

CHAPTER VII MEASUREMENT AND PAYMENTS

7.A MEASUREMENT

7.A.1 Payments for all works which are susceptible of measurement and for all supplies made are done on the basis of measurement recorded in the measurement book (MB). The MB is, therefore, an initial and very important book of accounts record which should be properly maintained and safely kept by the person to whom it is issued.

7.A.2 All MBs of an RE office should be serially numbered and an account of their issue and receipt back should be kept in the Register of MBs. All pages of an MB should be machine numbered and a certificate of number of pages contained in the MB should be recorded by the user on its first page.

7.A.3 Instructions given in the fly leaf of MB should be carefully followed and its index should be regularly filled in.

7.A.4 Measurement in the MB should be recorded by a person not below the rank of a Junior Engineer or Overseer. The measurement should be recorded directly in the MB in ink and no page or a line should be left blank. If a page is left blank inadvertently, it should be crossed under attestation by the person recording measurement. The entries should be neat and clean and no eraser should be used or overwriting done. Correction, if need be, should be done by cutting the wrong entry and attesting the cutting by dated initials.

7.A.5 Each set of measurement (record entry) in case of a works contract should commence with following entries:

- i) Full name of the work (as given in the estimate/agreement)
- ii) Site of work
- iii) Name of the contractor
- iv) Agreement number and date
- v) Estimate number and date
- vi) Date of record entry (measurement)
- vii) Reference to last measurement
- viii) Stipulated date of commencement of work
- ix) Stipulated date of completion of work
- x) Actual date of completion of work (if completed)

7.A.6 In case of supply of material, the measurement should commence with the entries:

- i) Name of supplier
- ii) Number and date of supply order
- iii) Agreement number
- iv) Name of the work and site if supply is made directly for a work, otherwise on stock
- v) Date of record entry (measurement)

- vi) Stipulated date of completion of supply
- vii) Actual date of completion (if completed)

7.A.7 The measurement should end with dated signature of the person making measurement.

7.A.8 The person taking measurement should work out the quantities of contents or area/volume in the MB correctly. In case of running account on which the work has been previously measured, reference to last set of measurement be given. If the work has been completed, actual date of completion be recorded. This is also applicable in case of first and final measurement.

7.A.9 The contractor should be given advance notice for being present at the site and measurement should be taken in his presence and his signature obtained in the MB in token of having accepted the measurement. If the contractor or his authorised representative does not present himself at the time of measurement even after service of notice, the junior engineer concerned should proceed further with taking and recording measurement. If the contractor remains present during taking measurement and raises dispute on any measurement, the fact should be reported to the Assistant Engineer/R.E. who will take decision on disputed measurement.

7.A.10 Any variation in nomenclature or specifications of an item of work be clearly mentioned in the MB while recording measurement so that it may be taken into consideration while allowing rate for payment, i.e., reduced rate or part rate.

7.A.11 After recording measurement in MB an abstract of quantities be prepared adding up to recorded quantities of each sub-head/item of work, the previous quantities in the same or other MBs giving reference of page numbers.

7.A.12 On completion of the abstract, the MB should be submitted to ARE, who after carrying out his test check, will enter the words "check and Bill" with his dated initials. The Sub Divisional Clerk will then check the calculation of quantities, abstract and prepare bill in relevant format and the MB.

7.A.13 In case of earth work and levelling operations, measurements be recorded in level books also which should be numbered and accounted for like MBs.

7.A.14 Before starting the earth work, original ground levels be recorded in level book in presence of the contractor or his authorised representative. A suitable base line should be fixed with permanent masonry pillars at a distance not exceeding 300 metres which should be maintained till final payments are made.

7.A.15 On completion of the work, the levels be again recorded in the level book and signature of contractor be obtained. The levels, initial and final be test checked by AE and RE as per the prescribed norms.

7.A.16 Intermediate payments can be made on the basis of borrow pit measurement but final payment be made on the basis of cross sectional measurements taken at suitable intervals, say 100 feet.

7.A.17 In case of rock excavation, over-burden should be removed first and then cross section can be taken for measurement. Where it is not feasible to take cross section, the volume be computed on the basis of stack of excavated rubbles less deduction of voids.

7.A.18 In case of large scale levelling works involving both cutting and filling, an accurate site plan should be prepared before the work is commenced. The portions requiring cutting and filling be divided into squares and corresponding squares into filling which are complementary to the squares in cutting given the same numbers. A table should be written upon the plan showing leads involved between the various complementary squares. This will form a lead chart for the work. In case the excavated earth is insufficient for filling, quantify and leads for earth to be imported be worked out. Similar procedure should be followed for disposal of surplus earth.

7.A.19 While working out quantities of earth, sand, aggregate, stone, road metal, etc., deduction for voids be made as per prescribed norms. Similarly, shrinkage allowance be deducted in case earth work is measured after rainy season.

7.A.20 In case of measurement of sand, stone, aggregate, etc., always stack measurement be taken and in no case body measurement of carrier be allowed. The stacks should be made up by boxes of standard size.

7.A.21 In case of rock cutting, thick jungle clearance, etc., or dismantling of an existing structure, the dismantled material be always collected, stacked and measured and taken on record in MB for proper disposal or further use.

7.A.22 The fully filled up MBs of a work on completion of the work should be deposited back in the RE office where they should be entered in the register of MBs and checked by AAO/Accountant for seeing that no page has been torn out, no entry is disfigured, check measurement index is properly filled up, etc.

7.B. TEST CHECK OF MEASUREMENT

7.B.1 The object of test checking of measurement is to detect errors and to prevent fraudulent entries. Specially those items should be selected for checking which:

- i) appear obviously incorrect;
- ii) are most easily susceptible of fraud; and
- iii) most seriously affect the total amount of the bill, if inaccurate.

