

**Bridge, Ropeway, Tunnel & Other Infrastructure Development Corporation
of Uttarakhand Ltd.**

(BRIDCUL)

(A GOVT. OF UTTARAKHAND UNDERTAKING)

Earlier-Uttarakhand State Infrastructure Development Corporation Ltd



Work Manual

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CHAPTER I
WORKS
SECTION 1
CLASSIFICATION OF FUNCTIONS OF BRIDCUL

1.1 Functions

BRIDCUL (Formerly USIDCL) was incorporated by Registrar of Companies, Kanpur on March 25, 2008, as the main construction agency of Uttarakhand State to develop the infrastructure within and outside the State and anywhere in the World.

1.2 Procedures for execution of works

1.2.1 The works shall be executed through open tenders. Major construction materials may also be procured separately besides turnkey tenders with the permission of Competent Authority as powers delegated in the department. In such cases, following procedure will be adopted.

- (i) To assure the quality of materials and best value of available funds, major construction materials e.g. cement, steel and pipes etc will be directly purchased from the manufacturer or the authorized dealer by the Department. through an authorised purchase committee will approve the rate contract for such materials separately for that financial year and the Project Managers concerned will place supply orders to the approved Supplier as per their respective demands for supply of materials at site road head anywhere in Uttarakhand.

Procurement of these materials will help in best utilization of funds *in an economical manner, being the bulk supply.*

- (ii) The tenders will be invited for the works from the contractors registered with any Central/State Govt. Department or Public Sector Undertakings or open category in relevant category of works.
- (iii) Procured materials i.e cement, steel and pipes etc. will be issued to the contractor at the 'Issue Price' *to be decided by BRIDCUL In each case.*
- (iv) Deposit works, emergency works and urgent works may be executed at variance with the above procedure as laid down in Section-3, 2,3, Goods & Materials may be procured as laid down in Section-3, 5.

1.3 Classification of Works

The works under taken by BRIDCUL are classified as follows:---

1.3.1 Original Works

These shall mean:-

- (i) All new constructions,
- (ii) All types of additions, alterations and/or special repairs to newly acquired Assets abandoned or damaged assets that are required to make them Workable.
- (iii) Major replacements or remodelling of a portion of an existing structure or installation. or other works, which results in a genuine increase in the life and value of the property.

1.4 Classification as per funding of works

(1) The funding of any work falls under one of the following categories:

1.4.1 **Budgeted works:** These are works that are undertaken under an outlay that is provided wholly from the financial estimates and accounts of the Government of Uttarakhand.

1.4.2 **Deposit works:** These works are undertaken at the discretion of the department. Outlay for these works, to be executed within the state/outside the state of Uttarakhand, is provided from grants of the state Govt. concerned to autonomous or semi-autonomous bodies or institutions, private institutions through their Administrative Ministries, or is financed from Government sources wholly or in part from:

- (i) Funds of a public nature, but not included in the financial estimates and accounts of the State of Uttarakhand or Union of India, (ii) contributions from the public.
- (ii) Provisions under section 3.6 may be referred to for further details of 'Deposit works'.

1.5 Executive Order of MD, BRIDCUL

The Managing Director, BRIDCUL (MD, BRIDCUL) is authorised to issue executive orders to:-

- (1) Revise from time to time the different rules and rates/amounts based on inflation/ the current prices.
- (2) Make mutatis-mutandis changes in this manual wherever required. Further, interpretation of the MD, BRIDCUL in relation to any matter contained in this manual will be final and binding on everybody.

1.6 Power to amend provisions of this manual:-

MD, BRIDCUL shall be competent to revise any provision of this manual with the concurrence of concerned CGM/GM

SECTION 2

STAGES FOR EXECUTION OF WORKS

2.1 Pre-requisites for execution of works

- 1) There are four main stages as follows for the execution of a work:-
 - (i) Administrative approval
 - (ii) Expenditure sanction
 - (iii) Technical sanction
 - (iv) Availability of funds.
- 2) No work should normally be commenced or any liability thereon incurred until an administrative approval has been obtained, a properly prepared detailed estimate has been technically sanctioned and where necessary expenditure sanction has been accorded and allotment of funds made.

2.2 Works of inescapable nature

Various works of inescapable nature can be classified under two categories as under:

Emergency Works:

Emergency works are those kinds of works which arise all of sudden and are inescapable requiring immediate action that cannot brook any delay. Emergency works may be taken up by BRIDCUL under following situations:

- (i) Earth quakes
- (ii) Blizzards
- (iii) Hurricanes/lightening
- (iv) Floods/Disaster/Heavy Rains
- (v) Explosions/Arson
- (vi) Fire
- (vii) War
- (viii) Mass strike affecting civil services such as water, sewer and power supply
- (ix) Restoration of services in case of accidents
- (x) Any work declared emergent by *MD, BRIDCUL* in case the interest of work so demands.

In case of emergency, the work may be executed in absence of any or all of the above mentioned prerequisites. On such aforesaid situations or on such order of the Uttarakhand Government in case any work declared emergent, BRIDCUL shall proceed to carry out the necessary work. The Project Manager should obtain the administrative approval and expenditure sanction and accord of technical sanction of the competent authority to regularise the liability as early as possible.

Urgent Works:-

The urgent works need not to be treated at par with the works to be taken up under emergency situations. Urgent works may be defined as those kinds of works which requires fast start/completion within compressed schedule and are to be taken up on top most priority at the• instructions of competent authority. Under such situation availability of funds needs to be ensured before taking up execution of works.

Urgent works can be taken up at specific request of user department with prior in principle approval of BRIDCUL officers competent to approve the work order to be issued to take up such works if work is to be executed through work order. Chief General Manager shall be final authority to approve the execution of urgent works.

The financial powers under emergency and urgent situation should be exercised with great caution after watching the financial Interests of Government.

2.3 Administrative approval

“Administrative approval” is the communication of formal acceptance of the proposals by the competent authority of the Administrative Ministry/Department requiring the work.

2.3.1 Accord of administrative *approval-in-principle*

- a) The concurrence of the competent authority of the Administrative Ministry/Department requisitioning the work should be obtained to the Preliminary Estimate for the work. However, no such concurrence is required for normal repairs and maintenance works.
- b) The Preliminary / phase-I estimate should be framed and sent in triplicate to the Administrative Ministry/Department requisitioning the work. The requisitioning authority shall be requested to return one copy of the estimate, duly countersigned in token of acceptance, while communicating the administrative approval-in-principle.

2.3.2 Powers for accord of administrative approval

- a) Various Ministries/Authorities who get their works executed through BRIDCUL, have been delegated specific powers to accord administrative approval to the works.
- b) The amount of administrative approval accorded, in all cases, shall include departmental charges, wherever it is liveable.

- c) If the estimated cost of a work exceeds the powers of any officer, the administrative approval of the Government of Uttarakhand in the Administrative Ministry must be obtained.

2.3.3 Approval to work of additions and alterations

- a) No authority, with the exception indicated in sub-para (b) below, is empowered to accord administrative approval to an estimate of additions and alterations to a work if the expenditure contemplated would result in increase of the capital cost of the work to a figure which is beyond the authority in question entitled to accord the administrative approval in case of a new residence.
- b) The Managing Director, General Manager and Project Manger may accord administrative approval, as per powers delegated to them to estimates for minor works and additions and alterations to the existing works irrespective of the capital cost subject to the conditions, that:-- The additions and alterations to be sanctioned shall be of the general type. All such cases where there are no precedents or where there are likely to be repercussions should be referred to the client Ministry.

2.3.4 Material deviations over original Sanctioned Scheme.

Material deviations that significantly alter the scope of work from the original sanction should not be made without the approval of the authority that accorded administrative approval to the work, even though the cost of the same may be covered by savings on other items.

2.3.5 Excess over administrative approval

Excess up to 10% of the amount of the administrative approval may be authorised by Officers of the BRIDCUL subject to their respective powers of technical sanction. In case it exceeds this limit, a revised administrative approval must be obtained from the authority competent to approve the cost so enhanced. No revised administrative approval is however necessary if the excess is covered by the requisite expenditure sanction.

2.4 Expenditure sanction

Expenditure sanction is to be accorded by the Administrative Ministry/Department to indicate that funds for the project/work have been provided and liability can be incurred.

2.4.1 Powers for accord of expenditure sanction

- a) Ministries/Departments of the State Government may issue expenditure sanction in respect of major works costing up to a specified limit without consulting the Ministry of Finance.

2.4.2 Excess over expenditure sanction

Expenditure sanction can be exceeded up to 10%, beyond which revised Expenditure Sanction shall be necessary. This should be applied for as soon as such excess is foreseen. No expenditure shall be increased over expenditure sanction prior to approval of Managing Director, BRIDCUL.

2.5 Technical sanction

A “technical sanction” amounts to a guarantee that the proposals are technically sound, and that the estimates are accurately prepared and are based on adequate data.

2.5.1 Accord of technical sanction

- a) **After** receipt of administrative approval and expenditure sanction, detailed estimates are required to be prepared for technical sanction. The technical sanction should be accorded by the competent authority before a work is taken in hand. In case of revised estimates, it is not necessary to wait for the revised administrative approval or the revised expenditure sanction to accord revised technical sanction.
- b) A copy of the technical sanction for the work should also be endorsed to the concerned Architect/Consultant, General Manager/Project Manager/ Electric wing *for. initiating action on electrical works*. The municipal/Local Bodies and Electrical Supply Companies should also be approached by the Project Manager, Civil and Electrical, well in time for providing External services including power supply.
- c) Before an estimate is technically sanctioned, the following shall be desirable:--
 - i) Detailed architectural drawings and specifications.
 - ii) Preliminary structural drawings for foundations
 - iii) Preliminary structural drawings of superstructure at least up to slab at *level 2*.
 - iv) Preliminary drawing for internal and external services.
 - v) *Detailed information about the estimate as per proforma.*
- d) The authority competent to accord such sanction shall ensure that the design and specification etc., adopted in the detailed estimate are adequate enough for the work to last till its desired life.
- e) In case of work for which tenders are called on “Design and construct” basis, technical sanction of such works may be accorded only on finalization of structural drawings. services drawings and other details on submission of the same by the contractor/consultant. However it would be necessary that all the Architectural and structural detail parameters, details of functional requirements and complete

specifications including preliminary drawings are finalized before the call of tenders on “Design and construct” basis.

- f) For various types of buildings, the economic life shall be taken as under:-
1. Monumental structures 100 years
 2. RCC framed structures 75 years
 3. Load bearing structures 55 years
 4. Semi permanent structures 30 years

Economic life of various internal services/fixtures including electric wiring, water supply distribution system may vary from 15 to 25 years depending on the geographical location, type of the services and its uses.

- g) For Technical sanction, detailed estimate shall be prepared based on applicable schedule of rates. Market rates shall be followed for the items not covered under schedule of rates. Effect of prevailing cost index over the hypothetical cost Index of schedule of rate should be taken on the amount of detailed estimate for items for which rates are based on schedule of rate. Estimate should be technically sanctioned for the amount inclusive of effect of Cost Index.
- h) The powers delegated to officers of the BRIDCUL for accord of technical sanction are given separately. The amounts are exclusive of departmental charges. The powers to accord technical sanction to revised estimates shall be the same as for the original estimates.

2.5.2 Deviation in Technical Sanction

- 1) The technical sanction can be exceeded up to 10% beyond which revised ‘technical sanction’ shall be necessary.
- 2) Similarly, if sequent to the accord of technical sanction, material structural alterations are contemplated the orders of the authority which sanctioned the estimate technically should be obtained, even though no additional expenditure may be involved due to such alterations.

2.5.3 Packages for accord of technical sanction

- (i) The authority of BRIDCUL who submitted the preliminary estimate to client should decide the project into packages for inviting tenders.
- (ii) The authority who decides the package will also decide the manner in which technical sanction(s) (one or many under each package) is/are to be accorded.
- (iii) In event the authority identifying the package decides that different authorities are to accord technical sanction for different components, he will intimate the same to all concerned authorities duly indicating the time frame. The technical sanctioning authorities, after according technical sanction for respective components, *w/i* submit the detailed estimates along with their proposal for

special conditions to be incorporated in NIT to authority competent to issue the NIT.

2.6 Appropriations and re-appropriations

- 1) Appropriation means assignment to meet specified expenditure of funds included in a primary unit of appropriation. Re-appropriation means the transfer of funds from one unit of appropriation to another under such unit. It is a fundamental principle that no outlay on a work shall be incurred without funds having been allotted for it by appropriation or re-appropriation. In exceptional cases, where expenditure is authorised in anticipation of the allotment of funds or in excess of the funds allotted for the purpose, the authorisation must be followed by a formal allotment of funds to the extent required.
- 2) Allotment of funds is intended to cover all the charges including the liabilities of past years to be paid during the year or to be adjusted in the accounts of it. It is operative until the close of the financial year. The financial year closes on 31st March, and after that date all cash and stock transactions are treated as pertaining to the following year.
- 3) However, the Transfer Entry Book and the stock accounts should be kept open for transfer entries relating to rectification of errors and settlement of outstanding. These accounts should be closed on the 20th May or on such other date, as may be prescribed by the Accountant General.

Note:

- (i) If any adjustments in accounts have been purposely deferred till the close of the accounts of the year, it is permissible to affect these after 31st March in the same way as adjustments in rectification of error noticed after that date.
 - (ii) Accounts of transaction with other Governments, Railways, Posts and Telegraphs and Defence must be settled completely and communicated to the Accountant General by the 12th April, at the latest.
- 4) An appropriation or re-appropriation can be authorised at any time before, but not after the expiry of financial year.

2.6.1 Powers for appropriation and re-appropriation

With a view to speed up the work and to ensure that the pace of work is not hindered, the powers to appropriate and re-appropriate funds to meet the expenditure on works are vested with the Managing Director, BRIDCUL, who will inform the Govt. or the client as the case may be.

2.7 'Pre-construction' and 'construction' stages

The execution of a project/work has two stages, viz, the 'Pre-construction stage' and the 'Construction stage'. The following activities are involved in the stages:

1. Pre-construction stage: —

- (i) Requisition from the client.
- (ii) Preparation of site/soil data, and assessment of feasibility of services such as water supply, electricity, drainage and sewerage etc.
- (iii) Discussion with the client to assess and appreciate their requirements, incorporation of the same and preparation of preliminary plans.
- (iv) Approval of the preliminary plans by the client.
- (v) Preparation of preliminary or Phase-I estimate.
- (vi) Submission of the Phase-I estimate to the client for in-principle- approval by the Govt. or client.
- (vii) Preparation of architectural drawings and review with client at appropriate/HOD level and modification of drawings, if required.
- (viii) Preparation and submission of the plans to the Local Bodies for their approval, including state pollution control committee where required.
- (ix) Approval of plans by the Local Bodies.
- (x) Preparation of preliminary structural sizes.
- (xi) Preparation of services drawings.
- (xii) Preparation of detailed working drawings.
- (xiii) Preparation of Detailed Project Report (DPR) including detailed estimates (civil, electrical and mechanical).
- (xiv) Preparation of NIT (with or without centralized material) and call of pre-qualification applications, wherever applicable.
- (xv) Preparation of structural drawings.
- (xvi) Selection of contractors from the pre-qualification applications wherever applicable.
- (xvii) Call of tenders and pre-bid conference wherever applicable.
- (xviii) Receipt/Opening of tenders.
- (xix) Decision on tender and award of work.

2. Construction stage:—

- (i) Execution of work and contract management.
- (ii) Completion of work.
- (iii) Testing and commissioning.
- (iv) Completion certificate.
- (v) Handing over to Client.
- (vi) Settlement of accounts.

2.7.1 Co-ordination of works

2.7.1.1 Pre-construction stage

- 1) The co-ordination upto the stage of preparation of detailed estimate/NIT for execution of a project/work shall be done by the Consultant Architect & PM/SRE handling the project. The preparation of lay out, preliminary and detailed working drawings of buildings shall be done by the Consultant Architect & PM/SRE in consultation with the client Ministry/Department as well as with the General Manager, civil and electrical, after obtaining their proposals and requirements. For this purpose, the PM/SRE shall send advance copies of the drawings to all the concerned officers and call for their comments. The detailed working drawings shall be finalised by him after taking into account such comments/data into consideration, and after further mutual discussions as may be necessary.
- 2) These drawings shall be sufficiently detailed to enable the field officers to relate it with the schedule of items for execution of work without any ambiguity or lack of clarity. In case of works where architectural input is not required, such as road work, the Project Manager/General Manager in Zone shall co-ordinate the work upto the NIT stage.

2.7.1.2 Construction stage

- 1) The co-ordination during the construction stage shall be done by the concerned Project Manager or by the Nodal Officer so appointed by the General Manager. He shall hold regular co-ordination meetings with the concerned officers of the disciplines (including, electrical, civil horticulture) to review the progress of the work, and to sort out hindrances or bottlenecks wherever these occur. He shall also invite the client's representative to participate in the coordination meetings for regular appraisal of progress of work, appreciation of client's needs and desire, and to sort out inter-departmental issues, if any. He shall issue regular minutes of such meetings to all concerned.
- 2) The Project Manager, Civil and Electrical, shall work in close co-ordination to ensure that all the preceding activities involving work of other disciplines are completed well in time before the subsequent activities as per the program of work are taken up. Activities that may conflict or cause avoidable damage to the work already done shall be avoided by proper planning.
- 3) Any change from the provisions in the architectural drawings that becomes necessary during the execution of work due to any practical difficulty etc., shall be brought to the notice of the Consultant Architect and the Technical sanctioning authority who will approve the changes in consultation with a structural engineer.

2.7.1.3 Local Bodies

- (1) In all cases, where the BRIDCUL has to depend upon the local Municipal and other authorities for the provision of external services, viz, roads, drains, water supply mains, sewerage, electric mains, etc. there should be proper co-ordination between the BRIDCUL officers concerned with the project and Municipal and other authorities. To avoid any infringement of building and health bye-laws of local Municipal Committee/Corporation, the water supply and Sewerage Scheme

should be prepared keeping in view the provisions and requirements of these bye-laws. The Project Manager shall furnish complete plans to such local bodies for their approval prior to commencement of the work.

- (2) The Consultant Architect shall pursue with the Local Bodies in close co-ordination with the Project Manager for obtaining the necessary clearances/approvals.
- (3) On commencement of work, the local bodies should also be moved simultaneously for provision of ancillary services. Provision for such external services, wherever required to be provided for by the Department should invariably be made in the main project estimate.

2.7.1.4 Horticulture works

When the building work has sufficiently advanced, the concerned PM/AD should initiate action for horticulture works.

2.8 Completion of Works

- (1) The administrative Department shall be kept informed at regular intervals about the stages of progress of work so that the client's observations, if any, could be responded to before the work is completed.
- (2) On completion of the work, the Administrative Department should be intimated of the same and formal handing over arranged in writing. Reasonable advance intimation of completion of the work should be given to the concerned Department to enable them to make arrangements for taking over.
- (3) Completion plans of the project including all services should be prepared and submitted along with the completion report showing the expenditure incurred on the project.
- (4) The Completion Report should be prepared from the Works Registers indicating the expenditure incurred till the date of completion and passing the excess, if any, as it may be within the competence of BRIDCUL Officers.
- (5) The Project Manager (Accounts Section) in charge of the work should maintain a register called "Consolidated Register of Works" so as to exhibit the total cost of the project including all components viz., building, water supply, water & sewage treatment plants, intake well, CWR, drainage, sanitary installation, electrical installations, etc. For this purpose, the concerned divisional units, on completion of their portion of the work will intimate the audited figures of expenditure to the building Division through a Completion Report and get the excess, if any passed.

The overall responsibility for obtaining the revised administrative approval and expenditure sanction for the project as a whole, wherever required, will rest with the Project Manager.

- (6) Subsequent to the computerisation of accounts and Progress Monitoring System developed by the NIC in co-ordination with BRIDCUL, the actual expenditure figures from the Monthly Accounts that are entered are being uploaded every month by the individual Divisional units to the Central server. The server automatically consolidates the actual expenditure figures of the various Divisional unit technical sanctions wise under the respective administrative approvals of the works. Thus the consolidated expenditure figures under each administrative approval are available at the BRIDCUL website. The Project Manager shall, therefore, watch the expenditure figures from the website for taking action as above, *on a regular basis*

SECTION 3 DEPOSIT WORKS

3.1 Definition

- (1) The term ‘Deposit Works’ is applied to works of construction or repairs and maintenance, the cost of which is met out of Government grants *of the concerned states to its* institutions through their Administrative Ministries, or is financed from non-Government sources wholly or partly from:--
 - a) Funds of public nature but not included in the financial estimates and accounts of the State Govt. or Union of India.
 - b) Contributions from the public.
The funds may either be deposited in cash or otherwise placed at the disposal of the MD.
 - c) Funds from private companies, institutions etc.
- (2) Where a work is to be carried out partly from funds provided in the financial 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 Taking up of deposit works

- (1) The work shall be executed in accordance with the procedures laid down for the works *in general*. However, the norms regarding plinth areas and specifications of the client department may be adopted even if such norms are at variance with BRIDCUL norms. In such case the client should be intimated beforehand about the government norms and financial repercussions.
- (2) In case of exigencies, with the permission of Managing Director or Chief General Manager, the work can be executed directly by the technical staff of the construction unit by procuring necessary machine and equipments, tools and plants, shuttering all material like steel, cement, bricks, sand, timber etc and engaging piece rated workers (PRW) through work order on labour item rate basis. Work order on labour item rate only will be issued upto 5.00 lacs and ‘ 10.00 lacs for works costing upto ‘ 5.00 crores and above respectively or as revised from time to time.
- (3) BRIDCUL should normally decline to undertake as deposit work for the maintenance of buildings that were not originally constructed by BRIDCUL and maintenance of mechanical/electrical equipments that were not originally procured and installed by I.T. Maintenance works of such buildings and installations may, however, be undertaken if it is in the interest of Government to

do so, e.g. when the Body or Institution is financed largely from Government grants and defects in construction or maintenance might lead to demand for further financial assistance from the Government 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 purpose or *leased* at a profit.

3.3 Powers to undertake deposit works

MD, BRIDCUL is fully authorised to undertake deposit works of any department / agency of the Government of Uttarakhand or of any other State Govt. or private institution which could be of any magnitude.

3.4 Realization of deposits

- 1) Whenever a deposit work is to be undertaken, the deposit should be realised before any liability is incurred on the work. 4% of the anticipated project cost should be realised before preparation of preliminary estimates or as per latest orders of State Govt. In addition to the outlay on the work in the preliminary estimate, departmental charges at such percentages as are prescribed by the Government of Uttarakhand from time to time shall also be realized in advance. No interest will be allowed on sums deposited from any source, including private contributions.
- 2) In the case of deposit works of autonomous bodies which are financed entirely from Government grants and from whom receipt of deposits is assured, 33-1/3% of the estimated cost of the work may be got deposited in 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) Where delays are experienced in obtaining deposits and where the 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 General Manager/Managing Director promptly for taking up the matter with the client. No expenditure shall be incurred on deposit works out of BRIDCUL grants and vice versa.
- 4) To enable the client to provide additional funds in time whenever the expenditure is anticipated to exceed the preliminary estimate figure, a revised preliminary estimate should be submitted to the client well in time during the execution of work.
- 5) Where a client has defaulted in making the required deposit and where the outstanding amount exceeds 10.00 lakhs or where the works outlay is

predominantly for purchase of capital equipments and machineries, the entire deposit including departmental charges should be realized in advance.

- 6) In no case deposits received from a client department for its work should be diverted to other works.
- 7) The client is to be clearly made to understand that BRIDCUL does not bind itself to complete the work within the amount of the preliminary estimate, and that they should agree to pay for the excess expenditure that may occur. An acknowledgement of this clear understanding shall be obtained from the client before the deposit work is taken in hand.
- 8) The Project Manager should ensure that at any time during the progress of the work, the expenditure is not more than the deposits received for the work. Where the PM is doubtful about the timely receipt of deposits, he should notify the client that if further deposit is not received, the work would be stopped and any contractual liability arising out of such stoppage of work will be borne by the client. He should also bring this to the notice of his higher officers for taking up the matter with the client.
- 9) 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 BRIDCUL, should also be enclosed

3.5 Transfer of deposits

To be made from HQ decision/Units wherever demanded by PM against specific bills of the project.

3.6 Execution of deposit *works* and settlement of accounts

- 1) With regard to design, estimate and execution of work, instructions as contained above should be followed. The scope of work should not be altered without written permission of the client.
- 2) The Project Managers should send a quarterly report to the clients showing the amount deposited and the expenditure incurred against each of the works for settlement of accounts.
- 3) It is necessary that the Project Managers settle their accounts against the deposit works expeditiously so that the amount in the books of the audit as well as the client does not remain unsettled for long.

SECTION 4 PREPARATION OF ESTIMATES

4.1 Preliminary Estimate/DPR (Part-I) for obtaining in-principle approval

Provisions in the Phase-I estimate are taken *for* preliminary survey, *land acquisition* utility shifting, forest land requisition (NPV), Consultancy charges Geo-technical *examination* etc., as per annexure, *for obtaining expenditure sanction for such procedural works, besides a preliminary estimate (based on plinth area rates of PWD/CPWD) showing the tentative cost of the proposed construction work for obtaining in-principle approval of the Govt. /client..* As a DPR (Part-I) activity, Administrative approval & Expenditure sanction will be obtained later, on the basis of detailed project report (DPR) which will include the detailed estimate.

- (1) Phase-I estimate will be prepared on the basis of plinth area rate or length of road etc worked out on the rate/unit area or length or number or such other method adopted for ready and rough calculation, so as to give approximate cost involved in the proposal.
- (2) Estimate shall be based on preliminary drawings prepared by the Architect.

4.1.1 Preliminary survey, etc.

- (1) Where any preliminary survey, site/soil investigation, preparation of project reports including appointment of consultant and/or other essential preliminary steps connected with the schemes, is needed to be done before the preliminary estimate for the requisitioned work can be finalised, a separate estimate for such purpose(s) may be prepared, and sent to client department for sanction.
- (2) Where, however, such works are required to be carried out after the receipt of administrative approval and expenditure sanction and at the time of preparation of detailed estimate, necessary provision for this purpose may be made in the preliminary estimate.

4.1.2 Preliminary data and drawings

- (1) Whenever a requisition is received for a work, the same should be passed on to the concerned Architect/Consultants for preparation of preliminary drawings. On receipt of the requisition, the Architect Consultant shall obtain the detailed requirements from the concerned Administrative Ministry/Department or client (in respect of deposit works), *through the concerned Project Manager.*

- (2) Where required, he shall also obtain the survey plan and site particulars and other site data from the concerned Project Manager in the relevant Performa.
- (3) He shall consult the representatives of all the concerned disciplines for incorporating their requirements in the preliminary plans.
- (4) He shall thereafter prepare preliminary plans and brief specifications according to the requirements for the work, and obtain the approval of the client department for the same. The preliminary drawings should indicate sufficient details for preparation of preliminary estimate.
- (5) He shall then forward the approved plans and brief specifications to the concerned General Manager/Project Manager, Civil and Electrical, for preparation of the preliminary estimate.

4.1.3 Plinth areas for residential buildings

- 1) The plinth area Scales approved by the State Govt. should be followed for all construction works as well as house for other Ministries/Departments where such norms are applicable.
- 2) No deviation from the prescribed scales should normally be made, unless specifically desired by the client department. In such circumstances specific reference to the deviation should be made in the history sheet of the estimate.

4.1.4 Preparation and forwarding of DPR (Part-I) Estimate (PE)

Managing Director/General Manager/Project Manager of the major component shall be the nodal officer for forwarding estimates.

- 1) The estimate shall be prepared in the prescribed format, *given in para 4.2.2(3) called "Report of the Estimate"*.
- 2) Provision for services like sanitary, water supply, drainage and electric installations etc., should be made on the basis of plinth area rates wherever required. Provisions for items for which plinth area rates are not available shall be made on rough cost estimation basis and included in the estimate.
- 3) The effect of Building and Other Construction Workers' Welfare Cess Act 1996, VAT/Work Contract Tax, Goods & Service Tax including Education Cess as applicable at the time of submission of Preliminary Estimate is *not* to be added.

However the effect of service tax including Education Cess as applicable at the time of submission of Preliminary Estimate may be added in case of commercial / industrial building as per notification No. 25/2012-Service Tax dt. 20.6.2012 of

Deptt. of Revenue, Ministry of Finance, Govt. Of India or any amendment revised tax laws later on.

- 4) 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 and time of the project 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. if so desired by the client at a later date.
- 5) While sending the estimates it shall be made clear to the client department that execution of the works will depend upon the receipt of the funds through authorization or through allocation well in time during the financial years.
- 6) In respect of maintenance operations for assets of client departments the deptt. Concerned should be requested to give a complete list of works, required to be carried out & estimates should be sent to them. While sending estimates it should be made clear that allotment of funds will be primarily for day to day repairs and payment of labour etc.

4.1.5 Provision for contingencies and its utilization

- 1) In addition to the provision for all expenditure which can be foreseen for a work, a provision of contingency shall be kept as follows:---
 - a) Estimated cost up to Rs. 1 Crore5%
 - b) Estimated cost more than Rs. 1 Crore - 3%,subject to a minimum of Rs 5 lacs.
- 2) 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 contingencies can be utilized for construction of site office, engagement of watch & ward staff and job works like Surveying, material testing, estimating, structural design, drawings, models and other field requirements or any other guidelines issued by Managing Director from time to time.

- 3) The amount of contingencies shall be utilized as per delegated powers given below:-
 1. PM can utilize contingencies for the works where sanctioned cost is within their powers to accord TS.
 2. PM can utilize contingencies upto Rs 5 lacs for works where sanctioned cost is within powers of GM & CGM to accord TS.

3. SE can utilize contingencies upto Rs 15 lacs for works falling within the competency of CGM and M.D.
4. Expenditure beyond Rs 15 lacs will fall within the competency of MD.
5. However it is to be ensured that the authority under which the competency of the works fall shall be kept informed about utilization of contingency for each utilization by indicating utilized and balance amount available.

4.2 Detailed Estimate

The preparation of detailed estimate and drawings and designs should be taken up only after obtaining an assurance from the Department/Ministry sponsoring the proposal; that the site is available, and without any encumbrances is available or likely to be made available within a reasonable time.

4.2.1 Preparation of the detailed estimate & Detailed Project Report/ DPR for obtaining Administrative approval & Expenditure sanction.

- (1) On receipt of the in-principle approval to the DPR (Part-I) estimate (PE) and confirmation about the availability of site, the concerned authority as per Para 2.5.3 shall decide on the packages for the purpose of accord of technical sanction. The General Manager/Project Manager, Civil and Electrical, shall forward to the Architect/Consultants all relevant structural and service data based on the approved preliminary plans, for preparation of detailed working drawings and architectural specifications for the work. On receipt of such drawings, the decided competent authority shall take up the preparation of the detailed estimate, and accord technical sanction.
- (2) The detailed estimate should be complete and as comprehensive as possible, and should be supported by detailed architectural drawings, preliminary structural plans, preliminary lay-out drawings of the various services, detailed drawings and/or specifications for the various components of work involved, etc., as applicable.
- (3) The work is to be executed strictly as per the detailed working drawings and specifications finalized by the department.
- (4) The detailed estimate should give broad details for each item of the work involved. Other details shall be covered by the accompanying detailed drawings and specifications. The detailed estimate should be based on the rates given in the schedule of Rates for the items of work covered by it, and by analysed market rates for the remaining items.

- (5) The plan and design of the external services shall be got vetted from the technical sanctioning authority for the main building work before the detailed estimate for the external services is technically sanctioned by the competent authority at a lower level.
- (6) The detailed estimate should invariably contain the following information:
 - (i) Necessary details in support of the lump-sum provisions made in the estimate, if any.
 - (ii) Basis on which the rates have been provided, i.e. reference of the schedule of rates or market rates.
 - (iii) A brief note on the special construction difficulties, if any, which are likely to be encountered during the construction stage.

4.2.2 Format for detailed estimate

- (1) The detailed estimate shall consist of a report in the prescribed form in Appendix-I. plans, specifications and a detailed statement of measurements as in form in **Appendix-2**, quantities and rates as in form in **Appendix-3**, 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 like-wise 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.
- (2) The estimate for a project/work should be comprehensive, supported by complete details and based on drawings and design calculations, where necessary.
- (3) The 'Report' of the estimate should be prepared in a lucid form, understandable by non-technical officers of the administrative Ministry/Department or the client. It should be comprehensive enough under each sub-head as mentioned below:-
 - (i) History:- Particulars relating to the initiation of the proposal, and events leading upto it, and its general purpose, including references to previous correspondence, documents and specifications, where necessary.
 - (ii) Design:- A description of the proposal, particularly with regard to its location and design, also with reference to standards and specifications, calculations and drawings, where necessary. In case of a revised estimate, a description of the original proposals and those finally adopted should be given.

- (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 portion(s) of the work which are not included in the estimates.
 - (iv) Rates:- Particulars as to how the rates have been arrived at, giving reference to the relevant standard schedule of rates or market rates and also to the details accompanying the estimate, where necessary, with any special explanation connected therewith.
 - (v) Cost:- Cost of the work, and in case of revision, a comparison with the amount originally provided under any previous administrative sanction or detailed estimate.
 - (vi) Method:- The method proposed for carrying out the work, whether by contract or daily labour, or any combination of the.
 - (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 provisions that have been made in the estimate for necessary construction plants and machineries, etc.
 - (ix) Land:- Provisions for acquisition of land, when necessary. Otherwise availability of land should be indicated.
 - (x) Time:- The estimated time of completion from the date of receipt. Indicating break up for pre-construction and construction stages.
- (4) Full reference should be given in respect of the Architectural, structural and services drawings accompanying the estimates in support of the details submitted therein.
- (5) Any other points of importance that demand knowledge of local conditions must be incorporated.
- (6) 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. **Para 4.4** may also be seen.

4.3 Schedule of Rates (SOR)

- (1) To facilitate the preparation of estimates, as also to serve as a guide in settling rates in connection with contract agreements, a standard schedule of rates for each kind of work commonly executed should be maintained up-to-date in the Department. 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.
- (2) The Schedule of Rates (SOR) for Uttarakhand, on which cost estimates are based, is issued under the authority of Uttarakhand PWD, which, at present, is followed by BRIDCUL also.

Any SOR, on which estimates are to be based, should be revised at short intervals to keep the rates of SOR as close as possible to the current market rates, so that the rates received through the tenders do not appear to be at great variance from the SOR. Therefore, SOR should be revised at least once every year.

- (3) 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.
- (4) Rates quoted by the contractors are viewed/ considered as above or below the estimated cost of work. When the estimated cost is not based on the current rates of labour and materials prevailing in the market and is based on the old rates then the estimate is not realistic. In such a situation quoted rates of the contractors (who always quote rates in keeping with the current market rates) will always appear to be much higher than the estimated cost, only because estimated cost itself is not realistic. This should not unduly disturb the officers, who should always assess / measure the reasonability of rates on the anvil of Market Rate Justification (MRJ). To obviate this problem it is advisable to prepare the estimate itself based on the latest Schedule of Rates (SOR).

From this point of view, the Delhi Schedule of rates (DSR) of BRIDCUL is the most appropriate SOR, because it is dynamic in nature as it is updated by BRIDCUL on a regular basis, by way of issuing quarterly cost index indicating the %age enhancement which needs to be added over and above the rates of SOR at any point of time, to bring the estimated cost to a realistic level.

Hence for estimate purposes, DSR should be followed by BRIDCUL. More so because there is a dearth of capable contractors within the state of Uttarakhand who can handle big works in the difficult terrains of the state. As a result generally contractors from outside the state, come in to participate in the process of tendering for the works of Multi locations which are of large magnitude. Basing the estimates on DSR will encourage the outside bidders in

sufficient numbers to participate competitively in the water supply and Construction works.

4.4 Recasting of Estimate

- (1) 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 4.2.2(6).
- (2) The details of cost and quantities already approved by competent authority should be rearranged, and the revised abstract should be approved by the GM. Thereafter it shall be treated as the sanctioned abstract of the estimate for all accounts purpose.

4.5 Supplementary Estimate

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

4.6 Revised Estimate

When an excess beyond permissible variation 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.

4.7 Estimates for additions and alterations

- (1) Normally all cases of additions and alteration should be carried out after preparations of detailed working drawings. While submitting estimates containing the proposals for additions and alterations, the fact that the concurrence of the client/occupant has been obtained should be stated explicitly.
- (2) Normally no work of addition/alteration which involves structural changes in the residential buildings, or alters the aesthetics of the external facade, shall be carried out except with the approval of concerned Architect *and the structural engineer*.
- (3) In water supply or sewerage works the alternations and addition can only be carried out after obtaining approval of competent authority. The competent

authority in such cases will be the Authority who has accorded the technical *sanction*/approval to the estimate.

4.7.1. Details to be provided with the estimate

- (1) 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) Whether such work has already been carried out in any other residence of the same type and if so agreed by the Ministry. Reference to such cases should be quoted.
 - (iii) Whether acceptance of the proposal is likely to have repercussions.
 - (iv) Whether the proposal has the approval of the Housing Committee in the case of residences of Members of Legislative Assembly.
 - (v) Whether the proposed additions and alterations will result in increase of the prescribed scale of certain 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 license fee. In such case, pay of the officer occupying the house and the pooled standard license fee of the house should be indicated.
 - (vii) Information regarding availability of funds to finance the proposal.
- (2) Where a portion of the house/premise 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. Report of the estimate should contain proposals, for utilizing the useful materials obtained from the dismantled material, and for disposal of unserviceable items.

4.8 Estimates for water supply, sewer and drainage works

1. Projects for the construction of water supply, sewer and drainage works must be accompanied by the following documents:
 - (i) Report, including a brief note on the proposed gradients
 - (ii) Abstract of estimate of cost.

- (iii) Index map.
 - (iv) 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) Query charts showing the various quarries from where all villages and habitations are proposed to be taken.
 - (vi) Drawing and Design criteria works is in the order in which they occur in the line of the water supply and sewerage.
2. Estimate for new lines of water supply and sewerage should include the cost of all dwellings and inspections.
 3. 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.

4.9 Estimates for road Works

- (1) 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 estimate sheets.
- (2) Estimate for new lines of road should include the cost of all dwellings and inspection house intended to be built along it for accommodation of subordinates and others.
- (3) 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.

4.10 Estimates for furniture

(1) Estimates for interior decoration, furniture and furnishing shall be prepared based on client's requirements.

(2) The cost of furniture in case of BRIDCUL offices will be chargeable to the contingent grant of the office of MD/GM, Divisional and Sub –Divisional Offices as the case may be.

Note: The MD/Head-Clerk in the various offices, or the official so designated for the purpose, shall maintain the numerical account of the office furniture in their office. Annual physical verification shall be conducted by an independent officer at least of the level of Resident Engineer, who shall record the required certificate.

(3) The supply of and repairs to furniture for any of the Government Inspection Bungalows in charge of the BRIDCUL as also Hotels and Hostels managed by Government of Uttarakhand will be carried out by the BRIDCUL. The first supply of such furniture should be charged to the estimate of the building for which the same is required.

4.11 Estimates for purchase of buildings

In case of purchase of built up accommodation, wherever authorized by the client department, a separate estimate is required to be prepared after confirming the structural soundness of the building, and after survey and valuation report of the EE of PWD is submitted to the client department and concurrence thereto obtained from the department of finance/ client.

4.12 Estimates for repairs to leased and requisitioned properties

(1) The BRIDCUL/Government takes on rent/ lease or by requisition some buildings if and when considered necessary, for residential and office accommodation. The repairs estimate for these buildings should be prepared on the same plinth area rates/percentages basis as per rent agreement/ department norms.

(2) 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 whether he has consented to the carrying out of the repairs or additions and alterations in question.

- (c) If the land lord has 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 whether the work 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?

(3) In case of additions and alterations, if any portion of the building to its original condition? Necessary credit for the dismantled materials should be afforded to in the estimate, as done in case of Government buildings.

(4) If the land lord refuses to meet the cost of repairs or additions and /or alterations, if any required, non recurring expenditure and recurring expenditure as per powers delegated may be sanctioned by the MD, and expenditure in excess thereto with the approval of the Govt, MD (in case of BRIDCUL) subject to the condition that at the time the building is released, the Government/BRIDCUL will have the right to remove all such installations or materials/articles as were added to the building/premises.

4.13 Hiring of Accommodation

Hiring Rate for hire of all private accommodation required by BRIDCUL will be according to the rates approved by concerned Districted Magistrate or as per government order which is corrected from time to time.

4.14 Powers for hiring accommodation

- (1) The financial powers of hiring accommodation shall be as per Delegation of Financial Power Rules.
- (2) MD/GM are competent to hire private accommodation for storage purpose, provided the expenditure is within the provision of the sanctioned estimate.

Annexure- I

(1) Assessment/Re-assessment of fair rent relating to private buildings taken on lease by BRIDCUL.

(2) Authority to issue rent reasonableness certificate.

(1) Reasonable rent shall be assessed according to two alternate methods:

- (i) Recognized principles of valuation and
- (ii) Prevailing market rent.

(2) Land rate as per records of Appropriate Authorities or Valuation Cell of Income Tax Department shall take precedence over the land rate notified by local Revenue authorities.

(3) In case of premises proposed to be hired being ready built property/space, the current composite cost of acquisition shall be taken as net value of the property without any further adjustment for depreciation according to its age or on account of under/over utilization of FAR, if any.

(4) Rent shall be inclusive of Municipal Taxes but element of Municipal Taxes shall be indicated in the Certificate leaving the final decision to the hiring department whether to pay composite rent or reimburse municipal taxes to the owner separately or to pay the same directly to the local body.

(5) The date from which the rent is to be assessed and also the period the assessed rent shall remain effective for, shall be decided by hiring department and hence no such period shall be indicated in the Certificate.

(6) In case the figure as per method (ii) referred to in Para (I) above is lower, only this figure shall be intimated as reasonable rent. However, if the figure as per method (ii) works out to be higher, both the figures shall be intimated as a range of reasonable rent leaving the final decision to the hiring department to negotiate and settle the rent keeping in view this range. It shall be for the hiring department to see if the rent as assessed by BRIDCUL/PWD is to be restricted to any specified limit in view of the terms and conditions of the existing lease agreement or due to any other relevant instructions issued by the Competent Authority.

(7) Rent Reasonableness Certificate shall be issued strictly as per modified model formats, given in the enclosed Annexure-IA & IIA.

(8) Necessity for re-assessment of rent, for whatever reasons, whether during the currency of the lease agreement or after its expiry, and the effective date therefore

shall be the date of receipt of the request of the owner or the date from which revision is due after expiry of existing lease agreement, whichever is later.

(9) The Hiring Committee on account of subsequent increase/decrease in municipal taxes, if any, shall not entertain the request for revision of rent. It shall be for the hiring department to settle the same right in the beginning as to how subsequent changes shall be dealt with.

(10) All rent assessment cases shall be dealt by a Hiring Committee associating a representative of Hiring Department, if the latter is so willing. Jurisdiction of a Hiring Committee shall also include satellite and twin cities/towns.

SECTION 5

EXECUTION OF ORIGINAL WORKS

5.1 Preliminaries

(1) *After the Administrative approval & Expenditure sanction to the DPR is obtained*, the technical sanctioning authority shall accord technical sanction to the detailed estimate and then finalise the notice inviting tenders, and send the same to the concerned Project Manager for release of *advertisement* in the website/press.

(2) It should be ensured that no work is taken in hand without proper technical sanction, except in the case of ‘urgent’ or ‘emergency’ work as described in para 2.2.

5.2 Inspection of Works

5.2.1 Periodic inspection of works

(1) It is incumbent upon the various officers concerned with the work, namely General Manager/Project Manager/Resident Engineer/Junior Engineer Civil and Electrical/Mechanical/IT etc, to inspect the works frequently to ensure that the works are in general being executed according to the design, drawings and specifications laid down in the contract.

(2) The Project Manager should draw up a quarterly programme of inspection of all works in his Division. The minimum number of inspections for each work shall be I for every 2 bills for the works at his head-quarters, and I for every 2 bill for the works outside the headquarters. A copy of this programme should be sent to the General Manager.

(3) Similarly, the General Manager shall draw up a programme for inspection of various works in his HQ. General Manager in particular, for contracts accepted by GM and above level officers, and for other important works, the programme for inspection shall be so drawn that the GM inspects *the works* at least once *when* 50% of the work, in question, is completed *in terms of the contract*.

5.2.2 Recording of inspection notes

(1) All the officers shall ensure issuance of inspection notes/ instructions after their inspection. *These* may be issued by way of recording the instructions in the Inspection Register at site, or by issue of inspection notes, a copy of which is required to be pasted in the Inspection Register. The compliance of inspection report to be ensured by Project Manager above should, before passing the bill. If this is not available on record, prior permission of the Managing Director shall be taken before payment is released.

(2) The instructions to be complied by the contractor shall be carried on to the Site Order Book for ensuring compliance. Action taken report on the inspection note issued by an inspecting officer should be given by the Project Manager within one month. During next inspection, earlier inspection report should be reviewed by the inspecting officers.

5.2.3 Responsibility for quality of work

(1) The officer who records/test checks the measurements for an item of work will be responsible for the quality, quantity and dimensional accuracy of the work.

(2) The Resident Engineer should make special efforts to be present at site when concreting is going on and must ensure quality of the concrete in work through appropriate fineness modules of fine aggregate, proper grading of coarse aggregate in relation to the grade of cement used, and an appropriate water-cement ratio depending on the temperature at which the concrete is laid, laying and curing, to obtain the designed or desired strength of concrete.

5.3 Deviations from architectural drawings

Any change from the provisions in the drawings issued by the Architects/Consultants, *through the T.S. authority*, that becomes necessary during the execution of the work due to any practical difficulty, shall be brought to the notice of the Technical Sanctioning authority and the Architect/Consultants and their approval obtained.

5.4 Critical situations

5.4.1 Situations for calling spot quotations — competent authority

(1) Wherever a work is to be taken up, or a material is to be procured under critical situations, such as in the case of a break-down of an essential service, or works which brooks no delay, spot quotations may be collected from reputed

and established agencies dealing with the work or supply of material, and the work awarded or supply order placed immediately.

(2) In case of a situation where there is a shortage of a critical material that is required to be arranged departmentally for the execution of a work, and its rate is not stable, and there is a wide day-to-day fluctuation in its rate in the market, spot quotations may be collected from reputed and established agencies dealing with the material, and supply order may be placed immediately for such quantities of material that are immediately required, and as are available with the agency. Spot quotations should be collected by PM or RE only.

(3) Prior approval of such authority should be obtained, in oral if not in writing, before awarding the work or placing the supply order. Reference therefore should be mentioned while forwarding the case for obtaining the written approval of this authority, and the same should be sought at the earliest possible opportunity but not later than 10 days.

5.5 Progress reports — submission by the contractor

(1) Apart from the progress reports which are being compiled and submitted to higher authorities from various levels in the department, there should be a stipulation in the contract for large value works, say, '15 crores' and above, or as may be decided by the NIT approving authority, for the contractor to submit monthly progress report of the work in a *computerised* form. The progress report shall contain the following, apart from whatever else may be required as specified:

(i) Project information, giving the broad features of the contract.

(ii) Introduction, giving a brief scope of the work under the contract, and the broad structural or other details.

(iii) Construction schedule of the various components of the work through a bar chart for the next three quarters (or as may be specified), showing the milestones, targeted tasks and upto date progress.

(iv) Progress chart of the various components of the work that are planned and achieved, for the month as well as cumulative up to the month, with reasons for deviations, if any, in a tabular format.

(v) Plant and machinery statement, indicating the deployed in the work, and their working status.

(vi) Man-power statement, indicating individually the names of all the staff deployed in the work, along with their designations.

(vii) Financial statement, indicating the broad details of all the running account payments received up to date, such as gross value of work done, advances taken,

recoveries effected, amounts withheld, net payments, details of cheque payments received, etc.

(viii) A statement showing the extra and substituted items submitted by the contractor, and the payments received against them, items pending for sanction/decision by the Department, broad details of the bank Guarantees, indicating clearly their validity periods, broad details of the insurance policies taken by the contractor, if any, the advances received and adjusted.

(ix) Progress photographs, in colour, of the various items/components of the work done upto date, to indicate visually the actual progress of the work.

(x) Quality assurance and quality control tests conducted during the month, with the results thereof.

(2) The progress report submitted by the contractor shall be checked and certified by the Junior Engineer and the Resident Engineer, and has to be reviewed by the Project Manager and the General Manager, over their dated signatures.

(3) All works costing Rs 15 crores and above, and any work of unique importance and character irrespective of the value of the work, should have videography undertaken at various stages of construction right from the day of start of work to date of completion/occupation, covering all major events, inspections, visits by dignitaries, etc.

SECTION 6 MISCELLANEOUS

6.1 Expenditure on survey work

Where survey of site and/or digging of trial pits for the work of load bearing capacity and subs oil obviations are required to be undertaken before proceeding with the main project, the expenditure on the items should form part of the main project. In case, however, the project is abandoned as a result of the trials and examinations or some other reason, tile expenditure incurred on survey works etc. should be treated on the same line as for abandoned works. Since survey work is to ensure proper quality of construction so prior to sanction of any new work expenditure for surveying, testing, consulting etc may be incurred from central contingency fund available at HQ and later on after sanction of work and these expenses the amount spend shall be reappropriated to contingency head.

6.2 Expenditure on exhibitions

Wherever exhibitions are organized or held anywhere with participation of *BRIDCUL*/ the State P.W.D. in it, the Managing Director/Managing Director are empowered to incur expenditure as per power delegated.

6.3 Expenditure on inauguration

- (1) In *case* of foundation stone laying or opening ceremonies of Government projects/works, the expenditure should be restricted to items like foundation stone, erection and hire of pandals, lighting arrangements, light refreshments such as tea, coffee or cold drinks and other incidental items. The Managing Director/Managing Director are delegated powers to sanction such expenditure a delegated on each occasion. This expenditure shall be met from the contingent grant of the Establishments concerned, as the case may be.
- (2) In respect of deposit works, such expenditure shall be incurred with the approval of the client/Contingency

6.4 Expenditure on architectural models

Wherever required, the Architects/Consultants shall arrange for the preparation of architectural models and their presentation. He shall invite quotations for the same and award the work. The bill(s) for such work(s) shall be verified and accepted by him, and passed on to the concerned Project Manager for payment.

6.5 Register of Buildings

- (1) Every Division should maintain a Register of Buildings upto date. The Project Manager should certify to that effect at the end of every financial year

after ensuring that necessary additions in the cost and in structures are made upto date. This certificate should be furnished by him to the General Manager every year in the month of July.

(2) The General Manager, during his inspection of the Divisional Office, should examine this register to verify that it is being posted and maintained upto date.

6.6 Safety of buildings/structures

6.6.1 Inspection of buildings/installations for safety

(1) The Junior Engineers are required to inspect all buildings/structures twice a year to ensure that the building/structure of the Nigam is not unsafe for use, and they shall record a certificate to that effect. All buildings/structures are also required to be inspected once a year by the Resident Engineer to ensure that the building/structure is not unsafe for use. In case of electrical and other installations, the Resident Engineer (Electrical) should inspect the same and record a certificate to that effect. Non compliance of the laid down procedure may attract serious disciplinary action against defaulters.

(2) In case of any deficiency found in the building/structure, necessary report should be made to higher authorities, and immediate steps taken to get the same inspected by the Project Manager. Further action should be taken forthwith to remedy the defects.

(3) The PM will also inspect important buildings/structures once a year. He shall bring to the notice of his General Manager, cases where he has reasons to doubt the structural soundness of any building/structure and the latter will take such action as he considers necessary.

6.6.2 Demolition of unsafe buildings/structures

In case it is decided to demolish such unsafe building/structure, it should be disposed of without land by auction under the powers vested in competent authorities:

6.7 Disposal of Government buildings

(I) No Government/BRIDCUL building, built or purchased, should be disposed of by sale or demolition unless it has previously been ascertained that it is not required by any Department of the Government, and/ or it is in dangerous

condition and/or beyond economic repairs, or it is necessary to have a vacant site for constructing a Government building or structure in place of the existing one.

(2) When a building is proposed to be dismantled, a survey report should be prepared and submitted for approval of the authority competent to sanction sale or dismantlement of the building. Where the approval of the Government of India to the proposal of demolition of the building is necessary and such approval in principle has been obtained, the MD is delegated powers to sanction such survey reports.

6.8 Fixing Reserve Prices

After the survey report has been sanctioned, the Managing Director shall in all cases fix the reserve price after taking into consideration the assessed salvage value of the dismantled materials only. However prior clearance of the MD shall be taken in each case.

Note: Salvage value shall be defined as the cost of dismantled materials less the cost of dismantling it.

6.9 Disposal of purely temporary structures

(1) Purely temporary structures erected during the construction of a work may, on the completion of the work, or when the purpose for which the same were erected has been served, be sold or dismantled under the sanction of the Project Manager who has been entrusted with full powers.

(2) If the structure is proposed to be sold without land, the Project Manager should fix the reserve price, taking into consideration the life and condition of the structure and other local conditions subject to the minimum as laid down in para 6.8 above.

6.10 Powers for acceptance of tenders for disposal of government buildings

(1) The building(s) should be disposed of by call of competitive tenders after giving wide publicity.

(2) In case of emergency, the building(s), instead of being disposed of by call of tenders, may be dismantled departmentally with the specific approval of the MD. Materials which have an intrinsic and/or aesthetic value may be retained, otherwise all the materials shall be disposed of by public auction, or in any other manner as deemed fit.

6.11 Consultations with Department of Archaeology for new constructions

(1) In case of construction of any new building/structure at or in close proximity to any protected, monument, the Consultant Architect and General Manager/Project Manager should invariably consult the Department of Archaeology prior to conceptualizing the design for the proposed new structure.

(2) No ancient monuments should be demolished in the set up and construction of new townships, colonies and extensions to the present structures, wherever such monuments exist without consulting Archaeological Department.

(3) No religious edifice should be destroyed or damaged in the execution of works without the full and free consent of the persons/institutions interested in it, nor without the concurrence of the principal civil or political authority on the spot within whose jurisdiction such edifice stands.

6.12 Consultation with other departments

(1) Consultation with local Civil Aviation Authority and Environment and Forest department etc. may be required as per location and magnitude of the Project.

(2) Environment Impact assessment (EIA) shall precede allotment of land for infrastructure development—It is now mandatory for all the infrastructural development agencies/land owning agencies to conduct Environment Impact Assessment (EIA) before allotting the land for any activity. Such agencies should decide whether the intended land use in the area could be permitted or not on the basis of EIA.

BRIDCUL officers should therefore ensure that their recommendation for allotment of land for any infrastructural developmental should be supported with ETA clearance even though actual allotment of land is done by the Govt. Further, for development of any new campus, the client department should be made aware of the essentiality of EJA requirement in terms of judgment of Hon'ble Supreme Court in Civil Appeal No. 7425 of 2000.

6.13 Engagement of Private Consultants

Managing Director / Chief General Manager in BRIDCUL have been delegated powers to appoint Private Architects/Consultants by the State Govt.

(i) (a) The powers for appointment of Private Architect/Consultant are delegated to the officers at the level of Managing Director/CGM to in-principle approval of MD, BRIDCUL. Managing Director /Chief General Manager will exercise such

powers for the works which fall within their competence to accept final bids as per delegation of financial powers. In case, amount of the bids for consultancy work exceeds the delegated financial powers of Managing Director/Chief General Manager, approval of the competent authority as the case may be, will be obtained for appointment of Private Architect/Consultant.

(b) The powers shall not be sub-delegated to any other authority by the Managing Director /*Chief General Manager*.

(c) The CE-in-Charge shall be competent authority to assign extra work to the consultant and fee to be paid for the extra work so assigned.

(ii) Such engagement of the Private Architect/Consultant shall be resorted to only when the competent authority is satisfied for reasons to be recorded in writing by them that either the required expertise is not available or the staff available is fully occupied and the work is of urgent nature besides satisfying themselves that it will be economical and in public interest to do so.

(iii) Appointment of Private Architect/Consultant will be need based.

(iv) BRIDCUL shall maintain a panel of Private Architects/Consultants, wherever possible. Such panel will be prepared on the basis of open advertisements, and appointment of Private Architects/Consultants in specific case will be on the basis of invitation of quotations limited to those in the panel. As such final empanelment of Architects/consultant will be done as per minimum rate offer/rate contract and actual requirements for different projects. Accordingly specific project shall be awarded from such empanelled Architects/Consultant. Wherever the number of eligible Private Architects/Consultants is less than 5, there will be no need to maintain a panel and in such cases, engagement of Private Architects/Consultants will be done through open advertisement.

(v) Consultancy work (such as proof checking of structural design or original structural design of typical or special structure, assignment of specialized job requiring analysis of structures. and soil investigation and seeking expert advice for retro- fitting of buildings) can be assigned to IITs, NITs, Govt. Engineering College, Central Building Research Institute (CBRI) and other central/state Govt. Institutes, without call of tenders and subject to the condition of (i) empanelment of such institutes and (ii) calling of quotations from the empanelled institutes.

(vi) The estimates of fees of the Private Architect/Consultant shall be included in work estimate as a distinct item. Payment of fee to Private Architect/Consultant may be met from contingencies/savings of the project provided that if it could not be reasonably predicted with due diligence at that stage due to unforeseen situations (e.g. transfer of trained personnel, sudden increase in the workload and unforeseen complexities of the work which have cropped up at the later stage) for the reasons to be recorded in writing by the competent authority.

6.13.1 Engagement of Private Architects/Consultants for Deposit Works:

At present deposit works are being executed with Departmental Charges (D.C), to engage private Architects/Consultants, following procedure shall be followed;

(I) In case deposit work are to be executed with Departmental Charges, then the estimates of fees of private architect/consultant need not be included in the works estimate as a distinct item since such costs are covered under D.C.

(ii) In case of deposit works to be executed without Departmental Charges, then it should be ensured that such specific provision for the fee to be paid to architect' consultant is available in the sanctioned estimate. In case such specific provision is not available in the sanctioned estimate, then a separate enabling estimate should be got approved from user department since fee of Architect/ consultant is to be borne by user department/client only.

(iii) In addition to above, other provisions contained at S.No. (i)b, (ii) and (iv) under para 6.13, will also be applicable.

6.13.2 Engagement of agencies for preparation of Architecture drawings

MD, BRIDCUL shall have full powers to engage Agencies to prepare architectural drawings so as to expedite Architectural planning works and such expenditure shall be charged to contingencies of work or sanctioned provisions as the *case* may be and to be paid by respective PM.

6.14 Checking of Drawing prepared by Consultants

In case of technical sanction accorded by CGM, GM or PM the structural design and drawings prepared by Consultant and further proof checked by some other consultant, shall be authenticated "Good for Construction" by GM concerned or PM respectively before issuing the drawings to contractor.

CHAPTER II
WORK ACCOUNTS
SECTION 7
MEASUREMENT BOOKS (MBs)

7.1 General

(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 the 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 Government works.

(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.

(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, and are charged direct to the work on which the labour is actually employed.

(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.

7.2 Writing of Measurement Book

(1) 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.

(2) 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.

7.3 Register of Measurement Books

(1) All the Measurement Books belonging to a Division should be numbered serially. A register should be maintained 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.

(2) A similar register should be maintained in the Sub-Divisional Office showing the names of persons. i.e. Resident Engineer/Junior Engineer, to whom the Measurement Books are issued.

7.4 Transfer of Measurement Books

(1) The Measurement Books that are no longer required to be used in the Division or with the Junior Engineer should be withdrawn promptly even though not completely written up and reissued.

(2) When an Resident 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 re-issued 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.

7.5 Recording of measurements

(1) Entries at commencement of measurements of 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) Location 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 shall 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.
 - (f) Date of recording measurements.

(2) Writing of abstract

- (i) A suitable abstract should then be prepared which should collect in the case of measurements 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.
- (ii) For recording measurements and also for preparing abstract, the agreement item No., both in words as well as in figure, should be given neatly along with description of the item in full or in abbreviated form.

(3) Nomenclature of item

- (i) In case of extra/substituted item of work that is not covered in the agreement, the full nomenclature shall be reproduced in the Measurement Book and the bill form.
- (ii) 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.

(4) Cross reference in case of running account bill

If the measurements are taken in connection with a running contract, a reference to the last set of measurements, if any, should be given.

(5) Recording of date of completion

(i) If the entire job or contract has been completed, the date of completion should be duly recorded.

(ii) 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 recorded.

(6) Neat recording of measurements All measurements should be recorded neatly in the Measurement Book.

(7) Signature of the contractor The signature of the contractor or his authorised representative should be obtained in the Measurement Book for each set of measurements including that the measurements have been accepted by him by writing “Measurements accepted” In case of final bill a “No claim certified” shall also be submitted by the contractor along with bill.

(8) Measurements in ink

The measurements shall be recorded in ink.

(9) Making corrections in measurements

(i) 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 initialled and dated by the officer recording/checking measurements.

(ii) 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

(10) Page numbering

(i) The pages of the Measurement Books should be machine numbered.

(ii) Entries should be recorded continuously and no blank page left or torn out. Any pages or space if left out blank inadvertently should be cancelled by diagonal lines, the cancellation being attested and dated.

(11) Recording of measurements only by authorised persons

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 Resident Engineer or the Project Manager to record measurements for any particular item of work himself.

(12) Measurement of repetitive works

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.

(13) Certification of measurements

The person recording the measurements should record a dated certificate “Measured by me” over his full signature in the Measurement Book.

7.5.1 Where measurements need not be recorded

(1) No measurements need be recorded for petty purchases made through permanent imprest accounts. It is adequate in such cases that the Junior Engineer or the Resident Engineer makes an endorsement on the original and duplicate copies of the cash vouchers/bills of the suppliers regarding verification of the same, and the page number of the MAS register in which he has taken the material(s).

(2) The material(s) may be issued for the work(s) from the MAS register as usual. Abstract of vouchers can be drawn in the Measurement Books for continuity of record keeping.

