





STANDARD OPERATING PROCEDURES FOR CPWD WORKS MANUAL -2019



Published under the Authority of Director General CPWD, Nirman Bhawan, New Delhi



GOVERNMENT OF INDIA

CENTRAL PUBLIC WORKS DEPARTMENT

STANDARD OPERATING PROCEDURES FOR CPWD WORKS MANUAL - 2019



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DR K.M. SONI Addl. Director General (TD)





PREFACE

The Standard Operating Procedures (SOPs) for CPWD Manual 2019 is a compendium of standard procedures and work-flows for the CPWD Works Manual 2019 as prevalent in CPWD. The SOPs, are to be read in conjunction with the provisions of CPWD Works Manual 2019.

Relaxation of any provision of the SOPs in the interest of requirements of work in keeping with the provisions of the preamble to the CPWD Works Manual 2019, would be allowed by the next higher authority not below the rank of Chief Engineer with recorded reasons.

It shall always be open, where authorities of one or more levels may be missing, for a higher authority to exercise the powers delegated to a lower authority. Similarly, whenever any lower authority fails to take action(s) or exercise his/ her delegated powers, it will always be open to the higher authority to exercise the powers of the lower authority, but with recorded reasons, if the requirements of the work so demand.

In case of any conflicting provisions in the Manual and SOPs vis-a-vis "The General Conditions of Contract (GCC)", the provisions made in the GCC shall prevail in contract management. Similarly, Acts, Laws as notified by the government, GFR provisions and CVC guidelines shall prevail over provisions of the Manual and the SOPs.

Place: New Delhi

February, 2019 (Dr K.M. Soni)

INDEX OF SOPs & ANNEXURES

SOP No.	Description	Reference of Para in Works Manual	Page No.
CHAPTER 1	GENERAL PROVISIONS	NO SOP	
CHAPTER 2	BUDGET AND RECONCILIATION OF ACCOUNTS		
SOP No 2/1	Preparation of Budget	Para 2.10, Para 2.17	1
SOP No 2/2	Addition of New Instruments of Services/ Works in the mid of Financial Year	Para 2.12	1
SOP No 2/3	Submission of PE/ RE for Grant of A/A and E/S for Capital Works of GPRA/ GPOA Scheme Funded through MoHUA Grant	Para 2.12	1
SOP No 2/4	Re-appropriation Proposal in CPWD under Rules prescribed in DFPR	Para 2.22	2
SOP No 2/5	Submission of Audit Paras relating to Internal Audit/CAG Audit/ Pac, etc.	Para 2.27.1	2
CHAPTER 3	GENERAL PROVISIONS		
SOP No 3/1	Client Requisition, Team Formation, Framing Enabling Estimate and Rough Cost Estimate	Para 3.1.1.1 (3)	3
SOP No 3/2	Preliminary Estimate/ Preliminary Project Report	Para 3.1.1.1 (4)	3
SOP No 3/3	Preparation of Detailed Project Report/ Detailed Estimate	Para 3.1.1.2, 10.3	5
SOP No 3/4	Provision for Contingencies and its Utilization	Para 3.1.1.3 (3)	6
SOP No 3/5	Accord of Technical Sanction	Para 3.1.1.6 (3)	7
SOP No 3/6	Realization of Deposits, Transfer of Deposits, Execution of Deposit Works and Settlement of Accounts	Para 3.1.2.1 (9) & Para 10.3	7
CHAPTER 4	MODES OF BIDDING SYSTEM		
SOP No 4/1	E-Tendering	Para 4.4 (3)	9
SOP No 4/2	Restricted Tenders	Para 4.5.1	15
SOP No 4/3	Composite Tenders	Para 4.5.2 (2)	16
SOP No 4/4	Procedure for Opening of Two/Three Bid System Tenders	Para 4.5.3 (4)	18
SOP No 4/5	Manual Tendering	Para 4.7	18
SOP No 4/6	Execution of Works on EPC Contract Basis	Para 4.8 (9)	20
SOP No 4/7	NIT for Works involving Specialized E & M Services	Para 4.10(3) vii, Para 10.4	20



INDEX

SOPs FOR CPWD WORKS MANUAL 2019

SOP No 4/8	Notice Inviting Tenders (NIT) in Single Bid System	Para 4.10 (3) viii, Para 10.5(2)	26
SOP No 4/9	Notice Inviting Tenders (NIT) in Two/three Bid System	Para 4.10(3) viii, Para 10.5(2)	29
SOP No 4/10	Debarment of Contractors with Blemished Record	Para 4.19	32
CHAPTER 5	CONTRACT MANAGEMENT		
SOP No 5/1	Mode of Deposit of Earnest Money	Para 5.1.3 (1)	34
SOP No 5/2	Refund of Earnest Money	Para 5.1.4 (1)	34
SOP No 5/3	Justification of Tenders	Para 5.1.6	35
SOP No 5/4	Procedure for Conducting Negotiations	Para 5.1.8 (2)	36
SOP No 5/5	Acceptance of Tenders	Para 5.1.9	37
SOP No 5/6	Responsibilities of Officers for Scrutiny of Tenders	Para 5.1.10	37
SOP No 5/7	Acceptance of Tenders by the Central Works Board	Para 5.1.11	38
SOP No 5/8	Acceptance of Tenders in Anticipation of Revised Expenditure Sanction	Para 5.1.12	39
SOP No 5/9	Co-ordination at Construction Stage	Para 5.6.3	39
SOP No 5/10	Responsibility of Officers for Quality of Work	Para 5.6.4	40
SOP No 5/11	Responsibilities of Field Officers with regard to Labour Regulations	Para 5.6.5	41
SOP No 5/12	Periodic Inspection of Works	Para 5.6.6	41
SOP No 5/13	Monitoring of Cement and Steel and Other Materials and Check on their Consumption	Para 5.6.7	41
SOP No 5/14	Maintenance of Site Documents	Para 5.7 (2)	42
SOP No 5/15	Documentation of Accounts	Para 5.7.1	45
SOP No 5/16	Outside/Independent Testing Facilities	Para 5.7.2	46
SOP No 5/17	Grant of Mobilization Advance to the Contractors for Executing Capital Intensive Works	Para 5.8(3)	47
SOP No 5/18	Grant of advance for plant and machinery and for shuttering material	Para 5.9	47
SOP No 5/19	Secured Advance	Para 5.10	47
SOP No 5/20	Physical Measurement Books	Para 5.12.2	48
SOP No 5/21	Procedure on Measurements for Earth Levelling Work	Para 5.12.4	53
SOP No 5/22	Advance payment	Para 5.12.5	54

G-28011/113/2022-IAB

634846/2022/IAB

SOPs FOR CPWD WORKS MANUAL 2019

INDEX

SOP No 5/23	Payment for Sub-Standard Work	Para 5.13(2)	56
SOP No 5/24	Test checking of Measurements	Para 5.14	57
SOP No 5/25	EOT & Rescheduling of Milestones	Para 5.16	60
SOP No 5/26	Compensation Under Clause 2	Para 5.16.1	62
SOP No 5/27	Inspection of Works for Issue of Completion Certificate	Para 5.17.2 (2)	62
SOP No 5/28	Deduction of Income Tax at Source from Contractor's Bill	Para 5.18.4	63
SOP No 5/29	Refund of Security Deposit in Cases of Delay In Final Bill & Maintenance of Deposit Register	Para 5.19 (2)	64
SOP No 5/30	Refund of Security Deposit in Specific Nature of Work	Para 5.19 (3)	64
SOP No 5/31	Appointment of Arbitrator and Reference of Disputes	Para 5.21.2	65
SOP No 5/32	Court cases and Judgment in Court Cases	Para 5.22	74
SOP No 5/33	Operation of Contract Clauses	Para 5.23	75
SOP No 5/34	Dispute Redressal Committee	Para 5.24	85
CHAPTER 6	STORES	NO SOP	
1			
CHAPTER 7	QUALITY ASSURANCE		
CHAPTER 7 SOP No 7/1	QUALITY ASSURANCE CTE's Organisation – Returns and Inspections	Para 7.1.2	88
		Para 7.1.2 Para 7.2	88
SOP No 7/1	CTE's Organisation – Returns and Inspections		
SOP No 7/1 SOP No 7/2	CTE's Organisation – Returns and Inspections Quality Assurance and Technical Audit Wing		
SOP No 7/1 SOP No 7/2 CHAPTER 8	CTE's Organisation – Returns and Inspections Quality Assurance and Technical Audit Wing MISCELLANEOUS Co-opting of CPWD officers as Members in Building Works Committees Constituted by various Departments/	Para 7.2	88
SOP No 7/1 SOP No 7/2 CHAPTER 8 SOP No 8/1	CTE's Organisation – Returns and Inspections Quality Assurance and Technical Audit Wing MISCELLANEOUS Co-opting of CPWD officers as Members in Building Works Committees Constituted by various Departments/ Organizations Consultations with Department of Archaeology and	Para 7.2 Para 8.1	96
SOP No 7/1 SOP No 7/2 CHAPTER 8 SOP No 8/1	CTE's Organisation – Returns and Inspections Quality Assurance and Technical Audit Wing MISCELLANEOUS Co-opting of CPWD officers as Members in Building Works Committees Constituted by various Departments/ Organizations Consultations with Department of Archaeology and Other Departments for New Constructions Disposal of Surplus or Unserviceable Stores through	Para 7.2 Para 8.1 Para 8.2	96 96
SOP No 7/1 SOP No 7/2 CHAPTER 8 SOP No 8/1 SOP No 8/2 SOP No 8/3	CTE's Organisation – Returns and Inspections Quality Assurance and Technical Audit Wing MISCELLANEOUS Co-opting of CPWD officers as Members in Building Works Committees Constituted by various Departments/ Organizations Consultations with Department of Archaeology and Other Departments for New Constructions Disposal of Surplus or Unserviceable Stores through E Auction Estimates for Purchase, Repairs to Leased and	Para 7.2 Para 8.1 Para 8.2 Para 8.6 (1)	96 96 97
SOP No 7/1 SOP No 7/2 CHAPTER 8 SOP No 8/1 SOP No 8/2 SOP No 8/3 SOP No 8/4	CTE's Organisation – Returns and Inspections Quality Assurance and Technical Audit Wing MISCELLANEOUS Co-opting of CPWD officers as Members in Building Works Committees Constituted by various Departments/ Organizations Consultations with Department of Archaeology and Other Departments for New Constructions Disposal of Surplus or Unserviceable Stores through E Auction Estimates for Purchase, Repairs to Leased and Requisitioned Properties	Para 7.2 Para 8.1 Para 8.2 Para 8.6 (1) Para 8.14	96 96 97
SOP No 7/1 SOP No 7/2 CHAPTER 8 SOP No 8/1 SOP No 8/2 SOP No 8/3 SOP No 8/4 SOP No 8/5	CTE's Organisation – Returns and Inspections Quality Assurance and Technical Audit Wing MISCELLANEOUS Co-opting of CPWD officers as Members in Building Works Committees Constituted by various Departments/ Organizations Consultations with Department of Archaeology and Other Departments for New Constructions Disposal of Surplus or Unserviceable Stores through E Auction Estimates for Purchase, Repairs to Leased and Requisitioned Properties Hiring of Accommodation	Para 7.2 Para 8.1 Para 8.2 Para 8.6 (1) Para 8.14 Para 8.15	96 96 97 98

INDEX

SOPs FOR CPWD WORKS MANUAL 2019

CHAPTER 9	GENERAL PROVISIONS		
SOP No 9/1	Annual Rate Contract for Maintenance/Minor works	Para 9.3.5	102
CHAPTER 10	PRELIMINARIES FOR MAINTENANCE WORKS		
CHAPTER 11	MODES OF BIDDING SYSTEM	SOPs are analogou	
CHAPTER 12	CONTRACT MANAGEMENT	Construction Wor	rks
CHAPTER 13	QUALITY ASSURANCE		
CHAPTER 14	STORES		
SOP No 14/1	Advance Payments for Purchase of Stores	Para 14.5.1	104
SOP No 14/2	Receipt of Materials	Para 14.7	104
CHAPTER 15	MISCELLANEOUS		
SOP No 15/1	Maintenance of Building Register	Para 15.3	105
SOP No 15/2	Procedure for Inspection of Buildings	Para 15.3.1	105
CHAPTER 16	GREEN BUILDINGS AND SUSTAINABILITY MEASURES	NO SOP	

ANNEXURES TO WORKS MANUAL

Annexure No	Description	Reference of Para in Works Manual	Page No.
Annexure 1	Forms of Bill and Vouchers for Payment	Para 1.1 (10)	109
Annexure 2	Budget, Re-appropriation, Work Annexure, New instruments of Service, Audit, Accounts	Para 2.10, Para 2.12	110
Annexure 3	Detail of Pre-construction Activities	Para 3.1	119
Annexure 4	Memorandum of Understanding	Para 3.1.1.1 (2), Para 3.1.2.1 (5)	122
Annexure 5	Rates of Departmental Charges	Para 3.1.1.4 (1)	124
Annexure 6	List of Specialized Items/ Works	Para 3.1.3 (2)	126
	List I: Specialized Items/Jobs for Civil Works		126
	List II A & II B : Specialized Items/ Jobs for Electrical Works		126
	List III : Specialized Items/Jobs for Horticulture Works		128
	List IV: Concurrent list of Specialized Items/ Jobs		128



ANNEXURES TO WORKS MANUAL

INDEX

Annexure 7	Specific Days for Uploading and Opening of Tender	Para 4.13(2)	129
Annexure 8	Documents in a Complete Agreement/ Contract	Para 5.0 (7)	130
Annexure 9 A & 9 B	Sample letter of Acceptance of Tender & Commencement of Work	Para 5.3(2)	131
Annexure 10	Authorities Empowered to Prepare, Verify and Pass the Bills	Para 5.18.2	133
Annexure 11	Form of Supplementary Agreement	Para 5.20 (2)	134

ANNEXURES TO SOPs

Annexure No.	Description	SOP No.	Page No.
Annexure 12	Proforma for Particulars to be Furnished by Administrative Departments when Initiating Building Projects which are to be Executed by CPWD	SOP 3/1 & 3/2	139
Annexure 13	Letter of Acceptance of Deposit Works	SOP 3/1	144
Annexure 14	Statement Showing the Rates of EPF and ESI Charges to be included in Preliminary Estimate	SOP 3/2	146
Annexure 15	History Sheet of Estimate	SOP 3/3	147
Annexure 16	Information for Accord of Technical Sanction	SOP 3/5	149
Annexure 17	Time Schedule for Scrutiny of Tenders	SOP 4/1 & 5/6	162
Annexure 18	Guidelines on Definition of Similar Work	SOP 4/8	163
Annexure 19	Register of NIT's	SOP 4/8	164
Annexure 20	General Guidelines for Fixing Requirement of Technical Staff for a Work	SOP 4/8	165
Annexure 21	CPWD 6 for E- Tendering	SOP 4/8 & 4/9	167
Annexure 22	Information And Instructions for Bidders for e-tendering Forming Part of Bid Document	SOP 4/8	174
Annexure 23	Information And Instructions for Bidders for e-tendering Forming Part of Bid Document	SOP 4/9	176
Annexure 24	Guidelines for Fixing eligibility criteria for Two/ Three Envelope System	SOP 4/9	179
Annexure 25	MEMO forwarding Tenders to Central Works Board/ Regional Works Board	SOP 5/7	189
Annexure 26	Check List for items of Foundation Concrete	SOP 5/10	196
Annexure 27	Responsibility for Quality	SOP 5/10	201
Annexure 28	Sample Form of Site Order Book	SOP 5/14	204

INDEX ANNEXURES TO SOPS

Annexure 29	Sample Form of Inspection Register	SOP 5/14	205
Annexure 30	Sample Form of Cement Register	SOP 5/14	206
Annexure 31	Sample Form of Register of Dismantled Material	SOP 5/14	207
Annexure 32	Bill Book of Division	SOP 5/15	208
Annexure 33	Proforma for Write off of Lost MB's	SOP 5/20	209
Annexure 34	Specimen of Letter by the Engineer in Charge to the Contractor for Provisional Reduction in Rate for Sub-Standard Work	SOP 5/23	210
Annexure 35	Specimen of Letter of Contractor's Acceptance of Provisional Reduction of Rate for Sub-standard Work	SOP 5/23	211
Annexure 36	Form of Application by the Contractor for Seeking Extension of Time	SOP 5/25	212
Annexure 37	Form of Application of the Contractor for Seeking Rescheduling of the Milestones	SOP 5/25	213
Annexure 38	Guarantee to be Executed by Contractors for Removal of Defects after Completion in respect of Water Proofing Works	SOP 5/30	214
Annexure 39	Notice for Appointment of Arbitrator	SOP 5/31	216
Annexure 40	Model Form of Letter of Appointment of Sole Arbitrator	SOP 5/31	218
Annexure 41	Model Form of Letter of Appointment of First Arbitrator	SOP 5/31	219
Annexure 42	Model Form of Letter of Appointment of Substitute Arbitrator due to Transfer or Vacation of Office by the Arbitrator	SOP5/31	220
Annexure 43	Specimen Letter Asking for Undertaking from the Contractor for Acceptance of Award	SOP 5/31	221
Annexure 43A	Quarterly Statement Showing Position of Pending Arbitration Cases	SOP 5/31	222
Annexure 44	Proforma for Show cause to the Contractor regarding Compensation under Clause -2	SOP 5/33	223
Annexure 45	Proforma for Show cause to the Contractor regarding Compensation under Clause -2 (In case of contract is determined under clause-3)	SOP 5/33	224
Annexure 46	Show cause Notice under Clause -3 of the Agreement	SOP 5/33	225
Annexure 47	Notice on Final Action under Clause -3 of the Agreement	SOP 5/33	226
Annexure 48	Statement Showing the Quarterly Progress of Original Works for the Quarter Ending	SOP 7/1	228
	ı		



ANNEXURES TO SOPs INDEX

Statement Showing the Quarterly Progress of Supply/Purchase Contracts for the Quarter Ending	SOP 7/1	229
List of Documents Considered Essential for Inspections by CTE and which may be Called for Examination of a Work	SOP 7/1	230
Register of Observation, MEMOs, Received from the Chief Technical Examiner	SOP 7/1	232
Register Showing Over Payment Assessed / Pointed out by C.T.E. Organisation and subsequent Recoveries Effected	SOP 7/1	233
List of Equipment for Field Testing Laboratory	SOP 7/2	234
Field testing Instruments	SOP 7/2	236
Proforma For Mandatory Tests to be Attached with Running Bills	SOP 7/2	237
Proforma for Quality Control Inspection by Circle Office QA Team	SOP 7/2	238
Proforma for Preparing Observations by Core Wing/Regional QA Units	SOP 7/2	242
Sample of Press Notice for E-Auction	SOP 8/3	246
Notice for E-Auction	SOP 8/3	247
Sample of Bid Acceptance Letter	SOP 8/3	248
Record of Departmental Auction	SOP 8/3	249
Assessment/Re-assessment of Fair Rent relating to Private Buildings Taken on Lease by the Central Government Departments.	SOP 8/5	250
Model Format for Issue of Rent Reasonableness Certificate if Rent according to Prevailing Market Rent is Less than that as per Recognized Principles of Valuation	SOP 8/5	257
Model Format for Issue of Rent Reasonableness Certificate if Rent according to Prevailing Market Rent is more than that as per Recognized Principles of Valuation.	SOP 8/5	258
Proforma for Weeding Out and Destruction of Old Agreements	SOP 8/8	260
	List of Documents Considered Essential for Inspections by CTE and which may be Called for Examination of a Work Register of Observation, MEMOs, Received from the Chief Technical Examiner Register Showing Over Payment Assessed / Pointed out by C.T.E. Organisation and subsequent Recoveries Effected List of Equipment for Field Testing Laboratory Field testing Instruments Proforma For Mandatory Tests to be Attached with Running Bills Proforma for Quality Control Inspection by Circle Office QA Team Proforma for Preparing Observations by Core Wing/Regional QA Units Sample of Press Notice for E-Auction Notice for E-Auction Sample of Bid Acceptance Letter Record of Departmental Auction Assessment/Re-assessment of Fair Rent relating to Private Buildings Taken on Lease by the Central Government Departments. Model Format for Issue of Rent Reasonableness Certificate if Rent according to Prevailing Market Rent is Less than that as per Recognized Principles of Valuation Model Format for Issue of Rent Reasonableness Certificate if Rent according to Prevailing Market Rent is more than that as per Recognized Principles of Valuation. Proforma for Weeding Out and Destruction of	Supply/Purchase Contracts for the Quarter Ending List of Documents Considered Essential for Inspections by CTE and which may be Called for Examination of a Work Register of Observation, MEMOs, Received from the Chief Technical Examiner Register Showing Over Payment Assessed / Pointed out by C.T.E. Organisation and subsequent Recoveries Effected List of Equipment for Field Testing Laboratory Field testing Instruments SOP 7/2 Field testing Instruments Proforma For Mandatory Tests to be Attached with Running Bills SOP 7/2 Proforma for Quality Control Inspection by Circle Office QA Team Proforma for Preparing Observations by Core Wing/Regional QA Units SOP 8/3 Notice for E-Auction SOP 8/3 Record of Departmental Auction Assessment/Re-assessment of Fair Rent relating to Private Buildings Taken on Lease by the Central Government Departments. Model Format for Issue of Rent Reasonableness Certificate if Rent according to Prevailing Market Rent is Less than that as per Recognized Principles of Valuation. Proforma for Weeding Out and Destruction of



PART - I

SOPs COMMON TO CONSTRUCTION AND MAINTENANCE WORKS

CHAPTER 2

BUDGET AND RECONCILIATION OF ACCOUNTS

SOP No 2/1: Preparation of Budget (Refer Para 2.10 & Para 2.17)

- 1. Circulation of format and orders by Director (Finance), CPWD to field formations.
- 2. Divisional heads fill the format online and submit to Circle office.
- 3. Circle office scrutinizes and takes the approval of Chief Engineer and forwards the same to Director (Finance).
- 4. Director (Finance) finalizes the Budget in consultation with Financial Advisor, MoHUA and submits to MoHUA for inclusion in total demands of MoHUA.

SOP No 2/2: Addition of New Instruments of Services/ Works in the mid of Financial Year (Refer Para 2.12)

- 1. Circulation of format and orders by Director (Finance), CPWD to field formations for demand of NS/ NIS/ New Works for inclusion in the Detailed Demand of Grants (PINK BOOK).
- 2. Concern Chief Engineer prepares the item and forwards the same to Director (Finance) with fund requirement plan.
- 3. Director (Finance) finalizes the item in consultation with Financial Advisor, MoHUA and submits to MoHUA for inclusion of item in work annexure and fund demands of MoHUA. This may require to get supplementary demands approved by the Parliament.

SOP No 2/3: Submission of PE/ RE for grant of A/A and E/S for Capital Works of GPRA/ GPOA Scheme funded through MoHUA Grant (Refer Para 2.12)

- 1. PE is prepared by Division/Zone and submitted to DDG (Works)/ ADG (TD), CPWD in prescribed format.
- 2. After technical scrutiny, it is forwarded to Director (Finance), CPWD for Financial Scrutiny and observations on all technical matters which have financial implications or as per guidelines of the Ministry.
- 3. If estimate is below Rs. 5.0 Cr or as notified from time to time by CPWD Directorate, concurrence of Director (Fin), CPWD and approval of DG, CPWD is sufficient.
- If estimate is above Rs. 5.0 cr and below Rs. 20.0 Cr or as notified from time to time by CPWD Directorate, concurrence of IFD, MoHUA through Director (Fin) would be obtained and approval of DG, CPWD is sufficient.
- 5. If estimate is above Rs. 20.0 Cr. or as notified from time to time by CPWD Directorate, concurrence of IFD, MoHUA through Director (Fin) would be necessary and approval of competent authority i.e. Secretary (HUA)/ Hon'ble Minister, HUA/ EFC/ SFC/ DIB would be required.



BUDGET AND RECONCILIATION OF ACCOUNTS

CHAPTER 2

SOP No 2/4: Re-appropriation proposal in CPWD under Rules prescribed in DFPR (Refer Para 2.22)

- Demands of additional budget or NIS/ NS is submitted by Chief Engineer to Director (Finance), CPWD.
- 2. Director Finance examines the demands, if it can be funded directly or needs Re-appropriation.
- 3. Director Finance examines the demand if it can be funded by re-appropriation within Ministry or it needs MoF approval or it needs to be converted into Supplementary Demands.
- 4. As per requirement, Re-appropriation/ Supplementary demands are prepared by Director (Finance) and submitted to DG, CPWD for approval and onward submission to MoHUA.
- 5. Financial Advisor, MoHUA finalizes the demands with the approval of Secretary HUA and the same is submitted to MoF for inclusion in total demands of MoHUA.
- 6. After approval of Re-appropriation or supplementary funds will be provided to the field formation by Director (Finance).

SOP No 2/5: Submission of Audit paras relating to Internal Audit/ CAG Audit/ PAC, etc. (Refer Para 2.27.1)

- 1. Circulation of format and orders by CAC/ Director (Finance) to RAC, SRAC and ZAC in the field formations.
- 2. RAC, SRAC and ZAC holds meeting at a frequency pre decided and gets these formats for Audit para monitoring filled properly.
- 3. Divisional heads fill the format online and submit to Circle office.
- 4. Circle office scrutinizes and takes the approval of Chief Engineer and forwards the same to SRAC.
- 5. SRAC after vetting submit the same online to RAC and RAC in-turn submits it to CAC.
- 6. Director (Finance) in consultation and approval of DG, CPWD, forwards the CAG/ PAC para reply, to CAG/PAC Secretariat.



PART - II SOPS RELATED TO CONSTRUCTION WORKS

CHAPTER 3 GENERAL PROVISIONS

SOP No 3/1: Client Requisition, Team Formation, Framing Enabling Estimate and Rough Cost Estimate (Refer Para 3.1.1.1 (3))

- 1. Client sends the requisition either manually or online.
- 2. The officer receiving the requisition makes a rough estimation of cost, helps the client department fill up the basic requisition proforma/ details of the proposed work as per **Annexure -12** and forwards the requisition to the competent official, under whose T/S powers the expected cost of the requisitioned work falls, as per the rough estimation of cost. In the case of composite works, the competent T/S Authority of the project is the official competent to accord technical sanction to the major component of the work, provided the expected cost of the composite work falls within his/ her T/S powers.
- 3. In case of deposit work, a letter as per **Annexure -13** alongwith draft MOU (as per the standard template given in Annexure 4) is issued to the client for conveying acceptance to take up the work by the competent official (i.e the authority under whose T/S powers the amount of the A/A & E/S is expected to fall).
- 4. The competent T/S Authority (as per para 2 above) refers the matter to the SDG/ ADG or any other officer designated by the CPWD Directorate from time to time, to constitute/ designate a Project / Work Execution Team.
- 5. The competent T/S Authority interacts with the Client for finalization and signing of MOU.
- 6. The competent T/S Authority prepares/ gets prepared enabling estimate (if required) and sends to the client department for A/A & E/S. If required by the client, a rough cost estimate is also sent.
- 7. All co-ordination work up to the stage of preparation of detailed architectural drawings and specifications including local body approvals, structural drawings and E&M services drawings for execution of a project/work is done by the official competent to accord T/S as per para 2 above.
- 8. All field, architectural and planning units are accountable for providing necessary support to the competent T/S Authority.

SOP No 3/2: Preliminary Estimate/ Preliminary Project Report (Refer Para 3.1.1.1(4))

- 1. The Officer under whose T/S competence the total amount of the PE falls (as per para 2 of SOP 3/1) is also the nodal officer for forwarding the estimate in case of estimates with components from other disciplines. He/ She is also the T/S Authority of the project, and decides on the requirement of the following:
 - (i) Survey of site
 - (ii) Soil investigation
 - (iii) Preparation of preliminary drawings
- 2. The T/S Authority of the project decides whether to get any of the tasks done in-house or from outsourced agencies with recorded reasons.
- 3. The T/S Authority of the project coordinates all activities required for preparation of the Preliminary Drawings and Preliminary Estimate.



GENERAL PROVISIONS CHAPTER 3

4. Concerned Architectural Wing/Outsourced Consultant interacts with Client for detailing of inputs for preparation of Preliminary Drawings (PDs) and obtains the relevant detailed requirements as given in **Annexure -12**, from the client.

- 5. Concerned Architectural Wing/Outsourced Consultant interacts with the representatives of all the concerned disciplines as decided by the T/S authority of the project for incorporating their requirements in the preliminary drawings.
- 6. Preliminary Drawings (PDs) and Specifications are prepared by concerned Architectural Wing/ Outsourced Consultant and submitted to T/S Authority of the project for review. The T/S Authority after review, approves the same and sends it to the client for further approval.
- 7. Client department reviews the PDs and specifications and provides feedback, if any changes are required. Changes proposed by client are incorporated by the concerned Architectural Wing/Outsourced Consultant and submitted again for approval of the client.
- 8. PE is prepared by the T/S Authority of the project on the basis of the preliminary drawings and specifications approved by the client. He/She sends the approved plans and brief specifications to the concerned officers of the minor components relating to Civil/ Electrical/ Horticulture disciplines, for preparation of the preliminary estimates of the concerned discipline.
- 9. T/S Authority of the project prepares & compiles all the other reports/details required by Client as per requisition for inclusion in the preliminary estimate.
- 10. Preliminary estimate (PE) is to be prepared on the basis of Plinth Area Rates or length of road etc. worked out on the rate per unit area/length/number, or such other method adopted for ready and rough calculation, so as to give an idea of the approximate cost involved in the proposal.
- 11. Prevailing Cost Index over the plinth area rates, effect of ESI & EPF leviable (rates as given in **Annexure -14**, Contingencies and Departmental Charges (if applicable) are to be added in the PE.
- 12. The Plinth Area Scales as notified by MoHUA is followed for all construction works in the General Pool houses as well as houses for other Ministries/Departments where such norms are applicable. Details of Plinth Areas Scales are available on CPWD web site. No deviation from the prescribed scales is normally made, unless specifically desired by the client department. In such circumstances, specific reference to the said deviation is made in the history sheet of the estimate.
- 13. Provisions as required by the Architectural Unit for architectural planning jobs is made in the preliminary estimate/enabling estimate as the case may be, especially for outsourcing the preparation of architectural drawings, to be submitted to the competent authority for accord of A/A & E/S. The provisions so made is placed at the disposal of the concerned Architectural Unit.
- 14. Wherever 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 finalized, a separate estimate for such purpose(s) (called the enabling estimate) is prepared and sent to client department for according sanction.
- 15. For works which are predominantly of E&M nature, the PE would be prepared and sent by the T/S authority of the concerned discipline within his/her powers to accord T/S.



CHAPTER 3 GENERAL PROVISIONS

16. In case of proposals under the administrative control of the MoHUA, while forwarding the preliminary estimate, it should specifically be mentioned whether the expenditure involved can be met:

- (i) From within the sanctioned grant.
- (ii) From the specific budget allotment during the current financial year.
- (iii) By re-appropriation of funds and if so, source of re-appropriation is indicated.
- 17. While forwarding the PE to the client department for accord of A/A & E/S, an indication is 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.
- 18. While sending the estimates it is made clear to the client department that execution of the works will depend upon the receipt of the funds through authorization or through regular allocation well in time during the financial years.
- 19. The PE includes the provision "In the event of delay in taking over completed Project or completed components of the Project independently as per phasing mutually agreed with client without awaiting the completion of the entire project, charges on security, re-finishing and recommissioning, conservancy charges etc is borne by the client".

SOP No 3/3: Preparation of Detailed Project Report/ Detailed Estimate (Refer Para 3.1.1.2)

- The T/S authority decides on the packages for the purpose of accord of technical sanction.
 While deciding such packaging, the requirements of the client/site conditions/nature of work is taken into consideration.
- 2. The T/S Authority decides whether to get the tasks related to preparation of detailed estimate done in-house or from outsourced agencies with recorded reasons. Subsequently he /she initiates process of hiring external agency through tendering process as per requirement of work.
- 3. The T/S Authority coordinates all activities required for preparation of the DE/DPR. If the preparation of DE/DPR is done in-house, the T/S authority forwards to the Architectural Unit all relevant structural and service data relevant to the approved preliminary plans, for preparation of detailed working drawings and architectural specifications for the work.
- 4. On receipt of the detailed working drawings and architectural specifications, the T/S authority takes up the preparation of the detailed estimate and accords technical sanction.
- 5. The detailed estimate is complete and comprehensive and is 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, details in support of the lump-sum provisions made in the estimate if any, a brief note on the special construction difficulties likely to be encountered during construction stage etc.
- 6. The detailed estimate gives broad details for each item of the work involved. Other details are covered by the accompanying detailed drawings and specifications. The detailed estimate is based on the rates given in the prevailing schedule of rates for those items of work covered by it, and by analyzed market rates for non schedule items.
- 7. The detailed estimate contains a report in the Form CPWD-1, plans, specifications and a detailed statement of measurements as in Form CPWD-2, quantities and rates as in Form CPWD-3 with an abstract showing the total estimated cost of each item or work in case of a project consisting of several works.



GENERAL PROVISIONS CHAPTER 3

8. The 'Report' of the estimate is prepared in a lucid form, so that it is clearly understood by the non-technical officers of the administrative ministry/department or the client. It is self-explanatory and comprehensive including detailed information i.e : History, Design, Detailed Scope of Work, Rates (how the rates have been arrived at), cost of the work, list of items of work which do not form part of detailed estimate but are included in the sanctioned scope of work, the method proposed for carrying out the work, details of any provision made in the estimate for work-charged establishment, any special methods of construction to be adopted with reference to specifications etc., details of the provisions that have been made in the estimate for necessary construction plants and machineries etc. provisions for acquisition of land, if required, the estimated time of completion from the date of receipt of A/A & E/S indicating break up for pre-construction activity and construction stage, full reference of the architectural, structural and services drawings accompanying the estimates in support of the details submitted therein, any other points of importance that demand knowledge of local conditions must be incorporated.

- 9. In case of revision of Estimate, a comparison is included in the report with the amount originally provided under any previous sanction or detailed estimate.
- 10. During progress of work, if any development is thought necessary which is not fairly contingent on the proper execution of the work as first sanctioned, the same is covered by a supplementary estimate. This estimate is accompanied by a full report of the circumstances that renders it necessary. The abstract shows the amount of the original estimate and the total of the sanction required including the supplementary amount.
- 11. 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 is made to the authority whose sanction is ultimately required. This is accompanied with a statement in Form CPWD 4 and a report showing the progress made upto-date.
- 12. For Form CPWD 1 to 4 refer **Annexure -15**.

SOP No. 3/4: Provision for Contingencies and its Utilization (Refer Para 3.1.1.3 (3))

- 1. In addition to the provision for all expenditure which can be foreseen for a work, a provision of contingency is kept as follows:
 - (i) Estimated cost up to Rs. 1 Crore 5%
 - (ii) Estimated cost more than Rs. 1 Crore ... 3%, subject to minimum of Rs. 5 Lakh
- 2. This provision is also intended to cover the cost of work-charged establishment for which no provision is 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.
- 3. The amount provided for contingencies is utilized by the officers as per the powers delegated in the "Compendium of financial powers delegated to CPWD officers". The T/S authority shall have full powers to utilize contingencies for the works where sanctioned cost is within his/her powers to accord technical sanction.
- 4. All officers ensure that the authority under whose competency the work falls is kept informed about utilization of contingency for every utilization by indicating utilized and balance amount available.



CHAPTER 3 GENERAL PROVISIONS

SOP No 3/5: Accord of Technical Sanction (Refer Para 3.1.1.6 (3))

The T/S authority accords Technical Sanction before a work is taken in hand (except in case of Emergent works and works on "Design and Construct"/ EPC mode).

- 1. The T/S authority ensures that the design and specification etc. adopted in the detailed estimate are adequate enough for the building to last till its desired life. Under the 'Design and Scope' of the estimate, it is specifically mentioned that,' under normal use and maintenance, the building is expected to have an economic life of....... years.'
- 2. For various types of buildings, the economic life is taken as below:

(i) Monumental structures 100 years

(ii) RCC framed structures 75 years

(iii) Load bearing structures 55 years

(iv) Semi-permanent structures 30 years

However, Economic life depends upon the geographical location, type of the services and its uses.

- 3. No estimate is generally technically sanctioned unless relevant information required for T/S as per proforma at **Annexure -16** is prepared so as to enable the sanctioning authority to see that the detailed estimate prepared takes into account all aspects of planning and that no point has escaped notice.
- 4. For technical sanction, detailed estimate is prepared based on applicable schedule of rates. Market rates are followed for the items not covered under schedule of rates. Effect of prevailing cost index over the reference cost Index of schedule of rate is taken on the amount of detailed estimate for items for which rates are based on Schedule of rate. Estimate is technically sanctioned for the total amount inclusive of effect of Cost Index.
- 5. In case of work for which tenders are called on "Design and construct" / EPC basis, the Contractor takes the full responsibility for the design and execution. Therefore, provisions of Para 64 (Technical Sanction) etc. of the CPW Departmental Code are not applicable. Only the scope, description of work, specifications, approved conceptual drawings for engineering and architectural planning, and schedule of quantities (if available) and as provided in the contract document, is kept on record and a No Objection Certificate is recorded by the CE/CA/SA/SE/EE or any authority designated by the Directorate, for the drawings prepared and submitted by the contractor after proof check, before the same is released for execution.
- 6. It would be necessary that all the architectural and structural data/parameters, details of functional requirement and complete specifications including preliminary drawings are finalized before the call of tenders on "Design and construct" / EPC basis.

SOP No 3/6: Deposit Works (Refer Para 3.1.2.1 (9) and Para 10.3)

1. Realization of Deposits

- (i) Whenever a deposit work is to be under taken, the deposit is realized before any liability is incurred on the work.
- (ii) 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 or 10% of the estimated cost of the work, is got deposited in



GENERAL PROVISIONS CHAPTER 3

advance at the time of issue of A/A &E/S and balance amount i.e.23-1/3% of the estimated cost of the work is got deposited before award of work. Thereafter, the expenditure incurred is got reimbursed through monthly bills simultaneously with rendering of monthly accounts on the progress of work.

- (iii) The deposit of 33-1/3% obtained as mentioned above is retained for adjustment against the last portion of the estimated expenditure.
- (iv) 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 is brought to the notice of T/S authority promptly for taking up the matter with the client.
- (v) Whenever the expenditure is anticipated to exceed the A/A and E/S amount, a revised preliminary estimate is submitted to the client well in time during the execution of work.
- (vi) Where a client has defaulted in making the required deposit, and where the outstanding amount exceeds Rs.10 lakhs, or where the works outlay is predominantly for purchase of capital equipment and machineries, the entire deposit including departmental charges is realized in advance.
- (vii) In no case deposits received from a client department for its work is diverted to other works. No expenditure is incurred on deposit works out of CPWD grants and vice-versa.
- (viii) An acknowledgement that the Central PWD 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 is obtained from the client before the deposit work is taken in hand.
- (ix) The Engineer in Charge 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 E-in-C is doubtful about the timely receipt of deposits, he/she 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 is borne by the client. He/she should also bring this to the notice of his/her higher officers for taking up the matter with the client.
- (x) While submitting preliminary estimates for deposit works for obtaining administrative approval and expenditure sanction, a draft MOU as per Annexure -4 is submitted along with the PE to the Client.

2. Transfer of Deposits

- (i) It is incumbent on the part of the Civil/Electrical/Horticulture Divisions to transfer deposit to the concerned Electrical/Civil/Horticulture Divisions a part of the same in proportion of the sanctioned component of E&M/Civil/Horticulture works as per the sanctioned estimate.
- (ii) This transfer of deposit is made at an appropriate stage so that at no stage the progress of work is hampered for want of transfer of deposit.

3. Execution of Deposit Works and Settlement of Accounts.

- (i) The scope of work is not to be altered without written permission of the client.
- (ii) The Engineer in Charge sends to the T/S authority every month the Statement of Expenditure in Form CPWA 65 A along with the Schedule of Deposit Works in Form CPWA 65, for onward transmission to the concerned client after verification.
- (iii) The Engineer in Charge settles the accounts against the deposit works expeditiously so that the amount does not remain unsettled for long.



CHAPTER 4 MODES OF BIDDING SYSTEM

SOP No. 4/1 : E-Tendering (Refer Para 4.4 (3))

1. Digital Signatures:

- (i) All the designated officers in field units obtain digital signature (Class III) from authorized certifying authorities viz. NIC, MTNL, e-Mudhra, TCS, Safe scrypt, GNFC etc. and get the same registered with ITI or any other service provider as intimated from time to time.
- (ii) In case of transfer, the officer sends intimation to ITI or any other service provider as intimated from time to time immediately through e-mail.
- (iii) The new incumbent, if not in possession of digital signature, obtains the same from authorized agency or if in possession, intimates the serial number of his/her digital signatures to ITI or any other service provider as approved by the Directorate from time to time for updating so as to enable him/her to upload and open e-Tenders.

2. Preparation of Bid Document

- (i) NIT approving authority specifies the time and date of submission and opening of bid. Generally a time of 3 working days after last date of submission of bid is enough to receive and verify the documents uploaded by the intending bidder. However, NIT approving authority specifies the minimum time interval between the last date of submission of tender and the date of opening of financial/Technical bid keeping in view the time required for verification of documents and preparation of justification.
- (ii) The list of documents to be scanned and uploaded by the intending bidder are clearly mentioned under Information and Instructions for contractors.
- (iii) The Information and Instructions for contractors are attached in NIT and are modified suitably as per requirement, if found necessary by the NIT approving authority.
- (iv) To avoid failure of system to download the bids submitted by the contractor, opening of document during rush hours is generally avoided. Opening time of bids is kept either early in the morning or late in the evening. It is not necessary that bids are to be opened at 3.30 PM only.
- (v) If the time of opening of bid is changed, issue of corrigendum is not required and only information is given to the bidders after opening of bids.

3. Bids invited in Two/ Three Bid System

- (1) When bids are invited in Three Bid system, following steps are followed:
 - Entire bid document related to Eligibility Criteria, Technical bid and Financial bid are uploaded.
 - (ii) Stage-I: documents uploaded by the contractors related with Eligibility Criteria are opened first and after evaluation of bids the name of eligible contractors are approved by competent authority.
 - (iii) Stage-II: Stage II deals with technical bid which requires pre bid conference. NIT approving authority decides whether pre bid conference with qualified contractors is to



CHAPTER 4

be held before opening of technical bid or to be held after opening of technical bid, if required, with recorded reasons. This is clearly indicated in the NIT. Accordingly qualified contractors are called for conference and specifications are finalized and new bid document is prepared on the basis of decisions taken.

- (Iv) Revised financial bids, if required, are called from the qualified contractors.
- (v) The new bid document is uploaded on e-tendering portal in the following manner:
 - (a) Upload revised financial BOQ.
 - Opened tenders edit attachment -new addendum bid documents replace upload revised BOQ approve.
 - (b) Enter date of opening of revised financial bid
 Opened tenders line 1 -new corrigendum enter date and time create approve.
 - (c) Enter period of submission of revised financial bid.Opened tenders edit attachments initiate resubmission enter period submit.
- (vi) System generated e-mail is sent to all the qualified contractors intimating them the last date and time of submission and opening of revised financial bid.
- (vii) Submission of revised financial bid is mandatory since the earlier bid becomes invalid.
- (viii) Stage-III: Revised financial bids is opened on due date and time.
- (ix) In case, there is no change in technical specification then revised financial bids are not invited and the bids submitted earlier are opened. Time and date of opening of financial bids is intimated to qualified contractors.
- (2) At the time of submission of bid, contractor uploads affidavit/ certificate from CA mentioning turnover of last 3 financial years or for the period as specified in the bid document alongwith other documents mentioned in the NIT. Further details if required are asked from contractor later on after opening of technical bid.

4. Bids for Specialized works and Purchase of Materials

Bids for Specialized works, purchase of materials, security works, hiring of vehicles and outsourcing services such as running and maintenance of E&M services/ housekeeping/ running of vehicles/ operation and maintenance of computers in offices etc are invited through e-tendering system.

5. Publicity

Time limit for publicity of bids is as per the provisions of Para 4.13 of chapter 4 of Works Manual 2019.

6. Uploading of Bid Documents

- (i) All the documents such as NIT including Information and Instructions for contractors, all the conditions of NIT, Schedule of Quantities, Drawings and any other document, if required, are uploaded at one time.
- (ii) Uploading of bid document on the ITI website/website as notified from time to time, is done by the NIT approving authority or by the officer delegated by him for the same. Under no circumstances document is to be got uploaded directly through ITI or any other service provider.
- (iii) To generate comparative statement in composite bids for all major and minor components, the schedule of quantities of components of all the disciplines are uploaded in a single spread sheet of schedule of quantities.



MODES OF BIDDING SYSTEM

7. Preparation of Justification

- (i) In case of Single Bid system, justification is prepared before opening of Financial Bid by considering market rates of material and labour etc. as prevailing on the last date of submission of tenders.
- (ii) In case of Two/Three Bid system, the Justification is prepared before opening of Technical bid by considering market rates of material and labour etc. as prevailing on the last date of submission of tenders. In case revised financial bids are called, fresh Justification, if required, is prepared before opening the revised Financial bid.

8. Opening of Bids

- The bids are opened by Engineer in Charge or the person authorized, as per the provisions of the NIT.
- (ii) The bids opened are entered in the bid opening register. The form of bid such as item rate bid, percentage rate bid or lump-sum bids is also entered in the register. Name of persons present is also recorded.
- (iii) If bid opening authority is on leave/ tour or not available to open the bids, then under such situations, bids are opened by any officer authorized by Bid Opening Authority specified in the NIT using the options in the E portal.
- (iv) If the bid is withdrawn before due date & time of opening, the same is not considered and is also not included in the Comparative Statement.
- (v) Bid opening authority downloads schedule of quantities of each bidder duly filled by them and Comparative Statement. He/she puts a seal "downloaded by me on" and page number/ total number of sheets on each sheet downloaded and signs on each sheet.
- (vi) Bid opening authority also downloads the full bid document of lowest bidder. He/she puts a seal on each sheet "downloaded by me on" and signs on each sheet.

9. Preparation/ Checking of Comparative Statement

- (i) The comparative statement is generated automatically.
- (ii) The detailed arrangement for proper checking of bids and comparative statement and its scrutiny is left to the bid accepting authority.
- (iii) The concerned officials put dated initial on all papers of the calculations which they have checked and all working sheets are preserved.
- (iv) The duties of Divisional accountant in this regard are given at SOP No. 5/6.

10. Processing of Bids

- (1) Bid opening authority along with his/her recommendations submits following documents to bid accepting authority:
 - (i) Hard copies of documents as submitted by the qualified bidders.
 - (ii) The bid documents as uploaded by the tender inviting authority.
 - (iii) Schedule of Quantities of all bidders as downloaded.
 - (iv) Comparative Statement as downloaded.
 - (v) Original approved NIT.



CHAPTER 4

- (vi) Any corrigendum, minutes of Pre Bid meeting, if any, and any other document as called for by bid inviting authority.
- (2) The reasons for rejection of bids is intimated to the bidders.

