NIT approving authority may choose any of the forms of tender i.e.PWD-7 or PWD-8 for recorded reasons.

PWD Form No. 8 Item Rate Tender
13.2.3For item rate tenders contractors are required to quote rates for individual items of work on the basis of schedule of quantities furnished by the Department. This form ensures a more detailed analysis of cost by the contractor. The Contractors have to work out the rates against each item.

PWD Form No. 9 Supply of materials
13.2.4This form should normally be used where the purchase of materials is involved. According to the PWD Form No. 9 the contractors are required to quote rates for supply of the required quantity of materials, whether raw or finished.

PWD Form No. 10 Piecework
13.2.5This form is to be used
(i) For a work costing less than Rs. 60,000/-. (ii) In cases in which it is necessary to start the work in anticipation of formal acceptance of contract, and (iii) For running contracts i.e. those for pipes, laying of sewerage etc.

In cases of (ii) above, the piece-work contract is cancelled as soon as regular contract is signed.

In case of (iii) above, quotations are called periodically and a running rate contract is drawn up as a result of those quotations usually for one year. The piece work contract form provides for payment of stipulated rates only when it refers to such quantity of time and also stipulate that the Engineer in-charge may put an end to the agreement at his option at any time.

PWD Form No. 11 Work Order
13.2.6This form may normally be used for works costing Rs. six lacs & below. It is not much different from Form No. 10 but any work awarded on Form No. 11 may be stopped by the Engineer-in-charge at any time and the contractor is also entitled to stop the work at any time.

P.W.D Form No. 11A Work Order
13.2.7This form may be used for small works costing less than Rs. six lacs where it is not considered necessary to use regular Forms No. 7, 8 & 12 and at the same time it is desired to bind the contractor in respect of the quantity of the work and the time in which it is to be completed.

Before awarding works on works orders (Form 11 & 11A), the contractor should be asked to furnish a list of Gazetted and non-Gazetted CPWD Employees related to him. The term 'Non-Gazetted' staff shall include CPWD staff on workcharged establishment as well.

PWD Form NO.12-Lump-Sum Contract
13.2.8This form, as its name indicates, is used for work in which contractors are required to quote a lump-sum figure for completing the works in accordance with the given designs, drawings, specification and functional requirements as the case may be. Lump-sum tender can be either for only executing the work as per given design, drawing and specification or it may include element of doing design work and preparation of structural drawings as well which shall be in keeping with the
given functional, structural and architectural parameters and subject to approval by the competent authority before hand.

In cases where work is to be executed as per design and drawing of the department, all the detailed working drawings, both architectural and structural must be prepared before hand and should form part of the tender documents which should also contain complete and detailed specifications of the work. The tender documents must set out complete scope of the work. Only the drawings and the detailed specifications as contained and/or referred to in the tender documents shall form the basis of execution and payment. The extra payment or recovery over and above the accepted rate shall therefore be called for only in the event of authorized deviations from the drawings and specifications (as given and/or referred to in the tender documents) in course of execution and not otherwise.

In cases where the detailed architectural and structural drawings are to be provided by the Contractor, all the architectural and structural data/parameters necessary to work out the cost of the work, details of the functional requirement and complete/detailed specification thereof including preliminary drawings if any, must be finalised before call of tender and the tender documents must contain all these details so that there is little scope of guess work on the part of the contractor while tendering and chances of dispute at later stage are minimised. A condition should be stipulated in the tender documents that the work shall be executed as per detailed design and architectural/structural drawings to be prepared by the successful contractor conformed to the given parameters and functional/design requirements as enunciated in the tender documents and submitted to the department within specified time after the award of work. The contractor shall accordingly get the design/drawings approved by the department before taking up execution of the work. In case any modification for any reason is ordered in course of execution, suitable adjustment for extra payment or recovery shall be effected only if such modification in the tender documents or any change from the specified parameters.

PWD Form No. 47-Tender for Demolition of Buildings

13.2.9 This form of tender is adopted for demolition of buildings and removal of debris from the site.

World Bank Documents

13.2.10 The Standard Bidding Documents finalised by World Bank are used for works aided by it. Only work specific changes, acceptable to the Bank, may be made in the conditions of contract. Such changes may be incorporated through additional conditions or contract-data-sheets and not by introducing changes in the standard wordings of the Standard Bidding Documents of the World Bank. The two authorities for administering the contract for World Bank project viz. the "Employer" and the "Engineer" should be substituted with "The Central Public Works Department represented by Chief Engineer/Superintending Engineer" and "The Executive Engineer represented by the Assistant Engineer/Junior Engineer" respectively and in the Additional Conditions of Contract, to be got approved by the World Bank representative, it should be mentioned that it shall be open for the Executive
Engineer to invite a third party to inspect the work and advise him on the quality, workmanship etc. of the work.