7.6 Notice to the contractor before recording measurements — action to be taken if he fails to respond

(1) Clauses of Contract in General Conditions of Contract (GCC) 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.

(2) 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. RE/PM immediately, with the result that prompt action cannot be taken. The contractor *is* 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 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/Resident Engineer taking the measurements should report this fact within 72 hours to the RE/PM in writing. The latter, on receipt of such a report, should take immediate action, and inform the contractor in writing that the measurements as taken by the Junior Engineer/Resident Engineer are final and no claim whatsoever on this account shall be entertained.

(3) These instructions will not apply in cases where the contractor is to submit computerised measurements to the Department as per provisions under para 7.12 *herein-after*.

7.7 Preparation of bill

(1) On completion of the abstract, the Measurement Book should be submitted to the Resident Engineer, who after carrying out his test check should enter the word "Check and bill" with his dated initials. The Divisional Clerk/Accountant 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 PM who, after comparing the two, should sign the bill and the Measurement Book at the end of the abstract.

(2) 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.

(3) Corrections to calculations or rates in the Measurement Book Any corrections to calculations or rates made in the PM or Divisional Office should be made in red ink and brought to the 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, the 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.

(4) Payment for work done through daily rated labour
When work which is susceptible of measurement is carried out by daily

rated 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.

7.8 Movement of Measurement Books

Measurement books should be sent only by Registered Post or through Official Messenger.

7.9 Recording measurements of supply/issue/laying of steel

(1) Supply of steel

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 latter case, 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.

(2) Issue of steel

The issue of steel shall be made in the same manner as for the supply as described in sub para (1) above.

(3) Laying of steel

- (i) Wherever the structural drawings that are approved by the Department for a work contain the bar bending schedule, the measurements of reinforcement bars laid shall be recorded on the basis of this schedule after due verification that they have been laid in conformity to the structural drawings. The bar bending schedule shall show the extra percentages that shall be allowed for laps and wastages. Detailed measurements of each and every bar shall be dispensed with in such cases.
- (ii) In other cases, the bar bending schedule shall be prepared by the contractor, and checked and signed by the Engineer — in - charge before the bending of bars is taken up at site.

(4) Test check of steel: **Para 7.10.2(3)** may be referred to for test check of steel.

7.10 Test checking of Measurements

7.10.1 Test check by the Resident Engineer

- (1) The Resident Engineer must satisfy himself before passing a bill for payment, or before submitting it to the PM 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 authorizing final payments in connection therewith.
- (2) In addition to the above, he is required to check measure the works in his charge as below:
 - i) 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 Resident Engineer to record measurements for any particular

item of work himself. In case of absence of Junior Engineer, the Resident Engineer may be asked to record measurements.

- (ii) The Officer accepting the tender for any work may stipulate and require the Resident Engineer to record measurements himself or exercise 100% check on the measurements recorded by his subordinate for any item including those, which, owing to their situation, cannot subsequently be checked measured or which have very high unit rates or which in the opinion of the Officer are important.

Important items for Measurements

Important works, within meaning of the above, include items which owing to the situation cannot be subsequently checked or which have very high unit rates. For guidance, these items are classified generally as below.

(A) Items of work which owing to their situation cannot subsequently be checked:

i) All work below ground level such as Concrete, Masonry, Steel work etc. in foundation

(ii) Fabricated Steel work in columns, beams, etc. which are encased either in masonry or concrete, reinforcement in RCC/RB work.

(iii) Wood work, Iron work etc. Hidden by ceilings, wall panelling or floor boarding's.

(iv) Bitumen painting of roofs under mud phuska and tiles paving or wider terrace concrete.

(v) Water proofing compounds used in gauging cement.

(vi) Lines of pipes buried in floor or masonry in Internal sanitary, water supply or drainage installations.

(vii) Earthing installation, cable laying etc.

(B) Items of works which are considered to have very high unit rates:

(i) RCC Work.

(ii) Items in sunk ashlar stone or marble work, plain sunk or moulded in walls, columns, arches or domes.

(iii) Stone or marble work in wall lining. All steel cladding, structural glazing etc.

(iv) All wood work in Chowkhats, frames or trusses in Indian or Burmah teakwood.

(v) All joinery work in shutters, trellis works, miscellaneous wood work etc. whether in Indian Teak or Burma teakwood.

(vi) All brass, oxidised brass or other similar costly fittings of doors, windows etc. where payable separately.

(vii) All major equipments for AC, lifts, Generator sets, Sub-station equipments, fireworks, any other items desired by Engineer-in-charge.

(3) In case of works at headquarters of the Sub-Division, RE 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.

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

Note:-- 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 to be based on the number of levels recorded.

- (5) While test checking the works of repetitive type, the Resident Engineer (Elect) 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.
- (6) Besides the mandatory test check of RCC and hidden items of work, the test check of measurements by Resident Engineer shall also include not less than 50% of the plumbing work for sanitary and water supply wherever applicable.
- (7) In the case of works outside the headquarters of the Sub-Division costing upto 20% of his tender acceptance power, check measurements by the Resident Engineer need not be insisted upon. He will, however, have to accept general responsibility for the correctness of the bill as a whole.

7.10.2 Test check by the Project Manager

- (1) The Project Manager should test check at least 10% of the measurements recorded by his subordinates for every bill for works at his headquarters, and at least every alternate bill for works outside his headquarter. Items selected by PM for Measurements should be independent of measurements test checked by RE. However this will not apply to items, the measurements of which are checked 100% by RE. In respect of works costing up to 20% of his tender acceptance power at places outside the headquarter of the division, and in case of works costing up to 10% of his tender acceptance power at the headquarter of the division, the Project Manager 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. The serial no of item test checked shall be written in MB by RE/PM at the time of signing.
- (2) Test check of RCC and plumbing works
- (i) Test check of the Project Manager shall also include at least 10% test check of the. measurements of RCC items so as to ensure structural safety of building.
- (ii) Besides the mandatory test check of RCC and hidden items of work, the test check of measurements by the Project Manager shall also include not less than 10% of the plumbing work for sanitary and water supply.
- (3) Test check of steel

- (i) In the case of receipt of steel, the Project Manager shall test check 10% of the total consignment received in a month. Any consignment test checked by the PM should be checked by him 100%.
- (ii) Permitted variation between the quantities as per supplier's 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.
- (iii) If in any consignment the variation on lower side exceeds the aforesaid limits, 100% check of the measurements shall be carried out by the Project Manager, and detailed investigation into the reasons for the shortage recorded.

(4) Test check in road works .

In case of road work involving supplying and laying of sub-base and base course material:

- (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 Resident Engineer shall test check not less than 50%, and the Project Manager, not less than 10% of the supply of materials in each length of 1 km before the work of laying, is started.

(5) Test checks to be attested

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.

(6) Consolidated record of checks/test checks

(i) 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:

- a) Date of check.
- b) Page recording measurements subject to test check.
- c) Val Lie of measurements checked.
- d) Result of the check exercised.
- e) Dated initials and designation of the checking officer.

(ii) The result will be indicated by the word "Satisfactory" or "Unsatisfactory" as judged at the time on merits of each case. Unsatisfactory result will be communicated to the JE or both the JE and RE as the case may be.

7.11 Recording measurements for earth levelling work

7.11.1 Level Books

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.

7.11.2 Preparatory works

1) Before starting the earth work, the following steps should be taken: Original ground levels should be recorded in the Level Book in the presence of the contractor or his authorised representative, and should be signed by him and the

Departmental Officer who records the levels. All the local mounds and depressions should be indicated clearly in the drawing and the field Level Book, and should be checked by the RE/PM before the levelling work is started.

2) A suitable baseline should be fixed with permanent masonry pillars at distances not exceeding 150 metres to provide a permanent reference line for facilitating check work. The base line(s) should be entered in the Level Book with co-ordinates. These baselines should be maintained till the final payment for the work has been made.

3) While recording the levels, it should be ensured that the circuit is closed by taking final levels of the starting point or any other point, the R.L. of which was previously determined.

4) 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 before commencement of the work.

7.11.3 Test check of the levels

1) **The** Resident Engineer should exercise test check at least to the extent of 50%, and the Project Manager at least to the extent of 10% where the value of this item of work exceeds 10% of the tender acceptance power of the Resident Engineer.

2) The test check of the levels should be carried out independently by each officer and the readings should be recorded in the prescribed Level Book in red ink against the old levels which should be neatly scored out wherever necessary. If the test check carried out reveals serious mistakes in the original levels, these should be taken or re-taken and re-checked.

3) The test check carried out by an Officer should be as representative as possible for the entire work done.

4) 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 RE/PM to the same extent as indicated in (I) 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.

5) The formation levels as per final execution of the work should be compared with the proposed formation levels and the work got rectified within permissible tolerance.

7.11.4 Payment for leveling work

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

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

7.11.5 Large scale leveling work

- 1) In case of large scale leveling work 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.
- 2) 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.
- 3) Before the work of leveling is commenced, the lead chart shall be checked by the Resident Engineer in the presence of the contractor or his authorized 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.
- 4) 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.

7.11.6 Import of earth

In case of earth to be imported, the area from where the earth is to be imported, should be predetermined wherever possible before the start of the work, and wherever feasible, the average lead should be worked out and stipulated in the tender. After this is determined, initial levels of the area to be filled should be recorded. The levels should be properly checked during the progress of work and on completion.

7.12 Computerised Measurement Books (CMB's) and Bills to be submitted by the contractor

7.12.1 Application and format of the Computerised M.B.

- 1) In works of estimated cost put to tender of Rs. 15 lakh and above, approving authority, the conventional Measurement Books could be replaced by a bound volume of computerised measurements to be furnished by the contractor, duly machine numbered for the pages, and with an MB number given by the Division Office. The pages of these Measurement Books shall be of A-4 size. All these Measurement Books belonging to a Division shall be serially numbered, and a record of these Computerised Measurement Books shall be maintained in a separate Register.

2) The same format as in existing Measurement Books shall be used for the Computerised Measurement Books. The measurements shall be carried forward from the previous recorded measurements as per the existing procedure.

7.12.2 Mode of measurements

- 1) The measurements shall be recorded and entered in computerised format in the first instance by the contractor, and a hard copy shall be submitted to the Department. All entries shall be made exactly as per the existing procedure.
- 2) These measurements shall then be 100% checked by the Junior Engineer. If Junior Engineer is not available, the Resident Engineer shall perform 100% check of the measurements. The contractor shall incorporate all such changes or corrections, as may be done during these checks, to his draft computerised measurements, and submit to the department the corrected computerized measurements in the form of a book, duly hard bound in red colour on the lines of the conventional Measurement Books now in use, and with its pages machine numbered.
- 3) The Resident Engineer and the Project Manager shall test check these computerised measurements as per the existing instructions; This book shall be treated as a Computerised Measurement Book.
- 4) The Junior Engineer, Resident Engineer and the Project Manager shall record the necessary certificates for their checks and test checks as per the existing procedure in this Computerised Measurement Book.
- 5) The Computerised Measurement Book shall be allotted a serial number as per the Register of Computerised Measurement Books.

7.12.3 Cutting or over-writing in the computerised M.B. not allowed

- 1) The Computerized Measurement Book given by the contractor, duly bound, with its pages machine numbered, shall have no cutting or over-writing.
- 2) It is the responsibility of the Junior Engineer or the Resident Engineer as the case may be to ensure that the checks and test checks done by them in the initial draft measurements are correctly incorporated in the Computerized Measurement Book before they record their certificates.
- 3) In case of any error, the Computerised Measurement Book shall be cancelled, and the contractor shall re-submit a fresh Computerized Measurement Book. This should be done before the corresponding computerised bill is submitted to the Division for payment
- 4) The contractor shall submit as many copies of Computerised Measurement Books as may be required, and as are specified in the NIT/contract, for the purpose Of reference and record in the various offices of the department.

7.12.4 Computerised Bill to be submitted by the contractor

- 1) The contractor shall submit his running and final bills in a computerised form in the same format as the existing conventional bills, with all the pages machine

numbered, and hard bound, and with all the entries made as per the existing procedure.

2) The contractor shall submit as many copies of the computerized bills as may be required for the purpose of reference and record in the various offices of the department.

3) The bill shall be carried forward from the previous running account bill as per the existing procedure.

4) These computerised bills shall be processed by the various offices for payment, as per the existing procedure.

7.13 Review of Measurement Books

1) The Measurement Books are required to be reviewed by Divisional Accountant under the supervision of Project Manager. The Resident Engineer 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.

2) The review by the Divisional Accountant shall be 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 Measurement Book or 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.

3) On receipt of the Measurement Books in the Divisional Office, the Project Manager should indicate in column 2 of the "Review Notes" in each Measurement Book as referred to in para 7.13(5) below as to which of the calculations are to be test checked by the Divisional Accountant. The extent of this check will be determined by the Project Manager having regard to the result of the last review, and should cover complete set of measurements.

4) 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, contractors ledger, etc. and verified.

5) Communication of discrepancies

The defects, discrepancies, etc. noticed should be communicated to the Resident Engineer concerned and summarized in the following form in the Measurement Book that has been test audited.

Review Notes by Divisional Accountant

Pages reviewed generally	Calculations selected by the Divisional Officer/PM for re-check		Defects and discrepancies noticed	Dated initials of	
	Pages	Dated initials		Divisional	Accountant Officer
1	2	3	4	5	6

- 6) 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.

7.14 Loss of Measurement Books

- 1) When a Measurement Book is lost, an FIR should be lodged with the police by JE.
- 2) 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 Managing Director, who is empowered to sanction the write off of the lost Measurement Books. In case of theft or loss of a blank Measurement Book, the General Manager shall be the competent authority to write off the loss.
- 3) Such losses for write off should be reported in the Performa Appendix
- 4) It is also necessary that the measurements in the lost Measurement Book should be reconstructed at the earliest.

SECTION 8

STANDARD MEASUREMENT BOOKS (SMB'S)

8.1 Purpose

The Standard Measurement Books are maintained to record the measurements of permanent standing in a building, and are required to be brought upto date from year to year on the basis of additions, etc. that are made to the building during a year. These are used for preparing the repairs estimates and contractors' bills for such repairs so as to avoid taking detailed measurements on each occasion.

8.2 Preparation and accounting of Standard Measurement Books

- 1) The Standard Measurement Books shall be prepared after the completion of the work by the Construction Division that has executed the work. The preparation of these books will ordinarily be undertaken in accordance with the program for each Sub-Division or such other suitable unit as may be fixed by the Divisional Officer.
- 2) All drawings, Standard Measurement Books etc. should be properly documented before handing over the building.
- 3) All the Standard Measurement Books should contain pages in singleton. They should be numbered in an alphabetical series so as to be readily distinguishable from those assigned to ordinary Measurement Books.
- 4) These will be accounted for in the same manner as ordinary Measurement Books in a register.
- 5) A similar register will be maintained in each Sub-Division showing the books belonging to it, and reviewed as done in case of the ordinary Measurement Books.

8.3 Writing of Standard Measurement Books

The Standard Measurement Books should be written legibly in ink, and certified as correct by the Project Manager. These should be maintained very carefully and accurately, as they may have to be produced as evidence in a Court of Law.

- 1) The Standard Measurement Books should either be written by the Resident Engineer himself or a Junior Engineer under his orders. Each set of measurements taken by the Junior Engineer should, however, be fully checked by the Resident Engineer, after which it should be examined by the Project Manager. He should declare in writing in the Book itself as finally approved by him for the purposes of preparing annual repair estimates and contractors' bills for the work done. Unit this is done, the Book will not be assigned a number, and will not be entered in the Register of Standard Measurement Books.
- 2) The Standard Measurement Books shall be brought upto date under the supervision of the Resident Engineer with reference to the building or work concerned within one month of closing of the accounts of the estimate thereof. All such corrections shall be attested by the Resident Engineer, and approved by the Project Manager.

8.4 Computerised SME's

The SMB's can also be in the Computerized Measurement Book form, and shall fully correspond with the final computerized measurements for the various items as recorded in the Computerised Measurement Book used during the construction stage.

8.5 Check by superior officers

1) The Project Manager shall check the compilation of Standard Measurement Books from time to time by personally examining each book at least once a year. To this end, the program of work should ordinarily be as follows:

a) Soon after the close of the official year as possible, the Resident Engineer concerned shall arrange for a personal examination of these books with a view to satisfying himself that they have been brought upto date with reference to the additions, alterations or special repairs carried out in the building or works during the preceding year, and ensuring their submission on such dates as may be fixed for the purpose for the inspection of the Divisional Officer.

b) On receipt in the Divisional Office, the Books will be compared with the Register of Standard Measurement Books in order to ensure that all the Books have been submitted for inspection. These shall then be subjected to such scrutiny as the Divisional Officer may direct. A comparison of these Books with the accounts of expenditure, and the record of connected measurements relating to estimates for additions/alterations or special repairs to building and works in the Division should, however, form a feature of the check to be applied.

2) A record of the results of the scrutiny referred to above should invariably be retained and produced, if required, during the inspection of General Manager/Audit/ Accounts Officer.

8.6 Submission of certificates

1) A report should be made to the General Manager, so as to reach him not later than the 31st July of each year, with copy endorsed to the concerned Accounts Officer, certifying in clear terms:

(i) That all the Standard Measurement Books of the Division have been inspected by the Project Manager.

(ii) That the entries made therein have not been tampered with,

(iii) That all corrections due to additions or alterations to the building or work concerned have been carried out, and,

(iv) That the Books are reliable with upto date records.

2) When a payment is based on Standard Measurements, the following certificate should invariably be recorded on the bill, in his own handwriting, by the Resident Engineer preparing, examining or verifying it: "Certified that the whole of the work billed for herein has been actually done, and that no portion thereof has been previously billed for in any shape."

SECTION 9

PREPARATION AND PASSING BILLS FOR PAYMENTS

9.1 Preparation and passing of bill

- 1) The contractor is required to prepare the bill in one of the forms prescribed, as applicable in each case, for the work done by him and submit the same to the Sub- Divisional Officer.
- 2) Wherever Computerised Measurement Books have been stipulated for use, the contractor shall submit Computerised Bills for all his claims, and thereafter these bills shall be processed in the usual manner.
- 3) Before the bill of a contractor/supplier is passed, the entries in the Measurement Book relating to the description and quantities of work/supplies should be scrutinized by the Resident Engineer, and calculations of “Contents or Area” should be checked arithmetically under his supervision. The bill should then be checked, passed and paid in the office of the Project Manager from the Measurement Book entries.

9.2 Payment of bill

(1) Part rates

Full rates, as per agreement/supply order should be allowed only if the work or supply has been accepted as of required quality and specification. If the contract is determined, or an on account payment is to be made when the contract is to run, a part rate as considered reasonable shall be allowed with due regard to the work remaining to be done and general terms of the agreement, and after getting the part rate statement approved from the bill passing authority.

(2) Payment for supply

In case of supplies, the payment is not permissible until the stores have been received, examined and accepted.

(3) Recoveries for stipulated issue of materials

In case of contract for completed items of work with stipulation of supply of materials of specified description, necessary recoveries on account of the cost of the materials supplied to him from *BRIDCUL* stores, and actually measured (including wastage wherever applicable) and billed, shall be effected from each bill at the recovery rates fixed for the purpose.

9.3 Forms of Bill for payment and vouchers

The authorised forms of bills to be used for payment of contractors! suppliers and their utility are described below:--

- a) **First and Final Bill Form CPWA 24 / BRIDCUL 27C (Yellow Color)**
It should be used for making payments both to contractors for work and to suppliers, when a single payment is made for a job or contract on its completion. A single form may be used for making payments to several payees, if they relate to the same work section of work, or to the same head of account in the case of suppliers and re-billed for at the same time.

b) **Running Account Bill Form CPWA 26 / BRIDCUL 27C (White Colour)**
This form should be used for all running and final payments to contractors and suppliers (other than those relating to lump sum contracts including cases where advance payments are proposed to be made or are already outstanding in respect of the same work against the contractor. In case where secured advances are to be made or already outstanding in respect of the same work against the contractor, Account of Secured Advances should be attached to the bill.

c) **Hand Receipt Form CPWA 28 /BRIDCUL 28:**

(i) This is a simple form of voucher intended to be used for all miscellaneous payments and advances for which none of the special forms mentioned above is suitable.

(ii) This form is not to be used for refund of lapsed deposits.

9.4 Authorities to pass the bills

The statement summarizing the authorities empowered to prepare, examine or verify and pass the bills after observing the required test check and other formalities are given Separately.

9.5 Payment for work done

Payment for work done or supplies made on running account should be made periodically on submission of the bill by the contractor/supplier.

SECTION 10

DOCUMENTATIONS OF ACCOUNTS

10.1 Bills Register

- (1) The payments made in the Divisional Offices are made on receipt of the bills from the various Sub-Divisions. A consolidated record of all the bills received from the Sub-Divisions. in respect of works/supplies should be maintained in one register known as the Register of Bills in the Divisional Office in the form given at Appendix-7.
- (2) The bills should be entered in the register strictly in order of receipt, i.e. the bills received first should be entered before the bills received afterwards. The payment of the bills should also be made strictly in order of their receipt. In no case a bill received afterwards should be given priority over the bills that have been received before, except under the written orders of the Divisional Officer.
- (3) The Divisional Accountant should ensure that the register is properly maintained and kept up-to-date in the Accounts Branch. The register should be submitted to the Project Manager every week for his perusal, and he will record in the register cases in which these instructions have not been followed.
- (4) The bills of work charged establishment, muster rolls and establishment bills should not be entered in this register.
- (5) A similar register, as mentioned above, should also be maintained in each Division in respect of payments to be made by the Resident Engineer. This register should be kept by the Divisional Clerk in the same way as the register in the Divisional Office, and put up to the Resident Engineer every week.

10.2 Contractor's Ledger

- (1) The accounts relating to contracts! supplies should be kept in a bound book known as the "Contractors Ledger". A separate folio or set of folios should be reserved for all the transactions with each contractor/supplier, for whom a personal account should be maintained. The register should be properly indexed.
- (2) A personal account should be opened in the ledger for every contractor, whether or not a formal contract has been entered into with him, unless the work or supply entrusted to him is not important and no payment is made to him, except on a First and Final Bill Form BRIDCUL 27C on completion. If only materials are issued to the contractor or any payments are made on his behalf, a ledger account must be opened.
- (3) The Contractors' Ledger should be written up and maintained up-to-date.
- (4) The Ledger accounts should be closed and balanced monthly. The closing balance of each personal account should be detailed so as to show in respect of each separate work or account (stock or purchases) the amount outstanding, if any, under each of the three suspense accounts i.e. (i) Advance payments (ii) Secured Advances and (iii) Other transactions.
- (5) The Divisional Accountant is responsible for correctness of entries in the Contractors' Ledger and balances at the closing of the month. All the personal

accounts in the Ledger should be examined to see that:--
I) the balances do not remain outstanding for a long time without justification, and (ii) the bills are prepared at reasonable intervals in the case of running accounts.

(6) A Contractor requiring a copy of his running account bill or extract from the Contractors' Ledger should be supplied the same. He should sign in the Ledger in token of his acceptance thereof at the time of payment of each running bill/final bill.

10.3 Register of Works

(1) The permanent and collective record of the expenditure incurred in the Division during a year on each work is the "Register of Works". This record is maintained in the Divisional Office.

(2) Generally in cases of Major Works, the account of expenditure incurred is maintained in detailed Form **CPWA 40** of the Register of Works. In case the General Manager or other sanctioning authorities so desires, the accounts of Minor Works may also be kept by sub-heads in a detailed *form CPWA 40*. The General Manager is empowered to dispense with maintenance of accounts in the Register of Works by Sub-heads in respect of any work if he considers that the circumstances render such accounts useless or impossible to maintain. In such cases, a copy of such orders should also be forwarded to the Accounts Officer.

(3) The Registers of Works are posted monthly from Works Abstracts. Separate folio or set of folios in Form 40 Register should be assigned to each Major Works estimate. Entries relating to Minor Works estimates can be made on a single page in Form **CPWA 41** Register.

(4) The Work Abstracts are required to be maintained in Sub-Divisional Office on a single sheet on each work. These should be sent regularly every month to the Divisional Office for compilation of the monthly accounts.

(5) Before submission of the monthly account, the Registers of Works should be completed, reviewed by the Project Manager and date initialled by him in token of his having examined the entries and found to be correct.

10.4 Materials Account

In the **BRIDCUL**, materials are purchased for maintaining stocks for requirements of various original and maintenance works, and can be of following two types:

- (1) Materials issued to contractors for use on the work in respect of completed items of work for both labour and materials for which they have quoted.
- (2) Materials issued direct to works when the work is done departmentally or by contractors whose agreements are for labour work only.

10.4.1 Materials issued to contractor

(1) In the cases of issue of materials to contractors in respect of complete items of work, the materials are issued to the contractor as stipulated in the agreement

at a fixed issue rate as indicated therein. These rates should include storage and other charges where these are issued from stock. The materials, other than those stipulated in the agreement, should not be issued in such cases without the express authority of the General Manager, who should specify in each case the "Issue Rate" to be charged for the materials inclusive of delivery at the place where these are stored.

(2) This restriction may, however, be waived in respect of petty issues (at full issue rates) from the existing stocks not exceeding Rs. 5,000/- in any month for any one contract.

10.4.2 Issue to work

(1) In case of materials issued direct to works, its detailed account should be kept, i.e. Material at Site Account. Only principal items of materials, i.e. those items, the estimated cost. of which exceeds Rs. 10,000/- each, need to be detailed in this account.

(2) Both quantities and values of such items should be shown, except in respect of carriage and incidental charges for which only values should be shown.

10.4.3 Annual verification of balances

Unused balances of materials charged direct to work should be verified at least once a year, and a report of verification of the materials should be sent by the Resident Engineer to the Project Manager.

10.4.4 Maintenance of account

(1) In order to control the quantum of the materials both in receipt and issues, a numerical account of the principal items should be maintained. This should be maintained in respect of works costing more than Rs. 5,00,000/-.

(2) A simple numerical account may, however, be maintained for, the minor works and departmental repair works at the discretion of the Project Manager, if there is an accumulation of materials for a number of works. V

(3) Where the materials are issued to a work done departmentally or through a contract on labour rates only, the Material at Site Account should be maintained only if the estimated cost of the work is more than Rs. 25,000/-

10.5 Cement Registers

(1) The Resident Engineer/Project Manager should check the registers maintained for accounting of cement at different work sites.

(2) In case of works costing above Rs. 1,00,000/- situated outside their headquarters, they should inspect the registers and stores during their respective visits and inspection of the works.

(3) In case of works where Ready Mixed Concrete (RMC) is stipulated to be used from an approved source/manufacturer, such registers need not be maintained. However, the computerised despatch slips that are sent with each despatch of RMC shall be kept on record.

10.6 Hire charges of Plant and Machinery

- (1) When so specified, the contractor may be allowed use of Plant and Machinery of the Department at fixed hire rates. The hire charges of such Plant and Machinery will count from the date these are taken out from the Departmental Workshop or a specific place till the date of their return.
- (2) The rates of hire charges are fixed from time to time. The hire charges are for each day of 8 hours (including one hour lunch break) or part thereof.
- (3) The hire charges shall include the idle days except for a major break down necessitating its return to the workshop. In case of any dispute, the decision of the General Manager shall be final. Para 27.3 also be referred to.
- (4) These hire charges shall include services of operating staff and maintenance staff as also the materials required for normal maintenance and repairs. Para 27.3 may also be referred to.

10.7 Dismantled materials account

10.7.1 Dismantled materials arising out of dismantlement through departmental works

- (1) The serviceable materials obtained from dismantlement of a building or structure wherever not sold by tender or auction, should be recorded without value in the Measurement Book for record purpose. On the basis of these measurements, these should be taken in the Register of Dismantled Materials in the form at Appendix-8. After the entries are made in the Register, and duly attested by the Resident Engineer, the entries in the Measurement Book should be crossed by diagonal red ink line with a suitable note that these materials have been entered in the Register.
- (2) A separate folio or set of folios should be kept apart for keeping the accounts of dismantled materials pertaining to each work.
- (3) The serviceable materials obtained from dismantlement should be used in the works as far as possible and shall be shown as issued to works accordingly in the Register. The unserviceable materials should be disposed of in the manner indicated in provisions under section 39 of this manual.
- (4) The undisposed balances should be physically verified at least once a year and the result of the verification recorded in the "Remarks Column".
- (5) This register (even for "Nil" transactions) should be submitted by the Resident Engineer regularly each month along with the monthly accounts for scrutiny in the Divisional Office. In cases where the Junior Engineers are stationed at places other than the headquarters of the sub-Divisions, separate register should be furnished by them every month the sub-Divisional Accountant, the Register should be laid before the Project Manager for monthly review. The fact of such review should be placed on record in all cases.
- (6) In no case dismantled materials should be collected on the road berms. If for any reason, it is not found possible to comply with these instruction in any particular case, the written approval of the General Manager and local authority, if any, should be obtained.

(7) The “Empties”, i.e. empty drums, tins, bags and other container should also be included and accounted for in the Register of Dismantled Materials.

10.7.2 Dismantled materials arising out of dismantlement through contract

(1) In case a building or structure is dismantled through contract, a stipulation/provisions in the schedule of work can be made in the NIT/contract that the contractor has to take away the dismantled materials within specified time, and for which he should give credit to the Department at this tendered and accepted rates.

(2) There may be cases where the intrinsic value of the dismantled materials may be more than the cost of dismantlement of the building/structure. In that event, sufficient safeguard should be taken through suitable stipulation/provision in the NIT/Contract whereby the contractor deposits the cost of dismantled materials in full with department before he is allowed to take up the dismantling work. The cost of dismantling shall be paid to him after he completes the dismantling work.

(3) The contract shall also have the usual provision for security deposit/performance guarantee to ensure that the contractor completes the dismantling work, and that he does not just walk away with the costly dismantled materials.

(4) In case where dismantlement is part of construction contract, lump sum stipulation can be made for dismantling and removing the dismantled material, recovery of which can be made as early as possible preferably in first three running bills.

10.7.3. Dismantled materials arising out of maintenance works

(1) It may be referred to for disposal of dismantled materials arising out of maintenance works done through contracts.

(2) In case of dismantled materials of negligible salvage value arising out of departmental maintenance of works, such as electrical lamps and tubes, A.C. sheet ridges, PVC flooring, etc., may not to be taken in the dismantled materials account, and they shall be disposed of as deemed fit. The Junior Engineer/Resident Engineer/Project Manager shall exercise a check on the quantum of materials dismantled from their normal consumption pattern.

(3) For other dismantled materials having salvage value arising out of such works, these should be accounted for in the Register of Dismantled Materials, and disposed of, or re-used as the case may be.

10.8 Losses of Government assets

10.8.1 Reporting of losses

(1) All losses of assets in cash or properties should be reported to higher authorities and Audit Officer/Accounts Officer as soon as these come to the notice of an Officer, and action taken to investigation it, and apportion the responsibility for the lapses and losses. This includes losses due to shortage and damages discovered, during physical verification of stores.

(2) With the exception noted below, any loss or shortage of public moneys, departmental revenue or receipts, stamps, stores or other property held by or on behalf of Government, caused by defalcation or otherwise including losses and

shortage noticed as a result of physical verification, shall be immediately reported by the Divisional Officer through his General Manager to the Managing Director concerned. The Project Manager should simultaneously endorse a copy to Audit. The Managing Director of the Zone shall forward the same with his recommendations to the Managing Director for onward transmission.

- (3) If the irregularity is detected by the Audit Officer/Accounts Officer in the first instance, he shall report it immediately to the Project Manager concerned, and if he considers it necessary, to the BRIDCUL Head Quarter as well. The Accounts Officer shall send his report through the Audit Officer concerned.
- (4) All cases involving loss of Government money arising from erroneous or irregular issue of cheques, or irregular accounting of receipts and circumstances leading to the loss should also be reported to the Controller General of Accounts so that he could take steps to remedy the inadequacies in rules or procedures, if any, connected therewith, which might have been exploited to facilitate the perpetration/occurrence of the act/event.
- (5) The report must be submitted as soon as suspicion arises that there has been a loss. It must not be delayed while detailed enquiries are being made. When the matter has been fully investigated, a further and complete report should be submitted of the nature and extent of the loss, showing the errors or neglect of the rules by which such loss was rendered possible, and the prospects of effecting recovery.
- (6) The report shall be submitted with such comments, as may be necessary or expedient, on the causes or circumstances which led to the defalcation or loss, the steps taken to prevent its recurrence, and the disciplinary or any other action proposed as regard to the persons responsible.
- (7) When material losses due to suspected theft, fraud, fire etc. occur in any office/installations, such cases should immediately be reported to the Audit Officer/Accounts Officer/CGM(F) concerned, and higher officer of the Department. Such cases should be invariably reported to the Police for investigation. The Head of the Department should exercise his discretion in determining at what stage the report should be sent to the Police, keeping in view the fact that the Police investigation will be increasingly handicapped with lapse of time.
- (8) All losses of the assessed value of Rs. 10,000 and more shall be regarded as "Material losses" excepting the losses due to suspected sabotage. All cases of suspected sabotage should be reported to the Police promptly, irrespective of the value of the loss involved.

10.8.2 Cases that need not be reported

- (1) Cases involving loss of revenue due to:
 - a) mistakes in assessments which are discovered too late to permit a supplementary claim being made.

- b) under assessments which are due to interpretation of the law by the local authority, being over ruled by higher authority after the expiry of the time limit prescribed under the law, and
 - c) refunds allowed on the ground that the claims were time barred, need not be reported to the Audit Officer and Accounts Officer. A record should, however, be kept of such cases for examination by the Audit Officer and the Accounts Officer at the time of local inspections.
- (2) Petty cases need not be reported to the Audit Officer and the Accounts Officer.

10.8.3 Follow-up action on losses — write-off of losses

- (1) The Managing Director/Managing Director /General Manager are empowered to deal with and write off the losses of stores or of public money as per the powers given in Appendix-I.
- (2) For all cases exceeding the limit given in the Appendix-1, the case should be sent to the Government for sanction.
- (3) Where the losses occurred due to irregularity arising out of breaches of rules and regulations do not exceed the power delegated to the Managing Director/Managing Director/ General Manager, as the case may be, in each case he is empowered to condone the irregularity and regularize such action, provided :-
- (i) He himself is not responsible for the irregularity.
 - (ii) There has not been any serious negligence on the part of some individual Officer(s) which may probably call for disciplinary action, requiring the orders of a higher authority.
 - (iii) The irregularity committed does not disclose **any** defect in the rule or regulations, the amendment of which requires the orders of a higher authority.

**SECTION 11:
GENERAL DEPARTMENTAL CHARGES
Departmental Charges (Centage) For Water supply & Sewerage Works**

Departmental charges (Centage) for Water supply & Sewerage works will be recovered at the rates approved by the State Govt. from time to time. At present centage is chargeable as per G.O bearing No.346/ XXVII(7)/2012 dtd 20th December, 2012 and G.O bearing No. 163/xxvii(7)/2007 dtd 22nd May, 2008 issued by the Finance department of the Govt. of Uttarakhand.

For other deposit works to be done outside the state, the Centage will be decided by the BRIDCUL keeping in view the expenditure which is likely to incurred on the establishment to be deployed on the project.

11.1 Departmental Charges For Deposit Works

For works done by BRIDCUL departmental charges are to be levied from the client organization / owner of the project. Different components of charges to be levied for different works executed by BRIDCUL are tabulated below :-

Departmental charges on percentage basis

Type of works	Establishment	Tools & Plants	Pensionary charges	Audit & account	Remarks
Works executed on Behalf of Govt. of Uttarakhand/Central Govt./ Other Govt. Commercial concerns/ local bodies & non Govt. bodies or individuals	To be recovered	To be recovered	To be recovered	To be recovered	Establishment charges should correspond as far as as possible to the average percentage borne by the BRIDCUL normal establishment to the normal works program which fully occupy such establishment.

11.2 Rates of departmental charges

- (1) The rates of departmental charges levied by the BRIDCUL on works executed by them are revised from time to time and are given along with their break up in **Appendix-9. The** expenditure on purchase of vehicles/running and maintenance of jeeps shall be charged to the work concerned direct instead of Machinery Equipment. 'The rates will not be applicable where specific rates of Departmental charges have been prescribed by the competent authority for specific works.
- (2) The basis of determining the slab for levying the departmental charges shall be the estimated cost of the work, i.e. the amount of expenditure sanction in respect of original works, and the administratively approved amount in the case of minor works where expenditure sanction is not accorded. The estimated cost of repair works is the amount of technical sanction for such works.

11.3 Departmental charges for preparation of plans, design and estimates

- (1) Above charges should be recovered from Commercial Departments, Autonomous Bodies & State Governments if the plans are specially prepared for them. If typical plans, which are already available with BRIDCUL, are required by them for reference purpose only, copies of type design may be sold to them on the recovery of the cost of prints only, provided an undertaking is given by the organization that if they adopt the designs for construction, normal departmental charges would be paid by them.
- (2) Fee for preparation of plans and estimates, whether preliminary or detailed, for schemes that do not mature, shall not be charged from the Departments of the Government of Uttarakhand and local bodies who entrust their works to the BRIDCUL as a standing arrangement. Charges shall be levied at the rate of 1.5 and 5 per cent for the preparation of in-fructuous preliminary and detailed architectural plans / work's estimates respectively from the other bodies who approach BRIDCUL for the execution of works occasionally as distinct from standing arrangements.
- (3) The Public Sector Undertakings, autonomous bodies and semi-Government organizations, when they approach BRIDCUL for preparation of preliminary plans, will have to pay departmental charges at the rate of 4% of works outlay for the said service. The cost will be worked out on the basis of total carpet area required by the client organization multiplied by a suitable factor to convert it into plinth area, and then applying the normal plinth area rate prevailing in the locality. Subsequently, this amount will be adjusted in the overall departmental charges if the project is sanctioned, provided no major changes are made in preliminary plans.

11.4 Levy of charges for works abroad

Departmental charges at the following rates shall be levied for departmental works that are executed in Missions abroad:

- a) In cases where the works are executed through the agency of BRIDCUL:-
Actual expenditure incurred on the executive staff stationed at a particular

place including actual travelling and other special allowances (including the permissible home leave fares) given to the India based staff in the particular Embassy according to the rules in force, plus actual travelling allowances of the Senior Engineers and Architects visiting the works abroad periodically, plus 3% of the building cost as “Direction Charges” to cover the services of Architects and Designers, and higher level supervision.

- b) In other cases where BRIDCUL is associated with the work and assist and advise the local architects
 - (i) For preparation of preliminary sketches and estimates @ 1% of the estimated cost,
 - (ii) Actual expenditure on executive staff in accordance with sub para (a) above in case of an officer who is sent abroad to advise on various matters, and
 - (iii) Actual travelling allowances of the Senior Engineers and Architects visiting the work abroad.

11.5 Departmental charges for Fair Rent Certificate

- (1) The BRIDCUL may charge fees for issuing certificates of reasonableness of rent on buildings hired by the State Government at the same rates as are charged by the State Govt. P.W. Department for giving such certificates to the Central Government in respect of building taken on hire by the latter.
- (2) The Departmental charges at the rate of 2% of the cost of a building shall be charged by the Central PWD for issuance of certificate to an autonomous body about the reasonableness of its rent. No waiver of departmental charges is allowed for issuing such certificate.
- (3) Where valuation of land is also necessary in determining the rent of building, departmental charges shall be levied at the rate to ¼% of the land value in addition to 2% of the cost of the building.
- (4) Where for a non-residential building, the only expenditure to be incurred by the Public Works Department is for the mere acquisition of the building, it should be sufficient to charge ¼% of the acquisition cost for examining the building and issuing suitability certificate.

11.6 Levy of fees by the BRIDCUL Consultancy Services

BRIDCUL may handle consultancy works of planning and designing (with or without construction) of various projects including high-rise buildings, housing complexes etc. of Public sector undertakings and other organizations etc. at negotiated rates, Fee for the consultancy services to be charged by BRIDCUL as given below as a % age of the cost of work:-

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.

(3) Corrections to calculations or rates in the Measurement Book Any corrections to calculations or rates made in the Sub-Divisional or Divisional Office should be made in red ink and brought to the 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, the 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.

(4) Payment for work done through daily rated labour When work which is susceptible of measurement is carried out by daily rated 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.

7.8 Movement of Measurement Books

Measurement books should be sent only by Registered Post or through Official Messenger.

7.9 Recording measurements of supply/issue/laying of steel

(1) Supply of steel

In case of supply of steel, the measurements should be recorded:

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

(iv) On standard sectional weight basis for bars above 10 mm dia. In the latter case, 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.

(2) Issue of steel

The issue of steel shall be made in the same manner as for the supply as described in sub para (1) above.

(3) Laying of steel

(i) Wherever the structural drawings that are approved by the Department for a work contain the bar bending schedule, the measurements of reinforcement bars laid shall be recorded on the basis of this schedule after due verification that they have been laid in conformity to the structural drawings. The bar bending schedule shall show the extra percentages that shall be allowed for laps and wastages. Detailed measurements of each and every bar shall be dispensed with in such cases.

(ii) In other cases, the bar bending schedule shall be prepared by the contractor, and checked and signed by the Engineer — in - charge before the bending of bars is taken up at site.

(4) Test check of steel: **Para 7.10.2(3)** may be referred to for test check of steel.

7.10 Test checking of Measurements

7.10.1 Test check by the Resident Engineer

(1) The Resident 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 authorizing final payments in connection therewith.

(2) In addition to the above, he is required to check measure the works in his charge as below:

i) 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 Resident Engineer to record measurements for any particular item of work himself. In case of absence of Junior Engineer, the Resident Engineer may be asked to record measurements.

(ii) The Officer accepting the tender for any work may stipulate and require the Resident Engineer to record measurements himself or exercise 100% check on the measurements recorded by his subordinate for any item including those, which, owing to their situation, cannot subsequently be checked measured or which have very high unit rates or which in the opinion of the Officer are important.

Important items for Measurements

Important works, within meaning of the above, include items which owing to the situation cannot be subsequently checked or which have very high unit rates. For guidance, these items are classified generally as below.

(A) Items of work which owing to their situation cannot subsequently be checked:

i) All work below ground level such as Concrete, Masonry, Steel work etc. in foundation

(ii) Fabricated Steel work in columns, beams, etc. which are encased either in masonry or concrete, reinforcement in RCC/RB work.

(iii) Wood work, Iron work etc. hidden by ceilings, wall panelling or floor boardings.

(iv) Bitumen painting of roofs under mud phuska and tiles paving or wider terrace concrete.

(v) Water proofing compounds used in gauging cement.

(vi) Lines of pipes buried in floor or masonry in Internal sanitary, water supply or drainage installations.

(vii) Earthing installation, cable laying etc.

(B) Items of works which are considered to have very high unit rates:

(i) RCC Work.

(ii) Items in sunk ashlar stone or marble work, plain sunk or moulded in walls, columns, arches or domes.

- (iii) Stone or marble work in wall lining. All steel cladding, structural glazing etc.
 - (iv) All wood work in Chowkhats, frames or trusses in Indian or Burmah teakwood.
 - (v) All joinery work in shutters, trellis works, miscellaneous wood work etc. whether in Indian Teak or Burma teakwood.
 - (vi) All brass, oxidised brass or other similar costly fittings of doors, windows etc. where payable separately.
 - (vii) All major equipments for AC, lifts, Generator sets, Sub-station equipments, fireworks, any other items desired by Engineer-in-charge.
- (3) In case of works at headquarters of the Sub-Division, RE 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.
- (4) In case of works outside headquarters of the Sub-Division, the Resident Engineer should check measure upto 50% of the value of work done before preparing final bills or before making payment of alternate running/final bills.
- Note:-- 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 to be based on the number of levels recorded.
- (5) While test checking the works of repetitive type, the Resident Engineer (Elect) 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.
- (6) Besides the mandatory test check of RCC and hidden items of work, the test check of measurements by Resident Engineer shall also include not less than 50% of the plumbing work for sanitary and water supply wherever applicable.
- (7) In the case of works outside the headquarters of the Sub-Division costing upto 20% of his tender acceptance power, check measurements by the Resident Engineer need not be insisted upon. He will, however, have to accept general responsibility for the correctness of the bill as a whole.

7.10.2 Test check by the Project Manager

- (1) The Project Manager should test check 10% of the measurements recorded by his subordinates at least every alternate bill for works at his headquarters, and at least every third bill for works outside his headquarter. Measurements selected by PM should be independent of measurements test checked by RE. However this will not apply to items, the measurements of which are checked 100% by RE. In respect of works costing up to 20% of his tender acceptance power at places outside the headquarter of the division, and in case of works costing up to 10% of his tender acceptance power at the headquarter of the division, the Project Manager 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.
- (2) Test check of RCC and plumbing works

- (i) Test check of the Project Manager shall also include at least 10% test check of the measurements of RCC items so as to ensure structural safety of building.
- (ii) Besides the mandatory test check of RCC and hidden items of work, the test check of measurements by the Project Manager shall also include not less than 10% of the plumbing work for sanitary and water supply.

(3) Test check of steel

- (i) In the case of receipt of steel, the Project Manager shall test check 10% of the total consignment received in a month. Any consignment test checked by the Project Manager should be checked by him 100%.
- (ii) Permitted variation between the quantities as per supplier's 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.
- (iii) If in any consignment the variation on lower side exceeds the aforesaid limits, 100% check of the measurements shall be carried out by the Project Manager, and detailed investigation into the reasons for the shortage recorded.

(4) Test check in road works .

In case of road work involving supplying and laying of sub-base and base course material:

- (iii) 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.
- (iv) The Resident Engineer shall test check not less than 50%, and the Project Manager, not less than 10% of the supply of materials in each length of 1 km before the work of laying, is started.

(5) Test checks to be attested

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.

(6) Consolidated record of checks/test checks

- (iii) 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:
 - f) Date of check.
 - g) Page recording measurements subject to test check.
 - h) Val Lie of measurements checked.
 - i) Result of the check exercised.
 - j) Dated initials and designation of the checking officer.

- (iv) The result will be indicated by the word “Satisfactory” or “Unsatisfactory” as judged at the time on merits of each case. Unsatisfactory result will be communicated to the JE or both the JE and RE as the case may be.

7.11 Recording measurements for earth levelling work

7.11.1 Level Books

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.

7.11.2 Preparatory works

- 5) Before starting the earth work, the following steps should be taken: Original ground levels should be recorded in the Level Book in the presence of the contractor or his authorised representative, and should be signed by him and the Departmental Officer who records the levels. All the local mounds and depressions should be indicated clearly in the drawing and the field Level Book, and should be checked by the Resident Engineer/Project Manager before the levelling work is started.
- 6) A suitable baseline should be fixed with permanent masonry pillars at distances not exceeding 150 metres to provide a permanent reference line for facilitating check work. The base line(s) should be entered in the Level Book with co-ordinates. These baselines should be maintained till the final payment for the work has been made.
- 7) While recording the levels, it should be ensured that the circuit is closed by taking final levels of the starting point or any other point, the R.L. of which was previously determined.
- 8) 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 before commencement of the work.

7.11.3 Test check of the levels

- 6) **The** Resident Engineer should exercise test check at least to the extent of 50%, and the Project Manager at least to the extent of 10% where the value of this item of work exceeds 10% of the tender acceptance power of the Resident Engineer.
- 7) The test check of the levels should be carried out independently by each officer and the readings should be recorded in the prescribed Level Book in red ink against the old levels which should be neatly scored out wherever necessary. If the test check carried out reveals serious mistakes in the original levels, these should be taken or re-taken and re-checked.
- 8) The test check carried out by an Officer should be as representative as possible for the entire work done.
- 9) 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 Resident Engineer/Project Manager to the same extent as indicated in (I)

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.

- 10) The formation levels as per final execution of the work should be compared with the proposed formation levels and the work got rectified within permissible tolerance.

7.11.4 Payment for leveling work

- 3) Every fourth running bill and the final bill should be paid on the basis of levels.
- 4) Intermediate payments can, however, be made on the basis of borrow pit measurements. The Project Manager should take care that the quantities thus assessed are not in any case more than the actual work done.

7.11.5 Large scale leveling work

- 5) In case of large scale leveling work 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.
- 6) 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.
- 7) Before the work of leveling is commenced, the lead chart shall be checked by the Resident Engineer in the 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.
- 8) 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.

7.11.6 Import of earth

In case of earth to be imported, the area from where the earth is to be imported, should be predetermined wherever possible before the start of the work, and wherever feasible, the average lead should be worked out and stipulated in the tender. After this is determined, initial levels of the area to be filled should be recorded. The levels should be properly checked during the progress of work and on completion.

7.12 Computerised Measurement Books (CMB's) and Bills to be submitted by the contractor

7.12.1 Application and format of the Computerised M.B.

- 3) In works of estimated cost put to tender of Rs. 15 lakh and above, approving authority, the conventional Measurement Books could be replaced by a bound

volume of computerised measurements to be furnished by the contractor, duly machine numbered for the pages, and with an MB number given by the Division Office. The pages of these Measurement Books shall be of A-4 size. All these Measurement Books belonging to a Division shall be serially numbered, and a record of these Computerised Measurement Books shall be maintained in a separate Register.

- 4) The same format as in existing Measurement Books shall be used for the Computerised Measurement Books. The measurements shall be carried forward from the previous recorded measurements as per the existing procedure.

7.12.2 Mode of measurements

- 6) The measurements shall be recorded and entered in computerised format in the first instance by the contractor, and a hard copy shall be submitted to the Department. All entries shall be made exactly as per the existing procedure.
- 7) These measurements shall then be 100% checked by the Junior Engineer. If Junior Engineer is not available, the Resident Engineer shall perform 100% check of the measurements. The contractor shall incorporate all such changes or corrections, as may be done during these checks, to his draft computerised measurements, and submit to the department the corrected computerized measurements in the form of a book, duly hard bound in red colour on the lines of the conventional Measurement Books now in use, and with its pages machine numbered.
- 8) The Resident Engineer and the Project Manager shall test check these computerised measurements as per the existing instructions; This book shall be treated as a Computerised Measurement Book.
- 9) The Junior Engineer, Resident Engineer and the Project Manager shall record the necessary certificates for their checks and test checks as per the existing procedure in this Computerised Measurement Book.
- 10) The Computerised Measurement Book shall be allotted a serial number as per the Register of Computerised Measurement Books.

7.12.3 Cutting or over-writing in the computerised M.B. not allowed

- 5) The Computerized Measurement Book given by the contractor, duly bound, with its pages machine numbered, shall have no cutting or over-writing.
- 6) It is the responsibility of the Junior Engineer or the Resident Engineer as the case may be to ensure that the checks and test checks done by them in the initial draft measurements are correctly incorporated in the Computerized Measurement Book before they record their certificates.
- 7) In case of any error, the Computerised Measurement Book shall be cancelled, and the contractor shall re-submit a fresh Computerized Measurement Book. This should be done before the corresponding computerised bill is submitted to the Division for payment

- 8) The contractor shall submit as many copies of Computerised Measurement Books as may be required, and as are specified in the NIT/contract, for the purpose Of reference and record in the various offices of the department.

7.12.4 Computerised Bill to be submitted by the contractor

- 5) The contractor shall submit his running and final bills in a computerised form in the same format as the existing conventional bills, with all the pages machine numbered, and hard bound, and with all the entries made as per the existing procedure.
- 6) The contractor shall submit as many copies of the computerized bills as may be required for the purpose of reference and record in the various offices of the department.
- 7) The bill shall be carried forward from the previous running account bill as per the existing procedure.
- 8) These computerised bills shall be processed by the various offices for payment, as per the existing procedure.

7.13 Review of Measurement Books

- 7) The Measurement Books are required to be reviewed by Divisional Accountant under the supervision of Project Manager. The Resident 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.
- 8) The review by the Divisional Accountant shall be in the following respects:-
 - (v) 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.
 - (vi) To see that no original sheet is torn out of a Measurement Book or any entry erased or disfigured, and that the corrections made therein are initialled.
 - (vii) To see that pencil entries are not inked over.
 - (viii) 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.
- 9) On receipt of the Measurement Books in the Divisional Office, the Project Manager should indicate in column 2 of the “Review Notes” in each Measurement Book as referred to in para 7.13(5) below as to which of the calculations are to be test checked by the Divisional Accountant. The extent of this check will be determined by the Project Manager having regard to the result of the last review, and should cover complete set of measurements.
- 10) 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, contractors ledger, etc. and verified.

11) Communication of discrepancies

The defects, discrepancies, etc. noticed should be communicated to the Resident Engineer concerned and summarized in the following form in the Measurement Book that has been test audited.

Review Notes by Divisional **Accountant**

Pages reviewed generally	Calculations selected by the Divisional Officer for re-check		Defects and discrepancies noticed	Dated initials of	
	Pages	Dated initials		Divisional	Accountant Officer
1	2	3	4	5	6

12) 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.

7.14 Loss of Measurement Books

- 5) When a Measurement Book is lost, an FIR should be lodged with the police by JE.
- 6) 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 Managing Director, who is empowered to sanction the write off of the lost Measurement Books. In case of theft or loss of a blank Measurement Book, the General Manager shall be the competent authority to write off the loss.
- 7) Such losses for write off should be reported in the Performa Appendix
- 8) It is also necessary that the measurements in the lost Measurement Book should be reconstructed at the earliest.

CHAPTER – III
SECTION 12
CONTRACTS AND FORMS

12.1 What is a contract?

(1) When two or more persons have a 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”.

(2) According 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.

(3) The following are the essential ingredients of 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 promise, that is 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, becomes 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.

(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 (Tender).
- b) Communication of the proposal (Submission of Tender).
- c) Communication of acceptance of the proposal (Issuance of Award Letter).

(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 that 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/or modify his tender before its acceptance, unless there is specific promise to keep the offer open for a specific period, backed by a valid consideration.

12.2 Forms to be used for contracts.

(1) The following forms shall be used for agreements with the contractors for the purpose noted against each.

(2) Except for the statutory clauses, the NIT approving authority, not lower than the Project Manager, can introduce special/additional terms and conditions in the

NIT to suit the exigencies of work, and these would override the corresponding standard clauses of the various forms.

12.2.1 BRIDCUL Form 6 Standard Bidding Document

(1) This is Notice Inviting Tender Form, and in brief is known as NIT. It is required to be invariably issued in respect of works for which tenders are to be called. The Form includes the name of work, estimated cost put to tender, period of completion, time and dates of receipt and opening of tenders, and other relevant conditions. Care is required to be taken with regard to para 4 of BRIDCUL Form 6, which provides two alternative, 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.

(2) Para **15.3(1) and (2)** of this Manual, regarding tenders for specialized works, may be referred to regarding provisions to be made in the NIT

(Form -6) while inviting tenders with specialized components of works.

(3) Para **12.2.7(4)(v)** of this section regarding lump sum contracts may be referred to regarding provisions to be made in the NIT (Form 6) when all the participation renderers are to be paid by the BRIDCUL for furnishing their drawings and design along with their technical bids in the case of lump sum tenders.

(4) Para **14.4** may be referred to regarding provisions to be incorporated in the NIT (Form 6) for composite tenders.

(5) Para **16.1** regarding publicity of tenders may be seen regarding provision to be incorporated in the NIT (Form 6) for posting of tender notice on the website.

12.2.2 BRIDCUL Form 7 – Percentage rate tender

(1) This form should be used in tenders for a work, where the items of work constituting a major part of the estimated cost put to tender, are based on the Department's Schedule of Rates (SOR), irrespective of the value of the work.

(2) In other works, where the bulk of the items are not based on the Department's Schedule of Rates (SOR), this form should be restricted to works whose value does not exceed Rs. 10 lakhs. However, the NIT approving authority may decide to go in for this form even for higher values of work for valid reasons.

12.2.3 BRIDCUL Form 8 – Item rate tender

This form should be used in tenders for a work of value exceeding Rs. 10 Lakhs, where the items of work constituting a major part of the estimated cost put to tender are not based on the Department's Schedule of Rate. However, the NIT approving authority may decide to go in for this form lesser values of work for valid reasons.

12.2.4 BRIDCUL Form 9 – Supply of materials

This form should normally be used where the purchase of materials is involved According to the BRIDCUL Form 9, the contractors are required to

quote rates for supply of the required quantity of materials, whether raw or finished .

12.2.5 BRIDCUL Form 11 – Work order

This form may normally be used for works costing Rs. 10 lakhs and below. It is not much different from 10, but any work awarded on Form 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.

12.2.6 BRIDCUL Form 11A – Work order

This form may be used for small works costing less than Rs. 10 lakhs where it is not considered necessary to use regular Forms 7,8 or 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.

12.2.7 BRIDCUL Form 12 – Lump sum contract

(1) This form, as its name indicates, is used for work in which contractors are required to quote a lump-sum amount 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:-

- (i) For only executing the work as per design, drawing and specification given by the Department, or
 - (ii) For executing the work including the 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 beforehand.
- (2) Drawing and design by the Department.

- (i) 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.
- (ii) The extra payment or recovery over and above the accepted rate shall 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.

(3) Drawing and design by the contractor – after the award of work

- (i) 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 finalized before call of tenders, 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 a later stage are minimized. Any clarification of doubt as may be raised by the intending tendered should be cleared before the receipt of tender.

- (ii) 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 conforming to the given parameters and functional/design requirement as mentioned 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.
- (iii) 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 result in change in the scope of work as given in the tender documents, or any change from the specified parameters.

(4) Drawing and design by the contractor – before the award of work

- (i) Where the contractor is required to given the design and structural drawings, the contract can suffer from the following infirmities:-
 - a. The contractor may under design the structure in order to reduce the cost and win the contract, or,
 - b. During the proof checking of the structural design, there could be a tendency on the part of the contractor not to agree to the department's genuine contention for revising the structural design that may increase the cost of structure to his disadvantage.
- (ii) Wherever the above problem(s) is/are anticipated, the tenders shall be invited in a two-bid system.
 - a. The technical bid, containing the architectural plans, structural design calculations, structural drawings, service plans, the detailed measurement sheets, and other price technical parameters as may be required, etc.
 - b. The price bid.
 - (i) The technical bids shall be evaluated by a Committee chaired by tender accepting authority (not higher than the Managing Director), and comprising the RE (Architect)/GM/PM. The Committee shall co-opt appropriate officers from the tender(s) and/or call them for discussions wherever required, and select a final scheme. The same shall be made available or made known to all the participating tenderers, preferably through a pre-bid conference, and invite revised technical bids from them, if required.
 - (ii) After examining the technical bids/revised technical bids, and equalizing the same in respect of all the tenderers, the price bids shall be opened. If the tenderers are asked to modify their structural design and calculations as a result of this exercise, or if the validity period of the price bids expire, they shall be given the chance of offering revised price bids, and in the event, only the revised price bids

shall be opened. However the guidelines as per latest proposal rules of the state Govt. shall be followed whenever applicable.

(iii) The NIT approving authority shall consider paying to all the participating tenderers a reasonable and specified amount for furnishing all the above details along with their tenders, if it is felt that the specified requirements so warrant. In that event, the same should be suitably incorporated in BRIDCUL Form 6 as well as in the advertisements through website/press.

12.2.8 (1) The lump sum tender documents shall contain:-

- (i) the detailed architectural and structural drawings,
- (ii) detailed specifications for the various items and components of the work,
- (iii) the schedule of quantities for the various items and components of the work,
- (iv) the inclusions in and exclusions from the scope of the contract, if required, for better clarity, and,
- (v) the various stages of work, and the percentage of the contract value for each stage for release of intermediate and final payments.

(2) The schedule of quantities referred to above is only limited for the purpose of assessing the quantum of work involved by the tenderers. It is not meant for subsequent measurement and payment in the course of execution of the work. Before submitting their tenders, the tenderers shall, therefore, have to satisfy themselves that the quantities given in the tender documents for the various items and components of the work are correct. Deficiencies noticed, if any, should be immediately brought to the notice of the tender inviting authority, who shall examine the same, and make necessary correction, if required, to the tender documents before receipt of the tenders.

(3) The contractor shall execute the work as per the drawings and specifications as given in the tender documents, and shall have no claim for any payment on account of deviations and variations in quantity of any item(s) or component(s) of the work, unless they are authorized deviations from the parameters, drawings and specifications contained in the tender documents.

(4) The rates of deviated items shall be determined on the lines of clause 12 of the General Conditions of Contract for percentage/item rate contracts.

(5) The Junior Engineer and Resident Engineer shall satisfy themselves that the work has been done in each stage in conformity to the drawings and specifications contained in the tender documents, and certify the same before recommending to the Divisional Office for the release of the stage payment. The Project Manager shall conduct test checks to the prescribed levels as under para **7.10.2**.

12.2.9 BRIDCUL Form 47 – Tender for demolition of buildings

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

12.2.10 External documents

(1) The Standard Bidding Documents finalized by External Aided Agencies like World Bank, ADB and BRICS etc . are used for works aided by them. 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 External Aided Agencies.

(2) The two authorities for administering the contract for World Bank project, viz. the “Employer” and the “Engineer” should be substituted with “BRIDCUL represented by Managing Director/General Manager” and “The Project Manager represented by the Resident Engineer/Junior Engineer” respectively in the Additional Conditions of Contract, and should be got approved by the World Bank representative. It should be mentioned that it shall be open for the Project Manager to invite a third party to inspect the work and advise him on the quality, workmanship etc. of the work.

SECTION 13 : AWARD OF WORK WITHOUT CALL OF TENDERS

13.1 Procedure

Works awarded on the basis are Quotations are known as works awarded without call of tenders. Normally tenders should be called for all works costing more than Rs. 5,00 lacs or as government guidelines for work order. In case where the work is to be awarded expeditiously, the prescribed period of notice may be reduced. In urgent cases, or when the interest of the work so demands, or where it is more expedient to do so, works may be awarded on justified rates without call of tenders after approval of the competent authority *as per powers delegated*.

(1) In case responsive tenders are not received even after inviting tenders for the 3th time, the work can be awarded without call of tenders (though work order) even when the cost of work is more than Rs. 5,00 lacs, but only with the prior approval of the competent authority as per financial power delegated.

(2) The precise reasons should be recorded by the Divisional Officer before dispensing with call of tenders for works costing more than Rs. 5,00 lacs.