7.B.2 The items and extent of their check measurement is given below:
Civil Works (including supplies)

- i) Assistant Engineer (ARE)
 - a) 100% of selective items
 - b) 50% of the value of other items of each bill (in case of works at headquarters) and of alternative bill (for works outside the headquarters)
- ii) Executive Engineer (RE)
 - a) 20% of all selective items
 - b) 20% of value of other items of every third bill (in case of works at headquarters) and of every fourth bill (for works outside the headquarters).

7.B.3 The Assistant Engineer (ARE) will be responsible for the overall correctness of the bill.

7.B.4 *Selective items for check measurement of civil works:*

- a) All works below ground level such as concrete, masonry, steel work in foundations, pipes in water supply and drainage.
- b) Fabricated steel work
- c) Reinforcement in RCC work.
- d) Wood work and iron work, etc., hidden by ceilings, wall panelling or floor boardings.
- e) Water proofing compound used in gauging cement.
- f) Pipes buried in masonry
- g) Marble and costly stone work on walls and in flooring
- h) Costly flooring and skirting
- i) All sanitary, water supply and electric fillings
- j) Costly joinery fillings
- k) Any other costly specification
- l) All joinery (wood work, steel, etc.)
- m) RCC work
- n) Roofing including its water proofing
- o) Storage tanks, sluice valves, fire hydrants in water supply
- p) Main holes and pipe lines including joints in drainage works
- q) For road work - Earth work including compaction, collection of materials including lead for sub-base, base, wearing ad surface course and shoulders, consolidation and compaction of sub-base, base, wearing, surface course and shoulders, CD works and other costly items like caution boards, etc.

7.B.5 *Electric Works*

- i) Assistant Engineer (ARE)
 - (a) 100% of selective items
 - (b) 50% of the value of other items of all running and final bills of works at headquarters or outside
- ii) Executive Engineer (RE)
 - (a) 50% of value of all selective items and
 - (b) 30% of value of all other items of works at headquarters or outside

7.B.6 *Selective items for check measurement of electrical works (including supplies):*

The selective items for electrical works are those which owing to their situation cannot be subsequently checked or which have very high unit rate and requires special care. Some of the selective items are:

- (i) Distribution panels, control and working on main boards
- (ii) Cable jointing
- (iii) Sophisticated electronics instruments
- (iv) Conduit, cable, etc., before being finally buried or capping
- (v) Earthing, lightening conductors
- (vi) Other costly items

7.B.7 The test checking must be done before payment and withholding of certain amount for want of test check of measurements is forbidden.

7.B.8 The record of test check of measurements be kept in the MB in the proforma given at the end and in addition to this, it should be maintained in the prescribed register to be kept by ARE. The Superintending Engineer should see this register at the time of his inspection

7.C. REVIEW OF MEASUREMENT BOOKS

7.C.1 All the measurement books in use in a division should be collected once in the month of September each year for review by the Accounts person of the RE Office for following:

- i) To compare the books in use with Part I & II of the Register of MBs maintained in the Unit.
- ii) To see that no original sheet is torn out of the MB nor any entry is erased or disfigured and that the corrections made are properly initialled.
- iii) To test check the accuracy of calculations
- iv) Payment based on the entries should be traced into various accounts, contractor's ledger, etc., and verified
- v) The defects, discrepancies, etc., noticed should be communicated to the concerned Assistant Resident Engineer.
- vi) The MBs completed and returned for record in the Unit during the year should also be similarly scrutinised
- vii) The SEs during their inspection of the Unit should see that the MBs and their record are properly maintained.

7.D. LOSS OF MEASUREMENT BOOK

7.D.1 When a MB is lost, the Resident Engineer should conduct a detailed enquiry and report of the facts of the case together with statements of concerned parties should be made promptly to the MD.

7.D.2 The proforma for reporting the loss of MB for write off should contain:

- i) The date on which the MB was lost
- ii) In whose custody it was lost
- iii) Detailed circumstances leading to the loss
- iv) Efforts made in tracing the MB
- v) By whom the last measurements were recorded
- vi) Whether the measurements had been checked upto required percentage.

- vii) What does the movement register of MBs indicate about the loss
- viii) Whether the MB contained the details of any work for which payment has not been made
- ix) Whether any audit objection or contractor's dispute relating to the MB is pending and if so nature thereof and how this is proposed to be settled now.
- x) Whether the related work/supply is susceptible of re-measurement, if not, how the payment of outstanding bill is proposed to be made
- xi) Whether the RE is satisfied that if the MB is written off, the Corporation will not be put to a loss if payment is made on the basis of re-measurement and other subsidiary record, like last running bill, contractor's ledger, etc.
- xii) Details of disciplinary enquiry taken or proposed to be taken against the official responsible for the loss.
- xiii) Remedial measures proposed to be taken to avoid such recurrence in the future
- xiv) Whether loss of the MB has been reported to the police and result of police investigation, if completed.

7.D.3 For payment of works or supplies whose measurement were recorded in the lost MB, the Assistant Resident Engineer should prepare a list of such works/supplies which should be verified from the office copies of related bills, works abstracts, petty vouchers, muster rolls, cash book, etc., to ascertain that there is no duplicate recording of the fresh measurement. A certificate to this effect should be recorded in the new MB and then fresh measurement should be taken and entered in the new MB and paid.

7.E STANDARD MEASUREMENT BOOKS (SMBs)

7.E.1 Standard measurement books may be maintained in the RE office for buildings of the Corporation or other buildings which have been handed over to the Corporation for maintenance purposes. The measurements of existing structures are recorded in the SMB which are made up to date annually or as soon as any additions or alterations take place in them The measurements recorded in the SMBs may be used for the purpose of preparing annual estimates of maintenance and payment for the work done.