11. Processing of E-Tenders

- (1) The Divisional Accountant (Sub-Divisional Clerk in Sub-Division) is encouraged to be present at the time of opening of tenders.
- (2) A complete comparative statement of all the tenders received in response to the notice is downloaded. The Officer opening the tender records in his/her own hand in the tender opening register a statement of the "Percentage" or "Lump Sum" tenders received and signs that statement. In the case of item rate tenders only a list of tenders received is prepared.
- (3) The Divisional Accountant records 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."
- (4) After opening the tenders as above and preparation of comparative statement, the Bid opening authority sends the same to the office of the tender accepting authority concerned in respect of tenders where NIT has been approved by higher authority. The detailed scrutiny is done in the office of the Tender accepting authority. The Engineer in Charge not below the rank of EE or any other authority as notified by the CPWD Directorate from time to time, sends the market rates of material and labour for preparation of justification before opening of Technical Bid/Financial Bid as the case may be.
- (5) Complete scrutiny of tenders is done in the office of the Chief Engineer concerned or any other authority as notified by the CPWD Directorate from time to time, for tenders to be accepted by his/her higher authority.
- (6) Tenders are accepted by various officers as per powers embodied in "Compendium of Financial Powers Delegated to CPWD Officers" after assessing the reasonability of rates on the basis of justified rates. The same powers are applicable in case of rejection of tender also. After the tender for the work has been accepted, the same is communicated to the contractor asking him/her to submit the Performance Guarantee(PG) as per Annexure 9A.
- (7) After submission of the PG by the contractor in an acceptable form, an intimation to commence the work is given in Annexure 9B.
- (8) The period allowed for commencement of work is reduced as per requirements of the work and necessary changes are made in the contract form and the letter of acceptance of tender.
- (9) If the lowest tenderer backs out, there is re-tendering in a transparent and fair manner, with the NIT approving authority prescribing a limited or short notice tender if so justified in the interest of work.
- (10) The bidder, who has backed out, shall not be allowed to participate in the re-tendering process.
- (11) Top priority is given to decide the award of work on receipt of tenders. In order to minimize chances of delay, the time limit for processing of bids is given in **Annexure -17** is observed for processing the tenders by different authorities.



MODES OF BIDDING SYSTEM

- (12) The above referred time schedule for processing the tenders is strictly adhered and if any officer is unable to follow the same, he/she invariably give reasons for delay in respect of tenders falling within his/ her powers of acceptance or while forwarding the tenders to the higher authorities competent to accept it.
- (13) In case, of tender falling beyond the financial powers of the NIT approving authority, details like:
 - (i) validity period of the tender,
 - (ii) time already taken for scrutiny, and
 - (iii) balance period available,

are prominently indicated while forwarding the tenders to the higher authority.

- (14) AE(P) and EE(P) process the tender and put up the same to SE(P) within 7 days after receipt of the recommendations in the matter from SEs concerned or as per instructions issued by the Directorate from time to time.
- (15) The Finance Officer processes the tender within 3 days and put up to CE.
- (16) The following instructions are scrupulously followed while processing the tenders:
 - (i) The tenderers are not expected to make any post-tender modifications. Any such case is viewed seriously and under the provisions of Form CPWD 6, the matter is reported to the concerned Enlisting Authority for disciplinary action to be taken under the Rules for Enlistment of Contractors. In any case, such modifications are not considered by tender accepting authority.
 - (ii) When the tenders are under examination, no other authority makes queries or calls for reports/ clarifications from the tenderers except with the approval of tender accepting authority.
- (17) Tenders with any condition, including conditional rebates, are rejected. However, tenders with unconditional rebate are acceptable.
- (18) It is ensured that there is no delay in processing of tenders and decisions are taken well in time before expiry of validity of tender. The Tender accepting authority keeps a watch on the expiry of the validity of tenders. In case of tender where the validity period has already expired, decision to accept the same is taken only if the validity period is extended by the tenderer.
- (19) Authority who is originally competent to accept the tenders as per the Compendium of Financial powers to CPWD Officers accepts the tender even if the negotiated amount falls within powers of acceptance of subordinate officers.
- (20) When the tender involves liability exceeding the A/A & E/S for the work by an amount greater than 10%, such excess will require a revised A/A & E/S. This is applied for as soon as such an excess is foreseen.
- (21) The CPWD Officer accepting the tender involving extra expenditure immediately reports 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.
- (22) The revised estimate for the work is submitted within a month of acceptance of the tender to the competent administrative authority.



CHAPTER 4

- (23) Where technical bids are also invited, acceptance of the same falls within the competence 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 also falls within the competence of NIT approving authority, who places on record the justification and circumstances for making such change. The NIT approving authority also decides the recoveries to be made if any, if the proposed model/brand is cheaper.
- (24) The tender accepting authority satisfies himself/herself about the reasonability of rates before acceptance of the tenders. Reasonability of rates is primarily assessed on the basis of justified rates.
- (25) Variation upto 5% over the justified rates is ignored. Variation upto 10% is allowed for peculiar situations and in special circumstances. Reasons for doing so is placed on record. Tenders above this limit are not accepted.
- (26) No tenders which are required to be accepted by any higher authority are rejected by any lower authority, and all such tenders are submitted to the authority competent to accept the tender as per "Compendium of Financial powers to CPWD" for consideration. It is for that authority to reject them or to approve them or to authorize negotiations, if any.

12. Award Letter of Work

It is ensured by the tender inviting authority that the Award Letters are uploaded in www.tenderwizard.com/cpwd after acceptance of tender. The Award Letters become available on www.eprocure.gov.in through system link.

13. CPWD-6: CPWD 6 for E tendering is given in Annexure -21.

14. Information and instructions for tender inviting authority for e-tendering

- (i) The EE/Engineer in Charge/DDH of any divisions/projects of CPWD or any other officer designated by CPWD Directorate from time to time, are authorized to receive the EMDs. These authorities should receive the original EMD for their tenders or tenders of any other division/projects.
- (ii). The NIT approving authority/ Tender inviting authority at the time of issue of NIT also fills and upload the following prescribed format of receipt of deposition of original EMD along with NIT:-

	Rec	eipt of deposition of original EMD
	(Re	ceipt No / date)
	1.	Name of work*
	2.	NIT No*
	3.	Estimated cost*
	4.	Amount of Earnest Money Deposit*
	5.	Last date of submission of bid*
П	١,	be filled by Tender inviting authority/NIT approving authority at the time of issue of and uploaded along with NIT)



MODES OF BIDDING SYSTEM

1.	Name of Contractor	.#
2.	Form of EMD	#
3.	Amount of Earnest Money Deposit	
4.	Date of submission of EMD	
Sigi	nature, Name and Designation of EMD	
rece	eiving officer along with Office stamp	
(# ٦	o be filled by EMD receiving EE/DDH	

- (iii) The Authority receiving EMD in original form examines the EMD deposited by the bidder and issues receipt of deposition of earnest money to the agency in a given format uploaded by tender inviting authority. The receipt can also be issued by any subordinate gazetted authority as authorized by the EE/Engineer in Charge/DDH.
- (iv) The authority receiving original EMD also intimates tender inviting authority about deposition of EMD by the agency by email/fax/telephonically.
- (v) The original EMD receiving authority releases the EMD to unsuccessful bidders after the expiry of stipulated bid validity period or immediately after acceptance of the successful bidder, whichever is earlier, after verification from the e-tendering portal website (www.tenderwizard.com>tender free view> advance search>awarded tenders) that the particular contractor is not L-1 tenderer and work is awarded.
- (vi) The tender inviting authority calls for original EMD of the L1 tenderer from EMD receiving authority immediately.
- (vii) Information and Instructions for Contractors for e- tendering forming part of NIT and to be posted on website are referred from Annexure -22 for Single bid and Annexure -23 for Two/Three Bid system, as the case may be.

SOP No. 4/2: Restricted Tenders (Refer Para 4.5.1)

- 1. Restricted tenders are normally resorted under the following conditions with prior approval of DG, CPWD or any other authority designated by CPWD Directorate:
 - (i) The work is required to be executed with very great speed, and not all contractors are in a position to generate.
 - (ii) The work is of special nature requiring specialized 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) For maintenance of VIP residences/ important buildings as decided by competent authority designated by the CPWD Directorate..
 - (vi) Other exigencies of the work demanding for restricted tenders.



CHAPTER 4

- 2. For works estimated to cost upto Rs 50 lacs or as intimated from time to time, the CE or any other authority designated by CPWD Directorate has full powers to approve the restricted list for call of tenders.
- **3.** For works estimated above Rs 50 lacs or as intimated from time to time, the ADG or any other authority designated by CPWD Directorate has full powers to approve the restricted list for call of tenders and also to dispense with the requirement of Pre- qualification.

4. Procedure for preparation of restricted list of contractors/ consultants for secret works

- (i) The concerned ADG/ any other authority as designated by the CPWD directorate from time to time, forms a committee by nominating three members not below the rank of Chief Engineer/CA.
- (ii) The Committee prepares a list of contractors/ consultantants to execute the secret work.
- (iii) The list so prepared is approved by the concerned ADG/ any other authority designated by CPWD directorate.
- (iv) The bids are invited manually.
- (v) The designated competent authority takes all decisions in regards to consultancy work for architectural/ structural / others services related to the work as well as calling of bids for the work.

SOP No 4/3: Composite Tenders (Refer Para 4.5.2 (2))

- Only one agency is fixed i.e. the main contractor who is responsible for executing the entire
 work. The Engineer in Charge of the major component of the work calls bids for the composite
 work. The cost of bid document (if any) and Earnest Money is fixed with respect to the combined
 estimated cost put to tender for the composite bid.
- 2. The officers of minor disciplines within their individual T/S powers, approve and submit the schedules for minor components of the work along with terms and conditions to the T/S Authority of the major component well in time. Technical sanction and approval of NIT for the combined work is accorded by the competent authority of the major component under whose T/S powers the total estimated cost of work falls, after combining the cost of major and minor components. If the combined amount of the detailed estimate for the composite work does not fall within the T/S powers of the official in-charge of the major component, then the same is sent to his/ her next higher authority competent to accord T/S and approve the NIT for the composite work.
- 3. The officers of individual minor components prepare market rate justification of the minor components before opening of the technical bid(in case of two/three bid)/ financial bid (in case of single bid) and hand it over to the NIT approving authority. The NIT approving authority prepares the market rate justification of the total work before opening of technical bid. In case of tenders to be accepted by RWB/CWB, the market rate justification is submitted by the NIT approving authority to the RWB/CWB before opening of technical bid. (For detail on preparation of justification Refer **SOP No. 5/3**).
- 4. The eligible tenderers quote rates for various items of major as well as minor components of work. The lowest tenderer is decided based on quoted rates in respect of all the schedules attached in tender documents. It is obligatory on the part of the main contractor to sign the tender documents for all the components.



MODES OF BIDDING SYSTEM

- 5. The Department lays down eligibility criteria for agencies responsible for execution of specialized components of works. Agencies engaged by the main contractor are required to fulfill the laid down criteria. In case the main contractor himself meets the required eligibility criteria as laid down by the Department for specialized work, he is allowed to execute the same after due verification etc.
- 6. The main contractor gives detailed execution programme of the work which forms part of his agreement with the department. He indicates in the programme, the time/stage of the work when the agencies of specialized components of works will be deployed by him.
- 7. Acceptance of the tender is done by the NIT approving authority within his powers to accept tenders as per" Compendium of Financial powers to CPWD Officers" and is conveyed by the Engineer in charge of major component of the work on behalf of the President of India. After the work is awarded, the contractor signs copies of agreement depending upon number of EE's/DDH or any other authority designated by CPWD Directorate, in charge of minor components and hands over one set of agreement to concerned officer of minor component. EE or any other officer as notified by CPWD Directorate from time to time, of major component will operate part A and part B of the agreement. EE/DDH or any other officer as notified by CPWD Directorate from time to time, in charge of minor components operate Part C along with Part Á' of the agreement.
- 8. The main contractor enters into MOU with agencies associated by him for execution of specialized component as per NIT conditions.
- 9. Running payment for the major component is made by EE/Engineer in Charge to the main contractor. Running payment for minor components shall be made by the EE/DDH in charge or any other officer as notified by CPWD Directorate from time to time, of the discipline of minor component directly to the main contractor.
 - 10. In case the main contractor intends to change any 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.
 - 11. Supervision of various components of works will be carried out by concerned wings of the department under the overall co-ordination of the NIT approving authority or any other officer as notified by CPWD Directorate from time to time, as the case may be.
 - 12. Final bill of whole work shall be finalized and paid by the Engineer in Charge of major component. Other EEs/ DD(H) or any other officer as notified by CPWD Directorate from time to time will prepare and pass the final bill for their component of work and pass on the same to the Engineer in Charge of major component, for including in the final bill for composite work.
 - 13. CPM/PM/SE/Director (Horticulture) or any other officer as notified by CPWD Directorate from time to time of the concerned discipline will be competent authority for deciding reduced rates, if any.
 - 14. Levy of Compensation under Clause 2, if any, and rescheduling of milestones as stipulated under clause 5, will be decided by an officer not below the rank of SE or any other officer as notified by CPWD Directorate from time to time, in charge of the major component in consultation with concerned officer in charge of minor discipline and on receipt of required information in this regard from Engineer in Charge of major discipline as well as concerned Engineer in Charge of minor discipline.



CHAPTER 4

- 15. Same milestones are applicable for all components of work. The amount to be withheld under Clause 5 of the contract will be decided by the Engineer in Charge of the respective component. 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.
- 16. The composite work is treated as complete when all the components of the work are complete. The completion certificate of the composite work is recorded by Engineer-in-charge of major component after record of completion certificate by the competent authorities of all other components.
- 17. Arbitration case/Court case, if any, shall be handled by the Engineer in Charge of the major component or any other officer as notified by CPWD Directorate from time to time along with the support of the minor disciplines.

SOP No. 4/4: Procedure for opening of Two/Three Bid tenders (Refer Para 4.5.3 (4))

1. Two Bid System

- (i) Bid containing eligibility related documents is opened first.
- (ii) The eligibility of the bidder is evaluated as per terms and conditions of NIT and bidders are qualified/ disqualified by the competent authority.
- (iii) List of qualified bidders is prepared.
- (iv) Financial bid of qualified tenderers are then opened at notified time, date and place in presence of tenderers or their representatives.

2. Three Bid System

- (i) Works for which technical specification are not finalized and the same are to be finalized on receipt of the details from the tenderers are invited in Three Bid system.
- (ii) Bid-1 containing the Eligibility bid is opened first.
- (iii) Bid- 2, Technical bid containing technical specifications of those bidders who satisfy the eligibility criteria are then opened at notified time, date and place in presence of bidders or their representative. If required, a conference in respect of technical bids is held on notified date, time and place. After finalization of technical bid, if required, bidders are given chance to modify their financial bids.
- (iv) Financial bid of qualified bidders are then opened at notified time, date and place in presence of bidders or the representatives. The validity of the tenders is reckoned from the date of opening of the technical bids.
 - After opening of the Technical bids in Two/three Bid system, the bid opening authority prepares a list of deficiencies found in the bids of each bidder vis-a-vis requirements as per NIT within one week and communicates the same to individual bidders by Speed Post/E mail with a request to furnish required documents/clarifications within a week's time, failing which it is presumed that they do not have any further documents/clarifications to furnish and decision on bids is taken accordingly.

SOP No. 4/5: Manual Tendering (Refer Para 4.7)

Manual tendering is resorted to as an exceptional case only with well recorded reasons after obtaining prior approval of the next higher authority not below the level of SE or any other authority as notified by the CPWD Directorate from time to time. Tenders are invited only after:



MODES OF BIDDING SYSTEM

- (a) The work is technically sanctioned
- (b) The NIT is approved
- (ii) A few sets of tender documents are kept ready in the office of the tender sale authority to facilitate the intending tenderers to see them if they so desire. A register is maintained by the designated official to obtain the signature of the intending tenderer(s) as a proof of having seen the tender documents.
- (iii) Tenders as per prescribed conditions of publicity are received in the office of Engineer in Charge/Asst Engineer. All the tenders in the power of Engineer in Charge and higher officers are received in the office of Engineer in Charge.
- (iv) All the tenders are opened in the presence of such intending tenderers or their representatives as may choose to attend at the time and place, which is advertised. The tenders are entered in the Register Form CPWD 41.
- (v) The Divisional Accountant (Sub-Divisional Clerk in Sub-Division) is encouraged to be present at the time of opening of tenders.
- (vi) A complete comparative statement of all the tenders received in response to the notice is drawn up in the office of the Engineer in Charge. The Officer opening the tender records in his/her own hand in the tender opening register a statement of the "Percentage" or "Lump Sum" tenders received and signs that statement. In the case of item rate tenders, he/she needs to prepare only a list of tenders received.

The processing of tenders and acceptance of tenders are analogous to procedures laid down for E-Tendering and the same may be followed.

2. Corrections, Omissions etc in Manual Tenders

- (i) The Officer opening the tenders encircles all corrections, cuttings, conditions, additions and over-writings and number them and attest them in red ink marking them serially. The number of such corrections, cuttings, additions, conditions and over writings are clearly mentioned at the end of each relevant page of the Schedule attached to the tender documents, and they are properly attested with date.
- (ii) Any ambiguity in rates quoted by the tenderers, either in words or figures, is clearly indicated on each relevant page of the Schedule attached to the tender documents to which it concerns. Where the contractor has quoted rates in rupees and no paisa is mentioned, the word "only" is added after the words 'rupees', and the corrections are initialled and dated with suitable remarks at the end. 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 records the omissions on each page of the Schedule. If the contractor fails to record rates in words the Tender opening authority writes the rates in words at the time of opening of tenders.
- (iii) 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 is taken as correct. 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 is taken as correct. When the rate quoted by the contractor in figures and in words tallies, but the amount is not worked out correctly, the rates quoted by the contractor is taken as correct and not the amount. 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



CHAPTER 4

entered in the Schedule. 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 is taken into account. All corrections in the comparative statement is carried out neatly and clearly, and initialed by the person making the corrections. The corrections are attested by the authority concerned i.e Engineer in Charge/Assistant Engineer/ Divisional Accountant.

SOP No 4/6: Execution of Works on EPC Contract Basis (Refer Para 4.8 (9))

- 1. As per OM No28012/11/2016 W.3 dated 29th November 2016, of MoHUA's Works division and DG, CPWD's OM No DG/MAN/Misc./09 dated 9th May 2017, works of value more than Rs 100 crores or as notified from time to time are taken up under EPC (turnkey)mode.
- 2. As per the OM of NITI Aayog dated 5th September 2016, the model EPC bidding document published by the erstwhile Planning Commission suitably revisited or modified wherever required, to suit the requirements of the work, is adopted by the NIT Approving Authority.
- 3. After the receipt of requisition for the work, the client organizations are advised that they need not engage Design/Structural Consultants as the same would be part of the EPC tender. The detailed planning is the responsibility of the contractor but the monitoring is done by the Engineer in Charge. For works undertaken in the EPC mode, sanction is obtained on the basis of Detailed or Preliminary Project Report as per feasibility and requirement and submitted as per understanding with the client.
- 4. The concept design, preliminary drawings and specifications based on detailed requirements of the work, in consultation with the client, is prepared before framing of the PE. The NIT approving authority decides whether to get these tasks done in-house or from outsourced agencies with recorded reasons. If done in-house, the concerned Architectural unit prepares the concept design, preliminary drawings and specifications based on detailed requirements of the work, in consultation with the client.
- 5. The Preliminary Estimate (PE) or Preliminary Project Report (PPR) or Detailed Project Report (DPR) or any other document submitted for obtaining Administrative Approval and Expenditure Sanction defines accurately the scope of the work in terms of outcomes and performance parameters.
- 6. The following details are obtained to enable Preliminary Project Planning (PPP) (both Engineering and Architecture) for preparation of the PE or PPR or DPR:
 - (i) Document showing ownership of land duly certified by the client that the same would be in a position to be handed over to the contractor upon award of work free from all encumbrances and encroachments.
 - (ii) Boundary of the plot(s) either constructed or demarcated and free from dispute.
 - (iii) Topographical Map of the site.
 - (iv) Geotechnical Data (which includes a study of foundation system of structures including private structures in the vicinity and is as per codal provisions for the proposed structures).
 - (v) Sources of the Bulk Services required as well as apporved waste dumps for waste disposal.
 - (vi) Mandatory (e.g. fire, lift, EI, WS and SI etc.) as well as optional (HVAC, STP, RO, UPS, DG, SPV, Solar water heating etc.) services for each building/structure required by the client and found feasible.
 - (vii) Statutory Approvals required.



- MODES OF BIDDING SYSTEM
- 7. The Preliminary Project Planning (PPP) is developed on the basis of above details and is submitted to the client prior to the submission of the Preliminary or Detailed Project Report and includes the following in respect of the buildings:
 - (i) Scope of work
 - (ii) Floor plans for building etc. and geometry for other works etc.
 - (iii) Elevations/Sections/Perspectives
 - (iv) Layout plan(s)
 - (v) 3-D Block view (s)
 - (vi) Area and/or Length statements as applicable
 - (vii) Specifications in detail for each structure/building and its services to be included in the DPR.
- 8. Soil investigation report is appended in the NIT for indicative purpose only.
- 9. The responsibility of investigations, designing, planning, procurement, construction, safety, quality, and risk of engineering lies with the contractor and the same is incorporated in the NIT.
- 10. If required, an enabling sanction to cover the cost of activities under para 6 and 7 above is obtained by submitting an Enabling Estimate.
- 11. The DPR (in respect of works in which detailed engineering including architectural design is done before sanction) or PPR (Where only conceptual engineering and architectural planning is done before sanction) based on the PPP submitted to the client includes, in addition to the PPP, the following:-
 - (i) Brief description of the Procurement Method (which also mentions the name of work).
 - (ii) The obligations on the part of the client department, CPWD, and the contractor with specified time limits for smooth execution of work.
 - (iii) Architectural, Structural and MEP services specifications along with special conditions for execution of these jobs.
 - (iv) In addition to the structures and their mandatory services (e.g. Internal Electrification, Fire Services, Lifts, Water Supply, Sewerage etc where applicable) the list of optional services desired by the client.
 - (v) Cost Estimate on simple Plinth Area or length basis where possible and detailed basis for others etc. is duly enhanced by applicable cost index or by adopting any other appropriate method as decided by NIT approving authority in case cost index is not applicable including provision for cost of design development by contractor and risk devolving on the contractor.
 - (vi) Provision is made separately for post completion operational cost (for 5 years or higher as agreed with client) and maintenance cost (beyond free maintenance period and upto 5 years or higher as agreed with client).
 - (vii) List of approved makes and models for components.
 - (viii) Tentative time frame for completion, post completion operation and maintenance.
 - (ix) List of three or more suitable agencies (proof check agencies) or parameters for the selection of the proof check agencies, tasked with checking and approving the design submitted by the contractor from engineering and architectural aspects.
 - (x) Procedure and time frame for approval of implications of changes in scope of work requisitioned by the client as compared to that indicated in the sanctioned PPR/DPR.



CHAPTER 4

- 12. For works undertaken by CPWD in the EPC mode, the Contractor takes the full responsibility for the design and execution and provisions of Para 64 (Technical Sanction) etc. of the CPW Departmental Code are not applicable. Only the scope, description of work, specifications, approved conceptual drawings for engineering and architectural planning, and schedule of quantities (if available) and as provided in the contract document, is kept on record and a No Objection Certificate is recorded by the Engineer in Charge for the drawings prepared and submitted by the contractor after proof check, before the same is released for execution.
- 13. The contractor gets NOC for the design from NIT approving authority for functional aspects and aesthetics and from the approved proof check agency for engineering and architectural considerations. The officers of the CPWD are responsible for broad oversight of these aspects without being expected to examine the design.
- 14. The tender document is approved by the authority competent to accord technical sanction for the work of similar value in the non-EPC mode (i.e. traditional item-measurement basis) by officer of Chief Engineer and above rank. NIT approving authority may incorporate special and particular conditions in the contract document as per specific requirements of the project.
- 15. For EPC contracts, the NIT approving authority ascertains the reasonableness of prices using analytical methods such as tendered amount for similar works whose tenders were accepted in the recent past, PAR rates duly enhanced by the current cost index and any other method approved by the NIT approving authority for ascertaining the reasonability of the tendered amount of the L1 bidder. The acceptance of financial bid is approved by the authority competent to approve the financial bids for the work of similar value in the non-EPC (traditional itemmeasurement basis) contracts.
- 16. Submission of measurements, in case of EPC contracts, is only for record purpose. Payment of bills of the contractor is made on basis of stage-wise completion of work as per terms of the contract.

SOP No. 4/7: NIT FOR WORKS INVOLVING SPECIALIZED E & M SERVICES (Refer Para 4.10 (3) vii)

1. Tender for Original building works:

- (i) Tender for original building works are invited from approved and eligible CPWD Composite category contractors.
- (ii) The Composite category contractor associates other agency(s) for execution of each of the specialized E&M work(s) notified under **List II A and List II B of Annexure -6** as detailed in para 5 of this SOP.

2. Tender for Original works comprising of specialized E&M works from List IIA and List II B of Annexure 6.

- (i) Tender for original works comprising of at least one of the specialized E&M works from List II A & List II B of Annexure 6 are invited from approved and eligible CPWD Composite category contractors.
- (ii) The Composite category contractor associates other agency(s) for execution of each of the specialized E&M work(s) notified under **List II A & List II B of Annexure 6** as detailed in para 5 of this SOP.



MODES OF BIDDING SYSTEM

3. Tender for Stand alone or any combination of original E&M works from List II B of Annexure- 6.

- (i) Tender for stand alone or any combination of original E&M works from **List II B of Annexure 6** are invited from approved and eligible CPWD Composite category contractors.
- (ii) The Composite category contractor associates other agency(s) for execution of each of the specialized E&M work(s) notified under List II B of Annexure 6 as detailed in para 5 of this SOP.
- 4. Tender for original Specialized E&M works from List II A of Annexure-6.
 - (i) Tender for every original specialized E&M works from **List II A of Annexure 6** are invited individually from specialized firms whether A/A & E/S has been received separately or jointly for these works.
 - (ii) The specialized firms satisfies the following eligibility criteria:

Experience of having successfully completed works during last seven years ending on previous day of last day of submission of tender

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 nearest convenient figure.

5. Association of Other Agency(s) for execution of specialized E&M works by the Composite Category contractor:

 The Composite contractor associates other agency(s) for execution of each of the work(s) under List IIA and List II B of Annexure 6 forming part of the tender, which fulfills the following eligibility criteria:

A. For works of List II A and List II B of Annexure 6 (Except DG Sets, HVAC, Sub-Station works):

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 nearest convenient figure.

B. For works of DG Sets, HVAC, Sub-Station works:

Three similar works each of value not less than 40% of the estimated cost put to tender with capacity of individual DG Set/Chiller/transformer being 80% of individual capacity (rounded off to next available higher capacity) of the equipment i.e. DG Set/Chiller/transformer proposed in NIT.



MODES OF BIDDING SYSTEM

CHAPTER 4

OR

Two similar 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 individual capacity (rounded off to next available higher capacity) of the equipment i.e. DG Set/Chiller/transformer proposed in NIT.

OR

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

All amounts rounded off to a nearest convenient figure.

- Eligibility criteria of each such agency to be associated are set out in the tender documents.
- 2. The Composite category contractor is also be eligible to carry out himself/herself any or all of these works without associating any specialized agency provided:
 - (a) He fulfills the prescribed eligibility criteria respectively for these work(s). OR
 - (b) He directly procures the equipment of approved make from manufacturer and gets it installed from authorized agency/service provider of the manufacturer or specialized agency as per criteria mentioned in NIT.
- 3. The Composite Contractor and the associated specialized agencies is give required affidavit to confirm their association.
- 4. Tender accepting authority approves the change of Sub-Agency in case it is required during the currency of the contract.

Notes:

A. DG set:

- Suitable conditions are to 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 is carried out in the work shop of OEM/OEA only.
 - (c) At the time of submission of tender document the contractor is 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.



CHAPTER 4

MODES OF BIDDING SYSTEM

- (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 is carried out during the guarantee period by the authorized service provider of engine manufacturer
- The tenders for DG Sets to be installed in VVIP Complex or buildings
 of national importance / prestige is invited from OEA/OEM only with prior
 approval of ADG or any other authority notified by Directorate. The firm
 has to be OEM/OEA for the highest capacity of DG Set proposed to be
 installed.

B. For Specialized E&M Original Works and other original E&M Works:

- It is stipulated in the NITs of Specialized E&M original Works and other original E&M Works, where ever required, that the lowest tenderer is submit, along with the performance guarantee after the acceptance of tender, an undertaking from the OEM regarding:
 - (a) Authorization certificate.
 - (b) The OEM is unconditionally support the lowest tenderer technically throughout the execution of contract as well as for Maintenance/ Comprehensive Maintenance Contract for the useful life of the system, and
 - (c) OEM is provide all the spares required for healthy functioning of the equipment for at least seven years from the date of supply of equipment.
- The condition that the specifications are vetted by the manufacturers for the specialized E&M works is not be kept in the NITs as it amounts to restriction of competition.
- NIT approving authority is include more number of approved makes (not limiting to 3 nos. only) in the NIT, while procuring items of general nature for which a large number of good manufactures are available in the market.
- 4. No condition is incorporated in the NIT's regarding visits of CPWD 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 is incorporated in the NIT regarding inspection of equipments/ materials in the manufacturing unit located outside India without prior permission of MoHUA.

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.



MODES OF BIDDING SYSTEM

CHAPTER 4

SOP No. 4/8: Notice Inviting Tenders (NIT) in Single Bid System (Refer Para 4.10(3) viii)

- 1. Normal Standalone Works (i.e excluding Standalone Specialized and Emergent works)
 - (i) Tenders for normal standalone works estimated to cost upto tendering limit of CPWD Class I Composite category contractors is generally invited in Single Bid system. For other categories i.e Horticulture and Furniture, it shall be the tendering limit of Class -I contractors of these disciplines respectively).
 - (ii) Tenders are invited only from Contractors registered in CPWD in the appropriate class and category. However, the ADG or any other authority designated by the CPWD Directorate, may relax this provision for a specific period, he/she may consider it necessary and may allow tenders from contractors registered with the Railways/MES/BSNL, State PWDs (B & R) or the departments of State Governments dealing with (B & R) in appropriate class. These Non CPWD registered contractors have to fulfill the criteria of execution of works as below.
 - (a) Three similar works each of value not less than 40% of estimated cost put to tender (ECPT) or
 - (b) Two similar works each of value not less than 60% of ECPT or
 - (c) One similar work of value not less than 80% of ECPT (all amounts in (a), (b) and (c) are rounded off to a nearest convenient full figure), completed during last 7 years ending previous day of last date of submission of bids. Such tenders are then invited in 2/3 Bid system. Similar work is defined by the NIT approving authority keeping in view the CVC guidelines issued for wider participation. Guidelines on definition of Similar Work is given in Annexure -18. However, the NIT approving authority may modify the definition as per requirement and scope of work.
 - (iii) If works costing more than the tendering limit of Class II composite category contractors and upto the tendering limit of Class I composite category contractors are opened for Non CPWD registered contractors with approval of ADG or any other authority designated by the CPWD Directorate, then tenders are also opened to Class II contractors of CPWD. All the Non CPWD registered contractors as well as CPWD Class II category contractors submit eligibility documents of executing Similar works as mentioned at S. No (ii) above.

(Note: For other categories i.e Horticulture & Furniture it, shall be the tendering limit of Class-II and Class-I contractors respectively of each discipline).

- (iv) The NIT includes: Form CPWD -6, CPWD 7/8 including schedule A to F, Standard General Conditions of Contract for CPWD 2014 or latest edition, with all amendments/ modifications as applicable, General/specific conditions, specifications and schedule of quantities applicable to the work.
- (v) Notice Inviting Tenders is prepared in Standard Form, serially numbered and maintained in a proper register given in **Annexure -19**
- (vi) The units are specifically mentioned in words for example "Per hundred sq. meter" and not 100 sq. meter".
- (vii) Each page and the correction slips, as well as other corrections and modifications made in the NIT papers, are numbered and signed by the NIT approving authority or by an officer not below the rank of EE as designated by the NIT approving authority.



CHAPTER 4

MODES OF BIDDING SYSTEM

- (viii) All the pages/forms, whether printed or otherwise, are ensured to be clear, legible and unambiguous.
 - (ix) The NIT on CPWD Form 7 provides that the Contractor should quote the percentage above or below upto two places of decimal only.
 - The time period for completion of work is kept reasonable and decided by the NIT approving authority keeping in view the quantum of work, requirement of user department, geographical conditions of the site and other constraints with due consideration to the availability of site and structural design in phases if any, as well as the technical requirements and particular site conditions and other factors possibly affecting the work viz rainy season, depth of sub soil water, special features of the buildings, spread of construction area, access to the site, law and order issue, type of foundation, importance/ urgency of the work, mechanization involved in the work, availability of construction materials/machines etc.
 - (xi) The notice inviting tender stipulates minimum requirement of technical staff depending upon the nature and requirement of the work. Guidance is taken from **Annexure -20.**
 - (xii) Specific reference to the number of correction slips as well as the year of the Schedule of Rates and CPWD Specifications, is made in NIT.
 - (xiii) Physical milestones are described in the table of milestones in Schedule F of CPWD Form 7/8. The Milestones are fixed, as far as possible, considering the critical activities for optimal use of the resources and completion of work in minimum time, unless sectional or part completion is necessary. In case of high uncertainties in physical milestones, financial milestones are provided.
 - (xiv) Mode of deposit of Earnest Money is mentioned in NIT
 - (xv) Necessary information is given in the NIT regarding the competent authority to sign the Agmt, execute the work, make correspondence with contractor, EOT etc and all other information required in the Schedule A to F of CPWD Form 7/8.
 - (xvi) For maintaining uniformity in works, following deviation limits is stipulated by the authorities approving the NIT's for operation of Clause 12 of the GCC unless there are specific reasons to adopt different deviation limits for a particular work:
 - (a) For construction works
 - (i) Superstructure & foundation work (except items mentioned in earthwork sub head in DSR and related items)30%
 - (b) For construction works of time bound, urgent and emergency nature
 - (i) Superstructure & foundation work (except items mentioned in earth work sub head in DSR and related items)50%
 - (ii) Items mentioned in earth work sub head in DSR and related items100%
 - (c) All Maintenance Works50%



MODES OF BIDDING SYSTEM

CHAPTER 4

- (xvii) The NIT approving authority makes necessary changes and adds additional conditions in the NIT as per requirement of work.
- (xviii) For Tender Notice in CPWD 6, Information & Instructions to bidders etc in **Annexure -21** & **22** is referred for guidance.

2. Composite works

- (i) Tenders for composite works estimated to cost upto Tendering limit of Class I Composite category contractors is invited in Single Bid system, if pre qualification is not considered necessary. In such cases tenders are invited only from contractors registered in CPWD in the appropriate class and category.
- (ii) The NIT includes the following:
 - Part A:- CPWD -6, CPWD 7/8 including Schedule A to F for major component of the work, Standard General Conditions of Contract for CPWD 2014 or latest edition of the same, with all amendments/modifications as applicable.
 - Part B:-General/specific conditions, specifications and schedule of quantities applicable to major component of the work.
 - Part C:- Schedule A to F for minor component(s) of the work, (where competent authority for action under clause 2 and clause 5 shall be the same as mentioned in schedule A to F for major component) General/specific conditions, specifications and schedule of quantities applicable to minor component/components of the work.
- (iii) Apart from Civil work, components of Internal & External electrical works and Horticulture work are included in NIT.
- (vi) Entire work under the scope of composite tender is executed under one agreement.
- (v) For Specialized nature of works included in the NIT of the Composite work, eligibility criteria for specialized agencies is stipulated.
- (vi) Paras at S. No 2, 3, 5 to 18 of Normal standalone works mentioned above are analogous for Composite works also.

3. Common Procedure for Para 1 and 2 above:

- (i) NIT to be prepared only after Detailed Estimate is technically sanctioned.
- (ii) Only one of the alternative regarding availability of site to be retained.
- (iii) The Schedule A to F of GCC (to be part of NIT) to be carefully filled as per requirement and nature of work.
- (iv) The NIT document must be properly sealed to prevent any tampering.
- (v) No condition is incorporated in the NIT regarding visit of CPWD officers outside the country without prior permission of Ministry of Housing and Urban affairs, or within the country to inspect equipments/ materials/stores where such expenditure is to be borne by the contractor. In case any such condition regarding inspection outside India is incorporated in NIT without approval of MoHUA, it will tantamount to deliberate violation of instructions and will attract disciplinary action against the officer approving the NIT.
- (vi) Recovery rate for non deployment of technical staff to be specified.



CHAPTER 4

MODES OF BIDDING SYSTEM

- (vii) Base price of materials for Clause 10 CA, if applicable, to be filled up.
- (viii) For works costing more than the T/S power of SE/magnitude as notified from time to time by the CPWD directorate, a CPM based Activity – Time Programme (CPM-ATP), for completion and occupation is prepared. The stipulated time and Milestones is, preferably be derived from the CPM-ATP so finalized.
- (ix) The arbitration clause i.e. clause 25 in the GCC 7/8 is for domestic arbitration. In case any foreign party is permissible as contractor, clause 25 needs to be suitably amended by the NIT issuing authority clearly providing for seat of arbitration, governing law of contract and the government law of arbitration agreement, as it is an international commercial arbitration. Also care has to be taken regarding the enforcement mechanism in the country where the assets of the contractor would be with reference to seat of arbitration and where award is made as per New York Convention, 1958.
- (x) Care to be taken to ensure that there are no conflicting provisions in the NIT conditions.
- (xi) Clause 2A i.e Bonus Clause may be incorporated in the NIT as per instructions issued by the CPWD Directorate from time to time.
- (xii) Condition of refund of 80% PG or quantum as intimated from time to time, on substantial completion of work is to be made part of NIT as per discretion of the NIT approving authority. However, in case of contracts involving maintenance of building and services/ any other work after construction of same building and services/ other work, then 50% of Performance Guarantee shall be returned to the contractor, without any interest after recording the Provisional Completion certificate.
- (xiii) The definition of "Similar Work", wherever applicable, is to be spelt out clearly in a clear and unambiguous manner by the NIT approving authority. While deciding the Similar work, the CVC guidelines are to be kept in mind for wider participation.
- (xiv) Clauses not relevant as per requirement of the work to be struck off to avoid contractual implications/disputes.
- (xv) All relevant amendments issued by the CPWD Directorate are to be made part of NIT and the already existing provisions to be struck off or modified as per amendments to prevent duplicacy and contractual implications.
- (xvi) Levy of compensation under Clause 2, if any, and rescheduling of milestones as stipulated under clause 5, will be decided by an officer not below the rank of SE or any other officer as notified by CPWD Directorate from time to time.

SOP NO. 4/9: Notice Inviting Tenders (NIT) in Two/Three Bid System (Refer Para 4.10 (3) viii)

1. Normal Standalone Works

- (i) Tenders above the tendering limits (excluding Standalone Specialized and Emergent Works) of Class I Composite category contractors are invited in Two/Three Bid System. For other categories i.e Horticulture, Furniture it shall be the tendering limit of Class -I contractors of these discipline respectively.
- (ii) Enlisted CPWD contractors above Class I Composite category are allowed to participate upto their tendering limits without submitting Eligibility documents. Firms and Contractors,



MODES OF BIDDING SYSTEM

CHAPTER 4

not registered with CPWD are required to submit Eligibility documents of executing Similar works as follows:

- (a) Three similar works each of value not less than 40% of Estimated cost put to tender (ECPT) **or**
- (b) Two similar work each of value not less than 60% of ECPT or
 - One similar work of value not less than 80% of ECPT.
 (all amounts in (a), (b), (c) are rounded off to a nearest convenient full figure), completed during last 7 years ending previous day of last date of submission of bids." Guidelines on definition of "Similar Work" is given in **Annexure -18**. However, the NIT approving authority may modify the definition of "Similar Work" as per requirements scope of work and CVC guidelines.
- (iii) In case, works costing more than the tendering limit of Class II Composite Category contractors and upto the tendering limit of Class I Composite category are opened for Non CPWD registered contractors with approval of ADG or any other authority designated by the CPWD Directorate, then tenders are also opened to Class II contractors of CPWD. All the Non CPWD contractors as well as CPWD Class II category contractors are required to submit eligibility documents of executing Similar works as mentioned at S. No (ii) above.

(Note: For other categories i.e Horticulture, Furniture it shall be the tendering limit of Class-II and Class-I contractors respectively of each discipline).

- (iv) For Tender Notice in Form CPWD 6, Information & Instructions to bidders, Annexure -21 &
 23 is referred for guidance. For Guidelines on fixing eligibility criteria for two/three bid system,
 Annexure -24 is referred.
- (v) Other provisions are analogous to **S. No. iv to xvii** of normal standalone work given in **SOP No. 4/8**.
- (vi) In case of lump-sum tenders, the detailed drawings and specifications, and the cost of various items forming part of the sanctioned estimate of the work are correctly assessed and authenticated by the NIT approving authority to form part of the Notice Inviting Tenders.

2. Specialized Works

- (i) Tenders for specialized works of any value are invited in Two/Three Bid System for all types of Building and Road works, Furniture works, Horticulture works, mentioned in list of Specialized works given in **Annexure - 6** including any other work declared as specialized work by the Competent authority, as notified from time to time by CPWD Directorate as per provision 3.1.3 of Works Manual 2019.
- (ii) In case of specialized works, tenders are invited from specialized agencies as well as CPWD and Non CPWD contractors who possess the necessary eligibility criteria/ experience for executing the specialized works.
- (iii) For issuing Tender Notice in CPWD 6 and for Information & Instructions to bidders etc in **Annexure -21 & 23** is referred. Guidelines on fixing eligibility criteria for two/three Bid system are given as **Annexure -24**.
- (iv) Other conditions are analogous to the condition **S. No. iv to xvii** of Normal standalone works mentioned in **SOP No. 4**/8.
- (v) For works involving Specialized E & M works, SOP No. 4/7 is referred.



CHAPTER 4

MODES OF BIDDING SYSTEM

3. Composite Works

(i) The NIT includes the following:

Part A:- CPWD -6, CPWD - 7/8 including Schedule A to F for major component of the work, Standard General Conditions of Contract for CPWD 2014 or latest edition with all amendments/modifications as applicable.

Part B:-General/Specific conditions, Specifications and Schedule of quantities applicable to major component of the work.

Part C:- Schedule A to F for minor component of the work where competent authority for action under clause 2 and clause 5 shall be the same as mentioned in schedule A to F for major component) General/specific conditions, specifications and schedule of quantities applicable to minor component/components of the work.

- (ii) Apart from Civil work, components of all Internal and External electrical works, Horticulture work, if any, are also included in NIT.
- (iii) Entire work under the scope of composite tender is executed under one agreement
- (iv) For specialized nature of works present in the composite work, eligibility criteria for specialized agencies is stipulated.
- (v) For Tender Notice in CPWD 6, Information & Instructions to bidders etc in Annexure -21 & 23 is referred Guidelines on fixing eligibility criteria for Two/Three bid system are as given in Annexure -24
- (vi) Other conditions are analogous to the **S. No. iii, v to xvii** of Normal standalone works mentioned in **SOP 4/8.**

4. Common Procedures for I, II and III above

- (i) NIT to be prepared only after Detailed Estimate is Technically sanctioned.
- (ii) Tenders upto tendering limit of Class I contractor may be called in Two/Three Bid System after approval of the competent authority designated for this purpose by the Directorate.
- (iii) The tenders are to be invited only after the NIT approving authority approves the NIT papers.
- (iv) Only one of the alternative regarding availability of site to be retained.
- (v) The Schedule A to F of GCC to be carefully filled as per requirement of work.
- (vi) The NIT documents must be properly sealed to prevent any tampering.
- (vii) No condition is incorporated in the NIT regarding visit of CPWD officers outside the country without prior permission of Ministry of Housing and Urban affairs, or within the country to inspect equipments/ materials/stores where such expenditure is to be borne by the contractor. In case any such condition regarding inspection outside India is incorporated in NIT without approval of MoHUA, it will tantamount to deliberate violation of instructions and this will attract disciplinary action against the officer approving the NIT.
- (viii) The definition of Similar work is spelt out clearly in a clear and unambiguous manner by the NIT approving authority. While deciding the Similar work, the CVC guidelines are to be kept in mind for wider participation.
- (ix) Recovery rate for non deployment of technical staff to be specified.



MODES OF BIDDING SYSTEM

CHAPTER 4

- (x) Base price for clause 10 CA, if applicable, to be filled up.
- (xi) For works costing more than the the power of SE or magnitude as notified from time to time by the CPWD directorate, a CPM based Activity – Time Programme (CPM-ATP), for completion and occupation is prepared. The stipulated time and Milestones is, preferably be derived from the CPM-ATP so finalized.
- (xii) The arbitration clause i.e. clause 25 in the GCC 7/8 is for domestic arbitration. In case any foreign party is permissible as contractor clause 25 needs to be suitably amended by the NIT issuing authority clearly providing for seat of arbitration, governing law of contract and the government law of arbitration agreement, as it is an international commercial arbitration. Also care has to be taken regarding the enforcement mechanism in the country where the assets of the contractor would be w.r.t. seat of arbitration where award is made as per New York Convention, 1958.
- (xiii) Applicability of Clause 2A i.e Bonus clause may be incorporated as per instructions issued by the CPWD Directorate from time to time.
- (xiv) Condition of refund of 80% PG or as intimated from time to time on substantial completion of work is to be made part of NIT as per discretion of the NIT approving authority.
- (xv) The NIT approving authority can make necessary changes and add additional conditions as per requirement of work. Care to be taken to ensure that there are no conflicting provisions in the NIT conditions.
- (xvi) Clauses not relevant as per requirement of the work to be struck off to avoid contractual implications.
- (xvii) All amendments issued are to be made part of NIT and the already existing provisions to be struck of or modified as per amendments to avoid duplicity to avoid contractual implications.
- (xviii) The call of tenders involves following stages:
 - (i) Stage I- Approval of definition of similar work.
 - (ii) Stage II- Approval of technical specifications.
 - (iii) Stage III- Approval of names of eligible contractors.
 - (iv) Stage IV- Revision of financial bids, if required with recorded reasons.
 - (v) Stage V- Acceptance of financial bids.

The NIT approving authorities have full powers to approve the above stages.

SOP No 4/10: Debarment of Contractors with blemished record (Refer para 4.19)

- If the Engineer in Charge receives adverse report against any Non CPWD contractor, either
 from the department in which he is enlisted, or from any other department, then participation of
 such contractors is stopped on the basis of such report and tenders of such contractors are not
 considered.
- The Executive Engineer/Engineer in Charge communicates the information to the next higher authority not below the rank of SE for record and approval on the action taken or proposed to be taken by him.



CHAPTER 4

MODES OF BIDDING SYSTEM

- 3. On receipt of a case of adverse performance/misbehavior/threatening of site staff or any other such reasons, the CE/Chief Project Manager/Project Manager/ any other authority notified by CPWD Directorate from time to time issues show cause to such contractors and after considering their reply, he has full powers to debar non-CPWD contractor for a period as decided by him. Such debarred non-CPWD contractor are ineligible to take up any work in CPWD, MoEF, PWD (Govt. of Delhi) etc. all over India during the period of debarring.
- 4. In case a contractor is removed from the approved list of contractors maintained by CPWD for any reason including that of inactivity, such a contractor is not eligible to take up works in CPWD on the basis of his enlistment in any other Engineering Department. However, if the NIT approving authority not lower than the rank of Superintending Engineer is satisfied that it is in the interest of the Government to allow a contractor who has been removed from the approved list for reason of inactivity, to participate in the tendering process for getting competitive tenders, he may do so.



SOP No 5/1: Mode of Deposit Earnest Money (Refer Para 5.1.3 (1))

- 1. The Earnest Money is accepted only in the following forms:
 - (i) In cash upto Rs.10,000.
 - (ii) Treasury challan.
 - (iii) Deposit at Call Receipt of a Scheduled Bank guaranteed by the Reserve Bank of India.
 - (iv) Banker's cheque of a Scheduled Bank.
 - (v) Demand Draft of a Scheduled Bank.
 - (vi) Fixed Deposit Receipt (FDR) of a Scheduled Bank.
- 2. A part of earnest money is acceptable in the form of bank guarantee also. In such cases 50% of earnest money or Rs. 20 lakh whichever is less, will have to be deposited in shape prescribed above and balance can be accepted in form of bank Guarantee issued by a scheduled bank.
- 3. The FDR is pledged in favour of the tender inviting authority. It is in the tenderer's own interest to keep the FDR valid as long as it is required.
- 4. If the banks are closed on the last date of submission of tenders, the date is postponed suitably.
- 5. When it is required that the earnest money is deposited in the Treasury/accredited Bank direct by the contractor, the Divisional Officer/Sub-Divisional officer prepares Challan (Form TR 6/GAR 7 in-duplicate). The classification is correctly noted in the column "Head of Account". The earnest money for individual works are classified under the Head "Revenue Deposits". The Challan in-duplicate is handed over to the contractor who pays the amount into the treasury or the Bank on behalf of the Divisional Officer/Sub- Divisional Officer. The receipted challan is sent by the contractor along with the tender.
- 6. The MSME firms registered in NSIC under PP policy are exempted from payment of EMD for supply of goods and services only.
- 7. For bid submission the contractor deposits the original EMD in the office of Engineer in Charge AE/DOH/ADH inviting bids or division office of any Engineer in Charge within the period of bid submission. The EMD documents is issued from the place in which the office of receiving division office is situated.