(3) The work awarded after calling for quotations shall be construed to have been awarded without call of tenders.

(4) Normally, unless situation warrants otherwise, work orders shall be placed only after competitive call of quotations with publicity through notice board and on seeking a request from a purchase committee constituted by the divisional head with its members at least three including one from Account Section being nominated from the concerned divisional office.

(5) The period of notice for call of quotations may be decided by work order accepting authority depending upon the urgency. Spot quotations can be collected if the situation so warrants. Spot quotations should be collected by RE or PM. Para 5.4.1 of this Manual may be referred to for award of works by obtaining spot quotations in critical situations.

13.2 Award of works to Registered Labour Co-operative Societies

(1) With a view to encouraging the Registered Labour Co-operative Societies, works costing upto the limit fixed from time to time can be awarded to them at current market rates without call of tenders by officers of the Department.

(2) In relaxation of the provisions of the Standard BRIDCUL Contract Forms, running payments may be made even in respect of works awarded to these Societies on work orders.

(3) The frequency of payments may be fortnightly, provided there is appreciable progress on the work, and the value of work executed is not less than 1.00 lacs.

(4) The Registered Labour Co-operative Societies are exempted from payment of earnest money for works estimated to cost upto Rs. 3 Lakhs. These Co-operative Societies, however, shall pay Security Deposits by way of percentage deduction from their bills.

Note: (1) The Labour Co-operative Societies should be registered in the District and approved for the purpose by the Registrar of Co-operative Societies.

(2) Such works shall not be counted towards the annual ceiling for issue of work order.

SECTION 14
PREPARATION OF THE TENDER DOCUMENTS
(FOR NORMAL WORKS)

14.1 Preparatory works

(1) (i) Before tenders for a work are invited, a detailed estimate showing the quantities, rates and amounts of the various items of work, and also the specifications to be adopted, should be prepared.

(ii) The estimated cost put to tender in the NIT shall be worked out by enhancing the estimated cost of schedule items in accordance with the current cost Index and combining it with cost of non scheduled items if any, worked out on market rates.

(2) Before approval of NIT, the following are desirable:-

(i) Availability of clear site, funds and approval of building plans from local bodies.

(ii) Availability of structural drawings for the foundations.

(iii) Layout plan for the services.

(3) Tender documents of work comprising of the following should be prepared and approved by an authority who is empowered to approve the Notice Inviting Tenders (NIT) before it is issued:-

(i) The notice inviting tender in Form BRIDCUL 6.

(ii) The form of tender to be used along with a set of conditions. Particular specifications and special conditions should be decided by the NIT approving authority, and he shall be responsible for the same. Wherever special conditions have financial implications, the same should be enforceable.

(iii) The schedule of quantities of work.

(iv) A set of drawings referred to in the schedule of quantities of work.

(v) Specifications of the work to be done.

(4) The Resident Engineer / Junior Engineer/ Draftsman who compiles the tender documents for sale, should invariably date and initial all corrections, conditions and additions in the Schedule of Quantities, Schedule of Materials to be issued and specifications and other essential parts of contract documents, and also date and initial on all the pages of the tender documents, irrespective of fact whether they contain or do not contain any corrections or over writings etc. The officer concerned should record the fact in writing at the end of those pages individually.

(5) (i) The stipulated materials shall be issued for use at site on works, for all the items where such materials are required.

(ii) It should also be ensured that the description of the materials to be issued is adequately specified in order to obviate chances of any dispute. For example, if cement is specified for issue, it should be stated whether it is grey cement or white cement, and whether it will be in bags or otherwise.

(iii) The issue and recovery of simplified materials to contractors for use in construction works is governed by clause 10 & 42 of BRIDCUL 7 and 8. Recovery of stipulated materials used by contractor beyond permissible variations is to be made at rates specified in Schedule “F” by the authority approving the NIT for operation of Clause 10 and 42 of CPWD Form 7/8, and will be fixed at the issue rate at which materials are stipulated for issue + ten per cent.

(iv) A fifteen days notice should invariably be issued to the contractor to return the excess quality of materials got issued by him over and above the theoretical consumption and permissible variations, for taking action in terms of Clause 42.

(6) Clause 12 of the General Condition of Contract provides for specifying of deviation limits for various works. Such deviation limits are to be specified in Schedule “F” annexed to the Form, and shall form part of tender documents. For maintaining uniformity in works carried out by the department, following deviation limits shall be stipulated by the authorities approving the NIT’s for operation of Clause 12 of the Form 7/8 unless there are specific reasons to adopt different deviation limits for a particular work:

(i) For original works

(a) Superstructure- 30%

(b) Foundation- 100%

(i) For original works of time bound, urgent and emergency nature

(a) Superstructure- 50%

(b) Foundation- 100%

(iii) All maintenance works- 50%

(7) The agreement Forms BRIDCUL 7 and 8 contain general conditions of contract (GCC) for works in BRIDCUL and shall be applicable both for item rate as well as percentage rate tenders.

(8) For work not covering under the preview of composite tendering, tenders for electrical, and building works (including sanitary and water supply works) must be invited concurrently, or at an appropriate stage when they are required to be intimated to the General Manager and Managing Director concerned explaining the reasons for delay.

14.2 Tender for normal works (Non specialized works)

14.2.1 Tenders for works costing upto Rs. 20 crores

(1) Single source procurement:- For small works upto Rs 25 lacs when such work is a small component of the total project or works which are small and scattered or are situated in remote areas/ hilly terrains, where adequate number of contractors may not be available or where mobilization cost for contractors is unreasonably high, the work may be executed on the basis of single source procurement giving suitable reasons.

(2) Limited tenders:- These will be called for works costing upto Rs 25 lacs

(3) Two Bid System:- The tender documents for works costing beyond Rs 10 Cr shall be invited under Two Bid system only from the contractors registered in the BRIDCUL, CPWD, MES, BSNL, AIR, Railways, BRO, GREF, Postal Deptt. Of GOI, Uttarakhand State PWD, and other Departments & Undertakings of Uttarakhand Govt. in the appropriate category and class. All such registered contractors shall have to fulfill the criteria of satisfactory execution & completion of works as given below:-

- (a) 3 similar works, each of value not less than 40% of the estimated cost put to tender OR
- (b) 2 similar works, each of value not less than 60% of the estimated cost put to tender OR
- (c) 1 similar works of value not less than 80% of the estimated cost put to tender, all amounts rounded off to a convenient full figure, during the last 7 years counting backwards from the last date of submission of the tender.

However, it would be also a condition that the tenderer must have satisfactorily executed & completed at- least 1 work (either part of a, b, c above OR a separate work costing not less than 40% of the estimated cost put to tender) with some central/ state Govt. department or an Autonomous body or PSU of State Govt. or Central Govt.

Actual value of such similar executed works shall be increased at a simple rate of 7% per annum to bring the same to the current costing level, calculated from the date of current rates prevailing at the time of invitation of tender.

- (d) The term “**Similar work**” shall be properly defined and appropriately mentioned in the tender document (NIT) by the NIT approving authority with the prior approval of CGM. Similar Work mean works similar in nature and of quantum mentioned in the above para. It should not be defined in a manner which could result in restricted tendering unless a conscientious decision has been taken by the competent authority to go for restricted tendering, preconditions for which are given in para 14.6 hereinafter.

For an appropriate definition of ‘**similar work**’, CPWD’s O.M. No.DG/MAN/306 dat. 16.5.2014, available on the web site of CPWD may be refferd. to.

(4) **Two/Three bid system** :-- For works costing over Rs. 20 Crores, the tenders shall be invited under Two/Three envelope system as prescribed under Para 14.7 hereinafter.

14.2.2 Execution of work on Departmental basis :-- Due to hostile atmosphere in remote and difficult hilly terrains of Uttarakhand, several times the response from eligible/ capable contractors is poor when tenders are called for execution of works on full rate contract basis, where labour and material both are arranged/ managed by the contractor. Under such circumstances the MD/Managing Director , BRIDCUL will be competent to allow execution of works on departmental basis, where the work is split into labour component and material component. One or more contracts for labour component are awarded. For material component, as a matter of practice,

several supply orders are placed with different suppliers, who supply materials for the work. As the work is thus split into several parts of small magnitude, the local contractors are thus able to handle the work efficiently.

Otherwise also the Managing Director , BRIDCUL will be competent to allow departmental works in case of emergency in any area for recorded reasons.

14.2.3 Declaration by contractor to be submitted with tender.

1) In all cases, an affidavit should be submitted by the contractor along with the tender, declaring that he has not executed the works (on the basis of which he wants himself to be qualified / eligible) through any other contractor on a back to back basis & that he has not been debarred from tendering by any authority. Provision to debar the contractor from tendering in BRIDCUL, for a period of 3 years should also be kept in the NIT in case he files a false affidavit. Also if such a violation comes to the notice of BRIDCUL before the date of start of work, the Engineer-in-charge shall forfeit the Earnest Money Deposit & the Performance Guarantee, submitted by the tenderer/contractor.

14.2.4 Tendering limit of registered contractors

If a contractor is enlisted in more than one department, he shall be eligible to tender for works up to the highest amount permitted by virtue of his enlistment limit in the said departments.

14.2.5 Works costing more than Rs. 2.00 crore shall be invited through E-Tendering.

14.3 Invitation of tenders for component parts

- (1) Para 2.5.3 of this Manual may be referred to for splitting of the sanctioned project/work into packages for the purpose of accord of technical sanction.
- (2) In cases where the main work has been completed and there is some residual work forming part of the big project, remaining to be done, the tenders for such residual part need not be sent to the higher authorities, and may be decided by the Project Manager or General Manager if the amount of such residual work is up to 10% of the their power to accord Technical Sanction power respectively. GM will have full powers to decide the tenders for residual part.

14.4 Composite tenders

System of composite tendering shall be followed for all kind of building works (irrespective of cost) which shall include component of all internal Electric Installation and some other internal works as given below:-- Providing and fixing Conduits, Boxes, Switches & fixtures, EDB, MCB and Floor Trucking etc. and all required wiring

- (i) Providing and fixing Conduits, Boxes & Switches, fixtures for EPBAX/Intercom and Telephone, UPS, LAN etc. and all required wiring

- (ii) Providing and fixing: Conduits, Wiring, Boxes and all fittings and fixtures for Fire Detection & Fire Alarm System and all required wiring.
- (iii) Items of providing and fixing of fans and light fittings & fixtures can be executed through separate contract.
- (iv) In case of works costing up to Rs. 10 crore the CGM may dispense with the system of composite tender on case to case basis on the basis of recommendations of the GM/PM. System of composite tendering shall be followed for all kind of building works costing more than Rs. 10 crore. Apart from civil & horticulture works, CGM may include following components in the composite tender irrespective of sanctioned cost of work:
 1. Compound lighting
 2. Street lighting
 3. Low pressure side of air conditioning system
 4. Wet riser system
 5. Fire fighting system
 6. Lifts
 - 7 Any other item as decided by MD

14.4.1 Steps to be followed are given here asunder:

- (1) **The Department will fix only** one agency i.e. the main contractor for the work who will be responsible for execution of entire work. This contractor will be fixed by inviting tenders under two/three envelopes system as described under para 14.7 of this manual.
- (2) The NIT will include following three components:--
 - Part A** :- BRIDCUL—Form 6, BRIDCUL — 7/8 (Standard General Conditions of Contract) including schedules A’ to ‘F’ for major component of the work, Standard General Conditions of Contract will be adopted with all amendments/modifications as applicable, upto the date of approval of the NIT by the competent authority.
 - Part B** :- General/specific conditions, specification and schedule of quantities applicable to major component of the work.
 - Part C** :- Schedules A to F minor component of the work, (Where GM/PM in charge of major component shall also be competent authority under clause 2 and clause 5 as mentioned in schedule A to F for major components) General/specific conditions, specifications and schedule of quantities applicable to minor component/components of the work. Entire work under the scope of composite tender shall be executed under one agreement.
Schedules for minor components of the work will be supplied by technical sanctioning authority of the discipline well in time to be included in the main tender. Approval of NIT of Composite works shall be accorded by the major component authority and the cost component merely compilation of different heads for the purpose of

NIT. The eligible tenderers for major component will quote rates for various items of minor components of work also. The lowest tenderers would be decided based on quoted rates in respect of all the schedules attached in tender documents. It will be obligatory on the part of the main contractor to sign the tender documents for all components.

- (3) The Department will lay down eligibility criteria for agencies responsible for execution of minor components of works. Agencies to be engaged by the main contractor shall have to fulfil the laid down criteria. In case the main contractor himself meets the required eligibility criteria as laid down criteria. In case the main contractor himself meets the required eligibility criteria as laid down by the Department for any minor component(s) of work, he shall be allowed to execute the same after due verification etc.
- (4) The main contractor will give detailed execution programme of the work which will form part of his agreement with the department. He will indicate in the programme, the time/stage of the work when the agencies of minor components of works will be deployed by him.
- (5) Acceptance of the tender shall be done by the Tender Committee of CGM, GM or PM as defined in Schedule 'F' and conveyed by the Engineer –in- charge of major component of the work on behalf of the approving authority. After the work is awarded, the main contractor will have to sign two/or more copies of agreement depending upon number of PM's/SRE/RE in charge of minor component. One set of agreement shall be handed over to SRE/RE in charge of minor component. PM of major component will operate part A and part B of the agreement. PM's/SRE/RE in charge of minor components shall operate Part C along with Part A of the the agreement. The main contractor has to enter in agreement with the contractor associated by him for execution of minor component. Copy of such agreement shall be submitted to PM's/SRE/RE in charge of minor component as well as to PM in charge of major component.
- (6) Running payment for the major component shall be made by PM of major discipline to the main contractor. Running payment for minor components shall be made by the SRE/RE in charge on the recommendation of the office incharge of minor component directly to the main contractor.

In case main contractor fails to make the payment to the contractor associated by him within 15 days of receipt of each running account payment then on the written complaint of contractor associated for such minor component, PM/SRE/RE in-charge of minor component shall serve the show cause to main contractor and after considering the reply of the same he may recommend to PM, Incharge to make the payment directly to the contractor associated for

minor component as per the terms & conditions of the agreement drawn between main contractor and associate contractor fixed by him, if reply of main contractor either not received or found unsatisfactory. Such payment made to the associate contractor shall be recovered by PM of major or minor component from the next RA/final bill due to main contractor as the case may be.

- (7) If the main contractor fails to associate agency/agencies for execution of minor components of work within prescribed time or furnishes incomplete details or furnishes details of ineligible agencies even after the tenderer is given due opportunity the entire scope of such component of works shall be withdrawn from the tender and the same shall be got executed by the Engineer-in-Charge at the risk and cost of the main contractor.
- (8) In case the main contractor intends to change any of the above agency/agencies during the operation of the contract, he shall obtain prior approval of respective Engineer-in-Charge of the agreement. The new agency/agencies shall also have to satisfy the laid down eligibility criteria. In case Engineer-in-Charge of respective discipline is not satisfied with the performance of any agency, he can direct the contractor to change the agency executing such items of work and this shall be binding on the contractor.
- (9) Supervision of various components of works will be carried out by concerned wigs of the department under the overall coordination of the CGM.
- (10) Final bill of whole work shall be finalized and paid by the PM of major component. Other PMs/SRE/RE will prepare and pass the final bill for their component of work and pass on the same to the PM of major component for including in the final bill for composite work.
- (11) CGM of the concerned discipline will be completion authority for deciding reduced rates, if any. Date of completion of all components of work will be same. Levy of compensation under Clause 2 as well as fair and reasonable extension of time will be granted by the GM/PM in charge of the major component in consultation with GM concerned of minor discipline and on receipt of required information in this regard from PM of major discipline as well as concerned of minor discipline. Also PM in charge of major component shall be competent authority to give fair and reasonable extension of time under provision of clause 5 and GM in charge of major component shall be competent authority to reschedule milestones as stipulated under clause 5.
- (12) Same milestones shall be applicable for all components of work. The agencies of minor components will ensure that their components of the work are executed in time without giving any chance for slippage of milestones of the project. The amount to be withheld under Clause

5 of the contract will be decided by the PM of the main discipline only and not by other PMs. In the event of not achieving the necessary milestones as assessed from milestone bar chart, specified percentage of the tendered value of work will be withheld for failure of each milestone.

- (13) Arbitration case shall be handled by the PM of the major discipline along with the support of the minor discipline.

14.4.5 Pre-bid conference

At the discretion of the NIT approving authority a pre-bid conference may be held after sale of tenders with the intending tenderers at least 5 days before the last date of submission of the tenders as per details given in the tender documents for clarification of any doubts of the intending tenderers or for modification on any condition of the contract, specification etc. Minutes of the meeting shall be circulated to all the intending tenderers. whether or not they attend the pre-bid conference.

14.6 Restricted Tenders

14.6.1 Cases where restricted tenders can be resorted to.

Restricted tenders of any value can be called in the following cases with the prior approval of the MD/Managing Director , BRIDCUL.

(i) The work is required to be executed with very great speed, which not all the contractors are in a position to generate.

(ii) The work is of special nature requiring specialised equipment, which is not likely to be available with all contractors.

(iii) Where the work is of secret nature and public announcement is not desirable.

(iv) Where the list of pre-qualified contractors is required to be shortened to a suitable limited number.

(v) Maintenance of VIP residences/important buildings as decided by Managing Director concerned.

(vi) Other exigencies of the work so demand.

14.7 Tenders with two/three envelope system

This system involves pre-qualifying the parties before opening their financial bids.

(1) Tenders for all works except otherwise decided, shall be called on two/three envelope system.

(2) The definition of similar work is to be spelt out clearly in the NIT by NIT approving authority/ PM and shall be got approved from the GM. The **definition of the similar work** should be decided considering the following guidelines :-

(i) For building works, the number of storeys for the purpose of definition of similar works may be taken as under :-

No. of storeys to be constructed in the proposed building	No. of storeys to be mentioned in the definition of similar work
Upto 4 storeys	No binding
5 to 10 storeys ———	Minimum 5 storeyed buildings
11 to 15 storeys	Minimum 8 storeyed buildings
More than 15 storeys	Minimum 10 storeyed buildings

- (ii) In case the work involves Const of 2 or more basements, then it is to be stipulated in the definition of **similar work** that the bidder should have executed and completed similar work with minimum 1 basement.
- (iii) For any civil work (other than building work) if there is a significant component in the work, which is other than the normal building work, then that component should be considered as the main component of the work for the purpose of definition of similar work. The amount of such component can be mentioned in the definition of similar work.

However MD may deviate from above guidelines in the interest of the work with recorded reasons.

List of contractors satisfying the eligibility criteria and technical bid shall be got approved from Tender Accepting authority. Financial bid shall be got approved from the authority competent for acceptance of tenders.

(4) The system specifies for simultaneous call of technical and financial bids. However if the exigencies of work so demand, only technical bid can be called first, but with the approval of MD. Later on, financial bids can be called from qualified contractors as per the procurement rules of the Govt.

14.7.1 Procedure for call of tenders under two/three envelope system.

14.7.1.1 Two envelope system

Works for which technical specification is finalized & defined clearly in Nil, *tenderers' shall be required to submit the bids in two envelopes.*

Envelope - I :-Documents related to eligibility criteria.

Envelope - 2 :-Financial bid.

Envelope-I of all tenders shall be opened first. Eligibility related documents shall be evaluated and parties qualified/disqualified by the competent authority. Financial bid of qualified tenderers shall then be opened at notified time, date and place in presence of tenderers or their representatives.

14.7.1.2 Three envelope system

Works for which technical specification has not been finalized and the same is to be finalized on receipt of the details from the tenderers, the tenderers shall be required to submit the bids in three envelopes. Envelope - I :- Documents related to eligibility criterion.

Envelope - 2 :- Technical bid.

Envelope - 3 :- Financial bid

Envelope-1 of all tenderers shall be opened first. Technical bids of tenderers who satisfy the eligibility criteria shall then be opened at notified time, date and place in presence of tenderers or their representative. If required, a conference in respect of technical bids shall be held on notified date, time and place. After finalization of technical bid, if required, tenderers may be given chance to modify their financial bids and there after the financial bids shall be opened. The validity of the tenders shall be reckoned from the date of opening of the financial bids. The financial bids shall be opened within 30 days of the date of receipt of tenders.

14.7.1.3 Pre-bid conference

There shall be a pre-bid conference in which the doubts of the intending tenderers shall be clarified, besides discussions on any additional suggestion proposed by the tenderers. If found necessary, a corrigendum to the tender documents would be issued to all the intending tenderers, and thereafter no further query/condition shall be entertained. There would be no bar to hold the pre-bid conference more than once, especially in more complex types of works.

14.7.1.4 The Project Manager incharge of the work shall finalise the eligibility as well as bid evaluation criteria in accordance with the guidelines given in Appendix- 13. In case any deviation from guidelines (except for recalling tenders under para 16.7) are considered necessary, same should be got approved from the MD.

14.7.1.5 After opening of the technical bids, the PM shall prepare a list of all the deficiencies found in the bids of each bidder vis-à-vis the requirements of the NIT within 7 days of the opening and send these deficiency lists to the individual bidders by speed post/E-mail with a request to furnish the required documents within 1 week of receipt, failing which it will be presumed that they do not have any further documents to furnish and decision on bids will be taken accordingly.

14.8 Tenders for Specialized works- For details Section 15 be referred to.

14.9 Preparation of Notice Inviting Tenders

(1) The Notice Inviting Tenders should be carefully prepared. All notices calling for tenders should be in the standard form, and be serially numbered. A proper register (as per Annexure below) shall be maintained for this purpose. The notices should be issued only after the authority competent to accord Technical Sanction has approved the NIT papers.

(2) Avoidance of use of symbols:- The use of symbols, such as %, and 'per thousand' in the Schedule of quantities accompanying the Notice Inviting Tenders is to be avoided, and the words 'hundred', 'thousand', etc. must be written, e.g. "Per hundred sq. meter" must be written, and not "% sq. meter". The units should thus be more specific.

(3) Lump sum tenders:- In case of lump-sum tenders, the Divisional Officer should ensure that the detailed drawings and specifications, duly authenticated by the competent authority, form part of the Notice Inviting Tenders, and that the cost of various items forming part of the sanctioned estimate of the work is correctly assessed with reference to the relevant Schedule of Rates, and in the case of non-schedule items, on the basis of rates supported by detailed analysis thereof and duly sanctioned by the competent authority.

(4) Authentication of all corrections:- The NIT papers are very important documents, on which call of tenders and subsequent agreements with the contractors are based. It is, therefore, very necessary that each page and the correction slips, as well as other corrections and modifications made in the NIT papers, are numbered and signed by the competent authority in token of approval so that chances of tampering with such documents are avoided. Mere approval on forwarding letters would not serve the purpose. All corrections in the NIT's and pages of the NIT's approved by the General Manager /CGM and Managing Director should be attested by PM. Thereafter the documents must be properly sealed to prevent any tampering.

(5) All the pages/forms forming part of NIT, whether printed or otherwise, should be clear, legible and unambiguous. The Schedule of Quantities attached to the tender documents other than Form BRIDCUL 7 must also contain a column for the “Amount” after the column “Rate”. Care shall be taken in the preparation of the Schedule of Quantities so that there is adequate space between the items to enable the contractor to quote the rates without being cramped for space. The contractor must calculate the amount of each item, and enter it in the column. The Contractor must also enter these amounts by sub-heads, and give a grand total in words and figures at the end of the Schedule.

(6) The NIT for all works for which tenders are invited on BRIDCUL form 7 should provide that the Contractor should quote the percentage above or below to two places of decimal only.

(7) The time period for completion of work should be reasonable as decided by NIT approving authority, keeping in view the quantum of work, requirement of user department, geographical conditions of the site and other constraints. The Schedule of contract period as given in Appendix-25 may act as a rough guideline.

(8) The notice inviting tender should also stipulate minimum requirement of technical staff for the work. Requirement of technical staff should be decided by NIT approving authority. For building works recommended scale is given in Appendix 18.

(9) It should be ensured that a specific reference to the number of correction slips as well as the year of the Schedule of Rates as well as that of the CPWD Specifications, are made while mentioning the Schedule of Rates or the BRIDCUL Specifications for Works, e.g. “Schedule of Rates..... for.....with correction slips.....to.....”, and “BRIDCUL Specifications for Works at.....with correction slips to.....”.

(10) Following condition may be incorporated in the NIT:- No condition shall be incorporated in the NIT regarding visit of BRIDCUL officers within the country or outside the country to inspect equipments/materials/stores where such expenditure is to be borne by the contractor. Officers of the department may conduct inspection before dispatch of equipments/materials at manufacturer’s works. The contractor has to arrange facilities for inspection of equipments/materials including conducting the required tests in the manufacturing unit. However no condition shall be incorporated in the

NIT regarding inspection of equipments/materials in the manufacturing unit located outside India without prior permission of MD. In case any such condition regarding inspection outside India is incorporated in NIT without approval of MD, it will tantamount to deliberate violation of instructions and this will attract disciplinary action against the officer approving the NIT.

Annexure (Refer para 14.9.1)

Register of NIT's issued during the year.....

Name and address of the Division.....

Example Serial number first available in the register 5

Year..... : 2007-08

Division.....: Construction Division IV

Location..... : Delhi Sub

Division..... :(if outstation, suffix suitable initials)

Number

Sl. No.	Date	Sub-Division/ Division	Synod. Assigned by Division (if located out station)	Name of work	Estimated Cost	Date of opening	Remarks

Assigned to the NIT shall be.....

SECTION 15

TENDERS FOR SPECIALIZED WORKS

15.1 Specialized works to be executed through specialized agencies

Specialized works are those works for which there are specialized agencies available in the market to execute them. These works are listed by the department and are updated periodically. These works should be got executed through such agencies only to ensure a proper quality of work.

15.2 Tenders for specialized works are to be invited on two/three envelope systems.

15.2.1 Procedure for call of tenders under two/three envelope system as approved by NIT. approving authority shall be followed as per para 14.7.1 of this Manual.

15.3 Tenders with specialized components of work

In a building construction there are other specialized works, such as plumbing, aluminum work, doors and windows shutters, painting, etc., for which there are agencies who are specialized in such fields. The procedure to be followed in executing such works is given as under:-

1) Agencies acceptable to the department :- In a tender where there are components of such specialized nature of works, there should be a stipulation in the NIT (Form 6) that such works should be got executed only through associated agencies specialized in these fields. For this purpose, the NIT should list out the names of such specialized agencies that are acceptable to the Department, and/or stipulate the conditions for acceptable agencies. The contractor shall indicate the name(s) of his associated specialized agencies from the above list, or those fulfilling the above conditions as early as possible and within one month of award of work.

(2) Press advertisement in brief:

i) Since the NIT would be long in such cases, the above requirement may be mentioned in brief while releasing the advertisement in the press, and the intending tenderers may be requested to seek the regular NIT (Form 6) from the Department for more details. This may be issued to them free of cost.

(ii) However, the NIT shall be posted in full in the website. The press advertisement may also request the intending tenderers to refer to this website for more details.

15.4 Tenders for specialized works

- (1) Specialized item/jobs/ works are those that require special T&P and/or specialized skill.
- (2) The MD will be competent to declare an item/job/work as a specialized item/job/work. While approving such a specialized item/job/work, the MD shall endorse a copy of such approval letters/orders to all the GM's, as well as post such letters/orders in the website in order to maintain uniformity.
- (3) Tenders for works pertaining to DG Sets, HVAC, Sub Station, Fire Fighting, Fire Alarm/Fire Detection and lifts shall be invited for each work on two/three envelope system from specialized agencies/firms including OEM/OEA provided he/they meet the eligibility criteria as stipulated in the NIT.

15.5 Preparation of NIT

- (1) The NIT approving authority of the work shall finalize the eligibility as well as bid evaluation criteria in accordance with the guidelines given in Appendix- 13. In case any deviation from guidelines (except for recalling of tenders under para 16.7) are considered necessary, same should be got approved from the MD.
- (2) The eligibility criteria for pre-qualification should be made very clear in the Press Notice and NIT (Form 6). In order to get competitive rates in respect of specialized jobs, the NIT (Form 6) shall also be sent to some prominent specialized firms, which in the opinion of NIT approving authority are likely to become eligible.
- (3) Definition of similar work and eligibility criteria shall be spelt out clearly in the NIT by NIT approving authority. Definition of similar work shall got to be approved from MD if estimated cost of work is more than financial powers of CGM .
- (4) Apart from the criteria of the work experience, NIT approving authority may lay down other suitable conditions depending upon the nature of work.
- (5) The system specifies for simultaneous call of technical and financial bids. However if the exigencies of work so demand, only technical bids can be called first but with the approval of MD concerned. Later on financial bids can be called from qualified contractors.

(6) In the case of some specialized jobs by specialized firms, Guarantee Bonds are also required to be executed, viz, water proofing works and anti-termite treatment. A sample Guarantee Bond is given in Appendix 22 as a general guideline. NIT approving authority may decide separate/common Guarantee Bonds required for different jobs based on this sample.

(7) **Eligibility criteria** for such works (except DG Set, HVAC and Sub Station works) shall be specified in NIT as follows:

Experience of having successfully completed works during last 7 years ending _____ last _____ day _____ of the submission of tenders:-

- (i) Three similar works each of value not less than 40% of the estimated cost put to tender or Two similar works each of value not less than 60% of the estimated cost put to tender or one similar work of value not less than 80% of the estimated cost put to tender, all amounts rounded off to a convenient figure.

The eligibility criteria for similar works of outsourcing of day to day maintenance along with annual repair and maintenance work and special repair shall be based on the estimated cost of the work for 1 year even if tender is invited for a period of 2 or 3 years.

- (ii) **Eligibility criteria** for DG Set, HVAC and Sub Station works shall be specified in NIT as follows:--

Experience of having successfully completed works during last seven years ending _____ last day of the submission of tenders :- Two similar completed works each of value _____ not less than 60% of the estimated cost put to tender with capacity of individual DG _____ Set/Chiller/transformer being 80% of the individual capacity (rounded off to next available higher capacity) of the equipment i.e. DG Set/Chillers/transformer proposed in the NIT.

OR

One similar completed work of value not less than 80% of the estimated cost put to tender with capacity of individual DG Set/Chillers/transformer being 80% of the individual capacity (rounded off to next available higher capacity) of the equipment i.e. DG Set/Chillers/transformer proposed in the NIT. All amounts rounded off to a convenient figure.

(8) **DG set**

- (1) Suitable conditions be incorporated in the NIT to ensure compliance of following:

- a) Makes of engine, alternator and AMF panel be incorporated in the NIT and it is to be ensured that the DG Set(s) and AMF panel of Specified makes are procured from OEM/OEA only.
- b) Inspection and testing of DG set and AMF panel before dispatch shall be carried out in the works of OEM/OEA only.
- c) At the time of submission of tender document the contractor shall submit:-
 - (i) Written commitment from OEM/OEA to supply the DG Sets and delivery schedule as per requirement of department.
 - (ii) Certificate from OEM/OEA or authorized service provider of engine manufacturer for satisfactory installation and commissioning of DG Set after completion of the work.
 - (iii) Required Guarantee of DG Set from OEM/OEA in favour of Engineer-in Charge to cover defect liabilities.
 - (iv) An undertaking that mandatory free service shall be carried out during the guarantee period by the authorized service provider of engine manufacturer.

(2) The tenders for DG Sets to be installed in VVIP Complex or buildings of national importance/ prestige may be invited from OEA/OEM only with prior approval of MD. The firm has to be OEM/OEA for the highest capacity of DG Set proposed to be installed.

(9) No condition shall be incorporated in the NIT's regarding visits of BRIDCUL officers within country or outside India to inspect equipments/materials/stores where such expenditure is to be borne either by the contractor. Officers of the department may conduct inspection before dispatch of equipments/materials at manufacturer's works. The contractor has to arrange facilities for inspection of equipments/materials including conducting the required tests in the manufacturing unit." However no condition shall be incorporated in the NIT regarding inspection of equipments/ materials in the manufacturing unit located outside India without prior permission of MD.

In case any such condition is incorporated in NIT, it will tantamount to deliberate violation of instructions and this will attract disciplinary action against the officer approving the NIT.

(10) The procedure for call of tenders with two/three envelope system (excluding envelope containing earnest money) given under Para 14.7.1 shall be followed for such works involving following stages:-

- (I) **Stage I** – Approval of definition of similar work by competent authority.
- (ii) **Stage II** – Approval of names of eligible contractors by competent authority.
- (iii) **Stage III** – Approval of technical specifications by competent authority.
- (iv) **Stage IV** – Revision of financial bids, if required.
- (v) **Stage V** – Acceptance of financial bids by competent authority.

Definition of Competent Authority at each Stage:
Stage; I & II

Sl No.	Cost of work	Competent Authority.
1	Up to powers of technical sanction of PM	PM
2	Beyond T.S. powers of PM & upto the tender acceptance powers of CGM under his own authority	Full powers to Tender Accepting Authority upto (GM).
3	Beyond the tender acceptance powers of CGM under his own authority	MD

Stage: 111- To approve technical specifications : NIT approving authority

Stage: V- To approve financial bid: As per delegation of financial powers in Appendix-I

Similar procedure is to be followed in case the work is to be executed through Work Order without call of tenders. Definition of similar work shall got to be approved from competent authority. To obtain approval of competent authority for definition of similar work, a proposal in the form of a letter containing the following information is to be submitted to competent authority by the NIT approving authority:-

- a) Name of work and Sub Head.
- b) Brief description of the work to be undertaken
- c) Estimated cost put to tender
- d) Amount of A/A & EIS
- e) Time of completion
- f) Any other relevant information
- g) Proposed definition of similar work.

After approval of definition of similar work, tender shall be called and after satisfying that contractor has submitted earnest money in proper form, the envelope containing documents related to eligibility criteria shall be opened and to be sent to competent authority for approval of names of eligible contractors. In case GM/CGM is the competent authority, then case is to be sent to GM directly by the PM with a copy to GM. In case MD is the competent authority, then the case shall be submitted to MD by the CGM.

After examining the documents related with eligibility criteria names of contractors satisfying the eligibility criteria shall be approved by the competent authority. After finalization of name of eligible contractors, second envelope containing details of technical specifications shall be opened and assessment of technical specifications and their finalization shall be done by NIT approving authority.

After finalization of technical bid, if required, the eligible contractors may be given chance to modify their financial bids. The financial bids (original or revised as the ease may be) shall be opened by the Tender committee & Tender shall be

accepted by the competent authority as per delegation of financial powers. After opening of financial bids tenders shall be processed as per the existing procedure.

(11) **Pre bid conference:** There shall be a pre-bid conference in which the doubts of the intending tenderers shall be clarified, besides discussions on any additional suggestion proposed by the tenderers. If found necessary, a corrigendum to the tender documents would be issued to all the intending tenderers, and thereafter no further query/condition shall be entertained. There would be no bar to hold the pre-bid conference more than once, especially in more complex types of works. NIT approving authority should allow sufficient time to hold the pre-bid conference after sale of tenders.

(12) Tenders received by PM shall be submitted to NIT approving authority directly.

15.6 Sale of tenders

(1) It is necessary that the tenders for specialized jobs/works are sold to the firms who deal in the items of works for which the tenders are being invited.

(2) It is not necessary that specialized agencies who tender for the work should be registered with central or state government engineering department

(3) The requirements of experience and expertise are applicable to all the intending tenderers viz, specialized firms as well as registered contractors. Tender papers should be issued only after ascertaining from them, about their experience and expertise in the specialized field concerned. The registered contractor shall not be eligible to purchase tender unless he meets out the eligibility criteria for that particular specialized work. Press notice should also be issued accordingly.

(4) The issue of tender papers to civil or electrical contractors will be regulated by the discipline of work, namely, civil or electrical. The intending tenderers should append details and expertise with their applications for issue of tender papers.

(5) The tender papers should be issued only after ascertaining from the contractors their expertise and experience in the specialized field concerned with reference to the laid down eligibility criteria, and after satisfying that they fulfil the criteria.

(6) At the time of purchase of tender, the tenderer shall have to furnish an affidavit as under:

“I/We undertake and confirm that eligible similar works(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/We shall be debarred for tendering in BRIDCUL contracts in future for 3years . Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall forfeit the entire amount of Earnest Money Deposit/ Performance Guarantee.”.

15.7 Guideline to call tenders for lifts:- The lift manufacturers are approved into two categories from time to time:-

- (i) Category “A”
- (ii) Category “B” - The firms pre-qualified for a period of two years for buildings not covered by Cat “A”
- (iii) The categorization of lift for various buildings is as under.
 - Category “A”— Residential Building, Hospital, Prestigious Buildings, Buildings of National Importance other non residential and office buildings more than six floors (G + 5).
 - Category “B” — Office buildings and other non residential buildings except type of buildings classified under category A.
- (iv) The manufacturers approved under category “A” can participate for the works to be executed in various buildings under category “B”.
- (v) The Managing Director may decide the buildings of prestige and National Importance to be classified under category “A” to invite tenders from manufacturers approved under category “A”
- (vi) The makes approved under category “A” can be installed in any buildings provided the user department makes such specific request and is willing to bear the extra cost involved over and above the sanctioned provision of the estimate. Recommendation of Consultant to provide lift out of makes approved under “A” category should not be treated as final word unless approved by user department.
- (vii) The preliminary estimate for the lifts to be installed in various buildings under category “A” & “B” should be prepared accordingly.
- (viii) Para 15.3 of this Manual may be referred to regarding the main contractor associating specialized agencies for specialized components of the work that are covered by the contract.

15.8 Tenders for Specialized Civil Works:

In case of specialized Civil works where specifications of various items are already finalized, tender for civil works may be invited from specialized agencies as being invited from normal works but tenders shall only be sold to specialized agencies subject to fulfilment of eligibility criteria. For such case powers to approve NIT and acceptance of tender shall be as per normal delegation of financial powers.

However, there is no bar to invite tender on two/three envelope system if competent authority to approve NIT decide so.

15.9 Maintenance of specialized E&M Systems by Manufacturers/Authorized Agencies.

The following shall be followed for Operation & Maintenance of specialized E&M

Systems:

(1) Central AC Plant

(i) Irrespective of capacity, screw and centrifugal plants (to include both high & low side) will be got comprehensively maintained by Manufacturers/Authorized Agents for maintenance works of the Plant. This

should include all repairs, spares, gas, oil etc. To ensure undivided responsibility, operation of the Plant also should be entrusted to Manufacturer/Authorized Agent for maintenance works.

(ii) Reciprocating Plants above 200 Tons aggregate capacity will be got comprehensively maintained/operated by Manufacturer/Authorized Agents/original executing agencies.

(iii) Reciprocating Plants with aggregate capacity upto 200 Tons can be maintained and operated by specialized agencies selected on basis of prequalification criterion.

(2) Lifts will be got comprehensively maintained by the respective Lift manufacturer only.

(3) Addressable Type fire Alarm System will be got maintained by manufacturer/authorized agents/pre qualified firms up to their tendering limit.

(4) The following systems will be got maintained comprehensively by the Manufacturer/Authorized Agents only.

- (i) Baggage/Security Scanner
- (ii) Video/Film Projection System
- (iii) CC TV System
- (iv) UPS System
- (v) PA System
- (vi) Sound reinforcement System
- (vii) Conference System
- (viii) Communication System
- (ix) Computer System
- (x) Water Pump Automation System
- (xi) Fire Extinguishers
- (xii) DG Set

(5) Wet Riser, Fire Alarm System will be got operated/maintained by specialized firms selected on basis of prequalification criterion.

(6) Any other specialized System The Managing Director will decide whether the system is to be got maintained by Manufacturer/ Authorized Agents for maintenance works or by specialized firms to be selected on basis of prequalification criterion.

Note: When maintenance work is to be got awarded to Manufacturer/authorized agent, there, is no need to call tender with press publicity. It is adequate to send the NIT to only the manufacturer/authorized agent. The tender accepting authority will be responsible for the best offer received and reasonability of rates.

15.9.1 Operation and maintenance of E&M installations

The operation and maintenance (including repairs) of the equipments and systems listed under para 15.9 above shall also be treated as specialized items of works.

15.10 List of specialized items/jobs for Civil / Electrical works

The list of specialized items/jobs that have been declared in respect of civil works is given in Annexure I, & electrical works in Annexure II.

Annexure- I

List of specialized items/jobs for civil works

- (1) Carriage of Materials
- (2) Water proofing treatment work
- (3) Steel work in steel bridge work, space frames for long span structures, steel towers
- (4) Laying of granite stone flooring
- (5) Special foundations including all types of piles
- (6) Fibrous plaster ceiling.
- (7) Acoustic treatment and other decorative items such as glass ceiling.
- (8) Sinking of tube well.
- (9) Erection of food storage-both silos and flat type.
- (10) Aluminium doors and windows, aluminium partition.
- (11) RCC overhead tank with independent staging.
- (12) Underground tank.
- (13) Guniting, Ready mix concrete.
- (14) Repair and rehabilitation works.
- (15) Soil investigation and survey work.
- (16) Façade cleaning system and Façade cleaning.
- (17) Custom made wooden furniture (factory made).
- (18) Aluminium composite panel
- (19) Swimming pool.
- (20) Fabrication and erection of space frame including covering with lightweight poly carbonate sheet roofing.
- (21) Diaphragm walls.
- (22) Glass/green house (climate control)/screen house.
- (23) Anti-termite chemical treatment.
- (24) Stainless steel cladding and stainless steel railing.
- (25) Water treatment plants.
- (26) Structural glazing work,
- (27) Fiber glass doors.
- (28) Stone works such as:
 - (a) Ashlar stone masonry work
 - (b) Stone jail work.
 - (c) Italian marble work.
- (29) Pre-fabricated structures and portable units such as sentry posts. toilets, temporary office or residential accommodation, etc.
- (30) Modular furniture, moulded PVC furniture and kitchen cabinets.
- (31) Superior water supply fittings such as Jacuzzi steam cabins, cascades, etc.
- (32) Sensor operated system for flushing.

- (33) Plumbing with copper/polypropylene pipes using advanced technology for jointing.
- (34) Trench less pipe works.
- (35) Textured finishing work.
- (36) Care taking works.
- (37) Security to vacant bungalows/premises.
- (38) Tentage/view cutter works.
- (39) Washing/thy cleaning works.
- (40) Synthetic play area surface for games.
- (41) Signages
- (42) Stainless steel Water tanks
- (43) * Bamboo work
- (44) Environment Impact Assessment Study and Environment Clearance
- (45) Compactors/Optimizers
- (46) Wooden flooring
- (47) Composite work pertaining to Civil, Electrical & Horticultural Services Outsourcing of all Maintenance, Special Repair, up gradation works and Mechanized housekeeping etc. (Provided composite tenders are invited for civil, electrical, Horticulture and Mechanized housekeeping)

Note: Works of different categories such as Maintenance, Special Repairs and Up gradation works pertaining to Civil, Electrical & Horticulture, if executed independently, tenders are to be invited from registered contractors only by respective wings.

- (48) Mechanized Housekeeping Work
- (49) Outsourcing of day to Maintenance along with Annual Repair & Maintenance work and special Repair etc.:-
 - (a) Out sourcing day to day Maintenance for civil or electrical or Horticulture services.
 - (b) Out sourcing day to day Maintenance with any service such as Annual Repair & Maintenance and /or Special Repairs pertaining to civil or electrical or Horticulture services.

Note: However works of different category such as Annual Repair & Maintenance and/or Special Repairs pertaining to Civil. Electrical Horticulture. if executed independently i.e.. excluding works of day to day maintenance, tenders are to be invited from CPWD registered contractors only by respective wings.

- (50) Branded Wooden/Steel Furniture's
- (51) Semi- Automatic sound proof (50 db) Sliding folding partitions.
- (52) Bridge Works
- (53) Highways/Road Works

Annexure II
(Reference para 15.10)

List of specialised items/jobs for electrical works

Supplying/fabrication, installation, testing and commissioning of the following

- (1) Kitchen equipment.
- (2) Sewage treatment plant.
- (3) HT and LT Switchgear.
- (4) Air-conditioning plants.
- (5) Lifts, escalators and conveyors
- (6) Simultaneous interpretation systems.
- (7) Gas plants.
- (8) Transformers.
- (9) Diesel generating sets.
- (10) Heavy machinery items such as bulldozer, tractor scraper, road rollers, lorries, excavator, etc.
- (11) Refrigerators
- (12) Cold storage plant.
- (13) Water coolers.
- (14) Hot water/steam boilers.
- (15) Public address system, conferencing system, automatic vote recording system, recorders.
- (16) Stage lighting.
- (17) Projector and other special equipment for theatre.
- (18) Repairs and calibration of various types of measuring instruments and relays etc.
- (19.) Testing of transformer oil and dehydration and other type of high potential test
- (20) Runway lighting, taxiway lighting and approach lighting system including control regulators, relays and control panels.
- (21) Supply and erection of High Mast lighting.
- (22) Frequency converter.
- (23) Fabrication of steel cabin of body of trucks chassis.
- (24) Temporary illumination, security lighting and wiring for power outlets for metal detectors in connection with Republic Day and Independence Day celebrations
- (25) EPBAX system (equipments)
- (26) EPBAX system (cabling and wiring)
- (27) Illumination of heritage caves and fiber optic lighting system.

- (28) Security system and alarm
- (29) Building automation system.
- (30) Digital display board.
- (31) Fire fighting equipment (including wet riser and sprinkler system. **portable fire extinguishers), fire detection and alarm and any other co-related items. ** Necessary annual and day-to-day maintenance, refilling of portable fire extinguishers shall be carried out by Electrical wing.
- (32) Hydraulic platform/lift:
- (33) Incinerator.
- (34) Laundry equipment.
- (35) Energy conservation measures for lighting.
- (36) Centralized clock system.
- (37) Interior/exterior flood lighting of heritage/monumental buildings/structures involving computer aided design, and evolution of special mounting arrangements for luminaries:
- (38) Conservation measures for lighting.
- (39) Repair and Maintenance of Dish Antena.
- (40) *Supply and installation of UPS System and Servo Voltage stabilizers
- (41) *Rising Mains/Bus Trunking in Buildings.
- (42) Gas pipe line#
- (43) Modular OT#
- (44) Electrically Operated Gate
- (45) Fountain Work
- (46) Water supply motors and pumps of 100 hp or more
- (47) Mechanized Car Parking Systems
- (48) VRV/VRF Type Air-Conditioning Systems
- (49) Oxygen Generation Plant
- (50) CCTV and Allied Equipments
- (51) Access Control System
- (52) Hydro Pneumatic Pumps

SECTION 16 PUBLICITY OF TENDERS

16.1 Wide publicity

(1) Wide publicity should be given to the Notice Inviting Tenders (Form 6). Tenders must be invited in the most open and public manner possible, by advertisement in the website/press, and by notice in English/Hindi and the written language of the district. A copy of the notice \ should be sent to all the Divisions, Zonal Offices & Circle Offices. The notice may also be sent to the Local Municipality, Collector's office, and the State PWD Divisions, for works in places where there are not enough registered contractors.

(2) Notices for all the works, irrespective of their value, shall be posted in the BRIDCUL website. Proof thereof in the form of a printout of NIT details and the Tender ID no. from the web page shall be kept on record. In view of this requirement, sending of NIT's/NIQ's to the Contractors' Associations can be dispensed with

(3) In respect of works estimated to cost more than Rs. 25 lakhs, a brief advertisement inviting tenders should invariably be inserted in the press in the classified category.

(4) Advertisement for Notice Inviting Tenders should be sent to the press. Sometimes, tenders may have to be invited for different works by the same Division at the same time, or at short intervals of one or two days. In such cases, it is not desirable to send separate press advertisements for each work, and as far as possible composite advertisements in the prescribed format should be sent to avoid unnecessary expenditure on advertisement.

(5) In urgent cases, the authority competent to approve the NIT, for recorded reasons, decide to send the advertisement of tenders directly to the press. In such cases the newspaper bills shall also be settled by BRIDCUL..

(6) Draft specimen of Press Notice to be issued as a combined Advertisement in News Paper is given as **Appendix 11**, Specimen Press Notice forming part of NIT and to be posted on website is given in **Appendix 12**.

16.2 Economy in press advertisement

(1) The advertisement inserted in the press should be brief, but clear in meaning. For economy in cost, following guidelines should be kept in View: -

- (i) Combined tender notice may be issued for all the works to be awarded around the same time.
- (ii) The official designation and address of the Project Manager should not be repeated at the end.
- (iii) Details of estimated cost, earnest money, time- allowed etc. should be given as per Appendix 11.

- (iv) Titles such as “Government of Uttarakhand, BRIDCUL, Peyjal Nigam” etc. at the top should not be given, as the official designation at the beginning gives these details.
 - (v) The name of the Project Manager General Manager/Chief General Manager inviting tenders should not be printed.
- (2) The above instructions should be strictly observed, and Managing Director should ensure that these instructions are complied with, and proper economy is exercised regarding inviting the tenders.
- (3) These provisions shall compulsory be followed.

16.3 Guidelines regarding publicity of tenders

The following guidelines are to be followed by the Project Managers regarding publicity of tenders:

- (i) Request to DAVP for release of advertisement should be sent well in advance so that adequate time is available for release through press.
- (ii) The Division/Circle sending the request to DAVP should intimate their complete postal address to the DAVP.
- (iii) A watch should be kept on publication of advertisement in those newspapers where advertisements are being released.
- (iv) Newspaper cuttings in each case should be collected and kept on record as far as possible as a proof of publicity actually achieved.
- (v) Full details of the dates on which advertisement have actually appeared in the newspapers should be indicated while sending cases to higher officers.

16.4 Duty of Head Clerk

It is duty of the Head Clerk of the issuing Division to ensure that all NITs (Form 6) remain on the notice board of the Division from the date of issue of NIT to the date of opening of tenders. For this purpose, he should record a certificate to the effect on office copy of each NIT. The Project Manager should check such certificates from time to time. Inspecting Officers from Circle Office and Zonal Office may also check the notice boards for display of the notices, and the office copies of the NIT's for these certificates of the Head Clerk.

16.5 Time limit for Publicity of Tenders

- (1) The following time limits between the date of publication of tender on web site or Press whichever is earlier and the date of receipt of the tenders are desirable:-
- (i) 7 days in the case of works with estimated cost put to tender upto Rs.50 lakh.
 - (ii) 10 days in the case of works with estimated cost put to tender between Rs. 50 lakh to Rs 2 crores
 - (iii) 14 days in the case of works with estimated cost put to tender more than Rs. 2 crores
- (2) The above time limits may be varied at the discretion of the NIT approving authority keeping in view the exigencies of work.

16.6 Procedure for proper publicity of tenders

The following procedure shall be adopted for proper publicity of tenders by the Divisional office:--

- (1) All NIT's (Form 6), whether issued by the Sub-Division or the Division, shall be assigned a serial number in the form ['X' of 'Y']. where 'X' is the serial number of the NIT issued in a particular financial year and 'Y' represents that financial year. Abbreviations for Division and the place shall be added. This is illustrated by way of an example under Annexure in section 14. No NIT shall be publicized either on the notice board or in the website/press without the proper serial number. The serial number shall be continuous irrespective of the level of the NIT approving authority, i.e. Resident Engineer to Managing Director .
 - (2) The Resident Engineer shall intimate the details of the prospective NIT (to be issued within his power) to the Project Manager in writing in duplicate. On receipt of the intimation, the first serial number available in the register shall be assigned to the NIT, details noted in the register and the duplicate copy of the intimation returned to the Sub-Division with the serial number of the NIT noted on it under the signature of the Project Manager. In cases where the Project Manager decides not to release a particular NIT, no serial number shall be assigned to it.
 - (3) The agreement with the contractor shall bear the serial number of the NIT along with other details on the cover page. This shall be checked and reconciled in the Divisional Office by the Divisional Accountant before making payment of the first bill to the contractor.
 - (4) In case of works estimated to cost upto Rs.50 lakh, advertisement may not be inserted in press, but the NIT shall be necessarily displayed on notice boards of the issuing Sub-Division, Division and all the other Sub-Divisions of that Division located in the same station/Website.
 - (5) The NIT register shall be made available to contractors for perusal during a fixed time on working days and also to higher authorities during their inspection.
- 16.7 Action in case of poor response to tenders If the response to tenders from the contractors of the appropriate classes is poor or unreasonably high rates are received, following measures may be taken by officers upto the level of Managing Director but with the prior approval of the next higher authority;-
- a. Throw open tenders to next lower class, including to contractors registered with any department of any state govt. other than the state of Uttarakhand besides Railways, MES, Telecommunication & state PWDs in the appropriate class and/or
 - b. The NIT approving authority may modify the eligibility criteria suitably.
 - c. In addition to the above options, in case of poor response, the Managing Director will be competent to allow execution of works on Departmental basis, as envisaged.

16.8 Formalities for re-invitation of tenders

In case of re-invitation of tenders, all the formalities mentioned in aforesaid paras shall be observed. In cases when the dates and time for sale and receipt of tenders are required to be extended due to unavoidable circumstances, a proper notice for

the same shall be placed on the notice board, and the same should also be published in the website.

16.9 All notices in the name of the Hon. Governor of Uttarakhand.

All tenders should be invited in the name of the Hon. Governor of Uttarakhand. it is, therefore, necessary that the words “For & on behalf of the Hon. Governor of Uttarakhand” should be incorporated in all the press. (notices sent for publication in newspapers and or web site.

SECTION 17

SALE OF TENDER DOCUMENTS

17.1 General

- (1) The tender documents should be prepared and posted on the web site of BRIDCUL before the Notice (NTT) is actually sent to the press or is pasted on the Notice Board.
- (2) The tender documents should be sold to only those contractors who fulfil the eligibility criteria set out in the notice, and who are not near relatives of the Divisional Accountant or the General Manager or Project Manager or Resident Engineer/Junior Engineer of the Circle in which the work is to be executed. Note: A near relative includes wife, husband, parents, in-laws, children, brothers, sisters, uncles, aunts and cousins.
- (3) Any tender form that is issued, either for sale or for office use, should be issued under the signature of the Divisional Officer or the Sub-Divisional Officer, as the case may be.
- (4) Para 16.1 may be seen regarding posting of tender notice on the website.

17.2 Sale of tender documents to registered contractors (for normal works)

17.2.1 Tenders shall be sold to registered & eligible contractor who fulfil the criteria as stipulated in the tender Document.

17.2.2 Sale of tenders to contractors with a blemished record

If the Project Manager concerned receives adverse report against any contractor, either from the Department in which he is enlisted or from any other Department, he should stop issue of tenders to that contractor on the basis of such a report. The Project Manager should, however, communicate the information to his General Manager for record and for approval of the action taken or proposed to be taken by him.

17.2.3 Tendering limit where materials are stipulated for issue

For deciding the limit up to which a particular contractor is eligible to tender, the cost of materials, whether proposed to be issued free or on payment, shall not be deducted from the estimated cost of work put to tender.

17.3 Sale of tender documents for Balance works

- (1) When under Clause 3 or 14 of the contract Form 7 or 8, the unexecuted portion of the work is taken out of the hands of the original contractor, the tender documents for the residual work shall not be sold to the original contractor, if asked for.
- (2) In case of rescinded contracts, the NIT for residual work shall be approved by the authority who had approved the original NIT. However, the tender shall be accepted by the authority who has the powers to accept tenders as per the delegated financial powers.

(3) In case a contractor does not start the work after award or withdraws the tender after acceptance, he shall not be issued tender for the same work on recall. The Engineer-in-Charge shall also intimate the enlisting authorities.

17.4 Time interval between sale of tender documents and opening of tenders

Any tender form which is issued either for sale or for office use should be issued under the signature of the Divisional Officer or the Sub-Divisional Officer, as the case may be. In order to give contractors sufficient time to study tender documents and work out reasonable rates, the tender papers shall be sold as per following time schedule : --

Receipt of applications for issue of forms & issue of tender program will be stopped by 1500 hours one day before the date fixed for opening of tenders. Issue of tender forms will be stopped three days before the date fixed for opening of tenders.

17.5 Scale of charges for tender documents

- (1) The following will be the scale of charges for the sale of tender forms to contractors or as updated from time to time:—
 - (a) Works costing upto Rs. 1 Lakh: ...Rs 150/-
 - (b) Works costing between Rs. 1 Lakh and Rs.50 lakh Rs. 500
 - (c) Works costing more than Rs. 50 lakhs and upto Rs. 2 crore Rs. 1000
 - (d) Works costing above Rs. 2 crores Rs. 2000
- (2) Authorities competent to approve NIT's have got the discretion to add to the prices mentioned above any additional cost of drawing to be supplied along with tender documents depending on the labour actually involved in their preparation.

17.6 Accounting of tender documents

- (1) The following procedure is laid down for the accounting of tender documents:
 - a) All the tender documents should be priced and the price given on the document.
 - b) All the tender documents should be kept in the charge of the Cashier in the Divisional Offices and the Sub-Divisional Clerk in the Sub-Divisional Offices.
 - c) All the tender documents received by the Cashier/Sub-Divisional Clerk should be entered in the register.
 - d) The register should contain a chronological record of the issue of tender documents, showing the names of the persons to whom issued, the number of forms issued and the amount received. In case of online printed of similar record to be file
 - e) The Register of the Sale of the Tender Documents should be treated as a Subsidiary Cash Book and its pages should be machine numbered.
 - f) The money received by the Cashier or the Sub-Divisional Clerk on account of sale of tender documents should be entered in the Divisional or Sub-Divisional Cash Book daily as a lump sum. This daily total should agree with the detailed record in the Register of the sale of Tender Documents
 - g) On the 25th of each month, the Cashier or the Sub-Divisional Clerk concerned should close the register by striking the balance of tender documents in stock, the number of documents sold, and the amount of cash realized. He should also count the documents in hand. Thereafter, the tender documents and the entries in

the register should be checked and verified by the Divisional or the Sub-Divisional Officer concerned.

h) Surplus/unutilized tender documents must be destroyed after one month of acceptance of tenders.

(2) To avoid the possibility of bogus and fake tenders being submitted, it is necessary that the tender documents are sold individually and acknowledgements taken from contractors or their accredited representatives in the Register of the Sale of Tender Documents while handing over the tender documents to them. Where the tender documents are transmitted by post, these should be dispatched by Registered A.D. Post/speed post.

17.7 Responsibilities of Divisional Accountant

(i) To see that all the forms issued to tenderers, whether printed or otherwise are clear, legible and unambiguous. The schedule of quantities attached to the tender document other than Form 7 must contain a column for the “Amount” after the column “Rate”.

(ii) To ensure that tenders are issued to only those contractors who satisfy the eligibility criteria for issue of tenders as inserted in the press notice. He should properly scrutinize the applications received for issue of tenders, keeping in view the eligibility criteria and then put to the PM for a decision.

SECTION 18: EARNEST MONEY

18.1 Necessity for earnest money

According to the practice in BRIDCUL, earnest money is paid by each tenderer to enable the Government to ensure that a tenderer does not back out of his tender before its acceptance, or refuse to execute the work after it has been awarded to him.

18.2 When to be deposited

The earnest money is to be deposited by the intending tenderers in one of the acceptable forms as specified in para 18.4 alongwith their tender documents for a work, and it shall be so stipulated in the NIT (Form 6).

18.3 Rates of Earnest Money

The amount of the earnest money, which a contractor should deposit with the tender, is regulated by the following scales. In case of petty works costing Rs. 5,000/- or less the Project Manager may, at his discretion, dispense with the conditions for calling for earnest money.

- (i) For works estimated to cost upto Rs. 25 crores: 2%(Two percent) of the estimated cost
- (ii) For works estimated to cost more than Rs. 25 crores: Rs. 50 lakhs plus 1% (one percent) of the estimated cost in excess of Rs. 25 cores.

18.4 Mode of Deposit

- (1) The earnest money may be accepted only in the following forms: --
 - (i) Cash upto Rs. 10,000.
 - (ii) Demand Draft of a Scheduled Bank.
 - (iii) Fixed Deposit Receipt (FDR) of a Scheduled Bank.
 - (iv) Online payment
- (2) It should be ensured that the FDR is pledged in favour of the Managing Director, BRIDCUL authority. It is in the tenderer's own interest to keep the FDR valid as long as it is required. There is no need for the Department to insist upon the tenderer keeping the FDR valid, since he can encash the FDR only when it is assigned back to him by the tender inviting authority.
- (3) If the banks are closed on the last date of receipt of tenders, the date shall be postponed suitably.

18.5 Refund of earnest money

- (1) The earnest money given by all the tenderers except the lowest tenderer should be refunded immediately after the opening of the tenders, or latest within a week from the date of receipt of tenders. Entry of Demand Draft received as earnest money with the lenders may be kept in the Tender Opening Register, and these need not be deposited in the bank except for the lowest tender.
- (2) The Project Manager should periodically review the Tender Opening Register with a view to ensure that the earnest money is refunded in time. If the tenderers do not come forward to get their refund, their Demand drafts / Pay order etc should be sent to them by Registered Post within a week after expiry of the prescribed period. It will be the responsibility of Divisional Accountant to ensure

that Earnest Money is refunded to unsuccessful' tenderers in time specified above.

- (3) The earliest money deposits may be refunded under the authority of an order endorsed by the departmental officer (in whose favour the deposit was made) upon the original deposit receipt. Under no circumstances, part payment be made.
- (4) If the departmental officer desires that an item of earnest money deposit, instead of being refunded, be carried to the credit of the BRIDCUL, he must record the fact on the Deposit Receipt and in his initial records, and request the Accounts Officer to effect necessary adjustment in Accounts.

18.6 Earnest money is not security deposit

The earnest money, which a tenderer for a contract is called upon to furnish along with his application for issue of tender for the contract is not a security deposit within the meaning of rule 45 of the Saving Bank Rules for depositors. No account can, therefore, be opened for the deposit of such earnest money in the Post Office Saving Bank.

18.7 Earnest money stipulation in work/supply to be awarded after call of quotations

In case where work supply is to be awarded on the basis of quotations, and a condition for depositing earliest money is laid down in the Notice Inviting Quotation (NIQ), the following condition shall be stipulated in the NIQ:-“

The quotation for the work supply shall remain open for a period of 7-120 days from the date of opening of quotations. The BRIDCUL shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the Earnest money if any quotationer withdraws his quotation before that date or makes any modification in the terms and conditions of the quotation which are not acceptable to the department, and to forfeit the whole of the earnest money if the quotationer, whose quotation is accepted, fails to commence the work supply specified in the NIQ (along with changes in scope, if any) in the prescribed time or abandons the work/supply before its completion.”