7.E.2 The measurements in SMB should be recorded by Assistant Resident Engineer 10% of which be checked by RE before final approval.

7.E.3 A record of SMBs will be kept in the Unit in the Register in Form No. PWA-92 Part II and should be collected annually for inspection in the Unit.

7.E.4 When the payment is based on a SMB a certificate should be recorded by the Assistant Resident Engineer that whole of the work billed for herein has been actually done and no portion thereof has been previously billed for in any shape.

7.F PAYMENTS TO CONTRACTORS AND SUPPLIERS

7.F.1 Bills are prepared in the relevant forms in the sub-division by sub-divisional clerk on the basis of measurement entered in the MB and the 'Abstract of

Quantities' and 'Abstract of Cost' prepared in the MB. The calculations of 'contents or area' should be checked arithmetically under the supervision of ARE.

7.F.2 Bills should be prepared on printed and prescribed forms as follows:

- (i) First and final bill, Form No. RPWA 24: This form is used when a single payment is made for a contract of work or supply on its completion. A single form may be used for making payment to several payees, if they relate to the same work head of account and are billed at the same time.
- (ii) Running account bill and final bill, Form No. RPWA 26: This form is used for making all running and final payments to contractors and suppliers including payments and adjustments of advance payments and secured advances. In the latter case, the account of secured advance in Form No. 26A is also attached to the bill. Final payments be made on forms printed on yellow papers.
- (iii) Form lump sum contracts, Form No. RPWA 27A (for running bills) and Form No. RPWA 27B (for final bills) be used.
- (iv) Hand receipt, Form No. RPWA 28 is a simple form of voucher intended to be used for all miscellaneous payments and advances for which none of the forms stated above are found suitable.

7.F.3 The rates allowed should be entered by the ARE. Full rate should be allowed if his quantity of the work done or supplies made is upto the stipulated specifications. For working out the quantities and amounts of items since previous bill, the quantities and amounts upto previous bill should be deducted from the up-to-date quantities and amounts of each item.

7.F.4 Form No. RPWA 26 is the most frequently used form for preparing running or final bills for payments. This form has got four parts. Following guidelines/instructions are given for preparation of bills in this form:

7.F.5 On the top of the form, general information regarding the contract are filled in, like cash book voucher number and date, name of the contractor or supplier, name of the work, serial number of this bill and the last bill, work order/agreement number, date of written order to commence work, date of actual completion of work. Besides these printed columns, information regarding estimate number and chargeable head of account is also generally given.

7.F.6 Part I of the bill form is 'account of work' done or supplies made'. Its column are: items of work, unit, rate, up to date quantity, quantity executed since previous bill, up to date amount, amount since previous bill and remarks. Items of work should be entered exactly in the same language as given in the Schedule 'G' of the agreement and in the MB and should bear the same serial number. The unit and rate should also be the same as in the schedule 'G' and MB except when a part rate or a reduced rate is being allowed or the nomenclature of the item has changed. The up to date and since previous bill quantities should be entered from the abstract of quantities given in the MB. The quantity multiplied by rate and divided by unit gives the amount. In calculating the amount of each item, rounding off in whole rupee be done.

7.F.7 Extra items, if allowed should be entered in Part I of the bill after 'G' schedule items and be given fresh serial numbers. The extra items statement should be duly sanctioned by the competent authority.

7.F.8 If quantity of any item has not been executed since previous bill, then nil quantity and amount be entered against that item in 'since previous bill' column.

7.F.9 In the end of Part I of the bill percentage above or below as per the agreement is added or subtracted from the total and net value of work done since previous bill is worked out by deducting from the total up-to-date value of work done, the value of work done upto previous bill giving reference of MB number and page number.

7.F.10 In the Part I of the bill form, following certificates should also be recorded by the ARE.

- (a) Payment of this bill has not been drawn before.
- (b) The work has been executed as per design, drawing and specification (if not rates should be reduced accordingly)
- (c) There is nothing outstanding against the contractor (if outstanding, it should be shown in the recovery memo)
- (d) No labour and T&B/M&E of the Corporation has been supplied to the contractor (if supplied, recovery should be made showing details in recovery memo)
- (e) The lead and source of the material are the same as stipulated in the schedule 'G';
- (f) Consumption of the material is not more than the standard rates of consumption
- (g) Empty cement bags have been returned and entered in MAS account or stock account or required recovery has been shown in the recovery memo
- (h) Any other certificate required in a particular case, e.g., entry of excavated/dismantled usable material in stock/MAS account, entry of risk and cost value in contractor ledger, etc.

7.F.11 If a secured advance has been allowed and/or is being adjusted in the bill its account in the prescribed annexure (form RPWA 26) shall be attached. An indenture in form RPWA-31 must be got signed by the contractor and also attached with the bill if the advance is granted. Recovery of secured advance be made from the running account bills as the materials are consumed on work. The secured advance can be granted by RE to the contractor against security of imperishable material brought by the contractor on site like, steel, bricks, stone, wood, etc., for completed items of work and which are likely to be consumed on the work in near future. The rate allowed for the purpose of secured advance may be upto 75 per cent of the market rate.

7.F.12 If an advance payment has been made in previous bill, it should be recovered first in full against the amount of concerned items of work actually measured. Advance payment may be sanctioned by RE to the contractor against the items of work actually executed but could not be measured. A certificate will have to

be recorded by ARE/RE in the MB and bill that the value of work actually executed on the site is not less than the amount of advance payment being made. However, no second advance payment should be made unless the advance previously granted has been fully recovered. An advance payment (i.e., payment against items of work actually executed but could not be measured) and payment for measured items of work may be made in the same bill.