The Bank Guarantee submitted as a part of Earnest Money is be valid for a period of 90 days for single bid works and 180 days for two bid system or more from the date of submission of the tender.

SOP 5/2 : Refund of Earnest Money (Refer Para 5.1.4 (1))

1. The earnest money given by all the tenderers except the lowest tenderer is refunded immediately after the expiry of stipulated bid validity period or immediately after acceptance of the successful bidder, whichever is earlier. Entry of Demand Draft/Bankers's cheque received as earnest money with the tenders is kept in the Tender Opening Register, and these need not be deposited in the bank except for the lowest tenderer.



2. The Engineer in Charge periodically reviews 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 challans endorsed for refund, the challans are sent to them by Registered Post within a week after expiry of the prescribed period. It is the responsibility of Divisional Accountant to ensure that Earnest Money is refunded to unsuccessful tenderers in time specified above.

- 3. In case where the earnest money is deposited direct into the Treasury or Bank, and receipted Challan is submitted along with the tender, the amount is refunded in the case of unsuccessful tenders by making requisite endorsement on the original challan as per Rule 630 of the Central Treasury Rules.
- 4. In the case of the successful tenderer, the transfer of the amount to the credit of the concerned CPWD Division is got affected as per rule 631 of Central Treasury Rules, and the amount is then be noted on both sides of the cash book as receipt from the contractor creditable to CPWD and payment into Treasury. The amount is included in the amount of the consolidated Treasury Receipts for the month to be obtained from the Treasury Officer.
- 5. The earnest money deposits of Civil Departments is 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 is made.
- 6. If the departmental officer desires that an item of earnest money deposit, instead of being refunded, be carried to the credit of the Government in the Consolidated Fund, he/she records the fact on the Deposit Receipt and in his/her initial records, and requests the Accounts Officer to effect necessary adjustment in Accounts.

SOP No. 5/3: Justification of Tenders (Refer Para 5.1.6)

- Justification Statement is prepared for checking the reasonability of rates before opening of tender based on the market rates of material and labour etc. prevailing on the last date of submission of tender.
- 2. Market rates of labour, materials, cartage etc. are collected. Analysis of Rates of different Scheduled items in the Schedule of Quantity are prepared as per standard CPWD Analysis of Rates. Wherever the work of Flyovers, Bridges, Grade Separators and Highways/Hill Roads/Major Roads are involved, the justification is prepared on the basis of analysis of rates adopted in MORTH Standard Data Book. The contractors profit and overheads is also followed as provided in MORTH standard data book.
- 3. The major items of the entire Schedule costing at least 90% of the overall estimated cost put to tender are analyzed, to work out the justified percentage on this basis. The items to be considered for analysis of rates are selected 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 cost put to tender is reached.
- 4. Any other suitable method for working out the justification may also be adopted, depending upon the kind and complexity of work. The adoption of a particular method is decided judiciously by the authority competent to accept the tenders.
- 5. In case of tenders to be accepted by the Central Works Board/RWB, the adoption of a particular method is decided by the concerned Chief Engineer/Chief Project Manager/ Project Manager or any other authority as notified by the CPWD Directorate. For justification if base rates of materials have been specified under Clause 10 CA, then base rates of the material as stipulated under clause 10 CA are considered for justification.



6. Effect of taxes in justified cost is worked out as per circulars issued by the CPWD Directorate from time to time and available on the CPWD Website.

- 7. EPF & ESI contributions paid to the contract workers is not to be added in the analysis of rates while preparing market rate justification. It is reimbursed on actual basis for all contracts on submission of requisite documents by the contractor..
- 8. Contractors Profit & Over Heads (CP & OH) @ 15% is included in the analysis of rates of all Schedule & Non-Schedule items pertaining to Civil, Electrical and Horticulture works etc. for the purpose of estimation, justification and for payment of Extra items/ Substituted items/ Deviated quantities of items required to be sanctioned on market rates beyond deviation limit etc. carried out under the contract wherever applicable.
- 9. CP & OH@ 15% includes Contractor's Profit @ 7.5 % and the Contractor's Overhead @ 7.5 % to account for the following factors :-
 - (i) Cost of Engineering Establishment deployed by the Contractor.
 - (ii) Cost of effort in arranging Tools and Plants (T&P) and heavy machinery which have not been considered in the analysis of rates for the items included in the Schedule of Quantities of the work.
 - (iii) Cost of providing cleaner environment at site & labour welfare facilities.
 - (iv) Cost of Quality Assurance set up enhancing testing lab.
 - (v) Cost of Office set up ncluding engagement of necessary staff for computerized billing etc.
 - (vi) Any expenditure incurred on Cost of Earnest Money/Performance Guarantee/ Security Deposits.
 - Therefore no extra cost is to be added in justification on account of various factors mentioned above.
- 10. However, extra cost likely to be incurred by contractor on account of any special conditions incorporated in NIT which has financial bearing, or on account of any other factor having financial bearing, which are not covered or considered above and in the analysis of the rate of the items included in the BOQ of the work, are added on actual basis or by a rough approximation although not with so much exactitude if actual analysis is not possible.
- 11. No extra cost for T&P is to be added in Standard Analysis of Rates prepared either to work out estimated cost of item or market rate justification of the item for E&M works.

SOP No. 5/4: Procedure for Conducting Negotiations (Refer Para 5.1.8 (2))

Negotiations are not normally conducted with the tenderers, but in case where it becomes
necessary to do so, negotiations are restricted only to the 1st lowest tenderer under exceptional
circumstances. In case if L-1 withdraws or found ineligible after opening of tenders, tenders are
recalled invariably. The Officer not below the rank of CE or any other Officer designated by the



CPWD Directorate, negotiates with the lowest tenderer in case of tenders beyond the acceptance powers of CE. If negotiations are required in the case of tenders to be sent to the Central Works Board. Director General, Special DG or the Additional Director General, as the case may be, for their/ his/ her approval, the Chief Engineer negotiates with the lowest tenderer before sending the tenders to them.

- 2. The justification and details of such negotiations are duly recorded and documented without any loss of time. Convincing reasons are recorded by the authority recommending negotiations.
- 3. It is necessary for tender accepting authority to obtain prior approval of next higher authority (Chief Engineer being the highest accepting authority of a tender, approval of officer not beyond level of ADG is necessary for tender of any amount) whenever negotiation become necessary for reasons of urgency due to time constraint in execution of works of urgent nature and when time is not available for rejection and recall.
- 4. The negotiations by the accepting authority is permitted only in following situations:
 - (i) For clarification and confirmation on any error/ambiguity in the nomenclature/rate of item(s) of work that is possible to set right after negotiation with the lowest tenderer without any obvious disadvantage to other tenderers/Govt.
 - (ii) In case of receipts of higher rates on recall of a tender which was rejected on earlier occasion for reasons of higher rates than the justified rates including the allowable variations permitted.

SOP No. 5/5 : Acceptance of Tenders (Refer Para 5.1.9)

- In case amount of lowest tender falls within financial powers of ADG/RWB/CWBd but negotiated amount falls within powers of CE or ADG or RWB then tenders are to be accepted by CE under his own authority or with prior approval of the competent authority decided by negotiated amount of lowest tender received.
- 2. Tender to be accepted by T/S authority with prior approval of CWB/RWB/ADG and also CE/ CPM for PM of SE grade. In case amount of lowest tender falls within financial powers of CE/ADG/ RWB/CWB but negotiated amount falls within powers of PM of SE grade or CE or ADG or DG then tender is accepted by PM of SE grade under his/her own authority or with prior approval of the competent authority decided by negotiated amount of lowest tender received.
- 3. Where technical bids are also invited, the same would fall within the competence 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 of any if the proposed model/brand is cheaper.
- 4. Whenever the Engineer-in-Charge is on tour or on casual leave, award letter, after the tender has been accepted by the competent authority, is issued by the A.E. (P) clearly indicating that this letter when countersigned by Engineer-in-Charge will form part of the agreement.

SOP NO. No. 5/6: Responsibilities of Officers For Scrutiny Of Tenders (Refer Para 5.1.10)

1. The tender accepting authority makes detailed arrangements for the proper check of tenders(in case of manual tenders) and the comparative statement. This work is carried out under the control of the Financial Officer in the Chief Engineer's Office, SE(P) in case financial officer is not available, Engineer in Charge (Planning)/ AE(P) in Superintending Engineer office, Divisional



Accountant in Division Office and by Sub-Divisional Clerk in Sub-Division Office or by Officers as per the planning setup notified by the CPWD Directorate from time to time. The duties and responsibilities of the Divisional Accountant or any other Officer as notified by the CPWD Directorate from time to time, mentioned in the subsequent paras are deemed to be the duties of the above-mentioned officers under whose control the scrutiny of tenders is being done.

- 2. The Divisional Accountant/ the concerned officer mentioned above makes satisfactory and efficient arrangements for checking the computed tenders(in case of manual tenders). He/she conducts personally a test check of computed and checked tenders(in case of manual tenders) including the comparative statement, sufficient to satisfy himself/herself reasonably that the checking work has been properly done. He/she records a note on the comparative statement that as far as he/she could ascertain from such test check as he/she had been able to carry out, the statement is accurate.
- 3. All officers including the Finance Officer to the Chief Engineer are responsible to coordinate the processing of the tenders keeping a close watch on the validity of the tenders so that the tenders are decided in time and suitable action is taken before expiry of its validity.
- 4. In case of composite tender the EE while forwarding the tender to the Chief Engineer sends a copy of comparative statement of schedule related to other disciplines to the concerned EE and SE, who send their recommendation along with justified rates etc. to the Chief Engineer within 5 working days of receipt of the paper.
- 5. Forwarding/Scrutiny/Processing of tenders is to be done by concerned Officers well in time to ensure that the timelines as laid down in **Annexure -17** for scrutiny of tender are strictly followed. If any officer is unable to follow the same, he/she invariably gives reasons for the same while forwarding the tenders to the authorities competent to accept it.
- 6. For Two Bid/Three Bid system, a period of 30 days from the date of opening of Technical Bid is provided for scrutiny and finalization of Technical Bids.

SOP No. 5/7:

- Acceptance of Tenders by the Central Works Board (Refer Para 5.1.11)
 - (i) Tenders above the power of acceptance of the Regional Works Board are submitted to the Central Works Board for their consideration. These tenders are accepted by the respective Chief Engineers /Chief Project Manager/ Project Manager or any other authority as notified by the CPWD Directorate from time to time, with the prior approval of the Board.
 - (ii) The tenders submitted to the Central Works Board for consideration and approval are supported with detailed information as per the proforma laid down in **Annexure -25**. Ten legible copies of the proforma along with the comparative statement, NIT, tenders and other relevant documents are submitted by the Chief Engineer /Chief Project Manager/ Project Manager or by any other authority as notified by the CPWD Directorate from time to time to the Central Works Board.
 - (iii) Tenders are forwarded and presented to CWB by the concerned Chief Engineer/Chief Project Manager/Project Manager or by any other authority as notified by the CPWD Directorate from time to time . The CE/CPM/PM gives a copy of the documents forwarded to CWB to the concerned ADG/Spl. DG. The ADG gives his/her comments and recommendations immediately to CWB under intimation to Spl. DG. The concerned Special DG and Chief Engineer/Chief Project Manager/ Project Manager are invitees in the meeting of Central Works Board for the matter of acceptance of tenders and other miscellaneous matters related to the region. In absence of Special DG, the concerned ADG is invited in the meeting of Central Works Board.



2. Acceptance of Tenders by the Regional Works Board (Refer Para 5.1.11)

- (i) The Regional Works Board are located as follows: two at Delhi (for Delhi & Northern Region), one each at Mumbai, Kolkata and Chennai for Mumbai, Kolkata and Chennai regions respectively.
- (ii) Tenders are forwarded and presented to RWB by the concerned Chief Engineer/ Chief Project Manager/Project Manager. The CE/CPM/PM gives a copy of the tenders forwarded to RWB to the concerned ADG. The ADG gives his/her comments and recommendation immediately to RWB.
- (iii) Tenders above the power of acceptance of the Addl. Director General are submitted to the Regional Works Board for their consideration. These tenders are accepted by the respective Chief Engineers/ Chief Project Manager/Project Manager with the prior approval of the Regional Works Board.
- (iv) The tenders submitted to the Regional Works Board for consideration and approval is supported with detailed information as per the proforma laid down in **Annexure -25**. Five legible copies of the proforma along with the comparative statement, NIT, tenders and any other relevant documents are submitted by the Chief Engineer/ Chief Project Manager/ Project Manager to the Regional Works Board.

SOP No. 5/8: Acceptance of Tenders in Anticipation of Revised Expenditure Sanction (Refer Para 5.1.12)

- 1. 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 is applied for as soon as such an excess is foreseen. An assurance is 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 are allocated before the liability is incurred. The tenders are invited if the exigencies of work so demand in anticipation of fulfillment of the above conditions. The tender accepting authority, however, ensures fulfillment of these conditions before acceptance of tenders.
- 2. The CPWD Officers at appropriate levels are authorized to accept tenders in anticipation of revised expenditure sanction by the competent authority subject to the following conditions and limits: (i) The approval in principle has been given by the Client department to go ahead with the work (ii) The tendered rates are certified as reasonable by the CPWD officer accepting the tender. (iii) The CPWD Officer accepting the tender, also certifies that the scope of the work, as approved by the competent administrative authority, remains unchanged.
- 3. The CPWD Officer accepting the tender involving extra expenditure immediately reports 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.
- 4. The revised estimate for the work is submitted within a month of acceptance of the tender to the competent administrative authority.

SOP NO. 5/9: Co-ordination at Construction Stage (Refer Para 5.6.3)

The T/S Authority of the project holds regular coordination meetings with other concerned officers
of respective disciplines (including horticulture) to review the progress and to sort out any
hindrance or bottleneck in the work.



2. He/She also invites 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 interdepartmental issues, if any.

- 3. He/She issues regular minutes of such meetings to all concerned.
- 4. Any change in the architectural drawings found necessary during the execution of work due to any practical difficulty etc., is immediately brought to the notice of the Client and concerned Architect Unit/Consultant for approval.

SOP NO. 5/10: Responsibility of Officers for Quality of Work (Refer Para 5.6.4)

- To ensure that materials duly approved are used in the work, samples of various materials are approved by the Engineer in Charge and by NIT approving authority not below the rank of SE for projects above the powers of EE..
- 2. Wherever necessary the above mentioned authorities approve the sources for respective materials.
- 3. Approved samples of materials are signed by the approving authority and the contractor and preserved till the end of the project.
- 4. Samples of various materials, fittings are approved well in advance and displayed at sites of works with make and name of the manufacturer/supplier.
- 5. The material non conforming to specifications are promptly rejected and removed from site.
- 6. It is incumbent upon the Engineer in Charge to keep a watch over regular testing of materials before making payment at the stage of each running bill. For this purpose, a proforma as per **Annexure -54** is prescribed.
- 7. Samples for tests are taken mostly by the Junior Engineers, or some by the Assistant Engineers.
- 8. Samples for 10% of mandatory tests are collected by the Engineer in Charge. 10% of the field tests are got done by the Engineer in Charges in their presence.
- 9. A Guard file is maintained at all work sites, containing copies of all inspection reports to-date.
- 10. Site Order book, Record of tests,, etc. are put up for entries and review to every inspecting officer. Similarly online Inspection register are reviewed by the inspecting officers
- 11. The inspecting officers of the rank of Superintending Engineer and above not only confine themselves to review of progress, coordination and general matters, but also inspect the work from quality Assurance aspects.
- 12. The Engineer in Charge invariably reviews and signs the guard file of earlier inspections, Site Order Book, Register of tests carried out etc.

13. Checklist

- (i) As and when any important item is taken up for execution, the Junior Engineer/Assistant Engineer should go through the specifications and invariably make a checklist.
- (ii) This checklist is got approved from the Engineer in Charge, and is shown to the inspecting officers.
- (iii) 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.
- (iv) Sample checklists for items of concrete for raft, columns/beams/slabs, water supply lines, brickwork and plastering are given in **Annexure -26** for guidance.



- 14. To avoid dampness and leakage, the Engineer in Charges ensures that necessary 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.
- 15. The Engineer in Charge 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.
- 16. In respect of all works, the responsibility of various officers for checking of materials and workmanship is given in **Annexure -27**.

SOP No. 5/11: Responsibilities of Officers with regard to Labour Regulations (Refer Para 5.6.5)

- 1. Engineer in Charge ensures that the labour employed by the contractor is paid regularly as per prevailing labour laws, and that no arrears are allowed to accumulate on this account.
- 2. Engineer in Charge ensures submissions of prescribed returns by contractors and scrutinizes them to see that the contractor is duly fulfilling the conditions of the contract.
- 3. In case the Engineer in Charge finds it difficult to take action on the advice tendered by the Labour Officer under Contractor's Labour Regulations for any reason, he/she immediately reports the matter to his/her higher Authority for obtaining directions.
- 4. Engineer in Charge sees and ensures that labour provisions as per GCC are complied by the Contractor.

SOP No. 5/12 : Periodic Inspection of Works (Refer Para 5.6.6)

- 1. The various levels of field officers executing the work as well as CA/SA/Arch concerned with the work, mandatorily 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 Engineer in Charge draws a quarterly programme of inspection in respect of various works in his/her Division. The minimum number of inspections for each work are: 1 for every 2 bills for the works at his/her head-quarters, and 1 for every 3 bills for the works outside the headquarters. A copy of this programme is sent to his/her next higher authority.
- 3. Similarly an Officer not below the rank of SE draws a quarterly programme of inspection in respect of various works In particular, for contracts accepted by SEand above level officers, and for other important works, the programme for inspection is so drawn that the NIT approving authority inspects at least once at each of the following stages during the execution of each work:

(i) At SE's HQ Outside SE's HQ
(ii) Upto 3rd RA bill Upto 5th RA bill
(iii) 4th to 6th RA bill 6th to 10th RA bill

(iv) 7th to 9th RA bill 11th to 15th RA bill and so on

SOP No. 5/13: Monitoring of Cement and Steel and Other Materials and Check on their Consumption (Para 5.6.7)

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 is invariably prepared along with every running bill.



2. This is got signed from the contractor at the time of obtaining his/her signature on the running account bill so that he/she is aware of the basis on which the theoretical quantity of cement is worked out, and it is possible for the contractor as well as the Department to exercise a check over the consumption of cement during the execution of the work.

- 3. The theoretical quantity so worked out is 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 is properly explained both for less or more consumption by the Assistant Engineer, and the Engineer in Charge should go into such explanations and take remedial measures.
- 4. In order to have an effective control over the issue of cement, the following drill is observed:
 - (i) The cement godown(s) is properly and effectively double locked, keys of one of the locks remaining with the department and that of the other with the contractor.

(ii) Periodical checking of cement godown

The cement godown and the Cement Register is checked by the Assistant Engineer/ Engineer in Charge 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 Assistant Engineer/Engineer in Charge.
- (b) Whenever they visit the site of work in case of works that are located outside the Sub-Divisional/Divisional headquarters, and
- (iii) As an additional safeguard, the following instructions are followed:

(a) Display of position of cement outside the store

For all works costing more than Rs. 10 lakhs and using cement, the contractor is distinctly display a board at work site on the cement store indicating the opening balance on a particular date, receipt during the day, issue during the day and closing balance at the end of the day (The entries for receipts and issues is updated immediately on physical receipt and physical issue, and also at the end of the day).

(b) Checking of steel consumption

For making comparison of the actual consumption of steel with the theoretical consumption, each diameter of steel bars are treated as an individual item and check on theoretical consumption is applied to each diameter.

Theoretical consumption statement for steel bars is prepared along with every running bill. Should there be any case of issue being less or just equal in any particular diameter/section than the actual consumption, this is properly investigated. If such issue, diameter wise/section wise or in total, is very much higher than the consumption, it is generally ensured that the balance steel is available at site in good condition and this is certified by the Assistant Engineer. Any serious discrepancies that are noticed is reported to the Superintending Engineer.

SOP No. 5/14 : Maintenance of Site Documents (Refer Para 5.7 (2))

1. Site Order book

(i) The form of the site order book is given in **Annexure -28**.



- (ii) Verbal orders of Senior Officers are confirmed by the JE/AE in writing in all cases. However, implementation of these verbal orders is not delayed for want of confirmation.
- (iii) EE and AE concerned, sign the Site Order Book in token of having read all the instructions issued by various Officers and replies made thereto.
- (iv) In case the EE or AE himself/herself wants to give any instructions, he/she records them in the Site Order Book.
- (v) The JE/AE records their observations in the Site Order Book if any defective work is found, or if the contractor is not complying with any of the terms of the contract, or on the slow progress of work, if any.
- (vi) The Site Order Book is maintained at the site of the work, and is never removed from there under any circumstance.
- (vii) The contractor or his/her authorized agent is also at liberty to note his/her difficulties etc. in this book.
- (viii) The compliance of orders/instructions given by the supervisory staff and the date(s) of its (their) compliance is recorded side by side in the Site Order Book by the Junior Engineer/ Assistant Engineer with dated initials.
- (ix) The Engineer in Charge periodically reviews the Site Order Book to ensure that it is being properly maintained and used. The Site Order Book is consulted at the time of making payments to the contractor.
- (x) Assistant Engineer verifies at site whether the defects pointed out during construction have been rectified or not, and also proposes part rates, if necessary, for the items of work for which defects were pointed out but have not been rectified.
- (xi) While recording instructions, reference of CTE's inspection/ Quality Assurance inspection should not be quoted in the Site Order Book.

2. Inspection Registers

- (i) Senior Officers record the observations of their site inspections through Online site Inspection register module for each project registered in PMS.
- (ii) Online site inspection register becomes functional after the registration of work in PMS module on CPWD website.
- (iii) The inspecting officer after log in through his/her PIMS id selects the concerned project for work and records his or her observations.
- (iv) The Engineer in Charge and his subordinate officers carries over such observation and defects on which action is to be taken by contractor to the Site Order Book with appropriate cross references of the Online Inspection register.
- (v) The concerned site staff add compliance note against the observations and also upload site photographs, if needed.
- (vi) All the concerned officers of the project from JE to DG, CPWD can view the compliance and can also add new observations or comments in subsequent remarks.
- (vii) In case compliance note is found to be unsatisfactory, the concerned senior officers can add subsequent remarks in this regard.
- (viii) The observations can also be drafted in separate word file and then copied to the online register.
- (ix) There is also a provision for subordinate officer to prepare the draft observation/ compliance note and submit to approving authority. After approval, the observations are automatically uploaded in online register in the name of approving authority.
- (ix) Observations recorded are reviewed by Sr. officers during their subsequent inspections to ensure their compliance.



- (ix) Monthly report of observations made by an officer is generated by the module.
- (x) In exceptional cases, if manual inspection register is required to be maintained then prior approval of an Officer not below the rank of SE is obtained. In this regard a docketed Inspection register shall maintained as per proforma given in **Annexure -29.**

3. Cement Registers

- (i) The proforma for the Cement Register is as per **Annexure -30**.
- (ii) The Assistant Engineer/Engineer in Charge checks the registers maintained for accounting of cement at different work sites.
- (iii) In case of works costing above Rs. 1,00,000/- or as notified by the Directorate from time to time, situated outside their headquarters, they inspect the registers and stores during their respective visits and inspection of the works.
 - In case of works where Ready Mixed Concrete (RMC) is stipulated to be used from an approved source/manufacturer, such registers are not be maintained. However, the computerized dispatch slips that are sent with each dispatch of RMC are kept on record.

4. Dismantled materials arising out of dismantlement through departmental works

- The serviceable materials obtained from dismantlement of a building or structure wherever not sold by tender or auction, is recorded without value in the Measurement Book for record purpose
- (ii) On the basis of the measurements, the serviceable materials are taken in the Register of Dismantled Materials in the form at **Annexure -31.**
- (iii) The Assistant Engineer after duly attesting the entries made in the Measurement Book makes a suitable note that these materials have been entered in the Register and strikes out the page with a red diagonal line.
- (iv) A separate folio or set of folios is kept apart for keeping the accounts of dismantled materials pertaining to each work.
- (v) The serviceable materials obtained from dismantlement is used in the works as far as possible and is shown as issued to works accordingly in the Register.
- (vi) The un-disposed balances is physically verified at least once a year and the result of the verification recorded in the "Remarks Column".
- (vii) This register (even for "Nil" transactions) is submitted by the Assistant Engineer regularly each month along with the monthly accounts for scrutiny in the Divisional Office.
- (viii) After the transactions have been checked by the Divisional Accountant, the Register is laid before the Engineer in Charge for monthly review. The fact of such review is placed on record in all cases preferably in Form CPWA 96 (memo of review).
- (ix) In no case dismantled materials is collected on the road berms. If for any reason, it is not found possible to comply with these instructions in any particular case, then written approval of the Superintending Engineer and local authority, if any, is obtained.
- (x) The "Empties", i.e. empty drums, tins, bags, and other containers are also included and accounted for in the Register of Dismantled Materials.

5. Dismantled materials arising out of dismantlement through contract

(i) In case a building or structure is dismantled through contract, a stipulation/provision in the schedule of work is generally made in the NIT/contract that the contractor has to take away the dismantled materials within specified time, and for which he/she gives credit to the Department at his/her tendered and accepted rates.



- (ii) In cases where the intrinsic value of the dismantled materials is more than the cost of dismantlement of the building/structure. In that event, sufficient safeguard is taken through suitable stipulation/provision in the NIT/contract whereby the contractor has to deposit the cost of dismantled materials in full with the Department before he/she is allowed to take up the dismantling work. The cost of dismantling is paid to him/her after he/she completes the dismantling work.
- (iii) Usual provision for security deposit/performance guarantee is made in the contract to ensure that the contractor completes the dismantling work, and that he/she does not just walk away with the costly dismantled materials.
- (iv) In case where dismantlement is part of construction contract, lump sum stipulation is made for dismantling and removing the dismantled material, recovery of which is made as early as possible preferably from the first three running bills.

SOP No. 5/15 : Documentation of Accounts (Refer Para 5.7.1)

1. Bills Register

- (i) A consolidated record of all the bills received from the Sub-Divisions in respect of works/ supplies is maintained as the Register of Bills in the Divisional Office in the form given at **Annexure -32**
- (ii) The bills are entered in the register strictly in order of receipt and paid in that order. In no case a bill received afterwards is given priority over the bills that have been received before, except under the written orders of the Divisional Officer.
- (iii) The Divisional Accountant should ensure that the register is properly maintained and kept up-to- date in the Accounts Branch. The register is submitted to the Engineer in Charge every week for his/her perusal.
- (iv) A similar register should also be maintained in each Sub-Division in respect of payments to be made and is kept by Sub- Divisional Clerk in the same way as the register in the Divisional Office, and put up to the Assistant Engineer every week.

2. Contractor's Ledger

- (i) The accounts relating to contracts/ supplies are kept in CPWA Form 43 in a bound book known as the "Contractors Ledger".
- (ii) A separate folio or set of folios is reserved for all the transactions with each contractor/supplier, for whom a personal account is maintained. The register is properly indexed.
- (iii) A personal account is opened in the ledger for every contractor.
- (iv) The Contractors' Ledger is written up and maintained up-to-date.
- (v) The Ledger accounts are closed and balanced monthly the amount outstanding is shown, if any, under each of the three suspense accounts i.e. (i) Advance payments (ii) Secured Advances and (iii) Other transactions.
- (vi) 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 is examined to see that:
 - The balances do not remain outstanding for a long time without justification, and
 - The bills are prepared at reasonable intervals in the case of running accounts.
- (vii) A Contractor requiring a copy of his/her running account bill or extract from the Contractors' Ledger is supplied the same. He/she should sign in the Ledger in token of his/her acceptance thereof at the time of payment of each running bill/final bill.



3. Register of Works

- (i) 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.
- (ii) There are two forms of Registers of Works (CPWA 40 and 41) corresponding respectively to the two forms of Works Abstracts (CPWA 33 and 34 that are used in the Sub-Division) for Major and Minor Works. The detailed Form CPWA 40 is used for Major Works estimates, and the simpler Form CPWA 41 for Minor Works estimates. In respect of petty works, no record is necessary beyond the petty works requisition and Account Form CPWA 32, which is self- explanatory. But if desired, expenditure on these works is recorded in Register of Works for Minor Works Estimates in Form CPWA 41.
- (iii) 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 Superintending Engineer or other sanctioning authority so desires, the accounts of Minor Works may also be kept by sub-heads in detailed Form CPWA 40. The Superintending Engineer is empowered to dispense with maintenance of accounts in the Register of Works by Sub-heads in respect of any work if he/she 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.
- (iv) The Registers of Works are posted monthly from Works Abstracts. Separate folio or set of folios in Form CPWA 40 Register is assigned to each Major Works estimate. Entries relating to Minor Works estimates can be made on a single page in Form CPWA 41 Register.
- (v) The Work Abstracts are required to be maintained in Sub-Divisional Office in a single sheet on each work. These is sent regularly every month to the Divisional Office for compilation of the monthly accounts.
- (vi) Before submission of the monthly account, the Registers of Works is completed, reviewed by the Engineer in Charge and date initialed by him/her in token of his/her having examined the entries and found to be correct.

SOP No.5/16: Outside/Independent Testing Facilities (Refer Para 5.7.2)

- 1. Extensive testing of the materials used for construction is a pre-requisite for attaining high quality of the work. This is 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.
- 2. These laboratories are in the Government sector, Semi Government or Private sector. All govt. Institutes, Indian Institutes of Technology, National Institutes of Technology, Central and State research Centers, Centrally and State funded laboratories stands approved. No approval is required for testing in these laboratories/institutes.
- 3. However, the outside private laboratories are approved in the following manner:-
 - (i) The SE will approve the private lab irrespective of distance for tests. For this purpose, labs accredited by NABL or any other accreditation body which operates in accordance with ISO/IEC 17011 and accredits labs as per ISO/IEC 17025 for testing and calibration scopes is eligible.



- (ii) A lab will have to submit details of space available, equipments, staff (Technical and non Technical), Accreditation and approval from various department/institutes. For this purpose labs accredited by NABL or any other accreditation body which operates in accordance with ISO/IEC 17011 and accredits labs as per ISO/IEC-17025 for testing and calibration scopes is eligible.
- (iii) Initial approval of lab is for one year and can be revalidated for further one year and so on.
- (iv) Every lab is audited for maintenance and calibration of equipments and employment of staff prior to approval/ revalidation.
- 4. However, testing of material in any Govt. Lab/Public Undertaking Lab/IIT or NIT Lab/Government Engineering College is allowed by Engineer in Charge without prior approval of Superintending Engineer or higher officers provided these labs have all necessary facility to carry out the required tests.

SOP No. 5/17 : Grant of mobilization advance to the contractors for executing capital intensive works (Refer Para 5.8 (3))

- 1. In respect of certain specialized and capital intensive works with estimate cost put to tender Rs. 5 crores and above or as notified from time to time, provision of mobilization advance is kept in the tender documents.
- 2. The NIT Approving Authority within his financial powers uses his/her discretion carefully in deciding whether any particular work is to be considered as specialized or capital intensive one, as per terms and conditions specified in the GCC. Applicability or otherwise of relevant clause of GCC is clearly indicated in Schedule 'F', while finalizing NIT of a particular work.

SOP No. 5/18 : Grant of advance for plant and machinery and for shuttering material (Refer Para 5.9)

- 1. An advance for plant and machinery required for the work and brought to site by the contractor is given as per conditions of the GCC, if requested by the contractor in writing within one month of bringing them to site.
- 2. Such an advance is 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.
- 3. The contractor is 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 works.
- 4. Leasing of equipment is considered at par with purchase of equipment. Leasing of Equipment is 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.

SOP No. 5/19 : Secured Advance (Ref Para 5.10)

1. Secured Advances on the security of materials brought to site to be made to the contractors only for items which are to be used on work.



- 2. The Engineer in Charge sanctions the secured advance up to an amount not exceeding 75% of the value of the materials as assessed by the Engineer-in-charge, or an amount not exceeding 75% of the material element cost in the tendered rate of the finished item of work, whichever is lower.
- 3. A formal agreement is drawn up with the contractor under which Government 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 are made only on the certificate of an officer not below the rank of Assistant Engineer 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 are not postponed until the whole of the work entrusted to the contractor is completed. They are made from his/her 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 is to 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 Engineer in Charge identifies whether an item is perishable or not.
- 7. Statutory taxes like Income tax etc. are be deducted from the secured advance payment.

SOP No. 5/20 : Physical Measurement Books (Refer Para 5.12.1)

- 1. 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.
- 2. 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 is so written that the transactions are readily traceable.
- 3. These books are 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.
- 4. All the Measurement Books belonging to a Division, are numbered serially. A register is maintained in form CPWA 92 showing the serial number of each book.
- 5. A similar register is maintained in the Sub-Divisional Office showing the names of persons, i.e. Assistant Engineer/ Junior Engineer, to whom the Measurement Books are issued.
- 6. Recording of measurements
 - A. Entries at commencement of measurements

 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 is 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.

B. Writing of abstract

(i) A suitable abstract should then be prepared which should collect in the case of measurements for works done.

C. Nomenclature of item

- (i) In case of extra/substituted item of work that is not covered in the agreement, the full nomenclature is reproduced in the Measurement Book and the bill form.
- (ii) The full nomenclature of the items is adopted in preparing abstract of final bill in the Measurement Book and also in the bill form for final bills.
- D. 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, is given.

- E. Recording of date of completion
 - If the entire job or contract has been completed, the date of completion is 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 is suitably noted against the entries in the Measurement Book, and in the latter case, the actual date of completion is recorded.
- F. Neat recording of measurements

All measurements are recorded neatly in the Measurement Book.



G. Signature of the contractor

The signature of the contractor or his/her authorized representative is obtained in the Measurement Book for each set of measurements.

H. Measurements in ink

The measurements is recorded in ink.

- I. Making corrections in measurements
 - (i) No entry is erased or overwritten. If a mistake is made, it is corrected by crossing out the incorrect words or figures and inserting the correction. The correction thus made is initialed 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/her orders, initialed by the Officer who made the measurements, the reasons for cancellation being also recorded.

J. Page numbering

- (i) The pages of the Measurement Books are machine numbered.
- (ii) Entries are recorded continuously and no blank page left or torn out. Any pages or space if left out blank inadvertently is cancelled by diagonal lines, the cancellation being attested and dated.
- K. Recording of measurements only by authorized persons

All items of work in a project irrespective of their cost is measured and recorded by the Junior Engineer-in-charge of the work. It is, however, open to the Assistant Engineer or the Engineer in Charge to record measurements for any particular item of work himself.

L. 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.

M. Certification of measurements

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

7. Where measurements need not be recorded

- (i) 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 Assistant 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/she has taken the material(s).
- (ii) The material(s) is 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.

8. Review of Measurement Books

The Measurement Books are required to be reviewed by Divisional Accountant.



- (ii) The review by the Divisional Accountant is in the following respects:-
 - (a) 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.
 - (b) To see that no original sheet is torn out of a Measurement Book, nor any entry erased or disfigured, and that the corrections made therein are initialed.
 - (c) To see that pencil entries are not inked over.
 - (d) To test check the accuracy of calculations.
- (iii) On receipt of the Measurement Books in the Divisional Office, the Engineer in Charge should indicate in column 2 of the "Review Notes" in each Measurement Book as to which of the calculations are to be test checked by the Divisional Accountant. The extent of this check is determined by the Engineer in Charge having regard to the result of the last review, and should cover complete set of measurements.
- (iv) Payments based on the entries reviewed is traced into various accounts and verified. Similarly, supplies or issue of materials are traced into the various accounts, contractor's ledger, etc. and verified.

(v) Communication of discrepancies

The defects, discrepancies, etc. noticed is communicated to the Assistant 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 Engineer in Charge for re-check		Defects and discrepancies noticed	Dated initials of	
	Pages	Dated initials		Divisional Accountant	Divisional Officer
1	2	3	4	5	6

9. Loss of Measurement Books

- (i) When a Measurement Book is lost, an FIR is lodged with the police.
- (ii) An immediate report of the facts of the case together with an explanation of all parties concerned responsible for the loss should also be made promptly to the Chief Engineer, who is empowered to sanction the write off of the lost Measurement Books. In case of theft or loss of a blank Measurement Book, the Superintending Engineer is the competent authority to write off the loss.
- (iii) Such losses for write off is reported in the proforma as per Annexure -33.
- (v) It is also necessary that the measurements in the lost Measurement Book is re-constructed at the earliest.



Notice to the contractor before recording measurements - action to be taken if he/she fails to respond

- (i) Clause 6 of General Conditions of Contract provides that before taking any measurement of any work, the Engineer-in-Charge or a subordinate deputed by him/her is 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/her absence by the Engineer-in-Charge or by the subordinate deputed by him/her as the case is is deemed to have been accepted by the contractor.
- (ii) 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/her superior officers i.e. Assistant Engineer/Engineer in Charge immediately, with the result that prompt action under clause 6 of contract form CPWD 7/8 cannot be taken. The idea of clause 6 is to bind the contractor to file objection, if any, on his/her side to the measurement recorded by the Departmental Officers within a definite period so as to avoid any disputes later on. It has been decided that in all cases of works executed on contract forms CPWD 7/8, when the contractor fails to attend at the time of measurements or to countersign the measurement books in token of his/her having accepted the measurements recorded therein, or to record the difference, the Junior Engineer/Assistant Engineer taking the measurements should report this fact within 72 hours to the Assistant Engineer/Engineer in Charge in writing. The latter, on receipt of such a report, should take immediate action under clause 6 ibid, and inform the contractor in writing that the measurements as taken by the Junior Engineer/Assistant Engineer are final as per clause 6 of form CPWD 7/8, and no claim whatsoever on this account is entertained.
- (iii) These instructions will not apply in cases where the contractor is to submit computerized measurements to the Department.

11. Preparation of bill

- (i) On completion of the abstract, the Measurement Book is submitted to the Sub-Divisional Officer, who after carrying out his/her test check should enter the word "Check and bill" with his/her dated initials. The Sub-Divisional Clerk should then check the calculation of quantities in the abstract, and the bill in case of work carried out by contract, and should then place the Measurement Book and the bill before the Sub-Divisional Officer who, after comparing the two, should sign the bill and the Measurement Book at the end of the abstract.
- (ii) All corrections made by the clerical staff is in red ink.

12. Recording measurements of supply/issue/laying of steel

(i) Supply of steel

In case of supply of steel, the measurements are recorded:

- (a) On actual weight basis for bars upto 10 mm dia, and
- (b) 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.



(ii) Issue of steel

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

(iii) 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 is 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 is show the extra percentages that is allowed for laps and wastages. Detailed measurements of each and every bar is dispensed with in such cases.
- (ii) In other cases, the bar bending schedule is prepared by the contractor, and checked and signed by the Engineer in charge before the bending of bars is taken up at site.

Note: Procedure for Review and Loss of Computerized MB are analogous to S. No. 8 and 9 of this SOP.

SOP No. 5/21: Recording measurements for earth levelling work (Refer Para 5.12.4)

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 are numbered, accounted for and handled like Measurement Books.

2. Preparatory works

Before starting the earth work, the following steps are taken:

- (i) Original ground levels are recorded in the Level Book in the presence of the contractor or his/her authorized representative, and is signed by him/her and the Departmental Officer who records the levels. All the local mounds and depressions are indicated clearly in the drawing and the field Level Book, and is checked by the Assistant engineer/Engineer in Charge before the levelling work is started.
- (ii) A suitable baseline is fixed with permanent masonry pillars at distances not exceeding 150 meters to provide a permanent reference line for facilitating check work. The base line(s) is entered in the Level Book with co-ordinates. These baselines are maintained till the final payment for the work has been made.
- (iii) While recording the levels, it is 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.
- (iv) Plans showing initial levels, location of bench marks and reduced levels, is prepared and signed by both the parties and attached to the agreement before commencement of the work.

3. Test check of the levels

- (i) The Assistant Engineer should exercise test check at least to the extent of 50%, and the Engineer in Charge at least to the extent of 10% where the value of this item of work exceeds 10% of the tender acceptance power of the Assistant Engineer.
- (ii) The test check of the levels are carried out independently by each officer, and the readings are recorded in the prescribed Level Book in red ink against the old levels which is neatly scored out wherever necessary. If the test check carried out reveals serious mistakes in the original levels, these is taken or re-taken and re-checked.



- (iii) The test check carried out by an Officer is as representative as possible for the entire work done.
- (iv) 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 Assistant Engineer/Engineer in Charge to the same extent as indicated in (1) 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.
- (v) The formation levels as per final execution of the work is compared with the proposed formation levels and the work got rectified within permissible tolerance.

4. Payment for levelling work

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

5. Large scale levelling work

- (i) In case of large scale levelling work involving both cutting and filling, an accurate site plan is prepared before the work is commenced. The portions requiring cutting and filling is then be divided into squares and corresponding squares into filling, which are complementary to the squares in cutting given the same number.
- (ii) A table is written upon the plan showing leads involved between the various complementary squares. This would form a lead chart for the work to be done.
- (iii) Before the work of levelling is commenced, the lead chart is checked by the Assistant Engineer in the presence of the contractor or his/her authorized representative, and his/her signatures is obtained on the same. This should form an integral part of the contract and is duly signed by both the integral parties before commencement of the work.
- (iv) The quantity payable for earthwork is lower of the quantity derived from cutting or filling. The payment for lead is based on lead chart prepared in the aforesaid manner.

6. Import of earth

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

SOP No. 5/22 : Advance Payment (Ref Para 5.12.5)

1. For The Work Done And Measured

- (i) Advance payments to contractors against on account bills received in the Engineer in Charge's office is made by the Engineer in Charge, on receipt of an application from the contractor for financial aid in the shape of part payment, is make a lump-sum advance payment on Hand Receipt Form 28, subject to the following conditions:
 - (a) The bill in respect of which the advance is proposed to be made should actually be under check in the Divisional Office.



- (b) The amount of advance should not exceed 80% of the net amount of the bill under check, but no advance payment is admissible in cases where the amount of advance payable works out to less than Rs 20,000/- or as notified by the Directorate from time to time.
- (c) The payment is 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 is are 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 is treated in the accounts as an advance.
- (d) Before making payment, an undertaking is obtained from the contractor to the extent that, should the amount of advance paid to him/her is subsequently found to be more than the amount of the running account bill in respect of which the advance was paid, he/she will refund to Government forthwith the amount overpaid. The Engineer in Charge is 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.
- (e) A record of advances authorized by the Engineer in Charge is kept in a special register which is inspected by the T/S Authority at the time of his/her inspection of the Divisional Office.
- (ii) Grant of a second advance before the first one has been recovered is not be permitted.
- (iii) Statutory taxes like Income tax etc. is deducted from the secured advance payment.

2. Advance payment for work done but not measured

- (i) The following rules are observed with regard to advance payments made to contractors for work done but not measured: Advances to contractors are, as a rule, prohibited and payments to contractors are 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 by the Engineer in Charge, when it is essential to do so, and in such cases previous sanction of the T/S Authority is invariably obtained. In case the T/S Authority is himself/ herself the Engineer in Charge, then the approval of the next higher official is obtained.
 - (a) An advance payment for work actually executed is 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 is to ensure that no overpayment occurs on the work in consequence.
 - (b) The certificate printed on the Running Account bill is signed by the Sub-Divisional / Divisional Officer/ Engineer in Charge, and the lump-sum amount paid on account of the several items are specified against item 2 of Part III of the bill.
 - (c) 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.



- (d) When an advance payment has been authorized by the competent authority, it is followed by detailed measurements within 2 months at the most. Beyond 2 months, the approval of Chief Engineer or the authority designated by the CPWD Directorate is necessary.
- (e) The grant of a second advance before the first one has been recovered is not be permitted except with the prior approval of Chief Engineer or the authority designated by the CPWD Directorate.
- (ii) Advance payments for work done but not measured is made on bill Form no. CPWA 26, and the same be classified in the works accounts under suspense Sub-Head "Advance Payments". No such payment must be made on Hand Receipt.
- (iii) Statutory taxes like Income tax etc. is deducted from the secured advance payment.

SOP No. 5/23: Payment for Sub-Standard Work (Refer Para 5.13 (2))

1. Avoidance of sub-standard work

- (i) 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 is remain quality, speed and economy in cost in the execution of any work. There is no compromise on the quality of work.
- (ii) The field staff, namely, the Junior Engineer/Assistant Engineer/Engineer in Charge, remains 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 workman like manner, the contractor is immediately asked to rectify or re-do them according to the specifications, and according to sound engineering practice.
- (iii) All such defects/deficiencies in the items of works are to be noted in time and recorded in the Site Order Book. It is the duty of the field staff to point out such defects in the work in time during the progress of the work.
- (iv) These defects should also be brought to the notice of the Engineer in Charge immediately on their occurrence by the Junior Engineer/Assistant Engineer, so that he/she may take timely action to issue notices to the contractor either to rectify the defects or even to get the work dismantled and re-done if necessary as per clauses 3 and 16 of the agreement. The Engineer in Charge is also on his/her own inspect the work as frequently as possible and take timely action to issue such notices to the contractor.
- (v) Every attempt is 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 is difficult or impossible to rectify later on.
- (vi) Where such defects/deficiencies crop up during the maintenance period, notices for redoing/rectifying the same is issued within the prescribed maintenance period.
- (vii) If the contractor does not rectify the defect or make good the deficiency, the work is got redone 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 Forms no. CPWD 7 and 8, clause 5 of Form no. CPWD 10, and similar conditions in other forms.



2. Acceptance of sub-standard work

- (i) 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.
- (ii) Acceptance of work below specifications and/or below acceptable levels of workmanship, and the resulting payment at reduced rates for such defective/deficient works is 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 Chief Project Manager/ Project Manager/Superintending Engineer in-charge it is expedient to do so.
- (iii) Acceptance of sub-standard work at reduced rates is done only under exceptional circumstances by the Chief Project Manager/Project Manager/Superintending Engineer or by the next higher authority in case where an officer of the rank of SE/EE is the Engineer in Charge.
- (iv) The total value of quantities of items at agreement rate for which the Chief Project Manager/Project Manager/Superintending Engineer or the official as defined above accepts substandard work in a contract does not not exceed 5% of the contract value. In case total value of such items exceeds 5% prior approval of Chief Engineer/Chief Project Manager would be necessary.
- (v) 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 President of India, 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/her consent for acceptance of the terms specified by the Department. For this purpose two forms, as per **Annexure 34 and 35** is used.
- (vi) The decision of the Superintending Engineer/Project Manager/Chief Project Manager/Chief Engineer regarding the quantum of reduction as well as justification thereof in respect of rates for sub-standard work that is decided is final, and would not be open to arbitration under clause 25 of the agreement.
- (vii) The amount of compensation once levied by the Engineer in Charge under clause 16 of the General Conditions of Contract for CPWD Works, cannot also be waived or reduced by higher officers.

SOP No 5/24: Test Checking of Measurements (Refer Para 5.14)

1. Test check by the Assistant Engineer

- (i) The Assistant Engineer satisfies himself/ herself 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.
- (ii) The Assistant Engineer is to personally inspect all the works of any magnitude and submit the same to division office before for payment.
- (iii) He/She is required to check measure the works in his/her charge as below:
 - (a) All items of work in a project irrespective of their cost, are and recorded by the Junior Engineer-in-charge of the work. It is, however, open to the Assistant Engineer to record measurements for any particular item of work himself. In case of absence of Junior Engineer, the Assistant Engineer records measurements.