18.8 Forfeiture of earnest money

- (1) If any tenderer withdraws his tender before the expiry of the validity period, or before the issue of letter of acceptance, whichever is earlier, or makes any modification in the terms and conditions of the tender which are not acceptable to the department, then the Government shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the earnest money absolutely. This provision would naturally apply only to the lowest tenderer once the earnest money of all the tenderers except those of the lowest is refunded as per provisions under para 18.5(1).
- (2) If contractor fails to furnish the prescribed performance guarantee within the prescribed period, the earnest money is absolutely forfeited to the BRIDCUL automatically without any notice.
- (3) In case the contractor fails to commence the work specified in the tender documents on the 15th day or such time period as mentioned in letter of award, after the date on which the. Engineer-in-charge issues written orders to

commence the work, or from the date of handing over of the site, whichever is later, the BRIDCUL shall, without prejudice to any other right or remedy, be at liberty to forfeit whole of the earnest money absolutely.

(4) If only a part of the work as shown in the tender is awarded, and the contractor does not commence the work, the amount of the earnest money to be forfeited to the Government should be worked out proportionally with reference to the estimated cost of the work so awarded.

(5) In case of forfeiture of earnest money as prescribed in 1 to 4 above, the tenderer shall not be allowed to participate in the re-tendering process of the work.

SECTION 19

OPENING AND ACCEPTANCE OF TENDERS

With a view to avoid the possibility of original tender documents being tampered with, the following procedure shall be adopted in connection with the receipt and opening of tenders and their acceptance.

19.1 Receipt of tenders

- (1) All the tenders in the power of Project Manager and higher officers shall be received in the Divisional Office. Tenders in the power of Resident Engineer shall be received in the Sub-Division.
- (2) Provisions under para 18.2 of this Manual may be seen regarding deposit of earnest money.

19.1.1 Witnessing the opening offenders

- (1) All the tenders should be opened in the presence of such intending tenderers or their representatives as may choose to attend at the time and place, which should be advertised. The tenders should be entered in the Register as per Form **CPWD 41**.
- (2) The Divisional Accountant (Sub-Divisional Clerk in Sub-Division) should be encouraged to be present at the time of opening of tenders. The tenderers should also be encouraged to be present at the time of opening of the tenders.
- (3) The tenders that are received after the due date and time of receipt are not to be considered at all. They should neither be opened nor entered in the tender opening register.
- (4) When tenderers sign their tenders in any Indian script or can only write their names in English. the amount of the tender, or rate of percentage above or below offered by them. should be written in the tenderer's own handwriting in Indian script, and in the case of illiterate tenderer, the amount of tenders should be attested by one of the witnesses.
- (5) Percentage and lump sum tenders should be read out to the tenderers as far as possible. In the case of item rate tenders, the total amount worked out by the different tenderers may be read out, if required by the tenderers present.

19.1.2 Procedure for dealing with corrections, etc

- (1) The Officer opening the tenders should encircle all corrections, cuttings, conditions, additions and over-writings and number them and attest them in red ink.
- (2) In case of a number of corrections in the rate of any one item, either in words or in figures or in both, the number of corrections marked should indicate the corrections serially, that is to say, in case of. say, three corrections in rates of any one item, each of these corrections should be allotted independent numbers serially and not open number to represent all the three corrections.
- (3) The number of such corrections, cuttings, additions, conditions and over writings must be clearly mentioned at the end of each relevant page of the Schedule attached to the tender documents, and they should be properly attested with date. Any omission observed should also be brought out clearly on each relevant page of the Bill of quantities (BOQ).

- (4) The corrections, cuttings, conditions, additions and over writings etc.. should be allotted separate numbers, i.e. corrections should start from 1, 2, 3, etc. and over writings should similarly start separately from 1, 2, 3, etc.
- (5) Use of correction fluid anywhere in tender documents should not be allowed. In case use of correction fluid is noticed, such tender will be liable for rejection.

19.1.3 Procedure for dealing with omissions

- (1) Any ambiguity in rates quoted by the tenderers, either in words or figures, must be clearly indicated on each relevant page of the BOQ attached to the tender documents to which it concerns.
- (2) Where the contractor has quoted rates in rupees and no paisa is mentioned, the word “only” should invariably be added after the words Rupees’, and the corrections should be initialled and dated with suitable remarks at the end.
- (3) Where the contractors have omitted to quote the rates/amount either in figures or in words. or both as applicable, the Officer opening the tender should record the omissions on each page of the Schedule or BOQ.
- (4) The Divisional/Sub-Divisional Officer should see that the tenderers quote entire rates in words including paise to avoid chances of tampering in rates, and if the contractor fails to do so the Project Manager/Resident Engineer should himself write the rates in words at the time of opening of tenders.
- (5) The tenderer should be asked to fill in the tenders properly and carefully. They should avoid quoting absurd rates and making too many corrections in the tenders. The amounts should also be correctly worked out. If any contractor does not follow these instructions and desists from filling the tenders carefully, it would be open to the Department to take disciplinary action against the contractor.

19.2 Scrutiny of tenders

- (1) After opening the tenders in the manner mentioned above, and keeping a record as given in para 19.2.2.(1)(i), and preparation of comparative statement, the Project Manager will send the same to the office of the Project Manager/General Manager/Managing Director (i.e. the tender accepting authority concerned) and the detailed scrutiny will be done in the office of that accepting authority.

The market rates required for the preparation of justification and special problems / conditions, if any, at the area / site of work will, however, be sent by the Project Manager.

- (2) In case of tenders within the powers of MD Tender Committee. complete scrutiny will be done in the office of the Managing Director concerned.

19.2.1 Preparation/checking of comparative statement

- (1) Preparation of comparative statement :--

A complete comparative statement of all the tenders received in response to the notice inviting tenders should be drawn up in the office of the Project

Manager in BRIDCUL Form No. **13 or 14** as the case may be, and the following instructions should be carefully noted:

- (i) The Officer opening the tender should prepare in his own hand in the tender opening register a statement of the “Percentage” or “Lump Sum” tenders received and should sign that statement. In the case of item rate tenders, he needs to prepare only a list of tenders received.
 - (ii) Care should be taken in preparing and scrutinizing the comparative statement of tenders to guard against arithmetical and other mistakes. Failure to do this may result in the work being awarded to a contractor who is not the lowest acceptable tenderer, a contingency which must be guarded against.
- (2) Checking of comparative statement :—
- The detailed arrangements for proper check of tenders and comparative statement are left to the tender accepting authority, but any such arrangements must provide: --
- (i) That the work will be carried out under the control of the officer who is designated for the purpose in the Managing Director’s Office / General Manager’s Office, and Divisional Accountant in Division Office and by Sub-Divisional Clerk in Sub-Division Office.
The duties and responsibilities of the Divisional Accountant/HQ Account Assistant/Account Officer mentioned in the subsequent paras shall be deemed to be the duties of the above mentioned officers under whose control the scrutiny of tenders is being done. The officials handling the tender should work on it in the Branch only, and the tenders should not be taken outside the Branch in any case. The tenders and related papers must be kept under lock & key by the officials before leaving the office.
 - (ii) That the officials date and initial all papers the calculations of which they have checked and that all working sheets are preserved.
 - (iii) That the Divisional Accountant or the concerned officer mentioned in para 19.2.1(2)(i) makes satisfactory and efficient arrangements for checking the computed tenders. He should also conduct personally a test check of computed and checked tenders, sufficient to satisfy himself reasonably that the checking work has been properly done. He should also see that the comparative statement correctly incorporates the total as checked in individual tenders. Full details of the Divisional Accountants responsibility in the matter are contained in para 19.2.2.
 - (iv) Procedure for dealing with ambiguities in rates:--
That if on check there are differences between the rates given by the contractor in words and in figures or in amount worked out by him, the following procedure shall be followed:--
 - a) When there is a difference between the rates in figures and in words, the rates which correspond to the amounts worked out by the contractor shall be taken as correct.
 - b) When the amount of an item is not worked out by the contractor, or if it does not correspond with the rates written either in figures or in words, then the rate quoted by the contractor in words shall be taken as correct.

- c) When the rate quoted by the contractor in figures and in words tallies, but the amount is not worked out correctly, the rates quoted in figures and words by the contractor shall be taken as correct and not the amount.
- d) In the case of percentage rate tender, the tenderers are required to quote their rates, both in amount as well as in the percentage below/above the rates entered in the BOQ. In such cases, in the event of arithmetical error committed in working out the amount by the contractor, the tendered percentage and not the amount should be taken into account.
- e) All corrections in the comparative statement should be carried out neatly and clearly, and initialled by the person making the corrections. The corrections shall then be attested by the authority concerned.

19.2.2 Responsibilities of the Divisional Accountant

- (1) The responsibilities of a Divisional Accountant/Account Officer as regards the computation and checking of tender and the preparation of comparative statements, as decided by the Comptroller and Auditor General of India in consultation with the Government of India, are as follows:
 - (i) The Divisional Accountant is responsible for the safe custody of tender documents during the period when they remain in the Accounts Branch until submission to the Project Manager.
 - (ii) He is responsible for the arrangements for checking the computed tenders, i.e. for seeing that satisfactory and efficient arrangements are made for checking.
 - (iii) He should conduct personally a test check of the computed and checked tenders sufficient to satisfy himself reasonably that the checking work has been properly done.
 - (iv) He should see that the comparative statement correctly incorporates the totals as checked on the individual tenders.
- (2) The Divisional Accountant himself should not be called on to do any of the actual computing work or of the intermediate verification of the computations or of the preparation of comparative statement. His responsibility extends to the final checking arrangements and he himself doing a reasonable amount of test check. In fact, an Project Manager would be quite entitled to ask the Divisional Accountant to note on the comparative statement that as far as he could ascertain from such test check as he had been able to carry out, the statement is accurate. There is no objection for the employment of Accounts Clerks, as distinct from the Divisional Accountant, on the computation, if the work is large and the preparation of a comparative statement is urgent. It should, however, be open to the Divisional Accountant, if he thinks this the more satisfactory method of ensuring accurate check, to reserve or to detail one or more of the Accounts Clerks safely for him, to satisfy himself that any check has been properly done.
- (3) The Divisional Accountant should record the following certificate on the comparative statement:-

“Certified that, I have personally conducted a test check of all the computed and checked tenders and have satisfied myself that the checking work has been

properly done. The comparative statement correctly incorporates the totals as checked on the individual tenders.”

Para 19.2.3 — Responsibilities of Chief Finance Officer

- (1) Finance officer to the Managing Director shall be responsible to coordinate the processing of tenders in his branch as well as with PM attached with the GM so as to keep a close watch on validity of tender so that tenders are decided in time and suitable action is taken before expiry of its validity.
- (2) Finance officer shall raise all his queries or observations in one go and not in piece meal manner to avoid delay in scrutiny and processing of tenders for award of work.

19.3 Processing of tenders :--

19.3.1 Timely processing of tenders

- (1) Top priority should be given to decide the award of work on receipt of tenders. In order to minimise chances of delay, the time-table as laid down in **Appendix 16** should be observed for processing the tenders by different authorities.
- (2) The above time schedule should be adhered to strictly, and if any officer is unable to follow the same, he should invariably give reasons for the same while forwarding the tenders to the authorities competent to accept it.
- (3) In case, after receipt of tenders, it becomes necessary to forward the tenders to the higher authority for acceptance due to the tender going beyond the power of the NIT approving authority, details like:-
 - a) Validity period of the tender,
 - b) Time already taken for scrutiny, and
 - c) balance period available, should be prominently indicated on the noting sheet while forwarding the tenders to the higher authority, to ensure that there is no delay in processing of tenders and decisions are taken well in time.
- (4) PM of the CGM shall process the tender and send the same to Finance officer within 7 days of getting recommendations from the GM concerned.
- (5) Finance officer shall process the tender within 3 days and put up the same to CGM/GM.

19.3.2 Precautions to be taken while processing the tenders

The following instructions should be scrupulously followed while processing the tenders:-

- (1) The tenderers are not expected to make any post-tender modifications. Any such case should be viewed seriously, under the provisions of Form 6. The matter should also be reported to the Enlisting Authority for disciplinary action to be taken under the Rules for Enlistment of Contractors. In any case, such modifications shall not be considered.
- (2) When the tenders are under examination, no other authority should make queries or call for reports/ clarifications from the tenderers except with the approval of accepting authority.

- (3) Tenders with any condition, including conditional rebates, shall be rejected. However, tenders with unconditional rebate will be acceptable.
- (4) In case of tender where the validity period has already expired, decision to accept the same should be taken only after the validity period is got extended by the tenderer.

19.4 Acceptance of tenders

The powers delegated to the various officers of the Department for acceptance/approval of tender with or without negotiations are delegated from time to time. The same powers shall be applicable in case of rejection of tenders also.

In case amount of lowest tender falls within financial powers of MD Tender Committee but negotiated amount falls within powers of CGM/GM Tender Committee, then tender shall be accepted by the competent authority as decided by the negotiated amount of lowest tender received.

Where technical bids are also invited, the same would fall within the competency of NIT approving authority.

In case of execution of E&M work, change in model / brand of any plant & machinery involving no extra finance implications, the acceptance of the change will also fall within the competence of NIT approving authority, who will place on record the justification and circumstances for making such change. The NIT approving authority will also decide the recoveries to be made, if any, if the proposed model/brand is cheaper.

19.4.1 Conditions to be fulfilled before inviting/accepting tenders

- (1) The officers of BRIDCUL shall invite/accept tenders only after the following conditions are fulfilled:-
 - (i) The work is technically sanctioned.
 - (ii) The NIT is approved.

NOTE : Paras 2.5.1 and 14.1 of the manual may be seen respectively for accord of technical sanction and approval of NIT.

- (iii) When the tender exceeds the amount technically sanctioned for the work by an amount greater than the power of the technical sanctioning authority, revised technical sanction should be issued by the next higher authority before acceptance of tender.
- (iv) When the tender involves liability exceeding the expenditure sanction for the work by an amount greater than 10%, such excess will require a revised expenditure sanction. This should be applied for as soon as such an excess is foreseen.
- (v) An assurance should be received, either at the time of communication of expenditure sanction or subsequently, from the authority competent to

provide the necessary funds that the required funds will be allocated before the liability is incurred.

- (2) The tenders may be invited if the exigencies of work so deemed in anticipation of fulfilment of the above conditions. The tender accepting authority shall, however, ensure fulfilment of these conditions before acceptance of tenders.

19.4.2 Acceptance of tenders in anticipation of revised expenditure sanction

- (1) The Officers at appropriate levels are authorised to accept tenders in anticipation of revised expenditure sanction by the competent authority subject to the following conditions and limits:-
 - (i) In- principle approval has been given by the client department to go ahead with the work.
 - (ii) The tendered rates are certified as reasonable by the Officer accepting the tender.
 - (iii) The Officer accepting the tender, also certifies that the scope of the work, as approved by the competent administrative authority, remains unchanged.
- (2) The Officer accepting the tender involving extra expenditure must immediately report to the competent administrative authority, so as to enable it to make necessary additional provision in the budget. Expenditure in excess of the budget allotment will not be incurred without assurance of additional funds from the concerned administrative authority.
- (3) The Revised estimate for the work should be submitted within a month of acceptance of the tender to the competent administrative authority.

19.4.3 Reasonability and competitiveness of rates

The tender accepting authority shall satisfy himself about the reasonability of rates before acceptance of the tenders. Reasonability of rates shall primarily be assessed on the basis of Market Rate Justification (MRJ) statement prepared on the basis of market rates of men & material which prevailed in the area of operation / construction on the last date of receipt of tenders .For works in remote and difficult areas, due consideration should be given while adopting market rates for that particular area. The mode of preparation of Justification Statement (MRJ) is detailed in the following para 19.4.3.1 Permissible variations over the justified rates are given in para 19.4.3.

19.4.3.1 Market Rate Justification (MRJ) or Justification of tenders

MRJ or Justification statement shall be prepared for checking the reasonability of rates.

The method consists of preparing detailed analysis of rates by taking market rates of labour, materials, cartage etc. The method of analyzing item is the same as given in the standard CPWD Analysis of Rates. The major items, on the whole costing at least 90% of the estimated cost put to tender are analyzed, to work out the justified percentage on this basis. The items to be considered should be so selected that have higher estimated cost and amount. One should start with the items having the highest estimated amount, and then the next lower amount in the descending order and so on, till at least 90% of the estimated amount is reached. While preparing the justification for tender in these areas handling charges @ 2.5% are to be allowed on the cost of stipulated materials.

Any other suitable method may also be adopted, depending upon the kind of work. The adoption of a particular method should be decided judiciously by the authority competent to accept the tenders. The justification of tenders should be prepared based on prevailing marked rates only and the market rates of materials should correspond to the, specified quantity and standards & specification laid down in the Tender document. In case of tenders to be accepted by the Tender Committee, the adoption of a particular method should be decided by the concerned General Manager. For the justification of tenders, the issue rate (and not the market rate) of stipulated materials shall be considered for items stipulated for issue, irrespective of the quantity of stipulated materials stated in the draft NIT/tender documents. For justification of tenders for the materials for which the base rates have been specified under clause 10 CA, the base rates of the material stipulated under clause 10 CA shall be considered for justification statement.

Effect of following taxes is to be added:

- (i) Building and other construction workers cess as applicable in the state / union territory.
- (ii) GST at the rates levied by central Govt. from time to time..

Effect of these two taxes shall be added as under on :--

- (a) On Justification of tenders:-- To be added at the end of justified cost worked out on the basis of net prevailing market rates inclusive of all taxes i/c GST on each material considered in justification.
- (b) ON sanction of Extra item, Substituted item and rate for the quantity deviated beyond deviation limit specified under clause 12 of the General Conditions of Contract:-

To be added at the end of analysis of rate after adding contractors profit & over heads.

But nothing shall be added in analysis of rates for **Service Tax** since the same is to be reimbursed to the contractor separately. Service tax will not be applicable on constructions of non-commercial or non-industrial nature. For further details Notification No. 25/2012-Service Tax dtd. 20.6.12 and notification no... of the Deptt. of Revenue, Ministry of Finance, GOT may be reffd. to.

Contractors profit & Over head expenses @ 15% (CP-7.5% & OH-7.5%) shall be added in the analysis of rates to work out the estimated cost/ MRJ on all items of work both Schedule & Non Schedule pertaining to Civil, Electrical and Horticulture works etc. for the purpose of estimation, justification and to the additional/substituted items/deviated quantities of items to be sanctioned on market rates beyond deviation limit etc. carried out under the contract wherever applicable.

The Over Head expenses (7.5%) account for the following factors: --

- (1) Cost of engineering establishment deployed by the contractor.
- (2) Cost of effort in arranging T&P and heavy machinery which have not been considered in the

analysis of rates for the items included in the BOQ of the work..

- (3) Cost of cleaner environment at site & labour welfare facilities.
- (4) Cost of Quality Assurance set up enhancing testing lab.
- (5) Cost of office set up including engagement of necessary staff for computerized billing etc.
- (6) Cost of Earnest Money/Performance Guarantee! Security Deposits.

Therefore no extra cost is to be added in justification (MRJ) on account of various factors' mentioned above

No extra cost for T&P is to be added in Analysis of Rates prepared either to work out estimated cost of item or market rate justification of the item for E&M works.

However, special conditions, having financial bearing / implications, incorporated in NIT, which are not covered or considered above and in the analysis of rates of the items included in the BOQ of the work are required to be added on actual basis or by rough approximation although not with so much exactitude if actual analysis is not possible. It includes testing charges also if borne by the contractor.

19.4.3.2 Acceptance of tenders at justified rates with allowable variations

Provisions under para 19.4.3 of this manual, variation up to 5% over & above the justified amount rates of Market Rate Justification may be ignored. Variation up to 10% may be allowed for peculiar/difficult situations and in special circumstances. In case of remote areas and difficult hilly terrains variation upto 15% can be allowed. Reasons for doing so shall be placed on record. Tenders above this limit should not be accepted.

19.4.4 Powers of acceptance of tender with stipulated issue of materials

Where materials are stipulated for issue to the contractor, the net amount payable to the contractor after deducting the cost of the stipulated materials to be issued to the contractor at the stipulated rates, shall determine the authority competent to accept the tender.

19.4.5 Acceptance of Single Tender

Manual Tendering

There are occasions when in response to call for tenders, only a single tender is received.

In such cases when manual tendering is resorted to, prima facie, the preponderance of probability of receiving non-competitive rates is quite high because of the apprehension that the contractors might have formed a cartel among themselves in a bid to extract unjustifiably higher rates. To guard against this possibility, the powers delegated to the various officers of Department have been restricted / reduced to some extent vis-à-vis their normal delegated powers with regard to acceptance of a single tender. The intention is to make it difficult to award single tenders so as to discourage such cases.

It is not the intention that single tenders may be rejected straightaway. The only 2 preconditions that need to be satisfied, in case of manual tendering, before a single tender can be accepted are :---

- (a) Ensure that due publicity was given for inviting the tender.
- (b) Ensure that the single tenderer does not hold unjustifiably higher rates as compared to the Market rate Justification or MRJ, (which is prepared based on market rates of labour and materials prevailing on the last date of submission of tenders) plus the variations over and above the MRJ rates, permitted as per para 19.4.3.2 above.

E-tendering

With the introduction of e-tendering, the possibility of formation of a cartel amongst the contractors has been ruled out completely. The element of competition of rates is

already in- built in the cases of e-tendering about which there cannot be two opinions. Therefore, a single tender, received as a result of e-tendering cannot be seen with suspicion / distrust, as is the case with manual tendering. Therefore, such tenders, though single in number, should not be treated as single tenders and the officers should use their normal powers of delegation to accept such tenders. Unless otherwise prohibited by state Govt. Procurement rules.

However reasonability of rates must be assessed with reference to the MRJ, aforementioned, before accepting the tender.

19.4.6 Procedure for conducting negotiations

- (1) In general there shall be no negotiations on rates with the lowest tenderer. The tender shall either be accepted or rejected depending upon the reasonability of rates assessed on the basis of Market Rate Justification. It will be necessary for the tender accepting authority to obtain prior approval of the next higher authority whenever negotiation becomes necessary for reasons of urgency due to time constraints in the execution of work of urgent nature and when time is not available for recall of tenders after rejection.

Negotiations by the accepting authority shall also be permitted only in the following situations:-

- i) For clarification and confirmation on any error / ambiguity in the nomenclature / rate of item/s of work is possible to set right after negotiations with the lowest tenderer without any obvious disadvantage to the other tenderers / Govt./Nigam.
 - ii) In case of receipt of higher rates on recall of a tender which was rejected on an earlier occasion because of rates received higher than the MRJ rate plus allowable variations permitted under para I 9.4.3.2 aforementioned.
- (2) Counter offer to L-1 / lowest tenderer, to arrive at a an acceptable price, shall amount to negotiations. Post tender negotiations on rates should not normally be conducted with the tenderer, but in exceptional case where it becomes necessary to do so, negotiations should be restricted only to the lowest tenderer.
 - (3) If negotiations are required in the case of tenders to be sent to the MD /CGM/GM level Tender Committee as the case may be, for approval, the CGM/GM/PM shall negotiate with the lowest tenderer before sending the tenders to them.
 - (4) In case lowest tenderer does not agree to negotiate the rates / backs out, re-tendering shall be resorted to.

NOTE :--- (1) The term “lowest” includes the word “lower” also, when only 2 tenders are received. ‘Lowest’ does not imply that a minimum of 3 tenders must be received. More than one tender suggests competitiveness of rates. However the reasonability of rates has to be seen with respect to the MRJ, which is the only measure to assess the reasonableness of the lowest rates received.

(2) Rates quoted by the contractors are viewed / assessed as above or below the estimated cost of work. When the estimated cost is not based on the current rates of labour and materials prevailing in the market and is based on the old rates then the estimate is not realistic. In such a situation quoted rates of the contractors (who always quote rates in keeping with the current market rates) will always appear to be much higher than the estimated cost, (which estimated cost itself is not realistic). This should not unduly disturb the officers, who should always assess / measure the reasonability of rates on the anvil of MRJ . To obviate this problem it is advisable to prepare the estimate itself on the latest Schedule of Rates (SOR).

The Delhi Schedule of rates (DSR) of CPWD is the appropriate SOR from this point of view because it is updated by CPWD on a regular basis. Also in between the two revisions, quarterly cost index is circulated by CPWD thus enabling the estimators to prepare estimates on the latest / current market rates at any point of time. Hence for estimate, purposes DSR should be followed by BRIDCUL. More so because there is a dearth of capable contractors within the state of Uttarakhand who can handle big works in the difficult terrains of the state. As a result generally contractors from outside the state come in to participate in tendering for the works of Large or Multi locations projects which are of large magnitude. Basing the estimates on DSR will encourage the outside bidders in sufficient numbers to participate competitively in the construction works.

Adoption of DSR can be waived off in case of works of small magnitude i.e. single village w/supply schemes or other small projects, which are taken up on the recommendations of the village water & sanitation committee, in which the community itself participates in the execution of the works.

19.4.8 Rejection of Tenders

No tenders which are required to be accepted with the approval of the Accepting Authority of Tender Committee should be rejected by any lower authority, and all such tenders should be submitted to the accepting authority of tender committee for consideration. It will be for them to reject / approve the tender or to authorize further negotiations.

19.4.9 Communication of Acceptance/Rejection of tenders

- (1) After the tender for the **work has** been accepted, the same shall **be** communicated to the contractor in a sample form shown in Annexure-1

hereinafter. Para 20.1 may be seen for submission of the performance security or performance guarantee by the contractor.

- (2) After submission of the performance security/guarantee by the contractor in an acceptable form, an intimation to commence the work shall be given in a sample form shown in Annexure-II
- (3) Copies of these **Acceptance / Award** letters should also be endorsed to the following authorities in addition to the concerned departmental officers and the concerned branches:-
 - (i) Assistant Labour Commissioner (Central).
 - (ii) Conciliation Officer (Central).
 - (iii) Income-tax Officer (Concerned).
 - (iv) Labour Officer.
 - (v) Client organization
- (4) In special case where the work is required to be completed in a short time, and it is not desirable to allow 10 days' period for commencement of work, the BRIDCUL officers may reduce this period and make the necessary change in the contract form and the letter of acceptance of tender.
- (5) In the acceptance letter, the PM should give a reference to all the contractor's letters received with the tender or thereafter, and/or incorporate the fact of acceptance or rejection of the condition(s) mentioned in these letters of the contractor.
- (6) The tenderers whose tenders are rejected should be sent written intimation about the rejection.

19.4.10 Issue of letter of award while PM is on tour or on leave.

Following instructions may be followed in case tender is approved/accepted q by the higher authority and award letter is to be issued by PM and where expiry of validity of tender is very near and PM being on tour.

- a) Whenever tender papers are sent to PM, the envelope containing tender papers must be marked

'Tender papers'.

- b) Copy of letter of approval/acceptance of tender be sent separately to the PM. through Fax/email
- c) Whenever PM. is on tour or on casual leave, award letter, after the tender has been accepted by the competent authority, can be issued by the SRERE clearly

indicating that this letter when countersigned by PM will form part of the agreement.

19.5 Re-invitation of tenders

If the lowest tenderer backs out, there should be re-tendering in a transparent and fair manner. In such a situation, the NIT approving authority may advise call for limited or short notice tender, if so justified in the interest of work, and take decision on the basis of lowest tender. While re-tendering for the work, tender will not be issued to the contractor who has backed out.

19.6 Tender Committee

BRIDCUL has constituted a Tender Committee which acts as the highest body in the matter of acceptance of tenders / contracts and other miscellaneous matters relating to execution of works.

19.6.1 Composition of the Tender Committee

Tender committees have been formed by BRIDCUL for different ranges of the cost of works.

19.6.2 Processing of tenders by the Tender Committee

Procuring of tenders by the tender committees has been laid down by the BRIDCUL separately.

Annexure — I
(BY REGISTERED / SPEED POST)
Sample Letter of Acceptance of Tender / Award Letter

No.....

Dtd:

From The Project Manager,

Division:

BRIDCUL.

To (Name and address of the contractor)

Subject..... (Name of the work
as appearing in the tender for the work)

Dear Sir (s),

Your tender for the work mentioned above has been accepted on behalf of the Managing Director, BRIDCUL at your tendered/negotiated tender amount of Rs.....(Rupees.....only), which is.....% below/above the estimated cost of Rs..... (Rupees..... only).

1. You are requested to submit the performance security/guarantee of Rs (Rupees only) within 15 days* of issue of this letter without integrated and thereafter @ 0.1% per day late fees upto 30 days maximum. The performance guarantee shall be in the prescribed form as provided in clause 1 of the General Conditions of Contract for BRIDCUL Works, and shall be valid up to.....
2. On receipt of the prescribed performance guarantee, necessary letter to commence the work shall be issued, and the site of work will be handed over to you thereafter.
3. Please note that the time allowed for carrying out the work as entered in the tender (.....days/weeks/months) shall be reckoned from the 7th day* after the date of issue of this letter.

Yours faithfully,

Project Manager

For and on behalf of Managing Director, BRIDCUL
.....Division, BRIDCUL.....

Note: * Para 19.1(2) & (3) may be seen.

Annexure —II
[BY REGD. / SPEED POST]
Sample Letter for Commencement of Work

No.....

From The Project Manager,

Division:

BRIDCUL.

To (Name and address of the contractor)

Subject..... (Name of the work as appearing in the tender for the work)

Ref: 1. Performance security/guarantee submitted by you vide your letter

No.....dated.....for the above work.

2. This office letter of Acceptance of your tender no date

Dear Sir (s),

1. You are requested to contact the Resident Engineer (complete address) for taking possession of site and starting the work at once.

2. In continuation to the letters referred to above, you are requested to attend this office to complete sign the formal agreement within fifteen days from the date of this letter.

Yours faithfully,

Project Manager For and on behalf of Managing Director, BRIDCUL

.....Division.....

SECTION 20

SECURITY DEPOSIT AND PERFORMANCE GUARANTEE

20.1 Performance guarantee (P.G)

P.G is meant to guarantee / ensure proper performance of the contract

(1) The successful tenderer, hereafter referred to as the contractor, shall deposit an amount equal to 5% of the tendered and accepted value of the work (without limit) as performance guarantee in one of the following forms:-

- i) Cash (in case guarantee amount is upto Rs 10000/-)
- (ii) Deposit at Call Receipt/Banker's Cheque/Demand Draft/Pay Order of a Scheduled Bank. (In case guarantee amount is less than Rs. 1,00,000/-)
- (iii) Government securities.
- (iv) Fixed Deposit Receipt (FDR) of a Scheduled Bank.
- (v) An irrevocable bank guarantee bond of any scheduled bank or the State Bank of India in the prescribed form given in NIT.

(2) The time allowed for submission of the performance guarantee by the contractor shall be decided by the NIT approving authority for a period ranging from 4 to 15 days of issue of the letter of acceptance, depending upon the magnitude and/or urgency of the work. This period can be further extend at the written request of the contractor by the Engineer-in-charge for a maximum period ranging from I to 15 days with late fee @0.1% per day, of the performance guarantee amount. Such time period may be mentioned in schedule 'F' while finalizing the NIT. A sample copy of the letter of acceptance to the contractor for submission of the performance guarantee is given in Annexure-I of section 19.

(3) The date of start of the work may accordingly be fixed reckoning it after 7 to 30 day from the date of issue of letter of acceptance.

(4) The letter for commencement of work shall be issued to the contractor only after he submits the performance guarantee in an acceptable form. A sample copy of this letter is shown in Annexure II of section 19..

(5) However in case of contracts involving maintenance of building & services / other work after construction of the same building & services / other work beyond defect liability period, 50% of the P.G shall be retained as security deposit, which shall be returned year wise proportionately. The validity period of P.G shall be extended accordingly.

(6) In the event of recession of contract, the P.G and the Security deposit shall stand forfeited in full.

20.2 Security deposit (SD)

(1) The security deposit shall be collected by deductions from the running bill of the contractors at the rate mentioned below. The security deposit can also be deposited in cash or in the form of Fixed Deposit Receipts etc. ..

(2) A sum 2.5% of the gross amount of the bill shall be deducted towards the SD from each running bill as well as final bill of the contractor. Such deductions shall be made unless the contractor has deposited the amount of security at the rate mentioned in cash or Fixed Deposit Receipts. This is in addition to the performance guarantee that the contractor is required to deposit as per para 20.1.

(3) Security deposit can be released against bank guarantee issued by a schedule bank on its accumulation to a minimum amount of Rs. 5 lakhs subject to the condition that amount of any bank guarantee except last one, shall not be less than Rs. 5 lakhs.

(4) The Bank Guarantee submitted against Security Deposit shall initially be valid up to the stipulated date of completion of the work plus maintenance period which shall be extended further from time to time depending upon extension of contract granted under provisions of the bid/contract.

20.3 Forms of Security Deposit

(1) The security from a contractor should be taken in one of the forms as given below:--

(a) Deposit Receipts of a scheduled bank / State Bank of India in the name of the MD BRIDCUL.

(b) Cash deposits of contractors may be converted, at the cost of the depositor, into one or more of the forms of interest bearing securities provided that:-

- (i) the depositor has expressly desired this in writing)
- (ii) the acceptance of the new form of security is permissible under the rules as also under the terms of the agreement / bond.

Note: Cash that has actually been received or recovered from the contractor's bill(s) may be converted even though the full amount of the deposit, which is being paid in instalments, has not yet been realised.

20.4 Repayment/Retransfer of Security Deposit

No security deposit should be repaid or re-transferred to the depositor, or otherwise disposed off, except in accordance with the terms of his agreement or bond.

Note: The depositor's acknowledgement should be obtained in all cases of security that is returned. When an interest bearing security is returned or re-transferred, the acknowledgement should set forth the full particulars of the security.

20.5 FDR's as Security Deposit

(1) Since Fixed Deposit Receipts (FDR's) are not Government securities, there is no objection to their being accepted even if the period for the completion of the work is less than one year. It is further clarified that the Fixed Deposit Receipts should be accepted as security even if it does not cover the stipulated period/extended period, defect liability period.

(2) The Fixed Deposit Receipt tendered by the State Bank of India or any of the Scheduled Banks is acceptable as security. There is, therefore, no objection to the investment by the Divisional Officers of the amount of security, deducted from the running bills of the contractors in Fixed Deposit Receipts of the State Bank of India or any of the Scheduled Banks at the request of the contractor.

(3) It may, however be seen that the Fixed Deposits Receipt is made out in the name of "The Managing Director, BRIDCUL.

Annexure
Form of Performance guarantee / Bank guarantee bond
[Reference para 20.1 .(1)(iv)]

In consideration of the Managing Director of BRIDCUL (hereinafter called “The Nigam”) having offered to accept the terms and conditions of the proposed agreement between..... and..... (here in after called “the said contractor(s) ”for the work.....(hereinafter called “the said agreement”} having agreed to• production of an irrevocable Bank Guarantee for Rs (Rupees only) as a security/guarantee from the contractor(s) for compliance of his obligations in accordance with the terms and conditions in the said agreement.

1. We(hereinafter referred to as the “Bank”) hereby undertake to (indicate the name of the Bank) pay to the Nigam an amount not exceeding Rs (Rupees only) on demand by the Nigam.

2. We..... do hereby undertake to pay the amounts due and payable (indicate the name of the Bank) under this Guarantee without any demur, merely on a demand from the Nigam stating that the amount claimed is required to meet the recoveries due or likely to be due from the said contractor(s). Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this Guarantee shall be restricted to an amount not exceeding Rs(Rupeesonly).

3. We, the said Bank, further undertake to pay to the Nigam any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any Court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under, and the contractor(s) shall have no claim against us for making such payment.

4. We..... further agree that the Guarantee herein contained shall (indicate the name of the Bank) remain in full force and effect during the period that would be taken for the performance of the said agreement, and it shall continue to be. enforceable till all the dues of the Nigam under or by virtue of the said agreement have been fully paid, and its claims satisfied or discharged, or till the Engineer-in-charge, on behalf of the Nigam, certifies that the terms and conditions of the said agreement have been fully and properly carried out by the said contractor(s), and accordingly discharges this guarantee.

5. We further agree with the Nigam that the Government (indicate the name of the Bank) shall have the fullest liberty without our consent, and without effecting in

any manner our obligations hereunder, to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Nigam against the said contractor(s), and to forbear or enforce any of the terms and conditions relating to the said agreement, and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said contractor(s) or for any forbearance, act of omission on the part of the Nigam or any indulgence by the Nigam to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. This Guarantee will not be discharged due to the change in the constitution of the Bank or the contractor(s).

7. We..... lastly undertake not to revoke this Guarantee except with (indicate the name of the Bank) the previous consent of the Nigam in writing.

8. This Guarantee shall be valid up to..... unless extended on demand by the Nigam. Notwithstanding anything mentioned above, our liability against this Guarantee is restricted to Rs..... (Rupees.....only), and unless a claim in writing is lodged with us within six months of the date of expiry or extended date of expiry of this Guarantee all our liabilities under this Guarantee shall stand discharged.

Dated the.....day of.....
For.....(Indicate the name of the Bank)

SECTION 21

REFUND OF SECURITY DEPOSIT AND PERFORMANCE GUARANTEE

21.1 Conditions for refund of security deposit and performance guarantee

The security deposit and performance guarantee shall not be refunded to a contractor except in accordance with the terms of his security bond or agreement.

21.1.1 Recording of completion certificate

In case the completion certificate is recorded by a Junior Engineer/Resident Engineer, the Divisional Officer concerned shall countersign it within one month. In case of works costing more than the normal acceptance power of tender of the Project Manager, the original certificate must be recorded by the Sub-Divisional Officer and countersigned by the Project Manager within one month. If the Sub-Divisional Officer is not available the Project Manager should himself record the certificate.

21.1.2 Refund of performance guarantee

The performance guarantee shall be refunded to the contractor soon after the completion of the work and recording of the completion certificate as above.

However, in case of contracts involving maintenance of building and services / other work after construction of the same building and services / other work , 50% of the P.G shall be retained as Security deposit. The same shall be returned yearwise proportionately.

21.1.3 Refund of security deposit

(1) In the case of works executed against agreements on Forms 7/ 8, the refund of security deposit to a contractor on the completion of works is regulated by clause 17 of the contract.. This clause envisages the issue of a completion certificate in terms of the Contract. Such completion certificate shall be issued by the authority in a manner detailed in section 29.

(2) The period of maintenance as prescribed in the Contract will be counted from the date of completion as recorded in the certificate mentioned above. The security deposit of the contractor should be refunded by the Project Manager after the prescribed maintenance period as stipulated in the agreement or after the date in which the final bill has been prepared and passed for payment, whichever is later.

However, in case of contracts involving maintenance of building and services! other work after construction of the same building and services /other work, 50% of the P.G retained as Security deposit plus 2.5% Security deposit deducted should be refunded year wise proportionately.

Release of Security deposit will also be subject to Labour Officer's clearance as per clause 45 of the GCC.

(3) The Divisional Officers should keep a close watch on the delays in the refund of security deposit to the contractors, and for this purpose they should periodically review the Register of Security Deposit maintained in the Division.

21.2 Refund of security deposit in cases of delay in Final bill

(1) Where there is a delay in payment of final bill, the General Manager shall make an assessment of the likely recoveries against the contractor, and order release of as much security deposit as possible unless he has reasons to withhold the release of security deposit to the contractor. These reasons should be recorded by him in writing.

(2) The General Manager shall satisfy himself that the following formalities are completed by all concerned before exercising his discretionary power for part payment of security deposits:-

- (i) Formalities to be completed by the departmental officers
 - a) Completion of prescribed test checks of measurements by Project Manager and Resident Engineer.
 - b) Sanction of extra/substituted items by the competent authorities.
 - c) Decision on levy of compensation, etc.
- (ii) Formalities to be completed by contractor
 - a) Submission of final measurements to the department by the contractor & acceptance of final measurement. by the departmental officers.
 - b) Applying for extension of time as and when required immediately.
 - c) Rectification of defects pointed out by the departmental officers.
 - d) Completion of work in all respects, including clearance of site, etc.\
 - e) Return of surplus materials issued by the department immediately on completion of work or as and when it comes to light.

(3) There is no need to wait for the contractor to apply for refund of his security deposit. The Hand Receipt for this purpose should be prepared by the Junior Engineer/Resident Engineer as soon as it is due, and sent to the Divisional Office for payment.

21.3 Effecting of recoveries

Once the recoveries become due from a contractor, the same should be effected from the money due to the contractor either from the same work or from any other

work or from the security deposit. Action to recover the overpaid amount should not be kept pending or kept in abeyance on account of the case being before the arbitrator. Action in terms of the award by the Arbitrator can be taken after the award is received and accepted by the competent authority. The recovery of overpaid amounts should be effected as early as possible and the recovery should not be kept in abeyance during the pendency of arbitration proceedings.

21.4 Time limit on claims for refund of security deposit

The claim for refund of security deposit is governed by the Limitation Act. The period of limitation is 3 years, commencing from the date that the right to the due accrues. In the case of security deposit paid along with the individual contract, the right to the due would accrue under the maintenance period, or the date of payment of final bill, whichever is later.

21.5 Refund of security deposit regarding specialized items of work

(1) For some of the specialized items of work such as anti-termite treatment, waterproofing work, kiln seasoned and chemically treated wooden shutters etc. that are entrusted to specialized firms or registered contractors who associate specialized agencies as per para 15.3.(1) of this Manual, the contractor/firm executing the work should be asked to give a specific guarantee that they shall be responsible for removal of any defects cropping up in these works executed by them during the guarantee period. The form of the guarantee to be executed by the contractors is given vide Appendix - 13.

(2) It has further been decided that the security deducted from the bills of the contractors shall be refunded to him after expiry of maintenance period in accordance with the terms of the contract in this behalf.

(3) The Divisional Officer shall, however, maintain a register in which all these works carried out in the Division shall be entered and which shall be periodically reviewed by the Project Manager. The Register will contain the following heads:

- (i) Name of the work:
- (ii) Date of completion:
- (iii) Specification in brief:
- (iv) Rate paid.
- (v) Name of the firm/contractor
- (vi) History* of all defects, with date(s) of occurrence, noticed during the guarantee period. (vii) Action taken by the firm/contractor.

*The history will help as a ready reference about the efficiency and the quality of the, work done by the firm/contractor.

21.6 Divisional Accountant's responsibility for prompt refund of security deposit

In order to avoid delay in the refund of security deposit to the contractor, the Divisional Accountant should put up to the Divisional Officer every month a list of all the cases where the security deposit becomes due for refund so that the requisite certificate is immediately obtained by the Divisional Officer from the Sub-Divisional Officer concerned and the security deposit is refunded without waiting for any application from the contractor.

SECTION 22

ESSENTIAL FEATURES OF AGREEMENTS/CONTRACTS

22.1 General principles and guidelines

(1) The Tender Committee has full powers to accept tenders, and they are authorized to frame subsidiary rules relating to the calling for or acceptance of the tenders and the general procedures connected with the contracts.

(2) There are, however, certain general principles and guidelines laid down for acceptance of tenders that are required to be observed by subordinate authorities empowered to enter into contract or agreement involving expenditure from Public Funds.

(3) No contract shall be made by a subordinate authority that has not been directed or authorized to do so by or under the orders of the Board of Directors.

(4) The Managing Director should be made a party to every contract of the Nigam and the words “for and on behalf of the Managing Director of BRIDCUL” should follow the designation appended below the signature of the officer who is authorized in this behalf and who is executing the contract.

(5) The terms of contract must be precise and definite and there must be no room for ambiguity or misconstruction therein. In BRIDCUL, standard contract forms have been prescribed to avoid this possibility. The alternative conditions given in the standard forms that are not applicable to a particular contract should be invariably scored out. In cases where the standard forms of contracts are not convenient to be used, legal and financial advice should be taken in drafting the contracts before they are finally entered into.

(6) No relaxation of specification in a contract, or relaxation of the terms of an agreement entered into by the BRIDCUL should be made without proper examination and consequence of such relaxation. The interest of the public exchequer should be taken due care before agreeing to any relaxation of agreement or contract. Save in exceptional circumstances, no work of any kind should be commenced without prior execution of contract documents. Even in cases where a formal written agreement is not made, no order for supplies etc. should be placed without at least a written agreement as to the price and other terms of agreement.

(7) “Cost Plus” contract should be avoided except where they are inevitable and prior written approval of Managing Director has been obtained.

Explanation:-- A “Cost Plus” contract means a contract wherein the price payable for supplies or services under the contract is determined on the basis of the actual cost of production of the supplies or services rendered plus profit either at a fixed rate or unit or at a fixed percentage on the actual cost of production.

(8) The terms of the contract once entered into should not be materially varied without the previous consent of the authority competent to accept the tender/offer for the contract as so varied. Such variation involving payment to contractors by way of compensation or otherwise outside the strict terms of the contract or in excess of the contract rates shall be authorized by the MD/CGM as per the powers delegated to them. A variation of the terms of contract, which has been approved by the competent authority, shall be made by writing executed “for and on behalf of the Managing Director of BRIDCUL” by an officer who is authorized to execute the original contract.

(9) No contract involving an uncertain or indefinite liability or any condition of an unusual) character should be entered into without the previous consent of the Board of Directors.

22.2 Execution of agreements

(1) *Power to sign agreements:-*

(i) The Divisional Officer shall sign all agreements for execution of works “for and on behalf of the Managing Director of BRIDCUL” after the acceptance of tenders by the competent authority.

(2) *Avoidance of delay:-*

There should be no delay in executing the agreement as soon as a tender has been accepted by the competent authority.

(3) *Corrections in the tender papers:-*

(i) The Divisional Officers/Sub-Divisional officers should see that conditions not existing in the approved tenders are not in any case allowed to be embodied in the agreements.

(ii) Before signing an agreement it must be ensured that no conditions are inserted which were inadvertently omitted in the tender papers, though included in the NIT. Similarly, no errors, which might have inadvertently crept in the NIT should be corrected.

(4) *Recording of date of acceptance of tender in the agreement:-*

The date of acceptance of tender as shown in the letters of acceptance of tender and award of work issued to the contractor, which form part of the agreement, should be indicated in the space at the bottom portion of page 4 of contract agreement Form 7 or 8 as the case may be.

(5) Record of agreements:--

A record of the agreements drawn up should be kept in the Register of Agreements

22.3 Supply of copies of contracts to contractors

(1) Two sets of contract documents should be prepared and signed by both the parties on each page. One of the sets should be stamped “Original” and the other “Duplicate”. The duplicate copy should be supplied to the contractor free of cost

(2) For any additional copies required by the contractor the following prices be charged for each copy:

(i) Works costing upto Rs. 1 lakh. Rs. 150/-

(ii) Works costing between Rs. 1 lakh and Rs. 50 lakhs. Rs. 500/-

(iii) Works costing more than Rs. 50 lakhs and upto Rs. 2 crores. Rs. 1000/-

(iv) Works costing above Rs. 2 crores. Rs. 1500/-

(3) The additional copies should not be marked as “Triplicate”, but should only be certified as True copy.

22.4 Certification and safe custody of agreements

(1) Correctness of agreements:--

The agreements should be properly checked and compared in the office of the Project Manager/Resident Engineer with the Notice Inviting Tenders as approved by the competent authority. The Divisional Accountant will be held personally responsible for any mistake that is found subsequently after the agreement has been formally signed in respect of agreements signed by the Project Manager. Also, he should ensure that before copies of the accepted agreements are forwarded to the authorities concerned, they are complete in all respects.

(2) Custody of agreements:-

(i) The original contract documents should be kept in the personal custody of the Engineer-in-Charge (PM) and should be given to the Divisional Accountant whenever required by him after obtaining acknowledgement.

(3) Supply of certified copies of the agreement:-

(i) Certified copies of the agreements for which tenders are accepted by an authority higher than the Divisional Officer should be furnished to that authority, by the

Engineer-in-Charge. The authority which accepted the tender, on receipt of the copy of agreement from the Divisional Officer, will ensure that the agreement is in accordance with the accepted tender and if mistakes are found, communicate the same to the Divisional Officer.

(ii) The Divisional Officer shall incorporate the corrections and send certified copies of the agreement to the following:---

- (a) Tender accepting authority,
- (b) Chief Accounts Officer
- (c) Divisional Accountant,
- (d) Resident Engineer(s) in charge,
- (e) Junior Engineer(s) in charge.

(iii) It has been observed that there is a lot of avoidable delay in the supply of copies to Audit/Pay and Accounts Office. According to constructions, a copy is required to be supplied to Audit/Pay and Accounts Office latest within 4 weeks of acceptance of a tender.

(3) Certification of agreement:

- (i) The Divisional Officers should certify' each copy of an agreement as "True copy" and put their full signatures in token of such certification.
- (ii) Also, the original, duplicate and all copies of an agreement should be properly sealed.

(5) Payments only after execution and supply of copies of agreement
In the absence of execution of formal agreement, the first payment should not be made to the contractor without specific sanction from the General Manager. No subsequent payment(s) should be made unless the agreement has been signed.

22.5 Weeding out of Old Agreements

(1) Formation of Committee :---

For weeding out old agreements, a Committee consisting of the following shall be constituted by the Managing Director :

- (a) General Manager
- (b) Financial Officer to Managing Director
- (c) Project Manager of the concerned Division
- (d) Divisional Accountant of the concerned Division.

(2) The Committee will review all agreements for which final bill has been paid at least 10 years earlier and will decide which of those are to be weeded out, considering the points given in (a), (b) and (c) below.

The Committee will record the following certificate before weeding out/destruction of such records:--

- (a) The agreements are not required to be preserved for legal references, such as arbitration/court cases, or any other claims of contractor/department.
 - (b) The agreements are not required to be preserved for any pending Statutory Audit/Internal Audit paras, or settlement of any accounts affecting the exchequer/Nigam.
 - (c) The Committee is satisfied that these records are no more required for any other referred cases etc., and no claims in respect of such records are likely to arise in future.
- (3) The Committee will also prepare a list of such records as per Performa (given in Annexure below) for all agreements that are weeded out.

22.6 Supplementary agreements

(1) Where it is not desirable to keep the complete contract open for minor items, execution of which is not immediately possible on account of:

- (i) Certain prerequisite(s) which is(are) not the responsibility of the contractor, or
- (ii) Execution of maintenance/operation of equipments and installations for a specified period after completion of the construction/erection work.

In such cases the main contract may be finalized, and the residual work may be got done through the same contractor by execution of a Supplementary Agreement on the form prescribed vide **Appendix 14**.

(2) The authority competent to accept the tender will be the authority to order provisional closure of the original contract and drawing up of the supplementary agreement.

(3) The bill in relation to the work already done by the contractor against the first or original agreement should be provisionally finalized on the Final Bill Form (Yellow Paper) by adding the words "Provisional Final" on the top as well as against the entry "Serial number of this bill" of the said Bill Form. As per condition 2 (f) of the Supplementary Agreement, the final bill relating to the entire work under the two agreements, i.e. original and supplementary agreements, shall be prepared after completion of the entire work on the Final Bill Form (Yellow Paper)

22.7 Completion of Agreements

Adequate care should be taken to complete the agreement to be entered into between the contractor and the Project Manager for and on behalf of the Managing Director of BRIDCUL.

(1) Constituents of an agreement

(a) A complete agreement would consist of:-

- (i) Notice inviting tenders on Form 6 (which is invariably issued by the Divisional Officer irrespective of the fact whether he is competent to accept the tender or not),
- (ii) Pamphlet or any other for, used for the contract,
- (iii) Schedule of Quantities which indicates items of work, quantity, rates, unit, amount,
- (iv) Letter of the contractor submitting the tender,
- (v) Other letters of the contractor and the departmental officers that were exchanged before the tender is accepted,
- (vi) Letter of the Project Manager communicating acceptance of the tender, and
- (vii) Letter of the Project Manager issued for the commencement of the work (after submission of the performance security/guarantee by the contractor).

(b) BRIDCUL Safety Code, Model Rules for protection of health and sanitary arrangements for workers employed by the BRIDCUL or its contractors, BRIDCUL Contractors' Labour Regulations, Fair Wages clauses etc. should form part of the agreement.

(2) Signing of all correction slips by the contractor: ---

Instances have come to notice where there are a number of correction slips which are required. to be inserted at the time of drawing the agreement, in some cases the contractors fail to sign one or more correction slips resulting in dispute and disregarding claims of the Department. As such, special care is required to be taken to see that all corrections, additions, alterations, or slips attached to the agreements are duly signed both by the contractor and the Project Manager.

Annexure
Performa for weeding out and destruction of old agreements

[Reference para 22.5(3)J

- (1) Division..... (4) Project Manager
- (2) Circle..... (5) Chief General Manager.....
- (3) Zone..... (6) Managing Director

S.No	Name of Work	Agreement No.	Agency	Date of Start	Date of Completion (Stipulated)	Date of completion (actual)	Estimate cost put to tender	Tendered amount	% above/below	Vr. No & date of final bill	Amt of final bill	Audit para if any	Arbitration case, if any	Remark
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

SECTION 23
SECTION-23
EXTRA SUBSTITUTED AND DEVIATED ITEMS OF WORK

23.1 Deviations

- 1) Deviation means deviation in quantities of items, i.e. where there is increase or decrease in the quantities of items of work in the agreement.
- 2) The completion cost of any agreement for Maintenance works including works of up gradation, aesthetic, special repair, addition/alteration shall not exceed 1.25 times of the contract amount.

23.1.1 Market rates for quantities deviating beyond certain limit

- a) As per provisions of clause 12.2 of GCC, in case of agreement items, substituted item, agreement cum substituted items which exceed the limit stipulated in schedule 'F' of the contract, the contractor within 15 days of receipt of order or occurrence of the excess, can claim revision of rates, supported by proper analysis, for excess quantities. Engineer-in- Charge (PM) shall consider the analysis submitted by contractor and determine the rates on the basis of market rates. Further as per provision of clause 12.3 of GCC, in case market rates are less than the agreement rates then in such a case Engineer-in-Charge should give notice to the contractor within one month of occurrence of the excess and should decide the rates based on market rates considering the reply of contractor. The rates should be worked out by adopting the market rates of material/labour, prevailing at the time of occurrence of excess, in the relevant item as per the method adopted in the justification.
- b) For maintenance works including works of upgradation, aesthetics, special repair. addition/alteration :-- In the case of contract items, which exceed the limits laid down in schedule- F, the contractor shall be paid rates specified in the BOQ. Further as per provision of clause 12.3 of GCC, in case market rates are less than the agreement rates then in such a case Engineer-in-Charge should give notice to the contractor within one month of occurrence of the excess and should decide the rates based on market rates considering the reply of contractor.

23.1.2 Sanction of deviations

- a) For Project and Original works:-

Apart from obligation of sanctioning rates under the provisions of contract, a proper check is needed on deviations in quantities on higher/lower side for each and every item. The following procedure shall be followed in sanctioning the deviation items:-

- 1) The deviations shall be sanctioned by the officers as per their delegation of powers.
- 2) In case of deviations occurring in the quantities of substituted/extra items! deviation in quantity of any item already sanctioned, then revised sanction should be taken from the competent authority.
- 3) Total deviation in quantity of an item/extra items shall be sanctioned by one authority only whosoever is competent to sanction total deviation of the item.

- 4) Minus deviation is to be sanctioned on the basis of agreement rate irrespective of deviation limit. ***The amount of a deviation statement shall be the sum of absolute value of deviated amounts of all individual items. (B)*** For Maintenance works including works of upgradation, aesthetics, special repair, addition/alteration

In the case of contract items, which exceed the limits laid down in schedule-F, the contractor shall be paid rates specified in the BOQ. Apart from obligation of sanctioning rates under clause 12.3 of GCC/contract, a proper check is needed on deviations in quantities on higher! lower side for each and every item. In order to exercise proper check on deviations, the following procedure shall be followed

The amount of a deviation statement shall be the sum of absolute value of the deviated amount of all individual items.

23.2 Extra/Substituted Items

23.2.1 Definition

- (1) Extra items of work are items that are completely new, and are in addition to the items contained in the contract.
- (2) Substituted items are items that are taken up with partial modification or in lieu of items, of work in the contract.
- (3) One agreement item can be substituted by multiple items.
- (4) Resident Engineer/Project Manager should anticipate any extra item that may be necessary for the execution of the work, and they shall initiate the case after obtaining prior concurrence for its approval from the competent authority. Such cases shall be expeditiously processed at all levels to minimise delay in the execution of the work. But for projects / original works, no approval in principle of TS authority is required for EI/SI item.
- (4) Pendency of such items shall be closely monitored by Project Manager and higher level officers. Para 5.5 of this Manual may be referred to regarding the submission of monthly progress reports for large value works by the contractors, in which such pending items are to be highlighted by the contractors.

23.3 Determination of rates for extra items

A. For Project & Original works.

- (1) The rate of extra items and deviation items beyond the permissible limit will be worked out at market rates prevailing at the time of commencement of execution of these items.
- (2) For working out rates the contractor shall submit his rates along with proper analysis for all extra items. These shall be duly considered by the Engineer-in-Charge while finalizing the rates or forwarding the statement(s) for obtaining the approval of the competent authority.
- (3) Nothing is to be added in the analysis of rates on account of service tax (which will be reimbursed to the contractor by the Engineer-in-Charge on satisfying himself

that the contractor has actually and genuinely paid the tax) but effect of other Construction Workers' Cess Act, 1996 applicable will also be added in the analysis of rates for the deviated/extra/substituted items For detail also refer to para 19.4.3.1 of this manual.

B.) For Maintenance works including works of upgradation, aesthetics, special repair, addition! alteration: In the case of Extra Item(s) / substituted item(s), being schedule items (SOR items), these shall be paid as per the schedule rate plus cost index (at the time of tendering) plus! minus the %age above/ below the quoted contract amount. Payment of Extra item/s or Substitute item/s in case of non-schedule items (non SOR items) shall be made as per market rates prevailing at the time of occurrence / execution of the item at site. In the case of contract items, which exceed the limits laid down in schedule- F, the contractor shall be paid rates specified in the BOQ.

23.4 Measurements for inadmissible items In case of items that are claimed by the contractor but in the wisdom of the Department are not admissible for payment, measurements should be recorded without prejudice, for record purposes only, so that in case it is subsequently decided to admit the contractor's claims there should be no difficulty in determining the quantities of such work done. A suitable remark in the MB should, however, be made in red ink against such measurements to guard against payment.

SECTION 24

SITE ORDER BOOKS AND INSPECTION REGISTER

24.1 Maintenance of Site Order Books

(1) The Site Order Books shall be maintained in the form prescribed in **Appendix 15**. The Site Order Book shall be printed and its pages machine numbered and issued by the Project Manager in different sizes containing sufficient number of pages, depending upon the magnitude of the work.

(2) A flyleaf should be attached with each Site Order Book containing instructions regarding maintenance of Site Order Books.

(3) These will be maintained properly and preserved for a period of 5 years or up to the time all disputes/arbitration cases of the work are finally settled, whichever is later, after completion of a work in the same manner as a Measurement Book.

(4) The following procedure shall be followed regarding the maintenance of Site Order Books

(a) Senior Officers of the rank of General Manager and above shall communicate their observations by way of inspection notes.

(b) Verbal orders of Senior Officer :--

Whenever any Senior Officer gives verbal instructions to his Junior Officer at the site of work, it is necessary that he should confirm such orders in writing. In any case, it should be the responsibility of the Junior Officer to get these confirmed in writing. Though verbal orders have got to be confirmed in all cases, implementation of these verbal orders should not be delayed for want of confirmation.

(c) Observations of the Architect during his site inspection :--

While carrying out field inspections, the Architects may point out architectural defects through separate inspection notes, and their observations shall be acted upon by field staff after proper examination from technical, contractual and financial angles.

(d). As far as the Project Manager and Resident Engineer are concerned, they should invariably sign the Site Order Book in token of their having read all the instructions issued by various Officers and replies made thereto. In case the Project Manager or Resident Engineer himself wants to give any instructions, he should record them in the Site Order Book. In regard to important matters, they may find it necessary to communicate such orders even in writing in the form of inspection notes.

(e) The Junior Engineer/Resident Engineer should also record his observations in the Site Order Book if he finds any defective work going on, or if the contractor is not complying with any of the terms of the contract, or on the slow progress of work, if any.

(f) The Site Order Book should be maintained at the site of the work, and it should never be removed from there under any circumstance.

(g) Recording of observations by the contractor :--

The contractor or his authorized agent will also be at liberty to note his difficulties etc. in this Book.

(h) Recording of compliance of orders/instructions:-

The compliance of orders/instructions given by the supervisory staff and the date(s) of its(their) compliance should be recorded side by side in the Site Order Book by the Junior Engineer/Resident Engineer with dated initials. The Project Manager should also periodically review the Site Order Book to ensure that it is being properly maintained and used.

(i) Verification of Site Order Book before releasing payment
The Site Order Book should be consulted at the time of making payments to the contractor.

The Resident Engineer should record the certificate on the bill(s) submitted by the contractor to the effect that the Site Order Book has been verified before signing such bill(s). This would enable the Resident Engineer to ensure whether the defects pointed out during construction have been rectified or not, and also to propose part rates, if necessary, before the payments are made for the items of work for which defects were pointed out but have not been rectified.

24.2 Maintenance of **Inspection Register**

(1) An Inspection Register is required to be maintained at every site of work, duly issued by Project Manager and docketed from the Division Office.

(2) The proforma for the inspection Register shall be as per Annexure given below.

(3) Entries regarding site visit of senior officers

(i) Whenever he visits the site, the General Manager/CGM shall record the date and time of his visit, items inspected and his observations. Entry of visit should be made even if no defects are observed.

(ii) Similarly, the Managing Director shall record his observations in the Inspection Register, at least in 50% of his visits, and in other visits he shall at least sign the Inspection Register in token of his visit to the work.