7.F.13 Part II of the bill is for 'certificates and signatures'. The name of the person recording measurement along with date and number of MBs with page numbers be written, names of the persons checking the measurement be given or a memo of measurement be attached mentioning the names of persons recording and checking the measurement. Contractor's signature should also be taken in this part of the bill and the words "in full settlement of all demands" should also be got inserted in case of a final bill. Then the officer/ARE preparing the bill shall sign and a pass order will be given and signed by the RE.

7.F.14 The detailed calculations of amount to be paid and amount to be deducted/adjusted and recoveries to be made will be done in Part III of the bill named 'Memorandum of Payment'. The gross payment will include payment for value of work done since previous bill, advance payment (net) and secured advance (net). Out of this, deductions will be made first pertaining to the same work, e.g., recovery of material issued, compensation for bad work, etc. Then, recoveries pertaining to other heads of account/other works will be shown, e.g., income tax, royalty, contract tax, security deposit, hire charges of T&P/M&E, compensation for delay (at stages of work or final), water charges, court attachment, etc. Then net amount payable by cheque will be worked out. However, receipt of the contractor will be taken for the gross amount of the bill. Pay order will be recorded by the RE for the amount of cheque only. Receipt for recoveries, if demanded by the contractor, may be given.

7.F.15 The material like cement, steel, etc., should be issued to the contractor in quantities as and when required for consumption on the work. Full quantities estimated to be consumed on the entire work should not be issued in full in advance. Also the contractor should not be made the consignee to receive the material directly from the supplier/manufacturer as this may lead to fraud. The recovery of the cost of material issued should be made, as far as possible, in one lot from the next running bill. Excess consumption of material than the standard consumption should be made at double the issue rate plus storage charges. However, surplus material remaining unused on the work, if returned to the Corporation shall be at price not exceeding that charged to the contractor excluding storage charges. If the surplus but serviceable material issued to a work is transferred to another work then the credit given to the original work should not be more than the cost charged to it subject to ceiling of its current market value. The Corporation's material lying at the site during construction or after completion of the work should have proper watch and ward arrangement. The contractor shall not be entitled to any compensation or damage on account of any delay in supply of any material.

7.F.16 If there is delay in stage-wise completion of the part of work, then compensation for delay should invariably be levied and recovered from running bill as per clause 2 of the agreement unless the delay is attributable to Corporation or jointly attributable to the contractor and the Corporation and the competent authority has granted extension in time period specifying the delay on account of Corporation. The reduced compensation calculated on period of delay attributable to the contractor would be applicable to the entire delayed period but escalation charges will not be paid for the period of delay. If the slow progress of work in one time span is covered up within original stipulated period, then the amount of compensation levied earlier shall be refunded.

7.F.17 The security deposit @ 10% of the gross amount of the running bill shall be deducted from each running bill and shall be refunded on completion of the contract as per rules. The earnest money deposited shall, however, be adjusted while deducting security deposit from the first running bill. There will be no maximum limit of security deposit. No interest shall be paid by RSRDC on amount of security money. For furnishing Bank Guarantee against S.D. beyond Rs. 25.00 lacs office Order No. C-18 (1) 19117-55 dated: 20.02.2006 is to be followed (Copy enclosed).

**OFFICE OF THE RAJASTHAN STATE ROAD DEVELOPMENT &
CONSTRUCTION CORPORATION LTD., SETU BHAWAN, JHALNA
DOONGRI, JAIPUR.**

C-18(1)/ 19117-55

Date: 15/ 20. 02.2006

OFFICE ORDER

In continuation to officer order No. B-9(6)Boards/ 2005/ 10133-70 dated 19.09.2005 vide which revised contract agreement form was issued, following amendments are made in General Rules and Directions for the guidance of contractors and main conditions the contract agreement.

S. No.	Particulars	Existing Clause	Amended Clause
1.	General Rules and directions for the guidance of contractors (S. No. 27 d at page 4)	“The security deposit @ 10% of the gross amount of the running bill shall be deducted from each running bill and shall be refunded as per rules on completion of the contract as per terms & conditions. However, the amount of security deposit deducted from running bills shall not be covered into any mode of securities like bank guarantee, FDR etc. the earnest money deposited shall however be adjusted while deduction security deposit form first running bill of the contractor. There will be no maximum limit of security deposit”.	<p>“The security deposit @ 10% of the gross amount of the running bill shall be deducted from each running bill and shall be refunded as per rules on completion of the contract as per terms & conditions. However, the amount of security deposit deducted from running bills shall not be covered into any mode of securities like bank guarantee, FDR etc. The earnest money deposited shall however be adjusted while deducting security deposit from first running bill of the contractor. There will be no maximum limit of security deposit”.</p> <p>However where total security deduction which is 10% of gross amount of running bills exceed Rs.25.00 lacs, contractor may furnish the bank guarantee in lieu of security deposit from any nationalized bank for the amount exceeding Rs.25.00</p>

			lacs. In contracts having value of less than Rs.250.00 lacs furnishing of Bank Guarantee in lieu of security deposit is not permissible.
2.	Conditions of contract Clause 1 security deposit (Page 6)	<p>"The security deposit @ 10% of the gross amount of the running bill shall be deducted from each running bill and shall be refunded as per rules on completion of the contract as per terms & conditions. The earnest money deposited shall however be adjusted while deducting security deposit from the first running bill of the contractor, There will be no maximum limit of security deposit. All compensations or other sums of money payable, by the contractor to Rajasthan State Road Development & Construction Corporation Limited under the term of his contract may be deducted from or paid by the sale of a sufficient part of this Security Deposit, or from interest arising there from or from any sums, which may be due or may become due to the Contractor by the Rajasthan State Road Development & Construction</p>	<p>"The security deposit @ 10% of the gross amount of the running bill shall be deducted from each running bill and shall be refunded as per rules on completion of the contract as per terms & conditions. The earnest money deposited shall however be adjusted while deducting security deposit from the first running bill of the contractor, There will be no maximum limit of security deposit. All compensation or other sums of money payable by the contractor to Rajasthan State Road Development & Construction Corporation Ltd. under the term of his contract may be deducted from or paid by the sale of a sufficient part of this Security Deposit, or from interest arising there from, or from any sums, which may be due or may become due to the contractor</p>

