

CHAPTER XI - Site Order Book 'M' Books, Bills & Completion Report

Site Order Book

Every work site should have a site order book in the prescribed format so as to record the comments of the higher official while inspecting the work.

Name of the Work :

Estimate Cost :

Name of the Scheme :

Administrative Sanction details :

Technical Sanction details :

Name of the contractor :

Date of commencement of the work :

Probable Date of completion :

Date	Name & Designation of Inspecting Officer	Stage of work	Comments of Inspecting officer	Action taken	Remarks

Measurements

Measurement Book

The measurement books are very important account records. All measurement books are numbered serially and a register is maintained in the block office showing the serial number of each book, name of office, officer to whom issued, the date of issue, the date of return and remarks.

Works are measured and recorded in the Measurement books. Before the measurements are recorded in the M-Book, the date of measurement, name of the work, name of the contractor, estimate amount, Agreement No., etc., are to be noted on the top of the left and right page. Measurements should be taken in the presence of contractor and his signature should be taken at the bottom of the measurements for accepting measurements.

All measurements should be recorded directly in the M. Book on the left side only and no where else. The entries in the content column should be made after necessary calculations. There should not be any over writing. Corrections/cancellation should be authenticated. Entries should be recorded continuously and no blank pages left or pages torn out. Any pages left blank by mistake or oversight should be cancelled by diagonal lines and cancellation being initialed and attested with date.

Loss of M. Book is a serious matter and is to be reported to the higher authorities.

Every stage of work after execution is to be recorded and has to be check measured by the competent authority.

Check Measurement

Measurements recorded should in M-Book be check measured

a) Assistant Executive Engineer

The Assistant Executive Engineer should **check 50% of all recorded measurements, 75% of hidden items** of high unit value and his check measurements should **cover 75% of value of the work.**

b) Executive Engineer

In addition to check-measurement by the Assistant Executive Engineer, it is an important duty of Executive Engineers that, the Executive Engineer should during their inspections frequently check measure works which are in progress and they should test **check at least 30% of the value of each work costing more than Rs. One lakh** and should maintain a register of such check measurements check. The number of check-measurements/test check by Executive Engineer should be at least 24 per annum. (G.O.Ms.No.301 PWD dt.12.2.1986)

c) Superintending Engineer

"Superintending Engineers should make it a special point to see that these rules are duly observed, besides inspecting in detail **all works above a value of Rs.10.00 lakhs and certify that they conform to approved designs and estimates** and also free noticeable defect'.

(G.O.Ms.No.75 PWD dt.20.1.1976)

(C.E's (GI) No.Codes/71132/74, dated 2.3.76 and G.O.Ms.No.2681 PWD dt.11.11.86).

- Works costing more than Rs.10.00 Lakhs in agreement value should be super checked by the Superintending Engineer and a certificate issued by the Superintending Engineer as stipulated in para 297 of 'A' Code.
(C.E's (GI) No.CTO/A/158932/89 dt.27.2.89)

d) VIP Visit;

20% of temporary barricading works costing Rs.40,000/- and above may be submitted for super check by the Executive Engineer. (Govt. PWD Lr.No.28644/E1/88-5 dt.17.11.89)

e) Pre-Check Measurement of Jungle Clearance:

The Assistant Executive Engineer should check-measure all works except works costing less than Rs.500/-

(Note- 2 under para 297 of TNPWA Code)

Inspection:

a) The Assistant Executive Engineer should inspect the jungle clearance and before payment except works costing less than Rs.300/-
(Note 2 under Para 297 of TNPWA Code)

b) Removing and repacking of Revetment:

Upto Rs.1000/- - Assistant Executive Engineer

Above Rs.1000/- & Upto Rs.5000/- - Executive Engineer

Above Rs.5000/- - Superintending Engineer

(C.E's (MI) No.F2/24214/19 CE(MI)/80-15 dt.3.7.80)

Powers for sanction of Estimate of T and P

Sl. No.	Description	Powers of Officers P.W.D.				Authority
		Classification	Chief Engineer	Supdt. Engr.	Exe. Engr.	
a	Sanctions of Estimate for running charges such as purchase of Fuel, other consumables and working expenses.	Special T and P			Full Powers	G.O.Ms.No.1819 PWD Dt.1.9.84 1232 PWD dt.23.6.89 and 1552 PWD dt.23.9.91
		Ordinary T and P			Full Powers	
b	Annual maintenance, other than running of	Special T and P	Full Powers	Within the limit of appropriation assigned to the circle	5,000	
		Ordinary T and P	Full Powers		5,000	
c	Special repairs	Special T and P	Full Powers		60,000	
		Ordinary T and P	Full Powers		5,000	

Note :

(i) The cost of fuel is uniform throughout the State and therefore the fuel estimates can be sanctioned by the Executive Engineers themselves. (CE's (GI) No.AC3/79751/84 dt.10.4.84)

ii) As per G.O.Ms.No.1819 PWD dt.1.9.84, the Executive Engineers are competent to sanction estimate for repairs and maintenance including Special Repairs of departmental vehicles upto **Rs.5000/-**. (Govt. PWD Lr.No.70687/11/84-1 dt.2.4.85)

iii) Pending receipt of Govt. Orders the Superintending Engineers are requested to sanction Special Repairs to ordinary T & P as per delegation of powers accorded in Para 423(iv) of TNPWD Code (ie) upto limit of budget provision assigned to their circle. (C.E's (GI) No. AC(3)/85972/83-33 dt.1.6.1986)

Maintenance of Registers

The following registers are to be properly maintained:

- 1. Technical Sanction Register
- 2. Stock Register (Scheme wise)
- 3. Measurement Book Register
- 4. M. Book Movement Register
- 5. Minor Irrigation Tank Register
- 6. Check Measurement Register

Preparation of Bills

The Bills are to be prepared for the measurements recorded for the works executed and with reference to the agreements concluded by the contractor.