(iii) If for some reason, the Managing Director is not in a position to do so he may direct the Project Manager to record his observations in the Inspection Register and send a copy of those observations to the Managing Director by way of confirmation.

(4) Alternatively, the Managing Director /CGM/General Manager may issue inspection notes, copies of which shall be pasted in the Inspection Register.

(5) It will be the responsibility of the Project Manager to ensure that the observations of the inspecting officers for each and every visit are available in the Inspection Register, either through recorded notes or through pasting of the inspection notes.

(6) Carrying over senior officers' observations to the Site Order Book:--

The Project Manager/Resident Engineer shall carry over such observation and defects on which action is to be taken by contractor to the Site Order Book with appropriate cross references in the Inspection Register.

(7) Review of observations for compliance :--

It is also necessary that the observations recorded in the Inspection Register by the Managing Director /CGM/General Manager be reviewed during their subsequent inspections to ensure their compliance.

(8) These are also required to be reviewed during Quality Assurance Inspection.

Inspection Register

Name of work:

S. No	Date and Time	Officer's name and designation	Items inspected and specific defects noticed & action to be taken	Signature	Defects taken to site order book/letter written			Final action/result
					Site Order Book page no./letter no.	Date	Sign of RE/PM	
1	2	3	4	5	6	7	8	9

SECTION 25

ISSUE OF MATERIALS TO CONTRACTORS

25.1 Issue of materials

(1) Issue of materials to works, whether from stock or by purchase, transfer or manufacture, are divided into two classes:

(i) Issue to contractor:--

Issue of materials to contractors with whom agreements in respect of completed items of works i.e. for both labour and materials have been entered into.

(ii) Issue direct to works:

Issue of materials when work is done departmentally or through a contractor whose agreement is for labour only.

(2) In view of likely liability of Sales tax, it has been decided not to stipulate materials in the contract for issue to contractors. However, CGM of concerned region is empowered to take a decision on a case to case basis, based on merit.

Wherever such approval is obtained following shall be followed :--

The issue of materials to contractors is to be stipulated in contracts, which are for completed items of work, only in the following circumstances:

(i) When it is necessary to retain in the hands of Nigam the supply of imported materials.

(ii) When, in the interest of work, or with the object of utilizing existing stocks or materials, it is desirable to retain in the hands of Nigam the supply of certain other materials as well, and a condition to this effect has been inserted in the contract.

(3) Stipulation of materials to be issued by the Department :---

(i) Stipulated materials shall be issued for use at site on works, for all the items where such materials are required.

(ii) It should also be ensured that description of the materials to be issued should be adequately specified in order to obviate chances of any dispute. For example. if cement is specified for issue, its grade and colour, i.e. whether it is grey cement or white cement, should be stated clearly and also whether it will be in bags or otherwise.

(iii) The contract should specify:--

a) the materials to be supplied by Nigam for use on the work,

(b) the place or places of delivery, and

(c) the rates to be charged to the contractor for each description of materials.

(iv) The rates to be charged to the contractors for materials to be supplied should be definitely specified (vague provisions e.g. at stock rates should be avoided) and if intending contractors had been told that the materials would be supplied at certain rates and asked to tender on that assumption. then that rate should be adhered to in the contract.

(v) No carriage or incidental charges are borne by Nigam for moving the materials beyond the place where the contractor has agreed to take delivery thereof.

(vi) The contractor should be held responsible for obtaining from Nigam all such materials required for the work, and for making payment for them by deduction from his bills at the rates specified, regardless of fluctuation in the market rates or in the stock rates of the Department.

(vii) Conditions for supply of departmental materials should be so explicit that no doubt or ambiguity is left which may encourage the contractor to derive undue financial benefit subsequently. The tender documents should include the specific items of work for which materials are intended to be issued by the department with detailed description of materials. (4) Stipulation of free issue of materials:-

In contracts entered into by the department for works, stipulation to issue departmental materials such as steel, cement, pipes etc. free of cost should be avoided. However, in some exceptional cases, if such free issue of departmental materials is stipulated, it should be ensured that suitable provisions are made in the contract with regard to return of surplus materials and/or material used in excess of theoretical requirement. The provision for wastage/variation, if any, that will be permitted should be clearly indicated. The recovery rate for effecting recovery from the contractor, in case the excess materials are not returned or if the wastage/variation is more than the permissible limit, should also be clearly stipulated, and it should be so fixed that it discourages the contractor from retaining the unused materials.

(5) Drawing of stipulated materials by the contractor:-

It is not permissible for the contractor to obtain the materials, otherwise where the contract stipulates the issue of materials by the Department, unless in a case of emergency the supply has been entrusted by the Engineer-in-charge (PM) for recorded reasons to the contractor himself at suitable rates.

(6) Stipulation of materials those are not available:-

The Divisional Officers should not make any provision in the tender for the supply of materials by the Department to the contractors if the materials are not available for issue from the Central stores, or where they cannot be arranged in time for issue.

25.2 Issue of materials when not stipulated

(1) No material other than that stipulated for issue in the contract should be supplied to contractor for use on a works.

(2) Issue rate to be charged:-

(i) The rate charged for the materials should be:

(a) That is provided in the Analysis of Rate of MRJ for the item of work on which it would be used, plus or minus the percentage above or below the Schedule of Rate allowed to the contractor, or

(b) Market rate, or

(c) Stock issue rate plus storage charges, whichever is higher. No carriage or incidental charges should be borne by Nigam in connection with the supply.

(3) in cases in which the Nigam undertakes to supply materials to a contractor, full description of the materials as also its condition should be indicated in the relevant conditions of agreement with a view to safeguard the interests of the Nigam.

(4) Free issue of non-stipulated materials to the Contractor should be avoided as far as possible.

25.3 Issue and recovery of cost of materials

Regulated issue of materials

It should be ensured that the materials are not issued to contractor arbitrarily and without keeping an eye on the actual requirement at site. It is essential that issues to contractors are regulated and restricted to actual requirements depending on the progress of the work.

25.3.1 Issue of cement/steel and pipes and other materials and check on their consumption

(1) The theoretical consumption statement for consumption of cement on the work executed• from the start of the work up to and including the work included in the bill should be invariably prepared along with every running bill. This should be got

signed from the contractor at the time of obtaining his signature on the running account bill so that he is aware of the basis on which the theoretical quantity of cement is worked out, and it may be possible for the contractor as well as the Department to exercise a check over the consumption of cement during the execution of the work. The theoretical quantity so worked out should be compared with the actual issue of cement as per Cement Register as on the last date of the measurement of the work. Should there be any difference beyond the normal permissible limits of variations between these two quantities, such difference should be properly explained both for less or more consumption by the Resident Engineer, and the Project Manager should go into such explanations and take remedial measures.

(2) In order to have an effective control over the issue of cement, the following drill should be observed:--

i) The cement godown (s) should be properly and effectively double locked, keys of one of the locks remaining with the department and that of the other with the contractor.

(ii) The pages of the Cement Register should be as per **Appendix** — 19, machine numbered and each page initialled by the Project Manager.

(iii) Periodical checking of cement godown :--

The cement godown and the Cement Register should be checked by the Resident Engineer/Project Manager in-charge of the work as per following schedule:--

(a) At least weekly or fortnightly, respectively, in case of works at the headquarters of the Resident Engineer/Project Manager.

(b) Whenever they visit the site of work in case of works that are located outside the Divisional headquarters, and

(iv) As an additional safe guard, the following instructions should be followed:-- a) Display of position of cement outside the store :--

(b) Procedure for indenting, receipt and issue of cement and steel :--

While issuing an indent for fresh cement/steel, the balance material available at the site should be checked. The Resident Engineer must record on the body of the indent, the balance of such material available at the time and date of issue of the indent, which should be taken into account by the Project Manager before signing the indent.

At the time of receipt of the materials, not only the date but also the time of receipt shall be mentioned in the Cement Register as well as in the MAS Register. The

entries should be made separately for each truck, giving the gate pass number. The consignee should also indicate the time/date of receipt of material on the gate pass that is returned to the Central Stores through the transporter. Gate pass should be counter signed by the Resident Engineer for all quantities of cement received against indents of 10 tonnes and above. The cement/steel and other materials received from Stores/Local purchase etc. on any particular day shall not be used in the work or transferred to any other work for 24 hours from the time of receipt at site, for physical check and verification by the Resident Engineer. The cement already available in the store should be consumed first, before issue from the new consignment. Similarly, new steel items should be stacked in countable shape to facilitate physical check before these are used. The principle of first in and first out in issuing cement bags should be strictly followed.

(c) Checking of steel & pipes consumption:-

For making comparison of the actual consumption of steel with the theoretical consumption, each diameter of steel bars & pipes should be treated as an individual item issued departmentally and check on theoretical consumption should be applied to each diameter. Theoretical consumption statement for steel bars & pipes should be prepared along with every running bill. Should there be any case Qf issue being less or just equal in any particular diameter/section than the actual consumption, this should be properly investigated. If such issue, diameter wise/section wise or in total, is very much higher than the consumption, it should be generally ensured that the balance steel is available at site in good condition and this should be certified by the Resident Engineer. Any serious discrepancies that are noticed should be reported to the General Manager.

(3) Similar precautions should be taken in the case of all other materials issued by the Department.

(4) Recovery from the contractor C The recovery from the contractor shall be regulated as per clause 42 of the agreement, and its interpretation may also be referred to under section 32 of this Manual.

25.4 Issue rates **and recovery of cost**

(I) Issue rates of cement, steel or any other items in the contract should not be less than the market rates of these commodities irrespective of the issue rates of the Central Stores.

(2) Recovery for materials issued :--

The recovery from the contractor on account of the cost of materials issued to him for use on a work may be made gradually by the Divisional Officer on the basis of the theoretical consumption plus wastage of the material used in the work as

measured up-to-date. For each bill, the field staff should certify that the balance material(s) is(are) available in the contractor's custody. In case of shortage, the cost of the same should be immediately recovered from the contractor.

(3) Maintenance of account for materials issued
The Divisional Officer shall maintain a proper numerical account for materials issued to the Contractor.

(4) Recovery for excess/less use of bitumen

(i) Where bitumen is supplied at a fixed rate, recovery at issue rate plus 10% or market rate whichever is higher should be made for supply in excess of permissible variation over theoretical consumption. Where less than theoretical requirements of bitumen is used, recovery at issue rate plus cartage should be made for difference between actual consumption and theoretical requirement of bitumen.

25.5 Return of surplus materials

(1) Where any material for the execution of the contract is procured with the assistance of Govt. or Nigam, the contractor is required to use the said materials economically and solely for the purpose of the contract, and not dispose of them without the written permission of the Nigam. He should return, if required by the Engineer-in-charge, all surplus or unserviceable materials that may be left with him after completion of the contract, or at its termination for any reason whatsoever, on being paid or credited such price as the Engineer-in-charge shall determine having due regard to the condition of the materials. The price allowed to the contractor, however, shall not exceed the amount charged to him excluding the element of storage charges. The decision of the Engineer-in-charge (PM) shall be final and conclusive.

(2) In the event of breach of the aforesaid condition, the contractor shall, in addition to throwing himself open to action for contravention of the terms of the license or permit and/or for criminal breach of trust, be liable to Nigam for all moneys, advantages or profits resulting or which in the usual course would have resulted to him by reason of such breach.

(3) The exact proportion in which the materials are to be used by the contractor, for which he has tendered for the finished items of works, is laid down in the Specifications/Schedule of Rates. The theoretical quantities of the materials that should have been used by the contractor on execution of the work should be calculated according to the Specifications/Schedule of Rates provided in the contract.

According to clause 42 of the GCC/ agreement, the difference between the theoretical consumption and the total actual issues that is not returned by the

contractor is to be recovered at the prescribed rate after allowing variation allowed therein.

(4) Similarly, the cost of the materials less used, based on the stipulated issue rates etc., is to be regulated according to the provisions of the said clause.

(5) The excess consumption of materials beyond the permissible limit as given in clause 42 of the contract shall be recovered at normal stipulated rate plus(+ 10) %.

25.5.1 Recovery of materials issued for rectification of defects
In order to discourage a contractor from doing bad work, no allowance is to be given for the materials issued for rectification of defects. The materials issued for rectification of defective work should be recorded separately and recovered at double the issue rate. The work that is re-done should be measured for record purpose if the dismantled work has already been measured.

25.5.2 Recovery of materials issued for re-doing works due to circumstances beyond the control of the contractor

If it becomes necessary to issue cement or any other material for rectification of defects or for redoing works that are necessitated due to natural calamity beyond the control of a contractor, such as floods, earthquakes, etc. such issues should be treated as legitimate consumption on works and should not be charged at rates higher than the issue rates. On the question whether re-doing of work of rectification of defects has, in a particular case, been necessitated by natural calamities etc., the decision the Managing Director concerned shall be final.

25.6 Instructions regarding storage of cement in godowns
The construction of cement godowns for works, where consumption of cement in a work does not exceed 5 tonnes, may not be insisted upon. In such cases, the contractor shall be permitted to store cement at site inside a covered shelter providing adequate safeguards against clodding of cement due to action of water, and theft. The Engineer-in-charge shall inspect such shelter and satisfy himself that adequate safeguards as mentioned above exist.

25.7 Issue of next half day's cement requirements

In view of the double locking system of cement godowns, it is necessary that the Project Manager should ensure that the Department's representative should reach the go-down site in time every morning to enable the cement to be taken out of the godown for starting the work. They may also, if necessary, permit the issue, to the contractors of all classes, in the evening some extra cement that is adequate to start the work next day. They should ensure that the extra cement issued is not more than half day's requirement for a particular work. Such issues should also be shown in the Cement Register.

SECTION 26

MATERIALS ARRANGED BY THE CONTRACTOR

In all contracts where departmental issue of cement and steel is not stipulated, special conditions shall be incorporated as below:--

26.1 Special conditions for cement

(1) The contractor shall procure 43 grade (conforming to IS 8112) ordinary Portland cement, as required in the work, from reputed/Approved manufacturers of cement having a production capacity not less than one million tonnes or more per annum, such as ACC, Ultra-Tech, Vikram, Shri Cement, Ambuja, Jaypee Cement, Century Cement & J.K.Cement or from any other reputed cement manufacturer having a production capacity not less than I million tonnes per annum as approved by the MD. The tenderers may also submit a list of names of cement manufacturers which they propose to use in the works. The tender accepting authority reserves right to accept or reject name(s) of cement manufacturer(s) which the tenderer proposes to use in the work. No change in the tendered rates will be accepted if the tender accepting authority does not accept the list of cement manufacturers, given by the tenderer, fully or partially.

The supply of cement shall be taken in 50 kg. bags bearing manufacturer's name and ISI marking. Samples of cement arranged by the contractor shall be taken by the Engineer-in-charge and got tested in accordance with provisions of relevant BIS codes. In case the test results indicate that the cement arranged by the contractor does not conform to the relevant BIS codes, the same shall stand rejected, and it shall be removed from the site by the contractor at his own cost within a week's time of written order from the Engineer- in-charge to do so.

(2) The cement shall be brought at site in bulk supply of approximately 50 tonnes or as decided by the Engineer- in- charge. The cement godown of the capacity to store a minimum of 2000 bags of cement shall be constructed by the contractor at site of work for which no extra payment shall be made. Cement should be stored in such a manner that the cement bags can be counted easily by BRIDCUL officers.

(3) Double lock provision shall be made to the door of the cement godown. The keys of one lock shall remain with the Engineer-in-Charge or his authorized representative and the keys of the other lock shall remain with the contractor. The contractor shall be responsible for the watch and ward and safety of the cement godown. The contractor shall facilitate the inspection of the cement godown by the Engineer-in-Charge at any time.

(4) The cement shall be got tested by the Engineer-in-charge and shall be used on the work only after satisfactory test results have been received. The contractor shall supply free of charge the cement required for testing including its transportation cost to testing laboratories. The cost of tests shall be borne by the contractor/Department in the manner indicated below:

(a) By the contractor, if the results show that the cement does not conform to relevant BIS codes.

(b) By the Department, if the results show that the cement conforms to relevant BIS codes.

(5) The actual issue and consumption of cement on work shall be regulated and proper accounts maintained as provided in the contract. The theoretical consumption of cement shall be worked out as per procedure prescribed in the contract and shall be governed by conditions laid therein, in case the cement consumption is less than theoretical consumption including permissible variation, recovery at the rate so prescribed shall be made. In case of excess consumption no adjustment need be made.

(6) The cement brought to the site and the cement remaining unused after completion of the work shall not be removed from site without the written permission of the Engineer-in-charge.

(7) The damaged cement shall be removed from the site immediately by the contractor on receipt of a notice in writing from the Engineer-in-charge. If he does not do so within 3 days of receipt of such notice, the Engineer-in-charge shall get it removed at the cost of the contractor.

Chief General Manager may change the brand of Cement depending upon availability in local market, if needed but with the approval of Managing Director , Instructions in this respect can be issued by them at regular intervals. The name of manufacturers should be finalized after taking into consideration the suggestions of contractors during pre bid meeting, if any. Similar conditions for cement of other types like slag cement etc. may be incorporated wherever required by the NIT approving authority by providing for relevant BIS Codes, suitable brands of cement and technical circulars issued by the department.

26.2 Special conditions for steel

(1) The contractor shall procure TMT bars of Fe415/Fe415D/ Fe500/ Fe500D/Fe550 & Fe550D grade (the grade to be procured is to be specified) from Approved primary steel producers such as SAIL, Tata Steel Ltd, RINL, Jindal Steel & Power Ltd & JSW Steel Ltd or any other producer, as approved by MD/Managing Director BRIDCUL, who are using iron ore as the basic raw

material/input and having crude steel capacity of 2.0 million tonnes per annum or above.

In case of non-availability of steel from primary producers, the NIT approving authority may permit use of TMT reinforcement bars procured from steel producers having Integrated Steel Plants (ISPs) using iron ore as the basic raw material for production of crude steel which is further rolled into finished shapes in-house having crude steel capacity of 0.5 million tonne per annum or more, A separate list of producers for this category shall be got approved by the MD/Managing Director .

In case of non-availability of steel from primary producers as well as the ISPs, the NIT approving authority may permit use of TMT reinforcement bars procured from secondary producers. In such cases following conditions are to be stipulated in the NIT by NIT approving authority:

(a) The grade of the steel such as Fe415/Fe415D/Fe500/Fe500D/Fe 550/Fe550D or other grade to be procured is to be specified as per BIS 1786-2008.

(b) The secondary producers must have valid BIS licence to produce HSD bars conforming to IS 1 786 : 2008. In addition to BIS licence, the secondary producer must have valid licence from either of the firms Tempcore, Thermex, Evcon Turbo & Turbo Quench to produce TMT Bars.

(c) The TMT bars procured from primary producers & ISPs shall conform to manufacture's specifications.

(d)The TMT bars procured from secondary producers shall conform to the specifications as laid by Tempcore, Thermex, Evcon Turbo & Turbo Quench as the case may be.

(e) TMT bars procured either from primary producers or secondary producers, the specifications shall meet the provisions of IS 1786 : 2008 pertaining to Fe4 15/Fe 415D/Fe500/ Fe 500D/Fe550/ Fe 550D or other grade of steel as specified in the tender (while preparing NIT the grade of the steel is to be specified).

(2) The contractor shall have to obtain and furnish test certificates to the Engineer-in-charge in respect of all supplies of steel brought by him to the site of work.

(3) Samples shall also be taken and got tested by the Engineer-in-Charge as per the provisions in this regard in relevant BIS codes. In case the test results indicate that the steel arranged by the contractor does not conform to the specifications as defined under para (1)(d) & (1)(e) above, the same shall stand rejected, and it shall be removed from the site of work by the contractor at his cost within a week time or written orders from the Engineer-in-Charge to do so.

(4) The steel reinforcement bars shall be brought to the site in bulk supply of 10 tonnes or more, or as decided by the Engineer-in-charge.
 (5) The steel reinforcement bars shall be stored by the contractor at site of work in such a way as to prevent their distortion and corrosion, and nothing extra shall be paid on this account. Bars of different sizes and lengths shall be stored separately to facilitate easy counting and checking.

(6) For checking nominal mass, tensile strength, bend test, re-bend. test etc. specimens of sufficient length shall be cut from each size of the bar at random, and at frequency not less than that specified below:

<i>Size of bar</i>	<i>For consignment below 100 tonnes</i>	<i>For consignment above 100 tonnes</i>
Under 10 mm dia bars	One sample for each 25 tonnes or part thereof	One sample for each 40 tonnes or part there of
10 mm to 16 mm dia bars	One sample for each 35 tonnes part there of	One sample for each 45 tonnes or part there of
Over 16 mm dia bars	One sample for each 45 tonnes or part there of	One sample for each 50 tonnes or part there of

(7) The contractor shall supply free of charge the steel required for testing including its transportation to testing laboratories. The cost of tests shall be borne by the contractor.

(8) The actual issue and consumption of steel on work shall be regulated and proper accounts maintained as provided in the contract. The theoretical consumption of steel shall be worked out as per procedure prescribed in the contract and shall be governed by conditions laid therein. In case the consumption is less than theoretical consumption including permissible variations recovery at the rate so prescribed shall be made. In case of excess consumption no adjustment need to be made.

(9) The steel brought to site and the steel remaining unused shall not be removed from site without the written permission of the Engineer-in-charge.

(10) In case contractor is permitted to use TMT reinforcement bars procured from ISPs or secondary producers then:

(1) Reduction in the base price of TMT reinforcement bars shall also be indicated under Schedule "F" along with the base price.

(2) The rate of providing & laying TMT reinforcement bars as quoted by the contractor in the tender shall also be reduced by Rs per kg. (The rate of reduction

shall be same as 10.1 above converted to per kg plus Contractor's Profit and Over Heads (currently 15%) as applicable)

(3) The rates under 10.1 & 10.2 shall be specified by NIT approving authority at the time of issue of NIT for steel from ISPs and secondary producers separately.

26.3 Removal of rejected/sub-standard materials

The following procedure shall be followed for the removal of rejected/sub-standard materials from the site of work:---

(I) Whenever any material brought by the contractor to the site of work is rejected, entry thereof should invariably be made in the Site Order Book under the signature of the Resident Engineer, giving the approximate quantity of such materials.

(ii) As soon as the material is removed, a certificate to that effect shall be recorded by the Resident Engineer against the original entry, giving the date of removal and mode of removal, i.e., whether by truck, carts, or by manual labour. If the removal is by truck, the registration number of the truck should be recorded.

(iii) When it is not possible for the Resident Engineer to be present at the site of work at the time of actual removal of the rejected/sub-standard materials from the site, the required certificate should be recorded by the Junior Engineer, and the Resident Engineer should countersign the certificate recorded by the Junior Engineer.

26.4 Periodical checking of cement

Instructions as given in para 25.3.1 may be followed and Para 10.5(3) of this Manual may be seen regarding Ready Mixed Concrete (RMC) that may be stipulated for use in a work.

SECTION 27

ISSUE OF TOOLS AND PLANT

27.1 Conditions for issue

(1) When Tools and Plant such as road rollers, concrete mixers, etc. are available for issue to the contractor for bonafide use on a work of the Department, the Divisional Officer should invariably stipulate a provision for the supply of such T & P articles both in the Notice Inviting Tender and in the contract documents, specifying clearly the rates of recovery. Before making such a stipulation the availability of the road rollers etc. should be ascertained from the BRIDCUL concerned. Advance intimation to the concerned Division should also be given for arranging the road rollers, etc. at the proper time.

(2) If a project or work is sufficiently big, warranting the use of a number of road rollers, the Project Manager may consider opening a road roller shed and a workshop at or near the site of work, well staffed and equipped, to avoid loss of time in transit and to ensure proper utilization of the machinery.

(3) In exceptional cases where the T & P articles are hired out to the contractor without being provided for in the agreement, the full economic rate, i.e. rate chargeable from non- government bodies should be charged.

(4) Issue of the equipment(s) to private bodies should be made in very exceptional cases, and with the approval of the competent authority.

(5) As a matter of principle only such Plant and Machinery should be issued to contractor, quasi Govt. bodies, such as Municipalities or others, as can be spared without inconvenience to the department.

27.2 Calculation of hire charges

(1) The following procedure should be adopted in determining the hire and other charges when articles of Tools and Plants are lent to local bodies, contractors or others:

The following types of charges may be recovered:

(i) Direct charges

(a) Running expenses: All the expenditure that is incurred in working the tools and plants or machinery that would not be incurred if it were not being worked. In case the running expenses or a part thereof are borne by the contractor the same may be deducted from the hire charges.

(b) Maintenance charges:

Supervision charges

Minor repairs

Special Repairs

Other miscellaneous charges

(ii) Indirect Charges

(a) Depreciation charges: Value of the article as it decreases due to fair *wear* and tear.

This is calculated by assuming the life of the article and dividing the purchase cost by the number of years.

(b) Interest.

(c) Departmental charges on running expenses.

(2) The hire charges of different types of machinery, and T & P are fixed from time to time taking into account all the above principles in determining the rates thereof.

27.3 Recovery of hire charges

(1) The hire charges shall be recovered as below:

(i) In case where T&P is issued as per stipulation in the agreement Only Direct charges mentioned above shall be recovered.

(ii) In case where T&P is issued without stipulation in the agreement Full hire charges, i.e. Direct charges and Indirect charges, both shall be recovered.

(iii) In case T&P is issued to other departments and private bodies, when articles are lent to them for use on works under their supervision

All the charges mentioned under para 27.2, excepting supervision charges, shall be recovered.

(2) Different rates for hire charges as determined above are applicable for use on BRIDCUL works, either done departmentally or through contract where supply of T & P is stipulated in the agreement for issue to the contractor. If the T & P is issued to private individuals, non- government bodies or even to departmental contractors where there is no stipulation for issue in the agreement, full economic rates are chargeable.

(3) In this connection, the following conditions are required to be observed:
(i) The hire charges shall be recovered at the prescribed rates from and inclusive of the date the plant and/or machine is made over, and up to and inclusive of the date of its return in good order, even though the same may not have been working for any cause except for major breakdown due to no fault of the contractor, or faulty use by the departmental operator, and requiring more than 3 continuous working days (i.e. excluding intervening holidays and Sundays) for bringing the plant in order.

(ii) The contractor shall immediately intimate in writing to the Engineer-in-charge when any plant or machinery gets out of order requiring major repairs as aforesaid. The Engineer-in-charge shall record the date and time of receipt of such intimation in the log sheet of the plant or machinery. Based on this, if the breakdown occurs before lunch, the period of major breakdown will be computed by considering half day's breakdown on the day of complaint. If the breakdown occurs in the post-lunch period, the period of major breakdown will be computed starting from the next working day. In case of any dispute, the decision of the Chief General Manager shall be final.

(iii) The hire charges will include services of operational staff, viz. Driver/Operator, and maintenance staff such as Mechanic and Cleaner as required. The hire charges shall also include lubricating oil, stores for normal repairs and for cleaning purposes. All the other charges such as cost of power, fuel, fire matches, diesel oil, petrol, kerosene oil, etc. for running the machinery, and water for working and washing of steam roller, and pay of Chowkidar for guarding the T & P at night shall, however, be borne by the contractor/indentor.

SECTION 28

EXTENSION OF TIME AND COMPENSATION FOR DELAY

28.1 General Principles

- (1) At the time of issuing Notice Inviting Tenders for a particular work, the Engineer-in-charge should specify the time allowed for completion of the work consistent with the magnitude and urgency of the work.
- (2) The time allowed for carrying out the work as entered in the contract shall be strictly observed by the contractor, and shall be reckoned from the day (as mentioned in the NIT) after the date on which the letter of acceptance is given to the contractor.
- (3) The work shall be proceeded with all due diligence on the part of the contractor throughout the stipulated period of the contract (time being deemed to be the essence of the contract).
- (4) To ensure good progress of the work during execution, the contractor shall be bound, in all cases, in which the time allowed for any work exceeds one month (save for special job), to complete the work as per the milestones given in the contract, or as per the re-scheduled milestones. However, for special jobs, if a time schedule has been submitted by the contractor and the same has been accepted by the Engineer-in-charge, the contractor shall comply with such time schedule.

28.1.1 Review of progress of the work

- (1) The NIT approving authority shall stipulate time schedule for physical milestones of the General Conditions of Contract, in the NIT. The tender accepting authority shall review the progress of work each month with all the concerned disciplines including the contractor. The factors affecting the progress shall be identified and discussed and remedial measures taken, wherever required. Detailed minutes of these meetings shall be issued. Whenever physical milestones have been specified in the NIT, the detailed review may be carried out on the dates specified for such milestones.
- (2) If an extension of time has been granted by the competent authority for genuine hindrances, he should re-schedule the milestones appropriately for the work.
- (3) Whenever extension of time is granted by the competent authority, a copy of the same should be separately forwarded to the tender accepting authority.

28.2 Requirements of the Extension of time

Clause 5 of contract Form 7/8 and clause 4 of Form 9 empower the Engineer-in-charge to grant extension of time for the completion of the work on certain conditions. He can exercise such powers if the following conditions are satisfied:-

- (i) The contractor must apply to the Engineer-in-Charge in writing for extension of time.
- (ii) Such an application must state the grounds that hindered the contractor in the execution of the work within the stipulated time.
- (iii) Such an application must be made within 14 days of the date on which such hindrance arose.
- (iv) The Engineer-in-charge (PM) must be of the opinion that the grounds shown for the extension of time are reasonable.

28.3 Powers of officers for grant of extension of time

The powers for grant of extension of time have been delegated to BRIDCUL Officers.

28.4 Grant of extension of time without application

(1) Based on the Hindrance Register where adequate and proper grounds exist, the Engineer-in-charge can grant extension of time even in the absence of application from the contractor.

(2) The extension, in order to be binding, will have to be by the 'agreement' of the parties express or implied. It, therefore, follows that if the extension of time is granted by the Project Manager and such extension of time is accepted by the contractor, either expressly or implied by his action before and subsequent to the date of completion, the extension of time granted by the Project Manager is valid. It is, therefore, necessary that the Project Manager grants extension of time provisionally even when the contractor does not apply for extension of time in order to keep the contract alive. If the contractor refuses to act upon the extension granted by the Engineer-in-charge, it will attract the provisions of the agreement.

(3) The recovery of liquidated damages for delayed performance, on account of which extension of time is granted is a distinct matter and would depend on:-

- (i) Prior notice as contemplated by Section-55 of the Contract Act, 1872.
- (ii) Fault/delay/hindrance being attributable to the contractor, and
- (iii) Proof of the loss occasioned thereby (in case it is challenged by the contractor before the Arbitrator).

28.5 Form of application for extension of time

The form of application for extension of time to be submitted by the contractor has been standardized and is at Appendix-17. The contractor is required to apply for grant of extension of time on Part 1 of this Form. Part 11 of the Form is to be used by the departmental officers for the purposes of dealing with the application for extension of time.

28.6 Action on belated application for extension of time

Although the contractor is required to seek extension within 14 days from the date of occurrence of hindrance for which the extension is sought, it does not debar the grant of extension sought later, as it is always competent to a promise to waive a delay and accept performance after the stipulated time. However, the extraordinary concession should be refused save in most exceptional circumstances, and for very good causes shown for not seeking it within the period of 14 days. The contractor has no right to have this request for extension considered where he has not applied for it in accordance with clause 5 of the agreement.

28.7 Recording of hindrance

(1) Whenever any hindrance **whether on part of department or on part of contractor**, comes to the notice of the Resident Engineer, he should at once make a note of such hindrance in the register kept at site, and immediately make a report to the Project Manager within a week.

(2) The Project Manager shall review the Hindrance Register at least once in a month.

(3) The proforma for the Hindrance Register shall be as per Annexure given below.

(4) The following points should be kept in mind while entering the hindrances in the Hindrance Register:--

(i) The entry of date of start of hindrance and date of removal of hindrance should be made on the same day as the hindrance takes place or the cause of the hindrance is removed, respectively.

(ii) The Project Manager should work out the over-lapping period, net period of hindrance and weight age of each hindrance within 15 days of removal of the cause of hindrance. For works out side headquarters, this should be done as and when he visits the site.

(iii) The items of work affected due to any hindrance should be clearly mentioned in the Hindrance Register by the Resident Engineer, and the weightage should be allowed on this basis.

(iv) Each hindrance should be entered in the Hindrance Register, which should be authenticated by the Project Manager and **Contractor**.

(v) The hindrances on part of contractor is also to be entered in the Hindrance Register.

(vi) The hindrance should be recorded carefully in the Hindrance Register after considering its effect on completion of work.

(vii) Review of hindrance register shall be compulsory in division office by PM and Divisional Accountant at the time of payment of each Running Account Bill and final bill and certificate shall be recorded that all up to date hindrances on part of department and contractor have been recorded in the hindrance register.

(viii) The net delay on part of department or the contractor shall be worked out after considering all the hindrances recorded in the hindrance register.

(ix) The General Manager should review the Hindrance Register whenever he visits the site of work.

28.8 Processing cases of extension of time

(1) The Resident Engineer shall decide upon the grant of extension of time within 15 days of the completion of work, if it is in his competence to do so. Otherwise, he shall forward the case with his recommendations to the Project Manager within 30 days of completion of work.

(2) The Project Manager shall take a decision within 15 days if it is within his power to do so, or, otherwise, forward the case to the General Manager with his recommendations within this period.

(3) The General Manager should then pass orders within 15 days of the receipt of the extension case from the Project Manager. If the orders of the competent authority are not received in time, Project Manager should extend the contract before the stipulated date actually expires so that the contract might remain in force, but while communicating this extension of time, he must inform the contractor that this was without prejudice to Government's right to levy compensation of the agreement.

(4) The sanction of extension of time will in all cases be issued by the Resident Engineer/Project Manager under clause 5 of the agreement in the proforma shown in Appendix 17A. The form provides that the extension of time is granted without prejudice to right of Government to recover liquidated damages of the agreement. In all cases, a copy of the letter granting extension of time will be endorsed to the concerned Accounts Officer. While doing so, it should be made

clear in the endorsement whether the General Manager has decided to levy or not to levy compensation or liquidated damages.

(5) The decision in regard to levy of liquidated damages for delay in the execution of works of the contract (and corresponding clause in other contract forms) should not be recorded in the Measurement Book of the concerned work.

28.9 Extension of time without levy of compensation

In the case where extension is granted without levy of compensation (Performa shown in Appendix 17) after approval of the competent authority, provision suggested in the preceding paragraph should stand with a view to safeguard the interest of the Nigam, especially against unforeseen circumstances.

28.10 Compensation under clause 2 of the agreement

The word 'compensation' should be used in relation to clause 2 of the agreement which is executed on Form 7/8 and similar clauses in other contract Forms instead of the word 'penalty'.

28.11 Section 74 of the Indian Contract Act, 1872

(1) When a contract has been broken, and if a sum is named in the contract as the amount to be paid in case of such breach, or if the contract contains any other stipulation by way of compensation, the party complaining of the breach is entitled, whether or not actual damage or loss is proved to have been caused thereby, to receive from the party who has broken the contract, a reasonable amount not exceeding the one so named or as the case may be, the compensation stipulated for.

(2) According to clause 5 of the agreement, all letters of extension of time to be issued to the contractor should be over the signature of the Engineer-in-charge, as he is the only officer so empowered contractually to grant extension of time. Similarly, all letters intending to impose compensation or to recover liquidated damages of the agreement should be issued over the signature of the General Manager, as he is the only officer competent to do so under clause 2 of the agreement, in order to fulfil contractual obligation.

28.12 Proforma for intimating compensation

The BRIDCUL has prescribed a proforma for intimating the contractor with regard to levy of compensation under clause 2 of the contract as shown in **Appendix 18**.

Annexure

Proforma for Hindrance Register

[Reference para 28.7(3)]

S.no	Nature and Hindrance	Items of work that could not be executed due to this hindrance	Date of Start of Hindrance	Date of Removal of Hindrance	Overlapping if any .	Net hindrance in days	Sign of AEs	Weight age of hindrance	Net effective days of hindrance	Sign of PM	Remarks of PM reviewing officers
1	2	3	4	5	6	7	8	9	10	11	12

SECTION 29

PAYMENTS TO CONTRACTORS

29.1 Requirement of Clause – 7

(1) **The clause 7** of the Conditions of the contract provides that no payment shall be made for works or supplies estimated to cost less than Rs. 50,000 till after the whole of the work or supply shall have been completed and a certificate of completion given. In the case of works or supplies estimated to cost more than Rs. 50,000 the contractor shall, on submitting the bill thereof, be entitled to receive a monthly payment as passed by the Engineer-in-charge Para 7.12 of this Manual may be seen for submission of computerized bills by the contractor.

(2) On account payments are also permissible under the conditions of contract in piece work agreement and work order. The contractors should be required by the Engineer-in-charge to submit their bills by a fixed date in accordance with the terms of the contract. The Resident Engineer should supply to the contractor a copy of the measurements and a statement of part rates to be paid, at least 3 clear days in advance of such date fixed by the Project Manager. The payment to the contractor shall be made only on submission of the bill by him.

29.1. A - Stage Payments for Running & Final Bill

Initially the system of stage payments may be implemented in each zone for suitable projects/works as a test case. This system is suitable for works of repetitive nature. Running Account and Final payments to be made after completion of a particular stage needs to be defined keeping in view the following guidelines:

i) Payment for foundation work can also be defined in stages if all the foundations of one block/segment considered for each stage are of similar design. If not the payment for foundation works to be made as per actual measurements.

(ii) System of stage payments may be followed for residential and non-residential buildings where floor plans are identical.

(iii) Each stage should be well defined. Floor levels or any other level such as Lintel level/Sill level of each block/each segment may be the basis to allow stage payment.

(iv) The measurements of one complete unit for each defined stage shall be recorded and test checked by JE/RE/PM. Hidden measurements shall be test checked 100% by JE/RE & at least 10% of the hidden measurements are to be test checked by PM.

(v) After completion of each stage a certificate will be recorded by JE & RE that work has been executed strictly as per the measurements of standard unit as recorded earlier.

Completion of each stage is also to be certified by PM. For outer stations test check of PM may be exercised in alternate running account bills.

(vi) Payment Schedule defining each stage of payment subject to minimum amount of Running Account Bill is to be mentioned.

(vii) No part payment shall be allowed for incomplete stage.

29.1.1 Register of Bills and its review

(1) The Divisional Officer should maintain a register to keep a record of the monthly running payments made to the contractors in respect of contracts costing above Rs. 50,000 in the proforma prescribed in Appendix 7. As and when a bill is submitted, the same shall be entered in this register.

(2) The register should be reviewed by the Project Manager regularly to ensure that payments are being made to the contractors in time.

(3) The register should be posted at the time of making monthly running payment to the contractor.

29.1.2 Objections raised by the Divisional Accountant

If any objection is raised by the Divisional Accountant for payment of a particular item or rate in any bill, the Engineer-in-charge should make up his mind and finally pass speaking (reasoned) orders then and there whether the item on which objection has been raised should be allowed or not, and if it is not to be allowed than the item should be deleted from the bill, but in no circumstances the payment should be delayed.

29.2 Final payments

(1) Final measurements should be recorded within one month of the completion of work. Final payments for works shall be made as mentioned below;-

i) Within 2 months of the completion of work, if the contract value is upto Rs 100 lacs. (ii) Within 3 months of the completion of work if the contract value is more than Rs 100 lacs but not more than Rs 5.00 crores.

(iii) Within 6 months of the completion of work if the contract value is more than Rs 5.00 crores.

(2) Para 21.1.3 of this Manual may be referred to regarding prompt completion of all the formalities in connection with the release of the final payment.

29.3 Time schedule for payment of bills

The following time schedule for payment of bills and issue of completion certificates has been prescribed:--

Stage	Time Limit
Payment of running bills	As far as possible before expiry of 6 working days from the presentation of the bill. Both RE/PM and PM should not take more than 3 working days each (clause- 7).
Contractor's notice of completion of work	Within 10 days on completion of the work (clause 8)
Issue of completion certificates for works	Within 30 days of receipt of contractor's notice (clause 8).
Submission of final bill by the contractor	Within One month of the date of the final certificate of completion furnished by the Engineer-in-charge or 3 months of the physical completion of the work, whichever is earlier (clause 9).
Payment of final bills for works up to Rs. 100 lakhs	2 months of receipt of final bill from the contractor (clause 9).
Payment of final bills for works over Rs. 100 lakhs but upto Rs 5.00 crore	3 months of receipt of final bill from the contractor (clause 9).
Payment of final bills for works over Rs Rs 5.00 crore	6 months of receipt of final bill from the contractor (clause 9).

29.4 Inspection of works and issue of completion certificate

(I) Before the work is declared as completed in all respects and final payment is released to the contractor in respect of the following works, it has to be inspected by the Project Manager.

Contract Amount

- (i) All civil works..... Rs. 200 lakhs and above
- (ii) Electrical works..... Rs.100 lakhs and above
- (iii) Water supply/sanitary works..... Rs. 100 lakhs and above

(iv) Road/runway works..... Rs. 200 lakhs and above

(2) The General Manager shall also record the following certificate:--

“ I have inspected the work of..... contract value of which is Rs..... vide Agreement No..... As a result of this inspection and my previous inspections, I find that the work has been carried out generally to specifications, and has been completed satisfactorily. There are no noticeable defects except for the following:---

.....”

(3) The above certificate is required to be recorded within a period of 3 months from the date of completion of the work.

(4) In the case of works whose contract value is less than the above, the PM have to record similar certificate as the case may be.

(5) The defects so pointed out if any should be rectified by the contractor, or by the Department at his cost expeditiously, action for which should be taken in terms of the contract.

(6) An attested copy of the completion certificate will be attached with the office copy of the Final bill of the contractor, and it shall remain on the record of the Division. The Project Manager shall not make final payment till this certificate is recorded and attached to the office copy of the bill. This certificate, however, will in no way reduce the responsibility of the Project Manager and the Divisional Accountant for due check of the work and the bill as required by the rules and code of practice of the Department.

29.4.1 Completion certificate to be recorded by the Project Manager in whose tenure the work is completed

(1) The completion certificate is required **to be recorded by the Project Manager** in whose time the work is completed irrespective of the fact that a part of the work may have been done during the incumbency of his predecessor. The Project Manager recording the certificate is not responsible for work which may have been covered up during the incumbency of his predecessor, for instance, work in foundations or below the concrete flooring, but he is required to point out the defects which are visible, for instance, defects in the doors and windows, plastering flooring, painting etc. The Project Manager should necessarily record the completion certificate for the works completed in his tenure on the post before he hands- over the charge to his successor on transfer.

(2) In specific cases where there are practical difficulties, such as the Project Manager being no longer in the Department due to resignation, death etc, in getting the completion certificate recorded by him, the General Manager may decide

any relaxation of the existing instructions after examining the details of the case, and issue directions accordingly.

Administrative action should also be initiated against the Project Manager for not taking proper/timely action in getting the completion certificate recorded, whatever justified, as revealed by the facts of the case.

29.4.2 Inspection of works by Architect/Consultants

(1) The Architects/Consultants in-charge of the work/consultant Architect is required to certify on completion of particular building that it has been constructed according to the approved drawings design and specifications.

(2) In case of any unauthorized deviation, the certificate of completion shall not be given unless the defect or deviation has been rectified to the satisfaction of the Project Manager concerned. Such certificate by Architect/Consultants will be required for works costing Rs. 500.00 lakhs and above. The Managing Director may, however, decide whether a particular building involving less than Rs. 500.00 lakhs (contract Amount) will require the certificate from the Architect/Consultants or not.

(3) The form of certificate to be given by the Architect/Consultants is as under:-

“Name of Project.....

I do hereby certify that the work..... has been inspected on..... by me and has been completed on according to the plans, elevation, sections, details and specifications of architectural items prepared by me. The work has been completed to my general satisfaction and the workmanship and the whole of the materials used for finishing items are satisfying the architectural aesthetics.”

(4) Completion certificate from the Architect/Consultants is necessary before final bill is paid to the contractor.

(5) In the case of such work, the Project Manager should inform Architect/Consultants concerned of the work having been completed in all respects within one month of the physical completion of the work, and request him to carry out his inspection and record the required completion certificate. The Architect/Consultants shall inspect the work and issue the certificate within I month of receipt of such an intimation.

(6) An attested copy of this certificate of the Architect/Consultants shall be attached with the office copy of the final bill along with that of the General Manager, and it shall remain in the record of the Division.

29.5 Payment through bank

Payment due to a contractor, if so desired by him, may be made to his bank instead of direct to him, provided the contractor furnishes to the Engineer-in-charge all necessary documentation.

9.6 Deduction of income tax at source

(1) Under Section 194C of the Income Tax Act, 1961, deduction of income tax is required to be made at source by disbursing officers from payments made to contractors.

(2) Before signing the First and Final bill/Running Account bill Final bill, the Divisional Officer should see that:--

i) The statutory deduction on account of income tax, wherever due, has been made from the bill of the contractor, and

(ii) The same is specifically shown in the Memorandum of Payments thereof under the item, "By recovery of amounts creditable to other works or heads of accounts".

(3) It is open to the contractor or the sub-contractor as the case may be, to make an application to the Income Tax Officer concerned and obtain from him a certificate authorizing the payer to deduct tax at such lower rate or deduct no tax as may be appropriate to his case. Such certificate will be valid for the period specified therein unless it is cancelled by the Income Tax Officer earlier, and in such cases deduction will be made accordingly.

(4) In view of the existing provision of Section 288 B of the Income Tax Act, 1961, the amount of tax to be deducted at source should be rounded off to the nearest rupee by ignoring amount less than fifty paise and rounding off amounts of fifty paise or more to one rupee.

(5) The tax deducted on behalf of the Government should be paid to the credit of the State Government on the same day by book adjustment. In other cases, the tax deducted should be paid to the credit of the Government within one week from the last day of the month in which the deduction is made.

(6) Challans, for paying tax into the Government account, can be obtained from the Income Tax Officer concerned or the bank.

(7) The authority responsible for making any payment to a contractor or a sub-contractor, as the case may be, should issue a certificate of tax deducted at source in the specified form.

29.7 Deduction of VAT and cess *Building and other Workers' Cess Act 1996*)
Cess Act is a central legislation but it is to be implemented by state Government by formation of cess collection mechanism and constitution of welfare Board. It has not been put to implementation by some state Government yet. There are provisions of deduction of cess from contractors bills and depositing them with state welfare Board. VAT is a state subject. The rate and other provisions vary from state to state. Under VAT also there is a statutory provision for deduction of tax at source ie. from contractor's bill. These provisions should be followed wherever applicable.

SECTION 30

PAYMENT FOR SUB-STANDARD WORK

30.1 Avoidance of sub-standard work

(1) The contractors are required to execute all works according to the specifications laid down, and in a proper workmanlike manner. The motto of the Department shall remain quality, speed and economy in cost in the execution of any work. There shall be no compromise on the quality of work. The field staff, namely, the Junior Engineer/Resident Engineer/Project Manager, shall remain vigilant to see that the contractor does not execute any defective/poor quality work. If, despite their vigilance and issue of directions, certain items of work are done below specifications, and/or if they have not been done in a proper workmanlike manner, the contractor should be immediately asked to rectify or re-do them according to the specifications and according to sound engineering practice. All such defects/deficiencies in the items of works are to be noted in time and recorded in the Site Order Book. It will be the duty of the field staff to point out such defects in the work in time during the progress of the work.

(2) These defects should also be brought to the notice of the Project Manager immediately on their occurrence by the Junior Engineer/Resident Engineer, so that he may take timely action to issue notices to the contractor either to rectify the defects or even to get the work dismantled and redone if necessary as per of the agreement. The Project Manager shall also, on his own, inspect the work as frequently as possible and take timely action to issue such notices to the contractor.

(3) Every attempt should be made to issue such notices regarding the defective/deficient items immediately on their occurrence during the progress of the work. Timely action alone can prevent occurrence of defects/deficiencies that will be difficult or impossible to rectify later on. Where such defects/deficiencies crop up during the maintenance period, notices for redoing/rectifying the same should be issued within the prescribed maintenance period.

(4) If the contractor does not rectify the defect or make good the deficiency, the work should be got re-done or rectified through another agency, or departmentally by employing skilled labourers, at the contractor's cost in terms of clause 16 of the Conditions of Contract in Form 7 and similar conditions in other forms.

30.2 Acceptance of sub-standard work

(1) In general, sub-standard works should not be allowed to occur, as they reflect poorly on the professional competence of the field staff and adversely affect the image of the Department.

(2) Acceptance of work below specifications and/or below acceptable levels of workmanship, and the resulting payment at reduced rates for such defective/deficient works should be resorted to only for those items where materials conforming to the required specifications are not available, or where it is structurally impossible to get the work re-done or where in opinion of Project Manager in charge it is expedient to do so.

(3) Acceptance of sub-standard work at reduced rates should be done only under exceptional circumstances Project Manager is the competent authority to accept sub-standard work.

(4) The total value of quantities of items at agreement rate for which the Project Manager accepts sub-standard work in a contract shall not exceed 5% of the contract value. In case total value of such items exceeds 5% prior approval of General Manager would be necessary. Before a sub-standard work is accepted by the Department. the Engineer-in-charge, after getting prior approval of competent authority, should write a letter to the contractor, for and on behalf of the Managing Director, regarding acceptance of the same and the provisional rates pending the decision of the competent authority with regard to final rates. In reply to this letter, the contractor should send his consent for acceptance of the terms specified by the Department. For this purpose two forms, as per Annexure I and 11 given below. may be used.

(5) The decision of the General Manager/Managing Director regarding the quantum of reduction as well as justification thereof in respect of rates for sub-standard work that may be decided will be final, and would not be open to arbitration under clause 25 of the agreement.

(6) The amount of compensation once levied by the Project Manager under clause 16 of the General Conditions of Contract for BRIDCUL Works, cannot also be waived or reduced by higher officers.

Annexure- I
Specimen of letter by the Project Manager to the contractor for Provisional reduction in rate for sub-standard work
[Reference para 30.2(4)]

To
M/s.....

.....
Dear Sir(s)

Sub: Construction ofAgreement no

1. The Managing Director of BRIDCUL considers that the items of work (specified in the statement appended herewith) relating to the work undertaken by you in terms of the above agreement have not been executed in accordance with the prescribed specifications and/or in a workman like manner and therefore, cannot be accepted in terms of the above said agreement for payment at the rates specified in the agreement.

2. The Managing Director, however, is willing to consider acceptance of the same should you agree to receive payment at rates suitably reduced taking into consideration the sub-standard nature of the said items of work. The General Manager of the concerned Circle of BRIDCUL will determine as to what suitable reductions in the rates should be made from the agreed rates for the said items. His decision shall be final. Pending such decision of the General Manager, however, the payment for the said items of work will be made at the provisional rates indicated against each item.

3. If you agree to the aforesaid conditions for acceptance of payment for the said items of work you may please return the enclosed form duly executed by you.

4. If no reply is received from you within three weeks of the date of receipt of this letter it shall be presumed that the offer is not acceptable to you. In the said event the offer shall stand withdrawn, without prejudice to the rights and remedies of the Managing Director, BRIDCUL in terms of the contract.

Yours faithfully

Project Manager

End.: Statement as above.
BRIDCUL

For and on behalf of the M.D.,

ANNEXURE –II

**Specimen of letter of Contractor’s acceptance of provisional
reduction of rate for sub-standard work**

[Reference para 30.2(4)]

To

.....

.....

Sub: Construction of

Reference: Your letter no.....

Sir,

I/We have carefully read the terms and conditions offered in your letter dated.....and they are acceptable to me/us.

Pending the decision of the General Manager of the final rates of payment against the items of work specified in the statement attached to your above letter, which will be final and binding, I/we agree to the same being paid at the provisional rates indicated against each of the said item of work for the above work as mentioned in your statement.

Yours faithfully,

Contractor(s)

SECTION 31
ADVANCE PAYMENTS

1.1 Advance payment for work done and measured

(1) Advance payments to contractors, against on account bills received in the Divisional Office, may be made by the Divisional Officers, on receipt of an application from the contractor. The Divisional Officer shall make a lump-sum advance payment on Hand Receipt Form 28, subject to the following conditions:--

(i) The bill in respect of which the advance is proposed to be made should actually be under check in the Divisional Office. –

(ii) The amount of advance should not exceed 80% of the net amount of the bill under check, but no advance payment will be admissible in cases where the amount of advance payable works out to less than Rs. 40,000.

(iii) The payment should be suitably endorsed both on the running bill against which the advance payment is made and the connected abstract of measurements in the Measurement Book.

The Hand Receipt voucher on which payment is made should bear reference to the number, date and amount of the bill against which the payment is made, and also to the page number of Measurement Book and the number, date and amount of the voucher, if any, on which the previous on-account payment was made. The payment should be treated in the accounts as an advance.

(iv) Before making payment, an undertaking should be obtained from the contractor to the extent that, should the amount of advance paid to him is subsequently found to be more than the amount of the running account bill in respect of which the advance was paid, he will refund to BRIDCUL forthwith the amount overpaid. The Divisional Officer shall ensure that the advance is adjusted when payment is made on the running account bill in respect of which it was made, and for any overpayment which may occur.

(v) A record of advances authorized by the Project Manager shall be kept in a special register which should be inspected by the General Manager at the time of his inspection of the Divisional Office.

(vi) Grant of a 2nd advance before the first one has been recovered shall not be permitted.

31:2 Advance payment for work done but not measured

(1) The following rules should be observed with regard to advance payments made to contractors for work done but not measured:

(a) Advances to contractors are, as a rule, prohibited and payments to contractors should not be made until detailed measurements of the work have been taken and recorded. Advance payments may, however, be made in cases of real necessity, when it is essential to do so, and in such cases previous sanction of the General Manager concerned should invariably be obtained.

(b) An advance payment for work actually executed may be made on the certificate of a responsible officer (not below the rank of Sub-Divisional Officer) to the effect that not less than the quantity of work paid for has actually been done, and the officer granting such a certificate shall ensure that no overpayment occurs on the work in consequence.

(c) The certificate printed on the Running Account bill must be signed by the Sub-Divisional or Divisional Officer, and the lump-sum amount paid on account of the several items should be specified.

(d) If a secured advance has been previously allowed to a contractor on the security of any materials and such materials have been used in the construction of an item, the amount of the advance payment for that item should not exceed a sum equivalent to the value of work done less the proportionate amount of secured advance ultimately recoverable on account of the materials used.

(e) When an advance payment has been authorized by the competent authority, it would be followed by detailed measurements within 2 months at the most. Beyond 2 months, the approval of Managing Director shall be necessary.

(f) The grant of a second advance, before the first one has been recovered, shall not be permitted except with the prior approval of Managing Director - in-charge.

(2) Advance payments for work done but not measured should be made on bill Form no. BRIDCUL 27 , and the same be classified in the works accounts under suspense Sub-Head• “Advance Payments”. No such payment must be made on Hand Receipt.

31.3 Advance payment to private firms/autonomous bodies for chemical analysis and testing of materials

(1) A list of laboratories for chemical analysis and testing shall be approved by the General Manager. Advance payment may be made by the Project Manger to an enlisted laboratory, and for this purpose no further approval shall be necessary.

(2) The amount of advance shall be drawn on a simple receipt and accounted for under the final head to which the expenditure on services in question would be debited.

31.4 Secured advances

(1) Secured Advances on the security of materials brought to site may be made to the contractors for items which are to be used on work.

(2) The Divisional Officers can sanction the secured advance up to an amount not exceeding 90% of the value of the materials as assessed by the Engineer-in-charge, or an amount not exceeding 90% of the material element cost in the tendered rate of the finished item of work, whichever is lower.

(3) A formal agreement should be drawn up with the contractor under which BRIDCUL secures a lien on the materials and is safeguarded against losses due to the contractor postponing the execution of the work or due to shortage or misuse of the materials, and against the expense entailed for their proper watch and safe custody.

(4) Payment of such advances should be made only on the certificate of an officer not below the rank of Sub-Divisional Officer that:--

(i) The quantities of materials for which the advances are made have actually been brought to site.

(ii) Full quantities of the materials, for which advance is to be made, are required by the contractor for use on items of work for which rates for finished work have been agreed upon.

(iii) The quality of materials is as per the specifications.

(5) Recoveries of advances so made should not be postponed until the whole of the work entrusted to the contractor is completed. They should be made from his bills for work done as the materials are used, the necessary deductions being made whenever the items of work in which they are used are billed for.

(6) Secured advance shall be granted only for non-perishable items. It can however, be granted for perishable items after the contractor indemnifies the Government through an insurance cover.

The Divisional Officer shall identify whether an item is perishable or not.

31.4.1 Stage payments not to be treated as secured advances

Where stage payments are stipulated in certain contracts, like for E&M and other specialized works, such payments shall not be treated as secured advance.

31.5 Grant of mobilization advance to the contractors for executing capital intensive works

In respect of certain specialized and capital-intensive works with estimate cost put to tender Rs. 2.00 crores and above, provision of mobilization advance may be kept in the tender documents. Managing Director s should use their discretion carefully in deciding whether any particular work shall be considered as specialized or capital intensive one. Applicability or otherwise of relevant clause of GCC shall be clearly indicated in Schedule 'F', while finalizing NIT of a particular work.

(i) The Mobilization advance limited to 10% of tendered amount at 10% simple interest can be sanctioned to the contractors on specific request as per term of the contract.

(ii) The mobilization advance shall be released only after obtaining a bank Guarantee bond from a schedule bank for the amount of advance to be released and valid for the contract period. This shall be kept renewed from time to time to cover the balance amount and likely period to complete recovery together with interest. The advance should be released in not less than two instalments. The interest on the advance shall be calculated from the date of payment to the date of recovery, both days inclusive.

(iii) It shall be ensured that at any point of time, Bank Guarantee is available for the amount of outstanding advance.

(iv) The recovery should be commenced after 10% of work is completed and the entire amount together with interest shall be recovered by the time 80% of the work is completed.

31.6 Grant of advance for plant and machinery and for Shuttering material

(1) An advance for plant and machinery that are required for the work and brought to site by the contractor may be given if requested by him in writing within one month of bringing them to site. Such an advance may be given if the Engineer-in-charge feels that the plant and machinery would add to the expeditious execution of the work and improve the quality of the work.

(2) The amount of advance shall be restricted as follows:--

(i) For new plant and machinery 5% of the contract value, or 90% of the price of such new plant and machinery paid by the contractor [for which he shall produce satisfactory evidence to the Engineer-in-charge], whichever is lower.

(ii) For second hand and used plant and machinery 5% of the tendered value, or 50% of the depreciated value of the plant and machinery [as may be decided by the Engineer-in-charge], whichever is lower. The contractor, if so required by the Engineer-in-charge, shall submit the statement of value of such old plant and machinery duly approved by a registered valuer recognized by the Central Board of Direct Taxes under the Income Tax Act, 1961.

(3) No such advance shall be paid on any plant and machinery of perishable nature, or of value less than Rs. 50,000.

(4) 75% of such amount of advance shall be paid after the plant and machinery (new or old) is brought to the site, and balance 25% on their successful commissioning.

(5) The recovery should be commenced after 10% of work is completed and the entire amount together with interest shall be recovered by the time 80% of the work is completed.

(6) The contractor shall be at liberty to take away the plants and machinery after the advance(s) along with the interest due on it(them) is(are) realized by the Department, and in the opinion of the Engineer-in-charge, they are not required at site for the execution of the balance items of work.

31.6.1 Leasing of equipment

Leasing of equipment shall be considered at par with purchase of equipment, and shall be covered by tripartite agreement with the following:--

- i) Leasing company which gives certificate of agreeing to lease equipment to the contractor,
- (ii) Engineer-in-charge, and
- (iii) Contractor.

31.6.2 Hypothecation of equipments

- (1) All such plant and machinery, for which payment of advance is requested by the contractor, shall be hypothecated to the BRIDCUL before the payment of advance is released.
- (2) The contractor shall not be permitted to remove from the site such hypothecated plant and machinery without the prior written permission of the Engineer-in-charge
- (3) The contractor shall be responsible for maintaining such plant and machinery in good working order during the entire period of hypothecation, failing which such advance shall be recovered in lump sum.

31.6.3 Insurance of equipments

- (1) The contractor shall insure, at his cost, the plant and machinery for which mobilization advance is sought and given, for a sum sufficient to provide for their replacement at site.
- (2) Any amount that is not recovered from the insurers shall be borne by the contractor.

31.6.4 Advance for shuttering materials

Steel scaffolding and formwork shall be treated as plant and machinery for the purpose of grant of advance. All provisions under para 31.6 and up to para 31.6.3 shall apply for this purpose.

SECTION 32

GENERAL GUIDANCE FOR OPERATION OF CONTRACT CLAUSES

32.1 Clause 2 of BRIDCUL Form no. 7/8 & clause 16 of BRIDCUL Form no. 12 (Recovery of compensation)

(1) These clauses refer to recovery of compensation from the contractor for delays and defaults on his part. This clause can be divided mainly into three parts, viz.:

(a) Observation of time allowed for completion of the work.
(b) Payment of compensation by contractor for non-commencement, not finishing in time or slow progress during execution.

(c) The decision of the General Manager regarding compensation payable by the contractor shall be final.

(2) As already explained under section-28 of this Manual relating to extension of time to contractors and imposition of compensation for delayed performance, time allowed for completion of the work is essence of the contract on the part of the contractor. The date for commencement of the work starts from the stipulated date that is mentioned in the letter of acceptance to the contractor.

(3) For slow performance or delay in the completion of the work, compensation, subject to a maximum of 10% of the contract value, is recoverable.

(4) The compensation for slow progress or non-completion of work in the stipulated time, at the rates specified therein, is an “agreed compensation”, which the contractor has to pay in case of default. Therefore, there is no choice for the Engineer-in-charge but to recover the same at the rates mentioned in the contract, if the progress of the work is slow Or the work is not completed in stipulated time. In case the contractor feels aggrieved, he may appeal to the General Manager against such recovery, who may uphold the recovery at the original rates or at reduced rates or completely waive off the same depending upon the merits of each case. In such cases the decision of the General Manager shall be final and out of purview of the Arbitration clause.