		<p>Corporation Ltd. on any account whatsoever, and in the event of his security being reduced by reason of any such deduction or sale as aforesaid, the Contractor shall within ten days thereafter, make good in cash.</p> <p>Rajasthan State Road Development & Construction Corporation Ltd. is not concerned with any interest accruing to the contractor on any form of Security Deposited deducted by RSRDC.</p>	<p>by the Rajasthan State Road Development & Construction Corporation Ltd. on any account whatsoever, and in the event of his Security being reduced by reason of any such deduction or sale as aforesaid, the Contractor shall within ten days thereafter, make good in cash.</p> <p>Rajasthan State Road Development & Construction Corporation Ltd. is not concerned with any interest accruing to the Contractor on any form of Security Deposit deducted by RSRDC Ltd., However where to security deduction which is 10% of gross amount of running bills exceeds Rs.25.00 lacs contractor may furnish the bank guarantee in lieu of security deposit from any nationalized bank for the amount exceeding Rs.25.00 lacs. In contracts having value of less than Rs.250.00 lacs furnishing of Bank Guarantee in lieu of security deposit is not permissible.</p>
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This bears approval of the Hon'ble Chairman.

Managing Director

Copy to:

1. PS to Chairman RSRDC Ltd. Jaipur.
2. PS to Vice Chairman RSRDC Ltd. Jaipur.
3. PS to MD/ GM/ CPM RSRDC Ltd. Jaipur.
4. Chief Accounts Officer RSRDC Ltd. Jaipur.
5. All SE's/ Co. Secretary RSRDC Ltd. Jaipur.
6. All Managers/ Resident Engineers RSRDC Ltd. Jaipur.

Managing Director

7.F.18 If the work is being executed by the contractor at the risk and cost of previous contractor then the account of previous contractor shall be debited by the gross amount of the running bill and credited with the value of the work at the rates of the agreement executed with him. However, if the credit amount is more than the debit amount, the difference will not be paid to the previous contractor.

7.F.19 No materials, other than those provided for in the contract agreement should be issued to the contractor unless easily available in the stock but the rate charged shall be market rate or issue rate plus storage charges whichever is higher. However, supervision charges should not be levied on issue of material for bonafide use on the Corporation's work.

7.F.20 Application for extension in completion period of a span of work or full work shall not be entertained unless it is submitted by the contractor soon after occurrence of a hindrance but in no case after the stipulated date of completion of the span or the complete work, as the case may be. Extension cases must be decided by the competent authority and order passed within 30 days of submission of application.

7.F.21 The contractor will have to submit a monthly return to the RE of the extra items/quantities he has executed during the month by 10th of next month, otherwise his claim for the extra work will not be tenable afterwards.

7.F.22 The contractor shall inform by a notice in writing to the RE with a copy to the tender accepting authority about the completion of work and get it measured and request for issuing him a certificate of completion of the work. The RE shall inspect the work and ensure that the work has been completed in all respect and all

rubbish, scaffolding arrangements, etc., have been removed from the site and that there is no visible defect in the executed work. If a visible defect has been noticed or surplus material or rubbish, scaffolding material, etc., have not been removed, the RE shall inform the contractor to set right the defect or remove the material (as the case may be) and if the contractor does not do it, he will get it done at the cost of the contractor. He will then issue the completion certificate within 30 days. The final bill shall be paid within three months on presentation by the contractor after issuance of final completion certificate. If there shall be any dispute about any item(s) of the work, then the undisputed item(s) shall be paid within the said period of three months. The contractor shall submit a memorandum on the disputed items along with justification within 30 days from the disallowance thereof otherwise his claim shall be deemed to have been fully waived. In no case a final bill should be left unpaid after nine months from the receipt of notice from the contractor about completion of the work.

7.F.23 The running bills shall be paid monthly on or before the date fixed by RE. Therefore, measurement will be taken up by engineering subordinate/JEN before that date with intimation to the contractor to remain present at the time of taking measurement. The contractor will then submit the bill on the printed form and the bill may be paid, if possible, within 10 days of submission. The payments due to the contractor may also be paid directly to his bank, if he so desires, on submission of an authorisation/power of attorney but the contractor will have to accept the correctness of his account before it.

7.F.24 The RE may make any alterations, omissions or additions to or substitution in the original specifications, drawings, designs during the progress of the work and the contractor is bound to carry out the work in accordance with the instructions given by the RE in writing. However, the time for completion of the work may be extended in such a case depending on the nature of changes and increase in quantities. The rates for additional, altered or substituted work shall be worked out by following principles in order:

- a. If the rates are available in the contract (in schedule G), the same shall be given.
- b. If the rates are not specifically provided in the schedule G of the contract, but if the rates for similar class of work are available, then they may be applied.
- c. If the rates for the items or similar items are not available in the contract (schedule G), the rates will be worked out on the basis of BSR on which the estimate for the work was prepared.
- d. If the rates of the items are neither available in the contract (schedule G), or in the BSR, then the RE will obtain proposal from the contractor for the rates which he intends to charge alongwith rate analysis and justifications. The RE will verify the rate analysis with market rates and offer the contractor the rates which the Corporation may pay for those items. If the contractor agrees to these rates then he may be asked to execute the work but if he does not agree to carry out those items of work on the offered rates, the RE may get executed those items by some other agency.

- e. In case of sub-clauses (a) to (c) the tender premium or discount shall be added or subtracted from the total amount of items but in case of sub-clause (d) no addition or deduction on account of tender premium or discount will be made in the total amount as the rates in this case are on the basis of prevalent market rates.