**TRANSFER ENTRIES**

8.1.1 Transfer entries, which are entries intended to transfer an item of receipt or charge from the account of a work in progress or a regular head of account to the account of another work or head, are necessary. (a) In order to correct an error of classification in the original accounts; Note - Sometimes it is more convenient to classify items pertaining to several heads(or works), under a single head in the first instance than to classify them under each from the beginning. For example when a joint work in which several parties are interested is undertaken, the individual transactions relating to it are taken to the account of a single party in the first instance, and before closing the accounts of a month, the necessary distribution over all the accounts is effected by transfer entry. (b) In order to adjust, by debit or credit to the proper head of account (or work), an item outstanding under a suspense account or under a debt, deposit or remittance head; (c ) In order to bring to account certain classes of transactions which do not pass through the cash or stock account e.g. (i) for adjusting PAO Memos received from PAO of the Division in case of purchase made through DGS&D i.e. in the Accounts of Division (-) credit to Sub-head “Purchases pending payment / adjustment” under the minor head “129 - Material Purchase Settlement Suspense Account” below the Major Head “8658 - Suspense Accounts”. (ii) for credit to “P.W. Deposit” on account of balances due to contractors on closed accounts, vide paragraph 10.5.19. (iii) for credit to Revenue heads on account of revenue not re 73 another department or Government when the value is recoverable from them; (v) for credit to the heads concerned of the several percentages leviable under the rules, e.g., those on account of supervision (when not recovered in cash), establishment, tools and plant and workshop charges, vide paragraph 150 of the Central Public works Department Code and Appendix 4 and paragraph 14.2.5 of this Code. (d) In order to respond to a remittance transaction advised by the Accounts Officer, if the corresponding debit or credit to the Remittance head has not already appeared in the accounts; (e) In order to relieve the account of a work in progress of – (i) Items which have ceased to be debitable to the estimate for work, and (ii) Suspense charges which can no longer be kept within the accounts of the work. Such transfer entries are necessary either when the accounts of any contractor or of the work itself are to be closed, or when any recoveries (otherwise than in cash) have become due, e.g., by the transfer of stores to any other work or account. (f) to effect periodical adjustments such as (a) annual adjustment to credit to the head “8009” GPF an amount equal to total of interest accruing and afforded to various Group ‘D’ and Work Charged establishment accounts by contra debit to the head ‘2049 – Interest Payments’ etc . Note - A list of adjustments which have to be made periodically should be maintained in order to ensure that they are regularly made.
8.1.2 If an item which properly belongs to a revenue or expenditure head is wrongly classified under another revenue or expenditure head in the accounts, the error may be corrected at any time before the accounts of the year are closed by proposing a transfer entry; but after the accounts are closed, no correction is admissible, it being sufficient to make a suitable note of error against the original entry. If, however, the error affects the receipts and disbursements of another Government or the transactions of a commercial department, it should be corrected by transfer in all cases as soon as the error is discovered.

8.1.3 An error which affects a debt, deposit, suspense or remittance head must be corrected by transfer, however, old and small it may be. If the accounts of the year in which the error takes place are not closed, the correction should be made by the removal (through minus entry) of the item from the head under which it was wrongly taken to that to which it properly belongs.

8.1.4 If the accounts of the year in which the error takes place are closed, then the following procedure may be adopted. (i) an item taken to one debt, deposit, suspense or remittance head instead of another – the correction should be made by transfer from the one to the other. (ii) an item credited to a debt, deposit, suspense or remittance head instead of to a revenue head; or debited to a debt, deposit, suspense or remittance head instead of to an expenditure head – the correction should be made by transfer to the head under which it should originally have appeared. (iii) an item credited to a revenue head instead of to a debt, deposit, suspense or remittance head – correction should be made by debiting refunds and crediting the proper head; and (iv) an item debited to an expenditure head instead of a debt, deposit, suspense or remittance head – correction should be made by debiting the proper head and crediting the relevant departmental receipt head (or in the case of a department not having corresponding receipt head, to the major head 0075 – Miscellaneous General Services). However, when the correction affects a head for which budget provision is obtained, the correction / transfer may be effected by affording plus credit or minus credit under the head concerned without affecting the actual expenditure (i.e. debit side of the head) for the year.