(5) In case the contractor does not achieve a particular milestone as stipulated under clause 5 of the agreement, or as re-scheduled, the amount shown against that milestone shall be withheld automatically and without any notice to the contractor, and may be adjusted against the compensation that may be levied at the final grant of extension of time. However, if the contractor catches up with the progress of the work on the subsequent milestone(s), the withheld amount shall be released to him. In case the contractor fails to make up the delay in the subsequent milestone(s), the amount mentioned against each milestone missed shall also be withheld. No interest shall be payable on the withheld amount.

32.1.1 Notice to the contractor

Under these clauses, irrespective of the value of the contract, the GM alone is the competent to levy compensation. The decision as to the quantum of compensation calculated on basis of rate given in the clause, to be levied has therefore necessarily to be given in all cases by the GM. The General Manager should give a

registered notice to the contractor, of his intention to levy the compensation. Proformas for show cause notice to be issued to the contractor regarding compensation under clause 2 have been given in Appendix 20A & 20B as below

- (i) When work either is in progress or has been completed. (Appendix- 20A).
- (ii) In case of contract is determined. (Appendix- 20B).

Reply submitted by the contractor, if any should be taken into consideration while deciding the compensation.

32.1.2 Recovery of compensation after EOT is sanctioned
The recovery of compensation should be effected after decision on extension of time has been obtained.

32.2 Clause 2A of BRIDCUL Form 7/8 (Incentive for early completion)

(1) This clause, provides for incentive payable to contractor in case of early completion of work by him. The clause is applicable if so provided in Schedule 'F' of General Condition of Contract.

(2) Normally this clause may be provided in NIT for works where estimated cost put to tender is more than Rs. 1 crore. However, technical sanctioning authority may provide this clause in NIT for works of lower value also, considering the advantage arising out of early completion of the work.

(3) Quantum of Bonus to be paid to the contractor shall be decided with the approval of Tender accepting authority but not below the rank of General Manager.

32.3 Clause 3 of BRIDCUL Form 7/8 & clause 17 of BRIDCUL Form 12

(Determination of Contract)

(1) These clauses deal with determination of contract, forfeiture of security deposit and execution of work through other agencies. These clauses are very important and are of vital importance. According to the clauses, when the contractor has rendered himself liable to action under relevant clause, the Engineer-in-charge, for and on behalf of Managing Director of BRIDCUL, shall have powers to determine the contract. Termination notice given in writing to the contractor under the hand of the Engineering-charge, for and on behalf of the Managing Director, shall be conclusive evidence for enforcement of this clause.

(2) The agreement inter-alia provides that if contract is determined, the earnest money deposit, security deposit already recovered and performance security/guarantee under the contract shall be liable to be forfeited and shall be absolutely at the disposal of the BRIDCUL.

(3) The contractor, whose contract is determined as above, shall not be allowed to participate in the tendering process for the balance work.

32.3.1 Notice to the contractor

(1) Two model forms of letters have been introduced to be issued by the Engineer-in-charge for and on behalf of the Managing Director of BRIDCUL for serving the "Show cause Notice" as well as the "Notice on final action" to the contractor under clause 3 of the agreement in respect of works undertaken in the Department, have been introduced. Copies of these model forms are as per Appendices 21 & 22.

(2) While making use of these forms, the following points should be kept in view:-
a) Alternatives wherever not applicable should be deleted and suitable additions made wherever considered necessary.

(b) While determining the contract under any of the sub-clauses of clause 3 for causes other than the causes as mentioned in the standard form for “Show Cause Notice” (viz, wrongful delay or suspension of work or slow progress) suitable modifications may be made, where necessary, according to the requirements of the case.

(3) Final notice of the agreement form may thereafter be drafted and approval of the tender• accepting authority as defined under schedule ‘F’ of contract be obtained.
32.4 Clause 3A of Form 7/8

In case the work cannot be started due to reasons not within the control of the contractor within 1/8th of the stipulated time for completion of the work or 1 month whichever is higher, either party may close the contract. In case contractor wants to close the contract, he shall give notice to the department stating the failure on the part of the department. In such an eventuality, the performance security/guarantee (P.G) of the contractor shall be refunded within the following time limits:--

(i) within 15 days if the contract value is upto Rs 45 lacs.

(ii) within 21 days if the contract value is more than Rs 45 lacs but upto Rs 2.5 crores.

(iii) within 30 days if the contract value is more than Rs 2.5 crores.

If P.G. is not released within the prescribed time limit then a simple interest @ 0.25% per month shall be payable on the PG amount to the contractor from the date of expiry of the prescribed time limit.

A compensation for such eventuality, on account of damages etc. shall be payable @ 0.25 % of contract value subject to a maximum of Rs 10 lacs. Tender accepting authority as defined in the contract shall be the competent authority to approve final action to close the contract under provision of the contract.

32.5.1 Action on failure to commence the work

If contractor fails to start the execution of the work, the earnest money and performance guarantee shall be forfeited by Engineer-in-charge with the prior approval of tender accepting authority.

32.5.2 Progress of work as per milestones

As soon as possible after the contract is concluded, the contractor shall submit a time and progress chart for each milestone and get it approved from the Department. The chart shall be prepared in direct relation to the time stated in the contract documents for completion of the items of the work. It shall indicate the forecast of the dates of commencement and completion of various trades of sections of the work and may be amended as necessary by agreement between the Engineer-in-charge and the contractor within the limitations of time imposed in the contract documents, and further to ensure good progress during the execution of the work. The contractor shall in all cases in which time allowed for any work exceeds one month (save for special jobs for which a separate program has been agreed upon)

complete the work as per milestones given in schedule 'F'. The maximum amount that is to be withheld in case of non- achievement of milestones shall not exceed 5% of tendered value of the work.

32.5.3 Re-scheduling of milestones

(1) If however, contractor cannot complete the work against any of the milestone(s) due to having been unavoidably hindered in execution thereof, or on any other ground, he can apply for re-scheduling of the milestone(s) and extension of time within 14 days of the happening of the event causing delay, on the prescribed form. The contractor may also, if practicable, indicate in such a request the period for which extension of time is desired. The detailed procedure of granting extension of time under this clause has been dealt under section-28 of this Manual — titled “Extension of Time”.

(2) Extension of time is also justified to the contractor for additional work that is required to be worked out as provided in clause 12 of the agreement [para 32.11.1 of this manual may be referred to]

(3) The Engineer-in-charge shall give a fair and reasonable extension of time and re-schedule the milestone(s) for completion of the work. Rescheduling the milestones will include changing the number of milestones also.

(4) Even after rescheduling of milestones total percentage of tendered amount which can be withheld in case of non achievement of milestones shall remain unchanged as decided:

32.5.4 Finality of decision on EOT

According to this clause, the opinion of the Engineer-in-charge as to whether the grounds shown for extension of time are or are not reasonable, is final. If the Engineer-in-charge declines to grant extension of time, it is not within the competence of the contractor to challenge the soundness of the opinion by reference to arbitration under the relevant clause. The Engineer-in-charge should give extension as may be, in his opinion, necessary or proper. His opinion as to whether the period of extension granted by him is proper is not, however final. The contractor can seek arbitration on the question whether the period of extension granted is or is not proper.

32.5.5 Grant of EOT when the contractor does not apply

The period during which the contract remains valid is a matter of agreement and if the period originally set for the completion of the work comes to an end, nothing short of agreement of the party can extend the subsistence and validity of the contract. When the period fixed for the completion of the contract is about to expire, the question of extension of the contract may be considered at the instance of the contractor or the Department or of both. The extension, in order to be binding, will have to be by parties to agreement express or implied. It, therefore, follows that if the extension of time is granted by the Project Manager suo-moto, and such extension of time is accepted by the contractor either expressly or implied by his action before and subsequent to the date of completion, the extension of time granted by the Executive Engineer is valid. It is, therefore, necessary that the

Project Manager grants extension of time even when the contractor does not apply for extension of time in order to keep the contract alive. If the contractor refuses to act upon the extension granted by the Project Manager, it will attract the provisions of clauses 2 & 3 of the agreement.

32.5.6 Compensation for delayed performance

The compensation for delayed performance, on account of which extension of time is granted by the Project Manager, which could be leviable would be a distinct matter. The decision to levy compensation would depend on:-

- i) Prior notice as contemplated by Section 55 of the Indian Contract Act, 1872.
- (ii) Fault/delay/hindrances being attributable to the contractor, and
- (iii) Proof of the loss occasioned there by (in case it is challenged by the contractor before the Arbitrator).

32.5.7 Hindrances to be carefully weighed before deciding on EOT

- (1) The contractor in his application for extension of time, points out the various delays and the lapses on the part of the Department that he considers unavoidable hindrances. The Engineer-in-charge, while recommending or granting cases for extension of time, generally accepts these reasons for delay to be correct. The contractor may claim damages or compensation in arbitration, for prolongation of work due to defaults or lapses on the part of the Department. When such cases come before the Arbitrator, the action of the Engineer-in-charge in accepting the reasons for extension of time may assist the evidence for the claims of the contractor for damages etc.
- (2) Though there may be delays and lapses on the part of the Department, yet at the same time there are also delays and lapses on the part of the contractor. For such delays during the stipulated or extended period of completion, the contractor is responsible, and these are also to be taken into account by the Divisional Officer while recommending or granting extension. To safeguard Nigam's interest these lapses on the part of the contractor should invariably be clearly mentioned by the Engineer-in-charge while granting/recommending extension of time.
- (3) In granting extension of time, a balanced view should be taken of the delays on the part of the contractor. vis-a-vis the delays of the Department. The mention of the delays on the part of the contractor along with those of the Department would ultimately help the Department in properly defending its position before the Arbitrator against the claims of the contractor for damages

32.6 Clause 7 of Form 7/8 of BRIDCUL (Intermediate/ Running Payments)

The circumstances under which intermediate payments can be made to the contractor have been explained in para 29.1 of this Manual. The Engineer-in-charge should fix a date by which the contractor should submit the bill each month. The amount admissible shall be paid by 10th or 15th working day after submission of the bill by the contractor to the Engineer-in-charge or his Resident Engineer, with all the required details, depending upon whether the work is in the headquarters of the Engineer-in-charge or outside his headquarters. The payment to the contractor shall be made only on submission of the bill by him. If the contractor fails to submit the

bill as aforesaid, he forfeits all claims whatsoever due to delays on payment including that of interest. [Para 7.12 of this Manual may be seen on submission of the computerized bills by the contractor.]

32.7 Completion Certificate

(1) According to this clause a completion certificate is to be given by the Engineer-in-charge to a contractor on completion of the work. No final bill will be accepted from a contractor unless such a bill is supported by a completion certificate. Further, the date of the completion certificate will determine the date upto which a contractor can be held responsible for making good damages under relevant clauses of the agreement.

(2) It has been observed that generally no certificate is given and only the date of completion is noted in the Measurement Book. Since this practice is not in conformity with the provision of this clause, a completion certificate must be recorded in the manner detailed under para 29.4 of this Manual.

(3) If, on inspection of the work by the Engineer-in-charge on receiving intimation from contractor, the work is not found satisfactorily complete, the contractor should be intimated of the defects etc. in writing, but no provisional completion certificate should be issued.

(4) The date of completion of work is the date on which it is finished, and not the date on which the final measurements are recorded by the Engineer-in-charge or his subordinate. It will therefore, be necessary to enable the Audit/Accounts to satisfy itself that the work was completed within the time prescribed in the contract, to note the date of its actual completion both in the bill of the contractor as well as in the Measurement Book in which the last measurements are recorded.

32.7.1 Recording of completion certificate after site clearance and measurements

(1) If the contractor fails to remove the scaffolding, surplus material and rubbish. and does not clean up the dirt from the wood work, doors, windows, walls, floors and other parts of the building, etc. it should be got removed at the cost of the contractor as laid down in this clause. The completion certificate should not be given till the site is cleared of all malba, rubbish, etc.

(2) The clause further states that, the certificate of completion shall not be issued until the work is measured by the Engineer-in-charge. The intention behind the provision is that all the measurements for works shall be recorded in time. The measurements for works are the most vital details, which get measured and accepted by both the parties. Delay in the taking of measurements by the Engineer-in-charge cannot of course delay the date of completion, since shelter under this provision cannot be resorted to for the lapse by the party taking advantage of it. Anyhow, if

the contractor delays/avoids finalizing of measurements. application of this provision will be reasonable.

32.8 Clause 10(C) of Form 7/8 : Re-imbusement to Contractor

(1) This Clause provides for re-imbusement to contractor due to increase/decrease caused as a direct result of coming into force of any fresh law or statutory rule or order (but not due to any changes in sales tax/VAT), in the price of material incorporated in the works (excluding the materials covered under clause 1OCA) and/or wages of labour increased over prices/wages prevailing at the time of the last stipulated date of receipt of tenders including extensions, if any, for the work during contract period including the justified period extended tinder the provisions of the contract without any action under clause 2. The increase should not be attributable to delay in the execution of the contract within the control of the contractor.)

(2) The operation of the clause includes the increase as well as decrease in price of materials and/or the wages of labour.

(3) To ensure uniformity in working out the rates so payable, following procedure shall be followed:

(i) Materials:

The Increased/Decreased rates of material(s) shall be approved by CGM. Payment/Recovery shall be made by Engineer-in-Charge on the basis of theoretical consumption of material(s) multiplied with difference in cost of such material(s) as prevailing at the time of receipt of tender and increased/decreased rates as approved by CGM .

(ii) Labour:

(a) The increase/Decrease shall be approved and Paid/Recovered by Engineer-in-Charge on the basis of Increase/Decrease of wages of labour coming into force as per fresh law or statutory rule or order.

(b) The Increase/Decrease labour shall be considered on the minimum daily wages in rupees if any unskilled adult mazdoor, fixed under any law or statutory rule or order.

(4) Clause 10(C) forms an exception to the general rule of the contract that nothing more than what has been agreed to be paid for work done is to be paid to the contractor. It is in the nature of recompense to the contractor if during the progress of the work the price of any materials incorporated in the works and/or wages of labour increases as a direct result of the coming into force of any fresh law or statutory rule. The first thing is that the exception has to be strictly construed.

Secondly, it contains an in-built safeguard because it is in the nature of an equitable reimbursement.

(5) The claim for increase over and above the prices/wages prevailing at the time of the last stipulated date of receipt of tenders including extensions, if any, for the work during contract period including the justified period extended under the provisions of the contract without any action, shall be payable which shall be limited to the prices/wages prevailing at the time of stipulated date of completion or as prevailing for the period under consideration, whichever is less.

(6) The component of labour for every work has to be predetermined and incorporated in Schedule 'F' of the tender document. This may also be done as given in para 32.10.1 of this manual for clause 10 CC

32.9 Clause 10(CA) of Form 7/8 : Increase or Decrease in Prices of Materials

(1) It provides for varying the amount of contract due to increase or decrease in prices of various materials pertaining to the work. This clause shall be applicable for allowing adjustment in cost of work due to variation in prices of costly materials constituting substantial part of the work.

The NIT approving authority may consider bringing materials like cement, steel, structural steel, POL, bitumen etc. under the ambit of this clause. Such list of materials (other than Cement, Steel reinforcement bars and structural steel) shall be got approved from GM concerned, who shall have full powers for such approval. The material, the estimated cost of which is less than 5% of estimated cost of work and the materials like sand, stone etc., the prices of which vary from place to place, need not be considered.

(2) The items which are supplied by the department at fixed price to the contractor shall also not be considered.

(2) All India Whole Sale Price indices for various materials (except Cement, Steel reinforcement bars of structural steel) as published regularly by Economic Advisor to Government of India, Ministry of Commerce and Industry available at their website <http://eaindustry.nic.in> and price indices for cement, steel reinforcement and structural steel as issued under the authority of Director General, CPWD shall be followed. In case, for a particular material, price indices is not being published by Ministry of Commerce and Industry which is available at their website <http://eaindustry.nic.in>, the price indices of nearest similar material shall be followed. List of materials for which this clause is applicable and nearest similar material shall be indicated in schedule "F" of GCC while finalizing NIT of a work as illustrated below :--

Clause 10 CA

Material Under this Clause	Nearest Material other than cement, reinforcement bars and structural steel for which all India all India whole Sale Price Index is to be followed	Base Price of all the materials covered under Clause 10 CA*
1. Cement	1.....	1.....
2. Steel reinforcement bars
3. Structural Steel	2.....	2.....
4. P.O.L.
5.....	3.....	3.....
.....
	4.....	4.....

* Base Price of all the materials covered under clause 10 CA is to be mentioned at the time of approval of NIT.

(3) The base price for Cement, Steel reinforcing bars and structural steel for Dehradun shall be issued by CGM. Base prices for other materials covered under clause 10 (CA) shall be issued by concerned Managing Director. This clause shall be applicable for all the contracts.

32.10 Clause 10(CC) of Form 7/8 : Variation in Contract Amount

(1) This clause provides for variation in contract amount due to variations in price of materials, POL and/or wages of labour required for execution of work (not for the materials supplied or services rendered at fixed price in accordance with clause 10 & 34 of GCC and excluding materials covered under clause 10 CA), subject to certain conditions.

(2) Clause 10 (CC) will be applicable in contracts where the stipulated period for completion is more than 12 months.

(3) Payment under clause 10(CC) is applicable for work done during the stipulated period of the contract including the justified period extended under the provision of the contract without any action. However for work done during the justified period extended as above, payment shall be worked out on basis of prices/wages prevailing at the time of updated stipulated date of completion considering the effect of extra work done (to be calculated on pro-rata basis as cost of work x stipulated period / tendered cost).

32.10.1 Pre-determination of all components affecting clause 10 CC

(1) The components of materials, excluding materials covered under clause 10 CA, labour and P.O.L. for every work have to be predetermined and incorporated in the schedule 'E' of the *CCCI* Standard contract form 7/8. For this purpose, the works, shall be classified broadly as under:

- (i) Building works including sanitary and water supply.
- (ii) Road works and pavement works in airfields.
- (iii) Development works.
- (iv) Carriage works.
- (v) Internal electrical installations.
- (vi) External electrical works.
- (vii) Supplying and installation of machinery, like lifts, sub-stations, pump sets etc.

(2) In the case of building works the component of P.O.L. is very small and need not be indicated separately. Following percentage may be indicated for various categories of civil works:

Category of work	Cement + Steel + Material*	Labour	P.O.L.
Building	75%	25%	--
Road Works & pavement in airfields	90%	5%	5%
External sewerage	90%	10%	--
External water supply	95%	5%	
Bridge work/flyover works	70%	25%	5%

*Further break up may be worked out.

(3) The above percentage components are for normal types of works with ordinary/hard soil strata etc.

Where the soil strata is pre-dominantly rocky, involving heavy cutting or there are other special features, percentages may be fixed by the various authorities approving NIT taking into consideration the detailed estimate.

(4) In respect of carriage works and for other development works, such as levelling, etc. also, the NIT approving authority may decide the percentage components.

32.10.2 Calculation of escalation/de-escalation

(1) The contractor shall prepare the statements of escalation or de-escalation at the end of every 3 months, and submit to the Engineer-in-charge. The first statement of escalation shall be prepared at the end of 3 months, excluding the month in which the work was awarded. The work done from the date of start to the end of this period shall be taken into account. For subsequent statements, cost of work done during every quarter shall be taken into account. At the completion of work, the work done during the last quarter or fraction thereof shall be taken into account. For the purpose of reckoning the work done during any period, the bills prepared during the period shall be considered. The dates of preparation of bills as entered in the Measurement Book by the Resident Engineer shall be the guiding factor to decide the bills relevant to any period. The date of completion as finally recorded by the competent authority in the Measurement Book shall be the criterion.

(2) The Project Manager will communicate the base index to the contractor in respect of each work.

3) The Project Manager will sanction the compensation for escalation or deduction on account of de-escalation, and the amount thus sanctioned will be included in the next running account bill or final bill, as the case may be. The cost of work for which escalation/de-escalation is applicable/ deductible shall be worked out as below:--

- a) Gross value of work done upto this quarter----- (A)
- (b) Gross value of work done upto the last quarter----- (B)
- (c) Gross value of work done since previous quarter: $(A - B)$ ----- (C)
- (d) Full assessed value of secured advance (excluding the material covered Under clause IOCA) fresh paid in this quarter----- (D)
- (e) Full assessed value of secured advance (excluding the material covered under clause IOCA) recovered in this quarter----- (E)
- (f) Full assessed value of secured advance for which escalation is payable in his quarter: $(D - E)$ ----- (F)
- (g) Advance payment made during the quarter----- (G)
- (h) Advance payment recovered during the quarter----- (H)
- (i) Advance payment for which escalation is payable in this quarter: $(G - H)$ --- (I)
- (J) Extra items/deviated quantities of agreement items paid as per clause 12 Based on prevailing market rate during this quarter----- (J)

$$M = C + F + I - J$$

$$N = 0.85M$$

(k) Less cost of materials supplied by the department as per clause 10 & recovered during the quarter... (K)

(I) Less cost of services tendered at fixed charges as per clause 34 & recovered

during the quarter------(L)
(m) Cost of work for which escalation/de-escalation is applicable-----
------(M)

$$W=N-(K+L)$$

(4) All India Wholesale Price Index for civil component/electrical component of construction

material as worked **out** on the basis of All India Wholesale Price Index for Individual Commodities/Group Items’, and All India Wholesale Price Index for ‘Fuel, Oil and Lubricant’, both published by the Economic Adviser to the Government of India, Ministry of Industry and Commerce, and applying weightages to the Individual Commodities/Group Items, and the higher of the ‘Minimum wage of an unskilled male mazdoor’ notified by the Ministry of Labour and that notified by the Local Administration, will be collected by the Managing Director. He will work out the indices relevant to each month as per definition given in the sub clause and communicate to the MD, BRIDCUL, and General Manager, who would arrange to circulate these figures to all the Project Managers under their jurisdiction.

(5) Copies of all sanctions issued by the Project Manager shall be sent, to his General Manager and to his Managing Director also if the tender for the work was accepted by the Managing Director.

32.11 Clause 12 of Form 7/8 : Alterations, Addition or substitution from the Original Specification/Drawings.

(1) Under this clause the Engineer-in-charge has powers to make any alterations in, omission from, addition to or substitution for the original specifications, drawings, designs and instructions.

(2) The Engineer-in-charge (PM) is empowered under this clause to give necessary instructions to the contractor, and the contractor is bound to carry out the work in accordance with such instructions, but the following three conditions’ should be satisfied in the issue of such instructions:--

- i) Instructions must be given before any additional or substituted item is taken up.
- (ii) They must be given in writing after approval to the same is granted by the Technical Sanctioning Authority.
- (iii) They must be signed by the Engineer-in-charge.

32.11.1 Extension of time due to variations in items executed

As regards the extra time for completion of the work due to deviations in agreement items [para 23.1 of this Manual may be referred to], and altered, additional or substituted items, the Engineer-in-charge should determine the proportion that the algebraic sum of deviated, altered, additional or substituted work bears to the original contract work and certify for such portion. For substituted items, the additional cost of modified component only is to be taken. He should extend the time for the completion of the work according to such proportion plus 25% thereof.

The proportion so determined by the Engineer-in-charge is final, and the contractor cannot raise a dispute as to such proportion and demand arbitration. However, if the contractor feels that the period of extension given is, having regard to the proportion so determined, miscalculated, it is open to him to request arbitration under the relevant clause about the propriety or otherwise of such period of extension.

32.11.2 Precautions to be taken during sanction of items

- (1) Sometimes while sanctioning items the Engineer-in-charge gives the impression to the contractor that although he had recommended higher rates, the General Manager or the Managing Director has reduced them, It should clearly be borne in mind that under the terms of the contract it is the Project Manager who is the competent authority for according such sanction, and the sanction letter should be so worded as to convey clearly to the other party that the items have been sanctioned by him and not for or at the instance of the higher authority.
- (2) Sometimes the Project Manager endorses copies of communication addressed by him to the competent authority for sanctioning rates for certain items, to the contractor concerned. This practice is irregular and is likely to cause legal complications. All communications in connection with fixation of rates etc. should be marked “Confidential”, and copies thereof should not be endorsed to the contractor or any other private party. In reply to the communications of the contractor asking for early settlement of items, which are required to be examined and sanctioned by higher authorities and the sanction is awaited, the contractor should not be informed that sanction of the competent authority is awaited. They should only be informed that the matter is under consideration and is receiving attention.

32.11.3 Procedure for sanction of items

- (1) On receipt of the items duly supported by analysis of rate from the contractor as intimated by him under clause 12.2 of the contract, the Engineer-in-charge should consider whether the rates demanded therein are reasonable. If he is of the opinion that they are reasonable, he may agree to the rates after consulting the competent authority. If on the other hand he is of the opinion that the rates demanded are not reasonable and he does not agree to them, but agrees to the admissibility of these items, he should determine the rates on the basis of the market rates within the prescribed time limit.

As far as possible, the market rate analysis should be based on the coefficients given in the Delhi Analysis of Rates of CPWD.

- (2) Clause I 2.2 provides that in case of contract items, substituted items, contract-cum-substituted items (which result in exceeding the limits specified in Schedule “F”), the contractor shall within 15 days from the receipt of order or occurrence of

excess can claim revision of rates for the quantities exceeding the deviation limit. Such claims should be submitted by him duly supported by analysis. The Engineer-in-charge shall revise the rates based on market rates within the prescribed of receipt of such claims.

The prescribed time limits are as under :---

- (a) 30 days if the contract value is upto Rs 45 laos
- (b) 45 days if the contract value is more than Rs 45 lacs but upto Rs 2.5 (crores
- (c) 60 days if the contract value is more than Rs 2.5 crores

In order to achieve the prescribed time limits, the following time table

Should be observed :-----
 Contract Value Maximum time allowed for sanction of rates for
 extra/substituted/contact cum substituted items

	RE	PM	GM	CGM
(i) Upto Rs. 45 lacs	7 days	7 days	7 days	7 days
(ii) More than 45 lacs but Upto Rs. 2.5 crores	10 days	10 days	10 days	10 days
(iii) More than Rs. 2.5 crores	15 days	10 days	10 days	10 days

(3) The contractor on no account shall suspend the work on the plea of non-settlement of rates of items.

(4) For operation of this clause, the following points may be necessary:--

- i) There should be written order for deviation.
- (ii) The contractor is to apply for revision of rates supported by analysis within 15 days after receipt of such communication.
- (iii) The rates for deviated quantities beyond deviation limits are to be based on market rates. (iv) The work shall not be suspended on the plea of non-settlement of rates.
- (v) The rates shall be revised only for the, quantities beyond the deviation limits, and only if all the limits specified in Schedule “F” are exceeded. it should be noted that the whole operation of clause 12 for deviation is for works which appear necessary in the execution of work specified in scope of work.

32.11.B Clause 13 of Form 7/8

If at any time after acceptance of the tender, Engineer-in-charge shall decide to abandon or reduce the scope of work for any reasons whatsoever and hence not required the whole or any part of the work to be carried out, the Engineer-in-charge shall give notice in writing to that effect to the contractor and the contractor shall act accordingly in the matter.

However, the Engineer-in-charge shall take prior approval from the NIT approving authority before deciding to abandon or reduce the scope of the work in this regard.

32.12 Clause 16 of Form 7/8 : Obligation on the Contractor

(1) This is an important clause that casts an obligation on the contractor and the departmental staff to ensure execution of quality work.

(2) Under this clause the contractor may be required to make good the defects in work at his own expenses, or re-execute the work if it is not in accordance with the specifications, designs, etc.

(3) The clause authorizes the Engineer-in-charge to offer lower rates to the contractor for work done that is not conforming to specifications, if the work so done is otherwise acceptable to the Department.

(4) This clause empowers the Engineer-in-charge to ask the contractor to rectify or re-do the defective work, and in the event of his failing to do so within the period to be specified by the Engineer-in-charge in his demand, the contractor shall be liable to pay compensation at the rate specified in clause 2 while his failure to do so continues, and in case of any such failure the Engineer-in-charge may rectify, remove or re-execute the work at the risk and expenses of the contractor. Notice to the contractor of the intention to recover compensation is not necessary under this clause.

(5) The General Manager has not been given any power to reduce or waive compensation levied by the Project Manager under this clause.

32.13 Clause 21 of Form 7/8 & clause 20 of Form 12:

Tender accepting authority can rescind the contract for unauthorised subletting of contract.

(I) These clauses specify, in addition to those mentioned in clause 3 of Form 7/8, the circumstances under which the tender accepting authority can rescind the contract.

(2) Permission to sublet or assign the contract to another party should not be given to a contractor by the Divisional Officer without prior reference to the authority who accepted the tender.

(3) The tender accepting authority should keep the following points in view in case they decide to grant such permission:-

i) Sub-letting should be permitted only in exceptional cases and for recorded reasons as to why contractor himself cannot directly run the contract.
(ii) In all cases, the sublettee should be a contractor of the same or higher capacity or class as the original contractor.

iii) Examining the terms and conditions of the agreement between the contractor and the sublettee in order to satisfy himself that the contractor is not subletting the work for earning a middle man's profit.

(iv) It should be seen at the time of subletting that the Government will not be put to any loss on this account and that no risk is involved.

(v) Individuals holding general power of attorney cannot operate a contract awarded to a contractor.

Note: Engagement of labour on a piece work shall not be deemed to be subletting.

32.14 Clause 36 of Form 7/8 : Obligation on the Contractor to deploy skilled professionals

(1) **This** clause casts **an** obligation on the contractor to deploy well-trained, qualified and '!' skilled professionals **at site of work** to execute only quality work, and the consequences that would arise on his failure to do so. In order to effectively operate the provisions, certain instructions on this clause are given below:---
Project Manager should ensure that the contractor is called upon, immediately after award of work, to intimate the details i.e. name(s), qualifications, and address (es) of the qualified Engineer(s) required to be employed by him as per terms of the contract and to ensure that properly qualified engineer(s) employed by contractor is/are actually available at site to supervise construction at all stages and note down the instructions conveyed by the Engineer-in-Charge or his authorized representative namely RE or JE in site order Book. The engineer(s) should be invariably present fully during all stages of the execution of the work. It is also essential that the certificate that qualified engineer(s) has/have looked after the work during its execution is verified and recorded by the RE along with each running bill. Project Managers should also verify the fact of employment during their visit of works.

(2) Certain Administrative instructions as regards this clause are given as under:
i) Engineer(s) and/or Junior Engineer(s) deployed as per stipulation in the contract shall look after only the work under contract and no other work and shall be available fully during execution of work.

(ii) Even if contractor (or partner in case of firm/company) is himself an Engineer/ Junior Engineer(s), it is necessary on part of contractor to employ Engineer(s) and/or Junior Engineer(s) for the supervision of the work(s) as per stipulation.

(iii) The Retired Engineer/Resident Engineer who are holding Diploma may be treated at par with Graduate Engineers for the operation of the Clause.

(iii) Diploma holder with minimum 10 year's relevant experience with a reputed construction company can be treated at par with Graduate Engineer for the purpose of such deployment subject to the condition that such diploma holders should not exceed 50% of the requirement of degree engineers.

(3) Requirement of technical staff for a work shall be decided and stipulated in Schedule 'F' as per guidelines given at **Appendix 10**.

32.15 Clause 42 of Form 7/8 : Obligation on the Contractor

This clause imposes an obligation on the contractor to manage an effective inventory control of the expensive and essential stipulated materials, and the resultant consequences in case of non-observance of diligence in their usage by the contractor. Clause 42(u) and (iii) of GCC lays down that recovery at a specified rate (higher than the normal issue rates) is to be made from the contractor for use of cement and steel in excess over the quantity arrived at by theoretical calculation. The intention behind the clause is that the contractor shall take only the required quantity of materials, and if any such materials remain unused at the time of completion or determination of the contract, it has to be returned to the Engineer-in-charge. The clause specifically provides that the material not so returned shall be recoverable at the rates as specified. The rates so specified forms the reasonable compensation for the breach of the provisions therein. Thus this particular clause is not in the nature of penalty, but provides a reasonable compensation. The aggrieved party for the breach of the contract can receive reasonable compensation, not exceeding the amount so named relating to the excess issue of materials not returned by the contractor.

32.15.1 Theoretical consumption statement with every bill

(1) In order to operate the provision of this clause effectively, it is necessary that with every running account bill a statement showing the theoretical requirements of materials for the items of work done and measured should be prepared and got signed from the contractor at the time of obtaining his signature on the running

account bill, so that he is aware of the basis on which the theoretical calculations are worked out. It will also enable the Department to exercise a broad check over the consumption of these materials during execution of the work. As already mentioned above, the recovery at the rates so specified in the clause is for the materials issued in excess over the quantity which is expected to be used in the work if the materials is used with prudence and economy, and is arrived at through theoretical calculations of the quantity that is required and the quantity that is not returned by the contractor. The recovery is not for excess consumption. It is therefore absolutely necessary that a notice in writing should be issued by the Engineer-in-charge to the contractor to return the materials issued in excess of the theoretical quantity as provided in clauses 42 and 10 the contract. Only thereafter action for recovery under clause 42 should be taken.

(2) Once the distinction that recovery is for excess over theoretical consumption and not for consumption in the work becomes clear, it will be inappropriate for the Engineer-in-charge to admit before the arbitrator that the entire quantity of materials issued has actually been consumed in the work. In the counterstatement of facts in arbitration also, statement such as, “Excess materials have actually been used in the work”, should never be made.

(3) For non-scheduled items, the decision of the General Manager regarding theoretical quantities of materials that should have been actually used shall be final and binding on the contractor.

32.15.2 Validity of recovery at double the issue rate

In the judgement of the Delhi High Court delivered in Civil suit no. 27-A/75 Mehta Teja Singh & Co. vs Union of India, etc. The High court have upheld that recovery at double the issue rate (existing in the GCC at that time) for the excess quantity of materials issued over the quantity calculated on theoretical basis under clause 42(u) of the Contract Form no. 7 and 8 is justified.

SECTION 33

FAIR WAGE CLAUSE AND BRIDCUL CONTRACTOR'S LABOUR REGULATIONS

33.1 Provision of Act

(1) The Contract Labour (Regulation and Abolition) Act, 1970 applies to every establishment in which 20 or more workers are employed or were employed on any day of the preceding 12 months as contract labour, and to every contractor who employs or who employed on any day of the preceding 12 months; 20 or more workmen. The Act also provides for registration of establishment and Licensing of Contractors. Accordingly, every principal employer is to make an application to the Registering Officer for registration of the establishment. Section 9 of the Act lays down that no principal employer of an establishment, required to be registered under Section 7 but which has not been registered within the prescribed time limit, shall employ contract labour after the date.

(2) It has been clarified by the Ministry of Labour that the 20 contract labourers can be through one or more contractors, and it does not matter that a single contractor may not be employing 20 or more contract workers. It is sufficient that a total of 20 contract workers (through contractors) are working in an establishment of Principal Employer.

(3) If a contractor employs 20 or more workmen on any day in the preceding year, the contractor is legally bound to take license from the Licensing Officer i.e., Assistant Labour Commissioner (Central).

(4) As required under Section 2 (i) (g) of the Act, the Ministry has decided to declare every Divisional Officer (Project Manager) or any Sub-Divisional Officer incharge of an independent Sub-Division as "Principal Employer".

(5) The fees to be paid for the grant of Certificate of Registration shall be as prescribed under the Act.

(6) In pursuance of Section 12 of the Act, no contractor to whom the said Act applies, shall undertake or execute any work through contract labour except under and in accordance with a license issued in that behalf by the Licensing Officer.

33.2 Acts/Omissions

(1) The Appropriate authority in terms of Section 6(u) of BRIDCUL Contractors' Labour Regulations to approve the list of acts and omissions for which fines are liable to be imposed is the "Chief Labour Commissioner."

(2) The list of acts and omissions for which fines can be imposed on workers by contractors is given in the General Conditions of Contract (GCC).

33.3 Fair wages

(1) The term 'Fair wages' under BRIDCUL Contractors' Labour Regulations means wages fixed and notified under the provisions of the Minimum Wages Act, 1948 from time to time. The fair wages clause is applicable only to those employees whose wages do not exceed the limit prescribed in the Act.

(2) It should be the duty of the Labour Officer to make enquiries about non-payment of wages. for preventing wages' claims of contractors' labour falling in arrears. For this purpose, it is essential that Labour Officer should make frequent site inspections, as this is the only way of contacting Labour in the field and thus preventing wages falling in arrears. Any case of accumulation of arrears should be specifically brought to the notice of the Project Manager and General Manager for enquiry.

(3) The responsibility for identification of labour rests with the Labour Officer. He will, however, be afforded all assistance by the Junior Engineers.

(4) The contractor shall also abide by the provisions of the Child Labour (Prohibition and Regulation) Act, 1986. No labour below the age of fourteen years shall be employed on the work.

(5) Normally, working hours of an employee should not exceed 9 hours a day. The working day shall be so arranged that, inclusive of interval of rest, if any, it shall not spread over more than 12 hours a day.

(6) When a worker is made to work for more than 9 hours on any day or for more than 48 hours in any week, he shall be paid overtime for the extra hours put in by him at double the ordinary rate.

33.4 Responsibilities of field officers

(1) In order to ensure regular payment of wages to the labour by the contractor, the Fair Wages clause 19B(b) provides that the Project Manager or the Sub-Divisional Officer concerned shall have the right to deduct from the money due to the contractor any sum required or estimated to be required for making good the loss suffered by the workers, non payment of wages or of deductions from his or their wages which are not justified by the terms of the contract, or non-observance of the Labour Regulations. In view of this provision and other provisions of Fair Wage clause as embodied in the agreement, it is incumbent upon the Project Manager and the Sub-Divisional Officer to see that the labour employed by the contractor is paid regularly, and that no arrears are allowed to accumulate on this account. For this purpose, they should see that the returns that are prescribed are duly submitted by the contractor, and they should scrutinize them with a view to see that the contractor is duly fulfilling the conditions of the contract.

(2) In case an Project Manager finds it difficult to take action on the advice tendered by the Labour Officer under Contractor's Labour Regulations for any reason, the

matter should be immediately laterly reported to the General Manager concerned and directions obtained from him.

(3) Security Deposit of the work shall not be refunded till the contractor produces a clearance certificate from the Labour Officer. As soon as the work is virtually complete, the contractor shall apply for the clearance certificate to the Labour Officer under intimation to the Engineer- in-charge. The Engineer-in-charge, on receipt of the said communication, shall write to the Labour Officer to intimate if any complaint is pending against the contractor in respect of the work. If no complaint is pending on record till after 3 months after completion of the work, and/or no communication is received from the Labour Officer to this effect till 6 months after the date of completion. it will be deemed to have received the clearance certificate and the Security Deposit will be released, if otherwise due.

33.5 Responsibilities of contractor

(1) The contractor shall comply with all the provisions of the Minimum Wages Act, 1948, Contract Labour (Regulation and Abolition) Act, 1970 and rules framed there under, and other labour laws affecting contract labour that may be brought into force time to time.

(2) It shall be the duty of the contractor to ensure the disbursement of the wages in the presence of the Junior Engineer or any other authorized representative of the Engineer-in charge, who will be required to be present at the place and time of disbursement of wages by the contractor to his workmen.

(3) ‘The contractor shall obtain from the Junior Engineer or any other authorized representative of the Engineer-in-charge, as the case may be, a certificate under his signature at the end of the, entry in the prescribed ‘Register of Wages’, or the ‘Wage-cum-Muster Roll’, as the case may be, in the following form:

Certified that the amount shown in column no has been paid to the workman concerned in my presence on----- at-----“

33.6 Deductions to be made from contractor’s bills

(1) The Labour Officer, or other persons authorized as aforesaid, shall submit a report of result of his investigation or enquiry to the Project Manager concerned indicating the extent, if any, to which the default has been committed, with a note that necessary deductions from the contractor’s bill be made and the wages and other dues be paid to the labourers of these regulations. Actual payment to labourers will be made *by* the Project Manager after the General Manager has given his decision on such appeal.

(2) The Project Manager shall arrange payments to the labour concerned within 45 days from the receipt of the report from the Labour Officer or the General Manager, as the case may be.

(3) The contractors in the BRIDCUL are required to pay to the labour employed by them, either directly or through sub-contractors, fair wage as defined in the Contractors' Labour (Regulation and Abolition) Act, 1970 and the rules made there under.

(4) No deduction on account of Jamadar's commission charges etc. is to be made **from** the wages of labourers. In no case the liability of the commission charges shall fall on the workers.

33.7 Procedure in case of accidents to contract labour

(1) In case of fatal accidents or accidents involving permanent total disability, the accident must invariably be reported to the Managing Director , with a copy. among others. to the Chief General Manager and Labour Officer concerned immediately after the accident.

(2) Thereafter the Labour Officer (Project Manager concerned for Uttarakhand) should make personal investigation into the matter and submit a brief report to the Managing Director , with a copy to the General Manager concerned. The disposal of accident cases should be given priority at all levels.

SECTION 34

ARBITRATION AND LITIGATION CASES

34.1 Dispute Redressal Committee (DRC)

In order to drastically reduce the number of cases filed by the contractors for arbitration, and to redress the disputes with the contractor in accepting any decision of a competent authority on any matter relating to a contract there shall be a Standing Committee, set up by the Managing Director, for each Zone in the Region, comprising of the following Members:- A) For total claims more than Rs. 25.0 lakh

(a) Managing Director (Chairman)

(b) One Chief General Manager(not in-charge of the work)

(c) The GM in-charge of the work

(d) PM (Incharge of work)

(B) For total claims up to Rs. 25.0 lac

(a) Chief General Manager(Chairman) (charge of the work)

(b) GM (not in-charge of the work)

(c) The Project Manager in-charge of the work.

(2) In the first instance, the Project Manager, General Manager, or the Managing Director shall positively give his decision on any matter relating to the contract, for which he is competent to do so. If the decision so given is not acceptable to the contractor due to any legitimate reason, efforts shall be made to reason with the contractor to arrive at a consensus that is reasonable and legitimate under the terms and conditions of the contract. If, however, no consensus can be reached, the matter shall be referred to the next higher authority, and if no consensus can be reached at that level too, then the Managing Director shall refer the matter to the Dispute Redressal Committee for adjudication. In other words, cases shall be referred to the Committee only after exhausting all other remedies available with the officers of the department who are a party to the contract.

(3) The General Manager and his Project Manager, who are parties to the contract under dispute, shall present the case of the department before the Committee, alongside the contractor who shall present his case. The Committee shall hear both the parties, and suggest an amicable and legitimate solution to the problem, based on the principle of equity and natural justice. If the same is acceptable to both the parties, it shall be accepted by the officer in the department under whose competence the matter falls, and conveyed for implementation. If, however, the Committee fails to resolve the issue, the decision taken by the competent authority of the department in the matter would stand. It would then be up to the contractor to either accept it, or to apply for arbitration under the provisions of the contract.

(4) The party invoking arbitration clause should give information enough to justify existence of dispute. For this purpose, the party has to give details about the demand having been made and its refusal by the other party. It is held by Courts of Law that a ‘dispute’ implies an assertion of right by one party and repudiation thereof by the other. Existence of a dispute is a condition precedent to arbitration. If there is no existence of dispute there cannot be any right to demand arbitration.

(5) In view of the above, before appointing arbitrator, the Managing Director should ensure that existence of dispute(s) has been established. For this purpose the party invoking arbitration clause should be asked to produce documentary evidence of its claims having been duly lodged with the other party and refusal by the other party to accede to them or no response by other party within stipulated time.

34.4 Preparation for arbitration cases

(1) The following steps should be taken by the Divisional Officers with a view to properly defend the Arbitration cases:

(i) As soon as a contractor applies for arbitration, the Project Manager should prepare a detailed history sheet containing the data regarding estimates, designs and drawings, NIT, agreements, extra and substituted items, reduction statements, extension of time/notices issued and send a copy to his General Manager.

(ii) List out important letters in respect of the issues that are raised by the contractor, or the important notices by the contractor, or the important notices issued to the contractor, and place these originals in a separate file. In the routine file, true copies of these documents may be placed.

(iii) original agreements, plans, designs including the calculations for these if available, details of measurements and analysis of rates attached to the technically sanctioned estimates, all the Measurement Books connected with the work, Cash Book, Site Order Book, Cement Register in safe custody of the Project Manager along with originals listed in para (ii).

(iv) The Measurement Books should be closed.

(v) All the files connected with the work should be properly page-numbered, stitched and sealed, and kept by the Project Manager along with the above records.

(vi) If there are important situations or circumstances which are not available on the file, but are only known to the Executive Staff, their signed statements regarding the factual information should be obtained and kept on record, as after a lapse of time they may not be available for personal discussions, or they may be unable to recall past events.

(vii) The Project Manager may call the Executive *Staff* in-charge of the work from their new stations for any information that he may need to collect by personal discussions, but only under orders from the General Manager concerned.

(2) If the work has been completed, the final bill should be prepared as early as possible, and in any case before the disputes are referred to arbitration. The

General Manager/Project Manager should ensure that the bills are finalized immediately, if not already done.

- (3) The Project Manager shall inform the authority with whom Extra/Substituted Deviations/RR items are pending about the arbitration case with a request to approve the items immediately. The concerned authority shall ensure that all such pending items are finalized before CSF is submitted.
- (4) A detailed note on the facts of the case dealing with each and every item of the claims and/or counter claims should be prepared by the Project Manager, along with reference to various relevant documents supporting the Nigam's case or negotiating the contractor's claim(s).

34.5 Processing of contractor's application

- (1) The Project Manager shall send one copy of the application of contractor direct to the Managing Director with the under-noted information, without waiting for a reference from the Managing Director, within 15 days from the date of receipt of the contractor's application in his office, with a copy to General Manager. Thereafter the General Manager should send his report to Managing Director immediately.
 - a) An attested copy of relevant arbitration clause.
 - b) A note regarding verification of the factual data furnished by the contractor in the application form.
 - c) Brief comments on each claim of the contractor. While giving such comments, the admissibility of the claims in the light of arbitration clause and Limitation Act, should be kept in view and commented upon.
 - d) Statement of counter claims of the Department, if any. However, if counter claims are not readily enlisted or available, comments on contractor's claims should not be delayed.

34.6 Appointment of Arbitrator

- (1) standard form of appointment letter at Appendix 23 is to be used for appointing an Arbitrator.
- (2) In those cases where the amount of the claim is less than Rs. 1,00,000 (Rupees One lakh), para 2 of the standard form should be deleted. (Para 2 states that the Arbitrator shall give reasons for the award if the amount of claims in dispute is 'one lakh or above).
- (3) The MD of the Nigam will appoint a panel of Arbitrators, and generally the cases of disputes between the Nigam and other parties will be referred to the sole arbitration of one of them as may be decided by the Managing Director /MD.
- (4) The person thus appointed shall be the sole Arbitrator, and his award shall be final and binding on all parties to the contract, unless it is set aside by the Court.
- (5) Whenever a notice for appointment of an Arbitrator is received from a contractor in terms of Agreement (and corresponding clauses in other forms), the GM should process the case so as to appoint an Arbitrator within 30 days

from the receipt of such a notice. The time limit of 30 days for appointment of Arbitrator should be strictly adhered to.

- (6) In cases where no agreement exists, or where no clause exists in an agreement for referring the matter of dispute to the sole arbitrator of a person to be appointed by the Managing Director, the disputes should not be referred to arbitration by mutual consent and no agreement should be drawn up for this purpose.
- (7) The authority of an appointed Arbitrator does not become revocable except with the order of the Court. It shall not be revocable by the death of any party or parties to the contract.
- (8) The draft letter for appointment of a new Arbitrator due to transfer or vacation of office by the old Arbitrator shall be as per **Appendix 24**.

34.7 Action subsequent to appointment of Arbitrator

- (1) When the Arbitrator enters into reference and writes to the parties to the contract to file the statement of facts and counter statement of facts before him, the Project Manager should take prompt action to prepare the defence, duly supported by adequate documentary evidence and witnesses, and arrange for its submission to the General Manager and the Departmental Counsel, as may be necessary, and get their approval, and send to the Arbitrator by the date and within the time specified by him. In cases where the claims (excluding interest) exceed **Rs. 30 lakhs**, advice of the Legal Counsel should be sought as given in para 4. '0.1.
- (2) The Project Manager should deal with submission of counter statement with utmost urgency and priority. Taking into account the various difficulties in filing the counter statement, it has been decided that the Project Manager should submit the counter statement of facts normally within 2 months, and in exceptional cases within 3 months from the date of receipt of the statement of the Facts.
- (3) The Project Managers should invariably follow this time limit. However, in cases where they foresee some unavoidable delay in adhering to the time limit, they should explain the position to the Arbitrator under intimation to the other party and obtain extension of time before the expiry of the stipulated date.

34.8 Engagement of lawyers other than Departmental Counsel

- (1) Where the Counsel of the Department is not available and/or where it is considered desirable to avail of the services of a local lawyer to conduct a case on behalf of the Department or assist the Departmental Counsel, fees may be paid at the rates approved by the State Govt. or BRIDCUL. In such cases, approval of the MD/CGM as the case may be, should be obtained before engaging such lawyer.
- (2) Where the fees are in excess of the approved rates of charges laid down by the State Administration, prior approval of the B.O.D should be obtained.

- (3) In the case of Project Managers at stations where Senior/Junior Counsel is also stationed, the Project Managers should not engage Private Lawyer/Standing Government Counsel locally, except in case where the Senior Counsel/Junior Counsel is not available due to unforeseen circumstances, and the case can not be adjourned
- (4) However, the mere fact that the Counsel has not been able to come should not ordinarily call for adjournment of whole case. In such circumstances, the Arbitrator may hear the Project Manager on the claims involving technical and physical points. For hearing on legal issues, the Arbitrator may, if he is satisfied that hearing the Government Counsel is necessary, adjourn the case only to hear him on that or those issues. The Project Manager may also, where the nature of the claim warrants the presence of the Government Counsel, seek adjournment, if necessary, in writing.

34.9 Engagement of Departmental Counsel (Junior/Senior/Standing/Private)

- (1) In cases, where the value of the claims is Rs. 22.5 lakhs or more, the Counsel should invariably defend the cases with the help of the Project Manager concerned before the Arbitrator. In all cases that are defended by the Counsel, the Project Manager should supply him detailed brief at the initial stage itself, and should ensure that the hearings are fixed by the Arbitrator to suit the availability of the Senior Counsel. The Project Manager concerned should make it a point to contact the Counsel and discuss the arbitration cases with relevant documents.
- (2) If the case is to be defended by the Counsel of the Department, a copy of the detailed note referred along with copies of the documents referred to therein should also be forwarded to him with a draft counter statement/counter claims. For individual claims upto Rs. 50,000 which do not involve any point of law or interpretation of clauses, the Project Manager should prepare the case himself without taking the assistance of the Counsel.
- (3) Where required, the Departmental Counsel would assist in preparation of the counter statement of facts on the basis of the notes/matter to be made available to him by the Project Manager.
- (4) All the documentary evidence in the case has to be examined carefully and placed before the Arbitrator as the situation and circumstances in each hearing demands, stressing the points of the Department to counter act the contractor's claim(s).
- (5) Where the contractor's claims are based on entries in the Measurement Books recorded by our own officer who may have colluded with the contractor and made false entries, it is necessary that sufficient evidence contesting the correctness or veracity of the entries in the Measurement Books should be placed before the Arbitrator in support of the contention of the Department and extra care should be taken in such cases with regard to selection of the witnesses and evidence that is to be placed before him.

34.10 High Value Cases

- (1) Where the claim amount (except interest) exceeds Rs 30 lacs, the CSF/SF prepared by the Division and vetted by the GM, shall be broadly reviewed by the CGM and necessary advice rendered to the PM. GM regarding the defence of the case. The PM/GM should however continue to follow the procedure of getting the CSF/SF vetted further by the counsel.
- (2) The CGM shall also scrutinize the cases of acceptance or otherwise of the arbitration award in the power of MD and render necessary advice.
- (3) CGM is also required to examine the awards with a view to check the following :-- (a) Whether (lie case has been properly defended before the arbitrator & (b) Whether there are any lapses on the part of the concerned officials due to which the award has gone against the department.
- (4) The CGM shall bring such cases to the notice of the MD for appropriate action.

34.11 Production of official documents before Court/Arbitrator and claiming 'Privilege' concerning the same

- (1) In the course of legal/arbitration proceedings, the Court/Arbitrator may either themselves or at the instance of the opposite party, require production of official records, e.g. files, correspondence, registers or the other documents which are supposed to have a bearing upon the case.

While the Court/Arbitrator may require production before them of any document relevant to the case, it must be borne in mind that in terms of Sections 123, 124 of the Indian Evidence Act, the Nigam is permitted ' to claim privilege for not producing documents, the disclosure of which may be considered detrimental to public interest. Such privilege may invariably be claimed in respect of all "unpublished records" of the Government, BRIDCUL i.e. documents which have not come to the knowledge of the other party. For this purpose Notes Portion of a file and all communications and letters other than those emanating from or sent to the party (original or copies) should be treated as "Unpublished" records of the Govt. BRIDCUL in respect of which privilege, as aforesaid, can be claimed. This will be done by producing before the Court/Arbitrator a declaration, signed by the Managing Director Chief as Head of the Department, stating that documents referred in the declaration contain unpublished official information relating to the affairs of the State! Nigam, and that privilege in respect of the same is being claimed as their disclosure would be detrimental to the public interest.

- (2) A departmental officer may appear as a witness if summoned by the Arbitrator at the request of a contractor also. He is expected to give true and correct facts of the case. Deterrent action should be taken against the officials concerned, if they are found responsible for giving wrong evidence or concealing materials facts in an arbitration case.
- (3) Wherever required and found necessary, records of Central Technical Examiner / Quality control unit / objections on overpayments and defective work, reports of C.B.I./S.P.E. or the Vigilance Unit of the Department may be consulted and their assistance availed of.

34.12 Default of a party

If the claimant fails to communicate his statement of facts in accordance with the time determined by the Arbitrator without showing sufficient cause, the Arbitrator may terminate the proceedings. If the respondent fails to communicate his counter statement of facts within the time determined by the Arbitrator, the Arbitrator may continue the proceedings without treating the failure in itself as an admission of allegations by the claimant. In case a party fails to appear at hearing or fails to produce documentary evidence, the Arbitrator may continue the proceedings and make the award on the evidence before him.

34.13 Issue of award

- (1) Whenever an award is made by an Arbitrator appointed otherwise than through a Court, and if under the award, some money is payable to the Nigam by the contractor, the Project Manager should first supply to the Arbitrator stamped paper of appropriate value as may be asked for by the Arbitrator according to the amount of the award as per the rules of the State where the award is likely to be made by the Arbitrator, and request the Arbitrator to write the award on the stamped paper (non-judicial) so supplied to him.
- (2) It is open to objection in a Court of law to write the award on ordinary paper and afterwards rewrite it on the stamped paper. The award should, therefore, always be obtained on stamped paper. It is for the Arbitrator to say as to which party should supply the stamped paper in such cases.
- (3) As per the provision in the arbitration clause, in all cases where the total amount of all the claims in dispute is Rs. 1 lakh and above, the Arbitrator shall have to give the reasons for the award.

34.14 Filing of award

- (1) After the award is published, it should be examined if it is acceptable to the Government. Once the competent authority decides to accept the award, immediate action should be taken to make the payment to the contractor.
- (2) The payment should be made to the contractor as soon as the arbitration award has been accepted by the department. Onus is on the department to make the payment at the earliest to avoid accrual of interest.
- (3) Immediately on decision to accept the award by the Nigam (i.e by the Managing Director) or on receiving such intimation from the contractor, a communication as per Annexure-III given below, should be issued to the contractor intimating the fact of such acceptance, and offer payment in terms of the award if the contractor communicates acceptance of the award within the specified time. Payment so made would bar the contractor from suing again in respect of the same dispute.

- (4) An Arbitration award shall not be discharged by the death of any party thereto either as respect to the deceased or any other party, but shall in such event be enforceable by or against the legal representative of the deceased.

34.15 Acceptance/Challenge of award

(1) The Managing Director / other officers in the BRIDCUL have been delegated powers for acceptance/Challenge of arbitration {awards as given Appendix 1}.

(2) (i) When, in the opinion of CGM and MD, the award is just and reasonable and there are no grounds to challenge, the case need not be referred to the Counsel of the Nigam for further advice. However if considered necessary. CGM can refer the matter to Sr. Counsel of the Nigam before accepting/recommending for acceptance of the award.

(ii) Where, in the opinion of CGM and MD, there are good grounds available to challenge the award (whole or part of the award), a Sr. Counsel should be consulted by the competent authority before taking a decision.

(3) As per provisions contained in section 34(3) of Arbitration Act 1996 an application for challenging the award may not be made after 3 months have elapsed from the date of receipt of award or, if a request had been made under Section 33 of the Act, from the date on which such request had been disposed of by the Arbitrator. Provided that if the Court is satisfied that the Applicant was prevented by sufficient cause from making application within the said period of 3 months, it may entertain the application within a period of 30 days, but not thereafter. In view of this specific provision of Section 34(3) of the Arbitration Act, the following Time Schedule will be strictly followed:--

	Authority to accept/Challenge the award	By PM to GM	By GM to CGM	Action by CGM
	Managing Director	15 days from the date of receipt of award or from the date of disposal of application filed u/s 33 of arbitration Act.	5 days. The CGM shall offer his specific comments about acceptance award against each claim.	The CGM will submit the case to MD within 10 days of receipt from CGM with his specific comments about accepting/challenging award against each claim

Assuming that it takes about a month in the MD's office to take decision, even then the PM will have at least 15 days to prepare grounds and file application in the competent court, if lie decision is to challenge the award.

(4) The Project Manager should make payment to the contractor in terms of the award within a period of 30 days from the receipt of acceptance of award from the competent authority, and intimate the actual date of payment of award to the contractor.

(5) The payments made towards arbitration awards shall be charged to the work.

(6) In all arbitration cases where awards of the Arbitrator go against the Department (whether by upholding the claims of the contractors or by rejecting the counter claims of the Department), detailed reasons and lapses, if any, on the part of concerned officials due to which the awards have gone against the Department, should be gone into in detail by the CGM(F) office concerned. The concerned office should send his recommendations to the Managing Director on the issue of fixing of responsibility and for taking action against the officers, wherever necessary.

(7) The CGM (F) will keep statistics of all such cases for the information of Government/Nigam whenever required.

The arbitration award means the total award including the interest awarded by the Arbitrator. The amount of such interest is to be worked out upto the date specified in the award. Therefore, the amount of the interest has to be taken into consideration while deciding the authority competent to accept the award. However, in case no fixed date is specified in the award and the interest is to be paid upto the date of actual payment of award amount to the contractor, the likely date of such payment may be taken into consideration. There may be a situation that after acceptance of the award by the competent authority, the actual payment to the contractor gets delayed beyond the anticipated date due to some unavoidable circumstances, and the amount of interest increases to an extent that the total amount of award exceeds the power of acceptance of the authority that accepted the award. In such cases, the payment may be made to the contractor as early as possible, and the case may be submitted to the authority competent to accept the increased amount of award for ex-post facto approval.

34.16 Setting aside of the award

(1) The question of challenging the arbitral award in a Court of law should be considered very carefully. Under section 34 of Arbitration and Conciliation Act, 1996, there are very few grounds available to challenge the arbitral award as follows:--

a) The party making the application furnishes proof that:--

(i) a party was under some incapacity, or

(ii) the arbitration agreement is not valid under the law to which the parties have subjected it or, failing any indication thereon, under the law for the time being in force, or

(iii) the party making the application was not given proper notice of the appointment of an Arbitrator or of the arbitral proceedings or was otherwise unable to present his case,

or

(iv) the arbitral award deals with a dispute not contemplated by or not falling within the terms of submission to arbitration, or it contains decision on matters beyond the scope of submission to arbitration, provided that, if the decision on matters submitted to arbitration can be separated from those not submitted, only the part of the arbitral award which contains decisions on matters not submitted to arbitration may be set aside, or

(v) the composition of the arbitral tribunal or arbitral procedure was not in accordance with the agreement of the parties, unless such agreement was in conflict with a provision of this Part from which the parties cannot derogate, or failing such agreement, was not in accordance with this Part, or

b) The Court finds that:--

(i) the subject matter of the dispute is not capable of settlement by the arbitrator under the law for the time being in force, or

(ii) the arbitral award is in conflict with the public policy of India.

(2) An application for setting aside an arbitration award may not be made after 3 months have elapsed from the date on which the party making that application had received that arbitral award or from the date on which his application for correction in or interpretation of arbitration award in terms of Section 33 of the Arbitration and Conciliation Act, 1996 was disposed of by the Arbitral Tribunal! Arbitrator. Under Section 33, a party can make an application for correction or interpretation within 30 days of receipt of the arbitration award.

(3) If the award is found to be in order from all aspects, it need not and should not be challenged. In cases, where, in the opinion of authority competent to accept/challenge the award, there are good grounds available to challenge the award (whole or part), a legal opinion should be obtained.

(4) The following documents may be sent invariably with all awards:--

- a) Contract agreement in original.
- b) Award of the Arbitrator.
- c) Legal opinion of Counsel of BRIDCUL, where obtained.
- d) A statement in the proforma given below.

Proforma

Claim Wise Statement Of Arbitration Award For The Work.

1. Claim no.
2. Brief description of claim/counter claim as justified by the arbitrator.
3. Amount of claim.
4. Amount of award.
5. Project Managers recommendations.
6. General Manager's recommendations.
7. CGM's recommendations.

34.17 Award amount not to be deposited in court
Liability to pay further interest does not cease even if award amount is deposited in court. Therefore in case of challenge to the award, the award amount should not be deposited in the court unless otherwise directed by the court.