- (b) The Officer accepting the tender for any work may stipulate and require the Assistant 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.
- (iv) 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; and
 - (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 paneling or floor boardings.
 - (iv) Bitumen painting of roofs under mud phuska and tiles paving or under 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
 - (viii) any other items desired by Engineer-in-charge.
 - (v) In case of works at headquarters of the Sub-Division, AE should check measure not less than 50% of the value of the measurements recorded by his/her Junior Engineer before any running/final bill is paid. In case of works outside headquarters of the Sub-Division, the Assistant 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.
 - (i) In case of works at headquarters of the Sub-Division, AE should check measure not less than



- (ii) 50% of the value of the measurements recorded by his Junior Engineer before any running/final bill is paid.
- (iii) In case of works outside headquarters of the Sub-Division, the Assistant 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.
- (vi) While test checking the works of repetitive type, the Assistant 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.
- (vii) Besides the mandatory test check of RCC and hidden items of work, the test check of measurements by Assistant Engineer shall also include not less than 50% of the plumbing work for sanitary and water supply wherever applicable.
- (viii) In the case of works outside the headquarters of the Sub-Division costing upto 20% of his tender acceptance power, check measurements by the Assistant Engineer need not be insisted upon. He will, however, have to accept general responsibility for the correctness of the bill as a whole.

2. Test check by the Engineer in Charge

(i) The Engineer in Charge should test check 10% of the measurements recorded by his/her subordinates at least every alternate bill for works at his/her headquarter, and at least every third bill for works outside his/her headquarter. Measurements selected by EE is independent of measurements test checked by AE. However this will not apply to items, the measurement of which are a checked 100% by AE. In respect of works costing up to 20% of his/her tender acceptance power at places outside the headquarter of the division, and in case of works costing up to 10% of his/her tender acceptance power at the headquarter of the division, the Engineer in Charge may, in his/her discretion, authorize payment without any test check by him. He/she will, however, have to accept general responsibility for the correctness of the bill as a whole.

(ii) Test check of RCC and plumbing works

- (a) Test check of the Engineer in Charge is also include at least 10% test check of the measurements of RCC items so as to ensure structural safety of building.
- (b) Besides the mandatory test check of RCC and hidden items of work, the test check of measurements by the Engineer in Charge is also include not less than 10% of the plumbing work for sanitary and water supply.

(iii) Test check of steel

(a) In the case of receipt of steel, the Engineer in Charge is test check 10% of the total consignment received in a month. Any consignment test checked by the Engineer in Charge is checked by him/her 100%.



(b) 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.

(c) If in any consignment the variation on lower side exceeds the aforesaid limits, 100% check of the measurements is carried out by the Engineer in Charge, and detailed investigation into the reasons for the shortage recorded.

(iv) Test check in road works

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

- (a) The stacks is uniformly distributed along the road. The collection of stone metal is 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.
- (b) The Assistant Engineer is test check not less than 50%, and the Engineer in Charge, not less than 10% of the supply of materials in each length of 1 km before the work of laying is started.

(v) Test checks to be attested

The individual items checked is clearly shown in the Measurement Book, and the result recorded by the officer concerned. The items thus checked is attested by the dated initials of the checking Officer.

(vi) Consolidated record of checks/test checks

- (a) A collective record of all the check carried out from time to time is prepared in each Measurement Book.
- (b) The result is indicated by the word "Satisfactory" or "Unsatisfactory" as judged at the time on merits of each case. Unsatisfactory result is communicate to the JE or both the JE and AE as the case is.

SOP NO. 5/25 : EOT & Rescheduling of Mile Stones (Refer Para 5.16)

- 1. The contractor may apply to the Engineer in Charge within 14 days in writing for extension of time as per **Annexure -36 or Annexure -37**, as the case may be, stating the grounds that hindered the execution of work.
- 2. The Engineer in Charge is to see the grounds shown for the extension of time are reasonable.
- 3. Based on correspondences related to hindrances in this work, the Engineer in Charge may also grant EOT even if the contractor has not apply under clause 5.
- 4. Extension of time is to be granted and milestones rescheduled by the competent authority strictly as per the terms of the contract.
- 5. Engineer in charge submits the rescheduling proposal within 2 weeks from the date of receipt of proposal. Authority under Clause 5 for revision of milestones decides the rescheduling proposal in 2 weeks of receipt of proposal. The Engineer-in-charge promptly decide any extension as per Clause 2 & 5 and intimate the contractor and the authority for extension of item under Schedule F.



6. The justified extended time is promptly and firmly decided throughout the work and actual progress monitored with reference to the same. If the extension entitled for extra work under clause 12 cannot be fully and properly assessed before completion of the work, this is assessed on the work nearing completion. Such extra time, if any, is to be added to the extension of time granted earlier and notified by the Engineer in Charge before final action under clause 2.

- 7. All extensions of time is with a firm date as per due assessment on record while giving such extension and in no case there is any provisional extension of time.
- 8. In case there is any prevention by the Department, such authority should invariably and promptly grant extension of time under the relevant provision in the clause, even if the contractor fails to apply, however making the point of non application by contractor clear in the letter of extension of time. This is based on recommendation by the Engineer in Charge on the basis of relevant event / correspondences placed on record. It is the duty of Engineer in charge to bring such fact of prevention to the knowledge of the authority in Schedule F immediately and initiate immediate remedial measures to avoid delay in work on such account.
- 9. The contract can be determined even within the original stipulated period of contract under relevant provisions in clause 3 if the contractor is in breach of contract including failure to proceed with the work with due diligence. When the work remains incomplete on justified extended date and the contract has not been determined under clause 3, the Engineer in charge should try to obtain a programme from the contractor for completion of work in a reasonable period and grant such period as mutually agreed making it essence for performance of work by the contractor. This is with liability of the contractor to pay compensation under clause 2 of the contractor for such extended period which is made expressly clear in the letter extending time as per clause 5.4 of the contract.
- 10. In case the contractor does not give any such programme and the contract has not been determined under clause 3 for non-completion of work in the justified extended time, the Engineer in charge is fix a reasonable time duly assessed on record in writing for the balance work and is issue similar notice intimating the failure on the part of the contractor to give any programme to complete the work and making such time as essence of the contract for performance by the contractor with liability under clause 2.
- 11. If the contractor proceeds with due diligence and completes the work in such further extended time, there would be no determination of contract but there is levy of compensation for delay under clause 2 as notified under clause 5.5 while extending the time. However, if the contractor fails to complete the work on such further extended date, in addition to action under clause 2 there can be action under clause 3 as well. In such case the department need not wait in every case until the expiry of the extended date for determination of contract and the contract can be determined before expiry of the extended date by relying on the relevant sub clause of clause 3.
- 12. The powers and procedure for grant of justified extension of time is as provided in the contract. Time need to be extended based on due evaluation of causes listed in sub clause 5.2 and 5.3 of the contract. Hence first there has to be determination of whether such causes are relevant; causes entitling the contractor to extension. If the causes are not relevant i.e. do not fall under any of the category listed in clause 5.2 or 5.3, there can be no justified extension of time for such causes. In case the causes or the events causing delay in work are relevant causes or events then there has to be an objectives assessment of the impact of such causes on the final or sectional completion date.



13. Certain relevant causes or events may disrupt the work and even entitle the contractor to rescheduling of milestones, but not entitle him/her to extension of time or entitle him/her to extension of time or entitle him/her to extension of time only partially. However, any relevant event affecting any critical activity is invariably entitle the contractor to extension of time or entitle him/her to extension of time only partially. However, any relevant event affecting any critical activity is invariably entitle the contractor to extension of time for its full impact even if other non critical activities are in progress during such time. Hence the determination of justified extension of time is purely based on how relevant events impact the critical activities. Such an evaluation is made considering the impact of the relevant event on the planned and approved programme of the contractor.

SOP NO. 5/26 : Compensation Under Clause 2 (Refer Para 5.16.1)

- 1. When a contact 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 is the compensation stipulated for.
- 2. According to clause 5 of the agreement, all letters of extension of time to be issued to the contractor is over the signature of the Engineer-in-charge, as he/she is the only officer so empowered contractually to grant extension of time. Similarly, all letters intending to impose compensation or to recover liquidated damages under clause 2 of the agreement is issued over the signature of the Superintending Engineer, as he/she is the only officer competent to do so under clause 2 of the agreement, in order to fulfill contractual obligation.
- 3. The word compensation is to be used in CPWD form 7 to 8 and similar clause instead of the work penalty.
- 4. It is necessary to interpret Section 74 of Indian Contract Act, 1872 in view of judicial proceedings.
- 5. It is to be understood that party in breach of contract has the burden of proof that no loss was suffered by the other party.
- 6. Only when loss can be proved the party claiming compensation has to prove the loss.
- 7. Extension of time is to be decided during program of work and not after completion of work.
- 8. EOT can be granted on multiple occasion.
- 9. Non completion of work by justified extended date would make the contractor liable to compensation under clause-2.
- 10. Procedural compliance is to be done for clause-2 action i.e fixing the justified extended date and notice for claim of compensation while granting further extension.

SOP No. 5/27: Inspection of works for issue of Completion Certificate (Para- 5.17.2)

- 1. Before the work is declared as completed in all respects and final payment is released to the contractor, it has to be inspected by the T/S Authority of the work.
- 2. The T/S Authority shall also record the following certificate:

"I have inspected the work	of contract value of which is Rs vide	е
Agreement No	today. As a result of this inspection and my previous inspections,	I



- 3. The above certificate is required to be recorded within a period of 1 month from the date of completion of the work.
- 4. The defects so pointed out if any should be rectified in terms of the contract.
- 5. The Engineer in Charge or any other authority notified by the CPWD Directorate from time to time, shall not make final payment till this certificate is recorded and attached to the office copy of the bill.
- 6. The T/S Authority 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.
- 7. In specific cases where there are practical difficulties, in recording the completion certificate due to the concerned officer being no longer in the Department due to resignation, death etc, then in such cases, the next higher authority not below the rank of Chief Engineer 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 T/S Authority for not taking proper/timely action in getting the completion certificate recorded, whatever justified, as revealed by the facts of the case.

SOP No. 5/28: Deduction of Income Tax at Source from Contractor's Bill (Refer Para 5.18.4)

- 1. Under Section 194 C of the Income Tax Act, 1961, deduction of income tax is made at source by disbursing officers.
- 2. Before signing the bills of Contractors, the disbursing officers Officer ensures 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". (Note 5 below para 12.2.16 of CPWA Code).
- 3. In case Certificate is issued by the Income Tax Officer concerned, authorizing the payer to deduct tax at such lower rate or deduct no tax, then in such cases, deduction is made accordingly. Such certificate is valid for the period specified therein unless it is cancelled by the Income Tax Officer earlier.
- 4. The amount of tax deducted at source is rounded off to the nearest rupee as per existing provision of Section 288 B of the Income Tax Act, 1961.
- 5. Challans, for paying tax into the Government account, are obtained from the Income Tax Officer concerned or the bank.
- 6. The tax deducted on behalf of the Government to be paid to the credit of the Central Government on the same day by book adjustment. In other cases, the tax deducted is paid to the credit of the Central Government within one week from the last day of the month in which the deduction is made.
- 7. The authority responsible for making payment to issue a certificate of tax deducted at source in the specified form.



SOP No. 5/29: Refund Of Security Deposit In Cases Of Delay In Final Bill and Maintenance of Deposit Register (Refer Para 5.19(2))

- 1. In case of delay in payment of final bill, the concerned authority not below the rank of SE makes an assessment of the likely recoveries against the contractor, and order release of as much security deposit as possible unless he/she has reasons to withhold the release of security deposit to the contractor. These reasons are recorded by him/her in writing.
- 2. The concerned authority satisfies himself/herself that the following formalities are completed by all concerned before exercising his/her 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 EE/AE
 - (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) Acceptance of final measurement recorded 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. The Hand Receipt for this purpose is prepared by the Junior Engineer/Assistant Engineer as soon as it is due, and sent to the Divisional Office for payment without waiting for the contractor to apply for refund of his/her security deposit.
- 4. Maintenance of deposit Register i.e Part I, Part II, Part III & Part –V

Deposit register (Part II,III & V) should be maintained in the division to keep watch over the differently amount, deposited under Head 8443. Efforts should be made to clear the amount lying under these heads and outstanding balance should be minimized in this Head. 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 case of security deposit paid along with the individual period, the right to the due would accrue under clause 17 of GCC after the maintenance period, or the date of payment of final bill, whichever is later. If the amount remains unclaimed after that period, then same should be transfer to the Govt. account.

SOP No. 5/30 : Refund of security deposit in specific nature of work (Refer Para 5.19(3))

1. For some of the specific nature of work such as anti-termite treatment, waterproofing work, kiln seasoned and chemically treated wooden shutters etc. contractors who associate specialized agencies /specialized firm executing the work give a specific guarantee that they are 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 as per **Annexure -38**.



CHAPTER 5

CONTRACT MANAGEMENT

- 2. 10% of the security deducted from the bills of the contractors is refunded after expiry of maintenance period in accordance with the terms of the contract in this behalf.
- 3. The Engineer in Charge maintains a register in which all these works carried out in the Division are entered which are periodically reviewed by the Engineer in Charge. The Register contains 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 helps as a ready reference about the efficiency and the quality of the work done by the firm/contractor.

SOP No. 5/31: Appointment of Arbitrator and Reference of Disputes (Refer Para 5.21.1)

1. Reference of dispute to arbitration

- (i) The pre-arbitration procedures as per Clause 25 of the GCC are complied with before appointment of Arbitrator/s. The appointment of arbitrator/s is made within time and as per procedure prescribed in the arbitration Clause 25 of the GCC in the contract.
- (ii) The EE gives consent for fast track arbitration only with prior approval of CE/CPM.
- (iii) All disputes including those which were referred to the DRC are only referred to the Arbitrator/s if either party decides to resort to arbitration.
- (iv) Opinion of the Engineer-in-charge as to the reasonability of the grounds shown by the contractor for granting extension of time, under Clause 5 of the GCC, cannot be disputed and the decision of the Engineer-in-charge is final.
- (v) Arbitration is conducted as per the arbitral procedure, as decided by the arbitrator/s through their preliminary order.
- (vi) The Contractor cannot have recourse to a court of law for the redressal of his/her grievances, unless he/she has exhausted the channel of the arbitration as envisaged in Clause 25 of GCC of the contract.
- (vii) Even if the contractor goes to court, the Engineer in Charge takes a plea that the contractor being a signatory to the agreement containing arbitration clause, any dispute arising out of or in any way connected with the execution or work has first to be settled by reference to the process as mentioned in Clause 25 of the GCC.

2. Application for appointment of Arbitrator

 (i) A standard application form seeking appointment of arbitrator by the Contractors is given in Annexure- 39



(ii) The application form, duly filled in, listing out disputes and claim against each dispute is submitted by the contractor to the Chief Engineer, with two copies thereof to the concerned Engineer in Charge. All the three copies of the application form are accompanied by a Statement of Claims in the manner indicated in the application form.

- (iii) The arbitration clause can be invoked by the Engineer-in-charge as well as by the contractor applying to the Chief Engineer for appointment of the Arbitrator at any point during the execution of works and it is not required to wait till the completion of the work.
- (iv) The party invoking arbitration clause gives information enough to justify existence of dispute, details about the claims having been made and its refusal by the other party for admittance. 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.
- (v) Before appointing arbitrator, the Chief Engineer ensures that existence of dispute(s) has been established. For this purpose, the party invoking arbitration clause is 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.
- (vi) All correspondence between the Engineer in Charge and the Superintending Engineer/Chief Engineer regarding appointment of Arbitrator, or on award, and subsequent court cases, if any, and are sent through D.O letter/ e- mail/ speed post /special messenger.

3. Appointment of Arbitrator

- (i) The standard form of appointment letter, is given at Annexure -40 [for sole arbitrator] and Annexure 41 [in case of Arbitral Tribunal] whichever is applicable, is used for appointing an Arbitrator. Where the contract provision is for a sole arbitrator, the Appointing Authority follows the terms of Clause 25 and appoints an arbitrator and refers the disputes to him/her if either party requests for arbitration. Where the contract provision is for three arbitrators, the appointing authority follows the terms of clause 25 and appoints one of the three arbitrator if either party requests for arbitration.
- (ii) The sole or one arbitrator, in case he/she is an employee of CPWD, subject to fulfillment of requirement of Section 12(5) of the Arbitration and Conciliation Act, 1996 as amended in 2015 with reference to Seven Schedule i.e. agreement by the parties in writing after the disputes have arisen w.r.t. appointment of such an arbitrator. Otherwise the Appointing Authority appoints a suitable arbitrator with due consideration of the requirements of Fifth Schedule of the Arbitration and Conciliation Act, 1996 as amended in 2015.
- (iii) The Appointing Authority in every case ensures that the arbitrator so appointed satisfies the qualification as per the Arbitration clause of the contract. It is the duty of the Appointing Authority to appoint an Arbitrator of good reputation and having professional knowledge in arbitration. Hence in each case the power of appointment of arbitrator is exercised with due diligence by the Appointing Authority.
- (iv) Where the contract provision is for three arbitrators and in case of following situations
 - (a) the contractor fails to appoint the second arbitrator, or
 - (b) The two appointed Arbitrators fails to appoint the presiding arbitrator, within the prescribed time.



- The Appointing Authority ensures that Engineer-in-Charge, without delay requests the Director General CPWD to appoint the second Presiding Arbitrator as the case may be.
- (v) The Appointing Authority refers the disputes to the Arbitrator so appointed. Wherever it is found that (a) The arbitrator appointed by the contractor, or (b) The Presiding Arbitrator appointed by the two appointed arbitrators is not eligible under seventh schedule of Arbitration and Conciliation Act 1996 (as amended in 2015), the remedy is under Section 14 of the Act. However, in case there are justifiable doubts under fifth schedule, challenge to jurisdiction of arbitrator is done by Engineer in charge under section 16 of the act, without any delay. However, challenge to the appointment of Arbitrator under section 16 of the A&C Act should not be a ground for not referring the disputes to the Presiding Arbitrator.
- (vi) The Appointing Authority while referring disputes to arbitrator is not to decide whether the dispute is arbitrable or not; or whether it is barred by limitation or not. These are matters to be decided by arbitrator and parties are at liberty to raise objections on these issues before the Arbitrator. The role of appointing authority is only to appoint the arbitrator and refer a list of disputes. Hence the Appointing Authority should not hold any request because in his/her opinion it is an excepted matter and hence not referable to arbitrator. Whether it is an excepted matter or not may itself be matter of dispute and it is be decided by the arbitrator. Objection, if any, is to be raised before the arbitrator by the parties.
- (vii) Whenever a notice for appointment of an Arbitrator is received from a contractor in terms of Clause 25 of Agreement forms No. CPWD 7 and 8 (and corresponding clauses in other forms), the Appointing Authority 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 is strictly adhered to. Non-receipt of comments from Engineer in Charge / Superintending Engineer in respect of disputes does not have a basis of not adhering to the limit of 30 days.
- (viii) The mandate of an appointed arbitrator is not revocable except with the order of the court or his/her resignation or by consent of both the parties. It is not revocable by the death of any party or parties to the contract.
- (ix) In case arbitration proceedings are terminated by arbitral tribunal under Section 25(a) of Arbitration and Conciliation Act 1996 (as amended in 2015), for non submission of statement of claim by the claimant within time as per direction of arbitral tribunal, there is no provision in law for further appointment of arbitrator.
- (x) In all arbitration cases the Arbitrator(s) gives reasons for the award.
- (xi) Generally, the cases of disputes between the Government and other parties are referred to the sole arbitrator. The Government of India have appointed a panel of Arbitrators in the Ministry of , and generally the arbitration cases are referred to one of them as is decided by the Chief Engineer/Director General. CPWD.
- (xii) The award by the Arbitrator(s) thus appointed is final and binding on all parties to the contract, unless it is set aside by Court of Law, or a stay obtained by a separate application on the award from, the court.



(xiii) The sample letter for appointment of a new Arbitrator due to transfer or vacation of office by the existing Arbitrator is given in **Annexure -42**.

(xiv) It can be clarified in the letter of appointment of the Arbitrator that the reference is without prejudice to the defence that is raised by the Government regarding the tenability of the claim on all necessary and available grounds including those in limitation.

4. Preparation of Arbitration cases

- (i) Arbitration involves both matters of facts and technical issues as well as legal issues. The legal issues are generally involved the Indian Contract Act, 1872 The Limitation Act, 1963 and the Arbitration and Conciliation Act, 1996 and other relevant statutes. In addition, judicial precedents are used appropriately.
- (ii) The following steps are taken by the Engineer in Charges/Divisional Officers with a view to properly defend the Arbitration cases:
 - (a) As soon as a contractor or the Engineer-in-charge applies for arbitration, the Engineer in Charge or Divisional officer prepares 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 under clause 2, 3, 14 etc., and send a copy to his/her Superintending Engineer/PM/CPM.
 - (b) Lists 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 is placed.
 - (c) Keeps 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 Engineer in Charge along with originals listed in para (ii).
 - (d) Copies of the old Measurement Books if required be provided to sub divisions for completion of final bill.
 - (e) All the files connected with the work are properly page-numbered, stitched and sealed, and kept by the Engineer in Charge along with the above records.
 - (f) If there are important situations or circumstances which are not available on the file, but are only known to the field staff, their signed statements regarding the factual information is obtained and kept on record.
- (iii) If the work has been completed, the final bill is prepared as early as possible, and in any case before the disputes are referred to arbitration. The Superintending Engineer/Engineer in Charge ensures that the bills are finalized immediately.
- (iv) The Engineer in Charge informs the authority with whom Extra/Substituted/Deviations/RR items are pending related to instant work with a request to approve the items immediately. The concerned authority ensures that all such pending items are finalized within the time prescribed in the contract and in any case before statement of defence is submitted.
- (v) A detailed note on the facts of the case dealing with each and every item of the claims and/ or of counter claims is prepared by the Engineer in Charge, along with reference to various relevant documents supporting the Government stand or case or refuting the contractor's claim(s)



- (vi) The AAO of the office of the Engineer in Charge/Divisional Officer in complete compilation of records and is responsible for the same. Superintending Engineer is requested, wherever necessary for guidance and assistance in preparation of Arbitration cases.
- (vii) One of the important documents for defence in an arbitration case is the agreement. A copy of the Superintending Engineer's orders conveying his/her decision on recovery of compensation, if any, and copies of sanctioned extra, substituted and deviated items and sanctions to extension of time, etc. are attached to the original agreement by the Engineer in Charge so that these are readily available during the hearings of the arbitration case. 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.
- (viii) While examining the request for arbitration from a contractor or any claim ; the Engineer in Charge examines whether the claim of the contractor is time barred **or not**, in accordance with the provisions of the Limitation Act, 1908 or 1963 as the case is. This point is taken into consideration in preparing the defence before the arbitrator.
- (ix) The question as to whether any claim has become time barred will itself be a dispute which can only be settled by arbitration.
- (x) The Engineer in Charge may call the field Staff in-charge of the work from their new stations for any information that he/she may need to collect by personal discussions, but only under orders from the Superintending Engineer concerned.
- (xi) In cases where the claims (excluding interest) exceed Rs. 1 crore, advice of the Techno-Legal Cell is sought.
- (xii) The Engineer in Charge submits the Counter Statement of facts normally within two months, and in exceptional cases within three months from the date of receipt of the statement of the facts. However,in case the same is overruled by any order of the Arbitrator/s, the Engineer in Charge is bound to follow the order of the Arbitrator/s.

5. Production of official documents before Arbitrator/s

- (i) In case 'discovery' is sought by the contractor during arbitral proceedings, proper defence is raised, including proof of 'relevance' and need of specifying the documents. Similarly, the Department seeks discovery, only if necessary and is specific depending on the disputes under arbitration.
- (ii) Wherever required and found necessary, records of Central Technical Examiner / Chief Engineer (CSQ)/QA Unit's objections on overpayments and defective work, reports of CBI / SPE or the Vigilance Unit of the Department are consulted and their assistance is availed in order to defend the case.

6. Engagement of lawyer other than Departmental Counsel

Where the Counsel of the Department is not available and /or otherwise if 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 of the lawyer engaged is decided at the rates approved by the State in which the cases are conducted. In such cases, approval of the Chief Engineer/Additional Director General/Director General (Works) as the case is, is obtained before engaging such lawyer. However, the approval of the same from the competent authority as above is communicated to the Engineer in Charge within 15 days of the receipt of the request made by the Engineer in Charge.



(ii) Where the fees are in excess of the approved rates of charge laid down by the State Administration, and it is desirable to engage a lawyer, specialized in the particular matter in hand and broadly if it is in the interest of the government, prior approval of the DG, CPWD is obtained.

(iii) In the case of Engineer in Charges at stations where Senior/Junior Counsel is also stationed, the Engineer in Charges do 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 a lawyer is required to take up the case and appear before the court.

7. Engagement of Departmental Counsel (Junior/Senior/Standing/Private)

- (i) In cases, where the value of the claims is Rs. 1 Crore or more, the Counsel defends the cases with the help of the Engineer in Charge concerned before the Arbitrator. The Engineer in Charge takes necessary action to brief the Counsel.
- (ii) Where required, the Departmental Counsel assists in preparation of the counter statement of facts on the basis of the notes/matter made available to him/her by the Engineer in Charge.
- (iii) Where the contractor's claims are based on entries in the Measurement Books recorded by any CPWD officer who may have colluded with the contractor and made false entries, sufficient evidence contesting the correctness or veracity of the entries in the Measurement Books are placed before the Arbitrator in support of the contention of the Department.

8. Techno-Legal Cell

- (i) Arbitration cases pertaining to Sub-Regions of Additional Director General (NDR) and Additional Director General (DR) are handled by Director (Works), and those pertaining to other Sub-Regions, by the Director (TLCQA)/Director Works of the concerned Sub-Region.
- (ii) The Techno-Legal Units are required to take up the cases as soon as CSF/SF is prepared by the Department and is vetted by the concerned Superintending Engineer. These Units scrutinize the CSF/SF and render necessary advice to the Engineer in Charge/Superintending Engineer regarding defence of the case. The Engineer in Charge/Superintending Engineer should, however, continue to follow the procedure of getting the CSF/SF vetted further by the Counsel.
- (iii) The Techno-Legal Units scrutinize the cases of acceptance or otherwise of arbitration award in the power of Additional Director General/Special Director General/Director General and render necessary advice. The Chief Engineers seeks their advice in such cases.
- (iv) The Core Unit also deals with the cases of appointment of Arbitrator other than the designated Arbitrators of the Ministry of Urban Development, correspondence regarding legal opinion/ opinion of the Senior Counsel and suggestions for modifications to the existing Rules and Procedures, and any clarifications needed.
- (v) The Techno-Legal Units are required to examine the awards with a view to check:
 - (a) Whether the case has been properly defended before the Arbitrator, and
 - (b) Whether there are any lapses on the part of concerned officials due to which the award has gone against the department.
- (vi) The Techno-Legal Units bring such cases to the notice of the Chief Engineer for appropriate action.



9. Acceptance/Challenge of award

- (i) The Director General/Special Directors General/Additional Directors General/Chief Engineers in the CPWD are delegated powers for acceptance/Challenge of arbitration awards as provisioned under financial power delegated to the CPWD officers.
- (ii) When, in the opinion of CE/ADG/Special DG/DG there are no grounds to challenge the award under Section 34 (2)of the Arbitration and Conciliation Act, 1996, the case need not to be referred to the Sr. Counsel/Min. of Law for their advice. However, if considered necessary, CE can refer the matter to Sr. Counsel, CPWD/ Min. of Law (either Delhi or Local Branch) before accepting/ recommending for acceptance of the award.
- (iii) Where, in the opinion of CE/ADG/DG(W), there are good grounds available to challenge the award (whole or part of the award) under Section 34 (2) of the Arbitration and Conciliation Act, 1996, Ministry of law is consulted by the competent authority before taking a decision. An award should not be challenged without recording sufficient reasons to avoid frivolous litigation and interest burden.
- (iv) The time schedule for processing and deciding is as under:

Sr. No.	Authority to accept/ challenge the award	By EE to SE	By SE to CE	Action by CE
1	CE	20 days from the date of receipt of award or from the date of disposal of application filed u/s 33 of Arbitration Act.	10 days. The SE offers his/her specific comments about acceptance or challenging award against each claim.	The CE will take decision about accepting or challenging the award within 20 days after receipt of case from SE.
2	ADG	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 SE offers his/her specific comments about acceptance or challenging award against each claim.	The CE will submit the case to ADG within 10 days of receipt from SE with his/her specific comments about accepting/challenging award against each claim. The ADG will take decision about accepting or challenging the award within 15 days.
3	SDG/DG	- do -	- do -	Within 10 days of receipt from SE, the CE will submit the case to the SDG /DG under intimation to ADG/SDG who will send his/her comments to SDG/DG within 10 days. The SDG/DG will take decision about accepting or challenging the award within 15 days.



(v) If the award is found to be in order from all aspects, it is not challenged. However, Under Section 33, a party can make an application for correction or interpretation within 30 days of receipt of the arbitration award

- (vi) 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), Ministry of Law is consulted.
- (vii) An application for setting aside/challenge an arbitration award is not 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/her 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.
- (viii) The award amount should not be deposited in the court, in case of challenge to the award, unless otherwise directed by the court.

10. Payment of Arbitral Award:

- (i) Immediately on decision to accept the award by the Govt. of India (i.e. by Chief Engineer/ Additional Director General/ Special Director General, Director General as the case is), or on receiving such intimation from the contractor, a communication as per **Annexure-43** is 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.
- (ii) Payment is made to the contractor once the arbitration award is accepted by the Department and the payment is made within the specified period in the Award and if not so specified in the Award, then as per the Arbitration and Conciliation Act 1996.
- (iii) Money is get deposited by the client organizations for Arbitral award as per terms of the MoU. The payments made towards arbitration awards are charged to the work.
- (iv) 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, in case of no fixed date provided in the award, is taken into consideration.
- (v) If 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 then in such cases, the payment is made to the contractor as early as possible, and the case is submitted to the authority competent to accept the increased amount of award for ex- post facto approval.
- (vi) The award amount is paid even if the award is challenged for arbitration under the amended law in 2015 unless a stay is obtained through a separate Application. Even then the court may ask to deposit security for granting a stay. In deposit work the client is kept in loop regarding arbitration and the MoU is clear about liability of client for arbitration award.
- (vii) An Arbitration award is not be discharged by the death of any party thereto either as respect to the deceased or any other party, but is in such event be enforceable by or against the legal representative of the deceased.



(viii) The authority accepting the award examines, through the concerned Techno-Legal Units, whether there is any lapse on part of any official resulting the award against the Department. In case of any lapse is found appropriate action is taken.

(ix) Action is taken as per the NITI AAYOG circular No. N-14070/14/2016-PPPAU dated 05-09-2016, where the award is challenged.

11. General instructions

- (i) The Engineer in Charge sends a quarterly statement (ending March, June, September and December) of pending arbitration cases in the proforma **Annexure 43 A Part I & II** on 7th April, 7th July, 7th October and 7th January every year to the Superintending Engineer, who also sends a similar statement for the entire circle to the concerned Chief Engineer on 15th April, 15th July, 15th October and 15th January every year. These reports are reviewed by the Chief Engineer during periodical meetings with his/her Superintending Engineers/ Engineer in Charges to expedite the finalization of arbitration cases.
- (ii) The Engineer in Charge ensures 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. The Engineer in Charge also ensures that suitable and adequate arrangements are made in his/her Division regarding preservation of all-important documents, registers etc. Besides others, a list of all such records is prepared and kept handy so that correct position of each case is known to the Engineer in Charge who is required to defend the case, to enable him/her to do so on proper lines.
- (iii) The arbitration cases are not be considered as legacy of old and defunct Divisions handed over to subsequent Engineer in Charges. On the other hand, these are given due importance and dealt with on priority basis at all stages till these are finally disposed of.
- (iv) 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 Government by the contractor, the Engineer in Charge should first supply to the Arbitrator stamped paper of appropriate value as is asked for by the Arbitrator according to amount of the award as per the rules of the State where the award is likely to be made by the Arbitrator. However, it is for the Arbitrator to say as to which party should supply the stamped paper and the decision of the arbitrator in this matter prevails.
- (v) Often mistakes are made, despite engaging legal counsels from ministry of law, regarding the jurisdiction of courts in arbitration matters and particularly in challenge of arbitral award with adverse consequences. S.42 of the Arbitration Act confers jurisdiction only in one court, if the same has been approached earlier, but not due to previous Application under S.8 for reference to arbitration. Hence the proper advice must be obtained in each fact of case and the location from the legal counsel by giving full facts of history of case to avoid unnecessary litigation in wrong forum.
- (vi) As per judicial precedent the court at the seat of arbitration as well as the place involving subject matter of disputes have jurisdiction in arbitration. Where a High Court has original jurisdiction, it is the 'Court' for arbitration even in domestic arbitration. The procedure in court proceedings may depend on whether the arbitration is as per un-amended Act or amended Act in 2015. The Commercial Courts, the Commercial Divisions and Commercial Appellate Division, where set up, is have jurisdiction as per specified value of dispute.



SOP No. 5/32 : Court Cases and Judgment in Court Cases (Ref Para 5.22)

1. Court Cases

- (i) The expenditure likely to be incurred to recover any amount through litigation in courts, is carefully estimated so that unnecessary expenditure on litigation is avoided where there is no reasonable chance of recovering the judgment debts for reasons such as poor financial standing of the party concerned.
- (ii) It is the primary responsibility of the Departmental Counsel or Government Counsel at the particular station where the case has jurisdiction to see to the proper defence of the case. The superior officer of the Department keeps a constant watch over the progress of these cases and ensures that all such cases, at every stage, are processed properly so that the cases do not go against the Government interests by default, resulting in financial loss, etc. to the Government.
- (iii) The Superintending Engineer sees that all such cases are reported with all details to the Chief Engineer as soon as a suit against Government is threatened by any aggrieved party, or the Department itself intends to file a suit against a contractor or third party. Monthly reports on each such case is sent to the Chief Engineer detailing the progress of the case and further action taken.
- (iv) The Engineer in Charges of the Division concerned are primarily responsible for handling and defending the court cases. He/she collects all the relevant records and ensures all help to the counsel. The Superintending Engineer gives adequate and timely instructions to the Engineer in Charge to ensure that case is defended properly and handled expeditiously. If it is considered necessary to obtain the advice of higher authorities at any stage, the Superintending Engineer should refer the matter immediately to the Chief Engineer concerned for advice, either personal or in writing, according to the needs of the occasion.
- (v) The Superintending Engineer keeps himself/herself fully conversant with the progress of each case. He/she obtains regular reports from the Engineer in Charge about the progress of the case from time to time and sends monthly reports to the Chief Engineer.
- (vi) All defence statements to be filed by the Engineer in Charge are approved by the Superintending Engineer and the Counsel before the statement is filed.
- (vii) Engineer in Charges updates all the court cases in Legal Information Management and Briefing System (LIMBS) regularly and ensures all information is up- to-date.

2. Judgment in Court cases

- (i) The Engineer in Charge sends a report to the Chief Engineer direct within 48 hours after the court has delivered a judgment that is against and adverse to the Government with copies to the Superintending Engineer and the Ministry for information. He/she takes up the matter with the competent authority with the help of Superintending Engineer/Chief Engineer and take all necessary action as per decision of competent authority in each case.
- (ii) He is responsible to apply for and furnish with minimum delay a copy of the judgment and all other relevant papers, his/her own comments and the opinion of the Counsel conducting the case, on the advisability of filing an appeal/revision petition to enable the Government to come to a decision whether an appeal/revision is filed or not.



- (iii) On receipt of the relevant papers from the Engineer in Charge, the Superintending Engineer sends his/her own comments to the Chief Engineer. The Chief Engineer examines the matter on receipt of the Engineer in Charge's report, and considers the advisability of the filing an appeal/ revision petition in the light of the comments of the Superintending Engineer. Thereafter, the Chief Engineer forwards his/her proposals to the Ministry to enable them to seek the advice of the Ministry of Law.
- (iv) The proposal is made well in advance of the last date of filing an appeal, and it is 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 accompany the proposal.
- (v) The Engineer in Charges and Superintending Engineers ensures that there is no avoidable delay in the issue of the instructions to the Government pleader. In any case the instructions are communicated at least a day before the date of hearing.
- 3. Law charges on civil suits- The costs and expenses incurred on civil suits in connection with the execution of Government works is charged as per CPWD A-Code.

4. General issues related to Court Cases.

- (i) In order to enable the Engineer in Charges to put up proper defence of the case the Engineer in Charges hands over the charge of the Division, or transfer arbitration cases/ works, and they unless all the facts and arguments are already explained in the pleadings already submitted, prepare and place on record a self-contained note giving all the facts of the case and detailed comments on the claims.
- (ii) The Court of the place from where the letter of award of work has been issued, has the jurisdiction to decide any dispute arising out of or in respect of the contract.

SOP No. 5/33: Operation of Contract Clauses (Refer Para 5.23)

1. Clause 2 of CPWD Forms no.7 and 8 and Clause 16 of the CPWD Form no. 12

- (i) The compensation for slow progress or non-completion of work in stipulated time, at the rates specified therein, is an "agreed compensation" under clause 2, 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 clause 2 of the contract, if the progress of the work is slow or the work is not completed in stipulated time.
- (ii) In case the contractor feels aggrieved, he/she may appeal to the Chief Project Manager/ Project Manager/Superintending Engineer 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.
- (iii) In such cases the decision of the Chief Project Manager/ Project Manager/ Superintending Engineer is final and out of purview of the Arbitration clause. The Chief Project Manager/ Project Manager/Superintending Engineer should give a registered notice to the contractor, of his/her intention to levy the compensation. Proformas for show cause notice to be issued to the contractor regarding compensation under clause 2 have been given below
 - (a) When work either is in progress or has been completed. (Refer **Annexure-44**).
 - (b) In case of contract is determined under clause 3. (Refer **Annexure-45**).
- (iv) Reply submitted by the contractor, if any is taken while deciding the compensation.



2. Clause 2A of CPWD Form No 7 and 8 (Incentive for early completion)

- (i) Normally this clause is provided in NIT for works where estimated cost put to tender is more than Rs. 10 crore. However, NIT approving authority not below the rank of SE may provide this clause in NIT for works of lower value also, considering the advantage arising out of early completion of the work.
- (ii) Quantum of Bonus is to be paid to the contractor with the approval of noter.

3. Clause 3 of CPWD Forms no. 7 & 8 and similar clauses of other forms

- (i) This clause deals with determination of contract, forfeiture of security deposit and execution of work through other agencies. The determination as per clause 3 essentially means determination of the obligation of both the parties in the particular contract so far as performance of the work is concerned. Hence it is not termination of contract, as many of the clauses of the contract survive such determination for measurement of works, settlement of accounts, site clearance, settlement of compensation, dispute resolution etc.
- (ii) The determination of contract is possible as per law or as per terms of contract. Clause 3 provides the contractual rights out of breach of certain terms entitling the Engineer in Charge to determine the contract. When a contract provides for determination for breach of certain terms, such terms need not necessarily be conditions of contract, to entitle the party so empowered to determine the contract. However, the contractual procedure is scrupulously followed for determination of contract and any breach of procedure may make the determination illegal.
- (iii) Determination of contract under clause 3 need not be in every case only on anticipated breach of performance on completion date and such action can be taken based on other terms in clause 3, including failure to proceed with the work with due diligence. However, in case the determination under clause 3 is for anticipated or actual breach of contract for non-completion in completion time, such time has to be made essence of contract for completion of work before action under clause 3. This is a statutory requirement under section 55 of the Indian Contract Act, 1872. How this is to be done has been dealt with in Section 29.
- (iv) If the contract is for performance of a work and not a contract for performance for a time period and the time is made essence of contract, the contract is not come to end automatically on expiry of time, but in such case the innocent party obtains the right to avoid the contract for non performance at such time as per Section 55 of Contract Act. Hence the contract does not automatically come to an end if time is not extended further, but the innocent party has obtained only a right to avoid the contract and has to put the contract to an end. Hence in such case there has to be a positive action under Clause 3.
- (v) If the contract has not been determined on the expiry of justified extended date, time needs to be extended as per Clause 5.4 making such time as essence for performance of work by the contractor as laid out in Section 29, before any action is taken to determine the contract under Clause 3. Non-performance by the contractor in such extended period is entitle the Engineer in Charge to determine the contract under relevant provision in clause 3. In case there is no fair and reasonable extension of time granted on expiry of justified extended date, time is treated as set at large.
- (vi) The show cause notice under clause 3 (Refer Annexure-46) must mention the particular sub clause of clause 3 on which reliance is placed for breach by the contractor and should not be vague. In case the determination of contract is under sub clause 3(iii), the show cause notice is categorical i.e. either for anticipatory breach for non-performance during extended time notified as essence for performance of contract or for actual non-performance on such extended date.



- (vii) Determination of contract under clause 2 discharges the primary obligation on the part of the contractor to perform the contract, but gives rise to obligations to pay damages, as provided in clause 3, as consequences of determination. Clause 3 determination notice given in writing to the contractor under the hand of the Engineer in charge, for and on behalf of the President, is conclusive evidence for enforcement of this clause. The Tender Accepting Authority should approve the draft show cause as well as the draft final notice under clause 3 before its issuance by Engineer-in-charge. (Refer Annexure -47)
- (viii) Determination of contract is a drastic action and due precaution is taken before taking such action. The following points as applicable is ensured before issue of show cause / determination notice for determination of contract:
 - (i) Actions under clause 5, 12 and 15 as applicable are taken as per the contract and in time.
 - (ii) The terms on which the notice for determination is issued in show cause and final notice are properly satisfied and expressly mentioned in the notice.
 - (iii) In order to be reasonable and capable of holding Judicial / Arbitral scrutiny, actions to issue show cause and final notice is within reasonable period, respectively, of cause of action and of reply to show cause. Otherwise, claim of acquiescence may arise.
 - (iv) The determination notice should include conclusive finding against the reply submitted by the contractor, if any, to the Show Cause notice issued.
- (ix) Clause 3 of 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 is liable to be forfeited and is absolutely at the disposal of the Government.
- (x) The Contractor, whose contract is determined as above, is not be allowed to participate in the tendering process for the balance work. Once the contract is determined, no revocation is possible.

4. Action under clause 2 and 3 are independent

- (i) The compensation under clause 2 is for loss caused due to delay in performance, whereas, the compensation under clause 3 is for consequential losses due to non-performance of contract. Hence the Govt. is entitled to compensation under clause 3 and clause 2 independently.
- (ii) Hence, it is advisable to take action under clause 2 for levy of compensation depending on liability of contractor under clause 2 based on the delay at the stage of clause 3 action, before determination.

5. Clause 5 of Forms no. CPWD 7 and 8 clause 4 of Form no. CPWD 9

(i) Action on failure to commence the work

If contractor fails to start the execution of the work, the earnest money and performance Guarantee is forfeited by engineer-in-charge with the prior approval of tender accepting authority as defined in Schedule - F.

(ii) Re-scheduling of milestones

The Engineer-in-charge is 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.



(iii) 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, are 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 is, in his/her opinion, necessary or proper. his/her opinion as to whether the period of extension granted by him/her 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.

(iv) 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 is 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 Engineer in Charge suo-moto, and such extension of time is accepted by the contractor either expressly or implied by his/her action before and subsequent to the date of completion, the extension of time granted by the Engineer in Charge is valid. It is, therefore, necessary that the Engineer in Charge 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 Engineer in Charge, it will attract the provisions of clauses 2 & 3 of the agreement.

(v) Compensation for delayed performance

The compensation for delayed performance, on account of which extension of time is granted by the Engineer in Charge, which could be leviable under clause 2 would be a distinct matter. The decision to levy compensation under clause 2 would depend on:

- (a) Prior notice as contemplated by Section 55 of the Indian Contract Act, 1872.
- (b) Fault/delay/hindrance being attributable to the contractor, and
- (c) Proof of the loss occasioned thereby (in case it is challenged by the contractor before the Arbitrator).

(vi) Hindrances to be carefully weighed before deciding on EOT

- (a) The contractor in his/her application for extension of time, points out the various delays and the lapses on the part of the Department that he/she 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.
- (b) Though there is delays and lapses on the part of the Department, yet at the same time there are also delayed lapses on the part of the contractor. For such delays during the stipulated or extended period of completion, the contractor is responsible, but these



are also to be taken into account by the Engineer in Charge while recommending or granting extension. To safeguard Government'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.

(c) In granting extension of time, a balanced view is 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.

6. Clause 7 of Forms no. CPWD 7 and 8

- (i) The circumstances under which intermediate payments can be made to the contractor have been explained in manual under payments to contractor para 5.18 of this Manual. The Engineer-in-charge should fix a date by which the contractor should submit the bill each month.
- (ii) The amount admissible is paid by 10th or 15th working day after submission of the bill by the contractor to the Engineer-in-charge or his/her Assistant Engineer, with all the required details, depending upon whether the work is in the headquarters of the Engineer-in-charge or outside his/her headquarters.
- (iii) The payment to the contractor is made only on submission of the bill by him. If the contractor fails to submit the bill as aforesaid, he/she forfeits all claims whatsoever due to delays on payment including that of interest.

7. Clause 8 of Forms No. CPWD 7 and 8

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 is 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.

8. Clause 10(C) of Forms no. CPWD 7 and 8

(i) To ensure uniformity in working out the rates so payable, following procedure is followed:

(a) Materials:

The Increased/Decreased rates of material(s) is approved by Zonal Chief Engineer Payment/Recovery is 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 Zonal Chief Engineer.

(b) Labour:

- (i) The increase/Decrease is 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.
- (ii) The Increase/Decrease labour is considered on the minimum daily wages in rupees if any unskilled adult mazdoor, fixed under any law or statutory rule or order.



(ii) 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.

- (iii) 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 clause 5 of the contract without any action under clause 2 is payable, but it is limited to the prices/wages prevailing at the time of updated stipulated date of completion considering the effect of extra work (extra time to be calculated on pro-rata basis only as cost of extra work X stipulated period/tendered cost). This clause is not be applicable where clause 10CC is applicable.
- (iv) The component of labour for every work have to be predetermined and incorporated in schedule 'F'.

9. Clause 10(CA) of Forms no. CPWD 7 and 8

Clause 10 CA provides for varying the amount of contract due to increase or decrease in prices of various materials pertaining to the work. This clause is applicable for allowing adjustment in cost of work due to variation in prices of costly materials constituting substantial part of the work. The contract is varied and provided further that any such variation is effected for stipulated period of contract including the justified period extended under the provisions of clause 5 of the contract without any action under clause 2. However the work done during the justified period extended as above, payment is varied on the basis of prices/ wages prevailing at the time of updated stipulated date of completion considering the effect of extra work (extra time to be calculated on pro-rata basis only as cost of extra work x stipulated period/tendered cost). 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 and POL) is got approved from ADG concerned, who is 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. The items which are supplied by the department at fixed price to the contractor is also not be considered.

10. Clause 10(CC) of Forms no. CPWD 7 and 8

- (i) This clause provides for variation in contract amount due to variations in price of materials, and/or wages of labour required for execution of work (not for the materials supplied or services rendered at fixed price in accordance with clauses 10 and 34 and excluding materials covered under clause10CA), subject to certain conditions.
- (ii) Clause 10(CC) is applicable in contracts where the stipulated period for completion is more than 12 months.
- (iii) 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 clause 5 of the contract without any action under clause 2. However for work done during the justified period extended as above, payment is worked out on basis of prices/wages prevailing at the time of updated



CHAPTER 5

CONTRACT MANAGEMENT

stipulated date of completion considering the effect of extra work (extra time to be calculated on pro-rata basis only as cost of extra work X stipulated period/tendered cost).