7.F.25 The quantum of additional work for each item shall not exceed 50% of the original quantity given in the agreement and the total value of additional work shall not exceed 50% of the total contract value, unless otherwise mutually agree by the RE and the contractor, except item relating to foundation work. However, the rates for quantities in excess of the limit mentioned above may be revised (increased or decreased) as per the market trend by mutual agreement. However, the contractor shall not be entitled to any compensation on account of alterations in or restriction of work to be carried out.

7.F.26 The contractor shall not assign or sublet the work without the written approval of Managing Director of the Corporation. He shall also not offer any bribe, gift, reward, etc., to any person in the service of Corporation. If he does so, the contract may be rescinded and security deposit shall be forfeited.

7.F.27 **Deleted**

7.F.28 If an item of work estimated to cost more than Rs. 1,000/- is not executed in accordance with the sanctioned specifications, reduced rate may given by RE. Similarly, part rates may be given by RE provisionally in running bills for items which have not been fully executed or in case of item rate contracts if the rates of certain items are disproportionately higher than other item.

7.F.29 The percentage above or below quoted by the contractor and sanctioned in the contract shall be added or deducted on/from gross amount of the bill without deducting the value of stock issued.

7.F.30 The contractor shall adhere to the requirement of Workmen's Compensation Act, Minimum Wages Act and other labour legislations in force. If any compensation or penalty is paid by the Corporation as principal employer under the labour laws, the same shall be recovered from the contractor. Contractors shall be registered with employees Provident Fund Department.

7.F.31 If the RE considers that the work or portion of a work is not required to be executed by the contractor on account of slow progress or otherwise for reasons whatsoever, the work or that portion of the work may be withdrawn from him. The contractor shall not be entitled to any compensation for it. If due to slow progress of the work, another agency has to be engaged to supplement the execution, its cost shall be recovered from the contractor in addition to levy of compensation for delay.

7.F.32 All taxes, duties, royalty, octroi, quarry fees, sales tax, etc., payable on material consumed by the contractor on the work shall be paid by the contractor.

Similarly, cost of water and electricity consumed on the work shall be born by the contractor.

7.F.33 Any recovery pointed out within two years after payment of the final bill by pre-check, post-check, audit, technical examination of the work, bills, vouchers, etc., will be made from security deposit, performance guarantee or any sum due to the contractor and if need be, under Public Demands Recovery Act.

7.F.34 The formats of Check Slips for Scrutiny of Contract and Agreements; Work Orders; Supply Orders; Contractor's Running Bills; Supplier's Bills; Contractor's Final Bills and Refund of Deposit Bills are given at Annexure- VIIA; VIIB; VIIC; VIID; VIIE; VIIF; VIIG respectively in the form of half margin notes. The reply to the questions asked may be given in the blank space provided against the question. If the space appears short, or there are other points to be raised, extra sheets of plain paper may be used.

**CHECK SLIP
CONTRACT AND AGREEMENTS**

Unit _____
 Name of Work _____
 Name of Contractor _____ Agreement No. _____
 Date _____

1. In whose favour is the agreement drawn?
2. Is he an Enlisted contractor? If so, in what group?
3. What is the amount of contract? Is it within the limit admissible to contractors in the group?
4. What is the amount of Estimate?
5. Has the contractor been given any other contract or order for the same work either in whole or part?
6. If estimate has not been sanctioned what is the data on which the agreement is based?
7. Has the due publicity to tender been given?
(Names of newspapers with dates in which NIT has been published be given)
8. Is the agreement or any item in the agreement outside the scope of the estimate?
9. Is the agreement based on tenders and has the lowest tender been accepted?
10. If not, what reasons have been given?
11. What items are in excess of the schedule of rates?
12. Who is the authority accepting the tender? Is he competent to do so?
13. If negotiations conducted, whether the authority is competent to do so? Whether prescribed procedure for negotiations has been followed?
14. Is there a schedule of recoveries attached and rates of recoveries

- given clearly?
15. What other special conditions have been provided? Are these acceptable?
 16. Have the dates of start and completion been clearly given in the agreement?
 17. In the case of extra item statements, have all the above points been seen. See that the extra item statement has not the effect of taking the Contract Agreement beyond the powers of Sanctioning Authority?
 18. Whether extra items have been sanctioned by competent authority? If so, No. & Date and amount of sanction.
 19. Does the agreement/contract include all the documents namely specifications, general and special conditions of contract drawing required under schedule G, H, I
 20. Is the agreement based on lowest tender? If not, have reasons been recorded on comparative statement?
 21. What are comments of CAO?
 22. Whether the contract contains any unusual condition having uncertain or wide finite liability?
 23. Is the rate sanctioned within the rates sanctioned for similar works in recent past and market rates?

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RE/SE/GM/MD

**CHECK SLIP
WORK ORDERS**

Unit _____ Name of Work _____
 Name of Contractor _____ Work Order No. _____
 Date _____ Date of receipt _____

1. In whose favour is the Work Order drawn?
2. Is he an enrolled contractor? If so in what group?
3. What is the amount of contract? Is it within the limit admissible to contractors in the group?
4. What is the name of Work
5. What is the amount of estimate?
6. Has the contractor been given any other contract or work order for the same work either in whole or part?
7. If estimate has not been sanctioned, what is the data on which the work order is based?
8. Is the work order or any item in the work order outside the scope of the estimate?
9. Have you entered the corresponding item No. of the Schedule of Rates in the work order?
10. What are the items not covered by Schedule of Rates?
11. Are they acceptable on the basis of analysis of rates furnished?
12. Are conditions regarding deposit, supply of materials and other recoveries clearly given?
13. Are the dates of commencement of work and completion of work order given?
14. Do any of these dates take the work beyond the date fixed for the completion of the work itself?
15. Who is the authority awarding the work order? Is he competent to do so?
16. In the case of Extra Items statement have you satisfied yourself on all the

above points and seen that the extra item statement has not the effect of taking the work order beyond the power of sanctioning authority.