34.18 Period of Limitation

- (1) It is a term of the contract in the relevant arbitration clause that if the contractor does not make any demand for arbitration in respect of any claim (s) in writing within 120 days of receiving of intimation from the BRIDCUL that the bill is ready for payment the claim or the contractor (s) will be deemed to have been waived and absolutely barred from the liabilities under the contract in respect of these claims.
- (2) In spite of the above specific provision in the arbitration clause, the Managing Director should not withhold appointment of Arbitrator on the ground that the request was received after the expiry of the specified period mentioned in the relevant arbitration clause of the agreement, but should appoint the Arbitrator clarifying in the letter of appointment of the Arbitrator that the reference is without prejudice to the defence that may be raised by the BRIDCUL regarding the tenability the claim on all necessary and available grounds including those of limitation, and the parties to the agreement will be free to raise the question of limitation before the Arbitrator.
- (3) While examining the request for arbitration from a contractor or supplier or any claim in a litigation case, the Project Manager should examine whether the claim of the contractor is time barred, in accordance with the provisions of the Limitation Act, 1908 or 1963 as the case may be. This point should be taken into consideration in preparing the defence.
- (4) The question as to whether any dispute has become time barred will itself be a dispute which can only be settled by arbitration. The stage of reference is not concerned with the question whether the claim of the party to the arbitration agreement is barred by the Law of Limitation and that question falls within the jurisdiction of the Arbitrator to whom the dispute is referred. The reference of the disputes, even though seemingly time barred, would therefore be made to the Arbitrator. The parties would be free to agitate the question of time bar before the

Arbitrator, who would no doubt consider this point and give his award. However, it can be clarified in the letter of appointment of the Arbitrator that the reference is without prejudice to the defence that may be raised by the BRIDCUL/Government regarding the tenability of the claim on all necessary and available grounds including those in limitation.

- (5) An appeal before the Division Bench is to be filed within thirty days of pronouncement of judgment by the High Court. If for any reason a delay occurs, the Court has to be approached for condonation of delay in filing the appeal, and the Department has to explain the day-today delay to the satisfaction of the Court. Every care should, therefore, be taken in handling such arbitration/court cases, and it should be ensured that timely and prompt action is taken within the period of limitation.

34.19 Court cases

- (1) Before any action is taken in a court of law against some party for amounts due to the Nigam, a reliable report of its financial standing should be obtained, and simultaneously the expenditure likely to be incurred to recover this amount should be carefully estimated so that unnecessary expenditure on litigation may be avoided where there is no reasonable chance of recovering the judgment debts from the party concerned.
- (2) Although it is the primary responsibility of the Departmental Counsel at the particular station where the case has jurisdiction to see to the proper defence of the case, it is equally the responsibility of superior officer of the Department to keep a constant watch over the progress of these cases and see that all such cases, at every stage, are processed properly so that the cases do not go against the Nigam's interests by default, resulting in financial loss, etc. to the Nigam.
- (3) (The General Manager should, therefore, see that all such cases are reported to the Managing Director as soon as a suit against BRIDCUL is threatened by any aggrieved party, or the Department itself intends to file a suit against a contractor or third party. The first report from the General Manager about such cases should give a brief description of the case, and the steps that are being taken or have been taken for the proper defence or prosecution of the suit. Thereafter, monthly reports on each such case should be sent to the Managing Director detailing the progress of the case and further action taken or to be taken for its defence or its successful prosecution.
- (4) To enable him to discharge properly the responsibility that has been placed upon him in the matter of defence of court cases, the General Manager should observe the following:--
 - a) The Project Managers of the Division concerned will be primarily responsible for handling and defending the court cases. He will collect all the relevant records and compile it for the benefit of the Legal Counsel.

- b) The General Manager should also give adequate and timely instructions to the Project Manager to ensure that case is defended properly and handled expeditiously.
 - c) If it is considered necessary to obtain the advice of higher authorities at any stage, the General Manager should refer the matter immediately to the Managing Director concerned for advice, either personal or in writing, according to the needs of the occasion.
 - d) In order that the General Manager keeps himself fully conversant with the progress of each case, he should obtain regular reports from the Project Manager about the progress of the case from time to time. He will send monthly reports to the Managing Director. All defence statements to be filed by the Project Manager should be approved by the General Manager and the Counsel before the statement is filed.
- (5) In all court cases concerning the Department which the Project Managers have to defend with the assistance of BRIDCUL Counsels, the Project Managers concerned should exchange their complete postal address and telephone numbers (both offices and residence) with the Counsels, so that any information/developments relating to the case is intimated to them straight away without referring the matter through the MD or any other higher ranking officer.

34.20 Judgment in Court cases

- (1) The progress of the cases in the Court should be watched by the Project Manager who is in charge of the cases as well as by the Office of the Managing Director concerned on the basis & of the monthly reports. It shall be the responsibility of the Project Manager to send a report to the Managing Director direct within 48 hours after the court has delivered a judgment that is adverse to the Nigam with copies to the General Manager and the CGM for information.
- (2) It shall also be his responsibility to apply for and furnish with minimum delay a copy of the judgment and all other relevant papers, his own comments and the opinion of the Legal Counsel conducting the case, on the advisability of filing an appeal/revision petition to enable the Nigam to come to a decision whether an appeal/revision should be filed or not. There should be no delay in communication between the Project Manager and the legal Counsel and personal contact by telephone, etc. should be maintained with him.
- (3) On receipt of the relevant papers from the Project Manager, the General Manager should send his own comments to the CGM. The CGM should examine the matter on receipt of the Project Manager's report, and should consider the advisability of filing an appeal/revision petition in the light of the comments of the General Manager. Thereafter, the CGM should forward his proposals to the MD to enable him to seek legal advice.
- (4) The proposal should be made well in advance of the last date of filing an appeal, and it should be complete in every respect, i.e. copy of the judgment (if such copy

has not been received, a verbatim report of the same), and all other relevant papers should accompany the proposal.

- (5) It is essential that there is co-ordination between the different sections of the BRIDCUL's and Managing Director's Office in such matters, wherever any important decision of general interest is taken on a contractor's claim.
- (6) In all cases where the officers of the BRIDCUL are required to give instructions to the Nigam's pleaders in connection with court cases, they should give complete written instructions in regard to each case. The Project Managers and General Manager should also see that there is no avoidable delay in the issue of the instructions to the Nigam's pleader. In any case the instructions must be communicated at least a day before the date of hearing.

34.21 Law charges on civil suits

- (1) The costs and expenses incurred on civil suits in connection with the execution of Government works may be divided into three categories given below:--
 - (i) The amount of the claim for which a decree is given.
 - (ii) The amount of incidental costs incurred by the department in connection with a work financed from its own funds.
 - (iii) The amount of incidental costs incurred by the department in connection with a deposit work.
- (2) The decretal amount of the claim vide item (i) above should be debited in all cases to the works concerned, and the charges referred to in item (ii) above to the sub-head "Establishment Contingencies" of the Nigam. As regards item (iii) above the amount should generally be borne by the department on whose behalf the work is undertaken on the ground that the action of the executing department was as an agent and taken in the interests of the work.
- (3) When, however, it is established that the law suit has been caused by a deliberate act of an employee of the agent department for his personal gain, the charges should be adjusted by recovery from the individual concerned or by debit against the merits of each case. Such cases should be submitted to the MD for their orders.

34.22 General

- (1) **In order** to enable the Project Managers to put up proper defence of the case, it is necessary that as and when the Project Managers hand over charge of the Division. or transfer arbitration cases/works, they should, unless all the facts and arguments are already explained in the written counter statement of facts,

prepare and place on record a self- contained note giving all the facts of the case and detailed comments on the claims.

- (2) In order to enable speedy disposal of cases, the Project Managers should not ask for adjournment to the extent possible.
- (3) The Project Manager should always maintain a separate file so far as the disputes that have cropped up on the work during the progress of the work. In case of his transfer or relinquishing charge due to any reason, he should leave a self contained note on the file at the time of his handing over charge, giving full background of all the disputes that have cropped up during the time of his incumbency, various developments thereon and the order passed with due reference to the connected files. This should form a necessary and essential feature• of all the handing over notes. Suitable method and procedure should be devised in the Divisional Office by which such files are carefully preserved and become available at a later stage to the Project Manager who is required to defend the case.
- (4) The transferred Project Managers should make a comprehensive note about the pending claims of all the contractors for works in progress or completed in their time, except those where counter statements of facts have already been prepared. The note should indicate the admissibility or otherwise of each claim and the orders of competent authority. The note along with attested true copies of important letters mentioned therein should be handed over to their successors/ other Divisions.
- (5) It should be made a rule in the Divisional Office that all the drawings issued with the NIT, and those subsequently followed for execution of works are properly preserved and kept along with the contract documents. It should be ensured by the Project Manager that suitable and adequate arrangements are made in his Division regarding preservation of all important documents, registers etc. Besides others, a list of all such records should be prepared and kept handy so that correct position of each case may be known to the Project Manager who is required to conduct the case, to enable him to do soon proper lines.
- (6) The arbitration cases should not be considered as legacy of old and defunct Divisions handed over to subsequent Project Managers. These should, on the other hand, be given due importance and dealt with on priority basis at all stages till these are finally disposed of.
- (7) One of the important documents for defence in an arbitration case is the agreement. It is essential that a copy of the General Manager's orders conveying his decision on recovery of compensation and copies of sanctioned extra, substituted and deviated items and sanctions to extension of time, etc. are attached to the original agreement so that these are readily available during the

hearings of the arbitration case. It would be better if these papers are got signed by the contractor as far as possible, so that any claim on these issues can be refuted before the Arbitrator.

- (8) Before a dispute is put to arbitration, the Department should know its exact position with regard to each item of the claims under dispute. It is very necessary that a very close and thorough study of the relevant documents is made and the case prepared accordingly.
- (9) The Project Manager should send a quarterly statement (ending March, June, September and December) of pending arbitration cases in the proforma Annexure IV on 7th April, 7th July, October and 7th January every year to the General Manager, who should send a similar statement for the entire Section of General Manager circle to the concerned CGM on 15th April, 15th July, 15th October and 15th January every year. These reports should be reviewed by the Managing Director during periodical meetings with his CGM/General Manager/Project Managers to expedite the finalization of arbitration cases.
- (10) All correspondence between the Project Manager and his General Manager/CGM regarding appointment of Arbitrator, or on award, and subsequent court cases, if any, should be through DO. Letters, and should be sent through special messenger in the same station.

34.23 Jurisdiction of Courts

The Court of the place from where the letter of award of work has been issued shall have the jurisdiction to decide any dispute arising out of or in respect of the contract.

Annexure - I
Notice for appointment of Arbitrator
[Reference para 34.3(1)1

To
The Managing Director,
..... (Zone)
.....

Dear Sir,

In terms of the agreement, particulars of which are given below, I/we hereby give notice to you to appoint an arbitrator for settlement of disputes mentioned below:

Name of applicant

1. Whether applicant is Individual/Prop. Firm/Partnership Firm/Ltd. Co.
2. Full address of the applicant
3. Name of the work and contract number in which arbitration sought
4. Name of the Division which entered into contract
5. Contract amount in the work
6. Date of contract
7. Date of initiation of work
8. Stipulated date of completion of work
9. Actual date of completion of work (if completed)
10. Total number of claims made
11. Total amount claimed
12. Date of intimation of final bill (if work is completed)
13. Date of payment of final bill (if work is completed)
14. Amount of final bill (if work is completed)
15. Date of request made to GM for decision
16. Date of receipt of GM decision
17. Date of appeal to you
18. Date of receipt of your decision.

Specimen signature of the applicant (only
the person/authority who signed the contract
should sign)

I/We certify that the information given above is true to the best of my/our knowledge. I/We enclose following documents.

1. Statement of claims with amount claims.
- 2.
- 3.

Yours faithfully,

(Signature)

Copy in duplicate to:
The Project Manager,
.....Division.

Annexure —II
Specimen form of undertaking to be obtained from the contractor on stamped paper for acceptance of award
[Reference para 34.14(2)]

(i) WHEREAS the BRIDCUL, represented by..... (PM) is operating the contract No.....with M/S..... (Name of the contractor to be indicated) for execution of the work..... (Detail of work to be indicated, i.e., name of work and agreement No.).

WHEREAS certain disputes had arisen in the execution of the said contract— WHEREAS the parties decided to go for arbitration, the demand for arbitration having been made by..... (indicate contractor/ Nigam);

WHEREAS the Managing Director, BRIDCUL, under his powers as vested in clause 25 of the agreement had appointed Shri..... as Arbitrator;

WHEREAS the said Arbitrator had given his award dated..... and had awarded a sum of Rs..... (in figures and words) in favour of the contractor in arbitration case No.....

and

WHEREAS the Union of India have decided to accept the said award,

(ii) It is hereby agreed upon and accepted by both the parties to the above-mentioned contract that the said award in its entirety is final and binding as regards to all the disputes referred to the Arbitrator by them and an amount of Rs (in figures and words) given in the award in favour of the contractor will be paid by the Nigam in full and final settlement of the amounts due to the contractor under the said contract.

Signature of contractor

Signature of Project Manager
For and on behalf of the MD of BRIDCUL

Witnesses:

- 1.
- 2.
- 3.
- 4.

Annexure —III

**Specimen letter asking for undertaking from the contractor for acceptance of award
[Reference para 34.14(3)]**

To

.....
.....

Sub: Award..... dated made by Sri..... , Arbitrator in regard to the disputes arising out of agreement no..... and referred to arbitration in arbitration case no.....

Dear Sirs,

With reference to the award mentioned above, I am to say that the Managing Director, BRIDCUL has decided to accept the said award provided you accept the same as final and binding. Please intimate that you agree to accept payment of the sum awarded in full and final settlement of all your claims forming the subject matter of the reference to arbitration in the above case.

Yours faithfully,
Project Manager
For and on behalf of the MD of BRIDCUL.

Annexure — IV

**Quarterly statement showing position of pending arbitration cases (numbers only)
for
the quarter ending.**

[Reference para 34.22(9)]

Name of Division	Name of HQ General Manager	Name of BRIDCL HQ
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Part I

	AS at the end of previous quarter	Added the during the quarter	Cleared during the quarter	Total	Balance for
	1	2	3	4	5

- (A) Requests made, appointments not made
- (B) Appointments made, S.F. received, but CSF not sent
- (C) CSF sent, but award not received
- (D) Award received, but payment not made

Part II

Details of cases pending with Arbitrators for more than 12 months

Case No.	Name of Arbitrator	Name of work & Contractor	Appointed on	Remarks why pending

SECTION 35
PURCHASES OF GOODS & MATERIALS

35.1 Purchase of Goods & Materials:

Powers for Procurement of Goods: BRIDCUL shall have full authority to procure goods as per standards or norms prescribed by the concerned Administrative Department and within limits of delegation of power to them as per procurement rule from time to time.

Registration of Suppliers: Item-wise lists of eligible and capable suppliers will be maintained by BRIDCUL. Such ‘registered suppliers’ shall be prima-facie eligible for consideration in case of Limited Tender Enquiry for purchase of materials.

Procedure for Purchase of Materials

- (1) **Petty purchases:** Purchases costing upto **Rs. 5000/-** can be made through [land receipt/Imprest/Cash. Such Purchase shall not count towards annual ceiling of powers of purchase of materials.
- (2) Procurement without **Quotation** : Purchases of goods / materials costing upto Rs. 50000/- (Fifty thousand only)_on each occasion may be made without inviting quotations or bids but based on open market rates on the basis of a certificate to be recorded by the competent authority in the following format:-
“I,..... am personally satisfied that these goods (materials) purchased are of the requisite quality and specification and have been purchased from a reliable supplier at a reasonable price.”

Signature.....
Name of the Officer
Designation

- (3) **Purchase of Goods by Purchase Committee** : Purchase of goods/material costing above Rs. 50000/- (Fifty thousand only) only and up to Rs. 3,00,000/- (Rupees Three lakh only on each occasion may be made on the recommendations of a duly constituted Local Purchase Committee consisting of 3 members of an appropriate level including 1 member from finance / audit services, as decided by the Managing Director . The committee will survey the market to ascertain the reasonableness of rate, quality and specifications and identify the appropriate supplier. Before recommending placement of the purchase order, the members of the committee will jointly record a certificate as under:

“Certified that we..... , members of the purchase committee are jointly and individually satisfied that the goods/materials recommended for purchase are of the requisite specification

- (2) The Project Manager shall arrange payments to the labour concerned within 45 days from the receipt of the report from the Labour Officer or the General Manager, as the case may be.

(3) The contractors in the BRIDCUL are required to pay to the labour employed by them, either directly or through sub-contractors, fair wage as defined in the Contractors' Labour (Regulation and Abolition) Act, 1970 and the rules made there under.

(4) No deduction on account of Jamadar's commission charges etc. is to be made **from** the wages of labourers. In no case the liability of the commission charges shall fall on the workers.

33.7 Procedure in case of accidents to contract labour

(1) In case of fatal accidents or accidents involving permanent total disability, the accident must invariably be reported to the Managing Director, with a copy, among others, to the General Manager and Labour Officer concerned immediately after the accident.

(2) Thereafter the Labour Officer (Project Manager concerned for Uttarakhand) should make personal investigation into the matter and submit a brief report to the Managing Director, with a copy to the General Manager concerned. The disposal of accident cases should be given priority at all levels.

(4) Purchase of materials costing more than Rs. 3 lakh under Rate Contract:--

- a) The items which are borne on the rate contract of Central Purchase Organisation of the state govt. or DGS&D and the rate contract is valid at time of making purchase, and the total cost of such items being more than Rs. 300000/- shall be purchased at such rate contracts either through DGS&D or from the firm directly at rate contracts.
- (b) Items for which no valid rate contract exists shall be purchased from open market through call of tenders/quotations.
- (c) Above procedure at (a) & (b) can be deviated in the interest of work by the Managing Director with recorded reasons.
- (e) Quotations or tender should be invited preferably from manufacturers directly. In case manufactures are unwilling to supply the materials, quotations/tenders can be invited from authorized dealers.
- (f) While inviting Quotations/tenders, proper publicity should be given as laid down in Section-16 with the only change that the publicity in press shall be given for the supply having estimated cost more than Rs. 25 lakh.

(5) Limited Tender Enquiry: --- This method, may be resorted to when estimated value of the goods to be procured is upto Rs. 50 lakh. Copies of the bidding documents should be sent directly by speed post/courier/e-mail to more than 3 firms which are borne on the list of registered supplier for the goods in question, so as to ensure that minimum three quotations are received. Further web based publicity should be given for limited tenders.

(6) Advertised Tender Enquiry: ---The procurement of goods costing **more than** Rs. 50 lakh should be done through advertised tender enquiry. Tenders should be invited by advertised by two widely circulated national news papers. The tender enquiry should also be placed on the website of State Govt./Departments having a hyper link with the NIC website.

(7) Procurement of goods beyond Rs. 50 lakh
The procurement of goods above Rs. 50 lakh shall be done through e-tendering

NOTE: The Financial Limits of mode of tendering may be revised according to procurement rules of Govt. of Uttarakhand.

35.2(1) Earnest Money.

Earnest money for tenders of supply will be charged as under:-

1. Upto Rs 3 lac—5%
2. Rs 3 lacto Rs. 15 lac —4%
3. Rs5 lactoRs.50lac—3%
4. Above Rs 50 lacs — 2% of the estimated cost.

35.2(2) Performance Security:- It should be for an amount which is 5 to 10% of the contract value

35.3 Realistic procurement

As it is not business like to purchase stores in driblets, periodical indents should be prepared and as many articles as possible be obtained by means of such indents. At the same time, care should be taken not to purchase stores much in advance of actual requirements, if such purchases are likely to prove unprofitable to Government.

35.4 Purchase through DGS&D

The DGS&D is the Central Purchase Organisation of the Government of Uttarakhand and is required to conclude rate contracts with the registered suppliers for goods and items of standard types which are identified as common user items and are needed on recurring basis by various State Government Ministries or Departments. DGS&D furnishes and updates all the relevant details of rate contracts in its website. The department shall follow these rate contracts to maximum extent possible.

35.5 Direct Demanding Officers

(1) Normally the Project Managers are authorised as Direct Demanding Officers by the DGS&D. The Project Managers should invariably take steps to get their names included as Direct Demanding Officers, for which they should take up the matter, wherever required, through their General Manager. Items for which a rate contract exists, the order may be placed direct with the concerned firm, provided the name of the indenting officer is included by the DGS&D in the list of Direct Demanding Officers. The list of such items is revised from time to time by the DGS&D, and such items are indicated in the booklet issued by them every 6 months, titled “List of stores on rate/running contracts”.

(2) A large number of Project Managers of BRIDCUL have been declared as Direct Demanding Officers for placing supply orders against items that exist on the rate contracts of DGS&D. IL has, however, come to the notice of this Directorate that supply orders are placed without verifying availability of funds or budget provision, and in certain cases, for quantities far in excess of their immediate requirement.

(3) The indenting officers should not enter into direct correspondence with

the suppliers or their agents in cases where the work of procurement is entrusted to the DGS&D.

35.6 Precautions on drafting of indents

- (1) It has also come to notice that while placing supply orders, all the columns are not filled in and the quantities are not mentioned in words, with the result that the quantities can be easily tampered with. A few cases of issue of fake supply orders have been pointed out by DGS&D.
- (2) The following instructions should be strictly adhered to while placing the supply order against DGS& D RJC items:
 - (i) All the columns of the supply order should be filled in and supply order signed and affixed with seal of the DDO.
 - (ii) The quantities, rates, and amounts against each item should be given in figures as well as in words. Where the rates/charges, such as incidental charges, cannot be ascertained fully, the approximate rates and amount should be given, both in figures and words.
- (3) The specifications of the stores that are required should be carefully decided before placing indents on the DGS&D so that changes can be avoided after the contract has been finalised as far as possible. Where Indian Standard Specifications are not available, specifications as consistent with the requirement of safety, security and end use of the stores according to necessities of the structures and installations may be decided having regard to technical limitations of indigenous productions.
- (4) All Supply Orders in respect of RCs available online be placed by DDOs on online through their web-site (www.dgsnd.gov.in). The instructions/guidelines issued by the O/o DGS & D are available in their web-site can be referred.

35.7 Financial sanction

- (1) The indenter should ensure that necessary financial sanction of the competent authority exists before the demand is placed on the DGS&D. No indent would be complied with unless it is accompanied by a certificate over the signatures of the indenter to the effect that:

- (a) The expenditure involved in the indent including the estimated cost of freight and the departmental charges, has received the sanction of the competent authority. The indent will give an indication as to whether the stores indented for are required for bonafiede use.
 - (b) Funds are available to meet the expenditure under the proper head in the sanctioned budget allotment of the indenting Department/office.
 - (c) A sanction shall not lapse if tenders have been accepted (in the case of local or direct purchase at' stores) or the indent has been placed (in the case of Central Purchases) on the DGS&D within the period of one year of the date of issue of that sanction, even if the actual payment in whole or in part has not been made during the said period.
- (2) The indenting officer should, however, make provision for the funds required in the budget of the next financial year depending upon the delivery period of the stores as per the contract and subsequent amendment, if any.
- (3) As an exception to the above provision, the DGS&D accepts indents from the Project Managers of the BRIDCUL in emergent cases in anticipation of sanction. Indents for such works should be accompanied by a certificate in the following form: "I certify that sanction of the competent financial authority as been applied for the expenditure involved which is being incurred in anticipation of sanction."
- (4) The DGS&D can (within certain monetary limits) place contracts at price higher than those intimated in the indents without reference to the indenter.
- (5) Whenever the cost of stores indented for exceeds the prescribed limit, the DGS&D will obtain the indenter's concurrence for the extra expenditure involved before the actual placement of the order. The indenting officer should, when giving concurrence, certify the availability of funds as under: "I certify that the extra expenditure involved has received the sanction of the competent financial authority and that the funds are available under appropriate head in the sanctioned budget allotment of the indenting department for the year".

35.8 Careful filling of the indent form

Apart from the availability of funds, other columns of the indent/order forms should be carefully filled in, indicating clearly:

- (i) Head of Account to which the cost of the stores in question is debitable.
- (ii) Name of the Pay & Accounts Officer through whom the debit is to be passed.
- (iii) Detailed specifications and standards of the stores required.
- (iv) Date by which the stores are required to be supplied.
- (v) Detailed consignment instructions, giving clearly the postal and telegraphic address of the consignee and indenter.
- (vi) The manner in which the consignment is to be despatched, viz. "Owner's Risk" or "Railway Risk", "Goods train" or "Passenger Train" or "QTS" (Quick Transport Service) — where it operates.
- (vii) The rate and amount should be clearly mentioned specifying in clear terms 1 ii is F.O.R./F.O.B./C.I.F. Station of despatch/destination/port of despatch/port of disembarkation.

35.9 Cancellations and change in the indent

- (1) The officers of BRIDCUL should carefully note the following procedure prescribed for observance by the DGS&D on receipt of reduction/cancellation of demands intimated to them by the indentors:
 - (i) The terms of a contract are binding on both the parties and a contract during its currency can be cancelled or modified only by mutual consent. The DGS&D will not, therefore, proceed to cancel a contract in whole or in part straightway on receipt of the indenter's request. On receipt of request for cancellation/reduction, each case will be examined by the DGS&D immediately with reference to the terms and conditions of contract by the Purchase Officer within whose powers of purchase the contract falls, and after obtaining legal opinion where necessary. If the legal opinion confirms that the purchaser is within his rights with reference to the terms and conditions of the contract to cancel the contract, as for example, where the delivery period has expired, action will be taken to give effect to cancellation/reductions straightway.
 - (ii) Where, however, it is clear that the terms and conditions of the contract do not permit cancellation/reduction without the contractor's consent, the firm will be approached and persuaded to agree to cancellation/reduction without any financial repercussion. If the firm agrees, the formal amendment of

cancellation will be issued by the Purchase Officer concerned, making it clear that the reduction/cancellation is by mutual consent.

(iii) Where the firm does not agree to cancellation/reduction without financial repercussion, the Firm will be asked not to make further supply and not to incur further expenditure pending decision as to whether the contract should be terminated pursuant to the Termination of Contract Clause, and what the quantum of compensation payable, if any, should be. The indenter/ consignee will also be advised of the position. Simultaneously, arrangements will be made for independent inspection of the stores in an unfinished state of supply, with a view to ascertain the correct position of the supply of stores contracted for and the reasonableness or otherwise of the compensation claimed by the contractor. After the Purchase Officer, in consultation with Associated Finance, is satisfied that the amount of compensation claimed by the contractor is reasonable, the indenting officer will be addressed, explaining the issue involved and the amount of compensation that may have to be paid to the contractor, and asked whether he wants the contract to be cancelled and is prepared to bear the compensation. If the indenting officer still desires cancellation and is prepared to bear compensation, the cancellation/reduction will be effected by the DGS&D with the approval of the Head of the Organisation/Ministry.

(iv) In all cases involving financial repercussions, the Associated Finance will be consulted at every stage right upto the payment of compensation.

35.10 Delay in supplies

In case supplies are delayed beyond the period stipulated by the indenter, it would not be necessary for the DGS&D to have the availability of funds re-certified from the indenter, and so long as the indent is not cancelled they shall assume that funds are being provided from time to time to cover the cost of stores. They will, however, keep the indenter informed of the prospects of supply from time to time to enable the indenter to carry forward the funds accordingly.

35.11 Inspection of stores ordered through DGS&D/ rate contract

In case of supplies ordered against DGS&D rate contracts or indented through them, inspection of the supplies received is to be made by the respective Inspection Wing of that Department. The Inspection Wing's certificates are furnished by the supplier to the consignee, who after having recorded the required certificates about receipt of the goods in good condition, sends specific number of

copies back to them and to the Controller/ Deputy Controller of Accounts (Supply) as indicated by them.

35.12 Purchase of plant and machinery

(1) When indenting for plant and machinery etc., the indenting departments should take a decision as to the quantity of spares to be purchased along with the main equipment and also to place an indent for them on the DGS&D. The indenting officer should also specify whether any of the following guarantees is required to be obtained from the supplier of the equipments:

(i) A guarantee from the supplier of the equipment that he will supply spare parts if and when required on an agreed basis for an agreed period. The agreed basis should be an agreed discount on the published catalogue prices.

(ii) A warranty to the effect that before going out of production for the spare parts, he will give adequate advance to the purchaser of the equipment so that the latter may order the balance of the life time requirements in one lot.

(iii) If possible, a warranty to the effect that the supplier of the original equipment will make available the blue prints of drawings etc. of the spares if and when required in connection with the main equipment.

(2) In the indent for spare parts, reference to the number and date of the contract for the main equipment and any guarantee/warranty incorporated therein should be quoted by the indenting officers.

(3) The indenting department should endeavour to adopt Indian Standard Specifications wherever available, and where such specifications are not available, they should permit relaxation in indigenous production, which should be consistent with the requirement of safety, security and end use of the stores.

(4) Machinery and equipment which is not indigenously manufactured, or for manufacture of which certain parts are required to be imported from abroad, are arranged against specific quota of foreign exchange for the purpose from "Soft Currency" or "Hard Currency" countries.

35.13 Advance Payments

No payment whatever will be advance without due permission of MD. Further such payments shall be regulated.

SECTION 36

RECEIPT OF STORES

36.1 All the materials that are received should be examined, counted or measured when delivery is taken. The record of the detailed count/weight or measurement should be kept in the Goods Receipt Sheets (Form BRIDCUL 8-A) in prescribed format and the total number of quantity should be simultaneously entered in the Bin Card (Form BRIDCUL 8) in prescribed format where maintained or in a register.

36.2 In the case of Tools and Plant, the items should be brought on Form BRIDCUL A-13 with complete details. For items of Plant and Machinery, detailed History Sheets in prescribed form should be completed forthwith and recorded carefully especially items like AC plant, substation equipment, DG Sets, Lifts and pump set etc.

36.3 For receipt of petrol/diesel, coupon Books (duly numbered) will be obtained from the authorised petrol pump dealer and kept in safe custody. Whenever petrol/diesel etc. is required to be drawn, the Junior Engineer/Resident Engineer/Project Manager, who has been authorised to fill the coupon, will fill the same in triplicate. Two copies of the coupon will be given to the petrol pump dealer, who after issuing the material will return one copy to the paying authority along with the bill.

36.4 All stores of sundry nature, particularly sanitary fittings, electrical fittings and spares etc., should be allotted an alphabetical and numerical number according to the standards and sizes available, and the same should be indicated accordingly in the registers and on racks where these are kept. Similarly stocks of pipes and steel of different kinds and sizes should also be allotted a distinguishing alphabetical and numerical number to facilitate maintenance of accounts.

SECTION 37

SAFE CUSTODY OF STORES

37.1 The Project Manager is responsible to ensure that proper arrangements are made throughout the Division for the safe custody of stores, and for their protection from deterioration and fire.

37.2 The stores will be under the strict supervision and vigilance of a Junior Engineer, who will be particularly responsible for the safe custody of stores. At the end of each day, the locks of the stores should be properly sealed by the Storekeeper in the presence of chowkidar, and entered in the register. At the time of change of duty, proper handing over/taking over should be done by signing the register. The Storekeeper should seal the locks carefully when he closes the godown at the end of the day and examine the seal before opening the godown next time, to see that the seal has not been tampered with. If he finds that the seal has been tampered with in his absence, he should at once bring this fact to the notice of the higher authorities for reporting the matter to the Police. In the absence of the Storekeeper, the Junior Engineer will discharge such functions.

37.3 On the occurrence of any loss, action against the person concerned with the upkeep of stores should be taken promptly so as to avoid delay in obtaining evidence against persons responsible for the loss.

SECTION :38

DISPOSAL OF SURPLUS STORES

38.1 Excessive stocking of stores

(1) The Divisional Officers should not store for long the materials which are likely to deteriorate within a short time. Some of the materials which are likely to deteriorate within a short time are mentioned below:

(i) Cement

If such materials are indented for or ordered, these should be used on work as early as possible, and surplus quantity, if any, may be disposed off under the orders of the competent authority.

38.2 Transfer to other Divisions/Departments

All articles of stock (excluding tools and plants) that are not likely to be required during the following 12 months, should be reported to the Divisional Officer, who will, if necessary, take the General Manager's order as to their disposal. Since the materials which are surplus are liable to deterioration if kept unnecessarily, and also involve an avoidable expense on chowkidars, etc. and locking up of capital, it is therefore essential that such materials should be disposed off either by sale or transfer to other Divisions/Departments here these are required.

38.3 Disposal of surplus stores

(1) The General Manager in BRIDCUL have full powers to issue orders regarding the manner in which particular stores which have already been declared surplus or unserviceable by the competent authority are to be disposed off. This disposal can be either by public auction or through sealed quotations. The question as to who should supervise or conduct the auction will be decided by the General Manager.

(2) The commission, which should ordinarily not exceed 5%, may be allowed to the auctioneer, not being departmental officer, but no commission can be allowed on private sales. In all such cases recovery should be effected in cash in advance.

(3) No public stores should be sold otherwise than by public auction, without the permission of the General Manager.

- (4) Rules for departmental auction of surplus and unserviceable stores are contained in delegation of power 2011 applicable in the department.
- (5) When stores are sold by auction, a responsible officer not below the rank of Resident Engineer should attend and record the final bids in order to enable the sale account rendered by the auctioneer to be checked.

38.4 Sale of stores to private parties

(1) No public stores should be sold to a private person/body. If, however, sale is made to such private person/body, additional charges on account of supervision and contingencies at 10% should be realized on the value of the stock including storage charges. These additional charges may, however, be waived by the officer empowered to sanction the sale in the case of surplus stock which in his opinion would be otherwise unsaleable.

(2) For sale to private persons, the issues shall be made at market rates. The recovery in all such cases should be made in cash in advance.

SECTION 39

LOSSES ON STORES AND THEIR WRITE OFF

39.1 Unserviceable stores

(1) When stores of any kind become unserviceable, a report thereof should be made in Form no. CPWA 18. This should be done at once on discovery of the facts.

(2) In case of survey reports of stores valued above the powers of acceptance of the Project Manager, the certificate that materials proposed to be survey reported are really unserviceable should be recorded by the General Manager concerned after inspection of the stores. In the case of survey reports below this amount which are within the competence of Project Manager, the certificate should be given by the Resident Engineer, concerned while in the case of survey reports within the competence of General Manager, the certificate should be given by the Project Manager concerned.

39.2 Losses of stock

(1) All losses of stock should be immediately reported to the next higher authority as well as to the Audit Officer and the Accounts Officer even when such loss has been made good by the party responsible for it. Petty cases involving losses need not be reported to the Audit Officer/Accounts Officer unless there are some important features which need detailed investigation and consideration. The losses on stock should be immediately investigated and steps taken to obtain the sanction of the competent authority for their write off, if necessary.

(2) In the case of serious losses, the Divisional Officer should hold a departmental enquiry and record the evidence and his findings thereon, including findings as regards the responsibility and culpability of the persons concerned.

39.3 Losses relating to DGS&D contracts

(1) The procedure regarding write off of irrecoverable losses relating to contracts placed by the Directorate General of Supplies and Disposals is explained below:

(i) In respect of purchase and inspection of stores arranged through the DGS&D, Inspection Wing of Supplies and Disposals Directorate act as agents who utilize their services the gains or losses, if any, are to go to the indenter's account and money, if any, accruing by way of compensation, liquidated damages, etc. are

credited to the indenter concerned. Similarly losses too, if any, arising out of such contracts are also debitable to the indenter.

(ii) On their part, the DGS&D take care to avoid losses. They investigate all such cases and take steps to recover loss, if any, as far as possible. They take appropriate departmental action against the defaulting officers, if it is found that loss has been caused by delinquency on their part.

(iii) If, however, it is not possible to recover a loss, it is debited to the indenter.

(iv) Sanction letters are issued by the DGS&D within his powers in any individual case, and beyond this limit, by the Department of Supply. The head of account to which the loss is debitable is indicated in the sanction letter.

(v) Such sanctions enable the Audit Officer of the DGS&D:

(a) to regularise the amounts recovered and kept under objection in his books.

(b) to make payments to the suppliers of the amounts withheld from their bills, and

(c) to raise debits for the amount involved against the Accounts Officer of the indenter/consignee.

(d) A copy of the sanction letter is also endorsed to the indenter/consignee, who is to issue a similar sanction for writing off such losses to regularise his stores accounts.

(2) It is not open to the indenting Ministry to raise the question of the liability for the loss once the Associated Finance of the Department of Supply has accepted that there is no escape from the loss. There is, however, no objection to the indenting Ministry being associated in the matter of departmental action to be taken against the delinquent officials.

39.4 Powers to write off

(1) The powers of various authorities with regard to the sale, disposal and write off of stores are delegated in BRIDCUL.

(2) The authority issuing orders under Appendix-I should, after the disposal of stores of which value accounts are kept, determine and intimate to the Audit/Accounts Officer concerned the net amount to be written off to the final head (*MH2059 PW Minor Work. v-Losses on Stock*).

39.5 Expeditious disposal of obsolete/surplus/unserviceable stores/T&P items

(1) In order to ensure that the obsolete/surplus/unserviceable stores/T&P items fetch good returns, it is essential that:

(i) Such stores/T&P items are got surveyed reported by the competent authority at the earliest as soon as they reach that condition,

(ii) Proper protection is given to them till their removal by the purchaser, and
(iii) the time lag between the declaration and actual disposal of stores/T&P items is minimized.

(2) It is, therefore, incumbent on the Junior Engineer/Resident Engineer holding such obsolete/surplus/ unserviceable stores/T&P items to initiate the process of preparing the survey reports of such items and forwarding the same to the Project Manager for obtaining the, approval of the competent authority. Valuable storage space should not be wasted on unnecessarily holding such useless items.

SECTION: 40 STOCKTAKING

40.1 Physical verification of stores

(1) The Project Managers are to have stock taken throughout their Divisions at least once a year. It is not necessary that all the stocks of a Division or even of a Sub-Division should be checked and counted at the same time, but the date on which articles are taken stock of should be entered in the stores returns. The stores should be counted by an officer not below the rank of Resident Engineer, who is not the custodian, the ledger keeper or the accountant of the stores.

(2) Physical verification should be made in the presence of the authority responsible for the custody of the stores or of a person deputed by him. If such an authority Fails to be present during physical checking of stores or fails to depute a person, the verification should be carried out in the presence of another officer who is not in-charge of the stores.

(3) The results of verification of stock should be reported to the Divisional Officer for orders, but as soon as a discrepancy is noticed, the book balance must be set right by the verifying officer, treating surplus as a receipt and a deficit as an issue, with a suitable remark.

(4) The shortages and damages, as well as unserviceable stores, should be reported immediately to the authority competent to write-off the loss.

(5) The verification of road metal and materials charged direct to works will also be done in. the manner prescribed above.

40.2 Physical verification of MAS account and dismantled materials account

Apart from the stock, dismantled materials stores and materials at site account are also to be checked in the same manner every year and certificates recorded in the registers.

40.3 Physical verification of T&P

In case of Tools and Plants, the stocktaking should be done every year ending 31st March in the same manner as stated above, and certificates of physical verification recorded thereon.

40.4 Report on physical verification

The report about the required stocktaking and physical verification and certification thereof should be reported immediately to the General Manager

CHAPTER –IV
SECTION 41
QUALITY ASSURANCE

41.1 Introduction

(1) The Quality Assurance activity, in order to be truly effective has to ensure a progressively improved and uniform quality of the finished work. Experience gained over years indicate that “Process Control” is essential in building construction to ensure that the work in different phases is executed in a manner pre-determined and laid down in specifications. In order to achieve the above, the prerequisites cover among other things, an inbuilt provision in the contract for a system of continuous check on quality by the field staff and the contractor for ensuring quality of work; availability of adequately manned and equipped agency for overseeing the quality aspects, and periodical appraisal of quality and a system of feedback for effecting possible improvements.

(2) Maintenance of quality has to be imbibed in the minds of the contractor as well as the officials of the department. It is better to have a system in which the quality of work is achieved during the construction stage itself, rather than indulge in ‘fire fighting’ activities after the damage has been done by way of post-construction ‘quality control’. Quality control does have a place in the system, but this has to be more by way of being a means of enforcement, to ensure that the quality of work is checked and controlled as a continuous process during the construction stage itself: The final output will then be satisfying both to structural as well as aesthetical sensibilities.

41.2 Minimum Quality Assurance Plan

(1) Minimum Q.A. Plan shall have to be part of tendered document for all the works costing more than Rs 2 crore and for works not exceeding Rs 2 crore, the technical sanctioning authority may provide this clause in the NIT considering its necessity.

(2) Lot size, number of required tests and frequency of testing needs to be clearly indicated in QA Plan. While deciding these criteria BRIDCUL Specifications & Provisions of BIS Code and Standard Practices may be referred. Volume of work, Practical Difficulties and Site conditions etc. may

also be kept in view and lot size, number of tests and frequencies of testing may be varied suitably by NIT Approving Authority.

(3) It should clearly indicate the Machinery and other Tool & Plants required to be deployed at site by the contractor. Entire Machinery and T&P may not be required at the start of work, therefore, a proper time schedule by which each Machinery & T&P is to be brought at site should also be indicated.

(4) Requirement to setup field laboratory should be defined. All the testing equipments to be arranged by the contractor should be clearly mentioned. If field lab is to be setup by the Department the same may be indicated in the QA Plan.

(5) All the relevant and applicable codes, specifications and standards, as well as the acceptance criteria for various items of work, workmanship, materials and process employed needs to be mentioned.

(6) A proper shuttering schedule showing quantity of shuttering to be brought at site either in one lot or at different stages of work should form part of QA Plan.

(7) Maintenance of Register of Tests –

(i) All the registers of tests carried out at Construction Site or in outside laboratories shall be maintained by the contractor which shall be issued to the contractor by Engineer-in-charge in the same manner as being issued to BRIDCUL field staff.

(ii) All Samples of materials including Cement Concrete Cubes shall be taken jointly with Contractor by JE and out of this at least 50% samples shall be taken in presence of RE in charge. If there is no JE, all Samples of materials including Cement Concrete Cubes shall be taken by RE jointly with Contractor. All the necessary assistance shall be provided by the contractor. Cost of sample materials is to be borne by the contractor and he shall be responsible for safe custody of samples to be tested at site.

(iii) All the test in field lab setup at Construction Site shall be carried out by the Engineering Staff deployed by the contractor which shall be 100% witnessed by JE and 50% of tests shall be witnessed by RE-in-charge. At least 10% of the tests are to be witnessed by the Project Manager. For outstations the percentage of tests to be witnessed by JE, RE & PM are to be

decided by 1) NIT Approving Authority and it should form part of QA Plan.
(iv) All the entries in the registers will be made by the designated Engineering Staff of the contractor and same should be regularly reviewed by JE/RE/PM.
(v) Contractor shall be responsible for safe, custody of all the test registers.
(8) Submission of copy of all test registers, Material at Site Register and hindrance register along with each alternate Running Account Bill and Final Bill shall be mandatory. These registers should be duly checked by RE in Division Office and receipts of registers should also be acknowledged by Divisional Accountant by signing the copies and register to confirm receipt in Division office.

If all the test registers and hindrance register is not submitted along with each alternate R/A Bill & Final Bill, it will be responsibility of PM & Divi. Acctt. that no payment is released to the contractor.

(9) Maintenance of Material at Site (MAS) Register -

(i) All the MAS Registers including Cement and Steel Registers shall be maintained by Contractor which shall be issued to the contractor by Engineer-in-charge in the same manner as being issued to BRIDCUL field staff.

(ii). Each of the entry of receipt of material at site shall be 100% test checked by JE or by RE if there is no JE.

(iii) Each MAS Register shall be checked by JE at least twice a week and at least once a week by RE. If There is no JE then MAS registers will be checked by RE at least twice a week. (iv) Cement Register shall be reviewed by RE at least one in a month, by PM at least twice a year. For outstations the frequency of checking the Registers by JE, RE & GM is to be decided by NIT Approving Authority and should form part of QA Plan.

(10) It will be deemed that work so measured, checked and paid is of the required quality and standard. both in respect of ingredients as well as the intended functions it is supposed to perform. In other words, the work would not only meet the required specifications but also the workmanship as per sound engineering practices.

(11) Minimum QA plan may vary on work to work basis depending upon nature and volume of work.

(12) The Project Manager shall also have to check and sign these reports at suitable intervals in token of his ensuring compliance of the 'Quality Assurance Plan' for the work.

41.3 Method Statement

In all major works of contract costing more than Rs. 10 crores, provision shall be made in the tender documents for the contractor to submit a 'Methods statement' for the approval of the department soon after the award of work to him. The 'Methods statement' is a statement by which the construction procedures for important activities of construction are stated, checked, and approved. The 'Methods statement', should have a description of the item with elaborate procedures in steps to implement the same, the specifications of the materials involved, their testing and acceptance criteria, equipments to be used, precautions to be taken, mode of measurement, etc.

41.4 Responsibility for Quality Assurance

The direct responsibility for ensuring proper quality of work as per approved specifications for achieving the intended performance and structural, functional and aesthetical parameters, and the desired life of the building/installation/structure rests with the construction team of Project Manager, Resident Engineer and Junior Engineer. The General Manager shall be periodically review and monitor the Quality Assurance system.

41.5 Responsibilities of the construction staff, Project Manager and General Manager

The broad responsibilities of the field staff and the RE & PM will be as under:

(i) To ensure that materials duly approved by the competent authority are used in the work. Samples of various materials in repetitive type, important! big works shall be approved by Project Manager *concerned*.
(ii) Wherever necessary the Project Manager shall approve the sources for respective materials.

(iii) Samples of materials should be approved by the Project Manager and signed by him and the contractor and preserved till the end of the project.
(iv) Samples of various materials, fittings to be used shall be approved well in advance and displayed at sites of works with make and name of the manufacturer/supplier.

(v) As early as possible after award of work full-scale sample should be prepared for repetitive items. Such samples should be approved by the Project Manager with regard to their specifications, execution, performance and aesthetics. Some examples are:

- (a) Frames and shutters for door windows
- (b) Water supply, drainage and sanitary lines and fittings
- (c) External and internal finishing
- (d) Flooring, including levels and slopes and dado
- (e) Electrical switch board/electrical fittings/points
- (f) Door/window fittings
- (g) Kitchen
- (h) Sample quarter for residential areas
- (i) Sample unit like corridors, toilet, room in case of non-residential areas.
- (j) Various types of service pipes
- (k) AC ducts/AC grills
- (l) Window grills with or without coolers and AC's (m) False ceiling
- (m) Fire fighting pipes and fittings, conduit networks, including cable ducts and cable galleries
- (n) Shafts.

(vi) To ensure that all the mandatory field and laboratory tests as laid down in the specifications are carried out at appropriate time and materials failing to conform to the required specifications are promptly rejected and removed from site.

(vii) As far as practicable all tests on materials will be carried out at the construction site in a field laboratory, which will be set up under the control of the Project Manager. The equipments for such field laboratories may be purchased directly, charging their cost to the work. A Junior Engineer of the Division with aptitude for testing should be selected by the Project Manager for manning the laboratory. He should be given training in to familiarize with the various tests, and then placed in charge of the field laboratory. Typical lists of equipments and instruments which may be procured for a field Laboratory are given below in Annexure I and II. Results of routine tests carried out in the field laboratory will be promptly communicated simultaneously to the Engineer-in-charge The Junior Engineer-in-charge of the field laboratory will be responsible for carrying out tests correctly, and for timely communication of test results to authorities mentioned above. These test results shall be analyzed, interpreted and acted upon for the purpose of ensuring quality in the work as per Quality Assurance Plan.

(viii). Although testing of materials is a very important requirement for quality assurance, often testing is not carried out by the Resident Engineer/Junior Engineer at site till the lapse is pointed out by an inspecting officer. It is essential that the officers who have to get the work executed at site, should be aware of the various tests required to be carried out during the progress of work, and should be adequately prepared for the same before the actual work starts. A consolidated test register, duly signed by the Project Manager should be issued from the Divisional Office soon after the award of work.

(ix) It will be incumbent upon the Project Manager to keep a watch over regular testing of materials before making payment at the stage of each running bill. For this purpose, a Performa as given in Annexure III is prescribed. The first five columns of the Performa should be filled by the Resident Engineer/Junior Engineer, and checked by the Project Manager in advance, and copies as required made thereof. The remaining columns will be filled by the Resident Engineer/Junior Engineer with each running bill and checked by the Project Manager before making payment.

(ix) Samples for tests are taken mostly by the Junior Engineers, or some by the Resident Engineers. Samples for 10% of mandatory tests should be collected by the Project Manager. 10% of the field tests should be got done by the Project Managers in their presence.

(xi) A guard file shall be maintained at all work sites, with copies of all inspection reports to date, whether these be of the Resident Engineer (QA), Project Manager, General Manager or Managing Director.

(xii) Inspection Register, Site Order book, Record of tests, Hindrance Register, etc. should be put up for entries and review to every inspecting officer.

(xiii) The inspecting officers of the rank of General Manager and above shall not confine themselves only to review of progress, co-ordination and general matters, but shall also inspect the work from quality Assurance aspects.

(xiv) The Project Manager should invariably review and sign the guard file of earlier inspections, Inspection Register, Site Order Book, Register of tests carried out. Hindrance Register, etc.

(xv) The Project Managers should ensure that the Resident Engineers and Junior Engineers, as well as the contractor's supervisors in-charge are fully aware of the specifications and method of execution of any new/fresh item of work to be taken up in the next 2 weeks. The Resident Engineers/Junior Engineers/Supervisors should ensure that this important aspect is not

overlooked. The Junior Engineers/Resident Engineers shall carry the required field testing instruments as per Annexure II to ensure on site quality assurance check on a regular basis, and to enable the senior officers to conduct checks during their site visits.

(xvi) Checklist:-

a) As and when any important item is taken up for execution, the Junior Engineer/Resident Engineer should go through the specifications and invariably make a checklist. This checklist should be got approved from the Project Manager, and should be shown to the inspecting officers. The important items inter-alia include foundation work, including reinforcement and shuttering, brickwork, cast-in-situ mosaic flooring, doors & windows, plumbing, including water supply pipe lines, roof treatment, earth filling etc. which are a few illustrative items for checklist purpose.

(b) Sample checklists for items of concrete for raft, columns/beams/slabs, water supply lines, brickwork and plastering are given below in Annexure IV for guidance.

(xvii) To avoid dampness and leakage, the Project Managers shall ensure that necessary L) tests are carried out for proper slopes of canopies, chajjas, terracing, drainage arrangements, water tightness of expansion joints, joints in the water supply, drainage and sanitary works before these are covered/concealed, and also ensure rectification of defects noticed.

(xviii) The Project Managers shall ensure availability of the required test equipments for field tests, as well as an updated copy of specifications. copies of agreement at sites of works.

41.6 Action by PM on RE Report

(i) Based on the report of the Resident Engineer, Project Manager shall assess the following: 1) The general standard of quality of the work at the particular site. This assessment is to be based on the regularity of the routine tests carried out in the field, and general adherence to the quality control procedures.

(ii) Remedial action required to avoid defects of the nature mentioned in the Inspection Report.

41.7 The Core Wing in MD's office and its functions

- (1) The Core Wing headed by CGM, and overseen by MD, shall have the over-all responsibility of constantly reviewing the existing quality assurance procedures,

and updating them on the basis of feedback from Project Manager. It will perform the following other functions:

- (i) To deal with policy issues pertaining to Total Quality Management System (TQM) for the Nigam as a whole.
- (ii) To review the existing procedures regularly on the basis of feedback from field units, and to issue guidelines/instructions to ensure uniformity, consistency and reliability in implementation of Quality Assurance systems and procedures in the Department
- (iii) To lay down norms/guidelines for periodic inspection and effective functioning of the quality control set **Lip**.
- (iv) To keep itself updated with modern testing equipments and methods, and disseminate information in this regard to all concerned in the Department.
- (v) To review the existing tolerance limits, and to lay down the tolerance limits in respect of finished items for which such limits are not specified in the I.S codes and PWD specifications. Such tolerance limits will be fixed on the basis of the accumulated experience in various works.
- (vi) To issue guidelines/instructions for assigning accountability for different items of works.
- (vii) To carry out investigations and enquiries with regard to quality related aspects for specific works or any other functions assigned by the MD.
- (viii) CGM shall keep the MD apprised of all the important matters, as also on matters regarding policy issues, laying down new procedures, laying down tolerance limits in respect of finished items for which such limits are not specified in the specification book of the Nigam and issuance of guidelines/instructions for assigning accountability for different items of work.

41.8 Action in Divisions on the Inspection Report of Core Wing.

Proper attention by the field units to the concept of Quality Assurance as dealt in para 41.1 above and a continuous check over process control should be given. As a matter of fact give no opportunity to the Core Wing to bring out any shortcoming in quality related aspects of the work. Following action shall be taken by the Project Manager on receipt of the Inspection Report from the Core Wing

- (i) It should be immediately brought to the notice of the Resident Engineer and the Junior Engineer in charge of the work.
 - (ii) The following further action should be taken:--

- a) The various observations involving the contractor's work or any other obligation of the contractor shall be brought to the notice of the contractor through the Site Order Book.
- b) The work should be checked up for defects similar to the ones observed at other locations, and all such findings also brought to the notice of the contractor suitably as above. It should also be ensured that similar defects do not recur in further work.
- c) Wherever the defects are rectifiable, action should be taken for their rectification, simultaneously ensuring that such works are not placed in a position beyond rectification. No further work shall be done at that location till the defects are rectified. Also investigate as to why such defects were not arrested by process control quality assurance set-up in the Divisional Office in the first instance.
- d) For items of observations not involving the contractor's work/obligations, the Project Manager shall ensure that due action is taken in time.
- e) Wherever any para is referred to the General Manager/CGM, the Project Manager should send an action taken report to the General Manager on priority.
- f) The Project Manager concerned shall take action on the observations, and send compliance report on rectification of defects/deficiencies to the QA Unit within a period of 4 weeks from the date of receipt of the Inspection Report. (iii) There should be concerted efforts on the part of the field units as well as the QA cell to comply with the observations of the QA cell, and finally settle all the paras during the progress of the work itself so that the bill for the work is finalised in time. Such observations should not be allowed to linger on indefinitely.

41.9 Action in Circle Office on Inspection Reports of the Core Wing

Following action shall be taken by the General Manager on receipt of the Inspection Report from the Core Wing.

- (1) To analyze the reason for occurrence of the reported defects/shortcomings as to how the QA setup in Divisional failed to arrest them in the first instance, and taking action including seeking explanation from the concerned field officers.
- (2) Watching the compliance of the observations by the Project Manager and his Resident Engineers/Junior Engineers, and to ensure that replies to the Inspection Reports of the Core Wing are sent expeditiously.
- (3) On paras referred to the General Manager/CGM by the Core Wing, they shall not endorse the reply of the Project Manager as it is. They shall duly satisfy themselves about the same before sending the jr comments/reply.

- (4) Further, action on similar lines as mentioned under para 41.9 shall be taken by the General Manager on the inspection reports of the Core Wing.
- (5) It is necessary that the observations made by Core Wing are attended to on priority and compliance reported. The General Manager of the BRIDCUL shall be responsible to monitor the compliance of observations made by Core Wing and bring cases to the notice of the Managing Director for appropriate action where there is delay of more than 3 months.
- (6) The Managing Director should hold regular meetings to review pending Inspection Reports every alternate month. Similarly review should be done at General Manager's level at monthly intervals.

41.10 Responsibility for quality

In respect of all works, the responsibility of various officers for checking of materials and workmanship of items of works shall be as per Annexure VIII, given below. However, this does not absolve the Junior Engineer and other officers of their responsibility to get the work executed as per specifications and provisions of Manual Paras 5.2.3 and 41.4 above may also be seen in this regard.

41.11 Field testing laboratories

- (1) The salient functions of the Field Testing Laboratories have already been outlined while discussing the functions of the field formation in exercising control of quality. A list of field equipments for a typical field laboratory is given in Annexure I and II. The General Manager shall from time to time review the functioning of these Field Testing Laboratories, and suggest ways and means of improving the standard of their performance, in consultation with the Core Cell if necessary.
- (2) In all major works of contract costing more than Rs. 10 crores, the contractor shall be required to establish a complete field testing laboratory, and arrange all the relevant Codes and Standards. The list of such testing equipments, Codes, and Standards shall be specified in the tender documents. The contractor shall also arrange for more equipments, Codes, and Standards, if they are needed during the execution of the work. The contractor shall also provide the minimum staff, as specified, for quality assurance. He shall also provide for a temporary shed, of the specified size and specifications, at the allotted space at site, for housing the testing laboratory.
- (3) All working sheets containing various readings/datas of the different tests should be preserved till the bill of contractor is finalised and the technical audit paras are settled, if any. Such working sheets will be proof enough to conclude that a particular test has been conducted in the site laboratory in a proper manner or not. Tests not supported by relevant working sheets could be treated as under a cloud. Decision of the PM in respect of such tests, as to genuinely of the test,

will be final. In case a test is not found as genuine one additional destructive! Non-destructive tests shall be ordered by the PM through an appropriate agency. NOTE: Tolerances allowed as per stipulated specifications will be permitted, but suitable deductions shall be made for the tolerances on proportionate basis from the contractors bill, provided that structure is not unsafe because of the deficiency in the material/s tested.

41.12 Outside/Independent Testing Facilities

Extensive testing of the materials used for construction is a pre-requisite for attaining high quality of the work. This shall also require specialized tests, physical, chemical, ultrasonic, x-ray and various other types of tests which cannot possibly be carried out in a site laboratory. These tests also require specialized personnel who regularly deal in such testing. Therefore the need arises for carrying out the tests in outside laboratories. These laboratories may be in the Government sector, Semi Government or Private sector. The outside private laboratories shall be short-listed before hand by CGM and prior approval obtained from CGM. In case of laboratories in the private sector, the past record and reputation of the laboratory must invariably be given due consideration. The infrastructure in these laboratories should also be inspected physically. before they are short-listed, by a committee of officers to be constituted by the MD. Even when facilities for routine tests are available in the site laboratories, atleast 25 % of such routine tests should be carried out in outside laboratories and that too at regular intervals. PM should cross check the results of these tests during the execution of work itself with the results obtained from the site laboratories to assess the genuinely of the tests conducted in the site laboratory. If large difference is noted between the test results of the same material conducted in the site laboratory and the outside laboratory then PM should investigate the matter properly for taking a suitable action with the concurrence of the GM. **However, testing of materials in any Govt. Lab/Public Undertaking Lab/IIT or NIT Lab/Government Engineering College may be allowed by Project Manager without prior approval of higher officers provided these labs have all necessary facilities to carry out the required tests.**

Annexure - I
List of Equipment For Field Testing Laboratory
[Reference para 41 .5(vii)]

A. For Building Works

Balances

7 kg. to 10 kg. capacity, semi-self indicating type - accuracy 10 gm.

- (i) 500 gm. capacity, semi-self indicating type - accuracy 1 gm.
 - (ii) Pan balance- 5 kg. capacity - accuracy 10 gms.
-
- 1) Ovens-electrically operated, thermostatically controlled upto 110°C - sensitivity 1°C.
 - 2) Sieves: as per IS 460-1962.
 - (i) ES. sieves - 450mm internal dia, of sizes 100 mm, 80 mm, 63mm, 50 mm, 40 mm, 25 mm, 20 mm, 12.5 mm, 10 mm, 6.3 mm, 4.75mm, complete with lid and pan.
 - (ii) IS. sieves- 200mm internal dia (brass frame) consisting of 2.36mm, 1.18mm, 600 microns, 425 microns, 300 microns, 212 microns, 150 microns, 90 microns, 75 microns, with lid and pan.
 - 3) Sieve shaker capable of 200 mm and 300 mm dia sieves, manually operated with timing switch assembly.
 - 4) Equipment lbr slump test- Slump cone, steel plate, tamping rod, steel scale, scoop.
 - 5) Dial gauges, 25 mm travel - 0.01 mm/division least count - 2nos.
 - 6) 100 tonnes compression testing machine, electrical-cum manually operated.
 - 7) Graduated measuring cylinders 200 ml capacity - 3 Nos.
 - 8) Enamel trays (for efflorescence test for bricks).
 - (i) 300 mm x 250 mm x 40 mm- 2 nos.
 - (ii) Circular plates of 250 mm dia - 4 nos.

B. For Road Works

1. Balances

- (i) 7kg to 10kg capacity, semi-self indicating type - accuracy 10gm.
 - (ii) 500 gm capacity, semi-self indicating type, accuracy I gm.
 - (iii) Chemical balance, 100 gm capacity - accuracy- 0.1 gm.
 - (iv) Pan balance - 5 kg. capacity - 10 gm accuracy.
 - (v) Platform scale- 300 kg capacity.
- 2. Oven electrically operated, thermostatically controlled.**
- (i) Upto 200°C for determination of loss on heating of bitumen.
- 3. Sieves as per IS 460-1962.**
- (i) I.S. sieves - 450 mm of internal dia of sizes 100 mm, 80mm, 63mm, 50mm, 40mm, 25mm, 20mm, 12.5mm, 10mm, 6.3mm, 1.75mm, complete with lid and pan.

- (ii) I.S. sieves - 200 mm internal dia (brass frame) consisting of 2.36mm, 1.18mm, 600 microns, 425 microns, 300 microns, 212 microns, 150 microns, 90 microns and 75 microns with lid and pan
 - 4. Sieves shaker capable for shaking 200mm and 300mm dia sieves, electrically operated with timer.
 - 5. Dial gauge
- (i) 25mm travel - 0.01mm/division.
 - 6. Load frame-5 tonnes capacity, electrically operated with speed control.
 - 7. Aggregate impact test apparatus as per IS 2386-Part IV-1963.
 - 8. Compaction apparatus (Proctor) as per IS 2720-Part VII-1974.
 - 9. Modified ASHO compaction apparatus as per IS 2720-Part-II-1974.
 - 10. Sand pouring cylinder with control funnel and tube complete as per IS 2720-Part XXVIII-1974.
 - 11. Sampling tins with rods 100 mm dia x 50mm ht., 1/2kg capacity, and miscellaneous items like moisture tins etc.
 - 12. Constant temperature bath For accommodating bitumen test specimen. electrically) operated and thermostatically controlled. V
 - 13. Penetrometer with automatic time controller and with adjustable weight accessories and needles as per IS 1203-1958
 - 14. Oxhlet extraction apparatus complete with extraction thimbles etc.
 - 15. Laboratory mixer, about 0.02 cu-meter capacity, electrically operated with heating jacket.
 - 16. Hubbard field stability test apparatus complete.
 - 17. Marshall compaction apparatus as per ASTM 1559-62T, and complete with electrically operated leading unit, compaction pedestal bearing head assembly, dial micrometer, and bracket for flow measurement, load transfer bar, specimen mould (4 inch. dia) with base plate.
columns, mould (4 inch, dia) with base plate, collars, specimen extracted. Compaction hammer, 4.53 kg (10lb)/457 mm (18 inch) fall
 - 18. Distant reading thermometers.
 - 19. Graduated cylinder 1000 ml. capacity.
 - 20. Enamel tray.