- (iv) (a) Where provisions of clause 10CC are applicable, provisions of clause 10C will not be applicable but provisions of clause 10CA is applicable.
 - (b) Where provisions of clause 10CC are not applicable, provisions of clause 10C and 10CA becomes applicable.

(v) Pre-determination of all components affecting clause 10(CC)

- (a) The components of materials, excluding materials covered under clause 10CA, labour for every work have to be predetermined and incorporated in the schedule 'E'. For this purpose, the works, is 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.
- (b) Following percentage is indicated for various categories of civil works:

Category of work	(Cement + Steel + Material+ POL)*	Labour
Buildings	75%	25%
Road Works & pavements in airfields	90%+5% (POL)	5%
External sewerage	90%	10%
External water supply	95%	5%
Bridgework/flyover works	70%+5% (POL)	25%

^{*} Further break up is worked out.

Note: While mentioning the percentage of Xm in Schedule F of clause 10 CC, the percent of materials like Cement (15%)*, Steel (20%)*, POL and other material specified in clause 10CA covered under clause 10CA is deducted.

- *For normal building work only. NIT approving authority is work out these percentages for specific works based on detailed estimate.
- (c) 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 is fixed by the various authorities approving NIT taking into consideration the detailed estimate.
- (d) In respect of carriage works and for other development works, such as leveling, etc. also, the NIT approving authority may decide the percentage components.



(vi) Calculation of Escalation/de-Escalation

- (a) The contractor is 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 is 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 is taken into account. For subsequent statements, cost of work done during every quarter is taken into account. At the completion of work, the work done during the last quarter or fraction thereof is taken into account. For the purpose of reckoning the work done during any period, the bills prepared during the period is considered. The dates of preparation of bills as finally entered in the Measurement Book by the Assistant Engineer/ date of submission of bill finally by the contractor to the department in case of computerized measurement books is 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 is the criterion.
- (b) The Engineer in Charge will communicate the base index to the contractor in respect of each work.

11. Clause 12 of Forms no. CPWD 7 & 8

- 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.
- (ii) The Engineer-in-charge 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 are satisfied in the issue of such instructions:
 - (a) Instructions must be given before any additional or substituted item is taken up.
 - (b) They must be given in writing.
 - (c) They must be signed by the Engineer-in-charge.

12. 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 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. Payment made towards clause 10C/10CA/10CC should not be considered. He/she 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/her to request arbitration under the relevant clause about the propriety or otherwise of such period of extension.



13. Precautions to be taken during sanction of items

- (i) Procedure prescribed in GCC is to be followed for sanction of EI/SI/Deviations beyond deviation limit as per GCC provisions. Sometimes while sanctioning items the Engineer-incharge gives the impression to the contractor that although he/she had recommended higher rates, the Superintending Engineer or the Chief Engineer has reduced them. It should clearly be borne in mind that under the terms of the contract it is the Engineer in Charge who is the competent authority for according such sanction, and it is so worked as to convey clearly to the other party that the items have been sanctioned by him/her and not for or at the instance of the higher authority.
- (ii) Sometimes the Engineer in Charge endorses copies of communication addressed by him/her 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. is 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.

14. Procedure for sanction of items based on Market Rate Analysis

- (i) On receipt of the items duly supported by analysis of rate from the contractor as intimated by him/her under clause 12.2 of the contract, the Engineer-in-charge should consider whether the rates demanded therein are reasonable. If he/she is of the opinion that they are reasonable, he/she may agree to the rates after consulting the competent authority. If on the other hand he/she is of the opinion that the rates demanded are not reasonable and he/she does not agree to them, but agrees to the admissibility of these items, he/ she should determine the rates on the basis of the market rates within prescribed time limit. As far as possible, the market rate analysis is based on coefficients given in the Delhi Analysis of Rates.
- (ii) The contractor on no account suspends the work on the plea of non-settlement of rates of items.

15. Clause 16 of Forms no. CPWD 7 & 8

- (i) This is an important clause that casts an obligation on the contractor and the departmental staff to ensure execution of quality work.
- (ii) 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.
- (iii) 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.



- (iv) 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.
- (v) The Superintending Engineer has not been given any power to reduce or waive compensation levied by the Engineer in Charge under this clause.

[Form no. CPWD 9, 10, 11 and 11A - There is no corresponding clause in these forms.

Form no. CPWD 12 - Clause 12 of this Form is almost identical with clause 16 of Forms no. CPWD 7 and 8.]

16. Clause 21 of Forms no. CPWD 7 and 8 and clause 20 of Form no. CPWD 12

- (i) The tender accepting authority should keep the following points in view in case they decide to grant such a permission:
 - (a) Sub-letting is permitted only in exceptional cases and for recorded reasons as to why contractor himself/herself cannot directly run the contract.
 - (b) In all cases, the sublettee is a contractor of the same or higher capacity or class as the original contractor.
 - (c) Examining the terms and conditions of the agreement between the contractor and the sublettee in order to satisfy himself/herself that the contractor is not subletting the work for earning a middle man's profit.
 - (d) It is 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.
 - (e) Individuals holding general power of attorney cannot operate a contract awarded to a contractor.

Note: Engagement of labour on a piece work is not be deemed to be subletting.

Clause 13 of Forms no. CPWD 9 is identical to clause 21 of Forms nos. CPWD 7 and 8 as far as the subletting is concerned.

Forms no. CPWD 10, 11 and 11A - There is no corresponding clause in these forms.]

17. Clause 36 of Forms no. CPWD 7 and 8

(i) 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/her failure to do so. In order to effectively operate the provisions under clause 36, certain instructions on this clause are given below:

Engineer in Charge 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/her 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/her authorized representative namely AE or JE in site order



CHAPTER 5

CONTRACT MANAGEMENT

Book. The engineer(s) is invariably present fully during all stages of the execution of the work. It is also essential that the certificate that qualified engineer(s) the provisions of clause 36 has/have looked after the work during its execution is verified and recorded by the AE along with each running bill. Engineer in Charges should also verify the fact of employment during their visit of works.

- (ii) Certain Administrative instructions as regards this clause are given as under:-
 - (a) Engineer(s) deployed as per stipulation in the contract looks after only the work under contract and no other work and is available fully during execution of work.
 - (b) Even if contractor (or partner in case of firm/company) is himself/herself an Engineer, it is necessary on part of contractor to employ Engineer(s) and/or/Overseer for the supervision of the work(s) as per stipulation.
 - (c) The Retired Engineer/Asstt. Engineer who are holding Diploma is treated at par with Graduate Engineers for the operation of the Clause. Diploma holder with minimum 10 year relevant experience with a reputed construction company can be treated at par with Graduate Engineers for the purpose of such deployment subject to the condition that such diploma holders should not exceed 50% of requirement of degree engineers.
- (iii) Requirement of technical staff for a work is decided and stipulated in Schedule F as per guidelines given at **Annexure-20.**
- 18. Theoretical consumption statement with every bill
 - (i) 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 is prepared and got signed from the contractor at the time of obtaining his/her signature on the running account bill, so that he/she 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.
 - (ii) Once the distinction that recovery is for excess over theoretical consumption and not for consumption in the work becomes clear, it is inappropriate for the Engineer-in-charge to admit that the entire quantity of materials issued has actually been consumed in the work. In the counter-statement of facts in arbitration also, statement such as, "Excess materials have actually been used in the work", should never be made.
 - (iii) For non-scheduled items, the decision of the Superintending Engineer regarding theoretical quantities of materials that should have been actually used is final and binding on the contractor.

SOP No. 5/34 : Dispute Redressal Committee (Para 5.24)

- 1. The Additional Director General constitutes a standing committee for each Zone in the **Sub-region**, comprising of the following Members:
 - (i) For total claims in dispute more than Rs. 25.0 lakh
 - (a) Chairman- Chief Engineer(other than under whose jurisdiction the work falls)



- (b) Member- Director (TLQA)/ Director (works) who is the Member Secretary
- (c) Member- Superintending Engineer (other than under whose jurisdiction work falls)
 The SE in-charge of the work presents the case, as a party to the dispute, before DRC.

(ii) For total claims in dispute up to Rs. 25.0 lac

- (a) Chairman- Director (TLCQA) / Director (works)
- (b) Members- Two Executive Engineer other than EE under whose jurisdiction the work falls; one of whom is Executive Engineer (Planning/HQ) who is also the Member Secretary.
 - The Engineer in Charge of the work presents the case, as a party to the dispute, before DRC.
- 2. Suitable provisions are made in the NIT that the ADG in-charge will constitute the DRC comprising members mentioned above. This is incorporated under the clause 25 of schedule F of CPWD.
- 3. Engineer in Charge always maintains a separate file for the disputes that have cropped up on the work during the progress of the work. In case of his/her transfer or relinquishing charge due to any reason, he/she leaves a self-contained note on the file at the time of his/her handing over charge, giving full background of all the disputes including those have cropped up during the time of his/her incumbency, various developments thereon and the orders passed with due reference to the connected files.
- 4. The transferred Engineer in Charge makes a comprehensive note of the above. The note indicates 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 are handed over to their successors/other Divisions.
- 5. In the first instance, the Engineer in Charge, Superintending Engineer, or the Chief Engineer positively gives his/her decision on any matter relating to the contract, for which he/she is competent to do so.
- 6. If the decision so given is not acceptable to the contractor due to any legitimate reason, efforts are made to reason with the contractor to arrive at a consensus that is reasonable and legitimate under the terms and conditions of the contract.
- 7. If, however, no consensus between the parties is reached, the matter is referred to the next higher authority, and if no consensus can be reached at that level too, then the matter is reported to the Chief Engineer. If no consensus is reached at the level of Chief Engineer then the Chief Engineer refers the matter to the Dispute Resolution Committee for adjudication within 15 days of receipt of request by the contractor or the Engineer-in-charge.
- 8. In case there is no standing committee at the time of NIT or DRC committee is not constituted under clause 25 of Schedule F, ADG constitutes the committee within 15 days of the receipt of an appeal referring any dispute to DRC as per clause 25 of GCC.
- 9. The DRC hears both the parties, and suggests an amicable and legitimate solution to the problem, based on the principle of equity and natural justice.



10. The DRC gives decision on the claims of contractor or department within the period as per clause 25 of GCC, from receipt of reference. If no decision is given by DRC within three months then claimant is at liberty to seek appointment of arbitrator.

- 11. If the settlement by the DRC is acceptable to both the parties, the DRC submits its decisions to the Additional DG, who is empowered to accord acceptance to the same and give direction to the concerned CE accordingly for implementation.
- 12. If, however, the Committee fails to resolve the issue, the decision taken by the competent authority of the department in the matter stands. It would then be up to the contractor to either accept it, or to apply for arbitration under the provisions of Clause 25 of the GCC of the contract.
- 13. In case, either department or contractor is not satisfied with the decision of DRC, each can seek appointment of arbitrator.
- 14. The contractor is entitled to invoke the arbitration clause of the GCC after exhausting the remedy available under the Dispute Redressal Committee.



CHAPTER 7 QUALITY ASSURANCE

SOP No. 7/1 CTE's Organisation – Returns and Inspections (Refer Para 7.1.2)

- 1. The work wise returns are submitted in proforma given in **Annexure -48.** These returns are required to be submitted for the quarters ending March, June, September and December.
- 2. The proforma for quarterly progress report in respect of stores and purchase is given in **Annexure -49.**
- 3. Various documents relevant to the work generally asked for by the CTE are kept ready at site. A list of such documents is given in **Annexure -50**.
- 4. To expedite replies and settle the points and to ensure timely action, the time limit fixed by the CTE are strictly adhered to by officers of CPWD at all levels.
- 5. To watch proper disposal of replies, the T/S Authority/ Engineer in Charge maintains a register in proforma given in **Annexure -51.**
- 6. A Register of overpayments pointed out by the CTE Organisation and subsequent recoveries effected, is maintained by the NIT authority in the proforma given in **Annexure -52.**
- 7. Notice for rectification of defects, recoveries to the made etc., is issued by the concerned officer, who is party to the contract, acting for and on behalf of the President of India.
- 8. Qtrly progress reports to be sent to CTE for:

Category I Civil works, Turnkey works Contracts, Stores & Purchases, PPP- Public Private Partnership, Sale of Goods/Scrap/Land

Rs. Five crore and above.

Category-II Electrical/Mechanical works/Maintenance/Service contracts including Electronics / Instrumentation/ Telecommunication /Man power Supply/ Consultancy

relecommunication /Man power Supply/ Consultancy contracts:

Rs. One crore and above.

Category -III Horticulture works:

Rs. Ten lakhs and above.

- 9. The work wise returns are to be submitted on separate sheets.
- No reference to be made to CTE inspection/examination of works in any correspondence made with the contractor.

SOP No. 7/2: Quality Assurance and Technical Audit Wing (Refer Para 7.2)

The various steps regarding quality assurance and technical audit are to be followed as below:-

- 1. Minimum Quality Assurance Plan
 - (i) Minimum Q.A. Plan is 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 or as intimated from time to time by CPWD Directorate, the Technical Sanctioning Authority may provide this clause in the NIT considering its necessity.
 - (ii) Lot size, number of required tests and frequency of testing needs to be clearly indicated in QA Plan. 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 is varied suitably by NIT Approving Authority
 - (iii) It clearly indicates the Machinery and other Tool & Plants required to be deployed at site by the contractor.



CHAPTER 7 QUALITY ASSURANCE

- (iv) Requirement to setup field laboratory is defined. All the testing equipments to be arranged by the contractor is clearly mentioned by the NIT Approving Authority. A list of field equipments for typical field laboratory is given in **Annexure -53 & 53A**.
- (v) 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.
- (vi) A proper shuttering schedule showing quantity of shuttering to be brought at site either in one lot or at different stages of work forms part of QA Plan.
- (vii) Maintenance of Register of Tests -
 - (a) All the registers of tests carried out at Construction Site or in outside laboratories is maintained by the contractor which is issued to the contractor by Engineer-in-charge.
 - (b) All Samples of materials including Cement Concrete Cubes is taken jointly with Contractor by JE and the field officers as per percentage decided by the NIT approving authority and stipulated in the NIT. All the necessary assistance is provided by the contractor. Cost of sample materials is to be borne by the contractor and he/she is responsible for safe custody of samples to be tested at site.
 - (c) All the test in field lab setup at Construction Site is carried out by the Engineering Staff deployed by the contractor preferably. The percentages of tests to be witnessed by the field officers are to be decided by the NIT approving authority and stipulated in the NIT keeping in view the nature of work and should form part of QA Plan.
 - (d) All the entries in the registers are made by the designated Engineering Staff of the contractor and same is regularly reviewed by the field officers as well as the Engineer in Charge(e). Contractor is responsible for safe custody of all the test registers.
- (viii) Proforma for Mandatory tests as per **Annexure-54** is attached with each Running bill. Submission of copy of all test registers and material at site register along with each alternate Running Account Bill and Final Bill is mandatory. These registers are duly checked by AE(P) in Division Office and receipts of registers should also be acknowledged by Accounts Officer by signing the copies and register to confirm receipt in Division office.
 - If all the test registers and MAS register are not submitted along with each alternate R/A Bill & Final Bill, it is responsibility of Engineer in charge & concerned accounts unit to ensure that no payment is released to the contractor.
- (ix) Maintenance of Material at Site (MAS) Register -
 - (a) All the MAS Registers including Cement and Steel Registers is maintained by Contractor which is issued to the contractor by Engineer-in-charge.
 - (b) Each of the entry of receipt of material at site is 100% test checked by JE or by AE if there is no JE.
 - (c) Each MAS Register is checked by JE at least twice a week and at least once a week by AE. If There is no JE then MAS registers is checked by AE at least twice a week.
 - (d) Cement Register is reviewed by EE at least *once* in a month.
- (x) The 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 two is meet the required specifications and also the workmanship as per sound engineering practices.



QUALITY ASSURANCE CHAPTER 7

(xi) Minimum QA plan may vary work to work basis depending upon nature and volume of work.

(xii) The Superintending Engineer is also have to check and sign compliance of the quality assurance plan for the original/ major work costing above Rs. 10 crore before every alternate running account bill. The Superintending Engineer is not be absolved of his/her responsibilities to ensure that the quality assurance plan is complied within every work under his/her charge. It is his/her responsibility to locate the lapses or deficiency and take suitable action if the quality assurance plan is not implemented in spirit and action by the field officers.

2. Method Statement

In all major works of contract costing more than Rs.50 crore or as notified from time to time provision is 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.

3. Quality Assurance Set-up

- (i) QA wings in each sub region under the Additional Director General of the sub Region.
- (ii) Core Wing at the Directorate under the Chief Engineer (CSQ)...
- (iii) QA team at circle level

4. Organizational set-up of Quality Assurance Unit

The implementation of Quality Assurance in the field will require close co-operation among the three agencies, namely (a) field engineers (b) the construction agency, and (c) the Quality Assurance team at Circle level for strict compliance of Quality Assurance Procedure forming part of agreement.

5. Quality Assurance team at Circle level

- (i) The Quality Assurance team with the Superintending Engineer of the Circle as its head will comprise the Assistant Engineer, whose main job is quality assurance. In order that the role of the Assistant Engineer(QA) is effective in the process of Quality Assurance, the following points are essential:
 - (a) The periodicity of visit of works is such that the process control at various stages is possible.
 - (b) There is minimum delay between inspection of work and communication of inspection report to the field formation.
 - (c) The Assistant Engineer(QA) carries out his/her tasks in a work that relates operationally to the quality specifications and standards laid down for the work, and to the control actions that can be applied to the construction process. Thus the Assistant Engineer(QA) assesses those aspects which are important to the overall quality of the finished work.



CHAPTER 7 QUALITY ASSURANCE

- (ii) The functions of the Quality Assurance team at Circle level are to check the compliance of Quality Assurance system by the field units, to locate the lapse/deficiency in the implementation of the Quality Assurance Plan, and to guide the field engineers in quality related aspects of the work. For this purpose:
 - (a) The Assistant Engineer(QA) carries out minimum two visits to works every month.
 - (b) The Assistant Engineer(QA) prepares his/her program and take approval of the Superintending Engineer. The program is sent to site in advance of inspection.
- (iii) Such inspections by the QA team is, however, not absolve the responsibility of the Junior engineer/ Assistant engineer/Engineer in Charge for accepting only quality work from the contractor.
- (iv) The following norms have been decided for inspection to be carried out by the Assistant Engineer(QA) of the Circle Office:

(a)	Construction works costing less than the normal tender acceptance powers of the Superintending Engineer but more than or equal to the normal tender acceptance powers of the EE	Each work to be inspected at least twice during currency of work.	
(ii)	Construction works of the power of EE	Each work to be inspected once.	
(iii)	Maintenance works	Frequency to be decided by SE.	

- (v) During periodical visits, efforts of the Assistant Engineer(QA) is directed at:
 - (a) To check the quality of materials accepted by the field units for use in the work and to see whether the laid down system of 'Quality Assurance Plan' has been followed.
 - (b) To check the overall quality of the finished items. Random checks is applied by the Assistant Engineer(QA) with the help of handy instruments like impact hammer for determining the strength of concrete, portable, penetrometer for testing strength of mortar of plaster, electronic moisture meter for testing moisture content of timber, etc.
 - (c) To randomly check the field tests carried out by the field staff during the progress of the work.
 - (d) To provide guidance to the field staff in case of any problem relating to routine field tests.
 - (e) Finally, on the basis of these observations with regard to the quality of works, general adherence to the quality assurance procedures and the standard of progress, he/she is submit an overall assessment report in the form at **Annexure- 55** to the Superintending Engineer of the Circle. The Superintending Engineer is complete Part V of the report with minimum delay. The Assistant Engineer(QA) will then send the report to the Engineer in Charge concerned. In the case of works accepted by the Chief Engineer, or higher authority a copy of the Inspection Report is to be endorsed to the Zonal Chief Engineer also.



QUALITY ASSURANCE CHAPTER 7

6. Action by SE on AE (QA) Report

Based on the report of the Assistant Engineer (QA), the Superintending Engineer assess the following:

- (i) 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.

7. Sub Regional Q.A. units and their functions

- (i) Quality Assurance work in various Sub Regions are being looked after by the Sub Regional QA units headed by Director (work cum TLQA) the Superintending Engineer (TLCQA) or Director Works of the Sub Region.
- (ii) The Sub Regional QA units follow the guidelines and norms relating to Quality Systems and Procedures as laid down by the Quality Assurance Core Wing from time to time. These Sub Regional QA units function under the control of the Additional Director General, CPWD who is fully responsible for effective quality assurance in their Sub Region. However, the Chief Engineer (CSQ) also inspects the works in the Sub Regions on behalf of the Directrate to see the effectiveness of Quality Assurance as well as cases referred to him/her by the Chief Engineer/Additional Director General/ Special Director General.

8. The role and functions of Q.A. units under the Sub Region

- (i) In general, the QA units exercise the role of management of Quality Systems and Procedures to achieve and sustain quality of works executed by the CPWD, and to offer necessary guidance to the field units in this regard.
- (ii) Major functions assigned to QA Units are as under:
 - (a) To carry out inspection of original works costing more than the Superintending Engineer's power of acceptance of tenders in general, and maintenance works (including functioning of Enquiry Offices) from the Quality Assurance angle on selective basis. The QA units will check and comment on the Quality Assurance system in place.
 - The works where Third Party Quality Assurance agency have been engaged and detailed procedure of Quality Assurance and technical audit are followed, the works is not be selected either for comprehensive or normal inspection..
 - (b) For effective quality assurance, any major work is inspected 3 to 4 times during the progress of the work at various stages. Each QA unit headed by an Engineer in Charge is visit minimum 3 works per month, out of which at least 25% works is maintenance/ special repair works.
 - (c) To carry out comprehensive examination and technical audit of at least one Division per Zone in a year for works costing more than the Superintending Engineer's power of acceptance of tenders in general.
 - (d) To review the performance of new materials and techniques introduced in the Department from time to time on the basis of the field inspections.
 - (e) To convey observations regarding electrical works having bearing on the planning and execution of civil works to the appropriate unit in electrical wing and vice versa.



CHAPTER 7 QUALITY ASSURANCE

- (f) To inspect any work, or carry out investigations and enquiries with regard to quality related aspects assigned by the Additional Director General concerned/Special Directorate CPWD
- (g) To submit quarterly reports in brief to the Additional Director General covering: List of major works inspected, common defects/deficiencies observed in the work, And highlight of the functioning of the Sub Regional QA set-up.

9. The Core Wing and its functions

- (i) The Core Wing has the over-all responsibility of constantly reviewing the existing quality assurance procedures, and updating them on the basis of feedback from the Quality Assurance Teams.
- (ii) It carries out the functions of Sub Regional QA unit for works under all Additional Directors General under whom no Director Work cum TLQA) / Superintending Engineer (QA)/TLCQA is posted. Presently, the QA unit in the Core Wing looks after works under the Additional Director General (NDR), ADG (DR). In addition, it performs the following other functions:
 - (a) To deal with policy issues pertaining to Total Quality Management System (TQM) for the CPWD as a whole.
 - (b) To review the existing procedures regularly on the basis of feedback from the Sub Regional units, and to issue guidelines/instructions to ensure uniformity, consistency and reliability in implementation of Quality Assurance systems and procedures in the Department.
 - (c) To keep itself updated with modern testing equipments and methods, and disseminate information in this regard to all concerned in the Department.
 - (d) To carry out investigations and enquiries with regard to quality related aspects for specific works or any other functions assigned by the Chief Engineer (CSQ)/concerned Additional Director General/Director General, CPWD.

10. Uploading of works in Web Based Project Monitoring System (WBPMS)

All the works are uploaded in WBPMS by the respective officers(owner of the project) and further progress are updated and reviewed and is downloaded as and when required by the competent authority.

11. Issue of Inspection Reports by Core Wing/Sub Regional TLCQA units and follow-up action

- (i) During the inspection, the QA unit will prepare the necessary observations based on the proforma as **Annexure -56.**
- (ii) The emphasis of QA inspection is more on enforcing the required quality of work rather 'than on fault finding.. The QA inspections should, therefore, focus on ways and means to give the desired results in terms of quality of work. Defects/deficiency in the Quality Assurance system at the field unit level, lapses in the implementation of the Quality Assurance Plan is indicated for corrective action. The inspection report should consequently be broadly



QUALITY ASSURANCE CHAPTER 7

in two parts-the first, containing observations corrective in nature, and the second, part containing mandatory requirements.

- (a) The first part is on the shortcomings that are noticed, with necessary directions, and where necessary with necessary ways/methods, to rectify them. The field units should immediately act upon them, and report compliance to the QA cell.
- (b) The second part should cover serious shortcomings that affect the structural safety or life of the structure or installation. These is due to oversight, carelessness, inadvertent miscalculation, or deliberate action of a functionary or functionaries in the field formation. Such observations is require immediate remedial measures that could include rejection of the item of work or supply and re-doing the same, or reduction in payment, or in additional safety/ corrective measures. The inspection report should indicate the action to be taken by the field units. Where such shortcomings are due to, or are suspected to be due to deliberate and/or malafide motives, the QA cell is refer the case to the Chief Engineer for action to be taken against the erring officer(s) and/or official(s).
- (c) While mentioning the shortcomings noticed under 2(i) and 2(ii) above, corrective steps/ methodology to be taken up against each observation is to be indicated in the inspection report. EE/SE/CE may give their opinion on such corrective steps as suggested which is considered by QA unit and final decision to be conveyed to field units with minimum delay.
- (iii) After finalization of the report, the EE (QA) signs and sends the report to the concerned Engineer in Charge, simultaneously enclosing copies to the concerned Chief Engineer and the Superintending Engineer. A copy of the report will also be endorsed to the Additional Director General of Sub Region by the Sub Regional TLQA unit.
- (iv) Any point considered serious enough to be brought to the specific notice of the concerned Superintending Engineer/Chief Engineer is intimated by the Director (works cum TLQA) of the Sub Region/Chief Engineer (CSQ) through a separate letter by name in addition to the normal report.
- (v) Where some observation paras have been brought to the notice of the Superintending Engineer/ Chief Engineer, they should send their comments/replies after personal inspection in case the work is located at the same station/headquarter. For outside works, the Superintending Engineer/Chief Engineer can take the assistance of the Assistant Engineer(QA)/Superintending Engineer (P&A) in order to ensure that the replies are sent within 4 weeks from the date of receipt of the Inspection Reports/letters from the Director (works cum TLQA) of sub region/Chief Engineer (CSQ).
- (vi) Notwithstanding the above, serious irregularities/defaults, over-payments, shortages, of stores frauds like wrong certification, or wrong report of rectification of defects and any other matter involving vigilance angle is be referred to the Chief Vigilance Officer, CPWD immediately by the TLQA unit of sub region through their reporting officer/Chief Engineer (CSQ).

12. Action in Divisions on the Inspection Report of Core Wing/Sub Regional QA unit

 It is immediately brought to the notice of the Assistant Engineer and the Junior Engineer in charge of the work.



CHAPTER 7 QUALITY ASSURANCE

- (ii) The following further action is taken:
 - (a) The various observations involving the contractor's work or any other obligation of the contractor is brought to the notice of the contractor through the Site Order Book without quoting/giving reference of the QA unit inspections.
 - (b) The work is 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 is ensured that similar defects do not recur in further work.
 - (c) Wherever the defects are rectifiable, action is taken for their rectification,
 - (d) For items of observations not involving the contractor's work/obligations, the Engineer in Charge is ensure that due action is taken in time.
 - (e) Wherever any para is referred to the Superintending Engineer/Chief Engineer, the Executive Engineer should send an action taken report to the Superintending Engineer/ CE on priority.
 - (f) The Engineer in Charge concerned takes action on the observations, and sends 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 is concerted efforts 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.

13. Action in Circle Office on Inspection Reports of QA units

Following action is taken by the Superintending Engineer on receipt of the Inspection Report from the Core Wing/*Sub* Regional QA unit:

- (i) Watching the compliance of the observations by the Engineer in Charge and his/her Assistant Engineers/ Junior Engineers, and to ensure that replies to the Inspection Reports of the Core Wing are sent expeditiously.
- (ii) On paras referred to the Superintending Engineer/Chief Engineer by the QA Wing, they should not endorse the reply of the EE as it is. They should duly satisfy themselves about the same before sending their comments/reply to the QA unit.
- (iii) It is necessary that the observations made by the Q.A. unit are attended to on priority and compliance reported.
- (iv) The Chief Engineer should have regular quarterly reviews of pending Inspection Reports quarterly. Similarly review is done at Superintending Engineer's level at monthly intervals.



CHAPTER 8

MISCELLANEOUS

SOP No 8/1 : Co-opting of CPWD Officers as Members in Building Works Committee Constituted by various Department/ Organizations (Ref Para 8.1)

- Wherever CPWD is the executing agency, the officer of rank of EE / Assistant Engineer as approved by Chief Engineer and as acceptable to the client, participates in the Committee/Board dealing with works of the client. If required, higher level officers are made members with approval of Special DG/DG.
- 2. Wherever CPWD is not the executing agency, CPWD officers are generally not nominated to such Boards and Committees except in the following conditions:
 - (i) Where additional posts for participating in such Boards and Committees are got approved by these organizations on permanent or temporary basis and encadered with the CPWD or CPWD officers are selected on deputation.
 - (ii) Under exceptional circumstances where so approved by DG, CPWD.
- 3. The role and liability of CPWD Engineers on such Boards & Committees is to oversee that works are being carried out as per norms and provisions of the CPWD and other Government norms applicable to CPWD.
- 4. On observing departures/ violation from norms and provisions of CPWD and other Government norms applicable to CPWD, during execution of works, it is incumbent upon the member to point these out and ensure that participation is continued only if such observations are recorded. The Directorate is kept informed in such cases.

SOP No 8/2 : Consultations with Department of Archaeology and Other Departments for New Constructions. (Refer Para 8.2)

- 1. For any construction in close proximity to any protected monument, the Senior Architect and EE/SE/CE invariably consults the Department of Archaeology prior to conceptualizing the design for the proposed structure.
- 2. Consultation with local Civil Aviation Authority and Environment and Forest department etc. are carried out as per location and magnitude of the Project.
- For development of any new campus, the client department is made aware of the essentiality of EIA requirement in terms of judgment of Hon'ble Supreme Court in Civil Appeal No. 7425 of 2000.
- 4. No ancient monuments are demolished without consulting Archaeological Department
- 5. No religious office are 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. 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.



CHAPTER 8 MISCELLANEOUS

Such agencies should decide whether the intended land use in the area could be permitted or not on the basis of EIA

7. CPWD officers should ensure that recommendation for allotment of land for any infrastructural development is supported with EIA clearance even though 'actual- allotment of land is done by Ministry of Housing & Urban Affairs.

SOP No. 8/3: Disposal of Surplus or Unserviceable Stores through E Auction (Para 8.6 (1))

The following guidelines to be observed while conducting e-auction of unserviceable materials and surplus stores. Reference to SE, EE and AE in these rules includes officers of equivalent level:-

- 1. The materials to be auctioned are properly stored and clearly stacked for proper inspection by the prospective bidders
- 2. Wide publicity is given in the portal tenderwizard.com/cpwd which through system link gets published on eprocure.gov.in .The EE at his/her discretion endorses E auction notice to certain individuals, if he/she feels is in the interest of the Government to do so.
- 3. For auction of stores valued Rs. 10,00,000/- or more (reserve price), publicity is given in local English and vernacular press.
- 4. Date of publication of auction notice on the portal and press (where required) and the date of auction is kept minimum 7 days.
- 5. The e-auction notice clearly indicates particulars like value of materials for disposal, , earnest money, time and date fixed for auction, locality in which material is stored and any set of conditions depending on the materials proposed to be disposed off to avoid any claim by bidder due to misunderstanding or incorrect wordings provided in the contract document.
- 6. Earnest money @10% of reserve price is received from the bidders in required form. The officer receiving earnest money issues a receipt to the bidder.
- 7. CPWD officers do not need digital signature certificate for e-auction.
- 8. After the closing time of request but before the start time of e-auction, the AE/EE conducting e-auction logins and authorizes the eligible bidders to participate in e-auction by verifying the earnest money and other documents uploaded by them.
- 9. If bid is received within Y min of closing time, then the closing time is generally extended by X minutes. This process continues until no bid is received in last "Y" minutes before the extended closing time of auction. Values of "X" and "Y" is generally specified as 5 minutes in auction notice.
- If the bidder does not remove the materials from the site within 3 working days from the date of receipt of full bid money, EE can confiscate the balance materials lying at the site (such provisions is kept in auction documents)
- 11. After completion of e-auction, a complete record of all the bids offered by different bidders at different times is downloaded and signed by the officer conducting e-auction.
- 12. The officer conducting e-auctions sends an immediate report about the auction to the next higher authority.
- 13. Sample press notice for E auction & E auction notice is given as Annexure -57& 58, which is modified, if required. Sample of bid acceptance letter is given as Annexure- 59. All annexures form part of the contract.



MISCELLANEOUS CHAPTER 8

14. For stores sold by normal auction, a responsible officer not below the rank of Assistant Engineer attends and records the final bids in order to enable the sale account rendered by the auctioneer to be checked. The proforma in which this record is maintained is given at **Annexure -60**.

Notes:

- 1. Bids are accepted by the Engineer in Charge concerned. In case of bids below the reserve price, the bids are accepted by the next higher authority.
- 2. In case of rejection of highest bid, accepting authority to record in writing reasons for not accepting the same
- 3. Earnest money is returned to the unsuccessful bidders on completion of e-auction.
- 4. The bid award to be posted on CPWD portal.

SOP No. 8/4 : Estimates for Purchase, Repairs to Leased and Requisitioned Properties (Refer Para 8.14)

- In case of purchase of built up accommodation to house the offices of Government of India/UT
 Administration wherever authorised by the Ministry, a separate estimate is prepared after
 confirming the structural soundness of the building, and after a survey and valuation report of the
 Executive Engineer is submitted to the Ministry/Administrator and concurrence thereto obtained
 from the Ministry of Finance.
- 2. The maintenance of such buildings is normally carried out on the same plinth area rates/ percentages basis as laid down in case of other Government buildings, unless there are constraints in doing so.

Estimate for repairs to leased and requisitioned properties

- 1. The repairs for buildings taken by the Government on rent/lease or by requisition are taken up on the same plinth area rates/percentages basis as applicable to GPOA/ GPRA buildings.
- 2. While submitting estimates for repairs or additions and alterations to such buildings, following information is invariably 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 is furnished:
 - (a) Whether the proposed repairs or additions and alterations are due to Structural defects or not.
 - (b) Whether or not the landlord was approached, and whether he has consented to the carrying out of the repairs or additions and alterations in question.
 - (c) If the landlord 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.



CHAPTER 8 MISCELLANEOUS

3. In case of additions and alterations, if any portion of the building is to be demolished, necessary credit for the dismantled materials is afforded to in the estimate, as done in case of Government buildings.

4. If the landlord refuses to meet the cost of repairs or additions and/or alterations, if any required, non recurring expenditure and recurring expenditure as per powers delegated in "Compendium of Financial powers to CPWD Officers" may be sanctioned by the Additional Director Generals/Chief Engineers or any other authority designated for the purpose by the CPWD Directorate from time to time, and expenditure in excess thereto with the approval of the MoHUA, subject to the condition that at the time the building is released, the Government will have the right to remove all such installations or materials/articles as were added to the building/premises.

SOP No. 8/5: Hiring of Accommodation (Para 8.15)

- 1. For hiring of all private accommodation reqd. by any Civil Department of the Central Govt of Delhi, the EE(License Fee), CPWD is the Chairman of the Hiring Committee and concerned Assistant Director of Estate and Assistant Director (Finance) are the members.
- 2. For cities like Calcutta, Mumbai, Chennai and Nagpur, similar Hiring Committees exist, and the same procedure is followed
- 3. The requisitioning Department in the first instance, applies for a no objection certificate from the Directorate of Estate. On receipt of NOC, the requisitioning department applies for fair rent certificate to the EE (LF).
- 4. The EE (LF) in turn issues the fair rent certificate. The cost towards signing of agreement for hiring accommodation and payment of rent etc. is borne directly by the requisitioning department.
- 5. For places where there is a Superintending Engineer (Civil) posted at the station, the rent assessment is done by a Hiring Committee headed by the Superintending Engineer, with the local Assistant Estate Manager of the Directorate of Estate and an EE (Civil) co-opted by the Superintending Engineer as members, and certificate of reasonable rent is accordingly issued by the Superintending Engineer.
- 6. In case there is no officer of the Directorate of Estate at the station, the EE/ Assistant Engineer doing the estate function is co-opted as a member. In case, there is no such estate function involved, the Superintending Engineer co-opts an EE or Assistant Engineer as the second member.
- 7. In case there is more than one Superintending Engineer (Civil) at the station, the concerned Chief Engineer nominates one of the Superintending Engineers to head the Committee.
- 8. For all other areas, the rent assessment is done by the concerned EE (Civil) under whose jurisdiction the building proposed to be hired stands. If needed, he/she seeks assistance of an Assistant Engineer/Junior Engineer (Civil).
- 9. The procedure for calculating rent is given in **Annexure -61.** Proformas for issue of rent certificate is as per **Annexure-62A & 62B**
- 10. In cases where the rent is to be paid by the Central PWD due to branch of Estates Directorate not being there, the payment is made against specific estimates to be prepared for the purpose.
- 11. In case where the Administrative Departments using such premises hire the houses themselves and requests CPWD for issue of certificates as referred to above, then they are charged fees at the rates as are charged by the State Government for the purpose.



MISCELLANEOUS CHAPTER 8

SOP No. 8/6: Departmental Charges for Fair Rent Certificate (Para 8.16)

- The Central PWD 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 ½% of the cost of a building is charged by the Central PWD for issue of certificate to an autonomous body [even funded by the Central Government) about the reasonableness of its rent. The recoveries on this account are adjustable under the head "0059-PW-Other receipts". 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 is levied at the rate of 1/4% of the land value in addition to 1/2 % 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 is sufficient to charge 1/4% of the acquisition cost for examining the building and issuing suitability certificate.

SOP No. 8/7: Levy of Fees by CPWD for Consultancy Services (Para 8.20)

CPWD handles 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 to undertake construction on turn key basis, or for Mission's buildings abroad, etc. at negotiated rates. Fee for the Consultancy Services is charged by CPWD as given below.

FEES FOR CONSULTANCY SERVICES

(a)	Planning	4%
(b)	Construction Management	5%
(c)	Visits of CPWD Officers from India	1%

For planning and designing work, the following charges is levied:

(i)	Development of Master Plan	Rs.10000/- per hectare
(ii)	Architectural plans and drawings	3 % for original work
		½ % for repetition
(iii)	Structural designs and drawings	1% for original work
		½ % for repetition

Note:-

- 1. The above rates of Departmental charges/ fees is not be used for any commercial transaction either with a private party or with a PSU.
- 2. The soil testing and preparation of models would be paid for extra by the project authorities.
- 3. In addition, the project authorities bear the TA/DA expenses for members of the planning team who visit the site during the planning phase.



CHAPTER 8 MISCELLANEOUS

SOP NO. 8/8: Weeding Out Old Agreements (Refer Para 8.20)

- For weeding out old agreements, a Committee is constituted by the Chief Engineer comprising
 of Superintending Engineer (P)/ EE(P), Financial Officer to Chief Engineer, Executive Engineer
 of the concerned Division & 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.
 - (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.
- 2. The Committee will also prepare a list of such records as per proforma given in **Annexure -63** for all agreements that are weeded out.



PART - III SOPS RELATED TO MAINTENANCE WORKS

CHAPTER 9 GENERAL PROVISIONS

SOP 9/1: Annual Rate Contract System for Maintenance /Minor works (Refer Para 9.3.5)

- 1. Mainly, minor works and works of Additions and Alternations shall be dealt under this system.
- 2. The works, have to be planned in advance-and a number of agencies for works in each colony should be fixed before the start of financial year. Normal ARMO works, however, shall be dealt with under normal tendering system.
- 3. The items of work and their quantities to be executed shall be assessed by the concerned EE based on quantities of similar items executed in previous years.
- 4. Different schedules of such items/jobs shall be prepared for different trades/set of trades based on anticipated requirements.
- 5. Total anticipated quantities should be taken for framing estimate for technical sanction for each colony as per action plan.
- 6. All such estimates shall be technically sanctioned by the competent authority as per delegation of powers but not below the rank of SE.
- 7. Notice inviting tender (N.I.T.) shall be prepared on Form CPWD 7 (percentage rate basis) and approved by the authority who has accorded the technical sanction.
- 8. The quantity of items of work/jobs for approval of NIT shall be 25% of the total work as the work will be got executed on approved rate contracts by a maximum of five agencies. The tenderers eligible for this estimated cost of work will be permitted to participate.
- 9. Tenders for various technically sanctioned estimates shall be called from intending bidders. EM, SD, PG shall be payable as per manual provisions in proportion of the estimated cost put to tender.
- 10. The rates quoted by first lowest tenderer, if beyond acceptable limit, shall be brought down to an acceptable level through negotiations.
- 11. All the other tenderers shall be given a counter offer to reduce their rates to the rates quoted (or negotiated rates) by first lowest tenderer.
- 12. A maximum of five agencies shall be selected among the agencies who agree to reduce their rates to the level of first lowest tenderer. In case the number of agencies who agree to do the work at rate of first lowest tenderer are more than five then the agencies shall be selected in the order of first lowest, second lowest; third lowest and so on till five agencies are available.
- 13. The selection of five agencies as stated above shall be for each tender. Such list shall be valid for complete financial year. Such tenders shall be accepted/approved by the authority as per delegation of powers for the full quantity of work but not below the rank of SE.



CHAPTER 9 GENERAL PROVISIONS

14. As and when requisition of a set of works/jobs is received, the same shall be assigned to one of the short listed agency by EE starting from original L1 on a work order slip.

- 15. The subsequent work shall be assigned to different agencies on rotation basis in the order of notionally L2, L3; L4 and L5 etc. EE shall balance the work distribution amongst these agencies based on quarterly difference of 25 %. The contractor shall raise the bills for work done & payments shall be made accordingly.
- 16. If an agency does not start the work or does not perform the assigned work properly and/or in time, it shall be dropped from the list of approved/short listed agencies and their deposits including performance guarantee etc. shall be forfeited. Such agencies shall be debarred for tendering for a period of three years within that Zone. Such action shall be decided by CE. This shall form part of the contract as special conditions.



CHAPTER 14 STORES

SOP No. 14/1 Advance Payments for Purchase of Stores (Refer Para 14.5.1)

The CE/SE/EE or any other authority designated by CPWD Directorate from time to time, are authorised to make advance payments upto 90% to the firms for supply of stores upto the limit of their respective powers of acceptance of tenders subject to the following terms and conditions:

- 1. Advance payment is made only in cases where it is considered absolutely necessary.
- 2. The amount of advance payment against contract shall be made on the basis of a valid expenditure sanction issued with the concurrence of the competent authority.
- 3. The amount of advance payment against contract for supply of stores shall be restricted to 90% of the cost of stores, and the payment shall be made only against the despatch documents. Pre-inspection of the stores ordered should be ensured before making advance payment.
- 4. Where advance payment is made, transit insurance must be obtained from the supplier and the advance must be against Guarantee of equal amount from a Scheduled Bank.
- 5. The officers drawing the money for making advance payment to suppliers of stores shall be responsible for its adjustment within a period of one month from the date of the drawal of advance.
- 6. A second advance shall not be drawn for making advance payment to the firm/supplier unless the earlier advance, if any, made to the same firm/supplier has been adjusted.
- 7. The amount of advance shall be drawn on a simple receipt, and debited to the suspense account "Contractors other Transactions/Advance payments" in the works abstract of stock or work concerned.
- 8. The advance payment in cases not covered by the above conditions shall be made with the approval of the Director General.

SOP No. 14/2 Receipt of Materials (Refer Para 14.7)

- All the materials that are received should be examined, counted or measured when delivery is taken. In the case of Tools and Plant, the items should be brought on Form no. CPWA 13 with complete details.
- 2. 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.
- 3. 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/ Assistant Engineer/Executive Engineer, 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.



CHAPTER 15 MISCELLANEOUS

SOP No. 15/1: Maintenance of Building Register (Refer Para 15.3)

- 1. Every EE or any other authority designated by CPWD Directorate from time to time maintains a Register of Buildings owned by MoHUA/CPWD and keeps it upto date.
- 2. Necessary additions in the structure with cost is updated and certified by EE at the end of every financial year.
- 3. EE furnishes a Certificate to SE/CE or any other authority designated by CPWD Directorate from time to time about updating, every year in the month of July.
- 4. The Superintending Engineer or any other authority designated by CPWD Directorate from time to time, verifies the Building Register during inspections.

SOP No. 15/2: Procedure for Inspection of Buildings (Refer Para 15.3.1)

- 1. To ensure that the building/structures are safe to use, the following is ensured:
 - (i) The Junior Engineer (Civil & Electrical) inspects all buildings/structures twice a year and records a certificate to that effect.
 - (ii) Assistant Engineer (Civil & Electrical) also inspects all buildings/structures once a year and records a certificate to that effect.
 - (iii) In case, any deficiency/defect in the building/structure is reported by the JE/AE, the EE/ next immediate higher authority inspects the building/structure and takes immediate steps to remedy the defects.
 - (iv) The EE/next higher authority to JE/AE, as designated by CPWD Directorate from time to time also inspects important buildings/structures once a year and brings to the notice of his/her SE/ or any other authority designated by CPWD Directorate, for taking action for repair as considered necessary to make the building/ structure safe.
 - (v) In case SE/the authority designated by CPWD Directorate from time to time considers that the structure cannot be made safe with repairs, he/she informs his/her next higher authority who then inspects the building/structure and declares the building/structure unsafe for use.
 - (vi) A register of building/structure declared unsafe is maintained in the zonal office.
- 2. In case of important buildings like Prime Minister's House, Cabinet Ministers' House, Vice-President's House and houses of other V.I.P's, etc report about unsafe condition of the house is always be sent to the Chief Engineer/any other authority designated by DG,CPWD from time to time who routes it through the Ministry to the Department/Ministry concerned, if required, with his/her recommendations and proposal for repairs.



ANNEXURES TO WORKS MANUAL



ANNEXURE- 1

(Reference Para 1.1 (10))

FORMS OF BILL AND VOUCHERS FOR PAYMENT

The authorized 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

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

This form should be used for all running and final payments to contractors and suppliers (other than those relating to lump sum contracts for which Forms CPWA 27A and 27B are prescribed), 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 Form CPWA 26A should be attached to the bill.

(c) Hand Receipt Form CPWA 28

- (i) This is a simple form of voucher intended to be used for all miscellaneous payments and advances for which none of the forms mentioned above is suitable.
- (ii) This form is not to be used for refund of lapsed deposits for which Form TR 62 is to be used.



(Reference Para 2.10, Para 2.12)

BUDGET, RE-APPROPRIATION, WORK ANNEXURE, NEW INSTRUMENTS OF SERVICE, AUDIT, ACCOUNTS

1. Form of Accounts: Government Accounts shall be kept in the following parts, as per the provisions of the Constitution of India:-

Part II : Consolidated Fund
Part III : Contingency Fund
Part III : Public Account

Part I consolidated fund shall consist of all revenues received by Government, loans raised by it, and also its receipts from recoveries of loans granted by it from the Consolidated Fund. All expenditure of Government is met from the Consolidated Fund, as authorized by the appropriate legislature. All appropriations granted by the Parliament expire at the end of financial year and no deduction of unspent budget can be appropriated for meeting the demands in the next financial year. Thus, all unutilized funds within the year 'lapse' at the end of the financial year.

Part II, namely Contingency Fund of the Accounts, shall be recorded the transactions connected with the Contingency Fund set up by the Government of India or of a State or Union Territory Government under Article 267 of the Constitution / Section 48 of the Union Territories Act, 1963.