17. Name of authority who has sanctioned the extra item and whether he is competent for it.
- 18 Whether rates given in order are checked by inviting tenders form time to tome?
- 19 Is it a work order given on the basis of on annual running rate contract?

Jr Acctt./Acctt./AAO

ARE/RE/SE

**CHECK SLIP
Supply Orders**

Name of Unit
 Name of the Supplier
 Supply Order No.Date.....
 Stipulated date of supply
 Name of Work

- 1 Has the supply been arranged through Government allotment?
 Or
 Through approved suppliers on DGSD Rates? Or through annual running rate contract?
- 2 If otherwise, have the quotations/limited tenders/open tenders called and lowest quotation accepted? If not so then state reasons.
- 3 Has the supply order been issued by the competent authority? If so, quote authority?
- 4 Does the supply order provide for any compensation to be paid by the supplier, in case the supply is delayed beyond stipulated period?
- 5 Have the stores purchase rules followed?
- 6 Whether the supply order can be admitted or not? Give full particulars and objections.

Jr Acctt./Acctt./AAO

RE/PM/SE

CHECK SLIP
Contractor's Running Bills

Name of Unit..... Bill No..... Date.....
 Received on..... Name of contractor.....
 Name of Work.....Amount.....

- 1 Has the Contractor accepted the measurement in the M.B. and the Bill?
2. Have the several items in the bill been serially numbered if not, do it.
3. Is the work involved covered by an estimate? If so indicate against each item in pencil the Item No. of the estimate and specify cases where expenditure is in excess of provision and whether excess has been authorized?
4. If there is no estimate, has next higher authority's order for incurring expenditure in advance been received?
5. Is the claim covered by an agreement?
6. Has the currency of the agreement been exceeded?
7. Have you entered against each Item in the bill the number of corresponding item in the agreement in token of your check of the bill with the agreement?
8. What are the Items?
 - a) Not covered by agreement
 - b) Not conforming to the wording in the agreement?
- 9 In respect of 8 (a) have "extra item statements" been received? If not, has R.E. certified to the reasonableness of the rates?
- 10 In respect of 8(b) does the deviation indicate any material modification of the conditions agreed?
11. Have you noticed any excess in quantity over any item of the agreement?
12. Has the amount of the agreement been exceeded?
- 13 Have any part rates been allowed? Are they acceptable?
14. Have reduced rates been allowed for any items, Reasons and quantum of final

- reduction in rates be examined.
- 15 Do any aids to contractor's inadmissible occur in the bill?
 16. Have the bills been checked arithmetically?
 17. Has accountant/AAO effected the arithmetical check? (Specify the items)?
 - 18 Have the entries in the Measurement Books been checked? Specify page Nos. and No. of Measurement Book.
 - 19 Have the entries been compared with Measurement Book? Are there any differences?
 - 20 What is the date of measurement, date of check measurement and date of bill and comment on all delays exceeding the periods prescribed.
 - 21 Is check measurement made in your opinion adequate and effective? Have any gross errors been indicated?
 22. Have your checked the bill with the ledger and ledgerised the bill? What is the opening balance? How much of it is recoverable/adjustable in the bill and how much has been recovered/ adjusted. If any balance is left over, why?
 23. Are the recoveries made in accordance with the agreement and specify items where they are not?
 24. Has any claim for advance payment or secured advance been made?
 25. State whether the conditions prescribed in this behalf i.e. regarding amount of advance, sanction of R.E. etc. have been satisfied and whether the corporation has been board adequately protected against loss?
 26. Have previous advances been adjusted from which the advances are outstanding and whether reports to higher authorities have been made?
 - 27 Is percentage deduction on-account of security deposit made and if so is it adequate?
 - 28 Have required certificates been recorded in the Measurement Book and Bill
 - 29 Have the recoveries on account of

material issued, Income tax, Contract tax, hire charges of machinery, royalty, liquidated damages for delay, compensation for bad work, etc. been made?

30. Whether consumption of material issued by the corporation is within the prescribed limit. If not, then has the recovery been proposed.

31. Is any acknowledgement due from the contractor for previous payment.
32. What is your recommendation as to whether the bill should be passed or not.
33. Has the page number of works abstract/Register, (Subsidiary Ledger for works) in which you have posted the bill been mentioned.
34. Have you raised any objection on the bill, if so, give reference to the page number and item number of the objection book in which you have recorded the objection.
35. What is the amount of Administrative sanction and whether the expenditure including this bill exceeds the administrative sanction for this particular work?
36. What is the amount of technical sanction? Will it require revision?
37. State whether the expenditure including this bill exceeds the financial sanction. Also state the amount of financial sanction issued with number and date for this particular work.
38. Are sufficient funds/deposits of the client available for making payments.