Annexure - II

Field Testing Instruments

{Reference para 41 .5(vii)}

1. Steel tapes - 3 m
2. Vernier callipers
3. Micrometer screw 25 mm gauge
4. A good quality plumb bob
5. Spirit level, minimum 30 cms long with 3 bubbles for horizontal vertical
6. Wire gauge (circular type) disc
7. Foot rule
8. Long nylon thread
9. Rebound hammer for testing concrete
- 10 Dynamic penetrometer
11. Magnifying glass
12. Screw driver 30 cms long
13. Ball pin hammer, 100 gms
- 1 4. Plastic bags for taking samples
15. Moisture meter for timber
16. Earth resistance tests (for Electrical Divisions)
- 1 7. Meggar (for Electrical Divisions)

Annexure—III
Proforma For Mandatory Tests To Be Attached With Running Bills
 [Reference para 41.5(ix)]

Name of the work:..... Name of contractor.....
 Agreement no..... and date R/A Bill No.....

SL No.	Item	Qty as per Aggmt.	Frequency as per Specification	No. of Test reqd.	Upto date Qty.	No. or test reqd.	No. of test actually done	Remarks
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Note: If the number is less than that required, then reasons shall be recorded.

Signature of Junior Engineer

Signature of Resident
 Engineer/BRIDCUL/Unit.....

Signature of Project Manager/BRIDCUL/UNIT...

Annexure-IV
Check Lists For Various Items
[Reference Para 41 .5[xvi(b)1

PART—A

CHECK LIST FOR ITEMS OF FOUNDATION CONCRETE

Name of works.....

Name of contractor

Agreement no

1. Date of inspection
2. Location
3. Material used for concrete whether tested
 - (a) Sand Yes/No
 - (b) Coarse aggregate Yes/No
 - (C) Water Yes/No
 - (d) Admixture, if any Yes/No
4. Raft top level, whether provided as per details Yes/No
5. Architectural/structural drawing correlated Yes/No
6. Whether location of construction joint has been discussed with Project Manager, Yes/No and he has approved it
7. Cleaning over water proofing surface and construction joint done Yes/No
8. CC cover blocks of 60 mm, thickness provided (mm 2 in one square metre area) Yes/No
9. Reinforcement placement as per relevant structural drawing checked Yes/No
10. Layout of columns as per relevant structural drawing checked Yes/No
11. Placement of shuttering plates and key board for proper construction joint with Yes/No shuttering oil
12. Cement slurry applied on construction joint before pouring of concrete Yes/No
13. Trained mason available Yes/No
14. Concreting to start from farthest point to nearest point with respect of weigh batching plant- Yes/ No
15. Concrete mix has been designed Yes/No
16. Plasticiser being used Yes/No
17. Adequate number of concrete vibrators in working condition available Yes/No
18. Slump checked Yes/No
19. Sample cubes taken Yes/No
20. Signature of Junior Engineer.....
21. Signature of Resident Engineer
22. Signature of Project Manager

PART—B
CHECK LIST FOR COLUMNS/BEAMS/SLABS

1. Date of inspection
2. Drawing no.
3. Location
4. Whether materials used conform to relevant Specifications?
 - a) Sand Yes/No
 - b) Coarse aggregate Yes/No
 - c) Water Yes/No
 - d) Admixture, if any Yes No/NA
5. Whether structural drawings correlated with architectural drawings? Yes/No
6. Whether the centre line of column/beams checked with reference to grid lines as per architectural drawings? Yes/No
7. Whether treatment of expansion joint, wherever required, is done? Yes/No
8. Whether cleaning, repairing and approval of shuttering plate, application of quality shuttering oil is done? Yes/No
9. Whether shuttering is in true plumb and vertical and properly done and maintained during concreting? Yes/No
10. Whether reinforcement detailing, their placement are as per structural drawings? Yes/No
11. Whether proper gauge binding wire is used and with full cross binding and tightening of reinforcement bars with stirrups? Yes/No
12. Whether required minimum cover to reinforcement is maintained? Yes/No
13. Whether stainless steel cramps, angle irons for holding stones and any holding arrangement for electrical/mechanical/fire fighting/other services have been seen and approved by JE/RE Yes/No
14. Whether conduits for various electrical/mechanical/fire fighting/other services have been seen and approved by JE(E)/RE(E)? Yes/No
15. Whether concrete of approved design mix within maximum permissible water-cement ratio is used? Yes/No
16. Whether admixture of good brand quality approved by Engineer-in-charge is used? Yes/No
17. Whether technical supervision at batching plant/mixer and at point of concreting done? Yes/No
18. Whether concreting is placed within initial setting time of mixing? Yes/No
19. Whether proper compaction with vibrator is done? Yes/No

20. Whether the concreting has been done in a lift not exceeding 1.5 m? Yes/No
21. Whether cubes as per requirement filled for testing? Yes/No
22. Signature of Junior Engineer
23. Signature of Resident Engineer
24. Signature of Project Manager Post-concreting:
25. Whether shuttering stripped off as per specification, and laitance removed Yes/No immediately thereafter?
26. Whether proper arrangement of curing and curing period maintained as per Specification? Yes/No
27. Whether hacking of RCC surface by proper hacking tool for subsequent plastering/finishing is carried out ?Yes/No
28. Signature of Junior Engineer
29. Signature of Resident Engineer
30. Signature of Project Manager

PART—C
CHECK LIST FOR BRICK WORK

1. Date of inspection
2. Drawing no.
3. Location
4. Whether materials used conform to relevant Specifications and whether mandatory tests done?
 - a) Sand Yes/No
 - b) Bricks Yes/No
 - c) Water Yes/No
5. Whether structural drawings co-related with architectural drawings? Yes/No
6. Whether the centre line of brickwork checked with reference to grid lines as per Architectural drawings? Yes/No
7. Whether bricks soaked in water before use for sufficient period? Yes/No
8. Whether queen closers are used at junction of walls? Yes/No
9. Whether brickwork is in true plumb and vertical and all layers truly horizontal? Yes/No
10. Whether graduated wooden straight edge storey rod being used for keeping height of brick courses uniform? Yes/No
11. Whether wall height being constructed in a day is being restricted to 1 m height? Yes/No
12. Whether parts of wall left at different levels are raked back at an angle of 45 degrees or less with the horizontal? (Toothing is not to be permitted) Yes/No
13. Whether top courses of all plinths, parapets, steps and top of walls below floor and roof slabs laid with brick on edge? Whether marucona provided at corners in such brickwork? Yes/No
14. Whether thickness of joints in brickwork is kept 1 cm \pm 20%? Yes/No

15. Whether mortar of approved mix within maximum permissible water cement ratio is used? Yes/No
16. Whether all horizontal and vertical joints are being filled? Yes/No
17. Whether proper arrangement of curing and curing period maintained as per specification? Yes/No
18. Whether date of work done written? Yes/No
19. Signature of Junior Engineer
20. Signature of Resident Engineer
21. Signature of Project Manager

PART—D
CHECK LIST FOR PLASTERING

1. Date of inspection
2. **Drawing no.**
3. Location
4. Whether materials used conform to relevant specifications and whether mandatory tests done? Yes/No

5. Whether surface cleaned of all loose mortar and efflorescence? Yes/No
6. Whether all conducting and electrical piping done? Yes/No
7. Whether all doors, windows etc. fixed? Yes/No
8. Whether all defects of brickwork/CC/RCC rectified? Yes/No
9. Whether preparation of surface done? Yes/No
10. Whether 2.5 m long aluminium straightedge and plumb bob being used to check verticality and evenness of surface? Yes/No
11. Whether 15 cm x 15 cm bunda at every 2 m horizontally and vertically being provided to serve as gauges? Yes/No
12. Whether uniform groove provided at junctions of all plaster and ceiling plaster?
Yes/No
13. Whether mortar of approved mix within maximum permissible water cement ratio is used? Yes/No

- Whether proper arrangement of curing and curing period maintained as per specifications? Yes/No
14. Whether date of work done written? Yes/No
15. Signature of Junior Engineer
16. Signature of Resident Engineer
17. Signature of Project Manager

PART—E
CHECK LIST FOR WATER SUPPLY LINES

1. Date of inspection
2. Drawing no.
3. Location
4. Whether materials used conform
5. to relevant Specifications and whether mandatory tests done? Yes/No
6. Whether plumber employed is licensed plumber or not? Yes/ No
7. Whether plan for piping system has been prepared and got approved? Yes/ No
8. Whether all pipes and fittings are ISI marked? Yes/ No
9. Whether a sample system has been prepared and got approved? Yes/ No
10. Whether clamps provided at specified spacing? Yes/ No
11. Whether pipe lines checked at required pressure before covering? Yes/ No
12. Whether weight of flushing pipe checked? Yes/ No
13. Whether flushing cistern is ISI marked and internally painted with bitumastic paint? Yes/No
14. Whether fittings like wash basin, sink pan, cistern, bib cock, stop cock, wheel valves, etc. are ISI marked? Yes/No
15. Whether PVC water storage tank is ISI marked? If not, whether sample sent for testing? Yes/No
16. Signature of Junior Engineer
17. Signature of Resident Engineer
18. Signature of Project Manager

APPENDIX-I

HISTORY SHEET OF ESTIMATE

Estimate No :

for:

State :

Branch:

Division

Name of work:

Fund:

Major Head:

Minor Head:

Detailed Head:

Estimate framed by..... Engineer..... of the
probable cost of

REPORT

APPENDIX-2
DETAILS OF MEASUREMENTS

Name of Work.....

Details of Work	No.	Measurements			Quantities
		L	B	H	

APPENDIX -3
ABSTRACT OF COST- ORIGINAL ESTIMATE

State.....

Division

Branch.....

Sub- Division.....

Name of work

Item No.	Sub-Head and items of work	Quantity or No.	Rate		Per	Amount		Total	
			Rs.	P.		Rs.	P.	Rs.	p.

APPENDIX-4
ABSTRACT OF ORIGINAL AND REVISED ESTIMATES
WITH EXPLANATIONS OF DIFFERENCES IN
QUANTITIES AND RATES

Name of work

Sub Head of estimated and items of work	Original Estimate				Revised Estimate				Difference	Explanations
	Quantity	Rate Rs.	Per	Cost Rs.	Quantity	Rate Rs.	Per	Cost Rs.		

APPENDIX-5
PROFORMA FOR WRITE OFF OF LOST MB,s
(Measurement Books)

1. Serial number of the MB
2. To whom issued C
3. The date on which the M.B. was lost
4. Details of FIR lodged With the police
5. From whose custody it was lost?
6. Detailed circumstances leading to this loss
7. What efforts the last made to trace the M.B?
8. By whom the last measurements were recorded?
9. Whether the measurements have been checked up to the required percentage by the Superior officer as required under the rules? If not why?
10. IF any register is maintained to watch the movement of the M.B.?
11. Whether the M.B. contained the details or any work for which payment has not been made or all the works have been finalized?
12. Whether any audit objection or contractor's dispute relating to the M. .B is pending, and if so, nature thereof, and how it is proposed to settle up?
13. Whether work is susceptible of measurements again? if not, what is the basis on which the RE proposes to make final payment for the outstanding bills?
14. Whether the PM is satisfied that by writing of fresh measurements on the basis of other subsidiary records, ir any, the Government bill not be put to any loss, and there will be no dispute from any quarter? If not, what steps be suggested to safeguard against any the such shortcoming?
15. Details of disciplinary action taken against the persons responsible for the loss
16. Details of remedial measures taken against the recurrence of such cases
17. Any other remarks

Project Manager

.....Division BRIDCUL

APPENDIX-6
AUTHORITIES EMPOWERED TO PREPARE, PASS THE BILLS

	Wages of labourers Junior currant or rears, except Engineer those mentioned need in item 2 below	Junior Engineer	Resident Engineer	Project Manager
	Unpaid wages removed from account of a work in respect of muster roll	Project Manager/ Resident Engineer/Junior Engineer it an imp rest holder	Project Manager/Resident Engineer/Junior Engineer it an imp rest/holder	Project Manager
	Bill of work Charged staff	Resident Engineer .	Resident Engineer	Resident Engineer, subject to condition that employment of WC staff in question Is approved by the Competent authority And bill is rechecked by the Divisional
	Petty payment for Work done or Supplies made not Exceeding Rs, 150!-	Junior Engineer	Resident Engineer/ Junior Engineer if an imp rest holder	office Imp rest holder
	5 Running and final bills of contractor or suppliers involving work done or supply made to the value of Rs. 10,000!- and less but exceeding Rs. 150 against agreement entered entered into by them- selves,	Resident Engineer .	Resident Engineer/ Junior Engineer	Resident Engineer/ stationed away from Divisional Head Quarters, provided that the cash book, is maintained by
	Running and final bills of contractor or suppliers involving work done or supply made in Excess of Rs. 10,000!- bills or Advance (both secured and others& claims for refund)	Resident Engineer	Resident Engineer	Project Manager

APPENDIX -7

BILL BOOK OF THE..... DIVISION FOR THE YEAR.....

SL No of item	Date of receipt	Name of sub-Division on to which bill pertains	Name of work	Name of contractor	Amount of bill	Date of completion of work (if Final bill)	Date of last payment (if a running a/c bill)	Signature of receiving clerk in Division	Date of which cheque is drawn	Signature of cashier	Ref of cash voucher no and date	initial of Div accountant	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14

**APPENDIX-8
REGISTER OF DISMANTLED MATERIALS**

1. Name of Work

2. Name Of Division

SI no	Date of receipt	Ref. to no. page of MB	Full Particulars of material giving size, etc. if any	Opening balance	Qty. recd.	Total	Ref to its disposal, whether by write off, sale, or transfer to other works	Quantity. issued or disposed off	Closing balance.	Dated initial of the RE	Date of verification of balance, &by whom verified	Remarks
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.

APPENDIX-09

Standard Rates for Construction (First Stage) of Buildings in Hill Area

The Cost of the building will be calculated based on the prescribed rates and plinth area vide letter no. on the basis of which the following provisions will be made for the new construction (first Stage) of buildings.

- 1- Keeping in view of the increasing need for architect regarding architectural consultation etc. for the buildings in the present time the provision for the following items will be made for the estimated cost as per Serial Number 4.30 (as per given) and if the centage charges are given to other corporation, if they include any funds for these provisions, then this amount will not be payable.
 - I. Concept planning and sketch – 0.25%
 - II. Estimated cost, drawing and specification etc.- 0.5%
 - III. Detailed appraisal, drawing and specification-0.75%
 - IV. Detailed working drawing/designe-0.50%
- 2- Soil Testing and utility shifting-2%
- 3- Contingent Expenditure (Sr. No. 1& 2) – 3%
- 4- According to vide letter no. 332 for the approach road of the building, in hilly area 5.95 meter width 46 lakh per kilometer of fixed amount for new motorway construction for the field area, the casual expenditure in Sr. no. 1 to 5, from the rate of 35 lakhs per km fixed by the office vide letter no. 534 a provision of Rs. 29 lakh per Km will be made. The construction of approach road upto coating level, detailed report and necessary provision will be taken in DPR.
- 5- Provision for land for building construction, on the basis of the circle rates determined by the district Magistrates where the land is not available for free actual fare will be made.

APPENDIX-10
GENERAL GUIDELINES FOR FIXING EQUIPMENT OF
TECHNICAL STAFF FOR A WORK

Sl. No.	Cost of Work	No. of Key Personnel (Minimum Qualification & Experience)		
		Degree Engineering	Diploma Engineering	Supervisor
i.	Upto Rs. 1 Crore	-	1 (2 yrs.)	1 (2 yrs)
ii.	Above Rs. 1 Crore and upto Rs. 5 Crore	-	2 (3 yrs.)	2 (3yrs.)
iii.	Above Rs. 5 Crore and upto Rs. 10 Crore	1 (2 yrs.)	2 (3yrs.)	2 (3 yrs.)
iv.	Above Rs. 10 Crore and upto Rs. 25 Crore	1 (4 yrs.)	2 (5 yrs.)	2 (5 yrs.)
v.	Above Rs. 25 Crore	2 (6 yrs. & 4 yrs.)	3 (5 yrs.)	4 (5 yrs.)

- Notes: I. Cost of work, in table above, means corresponding amount available for work in sanctioned preliminary estimate.
2. Contract period, indicated, in table above should not be considered as standard schedule but should be actually determined as per appendix 17 for each work.
 3. Rate of recovery in case of non compliance of clause 36(i) be stipulated at following rates:

APPENDIX-11
SPECIMEN OF PRESS NOTICE TO BE ISSUED FOR
PUBLICATION IN NEWS PAPERS
NOTICE INVITING TENDERS

Specimen Tender Notice for Publication in newspapers

NIT No.....

The General Manager/Project Manager..... Unit/BRIDCUL on behalf of Hon. Governor of Uttarakhand, Invites sealed item rate/percentage rate/Lump-sum/two bid/three envelopes (delete which even not required) tenders from registered contractors/open tender from eligible contractor. Name of work..... Estimate Cost..... Tender End Date.....

Tender documents & other details may be downloaded/seen on website www.bridcul.com/
www.tenderwizard.com

General Manager/Project Manager
BRIDCUL

Note:-

- 1) Notice Inviting Tender as published in newspapers shall form of Nit/Tender document sold to the contractors
- 2) Combined advertisement to be issued for all tenders by clubbing all the press notices issued on a particular day.
- 3) In case of invited tenders contractors enlisted in the respective category as per tender value can only participate. Contractor registered in higher category are not eligible.

APPENDIX-12

Specimen of Press Notice Forming Part of NIT and to be Posted on website

NIT No.....

The General Manager/Project Manager..... Unit/BRIDCUL on behalf of Hon. Governor of Uttarakhand, Invites sealed item rate/percentage tender from approved & eligible contractors of the respective category as per estimated cost. Contractors approved in higher category are not eligible to apply.

S. NO.	NIT No.	Name of work Location	Estimated Cost put to tender	Earnest Money	of Time Completion	Last date & time		Time & date of submission & Opening of tender
						Receipt of application	Issue of tender Document	
1	2	3	4	5	6	7	8	9
		Name of work should contain details of minor components in case of composite tender	Estimated cost of component should also be indicated					

The tender forms and other details can be obtained from the office the PM on payment of Rs.....

* Conditions for Non—BRIDCUL contractor only, if tenders are also open to non-BRIDCUL contractors (for works estimated more than 10.0 Crore)

Tenders will be issued to eligible contractors provided they produce definite proof from the appropriate authority, which shall be to the satisfaction of the competent authority, of having satisfactorily completed similar work of magnitude specified below:-

Three similar work each of value not less than Rs or two similar work each of value not less than Rs..... Or one similar work of value not less than Rs..... In last 7 years ending last day of the month previous to one in which the tenders are invited,

* Conditions applicable, to BRIDCUL contractors only, if tenders are also open to non-BRIDCUL contractors (for works estimated to cost up to Rs. 15 crore)

For works costing above RS. 3 Crore but up to RS. 15 Crore, when tenders are open to non-BRIDCUL contractors also, then class II Contractors of BIRDCUL shall also be eligible if they satisfy the eligibility criteria specified for Non-BRIDCUL Contractors.

Earnest Money should be deposited along with the tender documents in separate envelop marked as Earnest Money in cash (up to RS. 10,000/-) or Receipt Treasury Chillan/ deposit at call receipt of a scheduled bank/fixed deposit receipt of a scheduled Bank/ Demand Draft of a scheduled bank issued in favor of A part of earnest money is acceptable in the form of bank guarantee also. In such case, 50%

of earnest money or Rs. 20 lac., whichever is less, will have to be deposited in shape prescribed above, and balance in shape of Bank Guarantee.

Both sealed envelopes (EMD and Tender document) marked as Earnest Money and Tender shall be submitted together in another sealed envelope superscripted with name of work and due date of opening. The envelope marked tender shall be opened whose Earnest Money, placed in the other envelope marked as Earnest Money is found to be in order.

Note: Other conditions for composite tenders and any special condition as applicable may also be added and Press Notice may be modified suitably by NIT approving authority.

APPENDIX- 13
GUIDELINES FOR FIXING ELIGIBILITY CRITERIA FOR
TWO/THREE ENVELOPE SYSTEM

1. The eligibility criteria to be inserted in Section-li (information and instructions for Bidders) and Section —111 (Information regarding eligibility) of the document and in the Press Notice shall be decided on the following lines:
- (A) Para 2(a) of the Invitation for bid, 7.1 of Section-11 and Form 'C' of Section—111. The 'moth' shall be the moth previous to the one in which the bids are invited.
- (B) Pare 2(a) of the Invitation for bid and 7.1 of Section-II.
- (i) Experience of having successfully completed works during the last 7 years ending last day of the month previous to the one in which r applications are invited.
Three similar completed works, costing not less than the amount equal to 40% of estimated cost put to tender,
Or
Two similar completed works, costing not less than the amount equal to 60% of the estimated cost **put** to tender
Or
One similar completed work of aggregate cost not less than the amount equal to 80% of the estimated cost.
And
- (ii) One Completed work of any nature (either part of (i) or a separate one) costing not less than the amount equal to 40% of the estimated cost put to tender with some central Government , Department/state Government Department! central Autonomous Body/ central public sector undertaking.
- (Note :- (ii) not applicable in case of specialized work)**
- (C) Para 2 (b) of the Invitation for bid, and 7.3 of section-u
Turnover: Average annual financial turn over on construction work (should be at last 30% of the estimated cost during the immediate last 3 consecutive financial year.
- (D) Pare 2(c) of the Invitation for bid and 7.4 of Section --II
Profit/loss: The date to filled in this column should be 31 St March of the previous financial year.
- (E) Para 2(d) of the Invitation for bid, and 7.6 of Section-II
Solvency Certificate: Solvency of the amount equal to 40% *o-f* the estimated cost of the work.
- (F) Pare 8 of Section—II
Evaluation of performance:

Evaluation of the performance of contractors for eligibility shall be done by

NIT approving authority or a Committee constituted by him. If repaired, the work executed by the bidders who otherwise qualify may be got inspected 'by a Committee or any other authority as decided by NIT approving authority.

(G) Pare 14.0 of Section —III

While framing NIT, validity period mentioned in BRIDCUL Form 6 and BRIDCUL- 7/8 may be modified so as to conform to provision given in Pare 14.0 of Section II.

Scoring Method of Evaluation: The scoring for evaluation mentioned in this column shall be done as given in Annexure-I. This should be made part of the tender documents.

2. For all works eligibility criteria shall be based on above guidelines. However, the Managing Director may insert experience of particular categories of items like stone work, mint false ceiling, basements, form works etc., as an additional condition.
3. The above criteria shall be applicable for normal Civil & Electrical Works in BRIDCUL.

Note:- **In case only technical bids are called, the document may be modified suitably.**

APPENDIX-13

CRITERIA FOR EVALUATION OF THE PERFORMANCE OF CONTRACTORS FOR PRE-ELIGIBILITY

Attributes Evaluation		Evaluation					
A	Financial strength (20 marks) (i) Average annual turnover 16 marks (ii) Solvency Certificate 4 marks	(i) 60% marks for minimum eligibility criteria (ii) 100% marks for twice the minimum eligibility criteria or more. In between (i) & (ii) —on pro-rate basis.					
B	Experience in similar class of (20 marks) works	(i) 60% marks for minimum eligibility criteria (ii) 100% marks for twice the minimum eligibility criteria or more. In between (I) & (ii) —on pro—rate basis.					
C	Performance on works (time over run)	(20 marks)					
	Parameter	Calculation for Points	Score		Maximum Marks		
(I)	Without levy of compensation.	If TOR	1.00	2.000	3.00	>3.50	20
(ii)	With levy of compensation		20	15	10	10	
(iii)	Levy of compensation not decided.		20	5	0	-5	
			20	10	0	0	
TOR = AT/ST, where AT=Actual Time; ST=Stipulated Time. Note: Marks for value in between the stages indicated above is to be determined by straight line variation basis. -							
D	Performance of works (Quality)	(15 marks)					
(i)	Very Good	15					
(ii)	Good	10					
(iii)	Fair	5					
(iv)	Poor	0					
E	Personnel and Establishment	(Max. 10 marks)					
(i)	Graduate	3 marks for each					
(ii)	Diploma holder Engineer	2 marks for each tip to Max. 4					
(iii)	Supervisory/Foreman	1 marks for each up to Max. 3 marks					
F	Plant & Equipment	(Max. 15 marks)					
(i)	Hopper Mixer	1 marks for each up to Max. 2 marks					
(ii)	Truck/Tippers/Transit mixer	1 marks for each up to Max. 2 marks					
(iii)	Steel Crane	2 Marks for each 800 Sqm up to Max. 4					
(iv)	Tower Crane	2 Marks for each up to Max. 4					
(v)	Building Hoist	1 Marks for each up to Max. 2					
(vi)	Excavator	1 Marks for each up to Max. 2					
(vii)	Batch Mix Plant	2 Marks for each up to Max. 4					

(viii)	Marks Tandem Roller	1 Marks for each up to Max. 2
(ix)	Marks Vibration Compactor	1 Marks for each up to Max. 2
(x)	Marks Paver Finisher	2 Marks for each up to Max. 4
(xi)	Marks Hot Mix Plant	2 Marks for each up to Max. 4
(xii)	Marks Special Equipment	(Marks to be fixed as per requirement)

Note: Above marking system for plants and equipments may be modified suitably by NIT approving authority depending upon type of plants and equipments required for the work.

Press Notice

(Forming part of NIT/Tender document and to be posted on website) BRIDCUL

Invitation for Bid The Project Manager on behalf of the Hon. Governor of Uttarakhand invites the bids from firms/contractors of repute in two/three envelope system for the following work.

1. Contractor who fulfil the following requirements shall be eligible to apply. Joint ventures are not accepted.
 - (a) Should have satisfactorily completed the works as mentioned below during the last Seven years ending last day of the month
 - (i) Three similar works each costing not less than Rs or two similar works each costing not less than Rs..... one similar work costing not less than Rs... with state Govt./Central Govt./PSU
And
 - (ii) One work of any nature (either part of (i) above or a separate one) costing not less than Rs..... with some Central/State Government Department/Central Autonomous Body/BRIDCUL.
Similar work shall mean works of The value of executed works Shall be brought to current costing level by enhancing the actual value of work at as per existing guideline of PWD calculated from the date of completion to last date of receipt of applications for tenders.
 - (b) Should have had average annual financial turnover of Rs.....
Work during the last three years ending 31 March
 - (c) Should not have incurred any loss in more than two years during the last five years ending 31st March
 - (d) Should have a solvency of Rs..... (Solvency not required if applicant is a class I (Civil) registered contractor of BRIDCUL and estimated cost is up to Rs. 25 Crore)*

2. Bid documents consisting of plans, specifications, the schedule of Quantities of the various types of work to be done and the set of terms and conditions of contract to be complied with the contractor whose bid may be accepted and other necessary documents can be seen in the office of the..... Between hours of 11.00 AM and 4.00 PM from..... to..... every day except on Sunday and Public Holidays, Bid documents, excluding standard form will be issued from his office, during the hours specified above. On payment Rs As cost of bid document.
 3. Application supported by prescribed annexure Money of Rs..... In the form of Receipt/Treasury Challan/Deposit at call receipt of a schedule bank! fixed deposit receipt of a schedule bank/demand draft of a scheduled bank issued in favour of..... Along with tender document. A part of Earnest money is acceptable in the form of bank Guarantee also. In such case, 50% of earnest money or Rs. 20 lakh whichever is less will have to be deposited in shape prescribed above and balance in shape of Bank Guarantee.
 4. Application supported by prescribed annexure and the financial bid shall be placed in separate sealed envelopes each marked” and” respectively. Both the envelopes shall be submitted together in another sealed envelope. The bids will be received up to 3.00 PM on The envelope marked Eligibility Documents” shall be opened by the Project Manager or his authorized representative in his office on the same day at 3.30 PM. The time and date of opening of financial bid shall be communicated at later date.
 - (i) Pre Bid conference shall be held in the chamber of At on to clear the doubt of intending tenderers, if any.
 - (ii) The department reserves the right to reject any prospective application without assigning any reason and to restrict the list of qualified contractors to any number deemed suitable by it. if too many bids are received satisfying the laid down criterion
 - To be struck off for works with estimated cost more than RS. 25 crore.
- ** Para 5 above be modified suitably for three envelope system.
(Any other condition as decided by NIT approving authority may be added)

Project Manager/General Manager
.....

Note: Press notice **inviting tenders shall be published in newspapers as per Appendix 11.**

SECTION I
BRIEF PARTICULARS OF THE WORK

1. Salient details of the work for which bids are invited are as tinder:

<u>Sl.no.</u>	<u>Name of work</u>	<u>Estimated cost</u>	<u>Period completion</u>
---------------	---------------------	-----------------------	--------------------------

2. The work is situated at

SECTION II
INFORMATION & INSTRUCTIONS FOR BIDDERS
(Modified as per OM/MAN/ 160)

1.1 General:

- 1.1 Letter of transmittal and forms for deciding eligibility are given in **Section III**.
- 1.2 All information called for in the enclosed form should be furnished against the relevant columns in the forms. If for any reason, information is furnished on a separate sheet, this fact should be mentioned against the relevant column in the forms, If for any reason. Information is furnished on a separate sheet; this fact should be mentioned against the relevant column. Even if no information is to be provided in a column, a “nil” or “no such case” entry should be made in that column, If any particulars! Query is not giving complete information called for in the application forms or not giving it in clear terms or making any change in the prescribed forms or deliberately suppressing the information may result in the bid being summarily disqualified. Bids made by telegram or telex and those received late will not be entertained.
- 1.3 The bid should be type-written. The bidder should sign each page of the application.
- 1.4 Overwriting should be avoided. Correction, if any, should be made by neatly crossing out, initialling, nay added by the contractor, should also be numbered by him. They should be submitted as a package with signed letter of transmittal.
- 1.5 References information and certificates from the respective clients certifying suitability, technical knowledge or capability of the bidder should be signed by an officer not below the rank of Project Manager or equivalent.
- 1.6 The bidder may furnish any additional information which he thinks is necessary to stability his capabilities to successfully complete the envisaged work. He is, however, advised not to furnish superfluous information. No information shall be incorrect after submission of eligibility criteria documents unless it is called for by the Employer.
- 1.7 Any information furnished by the bidder found to be incurred either immediately or at a later date, would render him liable to be debarred from tendering/taking up of work in BRIDCUL. If such bidder happens to be enlisted contractor of any class in BRIDCUL, his name shall also be removed from the approved list of contractors,
- 1.8 BRIDCUL works manual shall be referred & followed for any further clarification.

2.0 Definition:

- 1.1 In this document the following words and expressions have the meaning hereby assigned to them.
- 1.2 Employer: means the Hon. Governor of Uttarakhand, acting through the Project Manager

1.3 Bidder: means the individual, proprietary firm, firm in partnership, limited company private or public or corporation.

1.4 “year” means” Financial, Year” unless stated otherwise.

3.0 Method of application:

3.1 If the bidder is an individual, the application shall be signed by him above his full type written name and current address

3.2 If the bidder is a proprietary firm, the application shall be signed by the proprietor above his full typewritten name and the full name of his firm them with its current address.

3.3 If the bidder is a firm in partnership the application shall be signed by all the partners of the firm above their full typewritten names and current addresses, or, alternatively, by a partner holding power of attorney for the firm .In the later case a certified copy of the partnership deed and current address of all the partners of the firm should accompany the application.

3.4 If the. bidder is a limited company or a corporation, the application shall be signed by a duly authorized person holding power of attorney for signing the application accompanied by a copy of the power attorney. The bidder should also furnish a copy of the Memorandum of articles of association duly attested by a public Notary.

1.0 Final decision making authority.

The employer reserves the right to accept or reject any bid and to annul the process and reject all bids at any time. Without assigning any reason or incurring any liability the bidders.

4.0 Particulars provisional

The particulars of the work giving in section I are provisional. They are liable to change and must be considered only as advance information to assist the bidder.

6.0 Site visit

The bidder is advised to visit the site of work, at his own cost, and examine it and its surroundings to himself collect all information that he considers necessary for proper assessment of the prospective assignment.

7.0 Initial criteria *for eligibility*

7.1 The bidder should have satisfactorily complied during the last seven years ending last day of the month..... for this purpose cost of work shall mean gross value the completed work including cost material supplied by the government/client but excluding those supplied free of cost. This should be certified by an officer not below the rank of Project Manager. Project manager or equivalent.

(i) Three similar works each costing not less than Rs..... Or completed tow similar work, each costing not less than Rs..... Or completed one similar work costing not less than Rs.....

and

- (ii) One work of any nature (either part of (i) above or a separate one) costing not less than Rs..... with some Central/State Government! Central Autonomous Body! Central Public Sector Undertaking. Similar work shall mean works of.....

The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum; calculated from the date of completion to last date of receipt of applications for tenders. (Added vide OM/MAN/1 60)

- 7.2 At the time of purchase of tender, the tenders shall have to furnish an affidavit as under: “We undertake and confirm that eligible similar work(s) have not been got executed through another contractor on back to back basis. Further that, If such a violation comes to the notice of Department, then I/we shall be debarred for tendering in BRIDCUL contracts in future forever. Also. If such a violation comes to the notice of Department before date star of work, the Engineer- in- charge shall be free to forfeit the entire amount of Earnest Money Deposit/performance Guarantee.” . •)

(Added as per OMJMAN/211)

- 7.3 The bidder should have had average of annual financial turn (gross) of Rs on civil/Electrical construction works during the immediate last three consecutive financial years. This should be duly audited by a chartered Accountant. Year in which no turnover is shown would also be considered for working out the average.
- 7.4 The bidder should not have incurred any loss in more than two years during the immediate last five consecutive financial years. Duly certified by the chartered Accountant.
- 7.5 The bidding capacity of the contractor should be equal to or more than the estimated cost of the work put to tender. The bidding capacity shall be worked out by the following formula:

Bidding capacity $[A \times N \times 2J - B]$

Where,

A= Maximum value of construction works executed in any one year during the last five years taking into account the completed the well as works in progress.

N= Number of years prescribed for completion of work for which bids has been invited. B= Value of existing commitments and ongoing works to be completed during the period completion of work for which bids have been invited

- 7.6 The bidder should have a solvency of Rs.....certified by Bankers.

- 7.7 The bidder should own construction equipment as per list required for the proper and timely execution of the work. Else, he should certify' that he would be able to manage the equipment by hiring etc and submit the list of firm from whom he proposes to hire.
- 7.8 The bidder should have sufficient number of Technical and Administrative employees for the proper execution of the contract. The bidder should submit of these employers stating clear how these would be involved in this work.
- 7.9 The bidder's performance for each work completed in the last time and in hand should be certified by an officer not below the rank of Project Manager or equivalent and should be obtained in sealed cover.
* May be struck off for works with estimated cost more than Rs 25 cores. Performance these employees contract. The bidder should

8.0 Evaluation criteria

- 8.1 The detailed submitted by the bidders will be evaluated in the following manner:
- 8.1.1 The initial criteria prescribed in para 7.1 to 7.5 above in respect of experience of similar class of works completed, bidding capacity and financial turn over etc, will first be scrutinized and the bidder's eligibility for the work be determined.
- 8.2 Ever though any bidder may satisfy the above requirements , he would be libel to disqualification if the has:
- (a) made misleading or false representation or deliberately suppressed the information in the forms, Statements and enclosures required in the eligibility criteria documents,
 - (b) Record of poor performance such as abandoning work, not properly completing the contract. Or financial failures/weaknesses etc.

9.0 Financial information

Bidder should furnish the following financial information: Annual financial statement for the last five years in (Form"A") and solvency certificate in(Form "B")

10.0 Experience in works highlighting experience in similar works

10.1 Bidder should furnish the following:

- (a) List of all works of similar nature successfully completed during the last seven/five years in (Form'C')
- (b) List of the projects under execution or awarded (Form"D").

10.2 Particulars of completed works and performance of the bidder duly authenticated/certified by an officer not below the rank of Project Manager or equivalent should be furnished separately for each work completed or in progress in (Form "E").

10.3 Information in (Form "D") should be complete and on work should be left out.

11.0 Organisation information

Bidder is required to submit the information in respect of his organization in Form "F" & "G"

12.0 Construction **plant and equipment**

Bidder should furnish the list of construction plant and equipment including steel shuttering centring and scaffolding to be used in carrying out work (in Form "H"). Details of any other plant & equipment required for the work not included in Form "F" and available with the applicant may also be indicated.

13.0 Letter of transmittal

The bidder should submit the letter of transmittal attached with the document.

14.0 Opening of Price bid

After evaluation of applications, list of short listed agencies will be prepared. Thereafter the financial bids of only the qualified and technically acceptable bidders shall be opened at the notified time, date and place in the presence of the qualified bidders or their representatives, the bids shall remain valid for 90 days from the date of its submission.

15.0 Award criteria

15.1 The employer reserves the right, without being liable for any damages or obligation to inform the bidder, to:

- (a) Amend the scope and value of contract to the bidder.
- (b) Reject any or all the applications without assigning any reason.

15.2 Any effort on the part of the bidder or his agent to exercise influence or to pressurize the employer would result in rejection of his bid. Canvassing of any kind is prohibited.

15.3 In case the successful bidder with draws his offer/refuses to work after issue of letter of acceptance then the EMD submitted by the contractor shall be forfeited by BRIDCUL & contractor shall not be allowed to participate in the retender of said work.

15.4 In case the contractor fails to performance and his contract is terminated/discharged/cancelled by BRIDCUL in such a situation the performance guarantee/security of the contractor shall be forfeited by BRIDCUL.

SECTION III
INFORMATION REGARDING ELIGIBILITY
LETTER OF TRANSMITTAL

From:
To
The Project Manager

.....
Subject: Submission of bids for the work of
Sir,

Having examined the details given in press notice and bid document for the above work, I/we Hereby submit the relevant information.

1. I/we hereby certify that all the statement made and information supplied in the enclosed forms and accompanying statement are true and correct.
2. I/we have furnished all information and details necessary for eligibility and have no further pertinent information to supply.
3. I/we submit the requisite certified solvency certificate and authorize the Project Manager to approach the Bank issuing the solvency certificate to confirm the correctness thereof. I/we also authorize Project Manager to approach individuals, employers, firms and corporation to verify our competence and general reputation.
4. I/we submit the following certificates in support of our suitability, technical knowledge and capability or having successfully completed the following works:

Name of work

Certificate form

Enclosures
Seal of bidder

Date of submission:

Signature (s) of Bidder (s).

FORM 'A'
FINANCIAL INFORMATION

1. Financial Analysis — Details to be furnished duly supported by figures in balance sheet profit & loss account for the last five years duly certified by the Chartered Accountant, as submitted by the applicant to the Income Tax Department (Copies to be attached).
Years
 - (i) Gross annual turnover on construction works.
 - (ii) Profit/loss.
2. Financial arrangements for carrying out the proposed work.
3. Solvency certificate From Bankers of the bidder in the prescribed Form "B".

Signature of chartered accountant with seal

Signature of Bidder(s)

FORM "B"

FORM OF BANKERS CERTIFICATE FROM A SCHEDULED BANK

This is to certify that to best of our knowledge and information that M/s/Sh.....having marginally noted address, a customer of our bank are/is respectable and can be treated as good for any engagement upto a limit of Rs..... (Rupees.....)

This certificate is issued without any guarantee or responsibility on the bank or any of the officers.

(Signature)
For the bank

- NOTE
- (1) Bankers certificates should be on letter head of the Bank sealed in cover addressed to tendering authority.
 - (2) In case of partnership firm, certificate should include names of all partners as recorded with the Bank.

FORM "C"
**DETAILS OF ALL WORKS OF SIMILAR CLASS COMPLETED DURING THE
 LAST FIVE YEARS ENDING LAST DAY OF THE MONTH.....**

S. No.	Name of work, Project and location	Owner or sponsoring organization	Cost of work in cores of contract	Date of commencement as per contract	Stipulated date of completion	Actual date of completion	Litigation arbitration cases pending/in progress with details:*	Name and address/telephone number of officer to whom reference may be made	Remarks
1	2	3	4	5	6	7	8	9	10

*Indicate gross amount claimed and amount awarded by the Arbitrator.

Signature of Bidder (s)

FORM "D"
PROJECTS UNDER EXECUTION OR AWARDED

S. No.	Name of work, Project and location	Owner or sponsoring organization	Cost of work in cores of contract	Date of commencement as per contract	Stipulated date of completion	Actual date of completion	Litigation arbitration cases pending/in progress with details:*	Name and address/telephone number of officer to whom reference may be made	Remarks
1	2	3	4	5	6	7	8	9	10

Certified that the above list of works is complete and no work has been left out and that the information given correct to my knowledge and belief.

Signature of Bidder (s)

FORM 'E'

PERFORMANCE REPORT OF WORKS REFERRED TO IN FORMS "B" & "C"

1. Name of work/project & location
2. Agreement no.
3. Sentiment cost
4. Tendered cost
5. Date of start
6. Date of completion
 - (i) Stipulated date of completion
 - (ii) Actual of reduced rate items, if any
7. Amount of compensation levied for delayed completion, if any
8. Amount of reduced rate items, if any
9. Performance Report
 - (1) Quality of work Very Good/Good/Fair/Poor
 - (2) Financial soundness Very Good/Good/Fair/Poor
 - (3) Technical Proficiency Very Good/Good/Fair/Poor
 - (4) Resourcefulness Very Good/Good/Fair/Poor
 - (5) General Behaviour Very Good/Good/Fair/Poor

Dated: **Project Manager or Equivalent**

FORM "F"

STRUCTURE & ORGANISATION

1. Name & address of the bidder
2. Telephone no /Fax no.
3. Legal status of the bidder (attach copies of original document defining the legal status)
 - (A) An Individual
 - (B) A proprietary firm.
 - (C) A firm in partnership
 - (D) A limited company or Corporation.
4. Particulars of registration with various Government Bodies (attach attested photocopy)

Organization/place of registration

Registration No.

- 1.
- 2.
- 3.
5. Names and titles of Directors & Officers with designation to be concerned with this work.
6. Designation of individuals authorized to act for the organization
7. Was the bidder ever required to suspend construction for a period of more than six months continuously after he commenced the construction? If so give the name of the project and reasons of suspension of work.
8. Has the bidder. Or any constituent partner in case of part ship firm, ever abandonment the awarded work before its completion? If so give the name of the project and reasons for abandonment.
9. Has the bidder or any constituent partner in case of partnership firm, ever been debarred/black listed for tendering in any organization at time? If so, give details

10. Has the bidder, or any constituent partner in case of partnership firm, ever been convicted by the court of law? If so, give details.
11. In which field of Civil Engineering construction the bidder has specialization and interest?
12. Any other information considered necessary but not includes above.

Signature of Bidder(s)

FORM 'G'
**DETAILS OF TECHNICAL & ADMINISTRATIVE PERSONNEL TO
 BE EMPLOYED FOR THE WORK**

S.no.	Name of equipment	Nos	Capacity or type	Age	Condition	Ownership Status			Current Location	Remarks
						Presently owned	Leased	To be purchased		
1	2	3	4	5	6	7	8	9	10	11
	Earth moving equipment 1. Excavators (Various Sizes) Equipment for hoisting & lifting 1. Tower 2. Builder's hoist equipment for concrete work 1. Concrete batching plant 2. Concrete pump 3. Concrete transit mixer 4. Concrete mixer(diesel) 5. Concrete mixer (electrical) 6. Needier vibrator (electrical) 7. Needle vibrator (Petrol) 8. Table vibrator (elect./Petrol) Equipment of building work 1. Block making machine 2. Bar bending machine 3. Bar cutting machine 4. Wood thickness planer									

5. Drilling machine										
6. Circular saw machine										
7. Welding generators										
8. Welding transformer										
9. Cube testing machines										
10. M.S. pipes										
11. Steel Shuttering										
12. Steel scaffolding										
13. Grinding/polishing machine										
Equipment for road work										
1. Road rollers										
2. Bitumen paver										
3. Hot mix Plant										
4. Spreaders										
5. Earth rammers										
6. Vibratory road rollers										
Equipment for transportation										
1. Tippers										
2. Trucks										
Pneumatic equipment										
1. Air Compressor (Diesel)										
De-watering equipment										
1. Pump (diesel)										
2. Pump (electric)										
Power equipment										
1. Diesel generators (Any other plant/equipment)										

Signature of Bidder (s)

Note ABOVE LIST MAY BE MODIFIED SUITABLY BY NIT APPROVING AUTHORITY CONFORMING TO MAKING CRITERIA GIVEN AT ANNEXURE- 1

APPENDIX -14
APPLICATION FORM

To

The Project Manager,
.....Division, BRIDCUL

Subject: Purchase of Tender documents

Sir,

*I/We am/are registered with the BRIDCUL as Class.....
contractor/contractors and our Registration no. is..... It
is certified that the said registration is valid as on date.....

*I/We am/are not registered with BRIDCUL.

*I/We am /are registered contractor(s) with MES/Railways/P&T/State
PWD also.

Particular of the Authority, class and tender amount/limit upto which I/we
am/are eligible to tender are furnished below:

Authority	Class	Tendering limit

It is certified (confirmed) that this registration/these registrations is/are valid
as on date and we shall inform the department ourselves as soon as my /
our registration expires or is cancelled/revoked.

The particulars of work done are furnished/enclosed (for State PWD
contractors)

*I/We request that permission may be granted to me/us for the purchase of
tender document for the work of.....

Your faithfully,
(Contractor) *

(* Strike out inapplicable portion)

303

APPENDIX -15
SAMPLE GUARANTEE BOND

This agreement made this..... day of two thousand..... between MJs(hereinafter called the Guarantor of the **one** part) **and the**(Hon. Governor of Uttarakhand hereinafter called the Government of the other part).

Whereas this agreement is supplementary to the contract (hereinafter called the Contract) dated made between the Guarantor of the one part and Government of the other part, whereby the Contractor, inter alia, undertook to render the buildings and structures in the said Contract recited, completely termite-proof/water and leak-proof.

And whereas the Guarantor agreed to give a guarantee to the effect that the said structure will remain termite-proof for ten years to be reckoned from the date after the maintenance period prescribed in the contract expires.

During this period of guarantee the Guarantor shall make good all defects and for that matter, shall replace at his risk and cost such wooden members as may be damaged by termites, and in case of any other defect being found he shall render the building termite-proof at his cost to the satisfaction of the Engineer-in-charge, and shall commence the works of such rectification within seven days from date of issuing notice from the Engineer-in-charge calling upon him to rectify the defects, failing which the work shall be got done by the Department by some other Contractor at the Guarantor's cost and risk, and in the later case the decision of the Engineer-in-charge as to the cost recoverable from the Guarantor shall be final and binding.

That if the Guarantor fails to execute the anti-termite treatment or commits breaches hereunder then the Guarantor will indemnify principal and his successors against all loss, damage, cost, expense or otherwise which may be incurred by him by reason of any default on the part of the Guarantor in performance and observance of this supplemental agreement. As to the amount of loss and/or damage and/or cost incurred by the Government, the decision of the Engineer-in-charge will be final and binding on the parties.

In witness whereof these presents have been executed by the Obligor..... and by for and on behalf of the Hon. Governor of Uttarakhand on the day, month and year first above

written.

Signed, sealed and delivered by OBLIGOR in the presence of—

- 1.
- 2.

Signed for and on behalf of TI-IE Governor of Uttarakhand by..... in the presence of.

- 1.
- 2.

APPENDIX -16
TIME SCHEDULE FOR SCRUTINY OF TENDERS

Sl. no.	Classification of tenders	Maximum time allowed for scrutiny and disposal in days					CW Board (if concerned)
		Tender Committee	PM	GM	CGM		
N o t	Tenders within the powers of PM to award	7	3		-	-	-
e :	Tenders within the powers of GM to award	7	3	3	-		
T h	Tenders to be accepted by CGM	7	-	3	4	-	-
e t	Tenders to be accepted by MD	14	7	3	4	15	

Time schedule given above relates to tenders other than lump-sum tenders. For the later type of tenders, two days more may be allowed at each stage. Period indicated above is in working days.

APPENDIX -17
PROFORMA FOR EXTENSION OF TIME

To

Name.....

Address of the contractor

.....

.....

Subject

Dear Sir (s),

Reference your letter no..... dated..... in connection with the grant of extension of time for completion of the work.....

The date of completion for the above mentioned work is..... as stipulated in the agreement dated the.....with/without liquidated damage charge@_% per week for balance work.

Extension of time for completion of the above mentioned work is granted upto..... without prejudice to the right of the Government to recover liquidated damages in accordance with the provision of Clause 2 of the said agreement dated the.....

Provided that notwithstanding the extension hereby granted, time is and shall still continue to be the essence of the said agreement.

Yours faithfully

Engineer-in-Charge

-----Unit

BRIDCUL

APPENDIX - 17A
PROFORMA FOR EXTENSION OF TIME UNDER CLAUSE

To
(Name & Address of the contractor)
.....
.....

Sub :Extension of contract under clause 5.

Agreement No:-
Name of Work:-
Stipulated/Extended date of completion:-
(Strike out whichever not applicable)

Dear Sir (s),

Reference your letter no..... dated..... Submitting revised completion programme in connection with the grant of extension of time for completion of the above said work.

After considering your request carefully, under the provision of clause 5 the date of completion for the above mentioned work as stipulated in the above said agreement is extended up to..... without prejudice to the right of the Government to recover compensation in accordance with provision of Clause 2 and other clauses of the said agreement. With/without liquidated damage charges@-% per week for balance work.

Provided that notwithstanding the extension hereby granted, time is and shall still continue to be the essence of the said agreement.

Yours faithfully

Engineer-in-Charge
BRIDCUL

APPENDIX -18
**PROFORMA FOR INTIMATING THE CONTRACTOR REGARDING
COMPENSATION
UNDER CLAUSE 2**

To

Name.....

Address of the contractor.....

.....

.....

Subject: Intimation regarding levy of compensation under clause 2

Dear Sir (s),

The date of completion for the above mentioned work was..... as stipulated in the agreement number..... for the work of Extension of time for completion of the above mentioned work was extended by the Engineer-in-Charge vide his letter no. up to under clause 5 of the said agreement without prejudice to the right of the Government to recover compensation in accordance with the provisions of Clause 2 of the said agreement.

The work has finally been completed/determined (strike out whichever not applicable) on.....

You were issued show cause vide this office letter no..... to explain why compensation not be imposed upon you under the provisions of clause 2 of said agreement for delayed completion of the work.

Your reply vide letter no..... received in response to show cause has been considered carefully. (Reasons for not agreeing with hindrances as claimed by the contractor and total delay on part of contractor to be indicated in brief). After taking into consideration all the facts & circumstances I have come to the conclusion that you are solely responsible for delay of..... months..... days.....

In exercise of the powers conferred on me under Clause 2 of the agreement, Ithe General Manager decide and determine that you are liable to pay Rs..... as and by way of compensation as stipulated in Clause 2 of the agreement. The said amount of compensation is hereby levied on you for the period of..... and at the rate of..... as determined by me on the tendered amount of the work shown in the agreement and you are hereby called upon to pay the same to the Government within..... (here mention the period) failing which the said amount shall be adjusted or set-off against any sum payable to you under this or any other contract with the Government.

Yours faithfully,

(.....)

General Manager

**APPENDIX -19
CEMENT REGISTER**

Date of receipt	Quantity received	Progressives total	Date of issue	Quantity issued	Item of work for which issued	Quantity returned at the end of the day	Total issue	Daily balance at hand	Contractor's initial	JE's initial	Remarks RE/PM/at periodical checks

**APPENDIX 20A
PROFORMA FOR SHOW CAUSE TO THE CONTRACTOR REGARDING
COMPENSATION
UNDER CLAUSE 2**

To

Name & Address of the contractor

.....
.....

Sub: Show Cause for delayed completion/likely to be delayed completion of work under..... Agreement No.....

Dear Sir (s),

The date of completion for the above mentioned work was/is..... as stipulated in the agreement number..... for the work.....

Extensions of time for completion of the above mentioned work was extended by the Engineer-in- Charge vide his letter no..... up to..... under clause 5 of the said agreement without prejudice to the right of the Government to recover compensation in accordance with the provisions of Clause 2 of the said agreement.

The work entrusted to you under the agreement referred above could not unlikely to be completed within stipulated/extended date of completion due to your wrongful delay or suspension of work or slow progress of work or because of reasons within your control. The work has finally been completed on...../cannot be completed within stipulated/extended date of completion. Therefore, under the provisions of clause 2 of the above said agreement you have rendered yourself liable to pay compensation.

Therefore, I, in exercise of the powers conferred on me by the aforesaid agreement. for and on behalf of the Governor of Uttarakhand, hereby give you show cause within..... to my satisfaction that why compensation/liquidated charges should not be imposed upon you, under the provisions of clause 2 of said agreement for delayed/likely to be delayed completion of the work. Please note that in case no cause is shown by you within the stipulated period or the cause shown is not to my satisfaction, I shall take such actions against you as are contemplated under Clause 2 there under of the said agreement without further notice.

Yours faithfully,

(.....)

General Manager

Note: Strike out whichever is not applicable. Notice may be modified suitably intending to impose compensation when tendered value of the item or group of items of work for which a separate period of completion is originally given.

APPENDIX - 20B
PROFORMA FOR SHOW CAUSE TO THE CONTRACTOR REGARDING
COMPENSATION
UNDER CLAUSE 2 (IN CASE OF CONTRACT IS DETERMINED UNDER CLAUSE
3)

To

Name & Address of the contractor

.....
.....

Sub: Show Cause against agreement No..... for the work.....

Dear Sir (s),

The date of completion for the above mentioned work was as stipulated in the agreement number.....for the work of

Extension of time for completion of the above mentioned work was extended by the Engineer-in-Charge vide his letter no. up to..... under clause 5 of the said agreement without prejudice to the right of the Government to recover compensation in accordance with the provisions of Clause 2 of the said agreement. (Delete this Para if work was determined before stipulated date of completion)

The work entrusted to you under the agreement referred above could not be completed within stipulated/ extended (strike out whichever not applicable) date of completion and the work has been finally determined under clause 3 vide letter dated..... Under the provisions of clause 2 of the above said agreement you have rendered yourself liable to pay compensation.

Therefore, I, in exercise of the powers conferred on me by the aforesaid agreement, for and on behalf of the Governor of Uttarakhand, hereby give you notice to show cause within..... to my satisfaction that why compensation should not be imposed upon you under the provisions of clause 2 of said agreement for your failure to complete the work by the stipulated date of completion extended date of completion (strike out as the case may be). Please note that in case no cause is shown by you within the stipulated period or the cause shown is not to my satisfaction, I shall take such actions against you as are contemplated under Clause 2 of the said agreement without further notice.

Yours faithfully,
(.....)

General Manager

APPENDIX-21
SHOW CAUSE NOTICE UNDER CLAUSE 3 OF THE AGREEMENT

To

.....
.....

Sub:— Name of work

Agreement No

Dear Sir (s),

‘WHEREAS it appears to the undersigned that by reason of your wrongful delay or suspension of work or slow progress, the work entrusted to you under the agreement referred to above will not be completed/has not been completed (strike out whichever not applicable) within the stipulated/extended date of completion.(strike out whichever not applicable)

Therefore, I, in exercise of the powers conferred on me by the aforesaid agreement, for and on behalf of the Chairman of BRIDCUL, hereby give you notice to show cause within..... to my satisfaction why an action under clause 3 (a) and (b) of the above agreement will not be taken against you on account of the breach of contract on your part. Please note that in case no cause is shown by you within the stipulated period or the cause shown is not to my satisfaction, I shall take such actions against you as are contemplated under Clause 3(a) and (b) there under of the said agreement and/or other clauses thereof, without further notice.

Yours faithfully

(Designation) For and on behalf of the MD of BRIDCUL

Note: While determining the contract under any of the sub-clause (i) to (xi) of clause 3 for causes other than the causes as mentioned above (viz, wrongful delay or suspension of work or slow progress) suitable modifications may be made.

APPENDIX -22
NOTICE ON FINAL ACTION UNDER CLAUSE 3 OF THE
AGREEMENT

To
(Name & Address of the contractor)
.....
.....

Dear Sir (s),

Whereas under Clause 3 of the aforesaid agreement the Engineer-in-Charge shall have powers to take action under clause 3 in the event of delay or suspension in the execution of the aforesaid work by the contractor so that in the opinion of the Engineer-in-Charge (which shall be final and binding) the contractor will be unable to secure completion of the work by the stipulated/have already failed to complete the work by the extended* date of completion, whereas you have delayed/suspended the execution of the aforesaid work and as per the opinion of the undersigned, the Engineer-in-Charge (which is final and binding), you will be unable to secure completion of the work by the Stipulated/have already failed to complete the work by the extended* date of completion and, and whereas you were served with show cause in this regard under this office no..... dated..... but no reply has been given by you so far / your reply vide letter no.received in response to show cause has been considered carefully but not found to the satisfaction of the Engineer-in-Charge (Strike out whichever is not applicable, the arguments/facts claimed by the contractor be indicated in brief) or reply not received by the date. Therefore tunder powers delegated to me under sub-clause 3(a) & 3(b), 1 the Engineer-in-Charge for the aforesaid work under the aforesaid agreement, for and on behalf of the Governor of Uttarakhand, hereby

- (i) Determine the contract as aforesaid upon which determination your earnest money deposit, security deposit already recovered and Performance Guarantee stand absolutely forfeited to the Government and shall be absolutely at the disposal of Government, and
- (ii) Take out such part of the work out of your hand, as remains unexecuted, for giving it to another contractor to complete the work, and you shall have no claim to compensation for any loss sustained by you by reasons of your having purchased or procured any materials or entered into any engagements or made aiiy advances on account of or with a view to the execution of the work or the performance of the contract. You are also hereby served with notice to the effect that the work executed by you will be measured up on for which you are asked to attend for joiIt measurement failing which the work will be measured by the department unilaterally in your absence and result of measurement will be final and will be binding on you.

(iii) You shall not be allowed to participate in the tendering process for the balance work.

This s without prejudice to Government's right to take action under any other clauses or sub-clauses of the agreement and to realize Government dues and losses and damages whatsoever under such clauses or sub- clauses.

Yours faithfully,

**Engineer-in-charge
Project Manager**

.....Division

***Score out which is not applicable.**

Note: While determining the contract under any of the sub-clause (i) to (xi) of clause 3 for causes other than the causes as mentioned above (viz, wrongful delay or suspension of work or slow progress) suitable modifications may be made.

APPENDIX- 23

Model form of letter of appointment of Arbitrator

No. Dated; the..... 20.....

Subject: In the matter of arbitration between..... and Union of India, regarding the work..... Agreement no.....

Whereas has/have written to me vide his/their letter no dated.....that certain disputes have arisen between the above noted parties in respect of the above noted work. I.....,Managing Director , BRIDCUL by powers conferred on me under Clause 25 of the said Agreement hereby appoint Shri..... Arbitrator, as Sole Arbitrator to decide and make his award regarding the claims/disputes by the contractor, if any, as shown in the statements enclosed subject always, however, to their admissibility under clause 25 of the aforesaid agreement.

**The amount of the claim(s) in dispute being Rs. 1,00,000/_* or above Rs. 1,00,000/- the Arbitrator shall give reasons for the award.

(MANAGING DIRECTOR)

[*Score out what is not applicable

Note: **This para is to be omitted in cases where the amount of claim(s) is less than Rs.1 ,00,000]

1. To
Shri.....
Arbitrator
2. M/s.....Contractor, with reference to his/their letter no..... dated..... Copy to: C)
 1. Shri..... General Manager..... Circle, BRIDCUL.....with reference to letter no.dated.....
 - 2 Shri..... Project Manager..... Circle, BRIDCUL.....with reference to letter no.dated.....

Arrangements may please be made to defend the case effectively. Legal assistance of the Counsel General Manager may be obtained where necessary.

General Manager/Project Manager should ensure that the bills of the contractors are finalised immediately, if not already done.

MANAGING DIRECTOR

APPENDIX —24

Model form of letter of appointment of substitute Arbitrator due to transfer or vacation of office by the Arbitrator

No..... Dated, the.....20...

Subject: In the matter of arbitration between

.....Claimant

vs

.....Respondent

Arbitration case no..... of.....

Whereas Shri..... was appointed Sole Arbitrator by letter no..... dated.....

in the above matter, and whereas the aforesaid Arbitrator has been transferred/vacated his office on..... I; Managing Director (BRIDCUL) in exercise of my powers under clause 25 of the contract appoint Shri..... as the Sole Arbitrator to determine the disputes referred to the aforesaid arbitrator in accordance with the said clause 25. Shri..... may start the proceedings from the stage at which the aforesaid Arbitrator Left off.

2. **The amount of the claim in dispute being Rs. 1,00,000/- and above, the arbitrator shall give reasons for the award in respect of each claim/dispute.

Managing Director

Copy to:

1. Shri..... with the request to transfer the records of the case to Shri..... at the earliest.
2. Shri..... with the request to take over the records of the case from Shri..... at the earliest.

Note: **This para is to be omitted in cases where the amount of claim(s) is less than Rs. 1,00,000/-

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APPENDIX —25
STANDARD SCHEDULE OF CONTRACT PERIODS FOR BUILDINGS
WORKS

Sl. No.	Number of Storeys	Time Period (Months)
1.	Upto 4 Storeys	8 to 12
2.	Beyond 4 and upto 6 storeys	12 to 15
3.	Beyond 6 Storeys	16to21

(Note:- Basement may be treated equivalent to one storey) Time may be varied suitably due to following factors.

- (a) Rainy season and inundated conditions
- (b) Depth of subsoil water
- (c) Special features of the building
- (d) Scattered/concentrated works
- (e) Congested site
- (f) Type of foundation
- (g) Urgency/Importance of the work
- (h) Extent of Mechanization involved
- (i) Logistics available in area.