8.1.5 When a correction is permissible it should be made by a formal transfer entry, but when it is not permissible, a suitable note of it should be made in the account concerned. All corrections in accounts, which may be advised by the Accounts Officer on his auditing the documents should after verification, be carried out in all relevant red ink and attested by the dated initials of the Divisional Accountant. A reference to the audit note or other advice should also be noted against the correction.

8.1.6 For every transfer entry there must either be an authority in Form C.A.M. 34. Transfer Entry Order or an order recorded on another document (e.g., Survey Report, Form 18, and final bill of contractor’s closed account placed under Public Works Deposits) which sets forth all the necessary particulars; see also note below paragraph 22.4.3. Note 1 In cases in which the Transfer Entry Order is not required to be submitted to the Accounts Officer with the Monthly Account, vide paragraph 22.4.17, the necessary order, if not initialed by a Sub-divisional Officer may be signified by the Divisional Officer’s initials against
the entry in the Transfer Entry Book (paragraph 8.1.10.). Note 2 A single transfer entry may cover a number of adjustments and corrections, provided that all the necessary particulars are set forth in respect of each. However, on one side of every transfer entry, there should be only one major head but there may be a debit or credit to various other heads or vice versa. In a transfer entry all particulars explaining both the nature of the adjustment and the grounds for the correction must be clearly stated.

8.1.7 A Transfer Entry Order may be initiated by the Sub-divisional Officer, and should be so initiated by him in all cases falling with in clauses (a), (b), (c) and (e) of paragraph 8.1.1 which comes under his cognizance.

8.1.8 The Divisional Officer should see that no transfer entry is made in the accounts unless admissible under the rules, that a transfer entry is made as soon as it becomes necessary, and that Transfer Entry Order in respect of transactions falling under clause (a), (b) and (c) of paragraph 8.1.1., proposed by Sub-divisional Officers, are countersigned by himself in token of acceptance. Note- Transfer entries should receive the special attention of Divisional Officer so that habitual errors / misclassifications in the accounts of subordinate officers may not remain unnoticed.

8.1.9 All Transfer Entry Orders should set forth such explanation of the correction or adjustment proposed to be made as would establish clearly the correctness and necessity of the entry. Note - In cases of corrections involving a reduction in the charges against the estimate of work it is essential not only that full particulars of the vouchers and accounts in which the erroneous charges originally appeared are specified, but also that the circumstances in which the charges were allocated wrongly under the estimate for the work are set forth clearly. It is not sufficient to state that the charges were erroneously classified previously.

8.1.10 All transfer entries prepared during a month should be entered in the Transfer Entry Number Book (Form CAM 35). The effect thereof should be reflected in the monthly accounts of that month after preparing a ‘Summary of Transfer Entries’ (Form CAM 36) as described in the next para.

8.1.11. As and when approved, transfer entries should be posted individually into columns 1 and 2 of Form CAM 35 against the respective heads of account affected. After all the TEs, for the month are, thus entered, the total effect against each head of account separately under debit and credit columns should be worked out and posted into money columns 5 and 6 respectively of that Form. Thereafter the grand total under columns 5 and 6 should be worked out and agreed with the grand total under columns 1 and 2 respectively to serve as a cross check. The figures appearing in columns 5 and 6 against each head of account should be posted against the corresponding head of account in the departmental classified abstract in the appropriate column. In case a bound book is not used for entering each year’s monthly Summary of T.E.s then at the end of the year the monthly sheets of the document should be arranged in the order of the months and bound into a convenient volume.

8.1.12 No transfer should be made from one sub-head to another in the accounts of a work except on the authority of a formal Transfer Entry Order prepared in accordance with the procedure prescribed in this chapter and approved
by the Divisional Officer. The order should be filed with the Works Abstract for the month in which the transfer is effected and it should not be entered in the Transfer Entry Book. Note - The transfer entry orders prepared for the clearance of the suspense head “Land Acquisition” by debit to the final head “land” within the accounts of work vide paragraph 10.5.21 should be entered in the Transfer Entry Book and submitted to the Accounts Officer along with the monthly account supported by land acquisition vouchers.