Jr Acctt./Acctt./AAO

R E

**CHECK SLIP
SUPPLIER'S BILL**

Name of Unit _____ Bill No. _____ Date _____
 Received on _____ Name of Supplier/Firm _____

- 1 Is the bill in respect of purchase for stock or work? If charged to work, is there any reason for doing so?
- 2 If for stock, is the sanctioned limit not exceeded by the purchase?
- 3 Is it covered by a specific estimate?
- 4 If it is a purchase for work, has the estimate been sanctioned? What is the Item No. of the estimate in which this item has been included?
- 5 Have you kept a note of the supply for check with the material-at site accounts?
- 6 Is there a purchase order and does the bill confirm to the Purchase Order? Specify items where there is no such conformity.
- 7 Is the Purchase:-
 - (a) Local Purchase, or
 - (b) Purchase on basis of a rate contract
- 8 If local purchase, have reasons been given for not purchasing on basis of the rate contract?
- 9 Are the rates based on competitive tenders and how do they compare with rates of rate contract/current market rates?
- 10 Is the supply FOR place of purchase or destination?
- 11 Has a note been kept for watch of payment of freight?
- 12 Has the supply been entered in measurement book and stock ledger?
- 13 Who is the officer recording measurement/check measurement? What are the dates? Is the check measurement sufficient?
- 14 Compare date of purchase Order, date of measurement, date of taking

- on stock account. Comment on delays, if any.
- 15 Are any recoveries due from the supplier?
 - 16 Examine the validity of sales tax, octroi, excise duty and other dues,
 - 17 Are any acknowledgements due from the supplier for past payments?
 - 18 Has the bill been checked arithmetically?
 - 19 Has the supply been noted in the Stock Register or Tools and Plast Register?
 - 20 Is the supply outstanding in the purchase account? If not, why?
 - 21 What is your recommendation as to whether the bill should be passed or not?
 - 22 Give reference to page and item No. of register in which the payments have been noted.
 - 23 Does there any Budget Provision exist for this purchase. If so the amount of Budget Provision and expenditure including this bill be stated.
 - 24 In case of advance payment to the supplier, is there such condition in the supply order? Has the conditions for advance payment been satisfied? Has the competent authority sanctioned the advance?

Jr Acctt./Acctt./AAO

RE/SE/GM/CPM/MD

**CHECK SLIP
FINAL BILLS**

Name of Unit _____ Bill No. _____ Date _____
Received on _____ Name of Contractor _____
Name of work _____ Amount _____

- 1 Is the bill accompanied by the following documents? Comment on the acceptability of enclosed documents.
 - (a) Movement Slip
 - (b) Statement of issue and consumption of material in the Form prescribed
 - (c) Measurement Books (including reference MBs)
 - (d) Recovery Memo
 - (e) Deviation statement duly signed by RE/SE
 - (f) Extra items statement duly sanctioned by competent authority
 - (g) Check measurement memo
 - (h) Quality control results
- 2 Is the scrutiny slip correctly and properly filled (the Assistant should verify the correctness of replies in Scrutiny Slip), if not, what are the discrepancies? (The bills should be returned if the discrepancies affect the amount of claim, otherwise discrepancies should be reported to RE).

- 3 Are the following certificates recorded on the bill by the Executive Engineer?
- (i) The work has been actually completed according to the design and specifications, except in those cases where rates have been suitably reduced, viz., item Nos...
 - (ii) There is nothing due to RSRDC from the Contractor.
 - (iii) Free supply of Material and water was not arranged by the Corporation for construction purposes where it was not the responsibility of the Corporation as per terms of the agreement.
 - (iv) In the case of works let out on through rates, the actual leads and lifts involved are the same as contemplated in through rates and not less due to deeper borrow pits or other reasons, (if necessary certificates have not been recorded, the bill should be returned un-authorized).
- 4 Is the bill in proper form duly signed by ARE for payment (If not, bill is to be returned unauthorised)
- 5 Are there items not covered by the agreement? If so, has sanction for extra item been received and found in order? (If not, the bill is to be returned unauthorised).
- 6 Are the rates claimed as per agreement/Work order?
- 7 Have any reduced rates been allowed? If so, are reasons given acceptable?
- 8 Have you checked the bill arithmetically?
- 9 (a) Have you checked the totals of each page of M.Bs. pertaining to this bill?
- (b) Have you checked 100% of the entries in respect of M.Bs.

- 10 Have you checked the bill with Register of Miscellaneous Recoveries and Contractor Ledger etc. to ensure that recoveries due have been effected?
- 11 Are the recoveries made according to terms of agreement? (If not, the discrepancies should be got explained before authorising the bill for payment)
- 12 Have previous advances, if any, been adjusted? (If not, the bill is to be authorised after effecting adjustments due)
- 13 Is percentage deduction on account of security deposit made according to terms of agreement. (If not, correct it)
- 14 Has the contractor signed the bill and M.B., that the payment is in full settlement of all demands?

- 15 Have the measurement been recorded as prescribed in the PWD specifications,? (If not, the bill is to be returned unpassed.)
- 16 Does the expenditure on the work exceeds the sanctioned estimate by an amount which would require sanction of a revised estimate? If yes, whether sanction of the competent authority to the payment of final bill pending sanction of the revised estimate has been received? (If not, the bill is to be returned unauthorised).
- 17 Have the objections, if any, subject to which the previous running bill was passed, been replied and settled?
- 18 Additional remarks, if any,

Jr Acctt./Acctt./AAO

ARE/RE

CHECK SLIP
(For Refund of deposit bills)

Name of Unit _____ Name of the Contractor _____
Name of Work _____ Amount of the Bill _____

- 1 Whether the final bill for the work has been authorised for payment and all pending objections settled?
2. Whether there is a certificate that all the conditions prescribed in the agreement concerned for refund have been satisfied, the work has been satisfactorily completed, the final bill has been paid, defect liability period completed (where applicable) and there is nothing due to the Corporation from the contractor?
3. Whether the refund has been sanctioned by the competent authority?
- 4 Whether the credit has been verified by the Accountant in the register of deposits of the Division in respect of credit.
- 5 Whether a certificate that a note of refund has been recorded against the original entry in the cash book and other account records as to make the entertainment of a double or erroneous claim impossible, been recorded.
- 6 Whether the prescribed period has elapsed after the completion of the Work to entitle the refund?
- 7 In case of refund of a Miscellaneous deposit amount whether the reasons of placing the amount in misc. deposit and their rectification have been seen in detail and found satisfactory.

Jr Acctt./ Acctt./ AAO

RE