Part III, namely Public Account, of the accounts, the transactions relating to Debt (other than those including in Part I), "Deposits", "Advances", "Remittances" and "Suspense" shall be recorded. The transactions under Debt, Deposit and Advances in this part are such in respect of which Government incurs a liability to repay the moneys received or has a claim to recover the amounts paid, together with the repayments of the former (Debt and Deposits) and the recoveries of the latter (Advances). The transactions relating to "Remittances" and "Suspense" in this Part shall embrace all merely adjusting heads under which shall appear such transactions as remittances of cash in Banks. The initial debits or credits, to these heads will be cleared eventually by corresponding receipts or payments either within the same circle of account or in another account circle.

1.1 The range of code numbers allotted under the scheme of codification is shown below:-

Part I – Consolidated Fund Major Head Code Nos.

Section I - Receipt Heads - (Revenue Account)	0020—1999
Expenditure Heads - (Revenue Account)	2011—3999
Section II - Receipt Heads - (Capital Account)	4000
Expenditure Heads -(Capital Account)	4046-5999
Section III- Public Debt, Loans & Advances	6001-7999
Part II Contingency Fund	8000
Part III – Public Account	8001-8999



ANNEXURE- 2

1.2 Major, Sub-Major, Minor, Sub-Head, Detailed and Object Heads

- (a) The main unit of classification in accounts shall be the Major Head which shall be divided into minor heads, each of which shall have a number of subordinate heads, generally shown as sub-head. The sub-heads are further divided into detailed heads and detailed heads are further divided into Object Heads. Sometimes, major heads may be divided into 'Sub-major heads' before their further division into minor heads.
- (b) The Sectors, Major heads, Minor heads, Sub-heads, Detailed head and Object head together constitute a six tier arrangement of the classification structure of Government Accounts.
- (c) Major heads / Sub-Major heads of account falling within the Consolidated Fund generally correspond to 'Function' / Sub-function of Government, such as different services like "Crop Husbandary", "Defence Services" and Public Works, Office Building, Other Buildings and General etc. provided by Government while minor heads subordinate to them shall identify the "Programme" undertaken to achieve the objective of the function represented by the Major Head. A programme may consist of a number of schemes or activities and these shall, generally, correspond to "sub heads" below the minor head represented by the programme. In certain cases, especially in regard to non developmental expenditure or expenditure of an administrative nature, the sub-heads may denote the components of a programme such as 'Organisation' or the different 'Wings of Administration'. A Detailed Head is now termed as a Sub-scheme.
- (d) An Object head is termed as unit of appropriation. On the expenditure side of the accounts particularly in respect of heads of accounts within the Consolidated Fund, object heads are primarily meant for itemized control over expenditure and indicate the object or nature of expenditure on a Scheme / Sub-scheme or activity or organisation in terms of inputs such as "Salaries", "Office Expenses", "Grants-in-aid", "Loans" and "Investments" etc. and many more as enunciated in Rule 8 of the Delegation of Financial Power Rules, 1978 as amended from time to time.
- (e) The detailed classification of account heads in Government Accounts and the order in which the Major / Sub-major and Minor heads shall appear in all account records shall be such as are prescribed by the President on the advice of the Comptroller and Auditor General of India. The list of Major and Minor heads of Accounts of Union and States contains the classification prescribed (including the code No. assigned up to the major / Sub-major heads and minor heads the reunder) should be strictly followed.

1.3 CLASSIFICATION OF EXPENDITURE AS "CHARGED" OR AS "VOTED"

Expenditure which under the provisions of the Constitution is subject to the vote of the Legislature shall be shown in the accounts separately from expenditure which is "Charged" on the Consolidated fund of India or of a State or Union Territory Government. The expression "Charged" or "Voted" shall be appended to the heads concerned to distinguish the two categories of expenditure.

1.4 Grants for Expenditure Abroad

Estimates of transactions taking place abroad are required to be accounted for under the functional Major Head of Account, relevant minor head, Sub-head, Detailed Head and Object Head as the case may be. In the case of receipts of the department arising in the accounts of the High Commission / Embassy of India, the receipts would be passed on by



the Pay & Accounts Office, Ministry of External Affairs to the PAO concerned of the Department for eventual booking under the relevant minor head of the Major Head concerned. In the case of expenditure abroad viz. expenditure on stores, the debit on this account would be passed on by the P.A.O., Ministry of External Affairs, to the P.A.O. concerned of the Department for eventual booking under the relevant Major /Minor /Sub and detailed head of account.

The estimates for departmental payments abroad with the abolition of the average rate of exchange w.e.f. 1.4.74, are required to be budgeted by adopting the composite rate of exchange as notified by the Ministry of Finance from time to time. The resultant loss by exchange arising from such transactions is debitable to the capital head concerned while in the case of revenue heads, such loss/gain by exchange is accounted for under the major Head "0075" (in the case of gain by exchange) and "2075" (in the case of loss by exchange).

1.4.1 General requirement and Accounting Procedure for Works outside India

- (1) Works outside India are executed by CPWD as and when assigned by Govt. of India through Ministry of External Affairs.
- (2) The works to be executed outside India generally comprise of the works pertaining to Ministry of External Affairs and the projects to be taken up under Government of India's economic aid to the country.
- (3) For execution of projects, a Project Team of requisite strength is deputed in consultation with Ministry of External Affairs and after obtaining approval of Ministry of Urban Development. Depending upon the magnitude and importance of the project, the project team may be headed by an officer of the rank of Executive Engineer or Superintending Engineer or Chief Engineer.
- (4) Under the economic aid program, the land necessary for the project is provided by the concerned country free of all encumbrances. The payment of compensation, if any, and the settlement of claims or disputes arising there from, is the responsibility of the Government of that country.
- (5) After completion of the projects taken up under the economic aid program, the concerned Government takes over the project and undertakes to make provision to keep it in proper maintenance.
- (6) In addition to execution of the projects, CPWD also provides consultancy services for planning and design.
- (7) For the works executed outside India also, in general, the same accounting procedure is being followed by the CPWD for works in India. Deviation where necessary according to local conditions is approved by the competent authority in Ministry of External Affair/concerned Embassy in which case funds for the project are provided to Embassy itself and the entire expenditure on the projects as well as on the establishment of the CPWD Project Team are routed through the accounts books of Embassy.

1.4.2 CPWD: Heads of Accounts

The budget is prepared under various Heads of Account depending upon the nature of expenditure. The Main Heads, Minor heads and other heads are defined in CPWD Accounts Code issued by CGA/ CCA, MoHUA



1.5 New construction projects to be included in the Budget Grants of Ministry of HUA

Ministries/Departments prepare proposals for "New" construction projects to be included in the Budget Grants of Ministry of Urban Development. These proposals shall be furnished in the format circulated by Director (Finance), CPWD/ Budget Section of the DG, CPWD.

1.6 Details of Estimated strength of establishment

The Heads of Departments are to furnish the details of posts included in these estimates in order to furnish the statement showing the "Estimated strength of establishment" and provisions thereof to be appended to the detailed Demands for Grants. For this format issued by the Budget section of O/o DG,CPWD shall be followed.

1.7 Provisions for Re-Appropriation of funds under DFPR

Rule 64 of GRR 2017 regarding provisions relating to the Re-appropriation of Funds, relevant rules under DFPR to be followed in CPWD.

The executive Government is allowed to re-appropriate provisions from one sub- head to another within the same Grant, thus altering the destination of an original provision for one purpose to another, subject to the limits and restrictions laid down. The Comptroller & Auditor General and the Public Accounts Committee reviews these re-appropriations, and wherever necessary, comments on them for taking necessary corrective actions. As per Rule 59 of the General Financial Rules, the provisions relating to the Re-appropriation of Funds, state that:

- Subject to the provisions of Rule 10 of the Delegation of Financial Powers Rules, 1978, and also subject to such other general or specific restrictions as may be imposed by the Finance Ministry in this behalf, re-appropriation of funds from one primary unit of appropriation to another such unit within a grant or appropriation, may be sanctioned by a competent authority at any time before the close of the financial year to which such grant or appropriation relates.
- Re-appropriation of funds shall be made only when it is known or anticipated that the appropriation for the unit from which funds are to be transferred will not be utilized in full or that savings can be affected in the appropriation for the said unit.
- Funds shall not be re-appropriated from a unit with the intention of restoring the diverted appropriation to that unit when savings become available under other units later in the year.
- 4. An application for re-appropriation of funds should ordinarily be supported by a statement in Form GFR 4 or any other special form authorized by departmental regulations showing how the excess is proposed to be met. In all orders, sanctioning re-appropriation, the reasons for saving and excess of Rupees 1 lakh or over and the primary units (secondary units, wherever necessary), affected should be invariably stated. The authority sanctioning the re-appropriation should endorse a copy of the order to the Accounts Officer.

Rule 10 of the Delegation of Financial Powers Rules lay down the General Restrictions relating to Appropriations and Re-appropriations, which are as follows-

1. Funds shall not be appropriated or re-appropriated to meet expenditure which has not been sanctioned by an authority competent to sanction it.



- 2. Funds provided for charged expenditure shall not be appropriated or reappropriated to meet votable expenditure and funds provided for voted expenditure shall not be appropriated or re-appropriated to meet charged expenditure.
- 3. No re-appropriation shall be made from one Grant or Appropriation for charged expenditure to another Grant or Appropriation for charged expenditure.
- 4. Funds shall not be appropriated or re-appropriated to meet expenditure on a new service or new instrument of service not contemplated in the Budget as approved by Parliament.
- 5. Expenditure on Works shall be subject to the following further conditions, namely-
 - (a) Funds shall not be appropriated or re-appropriated to any work which has not received administrative approval and technical sanction as prescribed by the Government from time to time.
 - (b) The amount appropriated to any work shall not, save with the previous consent of the Finance Ministry, exceed the amount approved or sanctioned for that work by a sum greater than the excess which may be authorized under the rules referred to in clause (a). Provided that such consent may not be necessary if savings are available elsewhere under appropriate Works Head to re-appropriate funds to cover excess of expenditure over authorized limits up to 15 percent.
 - (c) Save with the previous consent of the Finance Ministry, no re-appropriation shall be made from the primary unit 'Major Works' to any other unit: Provided that where such a provision is made under Revenue Head in the budget, a Department of the Central Government shall be competent to reappropriate funds between the allied primary units 'Major Works', 'Minor Works', 'Maintenance', 'Tools and Plants', included within the same Grant or appropriation and no such re-appropriation shall, however, be made from or to the 'Suspense Head' relating to public work.
 - (d) (i) Save with the specific approval of Parliament or an advance from the Contingency Fund of India, appropriation or re-appropriation shall not be made to meet an expenditure for a new public work not provided for in the budget, which may cost [rupees fifty lakhs] or more.
 - (ii) Save with the previous consent of the Finance Ministry, no reappropriation shall be made for a new public work costing rupees ten lakhs or above but less than rupees fifty lakhs.
- 6. Without the previous consent of the Finance Ministry, no re-appropriation shall be made-
 - (a) From and to the provision for the Secret Service expenditure;
 - (b) So as to augment the provision under the primary units 'Salaries', 'Wages', 'Office Expenses' and 'Other Charges', taken together for the entire Grant or Appropriation, except for the exception for the Ministry of Information and Broadcasting as provided vide Note under Rule 10 (6) (b) of DFPR;
 - (c) from the provisions made for any specified new item of expenditure in a Grant or Appropriation for another purpose;



ANNEXURE-2

- (d) from funds provided under the Plan Heads to the Non Plan Heads both under Revenue and under Capital Heads; and
- (e) so as to augment the provision under the primary unit 'overtime allowance'.
- 7. Funds shall not be appropriated or re-appropriated from or to the primary unit of appropriation 'Deputation or Travel abroad of Scientists' over and above the funds provided for in the budget as approved by Parliament.

Ministries/Departments will have full powers for re-appropriation of funds from one Plan head to another Plan head in a Grant, except in cases involving foreign exchange provided that-

- (a) Commitments are not made beyond the allocations for the schemes during the Plan period; and
- (b) No re-appropriation from Capital to Revenue and vice-versa is made.

The Ministries/Departments shall not have powers to make re-appropriation in respect of following types of cases without the prior approval of Finance Ministry-

- (i) Re-appropriation of funds to augment the Secretariat expenditure;
- (ii) Re-appropriation of funds between direct expenditure in the Revenue Section to Grants in aid to States/Union Territories in the same Section and vice-versa; and
- (iii) Re-appropriation of funds between Capital Outlay and loans or viceversa, in Capital Section. Some other DFPR provisions related to reappropriation in brief are as follows-

Financial Advisers may divert the funds to augment provision for travel expenses according to the orders of MoF with the approval of Secretary of the Ministry. Savings in Revenue Section are not available for re-appropriation in Capital Section and vice-versa. Administrative Ministries/Departments may enhance provision under 'Travel Expenses' up to 10 percent with Prior approval of Secretary (Expenditure) if necessary for re-appropriation increasing the budget provision by rupees five crores or more.

- 1.8 List of various records which are examined by inspection party during local inspection are mentioned in CPWD Accounts Code issued by CGA/ CCA, MoHUA and as per Internal Audit Manual issued by O/o CGA.
- 2. Scope of functions of PAC, role of CAG, Draft Audit Para etc.
 - 2.1 The scope of functions of PAC, role of CAG, Draft Audit Para, Action to be taken by CPWD offices, Audit Report, Presenting the case before PAC, Disciplinary actions against the officials etc.are mentioned below:

2.2 Scope of functions

 The functions of the Public Accounts Committee will be laid down by the Parliament/ Legislature. The rules of business provide that the main function of the Committee is to consider the matters that are commented upon in the Audit Report by the Comptroller and Auditor General.



ANNEXURE TO CPWD WORKS MANUAL 2019

- 2. The function of the Public Accounts Committee is to discharge the responsibility of exercising vigilance over the financial working of the Government. The functions of the Public Accounts Committee are limited firstly to see that proper sanction of Parliament/Legislature has been obtained for expenditure to be incurred, that it has been presented in proper form so as to enable the Parliament/Legislature to understand the implication of the expenditure, that at the end of the year the appropriations have been asked upon in the proper way, and that if there are savings and excesses these are adequately explained.
- 3. The Public Accounts Committee would see that the Administration has functioned with due wisdom, faithfulness and economy. For this purpose, it is necessary for the Public Accounts Committee to have the material to show exactly that these duties of the Government have been performed, and the Audit Department supplies the Committee with the material in the form of Audit Reports.
- 4. In scrutinizing the Appropriation Accounts and the Audit Report thereon, the Committee has to satisfy itself that:
 - (a) The moneys shown in the accounts as having been disbursed were legally available for and applicable to the service or purpose to which they have been applied or charged;
 - (b) The expenditure conform to the authority which governs it; and
 - (c) Every re-appropriation has been made in accordance with the provisions made in this behalf under the rules framed by the competent authority.
- 5. The Public Accounts Committee, before taking up consideration of the current year's Report, goes over the past recommendations in which the Government has not taken action considered appropriate by the Committee. If in a particular case, an item appears year after year and the Department has not been giving satisfactory explanation, the Committee may appoint a small Sub-Committee, who might ask the Government to submit all the relevant papers so as to enable the Committee to arrive at proper conclusion.
- 6. If the Government directs or wants a certain department to adopt a certain procedure and the officer does not comply with it, the Committee will bring to the notice of the Government through its report that the officer does not appear to have followed the procedure, and the Government should make necessary investigation and take such disciplinary action as is considered necessary. In such case of an item which is placed before the Public Accounts Committee, and is under investigation by the Police Department, or is receiving attention of the Court of Law, the Public Accounts Committee will await the result of the Police investigation or judgement of the Court.
- 7. It is the function of the Public Accounts Committee to ensure that the guilty, negligent, corrupt and inefficient Government servant does not escape punishment. The Committee is not, however, concerned with the individual but with the system. The individual is employed by the Government, and the Public Accounts Committee cannot substitute itself for Government in the matter of punishment. But the Committee is certainly entitled to know what action has been taken on its recommendations.



ANNEXURE- 2

2.3 Role of Comptroller and Auditor General of India

The role of the Comptroller and Auditor General or his representative before the Public Accounts Committee and before the Executive is to explain the position fully, to give all aspects of the case, to point out whether a failure, if any, has occurred. It is then for the Public Accounts Committee to have an objective examination of the various points of view submitted by the Executive and by the Audit and come to a conclusion. The Comptroller and Auditor General does not influence the Committee in coming to those findings, and it is quite possible that he may even hold somewhat different views on a particular matter. But the Comptroller and Auditor General has still a role to play in the matter of drafting the report of the Public Accounts Committee, because he is to assist the Committee in seeing that all the relevant facts have been brought out in the report.

2.4 Audit Report

- 1. If replies to draft paras are considered satisfactory these are dropped. If these are not considered satisfactory and need further probe, these are included in the Audit Report. The Administrative authorities should undertake a thorough scrutiny of the Audit Reports immediately on their receipt, both in regard to verification of facts and figures mentioned therein, and for initiating prompt action on the various points brought out in the reports. Whenever irregularities are mentioned in the Audit Report, action to rectify them should be taken in advance of their consideration by the Committee, so that the Committee are informed of the final position, and not merely told that the matter would be looked into.
- 2. In case any discrepancy is noticed in the facts and figures mentioned in the Audit Reports, the same should be reported to the concerned Audit Officer immediately, and should not be held up for being discussed in the PAC meeting. It should also be ensured prior to appearing before the PAC that the discrepancies pointed out to Audit have been duly taken notice of by the Audit, so that a complete picture is available to the Committee as regards the facts.
- 3. The replies to the Committee's recommendations should be explicit and self-contained. In particular where remedial measures are called for, the details of action taken should be specifically spelt out. These should, in no case, be replied as 'Noted'.
- 4. The following procedure should be ensured while furnishing replies to the Committee's recommendations:
 - (i) The replies should be furnished (with 40 copies) duly vetted by Audit, and signed by the Secretary/ Additional Secretary/Joint Secretary concerned.
 - (ii) The replies to recommendations/observations should be framed with reference to the summary of recommendations as appear in the body of the Report showing the Summary of main conclusions/recommendations.
- 5. It is essential to furnish the Committee complete and correct information, duly vetted by the Audit to enable them to come to correct conclusions.



ANNEXURE TO CPWD WORKS MANUAL 2019

2.5 Presenting the case before the P.A.C.

- 1. It has always been the practice that the Secretary to the Government in the Department concerned invariably represents the Government in the meetings of the PAC. Generally speaking, the Secretary to the Government is not responsible for executive functions, and accordingly he is able to take a more objective and detached view of the transactions that the Head of the Department is able to take. The Head of the Department, i.e. the Director General (Works) and the Chief Engineers assist the Secretary with information whatever is considered necessary.
- 2. If a particular officer who is representing the Department at the moment is not able to explain an item of expenditure fully, the most that the Committee could do is to suggest to him that he might obtain information from the officer who was in-charge of the work. The Committee cannot go to the individuals, because it is the Department which is to answer.



ANNEXURE- 3

(Reference Para 3.1)

DETIALS OF PRE-CONSTRUCTION ACTIVITIES

The following Activities are involved in Pre-construction stage:

- (A) Incase A/A &E/S based on Detailed Project Report (DPR) after approval of enabling estimate, then following pre construction activities shall be followed.
 - (i) Requisition from the client.
 - (ii) Preparation of enabling estimate for preparation and submission of detailed Project Report (DPR) to client for accord of A/A & E/S. The enabling estimate should be prepared after consultation with the client to assess and appreciate their requirements.
 - (iii) The enabling estimate should give Rough Cost based on probable plinth areas requested by client and should incorporate estimated expenditure to be incurred on the following activities:-
 - (a) Site survey,
 - (b) Soil investigation
 - (c) Appointment of Architectural consultant, if required
 - (d) Appointment of Structural consultant, if required
 - (e) Appointment of E&M consultant, if required
 - (f) Other essential preliminary steps connected with preparation of detailed project reports.
 - (g) Model of the project, if required
 - (h) Assessment of services such as water supply, electricity, drainage and sewerage etc.
 - (i) Obtaining statutory approval from local bodies / local authorities
 - (iv) Submission of enabling estimate to the client
 - (v) Approval of enabling estimate by the client.
 - (vi) Appointment of consultant for site survey, soil investigation, obtaining local body approvals, architectural, structural and E&M services, wherever required.
 - (vii) Discussion with the client to assess and appreciate their requirements, incorporation of the same and preparation of the detailed architectural plans and specifications.
 - (viii) Approval of the detail architectural plans by the client.
 - (ix) Preparation of detailed working drawings including all architectural detailing.
 - (x) Submission of the plans to the Local Bodies / ASI / Fire Department /Civil Aviation Authority / EIA Clearance from Environment and Forest Department for their approval, if required.
 - (xi) Preparation of Structural drawings.
 - (xii) Preparation of services drawings



ANNEXURE TO CPWD WORKS MANUAL 2019

- (xiii) Approval of plans by the Local Bodies
- (xiv) Preparation of DPR including detailed cost estimate for buildings and all services (civil, electrical and mechanical)
- (xv) Submission of DPR along with detailed cost estimate to client for accord of A/A & E/S
- (xvi) Receipt of A/A & E/S from the client.
- (xvii) Preparation of NIT and call of tenders.
- (xviii) Selection of contractors from the pre-qualification applications wherever applicable.
- (xix) Receipt / opening of tenders
- (xx) Decision of tender and award of work.
- (B) In case of typed design construction and available approved architectural drawings, then following pre construction activities shall be followed:-
 - (i) Preparations of detailed cost estimates for buildings and all services (civil, electrical and mechanical) based on available architectural drawings, soil data details, structural drawings, service drawings / details, etc.
 - (ii) Receipt of A/A & E/S from the client.
 - (iii) Submission of the plans to the Local Bodies / ASI / Fire Department / Civil Aviation Authority / EIA Clearance from Environment and Forest Department for their approval, if required.
 - (iv) Approval of plans by the Local Bodies, if required.
 - (v) Preparation of NIT and call of tenders.
 - (vi) Selection of contractors from the pre-qualification applications wherever applicable.
 - (vii) Receipt / opening of tenders
 - (viii) Decision of tender and award of work.
- (C) In case Administrative Ministry / Department is asking for Rough cost Estimate based on plinth area rates and preliminary plans for depositing money with CPWD or for any other reason, then following pre construction activities shall be followed:-
 - (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) Discussions with the client to assess and appreciate their requirements, incorporation of the same and preparation of preliminary plans.
 - (iv) Approval of preliminary plans by the client.
 - (v) Preparation of Rough Cost estimate.
 - (vi) Deposition of fund with CPWD by the client.
 - (vii) Preparation of architectural drawings and review with client and modification of drawings, if required.
 - (viii) Preparation and submission of the plans to the Local Bodies for their approval.
 - (ix) Approval of plant by the Local Bodies.



ANNEXURE-3

- (x) Preparation of Structural drawings.
- (xi) Preparation of services drawings
- (xii) Preparation of detailed working drawings.
- (xiii) Preparation of DPR including detailed cost estimate for buildings and all services (civil, electrical and mechanical)
- (xiv) Submission of DPR along with detailed cost estimate to client for accord of A/A & E/S
- (xv) Receipt of A/A & E/S from the client.
- (xvi) Preparation of NIT and call of tenders.
- (xvii) Selection of contractors from the pre-qualification applications wherever applicable.
- (xviii) Receipt / opening of tenders
- (xix) Decision of tender and award of work.

ANNEXURE- 4

(Reference Para 3.1.1.1(2) & 3.1.2.1 (5))

MEMORANDUM OF UNDERSTANDING

This MOU made at	on	between the
		(herewith called the 'Client
Department') and the terms 'CLI and assignee on ONE PART.	ENT Department' shall m	nean and include its administrator, executors
•	AND	
CPWD through its EE /Project	t Manager having its offic	ce at OTHER PART.
hereinafter referred to	(name of work) at o as "Project" to CPWD or s Executive Engineer/Pro	ne work/ project relating to n the terms and condition set forth hereinafter nject Manager has agreed to undertake and

NOW, IT IS HEREBY AGREED BETWEEN THE PARTIES AS UNDER:

Responsibility of CPWD

- 1.2 After receipt of A/A & E/S from the client department, the CPWD will prepare and submit various detailed architectural drawings and service plans to Local Bodies whose approvals are required before taking up the construction work. These Local bodies are independent organizations and CPWD has not control over them. These Local Bodies take their own time for approving the Plans. The time required to get such approvals is not included in the time of construction indicated in the estimate. Although CPWD will make all efforts to get such approvals early, it may be necessary for the client department also to pursue with Local Bodies for early approval.
- 1.3 CPWD does not bind itself to complete the work within the estimated cost. Necessary revised estimate will be submitted as and when required.
- 1.4 Any dispute arising out of the operation of the contract(s) for the subject work will be subject to arbitration as provided for in the contract agreement. CPWD will defend the arbitration proceedings as best as it can and get the Arbitrator's award examined by the appropriate authority. The decision of the competent authority in CPWD to accept the award or to challenge the same in a Court of Law will be binding on the client department.
- 1.5 The CPWD has no funds of its own for investing in the work. The client department should, therefore, ensure that adequate funds are available with CPWD for executing the work. In case the client department fails to provide funds as per requirements, it may be necessary for CPWD to suspend/ abandon the work. In such eventuality, the client department shall be solely



ANNEXURE- 4

responsible for all the consequences arising out of such stoppage/abandonment of work including claims of contractors for compensation/ damages.

Responsibility of the Client:

- 1.6 Assurance of funds for the full estimated cost of the work as worked out by CPWD including departmental charges shall be given by the client department while issuing the A/A & E/S of the work. If additional funds are required, the same will have to be provided by the client department on the Revised Estimates submitted by CPWD.
- 1.7 The client department should hand over vacant possession of land/site to CPWD for the project free of encumbrances or charges. CPWD may, if so required, take responsibility for demolition/disposal of existing buildings/ structures.
- 1.8 Funds for making payment of all amounts which may be decreed by a Court of Law, Tribunal or by award of an Arbitrator in relation to the work will be made available by the client department promptly irrespective of it not being a party before the Court, Tribunal or Arbitrator. Such payments will be in addition to the payments made to the contractors for execution of work.
- 1.9 The client department will help CPWD in -
 - (a) Providing site for labour huts for the contractor's labour free of cost,
 - (b) Providing free access to contractor's materials and labour to the site of work,
 - (c) Providing electricity connection for execution of work on payment of usual charges, and
 - (d) Sanction and release of load from the concerned Electricity Board/Authority.

ANNEXURE-5

(Reference Para 3.1.1.4 (1))

RATES OF DEPARTMENTAL CHARGES

Objectives of works		es of works	All maintenance works, and minor works costing upto Rs. one lakh	Construction works costing upto Rs. Two Crores	Construction works costing between Rs. Two and five Crores	Construction works costing more than Rs. five crores
1			2	3	4	5
(A)	Esta	ablishment Charges				
	1.	Preparation of prelimi- nary sketches	1/2%	1/4%	1/4%	1/4%
	2.	Preparation of detailed working drawings	1%	3/4%	1/2%	1/4%
	3.	Preparation of preliminary estimates	1/4%	1/4%	1/4%	1/4%
	4.	Preparation of detailed estimates	1/2%	³ /4%	1/2%	1/4%
	5.	Preparation of structural designs	1%	1%	3/4%	3/4%
	6.	Execution				
	Tota	al Establishment charges	22-1/2%	10-¾%	7%	7%
(B)	T&F	(Machinery Equipment)	3/4%	3/4%	1/2%	1/2%
(C)	Auc	lit & Account	1/4%	1/4%	1/4%	1/4%
(D)	(D) Pensionary		1/4%	1/4%	1/4%	1/4%
			22-¾%	12%	8%	7%

Note:

- 1. The indicated rates of tools and plants are exclusive of the cost of special tools and plant, the cost of which will be charged to the estimate for the work.
- 2. The DDA will be allowed a rebate in the departmental charges on account of preparation of preliminary sketches, and detailed architectural drawing relating to their works as per the figures given in the breakup of departmental charges.
- 3. Departmental charges shall be 50% of the standard departmental charges given above for organizations who satisfy the following criteria:-
 - (a) The organization is a non-commercial (Non profit) organisation.
 - (b) The services by the organization have been put in negative list of GST levied by the Ministry of Finance, Govt., of India.
 - (c) The organization is a statutory



ANNEXURE-5

- 4. The above rates of Departmental charges/ fees shall not be used for any commercial transaction either with a private party or with a PSU
- 5. 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 India and local bodies who entrust their works to the CPWD as a standing arrangement. Charges shall be levied at the rate of 1.5 and 5 per cent for the preparation of infructuous preliminary and detailed architectural plans/works estimates respectively from the other bodies who approach CPWD for the execution of works occasionally as distinct from standing arrangements.

DEPARTMENTAL CHARGES FOR COAL MINES WORKS

For	works costing upto Rs. two	lakhs	For works costing more than Rs. two lakhs
1.	Preliminary Estimates	1/4 %	1/4 %on first Rs. two lakhs plus 1/8 % on amount that exceed Rs. two lakhs
2.	Detailed Estimates	3/4 %	3/4 % on first Rs. two lakhs plus 1/2 % on amount that exceeds Rs. two lakhs



ANNEXURE- 6

(Reference Para 3.1.3 (2))

LIST OF SPECIALIZED ITEMS / JOBS

List I - Civil Works

- 1. ** Water proofing treatment work.
- 2. Steel work in steel bridge work, space frames for long span structures, steel towers.
- 3. ** Special foundations including all types of piles.
- 4. RCC Overhead Tank with independent staging.
- 5. Structural Repair and Rehabilitation/ Retrofitting works.
- 6. Soil Investigation and Survey Work.
- 7. ** Facade cleaning system and facade cleaning.
- 8. Custom made wooden furniture (factory made).
- 9. Diaphragm walls.
- 10. Post construction Anti-termite chemical treatment.
- 11. Water Treatment Plants
- 12. Security to vacant bungalows/premises.
- 13. Tentage works.
- 14. Washing/dry cleaning works.
- 15. Synthetic play area surface for games.
- 16. Electronic / Digital Signages.
- 17. Environment Impact Assessment Study and Environment Clearance.
- 18. Mechanized Housekeeping Work .

Note:-

**For these works, Specialized Agencies shall have to be associated by the CPWD / Non CPWD Contractors in case the Contractor does not possess the requisite eligibliity and experience as per the NIT conditions to carry out these works..

Electrical Works

LIST- II(A)

S. No. Supplying /fabrication, installation, testing and commissioning of the following-

- 1. Kitchen equipment
- 2. Lifts, escalators and conveyors
- 3. Simultaneous interpretation systems
- 4. Gas plants.
- 5. Cold storage plant



ANNEXURE-6

- 6. Hot Water/Steam Boilers
- 7. Public address system; conferencing system, automatic vote recording system, recorders
- Stage lighting
- 9. Projector and other special equipment for theatre
- 10. Repairs and calibration of various types of measuring instruments and relays etc.
- 11. Testing of transformer oil and dehydration and other type of high potential test.
- 12. Frequency Convertor
- 13. Temporary illumination, security lighting and wiring for power outlets for metal detectors in connection with Republic Day and Independence Day Celebrations.
- 14. EPBAX system (equipments).
- 15. EPBAX system (cabling and wiring).
- 16. Illumination of heritage caves and fiber optic lighting system
- 17. Security system and alarm
- 18. Building Automation System
- 19. Hydraulic platform /Lift
- 20. Incinerator
- 21. Laundry equipment
- 22. Centralized clock system.
- 23. Interior/exterior flood lighting of heritage/Monumental buildings/structures involving Computer aided design and evolution of special mounting arrangements for luminaries:
- 24. Gas pipe line
- 25. Modular OT
- 26. Electrically Operated Gate
- 27. Fountain Work
- 28. Water supply motors and pumps of 100 hp or more
- 29. Mechanized Car Parking Systems
- 30. VRV/VRF Type Air-Conditioning Systems
- 31. Oxygen Generation Plant
- 32. CCTV and Allied Equipments
- 33. Access Control System
- 34. Hydro Pneumatic Pumps
- 35. Providing and fixing of Sensor operated Gates
- 36. Precision Air Conditioning System
- 37. LAN System
- 38. SITC of active power factor filter
- SITC of Solar Photo Voltaic Power generation system



ANNEXURE TO CPWD WORKS MANUAL 2019

LIST-II (B)

S. No. Supplying /fabrication, installation, testing and commissioning of the following-

- 1. Diesel Generating Set
- 2. Heating, Ventilation and Air-conditioning System
- 3. Sub-station equipment
- 4. Fire fighting system (including wet riser and sprinkler system, portable fire extinguishers)
- 5. Fire detection and alarm system

List -III Horticulture Works

Construction of Vertical Green Wall.

LIST -IV Concurrent list of Specialized items/ jobs

- (1) Sewage Treatment Plant
- (2) Outsourcing of Day to Day Maintenance Work*

*Note:-

- (a) For Outsourcing of Day to Day Maintenance Work, Provision is to be made in the NIT for CPWD/ Non CPWD Contractors, not having the requisite eligibility and experience as per the NIT conditions, to execute the Comprehensive Maintenance Work by associating Agencies Specialized in Day to Day Maintenance Work.
- (b) Outsourcing of Day to Day Maintenance Work is the "Specialized Work" for the purpose of association only and not for awarding work on standalone basis.



ANNEXURE-7

(Refer Para 4.13(2))

SCHEDULE FOR UPLOADING AND OPENING OF TENDERS

The following schedule may be followed by every region for inviting/uploading the NITs for call of tenders as well as opening of tender:

Region	Days for inviting/uploading NITs for call of tenders	Days for opening of Technical/ Financial bids
Delhi	Monday & Thursday	Monday & Thursday
Northern	Tuesday & Friday	Tuesday & Friday
Southern	Wednesday & Monday	Wednesday & Monday
Eastern, North Eastern	Thursday & Tuesday	Thursday & Tuesday
Western	Friday & Wednesday	Friday & Wednesday



(Refer Para 5.(7)

DOCUMENTS IN A COMPLETE AGREEMENT/ CONTRACT

Adequate care should be taken to complete the agreement which is to be entered into between the Engineer-in-Charge for and on behalf of the President of India and the Contractor/bidder.

- 1. Constituents of an Agreement
 - (a) A complete agreement would consist of:
 - CPWD Form no. 6, i.e. Notice Inviting Tenders (which is invariably issued by the Engineer-in-Charge irrespective of the fact whether he is competent to accept the tender or not),
 - (ii) Pamphlet CPWD Form 7 or 8 or any other form 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) Original letters of the Contractor and the Departmental officers that were exchanged before acceptance of tender.
 - (vi) Letter of the Engineer-in-Charge communicating acceptance of the tender, (Letter of Intent) and
 - (vii) Letter of the Engineer-in-Charge regarding commencement of the work (after submission of the Performance/Guarantee by the contractor).
 - (viii) General Condition of Contract (GCC) containing CPWD Safety Code, Model Rules for protection of health and sanitary arrangements for workers employed by the CPWD or its contractors, Central PWD 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 disputes and disregard of 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 Engineer-in-Charge



ANNEXURE- 9A

{Refer Para 5.3(2)}

(BY REGISTERED/SPEED POST)

(A) Sample letter of acceptance of tender

Annexure- 9B

(Refer Para 5.3(2))

(BY REGISTERED/SPEED POST)

(B) Sample letter for commencement of work

No		Dated
the		
From		
The	e Executive Engineer, Division,	
C.P	P.W.D.	
То		
(Na	ime and address of the contractor)	
	Subject	
	(Name of the work as appearing in the tender for the	work)
Ref: 1.	Performance Guarantee submitted by you vide your letter no above work.	dated for the
2.	This office letter of intent/acceptance of your tender issued vide no	date
Dear S	ir (s),	
1.	You are requested to contact the Assistant Engineer (comp possession of site and commencement of work.	lete address) for taking
2.	You are requested to attend this office to complete the formal agreement the date of issue of this letter.	within fifteen days from
		Yours faithfully,
		EE/AE
	For and on beha	alf of President of India
	Division	, CPWD,



ANNEXURE- 10 (Refer Para 5.18.2)

AUTHORITIES EMPOWERED TO PREPARE, VERIFY AND PASS THE BILLS

	Kind of Bills to be paid	Bill Prepared by	Authority competent to examine or verify the bill	Authority to issue order for Pass and payment of the bill
	1	2	3	4
1.	Wages of labourers, current or arrears, except those mentioned in item 2 below	SDC	Assistant Engineer	Executive Engineer
2.	Bill of Work Charged staff	SDC	Assistant Engineer	Executive Engineer
3.	Petty payments for work done or supplies made not exceeding Rs2000/-	Junior Engineer	Assistant Engineer/ Junior Engineer if an imprest holder	Imprest Holder
4.	Running and final bills of Contractors or Suppliers involving work done or supply made in bills or payment of advances, Claims for refund of SD.	SDC and Junior Engineer	Assistant Engineer	Executive Engineer

SDC: Sub Divisional Clerk

ANNEXURE- 11

(Refer Para 5.20 (2))

FORM OF SUPPLEMENTARY AGREEMENT

- 1. That this Agreement shall be called as Supplementary Agreement to the Agreement No. relating to the Name of work entered into by the parties to this Agreement.
- 2. That WHEREAS the First Party has substantially completed the execution of the work described in and covered by the Agreement No. except the items mentioned in the Schedule annexed to this Agreement and whereas the items of the work mentioned in the Schedule annexed to this agreement cannot now be executed on account of non completion of the sanitary work, electric installation and some other work; and whereas both the parties are desirous that the items mentioned in the Schedule annexed to this Agreement should be executed by the First Party after the completion of the sanitary work, electric installation and some other work, it is hereby further agreed as under:
 - (a) That First Party shall and will execute the work covered by the items mentioned in the Schedule annexed to this Agreement at the rates and as per the terms and conditions of the original Agreement No. whatsoever called upon to do so by the Engineer-in-Charge, within a period of one year from the date hereof.

 - (c) That the First Party shall have to execute all the items which the Engineer-in-charge consider necessary.



ANNEXURE-11

- deposit relating to the work in question, subject to the right of the Second Party to retain such amount as he thinks reasonable as mentioned above soon after the maintenance period of three months or six months, as the case may be mentioned in clause of the Original Agreement, is over.

IN WITNESS	WHEREOF	THE ABOVE	MENTIONED	PARTIES	HAVE PUT	THEIR	SIGNAT	URE
ON THIS DAY	/ THE							





ANNEXURE- 12 (Refer SOP No. 3/1, SOP No 3/2) PROFORMA A

PROFORMA FOR PARTICULARS TO BE FURNISHED BY ADMINISTRATIVE DEPARTMENTS WHEN INITIATING BUILDING PROJECTS WHICH ARE TO BE EXECUTED BY THE CPWD

Name of Ministry/Department/Organisation

Name of work

Location

- 1. Whether land is available. If so, what is the area available. Attach letter of allotment/lease deed of land specifying land use.
- 2. Estimate of total funds required for the project and availability of the same.
- 3. Details of available budget provision (year-wise)
- 4. Schedule of requirements:
 - (i) Details of officers and staff grade-wise/students/care-taking/ maintenance staff in
 - (a) Proforma A1 for Non-residential buildings
 - (b) Proforma -A2 for Hostels
 - (c) Proforma -A3 for Residential Complexes
 - (ii) Details of special requirements, if any, in
 - (a) Proforma -B1 for Non-residential Buildings
 - (b) Proforma -B2 for Hostels
 - (c) Proforma -B3 for Residential Complexes
- 5. Future requirements, if any, including phasing.
- 6. Any other particulars.

Note:

- 1. Generally lifts are provided for buildings of more than four storeys. If lifts are required for lesser storeyed buildings, reasons for the provision of the same may be given.
- 2. In a technical building, relative position of the rooms may be indicated by means of a rough sketch.
- 3. Attach separate sheets if the space provided in the proforma is not sufficient.

Signature

Forwarded to:

- 1. Chief Engineer
- 2. Superintending Engineer (Civil)



ANNEXURE- 12 ANNEXURE TO SOPs

- 3. Superintending Engineer (Electrical)
- 4. Executive Engineer (Civil)
- 5. Executive Engineer (Electrical)

PROFORMA - A1

SCHEDULE OF REQUIREMENTS IN RESPECT OF OFFICERS AND STAFF INCLUDING CARE TAKING & MANAGEMENT STAFF

(NON-RESIDENTIAL BUILDINGS)

S. No.	Desig- nation of officer & staff	Grade/ Scale of pay	No. of Officers/Sta ff in Grade/		Additional functional facilities/requirement beyond normal (May be indicated if actually required, otherwise left blank)					
			Scale	Area	Power Require -ment	Air-Conditioning Requirement	Acoustic Require- ment	Special type of flooring light fittings etc., false ceiling requirements	Any other Special Requirements like computer Terminals, Telephones, etc.	

PROFORMA - A2

SCHEDULE OF REQUIREMENTS FOR HOSTELS

S. No.	Status of incumbent	Numbers	Designation Grade/Scale of	Entitled Type o	f Accommodation	Special amenities, such as attached	Remarks
NO.			pay in case of faculty/ officers/ Warden/Staff	Single/ Double/ Triple seated rooms with area prescri- bed (in case of Students only)	Single/double/ triple seated rooms with area prescri bed (in case of Officers/ Hostel/Staff/ Warden	Toilet & Kitchen/ Kitchenette. Servant Quarters, Telephone, Air-conditioning etc. (Indicate whether approval of the competent authority is available)	
1	2	3	4	5	6	7	8
1.	Officers/Faculty members						
2.	Research students						
3.	Post graduate students						
4.	Under graduate students						
5.	Warden						
6.	Office staff (specify) including maintenance staff						



ANNEXURE TO SOPs ANNEXURE- 12

PROFORMA - A3

SCHEDULE OF REQUIREMENT FOR RESIDENTIAL COMPLEXES

S. No.		Numbers	Res	sidential Ac	commodation	Details of Norms & Specifications to be	Remarks		
NO.	of pay of the incum- bent including care taking & Maintenance personnel		Total	Avai lable	Additional required along with reference of approval of the competent authority	Number s to be accomo dated in Hostel if any	Future requirement	provided if norms* & specifications prescribed by Min. ofUD&PA are not to be followed	
1	2	3	4	5	6	7	8	9	10
								<u> </u>	

PROFORMA - B1

SCHEDULE OF SPECIAL REQUIREMENTS (NON-RESIDENTIAL BUILDINGS)

S. No.	Requirement	Num bers Area/ Capa- city		Special requirement for functionality beyond normal provision (May be indicated if actually required, otherwise left blank)									
			-	ower uirement	Air condi- tioning	Acoustic Require ment		Spe- cial light -ing	False ceil- ing	Com- puter Termi- nals	Tele phone	Water supply in places	Any other service like
					Requir- ments			9		IIais		other than Toilets	gas goods lifts etc.
1	Visitors room												
2	Conference room												
3	Auditorium with capacity												
4	Common room												
5	Recreation room												
6	Laboratory, Workshop, telephone exchange, library, lecture hall, etc. as may be specially required												
7	Canteen including kitchen, store												
8	Inspecting Officers Rest room												
9	Storage space for records, stationery furniture, etc												
10	Post office or sub-post office												



ANNEXURE-12 ANNEXURE TO SOPs

11	Bank						
12	Kendriya Bhandar						
13	Kiosk for photo copying						
14	Association room						
15	Covered parking and closed Garages required vehicle wise including Scooters and Cycles						
16	Maintenance Stores						
17	Any other requirement (specify)						

PROFORMA - B2

SCHEDULE OF SPECIAL REQUIREMENTS FOR HOSTELS

S.No.	Nomenclature	Capacity/ Area	Special Amenities Required, if any	Whether approval of the competent authority is available	Remarks
1.	Office				
2.	Reception				
3.	Lounge				
4.	Common room				
5.	Recreation room				
6.	Reading room & library				
7.	Dining hall & kitchen				
8.	Canteen				
9.	Dispensary & sick beds				
10.	Covered parking/garages				
11.	Caretaker				
12.	Service personnel				
13.	Guard room				
14.	Maintenance office & stores				
15.	Any other requirement (Specify)				



ANNEXURE TO SOPs ANNEXURE- 12

PROFORMA - B3

SCHEDULE OF SPECIAL REQUIREMENTS FOR RESIDENTIAL COMPLEXES

S. No.	Nomenclature	Capacity/Area	Special Amenities Required, if any	Remarks including availability approval of the competent authority
1.	Hostel (Details to be submitted in separate annexures) (Annexures B1 & B2 of Proforma 1)			
2.	Community Hall/Recreation Centre			
3.	Out door Recreation facilities			
4.	Dispensary including sick beds			
5.	Shopping facilities / Cooperative store			
6.	Post Office			
7.	Bank			
8.	Schools			
9.	Guest House			
10.	Guard room			
11.	Maintenance office & stores			
12.	Any other requirement (specify)			



ANNEXURE- 13 (Refer SOP No. 3/1)

LETTER OF ACCEPTANCE OF DEPOSIT WORKS

(To be issued to the client department)

То	
Subject:	Execution of (indicate name of work)
Refe	rence: Your letter No dt dt

In reference to the letter cited above, the above work can be taken up by the CPWD for execution as a deposit work under para 118-119 of CPWD Code, subject to the following:

- (1) Full estimated cost of the work as worked out by CPWD including departmental charges will have to be deposited by the client department before the work is taken up for execution. No interest will be paid by CPWD to the client department for such deposits.
- (2) The client department should hand over vacant possession of land/site to CPWD. CPWD may, if so required, take responsibility for demolition/disposal of existing buildings/ structures if any.
- (3) CPWD does not bind itself to complete the work within the estimated cost. If additional funds are required for finalization of works, the same will have to be provided by the client department. Necessary revised estimate will be submitted as and when required.
- (4) Any dispute arising out of the operation of the contract(s) for the subject work will be subject to arbitration as provided for in the contract agreement. CPWD will defend the arbitration proceedings as best as it can and get the Arbitrator's award examined by the appropriate authority. The decision of the competent authority in CPWD to accept the award or to challenge the same in a Court of Law will be binding on the client department.
- (5) Funds for making payment of all amounts which may be decreed by a Court of Law, Tribunal or by award of an Arbitrator in relation to the deposit work will be made available by the client department promptly irrespective of it not being a party before the Court, Tribunal or Arbitrator. Such payments will be in addition to the payments made to the contractors for execution of work.
- (6) After receipt of A/A & E/S from the client department, the CPWD will prepare and submit various detailed architectural drawings and service plans to Local Bodies whose approvals are required before taking up the construction work. These Local bodies are independent organizations and CPWD has not control over them. These Local Bodies take their own time for approving the Plans. The time required to get such approvals is not included in the time of construction indicated in the estimate. Although CPWD will make all efforts to get such approvals early, it may be necessary for the client department also to pursue with Local Bodies for early approval.
- (7) The CPWD has no funds of its own for investing in the work. The client department should, therefore, ensure that adequate funds are available with CPWD for executing the work. In case



ANNEXURE TO SOPs ANNEXURE-13

the client department fails to provide funds as per requirements, it may be necessary for CPWD to suspend/ abandon the work. In such eventuality, the client department shall be solely responsible for all the consequences arising out of such stoppage/abandonment of work including claims of contractors for compensation/ damages. 3

- (8) The client department will help CPWD in -
 - (a) providing site for labour huts for the contractor's labour free of cost,
 - (b) providing free access to contractor's materials and labour to the site of work,
 - (c) providing electricity connection for execution of work on payment of usual charges, and
 - (d) sanction and release of load from the concerned Electricity Board/Authority.
- (9) CPWD may at its discretion allow the clients to deposit the funds in installment. In such cases 33-1/3% of the estimated cost should be deposited as advance. Thereafter, expenditure incurred should be reimbursed in full through monthly bills. The initial deposit of 33-1/3% would be retained for adjustment against the last portion of the estimated expenditure.
- (10) In cases where funds are deposited in installments, CPWD will not be responsible for any delay, damage, stoppage of work, claims of contractors for compensation/damages etc. due to non-receipt of funds in time.

You are requested to convey acceptance of the above to enable this office to proceed further.