If work is completed in all respects only, the Final bill is to be prepared.

After completion of a portion of work, a part bill may be prepared.

If the material required for the execution of the project is supplied departmentally, necessary recoveries are to be made in the bill while making payment.

Hand Receipts

This is a simple form of voucher intended to be used for all miscellaneous payments, i.e for all item of works which were not covered in the contract for which no other form is suitable. (Model format is enclosed for reference)

HAND RECEIPT

Received a sum of Rs..... (Rupees
..... Only) from
.....towards the
.....
.....

Date :

SIGNATURE

Completion Report

A completion report is prepared after completion of work in all respects and making all payments showing the quantities and amount as per estimates, as actually executed and the excess / savings and explanation for the same. Completion report is submitted for higher authorities for approval.

Sl. No.	Description of work	As per original estimate			As per execution			Increase	Decrease	Reason for deviation
		Quantity	Rate	Amount	Quantity	Rate	Amount			

Precautions

Precautions while Preparing Estimates

1. Estimate for any work should never be prepared without prior site inspection.
2. During the site inspection the following points should be carefully examined.
 - a) Extent or area of land available – Whether there is sufficient area available for construction as per proposed design.
 - b) If the site is to be changed during execution the soil condition may change and the estimate prepared may become inadequate.
 - c) Classification of land i.e. private or government owned?
 - d) Location of site, i.e., in a plain area, undulating land, made up soil etc.
 - e) Soil condition – to decide the type of foundation to be adopted in case of buildings and to decide the pavement thickness in case of roads.
 - f) Other factors that could affect the provisions to be made in the estimates.
 - g) Identifying nearest source of materials required for construction and whether it is approved quarry, required yield etc., to be noted.
 - h) Adopting proper specifications for works and materials as per the latest codes and manuals.
 - i) In case of roads, the proposed alignment to be properly surveyed to decide the proposed road level.
 - j) Collection of hydraulic particulars of the water bodies that are located adjacent to the road and of those crossing the road to decide upon the type of cross drainage works.
 - k) Where the hydraulic particulars are not documented, a thorough local enquiry with the elders of the village will suffice to get a thorough knowledge about the linear waterway, discharge etc.
3. Preparation of drawings is a must and will add clarity to the estimates.
4. An estimate should be complete in all aspects and should be need based. For example deepening of any water body is of no use, if there are no provisions for

repairs/reconstruction/new construction of inlet, outlet, cleaning/deepening of supply channels etc.

5. Rates adopted for labours, materials and works should be based on current schedule of rates, and for those items where there are no approved rates local rates should be adopted with the approval of competent authority.
6. Immediate or competent authority may be discussed with before finalizing the estimate.
7. Preparation of estimate should be as per site conditions and should not require deviations during executions.
8. Exact requirement of materials should be worked out and issued to each and every work.
9. All issues should be properly recorded in the stock registers and also in the right hand side of the first page M-book of the work. Maintaining work wise issues register is a must.
10. Rates adopted should be either from Schedule of Rates or rates approved by competent authority.
11. Guidelines pertaining to the scheme should be scrupulously followed. For example, under MPLADS and MLACDS repair works, desilting works and works mentioned in the negative list cannot be taken up. On the other hand under finance commission grants maintenance works are alone taken up.
12. Proper handling of records, daily updating of stock registers, physical verification of stock with respect to godown and register.
13. Obtaining prior approval of competent authority in respect of deviations in work, if any required during executions.

Precautions and Points to be remembered during execution

1. Before marking, the classification of land of the site should be ascertained with the VAO to avoid private lands, temple lands and other classifications where the work should not be carried out.
2. In case of individual beneficiary schemes such as IAY it should be ensured if the beneficiary possesses patta.
3. Buildings should not be constructed under live **power lines**.
4. Site should be so located that it does not affect any existing waterways.
5. Site should be so located that the purpose of the work is achieved. Location of buildings far away from the habitation will make them unusable.
6. Adherence to proper specifications during execution, like proper mix of mortar, concrete, prior verification of the required quantity of materials collected at site.
7. Issuing proper instructions to the contractor about the material requirements, specifications will avoid unnecessary delay.
8. Any mistakes in estimates should be corrected during execution with the approval of competent authority. if required.
9. After any concreting work the next day the site should be inspected first to ensure curing of concrete is done.

10. Dimensions of various items of works, detailing of reinforcement should be prepared in writing, in advance and photocopied so as to give to the contractors/masons at various sites, since most of the works are repetitive or constructed as per type design.

Audit Paras and Necessary Precautions

It is the duty of the executing officers to ensure that the money allotted to any scheme is spent properly and as per the guidelines of the scheme. Some of the common queries and objections raised by the auditors are detailed below:

Non-recovery of amount for materials issued by the department.

- 1 . Insufficient recovery with respect to quantity of materials issued and cost of materials.
- 2 Excess issue of materials against the required quantity.
3. Excess issue of materials not returned or not recovered properly.
4. Non enclosure of necessary vouchers, hand receipts etc.
5. Deviations with respect to provisions of estimate.
6. Using sub standard materials or use of materials purchased from unapproved supplier when there is an approved rate and supplier.
7. Adopting incorrect rates for materials, labour, items of work etc.
- 8 . Incorrect calculation of material adequacy like cement, steel etc.
9. Taking up works that are against the guidelines of the schemes taken up.
10. Not producing records i.e. M-Books, Stock registers, vouchers, Firm bills etc.
11. Maintenance of registers like stock registers, M-Book registers and Technical sanctions registers etc.
12. Executing items of work not found to be necessary.
- 13 . Executing works without prior administrative sanction or technical sanction.