Yours faithfully

Executive Engineer



ANNEXURE- 14

(Refer SOP No. 3/2)

STATEMENT SHOWING THE RATES OF EPF and ESI CHARGES TO BE INCLUDIED IN PRELIMINARY ESTIMATE

Category of work	Component of Labour	EPF @12.5 % of labour Component	ESI @ 4.5 %of labour Component	Total of EPF & ESI
Buildings	25%	3.125%	1.125 %	4.25%
Road Works & pavements in airfields	5%	0.625%	0.225%	0.85%
External sewerage	10%	1.25 %	0.45%	1.70%
External water supply	5%	0.625%	0.225%	0.85%
Bridge/Flyover works	25%	3.125%	1.225%	4.25%
Maintenance works engaging only labour component	100%	12.50 %.	4.50%	17.00 %
Other Maintenance work	70%	8.75%	3.15%	11.9%

For other category of work, concerned CE or any other authority notified from time to time will finalize the component of Labour.



ANNEXURE- 15 (Refer SOP No. 3/3)

	(1313)		,			
	PROFO	RMA - 1				
	HISTORY SHEE	T OF ES	ГІМАТЕ			
	CENTRAL PUBLIC V	VORKS D	EPARM	ENT		CPWD- 1
Estimate No.	:			for		
State	•			101		
State	•			Branch		
				Division		
Name of Work				ווטופועום	•	
Name of Work						
Fund	:					
Major Head						
Minor Head						
Detailed Head	:					
	es against each of the above st	nould be r	made in	accordar	nce with	the classification
	l by E	ngineer			of tl	he probable cost
of						
	REP	ORT				
	PROFO	RMA - 2				
	DETAILS OF M	EASUREI	MENTS			CPWD- 2
Name of Work						
Details of Work/Iter	m/Locaton	No.		asuremei		Quantities
			L	В	Н	
		1	1			I

ANNEXURE- 15 ANNEXURE TO SOPs

PROFORMA - 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	
		0.110.	Rs.	P.		Rs.	P.	Rs.	P.

PROFORMA - 4 ABSTRACT OF ORIGINAL AND REVISED ESTIMATES

CPWD-4

CPWD-3

Name of work.....

Sub-	Original estimate				Revised Estimate				Difference	Explanations
heads of estimate and items of work	Quan- tity	Rate Rs.	Per	Cost Rs.	Quan- tity	Rate Rs.	Per	Cost Rs.		for difference
OI WOIN										

ANNEXURE- 16

(Refer SOP No. 3/5)

INFORMATION FOR ACCORD OF TECHNICAL SANCTION

PROFORMA - 1

LEVELLING

- 1. Name of project
- 2. (a) Reference to administrative approval and expenditure sanction and their amounts.
 - (b) Provision for levelling.
- 3. (a) Amount of detailed estimate
 - (b) Rate per square metre in the detailed estimate and how does it compare with provision in administrative approval.
- 4. (a) Total Area to be levelled
 - (b) General description of site

Part I - Engineering Appreciation

- (c) Are there any low areas which may be left green or developed as lakes or ponds? If so, can earth for filling be made available from such development?
- 5. (a) Classification and nature of soil
 - (b) Result of trial bores, if any.
 - (c) Exact classification of the different strata, if rocky.
 - (d) Possibility of blasting, keeping in view local bye laws and proximity of important buildings.
 - (e) Has necessary credit for hard rock been allowed?
- 6. (a) Are the proposed formation levels such as cutting and filling balanced.
 - (b) (i) Site from where earth is to be brought and its lead, in case of excess filling.
 - (ii) Amount involved.
 - (iii) Royalty payable, if any.
 - (c) In case of excess cutting:
 - (i) Site for the disposal of surplus earth
 - (ii) Extra lead and amount involved
 - (iii) Possibility of selling the earth
- 7. Levels of the adjoining sites, roads and buildings as compared to the site being levelled.
- 8. Do the proposed formation levels obstruct the existing natural drainage?
- 9. (a) Are any terraces proposed to economise on earth work?
 - (b) If so, do the proposals have concurrence of Town Planner, Architect, Director of Horticulture?
- 10. Have the proposals for development/layout been approved by local authorities?

Part II - Materials

11. Special T & P like heavy earth moving machinery needed for the execution of the project.



ANNEXURE- 16 ANNEXURE TO SOPs

PROFORMA- 2 FILTERED WATER SUPPLY

- 1. Name of the Project.
- 2. (a) Reference to administrative approval and expenditure sanction and their amounts.
 - (b) Provision for ancillary works such as overhead reservoirs, pumps, etc.
- 3. (a) Amount of detailed estimate
 - (b) Rate per sq. metre in the detailed estimate and how does it compare with provision in administrative approval.

Part I - Engineering Appreciation

- 4. Area covered (Give details of areas covered, if any, which have not been provided for in the A/A, future extension, etc.)
- 5. (a) Population
 - (b) Basis of assessment. (c) Future increase
- 6. (a) Source of Water Supply
 - (b) Has permission of the local body to tap water from their source been obtained? (c) Will sufficient quantity be available for areas under consideration?
 - (d) Distance of the source from the periphery of the scheme.
 - (e) Brief description of the system of water supply from intake to the distribution stage.
- 7. (a) Rate of supply with break-up showing allowance for industrial, horticulture and other uses.
 - (b) Is unfiltered water supply available?
 - (c) If not what, and on what basis, provision has been made for extra water required for lawns, parks etc.
- 8. (a) Pressure available at source.
 - (b) If required pressure is not available, state proposals to augment it.
- 9. Design formula adopted, value of the co-efficient of rugosity adopted in design.
- 10. Layout of mains
 - (a) Closed ring or tree type pattern with dead ends (give reasons for choice).
 - (b) Type of buildings and numbers of storeys recommended.
 - (c) Minimum head available in the distribution system; and is it suitable?
 - (d) Has minimum size of pipes required as per rule of the local body and Chief Fire Officer been provided?
- 11. Has the Chief Fire Officer been consulted with regard to the number of fire hydrants, their location and type?
- 12. Capacity and design particulars of overhead tanks, sumps, wells, pumps etc.
- 13. Have adequate provisions of sluice valves, reflux valves, air valves, scour valves and public hydrants been made?



ANNEXURE TO SOPs ANNEXURE-16

- 14. Have the lines been taken sufficiently deep to keep the air valve spindles flush with the ground level?
- 15. Has provision been made for laying the pipe or digging the trenches under sub-soil water level?
- 16. Is cutting through rock involved?
- 17. Has provision been made for crossing roads and nallahs, where necessary?
- 18. Are there any obstructions such as transmitting station, aerodrome, etc. which necessitate diversion?

Part II - Materials

- 19. Requirements of different sizes/type of pipes and specials and method of procurement.
- 20. Requirements of pig lead.
- 21. Have requirements of pumps and accessories been determined in consultation with the Electrical Engineer? Give details.
- 22. Requirements of other materials/tools and plants.

PROFORMA - 3

UNFILTERED WATER SUPPLY

- 1. Name of the project
- 2. (a) Reference to administrative approval and expenditure sanction and their amounts
 - (b) Provision for unfiltered water supply
 - (c) Provision for ancillary works such as overhead reservoirs, pumps, etc.
- 3. (a) Amount of detailed estimate
 - (b) Rate per sqm in the detailed estimate and how it compares with provision in administrative approval.

Part I - Engineering Appreciation

- 4. Total area of development scheme.
- 5. Area of grassy lawns.
- Basis of working out requirement of water needed for horticultural purpose.
- 7. Source from which the unfiltered water is proposed to be tapped.
- 8. (a) Is the water suitable for horticultural purpose? Has this been ascertained from laboratory tests?
 - (b) Degree of salinity if the water is saline.
- 9. If supply is proposed to be from existing unfiltered/filtered water mains,
 - (a) Have the mains got the capacity to supply the required quantity?
 - (b) Is the pressure in the existing mains enough to serve the area.
- 10. If the source of supply is from wells/tube wells indicate:
 - (a) Possibility of pumping from existing open wells; if any.
 - (b) Feasibility of digging open wells.
 - (c) Possibility of putting tube wells, if open wells are not suitable.
 - (d) Exploratory work done earlier in the proximity of the area to determine feasibility of providing wells/ tube-wells.

ANNEXURE- 16 ANNEXURE TO SOPs

- 11. Have the development/layout proposals been approved by local authorities?
- 12. Formula adopted for designs, value of coefficient of rugosity adopted in designs.
- 13. Layout of mains:
 - (a) Closed ring pattern or tree type with dead ends. (b) Reason for choice
 - (c) Minimum head available in the distribution system and is it suitable?
 - (d) In case fire hydrants have been provided in unfiltered water lines, has the Chief Fire Officer been consulted with regard to the number of fire hydrants, their location and type?
- 14. Capacity and design particulars of overhead tanks, sump wells, pumps, etc.
- 15. Have adequate provisions of sluice valves, reflux valves, air valves, scour valves been made?
- 16. Have the line been taken sufficiently deep to keep the sluice valves spindles flush with the ground level?
- 17. Has provision been made for laying the pipeline or digging the trenches under sub-soil water level?
- 18. Is cutting through rock involved?
- 19. Has provision been made for crossing road and nallahs, where necessary?
- 20. Are there any obstructions such as transmitting station, aerodrome, etc. which necessitate diversion.

Part II - Materials

- 21. Requirement of different sizes/types of pipes and specials and method of procurement.
- 22. Requirement of pig lead
- 23. Have requirements of pumps and accessories been determined, in consultation with the Electrical Engineer? Give details.
- 24. Requirement of any other materials/tools and plants.

PROFORMA - 4 SEWERAGE

- 1. Name of Project
- 2 (a) Reference to administrative approval and expenditure sanction and their amounts.
 - (b) Provision for sewerage
 - (c) Provision for ancillary works such as pumps, sumps, pump houses connection to existing ducts, septic tanks, etc.
- 3. (a) Amount of detailed estimate
 - (b) Rate per sqm as per the detailed estimate and how it compares with provision in administrative approval.

Part 1 - Engineering Appreciation

4. Area covered (Give details of areas covered, if any, which have not been provided for in A/A: future extensions, etc.)



ANNEXURE TO SOPs ANNEXURE - 16

- 5. (a) Population.
 - (b) Basis of assessment.
 - (c) Future increase.

6. Sewers

- (a) Shape of sewer
- (b) Minimum size used
- (c) Slopes adopted
- (d) Self cleansing velocity assumed and at what depth of flow.
- (e) If self-cleansing velocity not possible, have flushing arrangements been made? (f) Minimum velocity attained in the design
- (g) Is designed discharge three times the average discharge
- (h) Brief description of the system of sewerage
- (i) Design formula and the coefficient of rugosity adopted.

7. Manholes:

- (a) Minimum depth of starting manholes.
- (b) Types of manholes (rectangular, circular, arch type).
- (c) Types of manhole covers used (whether heavy, medium, light) and principles governing their use.
- (d) Has location of manhole been fixed on the consideration that:
 - (i) Each manhole should serve maximum number of plots.
 - (ii) Manholes provided at bends-change in diameter and gradients.
- (e) Maximum distance between two manholes.
- (f) Distance of vent shafts; has provision of these been made in the estimates?
- (g) Has provision been made for drop connections?
- (h) What is the maximum velocity in the sewer? (upto 2.44 metres per second avoids erosion of invert).

8. Disposal

- (a) Arrangement for disposal of sewerage.
- (b) Has permission of local body been sought if discharge is led into an existing sewer direct?
- (c) Distance of the existing duct from the last manhole in the area.
- (d) Do the invert levels permit connection to existing duct by gravity? If not, has provision been made for pumping the sewerage?
- (e) If pumping is necessary:
 - (1) Has provision been made for sumps, pumps, pump house and rising mains?
 - (2) Is electricity available?
 - (3) Is arrangement for prime mover in an emergency breakdown required?



ANNEXURE- 16 ANNEXURE TO SOPs

- (f) Details of sumps with regard to capacity, diameter.
- (g) (1) Details of pumps with regard to capacity, horse power, type of pumps (vertical or horizontal) etc.
 - (2) Efficiency factor assumed in the design of pumps. (h) Details of pump house, rising mains, etc.
- (i) In case connection to existing duct has not been provided:
 - (1) Has provision for septic tank, treatment plant, etc. been made?
 - (2) Have soak pits or dispersion trenches been provided?
 - (3) What is the type of soil?
- (j) Maximum and minimum depths below ground level of the ground water table.
- (k) Arrangements for disposal of treated effluents.
- (I) If sewers are to be laid in filling or across nallahs, have supports to firm ground been provided?
- (m) Have sewers and water mains been planned on opposite sides of the road?
- (n) Where sewers cross nallah, arrel etc. has the design been appropriately made?
- (o) In case of stage development schemes or where delay in the procurement of equipment is anticipated, have temporary arrangements been made for disposal work?
- 9 (a) Has provision been made for concreting upto haunches or all round?
 - (b) If so, on what basis?
- 10. Is provision of excavation under sub-soil was necessary?
- 11. Has provision been made for laying concrete and sewers under sub-soil water?
- 12. Is cutting through rock involved?
- 13. Has provision been made for crossing roads and nallahs?

Part II - Materials

- 14. Requirements of different types/sizes of pipes and specials.
- 15. Requirements of different types of manhole covers.
- 16. Have requirements of pumps been determined in consultation with the Electrical Engineer?
- 17. Requirements of any other materials/tools and plants.

PROFORMA - 5 CITY ROADS

- 1. Name of project.
- 2. (a) Reference to administrative approval and expenditure sanction and their amounts.
 - (b) Provision to cover the portion of work for which detailed estimate has been prepared.
- Amount of detailed estimate.



ANNEXURE TO SOPs ANNEXURE-16

Part I - Engineering Appreciation

- Reference to approval of the layout and alignment by competent authority.
- 5. Justification for the choice of the alignment indicating *inter-alia* obligatory points.
- 6. (a) Standards to be followed for:
 - (i) Cross-section of the road (indicating number of lanes)
 - (ii) Class of road
 - (b) Have suitable road junctions and crossings been designed and provisions made in the estimate?
 - (c) Has provision been made for road signs?
- Nature of sub-grade and sub-grade preparation suggested.
- 8. Earth works: cutting and filling balance, if not, what is the:
 - (a) Quantity of surplus/deficit earth.
 - (b) Site and lead for disposal of surplus earth (in case of excess cutting)
 - (c) Source of obtaining earth required and lead (in case of excess fillings).
 - (d) Royalty payable, if any.
- Method and salient features of road crust.
- 10. (a) Soling
 - (b) Wearing coat
 - (c) Surface treatment.
- 11. (a) Cross section between building lines showing the hard crust edging (if any), berms provisions for future widening (if any), storm water drains and their outlets and other services, both to be provided immediately and in the near future.
 - (b) Existing services, if any.
- 12. Details of bridges including class of loading for which they have been designed, culverts and other structures provided.
- 13. Details of land acquisition.
- 14. Phasing of the project.
- 15. (a) Rate of cost
 - (i) per unit length of different types of roads.
 - (ii) per unit of the area developed
 - (b) (i) Total cost of the work
 - (ii) Comparison of total cost with respect to provision in preliminary estimate.

Part II - Materials

- 16. Soling stone
 - (a) Total quantity.
 - (b) Name of quarry.



ANNEXURE- 16 ANNEXURE TO SOPs

- (c) Distance of quarry from site (Does scheduled rate for supply of soling stone indicate this lead? If not, has provision been made for extra lead?)
- (d) Market rate at quarry.
- (e) Prevalent carriage charges.
- 17. Stone ballast
 - (a) Total quantity
 - (b) Name of quarry
 - (c) Distance of quarry from site (Does schedule rate for supply of stone ballast indicate this lead?) (d) Market rate at quarry.
 - (e) Prevalent carriage charges.
- 18. Bitumen
 - (a) Total quantity.
 - (b) Arrangements for procurement.
- 19. Cement
 - (a) Total quantity.
 - (b) Arrangements for procurement.
- 20. Steel
 - (a) Total quantity.
 - (b) Arrangements for procurement.
- 21. Pipes
 - (a) Total quantity.
 - (b) Arrangements for procurement.
- 22. Tools and Plants

SI. No.	Equipments with details	Source of procurement	Cost	Foreign exchange
1	2	3	4	5



ANNEXURE TO SOPs ANNEXURE - 16

PROFORMA - 6 HORTICULTURAL WORKS

- 1. Name of project.
- 2. (a) Reference to administrative approval and expenditure sanction.
 - (b) Amount provided for horticulture work.
- 3. Amount of detailed estimate.

Part-I- Horticulture Appreciation

- 4. Brief scope of the work contemplated.
- 5. Total area of the development schemes
- 6. Area of the garden/greenery.
- 7. Detailed landscape plan of the area quoting SA(TP)'s letter no. approving it.
- 8. Type of soil
 - (a) Nature
 - (i) Saline or alkaline
 - (ii) Full of kankar, moorum or building rubbish. (b) P.H. Value
- 9. (a) Source of supply of earth if top soil is proposed to be replaced by good sweet earth.
 - (b) Site for dumping the replaced earth
 - (c) Proposal, if any, to apply cowdung or fresh cowdung to 1.5m 4.5m depth in case the soil is alkaline.
 - (d) Is the area duly levelled for the development of horticulture works.

Part II - Drainage

- 10. Is the drainage from roof provided in such a way as to drain off the flow of rain water on the back of the house and not on the lawn?
- 11. Are the levels and slopes of bajri paths and lawns suitably adjusted?
- 12. Do levels permit a slope in the lawns between 1/12 and 1/300?
- 13. Is a storm water drain available in the vicinity to catch rain water from the lawns?
- 14. Suggestions, if any, for improving drainage of lawns.

Part III - Water Supply

- 15. (a) Is the unfiltered water supply proposed to be tapped from existing unfiltered water mains?
 - (b) Is adequate supply of unfiltered water available?
 - (c) Are tube-wells proposed to be installed (It should be kept in mind that 3000 gallons of water per acre of green per day will be required).
- 16. Have unfiltered water mains and distributaries been laid and hydrants installed?



ANNEXURE- 16 ANNEXURE TO SOPS

Part IV - External Services

17. Have all the external services including roads, storm water drains, sewerage and electric cables/ wires been provided before horticultural works are taken up?

PROFORMA - 7 ELECTRICAL DISTRIBUTION LINES

- 1. Name of project.
- 2. (a) Reference to administrative approval and expenditure sanction and their amounts.
 - (b) Provision to cover the portion of work for which detailed estimate has been prepared.
- Amount of detailed estimate.

Part I - Engineering Appreciation

- 4. Brief specification of the system *
- 5. Average rate per sqm of:
 - (i) Detailed estimate,
 - (ii) Preliminary estimate
- 6. (a) Agency of execution
 - (b) Departmental charges
- 7. Special T&P required.
- 8. (a) Is supply proposed to be taken from the existing L.T. network of the supply authority?
 - (b) If yes, is element of cost of service connection taken in estimate, based on estimate from the supply authority?
 - *(c) If L.T. supply not available, how is electric supply proposed to be obtained?
- 9. Provision for future expansion and its extent.
- 10. Tariff (HT bulk, LT Bulk or retail LT) applicable.
- 11. In case of bulk supply, has provision been made for
 - (a) Equipments?
 - (b) Buildings for sub-stations and switching stations?
- 12. Has Architect been consulted for local siting of 11(b)?
- 13. Is stand-by required, if yes, has provision been made for it?
- 14. Statutory requirements of overhead or underground cables.
- 15. Details of phasing, if any, of different portions of work in consonance with the progress of civil work.
- 16. Special remarks, if any.
 - *Give a brief description of the system as in the example below:



ANNEXURE TO SOPs ANNEXURE - 16

" Supply is proposed to be taken from the L.T. feeders of the local electricity undertakin
by means of over-head/underground lines. The distribution is proposed to be carried out by ove
head lines carried on PCC/steel tubular/rail poles, copper/aluminum conductors of siz
will be run on the main roads and ofsize on the other roads. For roads having a width of
metres the lines will be taken along the central verge with double armed brackets for
lighting fixtures. For roads with a width of metres, a staggered layout will be adopted
Also indicate the arrangements adopted for sectionalizing and isolating portions of the net wor
for the purposes of maintenance and repairs".

*In case of composite lines carrying street light and L.T. distribution lines, the basis of allocation of cost to street lighting and L.T. distribution lines should be given.

PROFORMA - 8 STREET LIGHTING

- 1. Name of project.
- 2. (a) Reference to administrative approval and expenditure sanction and their amounts.
 - (b) Provision to cover the component for which this detailed estimate has been prepared.

Part I - Engineering Appreciation

- *3. Brief specification of the system.
- 4. Average rate per sqm of
 - (i) detailed estimate,
 - (ii) preliminary estimate.
- 5. (a) Agency for execution.
 - (b) Departmental charges.
- 6. Special T&P required.
- 7. Brief particular of source of power supply
- 8. Provision of future expansion and its extent.
- 9. Tariff applicable.
- 10. Phasing of different portions of the work in consonance with the progress of civil work.
- 11. Has the location of poles been decided in consultation with Director of Horticulture and the landscape architect?
- 12. Special remarks, if any.
 - *Give a brief description of the system as in the example below:
 - "........... Incandescent/High Pressure Mercury Vapour/fluorescent lamps will be provided onroads. The type of fittings shall be enclosed/open/semi-open tubes, and these will be suspended/fixed on brackets. The system of wiring will be with over-head copper/aluminum conductors of sizes.....Connections to poles will be given by means of underground cables ofsize and joints shall be used. For the major roads of widths, poles will be located on the central verge with



ANNEXURE- 16 ANNEXURE TO SOPs

double arc brackets for the lighting fixtures. For minor roads, poles will be located in a staggered pattern with an average spacing of An average illumination ofis arrived at on the main roads. Also indicate scheme of controlling lights, i.e. switching equipment".

In case of composite lines carrying street light and L.T. distribution lines, the basis of allocation of costs to street lighting and distribution lines should be given.

Note:

- 1. For major and important items give full technical description of specification in column 2.
- 2. For items to be imported, give a separate item wise note on justification and the inescapability of expenditure on foreign exchange.
- 3. If any special difficulty is likely to be encountered in procuring important materials, give a note suggesting steps that may be taken to overcome them.

PROFORMA - 9 TOWN PLANNING AND HOUSING SCHEME

(The following information should be available before a town planning scheme can be prepared)

- 1. Key plan of the area showing
 - (a) Location of site in relation to adjoining land uses.
 - (b) Types of development on adjoining plots
 - (c) Number of storeys (on adjoining plots)



ANNEXURE TO SOPs ANNEXURE- 16

Master Control Bar Chart (MCBC)

tnəilə Post Const ruction Stage Handing over to Commissioning and testing 15 4 13 12 BAR CHART (TIME IN MONTHS) Construction Stage 7 10 **Execution of work** 6 ω 9 2 4 က 8 2 tender Acceptance of Construction Call of tender က Preparation of MI TIM gniussi Authority responsible for Sub head No. for calling tender Sub head No. as per PE Sanctioned amount as per PE External service connection Specialised E&M services Description of sub head Sewage treatment plant External electrification Internal electrification Internal Roads & Path Water treatment plant Development of site fire fighting system Filter Water supply Internal furnishing Storm water drain Horticulture work Water harvesting fire alarm system Non residential Street lighting Solar Lighting sub station Sign Board Residential **Civil Work** Furniture Levelling DG sets wet riser HVAC, CCTV Sewer UPS lifts S.No. ڡ ပ σ Ø Q ပ Φ b ٥ σ б _ σ



Name of Work

Stipulated date of Completion as per P.E.

Amount and date of A/A & E/S

ANNEXURE 17

(Refer SOP No. 4/1, SOP No. 5/6)

TIME SCHEDULE FOR SCRUTINY OF TENDERS

SI. No.	Classification of tenders	Classification of tenders Maximum time allowed for scrutiny and di in days from date of opening of Financia			Bid CW Board		
		AE	EE	FO	SE	CE	(if concerned)
1	Tenders AE to award	7	-	-	-	-	-
2	Tenders to be accepted by EE to award	-	7	-			
3	Tenders to be accepted by SE	-	5	-	7	-	-
4	Tenders to be accepted by CE	-	5	3	5*	15**	-
5	Tenders to be approved by ADG/ RWB//CW Board	-	5	3	5*	15**	15

Note:

- 1. The 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.
- 2. Period indicated above is in working days.
- 3. *The SE will send his recommendation in the matter to the CE within 5 days of receipt of copy of tender papers from EE.
- 4. In case of composite tender the EE while forwarding the tender to the Chief Engineer will send a copy of comparative statement of schedule related to other disciplines to the concerned EE and SE, who will send their recommendation along with justified rates etc. to the Chief Engineer within 5 working days of receipt of the paper.
 - **AE(P)&EE(P) shall process the tender and put up the same to SE(P) within 7 days after receipt of recommendation in the matter from SEs concerned.
- 5. For Two Bid/Three Bid system, a period of 30 days from the date of opening of Technical Bid shall be provided for scrutiny and finalization of Technical Bids.



ANNEXURE- 18

(Refer SOP No 4/8, SOP No 4/9)

GUIDELINES ON DEFINITION OF SIMILAR WORK

The definition of Similar work is to be spelt out clearly in the NIT by NIT approving authority.

The definition of Similar work should be decided considering the following guidelines.

(i)	For building works, the number of storeys for the purpose of definition of similar work 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 four storeys buildings	No binding					
	Five to ten storeys buildings	Minimum one building of five storeys Or Completing balance Construction work of one building (i/c structural work) minimum up to five storey.					
	Eleven to fifteen storeys buildings	Minimum one building of eight storeys Orcompleting balance Construction work of one building.(i/c structural work) minimum up to eight storey.					
	More than fifteen storey buildings	Minimum one building of ten storey Or					
		completing balance Construction work of one building. (i/c structural work) minimum up to ten storey					
	For this purpose, each basement, stilt constructed in the building shall be considered as a storey.						
(ii)	In case the work involves construction of two or more basements, then it is to be stipulated in the definition of similar work that the agency should have executed one similar work with minimum one basement under one agreement. Work of Basement, specialized E&M services etc, if executed under a separate contract may also be considered for the purpose of assessing the technical competence only without adding its monetary value for determining the eligibility criteria.						
(iii)	For any civil work other than building work, if there is a significant component in the work other than normal building work then this component should be considered as 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.						



Annexure - 19 (Refer SOP No. 4/8) REGISTER OF NITs

Name and address of the Division
Maar

SI.No.	Date	Name of Sub- Division/Division	S. no. assigned (if located out station)	Name ofWork	Estimated Cost of work	Remarks

Example:

1-	
Serial number first available in the register:	5
Year:	2018-19
Division Construction Division	on IV
Location:	
Sub-Division/Division	: 2/CD-IV (if outstation, suffix suitable initials 5/2018-19/CD-IV/2

ANNEXURE - 20 (Refer SOP No. 4/8)

GENERAL GUIDELINES FOR FIXING REQUIREMENT OF TECHNICAL STAFF

Cost of Work	Requirement o	of Technical	Minimum experience (Years)	Designation Technical staff	Rate at which recovery shall	
(Rs. In Crores	Qualification	Number (of Major + Minor component		recillical Stall	be made from the contractor in the event of not fulfilling	
More than 100	Graduate Engineer (Major Componen)	1	20 (and having experience of one similar nature of work)	Project Manager with degree in major discipline of Engineering	Rs. 60,000/- per month	
	Graduate Engineer	2+1	12 (and having experience of one similar nature of work)	Deputy Project Manager	Rs. 40,000/- per Month per person	
	Graduate Engineer or Diploma Engineer	4+2	5 or 10 respectively	Project / Site Engineer	Rs. 25,000/- per month per person	
	Graduate Engineer	1+1	8	Quality Engineer	Rs. 25,000/- per month per person	
	Diploma Engineer	1	8	Surveyor	Rs. 15000/- per month per person	
	Graduate Engineer	1+1	6	Project Planning/billing	Rs. 20000/- per month per person	
More than 50 to 100	Graduate Enginee	1	20 (and having experience of one similar nature of work)	Project Manager	Rs. 60,000/- per month	
	Graduate Engineer	1+1	12 (and having experience of one similar nature of work)	Deputy Project Manager	Rs. 40,000/- per Month per person	
	Graduate Engineer or Diploma Engineer	1+1	5 or 10 respectively	Project/ Site Engineer	Rs. 25,000/- per month per person	
	Graduate Engineer	1+1	8	Quality Engineer	Rs. 25,000/- per month	
	Diploma Engineer	1	8	Surveyor	Rs. 15000/- per month	
	Graduate Engineer	1+1	6	Project Planning/ billing Engineer	Rs. 20000/- per month per person	
More than 20 to 50	Graduate Enginee	1	20 (and having experience of one similar nature of work)	Project Manager	Rs. 60,000/- per month	
	Graduate Engineer	1	12 (and having experience of one similar nature of work)	Deputy Project Manager	Rs. 40,000/- per Month per person	



ANNEXURE-20 ANNEXURE TO SOPs

	Graduate Engineer or Diploma Engineer	1+1	5 or 10 respectively	Project/ Site Engineer	Rs. 25,000/- per month per person
	Graduate Engineer or Diploma Engineer	1+1	2 or 5 respectively	Project Planning /quality/ billing Engineer	Rs. 15,000/- per month per person
More than 10 to 20	Graduate Enginee	1	10 (and having experience of one similar nature of work)	Project Manager	Rs. 30,000/- per month
	Graduate Engineer or Diploma Engineer	1	5 or 10 respectively	Project/ Site Engineer	Rs. 25,000/- per month
	Graduate Engineer or Diploma Engineer	1+1	2 or 5 respectively	Planning /quality/ billing Engineer	Rs. 15,000/- per month per person
	Graduate Engineer or Diploma Engineer	1+1	2 or 5 respectively	Project Planning /quality/ billing Engineer	Rs. 15,000/- per month per person
More than 5 to 10	Graduate Enginee Graduate Engineer or Diploma Engineer	1 1+1	5 (and having experience of one similar nature of work) 2 or 5 respectively	Project Manager Project Planning /quality/ billing Engineer	Rs. 25,000/- per month Rs. 15,000/- per month per person
More than 1.5 to 5	Graduate Engineer or Diploma Engineer	1+1	2 or 5 respectively	Project Manager cum planning/ quality/Site/billing Engineer	Rs. 15,000/- per month per person
More than 15 lac to 1.5 Crore	Graduate Engineer or Diploma Engineer	1 of major component	2 or 5 respectively	Project Manager cum planning/ quality/Site/billing Engineer	Rs. 15,000/- per month per person

Notes:

- 1. 'Cost of work,' in table above, means the agreement amount of the work.
- 2. Nothing extra need to be added while preparing market rate justified amount of the work if stipulation is made as per above recommended scale of requirement of technical staff.
- 3. Requirement of technical staff and their experience can be varied depending upon nature of work by NIT approving authority with recorded reasons.
- 4. The NIT approving authority shall mention the appropriate stage of employment of technical staff for minor component / specified work, if any at the time of approval of NIT.



ANNEXURE- 21 (Refer SOP No 4/8 & 4/9)

CPWD-6 FOR E- TENDERING

1.	Item rate/percentage rate bids are invited on behalf of President of India from approved and
	eligible contractors of CPWD and those of appropriate list of M.E.S., BSNL, Railway and
	State P.W.D. (B&R) or State Govt.'s Department (strike out as the
	case may be) dealing with building and roads, if there is no State PWD (B&R) for the Work
	of

The enlistment of the contractors should be valid on the last date of submission of bids.

In case the last date of submission of bid is extended, the enlistment of contractor should be valid on the original date of submission of bids.

- 1.1.1 The authority competent to approve NIT for the combined cost and belonging to the major discipline will consolidate NITs for calling the bids. He will also nominate Division which will deal with all matters relating to the invitation of bids.
 - For composite bid, besides indicating the combined estimated cost put to bid, should clearly indicate the estimated cost of each component separately. The eligibility of bidders will correspond to the combined estimated cost of different components put to bid.
- 1.2 Intending bidders is eligible to submit the bid provided he has definite proof from the appropriate authority, which shall be to the satisfaction of the competent authority, of having satisfactorily completed similar works of magnitude specified below:-
 - Criteria of eligibility for submission of bid documents
- 1.2.1 Conditions for Non-CPWD registered contractors only, if bids are also open to non-CPWD contractors.

For works estimated cost upto tendering limit of class -1 composite category Contractor (However, for Horticulture and Furniture etc. discipline, it may be modified as per bidding limit of CPWD class I contractors of respective discipline as the case may be)

Three similar works 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. (all figures rounded to nearest convenient figure) in last 7 years ending previous day of last date of submission of bids.

Note:-

For works costing above tendering limit of class –II composite category contractors but upto tendering limit of Clause-I composite category Contractor (However, for Horticulture and Furniture discipline, it may be modified as per bidding limit of CPWD class II and CPWD Class I contractors respectively of respective discipline as the case may be) when bids are open to non-CPWD contractors also, then class II contractors of CPWD registered shall also be eligible if they satisfy the eligibility criteria specified in 1.2.1 above.

1.2.2 Criteria of eligibility for CPWD as well as non-CPWD contractors,

For works estimated to cost above the tendering limit of class -1 composite category Contractor (However for Horticulture and Furniture discipline, it may be modified as per



ANNEXURE-21 ANNEXURE TO SOPs

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 the last date of submission of bid. This is applicable for 1.2.1 as well as 1.2.2 (This is not applicable for CPWD enlisted contractors of appropriate class in composite category)

To become eligible for issue of bid, the bidders 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 bidding in CPWD in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee. (Scanned copy to be uploaded at the time of submission of bid)

- 1.2.3 When bids are invited from non CPWD contractors and CPWD class II contractors as per provisions of **clause 1.2.1** above, it will be mandatory for non CPWD contractors and CPWD class-II contractors to upload the work experience certificate(s) and the affidavit as per the provisions of **clause 1.2.2**.
 - But for such bids, Class-I contractors of CPWD are eligible to submit the bids without submission of work experience certificate and affidavit. Therefore, CPWD class-I contractors shall upload two separate letters for experience certificate and affidavit that these documents are not required to be submitted by them. Uploading of these two letters is mandatory otherwise system will not clear mandatory fields.
- 2. Agreement shall be drawn with the successful bidders on prescribed Form No. **CPWD 7/8** (or other Standard Form as mentioned) which is available as a Govt. of India Publication and also available on website **www.cpwd.gov.in**. Bidders shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.
- 3. The time allowed for carrying out the work will be from the date of start as defined in schedule 'F' or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the bid documents.
- 4. The site for the work is available.

OR

The site for the work shall be made available in parts as specified below:-

(ii) The architectural and structural drawing for the work is available

or

The architectural and structural drawings shall be made available in phased manner, as per requirement of the same as per approved programme of completion submitted by the contractor after award of work.



The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents except Standard General Conditions of Contract Form can be seen on website www.tenderwizard.com/CPWD or www.cpwd.gov.in free of cost.

- 6. After submission of the bid the contractor can re-submit revised bid any number of times but before last time and date of submission of bid as notified.
- 7. While submitting the revised bid, contractor can revise the rate of one or more item(s) any number of times (he need not re-enter rate of all the items) but before last time and date of submission of bid as notified.
- 8. When bids are invited in three stage system and if it is desired to submit revised financial bid then it shall be mandatory to submit revised financial bid. If not submitted then the bid submitted earlier shall become invalid.
- 9. Earnest Money in the form of Treasury Challan or Demand Draft or Pay order or Banker's Cheque or Deposit at Call Receipt or Fixed Deposit Receipt (drawn in favour of Executive Engineer) shall be scanned and uploaded to the e-Tendering website within the period of bid submission. The original EMD should be deposited either in the office of Executive Engineer inviting bids or division office of any Executive Engineer, CPWD within the period of bid submission. The EMD receiving Executive Engineer (including NIT issuing EE/AE) shall issue a receipt of deposition of earnest money deposit to the bidder in a prescribed format (enclosed) uploaded by tender inviting EE in the NIT.

A part of earnest money is acceptable in the form of bank guarantee also. In such case, minimum 50% of earnest money or Rs. 20 lac, whichever is less, shall have to be deposited in shape prescribed above, and balance may be deposited in shape of Bank Guarantee of any scheduled bank having validity for six months or more from the last date of receipt of bids which is to be scanned and uploaded by the intending bidders.

Copy of Enlistment Order and certificate of work experience and other documents as specified in the press notice shall be scanned and uploaded to the e-Tendering website within the period of bid submission. However, certified copy of all the scanned and uploaded documents as specified in press notice shall have to be submitted by the lowest bidder only along with physical EMD of the scanned copy of EMD uploaded within a week physically in the office of tender opening authority. Online bid documents submitted by intending bidders shall be opened only of those bidders, whose original EMD deposited with any division of CPWD and other documents scanned and uploaded are found in order.

9A The contractors registered prior to 01.04.2015 on e-tendering portal of CPWD shall have to deposit tender processing fee at existing rates, or they have option to switch over to the new registration system without tender processing fee any time.

The bid submitted shall be opened at 03:30 PM on

- 10. The bid submitted shall become invalid and e-Tender processing fee shall not be refunded if:
 - (i) The bidder is found ineligible.
 - (ii) The bidder does not upload scanned copies of all the documents stipulated in the bid document.



ANNEXURE-21 ANNEXURE TO SOPs

(iii) If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically by the lowest bidder in the office of bid opening authority.

- (iv) If a tenderer quotes nil rates against each item in item rate tender or does not quote any percentage above/below on the total amount of the tender or any section / sub head in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer.
- 11. The contractor whose bid is accepted will be required to furnish performance guarantee of 5% (Five Percent) of the bid amount within the period specified in Schedule F. This guarantee shall be in the form of cash (in case guarantee amount is less than Rs. 10000/-) or Deposit at Call receipt of any scheduled bank/Banker's cheque of any scheduled bank/Demand Draft of any scheduled bank/ Pay order of any Scheduled Bank of any scheduled bank (in case guarantee amount is less than Rs. 1,00,000/-) or Government Securities or Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'F', including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor. The earnest money deposited along with bid shall be returned after receiving the aforesaid performance guarantee. The contractor whose bid is accepted will also be required to furnish either copy of applicable licenses/ registrations or proof of applying for obtaining labour licenses, registration with EPFO, ESIC and BOCW Welfare Board including Provident Fund Code No. If applicable and also ensure the compliance of aforesaid provisions by the sub contractors, if any engaged by the contractor for the said work within the period specified in Schedule F.

12. The description of the work is as follows:

Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A bidders shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidders shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidders implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.

13. The competent authority on behalf of the President of India does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the bids received without the assignment of any reason. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidders shall be summarily rejected.



14. Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the bids submitted by the contractors who resort to canvassing will be liable for rejection.

- 15. The competent authority on behalf of President of India reserves to himself the right of accepting the whole or any part of the bid and the bidders shall be bound to perform the same at the rate quoted.
- 16. The contractor shall not be permitted to bid for works in the CPWD Circle (Division in case of contractors of Horticulture/Nursery category) responsible for award and execution of contracts, in which his near relative is posted a Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any gazetted officer in the Central Public Works Department or in the Ministry of Urban Development. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Department.
- 17. No Engineer of Gazetted Rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the prior permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor orany of his employees is found any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the bid or engagement in the contractor's service.
- 18. The bid for the works shall remain open for acceptance for a period of thirty/seventy five (30/75) days from the date of opening of bids in case of single bid system/ sixty (60) days from the date of opening of technical bid in case bids are invited on 2 or 3 bid envelop system. (strike out as the case may be). If any bidder withdraws his bid before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the bid 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 said earnest money as aforesaid. Further the bidders shall not be allowed to participate in the rebidding process of the work.
- 19. This notice inviting Bid shall form a part of the contract document. The successful bidder/contractor, on acceptance of his bid by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign the contract consisting of:-
 - (a) The Notice Inviting Bid, all the documents including additional conditions, specifications and drawings, if any, forming part of the bid as uploaded at the time of invitation of bid and the rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
 - (b) Standard C.P.W.D. Form 7/8 or other Standard C.P.W.D. Form as applicable.

20. For Composite Bids

- 20.1.1 The Executive Engineer in charge of the major component will call bids for the composite work. The cost of bid document and Earnest Money will be fixed with respect to the combined estimated cost put to tender for the composite bid.
- 20.1.2 The bid document will include following three components:



ANNEXURE-21 ANNEXURE TO SOPs

- **Part A:-** CPWD-6, CPWD-7/8 including schedule A to F for the major component of the work, Standard General Conditions of Contract for CPWD 2014 as amended/modified up to
- **Part B:-** General / specific conditions, specifications and schedule of quantities applicable to major component of the work.
- **Part C:-** Schedule A to F for minor component of the work (competent authority under clause 2 and clause 5 shall be same authority as mentioned in schedule A to F for major components), General/specific conditions, specifications and schedule of quantities applicable to minor component(s) of the work.
- 20.1.3 The bidders must associate himself, with agencies as per NIT conditions
- 20.1.4 The eligible bidders shall quote rates for all items of major component as well as for all items of minor components of work.
- 20.1.5 After acceptance of the bid by competent authority, the EE in charge of major component of the work shall issue letter of award on behalf of the President of India. After the work is awarded, the main contractor will have to enter into one agreement with EE incharge of major component and has also to sign two or more copies of agreement depending upon number of EE's/DDH incharge of minor components. One such signed set of agreement shall be handed over to EE/DDH incharge of minor component(s). EE of major component will operate **Part A** and **Part B** of the agreement. EE/DDH incharge of minor component(s) shall operate **Part C** alongwith **Part A** of the agreement.
- 20.1.6 Entire work under the scope of composite bid including major and all minor components shall be executed under one agreement.
- 20.1.7 Security Deposit will be worked out separately for each component corresponding to the estimated cost of the respective component of works.
- 20.1.8 The main contractor has to associate agencies for specialized component(s) conforming to eligibility criteria as defined in the bid document and has to submit detail of such agency(s) to Engineer-in-charge of relevant component(s). within prescribed time. Name of the agency(s) to be associated shall be approved by Engineer-in-charge of relevant component(s).
- 20.1.9 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 Engineer-in-charge of-relevant specialized component(s).
 - The new agency/agencies shall also have to satisfy the laid down eligibility criteria. In case Engineer-in-charge 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.
- 20.1.10 The main contractor has to enter into MoU with agency(s) associated by him . Copy of such MoU shall be submitted to EE/ DDH in charge of each relevant component as well as to EE incharge of major component. In case of change of associate contractor, the main agency(s) has to enter into MoU/agreement with the new contractor associated by him.



20.1.11 Running payment for the major component shall be made by EE of major discipline to the main contractor. Running payment for minor components shall be made by the Engineer- in-charge of the discipline of minor component directly to the main contractor.

- 20.1.12A. The composite work shall be treated as complete when all the components of the work are complete. The completion certificate of the composite work shall be recorded by Engineer-in-charge of major component after record of completion certificate of all other components.
- 20.1.12B. Final bill of whole work shall be finalized and paid by the EE of major component.

 Engineer(s) in charge of minor component(s) will prepare and pass the final bill for their component of work and pass on the same to the EE of major component for including in the final bill for composite contract.



ANNEXURE- 22 (Refer SOP No 4/8)

INFORMATION AND INSTRUCTIONS FOR-BIDDERS FOR E-TENDERING FORMING PART OF BID DOCUMENT

(Applicable for inviting open bids)

The Executive Engineer	Division, CPWD	on behalf of President of
India invites online Item rate/percentage	rate bids from approved	and eligible contractors of CPWD and
those of appropriate list of M.E.S., BSNL	, Railway and	State P.W.D. (B&R) or State Govt.'s
Department dealing with b	building and roads, if there	e is no State PWD (B&R), (strike out as
the case may be) for the following work(s	s):	

S. No.	NIT No.	Name of work & Location	Estimated cost put to bid (Rs.)	Earnest Money	Stipulated Period of Completion of work (in months)	Last date of online submission of bid, copy of receipt of deposition of orginal EMD and other documents as specified in the bid document.	Date & time of opening of bid
1	2	3	4	5	6	7	8
		Name of work should include details of minor components in cases of composite bids	Estimated cost of minor component should also be indicated			Up to 03.00 PM on	

- 1. The intending bidder must read the terms and conditions of CPWD-6 carefully. He should only submit his bid if he consider himself eligible and he is in possession of all the documents required.
- 2. Information and Instructions for bidders posted on website shall form part of bid document.
- 3. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website www.tenderwizard.com/CPWD or www.cpwd.gov.in free of cost.
- 4. But the bid can only be submitted after deposition of original EMD either in the office of Executive Engineer inviting bids or division office of any Executive Engineer, CPWD within the period of bid submission and uploading the mandatory scanned documents such as Demand darft or Pay order or Bankers Cheque or Deposit at call Receipt or Fixed Deposit Receipts and Bank Guarantee of any scheduled Bank towards EMD in favour of Executive Engineer as mentioned in NIT, receipt for deposition of original EMD to division office of any Executive Engineer (including NIT issuing EE/AE), CPWD and other documents as specified.
- 5. Those contractors not registered on the website mentioned above, are required to get registered beforehand. If needed they can be imparted training on online bidding process as per details available on the website.
- 6. The intending bidder must have valid class-III digital signature to submit the bid.
- 7. On opening date, the contractor can login and see the bid opening process. After opening of bids he will receive the competitor bid sheets.



- 8. Contractor can upload documents in the form of **JPG** format and **PDF** format.
- 9. Contractor must ensure to quote rate in the prescribed column(s) meant for quoting rate in figures appears in pink colour and the moment rate is entered, it turns sky blue.
 - In addition to this, while selecting any of the cells a warning appears that if any cell is left blank the same shall be treated as "0". Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as "0" (ZERO).
 - However, If a tenderer quotes nil rates against each item in item rate tender or does not quote any percentage above/below on the total amount of the tender or any section / sub head in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer.
- 10. SC/ST contractors enlisted under class V category are exempted from processing fee payable to ITI.

List of Documents to be scanned and uploaded within the period of bid submission:

- I. Treasury Challan/Demand Draft/Pay order or Banker's Cheque /Deposit at Call Receipt/FDR/ Bank Guarantee of any Scheduled Bank against EMD.
- II. Enlistment Order of the Contractor.
- III. Certificates of Work Experience (if required from non CPWD and CPWD class II contractors).
- IV. Affidavit as per clause 1.2.3 of CPWD 6 (if required from non CPWD and CPWD class II contractors).
- V. Two letters from CPWD class I contractors as specified under clause 1.2.3 of CPWD 6 (if applicable).
- VI. GST Registration Certificate of the State in which the work is to be taken up, if already obtained by the bidder.

If the bidder has not obtained GST registration in the State in which the work is to be taken up, or as required by GST authorities then in such a case the bidder shall scan and upload following under taking along with other bid documents.

"If work is awarded to me, I/we shall obtain GST registration Certificate of the State, in which work is to be taken up, within one month from the date of receipt of award letter or before release of any payment by CPWD, whichever is earlier, failing which I/We shall be responsible for any delay in payments which will be due towards me/us on a/c of the work executed and/or for any action taken by CPWD or GST department in this regard.

Not to be posted on website

Other conditions for composite bids and any special condition as applicable may also be added and instruction to bidders may be modified suitably by NIT approving authority.



ANNEXURE-23

(Refer SOP No 4/9)

INFORMATION AND INSTRUCTIONS FOR BIDDERS FOR e-TENDERING FORMING PART OF BID DOCUMENT

(Applicable for inviting bids on 2/3 bid system)

The Executive Engineer ... Division CPWD.. on behalf of the President of India invites online bids from CPWD enlisted contractors of appropriate class in composite category and firms/contractors of repute in two/three bid system for the following work:

S. No.	NIT No.	Name of work & Location	Estimated cost put to bid	Earnest Money	Period of Completion	Last date & time of submission of bid, copy of receipt of deposition of original EMD, and other documents as specified in the NIT	Time & date of opening of technical bid
1	2	3	4	5	6	7	8
		Name of work should include details of minor components in cases of composite bids	Estimated cost of minor component should also be indicated			Up to 03.00 PM on	

- 1. Contractors who fulfil the following requirements shall be eligible to apply. Joint ventures are not accepted. (This is not applicable for CPWD enlisted contractors of appropriate class in composite category)
 - (a) Should have satisfactorily completed the works as mentioned below during the last Seven years ending **previous day of last date of submission of bids.**

costing not less than Rs. OR on	OR one similar work costing not less than Rs.		
brought to current costing level by enhancing	The value of executed works shall be the actual value of work at simple rate of 7% per ion to previous day of last day of submission of		

(i) Three similar works each costing not less than **Rs.**, or two similar works each

- (d) Should have a Solvency of **Rs.**.... (Scanned copy of original solvency to be uploaded)

(Solvency not required if applicant is a class I(Composite) registered contractor of CPWD and estimated cost is up to Rs. 25 Crore)*

* To be struck off for works with estimated cost more than Rs. 25 Crore.



2. The intending bidder must read the terms and conditions of **CPWD-6** carefully. He should only submit his bid if he consider himself eligible and he is in possession of all the documents required.

- 3. This information and instructions for bidders posted on website shall form pay of bid document.
- 4. The bid document consisting of Plans, Specifications, Schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website www.tenderwizard.com/ CPWD or www.cpwd.gov.in free of cost.
- 5. But the bid can only be submitted after deposition of original EMD either in the office of Executive Engineer inviting bids or division office of any Executive Engineer, CPWD within the period of bid submission and uploading the mandatory scanned documents such as Demand darft or Pay order or Bankers Cheque or Deposit at call Receipt or Fixed Deposit Receipts and Bank Guarantee of any scheduled Bank towards EMD in favour of Executive Engineer as mentioned in NIT, receipt for deposition of original EMD to division office of any Executive Engineer (including NIT issuing EE/AE), CPWD and other documents as specified.
- 6. Those contractors not registered on the website mentioned above, are required to get registered beforehand. If needed they can be imparted training on online bidding process as per details available on the website.
- 7. The intending bidder must have valid class-III digital signature to submit the bid.
- 8. On opening date, the contractor can login and see the bid opening process. After opening of bids he will receive the competitor bid sheets.
- 9. Contractor can upload documents in the form of JPG format and PDF format.
- 10. Certificate of Financial Turn Over: At the time of submission of bid contractor may upload Affidavit/ Certificate from CA mentioning Financial Turnover of last 3 years or for the period as specified in the bid document and further details if required may be asked from the contractor after opening of technical bids. There is no need to upload entire voluminous balance sheet.
- 11. Contractor must ensure to quote rate of each item. The column meant for quoting rate in figures appears in pink colour and the moment rate is entered, it turns sky blue.
 - In addition to this, while selecting any of the cells a warning appears that if any cell is left blank the same shall be treated as "0". Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as "0" (ZERO).
 - However, If a tenderer quotes nil rates against each item in item rate tender or does not quote any percentage above/below on the total amount of the tender or any section / sub head in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer.
- 12. The Technical Bid shall be opened first on due date and time as mentioned above. The time and date of opening of financial bid of contractors qualifying the technical bid shall be communicated to them at a later date.
- 14. When bids are invited in three stage system and if it is desired to submit revised financial bid then it shall be mandatory to submit revised financial bid. If not submitted then the bid submitted earlier shall become invalid.



ANNEXURE-23 ANNEXURE TO SOPs

15. 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.

Not to be posted on website

Other conditions for composite bids and any special condition as applicable may also be added and instruction to bidders may be modified suitably by NIT approving authority.

List of Documents to be scanned and uploaded within the period of bid submission:

- I Copy of receipt for deposition of original EMD to division office of any EE,CPWD.
- II Certificates of Work Experience.
- III Certificate of Financial Turnover from CA.
- IV Bank Solvency Certificate
- V Any other Document as specified in the NIT
- VI Affidavit as per provisions of clause 1.2.3 of CPWD-6
- VII GST registration Certificate of the State in which the work is to be taken up, if already obtained by the bidder.

If the bidder has not obtained GST registration in the State in which the work is to be taken up, **or as required by GST authorities** then in such a case the bidder shall **scan and** upload following undertaking along with **other** bid documents.

"If work is awarded to me, I/we shall obtain GST registration Certificate of the State, in which work is to be taken up within one month from the date of receipt of award letter or before release of any payment by CPWD, whichever is earlier, failing which I/We shall be responsible for any delay in payments which will be due towards me/us on a/c of the work executed and/or for any action taken by CPWD or GST department in this regard.

Note: The SI.No. II to IV are not applicable for CPWD enlisted contractors of appropriate class in composite category)

The contractors of composite category are mainly enlisted for execution of building work, internal and External Electrical Works and E&M services like HVAC, Fire Fighting, Fire Alarm, Sub-station, DG Set and related items, However, they shall not be eligible for tenders for exclusive work of horticulture lifts, Road, Furniture and other specialized works. If NIT approving authority feels that the work is of special or secret nature requiring speciliazed equipment and skill, them restricted tenders can be called as per para 4.5.1 of CPWD Works Manual 2019. Similarly, tenders of specialized nature/tenders with specialized component of works shall be called as per para 3.1.3 of CPWD Works Manual 2019.

Instruction to bidders may be modified suitably by NIT approving authority.



ANNEXURE-24

(Refer SOP No. 4/9)

GUIDELINES FOR FIXING ELIGIBILITY CRITERIA FOR TWO/THREE BID SYSTEM

- 1. The eligibility criteria to be inserted under Information and Instructions for Bidders for 2/3 bid system regarding eligibility) shall be decided on the following lines:
 - (i) Experience of having successfully completed works during the last 7 years ending previous day of last date of submission of tenders

Three similar completed works, each costing not less than the amount equal to 40% of estimated cost put to tender,

or

Two similar completed works, each 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.

- (ii) **Turnover**: Average annual financial turnover on construction works should be at least 50% of the estimated cost put to tender during the immediate last three consecutive financial years.
- (iii) Profit/loss: The bidder should not have incurred any loss (profit after tax should be positive)in more than two years during available last five consecutive balance sheet, duly audited and certified by the Chartered Accountant.
- (iv) **Solvency Certificate**: Solvency of the amount equal to 40% of the Estimated Cost put to tender (ECPT).
- (v) Evaluation of performance: Evaluation of the performance of contractors for eligibility shall be done by NIT approving authority or a Committee constituted by him. All the eligible similar works executed and submitted by the bidders may be got inspected by a committee which may consist of client or any other authority as decided by NIT approving authority. The marks for the quality shall be given based on this inspection, if inspection is carried out.
 - Scoring method of evaluation :- The scoring for evaluation mentioned in these columns shall be done as given in Proforma I . This should be made part of the tender documents.
- 2. For all works eligibility criteria shall be based on above guidelines. However, the NIT authority may insert experience of particular categories of items like stone work, metal false ceiling, basements, form works etc., as an additional condition.
- 3. The above criteria shall be applicable for normal Civil & Electrical Works in CPWD Note:- In case only technical bids are called, the document may be modified suitably.



ANNEXURE-24 ANNEXURE TO SOPs

PROFORMA - 1

CRITERIA FOR EVALUATION OF THE PERFORMANCE OF CONTRACTORS FOR PRE-ELIGIBILITY

	Attributes		Evalu	ation			
(a)	Financial strength	(20 marks)					
	(i) Average annual turnover (ii) Solvency Certificate	16 marks 4 marks	(ii) 1	00% ma r more	arks for t		ligibility criteria inimum eligibility criteria a basis
(b)	Experience in similar class of works	(20 marks)	(ii) 1	00% ma riteria o	arks for r more		ligibility criteria minimum eligibility a basis
(c)	Performance on works (time over run)	(20 marks)					
	Parameter	Calculation For points		Sco	ore		Maximum Marks
	If TOR = (i) Without levy of competition (ii) With levy of compensation	ation	1.00 20 20 20	2.00 15 5 10	3.00 10 0 0	>3.50 10 -5 0	20
'	TOR = AT/ST, where AT=A of Tim	octual Time; ST=Stipulated T	ime in the	e Agree	ment plu	us (+) justi	fied period of Extension
	Note: Marks for value in be	etween the stages indicated	above is	to be de	etermine	ed by strai	ght line variation basis.
(d)	Performance of works (Q	uality) ((40 mark	s)			
	(i) Outstanding		40				
	(ii) Very Good		30				
	(iii) Good		20				
	(iv) Poor		0				

SECTION - I BRIEF PARTICULARS OF THE WORK

1. Salient details of the work for which bids are invited are as under:

Sl.no.	Name of work	Estimated cost	Period of completion

2. The work is situated at



- 3. General features and major components of the work are as under:
 - (i)
 - (ii)
 - (iii)
 - (iv)
- 4. Work shall be executed according to General Conditions of Contract for Central P.W.D. Works available separately at printer's outlets. The bidder may obtain the address of the outlets from the Executive Engineer.

SECTION - II

1.0 General:

INFORMATION & INSTRUCTIONS FOR BIDDERS

- 1.1 Letter of transmittal and forms for deciding eligibility are given in Section III.
- 1.2 All information called for in the enclosed forms 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. 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 applicable in case of the bidder, it should be stated as "not applicable". The bidders are cautioned that 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 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 Executive Engineer or equivalent.
- 1.4 The bidder may furnish any additional information which he thinks is necessary to establish his capabilities to successfully complete the envisaged work. He is, however, advised not to furnish superfluous information. No information shall be entertained after submission of eligibility criteria document unless it is called for by the Employer.
- 1.5 Deleted

2.0 Definitions:

- 2.1 In this document the following words and expressions have the meaning hereby assigned to them.
- 2.2 Employer: Means the President of India, acting through the Executive Engineer
- 2.3 Bidder: Means the individual, proprietary firm, firm in partnership, limited company private or public or corporation.
- 2.4 "Year" means "Financial Year" unless stated otherwise.



ANNEXURE- 24 ANNEXURE TO SOPs

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 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 power of attorney should accompany the application. In both cases 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 of attorney. The bidder should also furnish a copy of the Memorandum of Articles of Association duly attested by a Public Notary.

4.0 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 to the bidders.

5.0 Particulars provisional

The particulars of the work given 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 completed Similar works during the last Seven years ending previous day of last date of submission of tenders as below. For this pupose cost of work shall mean gross value the completed work including cost of 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 Executive Engineer/Project Manager or equivalent.
 - (i) Three similar works each costing not less than Rs...., or completed two similar works each costing not less than Rs..., or completed one similar work costing not less than Rs...,

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 previous day of last date of submission of tenders

7.2 The bidder should have had Average Annual Financial Turn over of Rs........... on Civil/Electrical construction work during the last three consecutive years Balance sheets duly audited by Chartered Accountant. Year in which no turnover is shown would also be considered for working out the average.



7.3 The bidder should not have incurred any loss (profit after tax should be positive) in more than two years during *available last five consecutive balance sheets*, *duly certified and audited* by the Chartered Accountant.

- **7.4** The bidder should have a solvency of Rs. certified by his Bankers. (Not required if applicant is a Class-I (**Composite**) registered contractor of CPWD)*
- 7.5 The bidder should have sufficient number of Technical and Administrative employees for the proper execution of the contract. The bidder shall have **to** submit a list of these employees stating clearly how these would be involved in this work within 15 days of award of work.
 - * May be struck off for works with estimated cost more than Rs. 25 Crores.

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 **7.0** above in respect of experience of eligible similar works completed, loss, solvency and financial turn over etc. will first be scrutinized and the bidder's eligibility for the work be determined.
 - 8.1.2 The bidders qualifying the initial criteria as set out in para **7.0** above will be evaluated for following criteria by scoring method on the basis of details furnished by them.

		Total	100 marks
(d)	Performance on works (Form	D') - Quality	Maximum 40 marks
(c)	Performance on works (Form	'D') - Time over run	Maximum 20 marks
(b)	Experience in eligible similar no during last seven years (Form		Maximum 20 marks
(a)	Financial strength (Form 'A' &	'B')	Maximum 20 marks

To become eligible for short listing the bidder must secure at least fifty percent marks in each (Section a, b, c & d) and sixty percent marks in aggregate.

The department, however, reserves the right to restrict the list of such qualified contractors to any number deemed suitable by it.

Note: The average value of performance of works for time over run and quality shall be taken on the basis of performance report and eligible similar works.

9.0 Financial information

Bidder should furnish the Annual financial statement for the last five year in (Form "A") and Solvency Certificate in (Form "B")

10.0 Experience of similar works

10.1 Bidder should furnish the

List of eligible similar nature of works successfully completed during the last seven years in (Form "C").



ANNEXURE-24 ANNEXURE TO SOPs

11.0 Organisation information

Bidder is required to submit the information in respect of his organization in Forms "E"

12.0 Letter of transmittal

The bidder should submit the Letter of Transmittal attached with the document.

13.0 Opening of Price bid

After evaluation of applications, a 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.

14.0 Award Criteria

- **14.1** The employer reserves the right, without being liable for any damages or obligation to inform the bidder, to:
 - (a) amend the scope of work and value of contract.
 - (b) Reject any or all the applications without assigning any reason.
- **14.2** 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.

SECTION III

INFORMATION REGARDING ELIGIBILITY

LETTER OF TRANSMITTAL

rom:
·o
he Executive Engineer
Subject: Submission of bids for the work of
Sir,

Having examined the details given in the 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 A to H 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.



ANNEXURE TO SOPs	ANNEXURE- 24
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3.	I/we submit the requisite certified solvency certificate and authorize the Executive Enginee
	to approach the Bank issuing the solvency certificate to confirm the correctness
	thereof. I/we also authorize Executive Engineer 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 for having successfully completed the following eligible similar works:

Name of work	Certificate from

Certificate: It is certified that the information given in the enclosed eligibility bid are correct. It is also certified that I / We shall be liable to be debarred, disqualified / cancellation of enlistment in case any information furnished by me / us is found to be incorrect.

Enclosures: Seal of bidder

Date of submission:

Signature(s) of Bidder(s).

FINANCIAL INFORMATION (FORM 'A')

I. Financial Analysis – Details to be furnished duly supported by figures in balance sheet/ profit & loss account for the last five financial years duly certified by the Chartered Accountant, as submitted by the applicant to the Income Tax Department (Copies to be attached).

Financial years		

- (i) Gross Annual Turn Over on construction works.
- (ii) Profit/Loss.
- II. Financial arrangements for carrying out the proposed work.

Signature of Chartered Accountant with Seal

Signature of Bidder(s)



ANNEXURE-24 ANNEXURE TO SOPs

FORM "B"

BANKERS' CERTIFICATE FROM A SCHEDULED BANK

This is to certify that to the best of our knowledge and information that M/s./ Sh
having marginally noted address, as 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, 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 ELIGIBLE SIMILAR NATURE OF WORKS COMPLETED DURING THE LAST SEVEN YEARS ENDING PREVIOUS DAY OF LAST DAY OF SUBMISSION OF TENDERS

S. No.	Name of work/project and location	Owner or sponsoring organization	Cost of work in crores of rupees	Date of commen cement as per contract	Stipulated date of completion	Actual date of compl- etion	Litigation/ arbitration cases pending/ in progress with details*	telephone number of officer to whom	Whether the work was done on back to back basis Yes/ No
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'

PERFORMANCE REPORT OF WORKS REFERRED TO IN FORMS "C"

- Name of work/project & location
- 2. Agreement no.
- 3. Estimated cost
- 4. Tendered cost
- 5. Date of start
- 6. Date of completion
 - (i) Stipulated date of completion
 - (ii) Actual date of completion
- 7. Amount of compensation levied for delayed completion, if any
 - (a) Whether case of levy of compensation for delay has been decided or not Yes/No
 - (b) If decided, amount of compensation levied for delayed completion, if any
- 8. Amount of reduced rate items, if any
- 9. Performance Report

Quality of work
 Pinancial soundness
 Technical Proficiency
 Resourcefulness
 General Behaviour
 Outstanding/Very Good/Good/Poor
 Outstanding/Very Good/Good/Poor
 Outstanding/Very Good/Good/Poor
 Outstanding/Very Good/Good/Poor
 Outstanding/Very Good/Good/Poor

Dated: Executive Engineer or Equivalent

FORM "E"

STRUCTURE & ORGANISATION

- 1. Name & address of the bidder
- Telephone no./Telex no./Fax no.
- 3. Legal status of the bidder (Scan & upload 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



ANNEXURE- 24 ANNEXURE TO SOPs

Particulars of registration with various Government Bodies (Scan & upload attested photocopy)
 Organisation/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. Has the bidder, or any constituent partner in case of partnership firm, limited company / Joint Venture, ever been convicted by the court of Law? If so, give details
- 9. In which field of Civil Engineering construction the bidder has specialization and interest?
- 10. Any other information considered necessary but not included above.

Signature of Bidder(s)



ANNEXURE - 25

(Refer SOP No. 5/7)

MEMO FORWARDING TENDERS TO CENTRAL WORKS BOARD/ REGIONAL WORKS BOARD CENTRAL PUBLIC WORKS DEPARTMENT

						Zone		
1.	Nam	ne of Wo	ork					
2.	Committed date of completion of the work (Project) based on PE & A/A & E/S							
3.	Ref.	Ref. to administrative approval and expenditure sanction						
	(i)	Author	rity					
	(ii)	No. &	date					
	(iii)	Amour	nt					
	(iv)		sponding amour esent tender	nt available for the v	work	included in		
	(v)	Total N	No. of packages	6				
	(vi)	Details	s of other packa	ages				
		Pad	ckage Number	Contents of Pack	age	Corresponding amount		Status including amount of work
4.		ition of wing for		of works/Projects (Not	included in the tende	r) as	s per A/A & E/S in the
	SI.	Sl. No. Description o		f sub-head/items		mount as per A/A & E/S		Present Status
5.	Ref.	to techi	nical sanction					
	(i)	Scope	e of work					
	(ii)	(ii) Authority						
	(iii)	No. &	date					
	(iv)	Amou	nt					
6.	Scope of work for which tenders have been called for, clearly indicating the items omitted from the sanctioned estimate and how the omitted items shall be executed.							
7.	Ref.	to appr	oval of N.I.T.					
	(i)	Autho	rity					

ANNEXURE- 25

ANNE	(URE-	25	ANNEXURE TO SOPs
	(ii)	No. & date	
	(iii)	Estimated amount put to tender	
8.	Ref.	to publicity:	
	(i)	Date on which notice inviting tenders was placed on notice board in Divisional Office/ on website	
	(ii)	Date on which it was circulated to other offices	
		Name of newspapers/ website (with date) in which notice inviting tenders was actually advertised/ ished and the details of NIT identification number.	
9.	(i)	The date and time at which tenders were due to be received	
		in Divisional Office/ uploaded on website	
	(ii)	Postponed date and time, if any	
	(iii)	Reasons for postponement	
	(iv)	Reference to publicity in regard to postponement of tenders	
10(A).	The	date from which the tenders available for sale to the	
	cont	ractors/ website .	
10(B).	Pre	Bid Conference	
	(i)	Date and time of prebid conference.	
	(ii)	Name of Contractor present in the prebid conference.	
	(iii)	Decisions taken in the prebid conference.	
11.	auth	culars of contractors to whom tenders were sold. Quote ority for issue of tenders to contractors not eligible to tender marks column.	

Name of contractor	Class in which registered	Department in which enlisted	Date of issue of tenders	Remarks
1	2	3	4	5
(i) (ii) (iii) (iv) (v)				

12. Opening of tenders

- 12.1 For normal works costing upto Rs. 30 Crores:
 - (i) Date and time at which tenders were due to be opened.
 - (a) Date and time of which tenders were actually opened. (ii)
 - Name & Designation of officer who actually opened the tenders. (b)



- (iii) Name of contractors present at time of opening of tenders.
- (iv) Name and designation of any other person present.
- (v) Have all the contractors deposited earnest money in proper form?
- 12.2 For works costing more than Rs.30 Crore and specialised works.

12.2.A- For two bid system.

- (a) Opening of technical bids:
 - (i) Date and time at which technical bids were due to be opened.
 - (ii) (a) Date and time of which technical bids were actually opened.
 - (b) Name & Designation of officer who actually opened the technical bids.
 - (iii) Name of contractors present at time of opening of technical bids.
 - (iv) Name and designation of any other person present.
 - (v) Have all the contractors deposited earnest money in proper form?
 - (vi) List of the persons who submitted the technical bids

S.No.	Name of the Bidder
(i).	
(ii).	
(iii).	
(iv).	

- (vii) Reference, date and authority who approved the technical bids.
- (viii) List of the bidders whose technical bid approved.

S.No.	Name of the Bidder
(i).	
(ii).	
(iii).	

(ix) List of the bidders who are not qualified

S.No.	Name of the Bidder	Reasons for disqualification
(i).		
(ii).		
(iii).		

- (b) Opening of financial bids:
 - (i) Date and time at which financial bids were due to be opened.
 - (ii) (a) Date and time of which financial bids were actually opened.
 - (b) Name & Designation of officer who actually opened the financial bids.
 - (iii) Name of contractors present at time of opening of financial bids.
 - (iv) Name and designation of any other person present.



ANNEXURE- 25 ANNEXURE TO SOPs

12.2.B- For three envelop system.

- (a) Opening of eligibility criteria:
 - Date and time at which eligibility criteria were due to be opened.
 - (ii) (a) Date and time of which eligibility criteria were actually opened.
 - (b) Name & Designation of officer who actually opened the eligibility criteria.
 - (iii) Name of contractors present at time of opening of eligibility criteria.
 - (iv) Name and designation of any other person present.
 - (v) Have all the contractors deposited earnest money in proper form?
 - (vi) List of the persons who submitted the eligibility criteria

S.No.	Name of the Bidder
(i).	
(ii).	
(iii).	

- (vii) Reference, date and authority to approve the eligibility criteria
- (viii) List of the bidders whose eligibility criteria approved.

S.No.	Name of the Bidder
(i).	
(ii).	
(iii).	

(ix) List of the bidders who are not qualified

S.No.	Name of the Bidder	Reasons for disqualification
(i).		
(ii).		
(iii).		

- (b) Opening of financial bids:
 - (i) Date and time at which technical bids were due to be opened.
 - (ii) (a) Date and time of which technical bids were actually opened.
 - (b) Name & Designation of officer who actually opened the technical bids.
 - (iii) Name of contractors present at time of opening of technical bids.
 - (iv) Name and designation of any other person present.
 - (v) List of the persons who submitted the technical bids

S.No.	Name of the Bidder
(i).	
(ii).	
(iii).	



- (vi) Reference, date and authority to approve the technical bids
- (vii) List of the bidders whose technical bid approved.

S.No.	Name of the Bidder
(i).	
(ii).	
(iii).	

(viii) List of the bidders who are not qualified

S.No.	Name of the Bidder	Reasons for disqualification
(i).		
(ii).		
(iii).		

- (c) Opening of financial bids:
 - (i) Date and time at which financial bids were due to be opened.
 - (ii) (a) Date and time of which financial bids were actually opened.
 - (b) Name & Designation of officer who actually opened the financial bids.
 - (iii) Name of contractors present at time of opening of financial bids.
 - (iv) Name and designation of any other person present.
- 13. List of persons who tendered for the job, with their tendered amount

Name of contractor	Tendered amount percentage above or below	Net tendered amount after negotiations, if any
1	2	3

14.	Just	ified percentage as worked out by CE				
15.	Date	e on which validity/extended validity of tender of lowest expires				
16.	Impo	Important information				
	(i)	Availability of site				
	(ii)	Availability of stipulated materials				
	(iii)	Approval to layout plan				
	(iv)	Approval to buildings plan clearance from DUAC/Local body				
	(v)	Comment on the capabilities of lowest tenderer including financial and technical resources				
	(vi)	List of works in hand with lowest tenderer indicating the				



name of works, tendered amount, date of start, stipulated

period, progress made, and remarks

AIVIV	EXURE	- 25					ANNEXURE TO SOPS
	(vii)	Is this			s? If not, details of previous	s calls	
	(viii)	Statu of sa		Architectural worki	ng drawings and programn	ne	
	(ix)	Statu	s of s	structural drawings	s and programme of same		
	(x)	Statu	s of s	services drawings	and programme of same		
		(a)	Inte	rnal Electrical Inst	allation.		
		(b)	Inte	ernal Water Supply	and Sanitary.		
		(c)	Ext	ernal Electrical se	rvices.		
			(i)	Street light cabli	ng.		
			(ii)	Sub station Equ	ipments		
		(d)	Ext	ernal Water Suppl	y and Sanitary Lines/Install	ations.	
		(e)	Fire	Fighting System	including fire alarm system.		
		(f)	Lifts	s, Air Conditioning			
		(g)	Sev	verage treatment F	Plant. (h) Water treatment p	lant.	
	(xi)	Time	perio	od of completion of			
		(a)	the	total Project			
		(b)	the	work			
	(xii)	Detai	ls of	available funds			
	(xiii)	Justif	icatio	on			
	(xiv)	Any c	other	information*			
17.				warding of tender eer no. and date	s by the Executive Enginee	er to	
18.					e of forwarding the same or of composite tender to the		_
					Date of receipt	t	Date of forwarding to higher office.
	(a)	EE (C	Civil)				
	(b)	EE (E	Elect))			
	(c)	SE (C	Civil)				
	(d)	SE (E	Elect))			
19.				t required for each ng negotiation.	activities as assessed by CE	∃ and minim	um requirement indicated



ANNEXURE TO SOPs	ANNEXURE- 25

20. Details of milestones of activity (not included in tender for withholding payment but for execution of project).

Details of milestones.

SI. No.	Description of milestones	Time allowed in days (from date of start)	Amount to be withheld in case of non achievement of milestones.

21.	Recommendations of Chief Engineer	
	Shri	
	Secretary, Central Works Board,	
	U.O. No	Chief Enginee

^{*} Details of tenders for similar works in the nearby area accepted in the past.

ANNEXURE - 26

(Refer SOP No. 5/10)

CHECK LISTS FOR VARIOUS ITEMS

PART - A

CHECK LIST FOR ITEMS OF FOUNDATION CONCRETE

Nan	ne of v	vork:			
Nan	ne of c	contractor			
Agre	eemer	ıt no			
1.	Date of inspection				
2.	Location				
3.	Mate	rial 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.	Arch	nitectural/structural drawing correlated	Yes/No		
6.	Whe	ether location of construction joint has been discussed with Executive Engineer,			
	and	he has approved it	Yes/No		
7.	Clea	ning over water proofing surface and construction joint done	Yes/No		
8.	CC	cover blocks of 60 mm, thickness provided (min 2 in one square metre area)	Yes/No		
9.	Reir	forcement placement as per relevant structural drawing checked	Yes/No		
10.	Lay	out of columns as per relevant structural drawing checked	Yes/No		
11.	Plac	ement of shuttering plates and key board for proper construction joint with			
	shut	tering oil	Yes/No		
12.	Cen	nent slurry applied on construction joint before pouring of concrete	Yes/No		
13.	Trai	ned mason available	Yes/No		
14.		creting to start from farthest point to nearest point with respect of weight hing plant	Yes/No		
15.	Con	crete mix has been designed	Yes/No		
16.	Plas	ticiser being used	Yes/No		
17.	Ade	quate number of concrete vibrators in working condition available	Yes/No		
18.	Slur	np checked	Yes/No		
19.	Sam	iple cubes taken	Yes/No		

- 20. Signature of Junior Engineer
- 21. Signature of Assistant Engineer
- 22. Signature of Executive Engineer

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.	Whet	ther structural drawings correlated with architectural drawings?	Yes/No
6.		ther the centre line of column/beams checked with reference to ines as per architectural drawings?	Yes/No
7.	Whet	ther treatment of expansion joint, wherever required, is done?	Yes/No
8.		ther cleaning, repairing and approval of shuttering plate, application of ty shuttering oil is done?	Yes/No
9.		ther shuttering is in true plumb and vertical and properly done and tained during concreting?	Yes/No
10.		ther reinforcement detailing, their placement are as per tural drawings?	Yes/No
11.		ther proper gauge binding wire is used and with full cross binding and ening of reinforcement bars with stirrups?	Yes/No
12.	Whet	ther required minimum cover to reinforcement is maintained?	Yes/No
13.	any h	ther stainless steel cramps, angle irons for holding stones and holding arrangement for electrical/mechanical/fire fighting/other ces have been seen and approved by JE (E)/AE(E)	Yes/No
14.		ther conduits for various electrical/mechanical/fire fighting/other ces have been seen and approved by JE(E)/AE(E)?	Yes/No
15.		ther concrete of approved design mix within maximum permissible r-cement ratio is used?	Yes/No
16.		ther admixture of good brand quality approved by Engineer-in- ge is used?	Yes/No
17.		ther technical supervision at batching plant/mixer and at point of reting done?	Yes/No

ANNEXURE- 26

18. Whether concreting is placed within initial setting time of mixing? Yes/No 19. Whether proper compaction with vibrator is done? Yes/No 20. Yes/No Whether the concreting has been done in a lift not exceeding 1.5 m? 21. Yes/No Whether cubes as per requirement filled for testing? 22. Signature of Junior Engineer 23. Signature of Assistant Engineer 24. Signature of Executive Engineer 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 Yes/No specifications? 27. Whether hacking of RCC surface by proper hacking tool for subsequent Yes/No plastering/finishing is carried out? 28. Signature of Junior Engineer 29. Signature of Assistant Engineer 30. Signature of Executive Engineer

PART - C CHECK LIST FOR BRICK WORK

Date of inspection

(a) Sand

- 2. Drawing no.
- 3. Location
- 4. Whether materials used conform to relevant Specifications and whether mandatory tests done?

	(a) Sand	103/140
	(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



Yes/No

ANN	INEXURE TO SOPs		
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 ± 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 Assistant Engineer		
21.	Signature of Executive Engineer		

PART - D 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?	Yes/No
5.	Whether surface cleaned of all loose mortar and efflorescence?	Yes/No
6.	Whether all conduiting 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 aluminum straight edge 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

ANNEXURE-26 ANNEXURE TO SOPs

14.	Whether proper arrangement of curing and curing period maintained as per specifications?	Yes/No
15.	Whether date of work done written?	Yes/No
16.	Signature of Junior Engineer	
17.	Signature of Assistant Engineer	
18.	Signature of Executive Engineer	

PART - E CHECK LIST FOR WATER SUPPLY LINES

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 plumber employed is licensed plumber or not?	Yes/No
6.	Whether plan for piping system has been prepared and got approved?	Yes/No
7.	Whether all pipes and fittings are ISI marked?	Yes/No
8.	Whether a sample system has been prepared and got approved?	Yes/No
9.	Whether clamps provided at specified spacing?	Yes/No
10.	Whether pipe lines checked at required pressure before covering?	Yes/No
11.	Whether weight of flushing pipe checked?	Yes/No
12.	Whether flushing cistern is ISI marked and internally painted with bitumastic paint?	Yes/No
13.	Whether fittings like wash basin, sink pan, cistern, bib cock, stop cock, wheel valves, etc. are ISI marked?	Yes/No
14.	Whether PVC water storage tank is ISI marked? If not, whether sample sent for testing?	Yes/No
15.	Signature of Junior Engineer	
16.	Signature of Assistant Engineer	



ANNEXURE - 27

(Refer SOP No. 5/10) RESPONSIBILITY FOR QUALITY

1. Civil Work

Item	of wo	rk	Works costing	
			Above Rs. 50 lakhs	Upto Rs. 50 lakhs
A.	Mate	erials		
	(a)	Sand, stone, metal & chips, bricks, ordinary glass panes	JE & AE	JE
	(b)	Timber, paints, polish, door, shutters, windows, door/ window fittings, sanitary and water specials, glass panes	JE & AE	JE
	(c)	Marble, granite, kota stone and similar stone work items	AE & EE	JE & AE
	(d)	Cement and steel	AE & EE	JE & AE
	(e)	Bitumen, bitumen emulsion, mastic	AE & EE	JE & AE
B.	Item	ns of work		
	(a)	Foundation upto plinth	AE & EE	JE & AE
	(b)	Brick masonry/stone masonry	JE & AE	JE
	(c)	Centering and shuttering excluding sunshades/ shelves	AE & EE	JE & AE
	(d)	Reinforcement and RCC	AE & EE	JE & AE
	(e)	Structural steel work	AE & EE	AE
	(f)	Steel work	AE	JE & AE
	(g)	Aluminum work	AE & EE	JE & AE
	(h)	Wood work/wood substitutes	AE & EE	JE & AE
	(i)	Flooring - CC, mosaic glazed/ceramic tiles	AE & EE	JE & AE
	(j)	Flooring & cladding - marble, granite, kota, sand stone etc.	AE & EE	AE
	(k)	Plastering, painting & polishing	JE & AE	JE
	(l)	Joints in pipes i/c testing, slopes in flooring i/c verandah, balcony, toilets, terrace	AE & EE	JE & AE
	(m)	Bitumen painting of roofs	JE & AE	JE
	(n)	Water proofing treatment	AE	JE & AE
	(o)	Fittings of doors/windows	AE	JE & AE
	(p)	False ceiling work	AE & EE	AE
	(q)	(i) Storage tanks	AE & EE	JE & AE
		(ii) Sluice valves, fire hydrants	AE	JE & AE
		(iii) CI/Hume pipes & specials and their leadcaulked joints	AE & EE	JE & AE

ANNEXURE-27 ANNEXURE TO SOPs

	(r)	(i) Manholes i/c covers & frames	JE & AE	JE
		(ii) CI Inspection bends & chambers	JE & AE	JE
	(s)	General quality of work with particular reference to lines & levels/adherence to drawings and specifications & functionality	EE & SE	AE & EE
	(t)	Road works		
		(i) Preparation of sub grade	JE & AE	JE & AE
		(ii) Sub base/base course	JE & AE	JE & AE
		(iii) Wearing course	AE & EE	JE & EE
C.	Oth	er important material/items	To be decided by tender accepting authority	

2. E& M Works

Item of work		ork	Works costing	
			Above Rs. 20 lakhs	Upto Rs. 20 lakhs
A.	A. Materials			
	(a)	Conduit wires, switches, accessories internal wiring, MCB's, MCB DB's	JE & AE	JE
	(b)	Finished goods of Internal EI i.e. fans, electrical fittings, exhaust fans, call bells etc.	AE & EE	JE & AE
	(c)	LT/HT cables	AE & EE	JE & AE
	(d)	S/STN equipments, L T Panel/HT Panel Elect. main boards, DG Sets, Bus trunking, rising mains	AE & EE	JE & AE
	(e)	All the major equipment concerning wet riser/ sprinkler system, fire detection system etc. like pumps, DG Sets, pipes, valves,hoses, cabinets, panels, sprinklers, detectors,detecting panels, manual call boxes, PA system equipments etc.	AE & EE	JE & AE
	(f)	Air conditioning equipments like chilling units, cooling towers, Pump AHU's, duct insulation, GI sheets, pipes, control instrument etc.	AE & EE	JE & AE
	(g)	Major equipments of other special services like CCTV, BMS, EPABX, computer networking etc.	AE & EE	JE & AE
В.	Item	s of Works		
	(a)	Internal EI work i/c UG cabling etc.	JE & AE	JE
	(b)	Sub Station work	JE & AE	JE
	(c)	Fire fighting, fire detection work	JE & AE	JE
	(d)	A/C works & other specialized Services	JE & AE	JE
C.	Oth	er important materials/items	To be decided by tender accepting authority	



3. Horticulture Works

Item of work		ork	Works costing	
			Above Rs. 5 lakhs	Upto Rs. 5 lakhs
Α.	Mat	erials		
	(a)	Supply of Plants	SO/ADH & DDH	SO/ADH
	(b)	Supply of T&P	SO/ADH & DDH	SO/ADH
	(c)	Supply of Cut Flower	SO/ADH & DDH	SO/ADH
	(d)	Supply of various materials required for day to day use.	SO/ADH	SO/ADH
	(e)	Supply of Earth & Manure	SO/ADH & DDH	SO/ADH
	(f)	Supply of Earthern/Cement pot	SO/ADH	SO/ADH
В.	Exc	avation works		
	(a)	Trenching	SO/ADH	SO/ADH
	(b)	Excavation	SO/ADH & DDH	SO/ADH
	(c)	Filling of earth in excavated area	SO/ADH & DDH	SO/ADH
	(d)	Grassing, fine dressing, spreading etc.	SO/ADH & DDH	SO/ADH
	(e)	fabricating of Tree Guards	SO/ADH & DDH	SO/ADH
	(f)	Digging of Holes	SO/ADH & DDH	SO/ADH & DDH
C.	Mai	ntenance Works		
	(a)	Renovation of Lawn	SO/ADH & DDH	SO/ADH
	(b)	Complete maintenance of garden feature.	SO/ADH & DDH	SO/ADH
	(c)	Maintenance of Potted plants/cut flowers arrangement.	SO/ADH	SO/ADH
	(d)	General quality of works & specification and functionally as well as adherence to landscape plan.	DDH/DOH	SO/ADH
	D.	Other important Material and items not covered above	To be decided by tender accepting authority	

ANNEXURE - 28 (Refer SOP No. 5/14) SAMPLE FORM FOR SITE ORDERS BOOK

Name of work Date of commencement/period for completion

SI. No.	Remarks of the Inspecting Officer or Contractor	Action taken by Whom	Remarks
1	2	3	4

ANNEXURE - 29 (Refer SOP No. 5/14) SAMPLE FORM OF INSPECTION REGISTER

Name of work:

SI. No.	Date and time	Officer's Name and Designation	Items inspected and specific	Signature	Defects taken lette	Final action/		
			defects noticed & action to be taken		Site Order Book page no. /letter no.	Date	Sign. of AE / EE	result
1	2	3	4	5	6	7	8	9



ANNEXURE - 30 (Refer SOP No. 3/14)

SAMPLE FORM OF CEMENT REGISTER

Date of receipt	received	sive total	Date of issue	issued	work for which issued	Quantity returned at the end of the day		at hand	initial		Remarks of AE/EE at periodical checks
1	2	3	4	5	6	7	8	9	10	11	12
			4	5	0		0	א א			12

F

ANNEXURE 31

(Refer SOP No. 5/14)

SAMPLE FORM OF REGISTER OF DISMANTLED MATERIALS

me of Work	
1	ame of Work

2.	Name of Division	
----	------------------	--

Sl.no	Date of receipt	Ref. to no. & page of MB	Full particulars of material giving size, etc. if any	Opening balance	Qnty recd.	Total	Ref. to its disposal, whether by write off, sale, or transfer to other works	Qnty issued or disposed off	Closing balance	Dated initial of the AE	Date of verification of balance & by whom verified	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13

208

165 Years of Engineering Excellence

ANNEXURE 32

(Refer SOP No. 5/15)

BILL BOOK OF THE DIVISION FOR THE YEAR

Sl.no of item	Date of receipt		Name of work	Name of con- tractor	Amount of the bill	of com- pletion	Date of last payment (if a running a/c bill)	Signature of receiving clerk in Division	Date on which cheque is drawn	Signature of cashier	Ref of cash voucher no. and date		Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14

ANNEXURE - 33 (Refer SOP No. 5/20)

PROFORMA FOR WRITE OFF OF LOST MB's

- Serial number of the MB
- 2. To whom issued
- 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 its loss
- 7. What efforts were made to trace the M.B.?
- 8. By whom the last measurements were recorded?
- 9. Whether the measurements have been checked upto the required %age 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 of any work for which payment has not been made or all the works have been finalised?
- 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 measurement again? If not, what is the basis on which the AE proposes to make final payment for the outstanding bills?
- 14. Whether the EE is satisfied that by writing of fresh measurements on the basis of other subsidiary records, if any, the Government will 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 such shortcoming?
- 15. Details of disciplinary action taken against the persons responsible for the loss
- 16. Details of remedial measures taken to avoid recurrence of such cases
- 17. Any other remarks

Executive	Engineer
Division	CPWD



ANNEXURE - 34

(Refer SOP No. 5/23)

SPECIMEN OF LETTER BY THE ENGINEER IN CHARGE TO THE CONTRACTOR FOR PROVISIONAL REDUCTION IN RATE FOR SUB-STANDARD WORK

To	
Dea	r Sir(s)
Sub	Construction of Agreement no.
1.	The President of India 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 workmanlike manner and therefore, cannot be accepted in terms of the above said agreement for payment at the rates specified in the agreement.
2.	The President, 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 Superintending Engineer-in-charge of the concerned Circle of CPWD will determine as to what suitable reductions in the rates is made from the agreed rates for the said items. his/her decision is final. Pending such decision of the Superintending Engineer, however, the payment for the said items of work is 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 the letter it is presumed that the offer is not acceptable to you. In the said event the offer is stand withdrawn, without prejudice to the rights and remedies of the President of India in terms of the contract.
Youı	rs faithfully, Engineer in Charge



For and on behalf of the President of India

Encl.: Statement as above.

ANNEXURE - 35

(Refer SOP No. 5/23)

SPECIMEN OF LETTER OF CONTRACTOR'S ACCEPTANCE OF PROVISIONAL REDUCTION OF RATE FOR SUB-STANDARD WORK

То
Sir,
Sub: Construction of
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 Superintending Engineer of the final rates of payment against the items of work specified in the statement attached to your above letter, which is 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)

ANNEXURE - 36

(Refer SOP No. 5/25)

FORM OF APPLICATION BY THE CONTRACTOR FOR SEEKING EXTENSION OF TIME

PART - I

- 1. Name of contractor
- 2. Name of work as given in the agreement
- 3. Agreement no.
- 4. Estimated amount put tender
- 5. Date of commencement of work as per agreement
- 6. Period allowed for completion of work as per agreement
- 7. Date of completion stipulated in agreement
- 8. Period for which extension of time has been given previously:

	EE's letter no. and	Extension granted		
	date	Months	Days	
(a) 1st extension				

- 9. Reasons for which extension have been previously given (copies of the previous applications should be attached)
- 10. Period for which extension if applied for
- 11. Hindrances on account of which extension is applied for with dates on which hindrances occurred and the period for which these are likely to last.
 - (a) Serial no.
 - (b) Nature of hindrance
 - (c) Date of occurrence
 - (d) Period for which it is likely to last
 - (e) Period for which extension required for this particular hindrance
 - (f) Overlapping period if any, with reference to item. (g) Net extension applied for
 - (h) Remarks, if any.

Total period on account of hindrances mentioned above...... Months Days

- 12. Extension of time required for extra work
- 13. Details of extra work and the amount involved:
 - (a) Total value of extra work
 - (b) Proportionate period of extension of time based on estimated amount put to tender on account of extra work.
- 14. Total extension of time required for 11 & 12

Submitted to the Sub Divisional Officer

Signature of contractor Dated:



ANNEXURE - 37

(Refer SOP No. 5/25)

FORM OF APPLICATION OF THE CONTRACTOR FOR SEEKING RESCHEDULING OF THE MILESTONES

- 1. Name of contractor
- 2. Name of work as given in the agreement
- 3. Agreement no.
- 4. Estimated amount put tender
- 5. Date of commencement of work as per agreement
- 6. Period allowed for completion of work as per agreement
- 7. Date of completion stipulated in agreement
- 8. Rescheduling of milestones done previously

Milestone No. Already Rescheduled	EE's Letter No. and Date	Reschedulin	g Of Milestones Done
nescrieduled		Original Date	Rescheduled Date
(A) 1st Milestone			
(B) 2nd Milestone			

Rescheduling of milestone applied for

Milestone No. For	Original/	Details And Period	Comments	Proposed
Which Rescheduling is Applied	Rescheduled Date	of Hindrances	of Executive Engineer	Reschedule d Date of
(A) 1st Milestone				
(B) 2nd Milestone				

Submitted to the Sub Divisional Officer

Signature of Contractor Dated



ANNEXURE - 38

(Refer SOP No. 5/30)

GUARANTEE BOND TO BE EXECUTED BY CONTRACTORS FOR REMOVAL OF DEFECTS AFTER COMPLETION IN RESPECT OF WATER PROOFING WORKS

The Agreement made this day of two thousand and between

	son of	of	(hereinafte	r called the Guarante	or of the one part)
	RESIDENT OF IND		•		. ,
	•		•	nereinafter called the	,
			•	ing the Government	• •
recited con	npletely water and	leak-proof.		-	

AND WHEREAS GUARANTOR agreed to give a guarantee to the effect that the said structures will remain water and leak-proof for five years from the date of giving of water proofing treatment.

NOW THE GUARANTOR hereby guarantees that water proofing treatment given by him will render the structures completely leak-proof and the minimum life of such water proofing treatment shall be five years to be reckoned from the date after the maintenance period prescribed in the contract.

Provided that the guarantor will not be responsible for leakage caused by earthquake or structural defects or misuse of roof or alteration and for such purpose:

- (a) Misuse of roof shall mean any operation which will damage proofing treatment, like chopping of firewood and things of the same nature which might cause damage to the roof;
- (b) Alteration shall mean construction of an additional storey or a part of the roof or construction adjoining to existing roof whereby proofing treatment is removed in parts;
- (c) The decision of the Engineer-in-Charge with regard to cause of leakage shall be final.

During this period of guarantee the guarantor shall make good all defects and in case of any defect being found, render the building water-proof to the satisfaction of the Engineer-in-Charge at his cost, and shall commence the work for such rectification within seven days from the date of issue of the 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. The decision of the Engineer- in-Charge as to the cost, payable by the Guarantor shall be final and binding.

That if GUARANTOR fails to execute the water proofing or commits breach thereunder then the GUARANTOR will indemnify the 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 supplementary 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.



ANNEXURE TO SOPs	ANNEXURE- 38

IN WITNESS WHEREOF these presents have been executed by the Obligorand byand for and on behalf of the PRESIDENT OF INDIA 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 THE PRESIDENT OF INDIA by in the presence of

1.



ANNEXURE - 39 (Refer SOP No. 5/31) NOTICE FOR APPOINTMENT OF ARBITRATOR

lo	
The Chief Engineer,	

Dear Sir,

In terms of clause 25 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:

- 1. Name of applicant
- 2. Whether applicant is Individual/Prop. Firm/Partnership Firm/Ltd. Co.
- 3. Full address of the applicant
- 4. Name of the work and contract number in which arbitration sought
- 5. Name of the Division which entered into contract
- 6. Contract amount in the work
- 7. Date of contract
- 8. Date of initiation of work
- 9. Stipulated date of completion of work
- 10. Actual date of completion of work (if completed)
- 11. Total number of claims made
- 12. Total amount claimed
- 13. Date of intimation of final bill (if work is completed)
- 14. Date of payment of final bill (if work is completed)
- 15. Amount of final bill (if work is completed)
- 16. Date of request made to SE for decision
- 17. Date of receipt of SE's decision
- 18. Date of appeal to you
- 19. Date of receipt of your decision.

Specimen signature of the applicant (only the person/authority who signed the contract should sign)



G-28011/113/2022-IAB

634846/2022/IAB

ANNEXURE TO SOPs	ANNEXURE- 39
ANNIAL ACTULE TO COT 5	

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.
- 4.

Yours faithfully, (Signature)

Copy in duplicate to:

1. The Executive Engineer, Division.



ANNEXURE - 40

(Refer SOP No. 5/31)

MODEL FORM OF LETTER OF APPOINTMENT OF SOLE ARBITRATOR CENTRAL PUBLIC WORKS DEPARTMENT

No Bated, the	
Subject: In the matter of arbitration between and Union of India, regawork Agreement no	arding the
Whereas	the above e 25 of the ecide and tatements
The Arbitrator shall give reasons for the award.	
CHIEF ENGINEER	
To 1. Shri	
 M/s Contractor, with reference to his/their letter no dated	
2. Shri Executive Engineer,Division, CPWD with refere letter no dated	nce to his
Arrangements may please be made to defend the case effectively. Legal assistance of the Superintending Engineer (P) may be obtained where necessary.	• Counsel/
Superintending Engineer/Executive Engineer should ensure that the bills of the contr finalized immediately, if not already done.	actors are

CHIEF ENGINEER



ANNEXURE - 41

(Refer SOP No. 5/31)

MODEL FORM OF LETTER OF APPOINTMENT OF FIRST ARBITRATOR CENTRAL PUBLIC WORKS DEPARTMENT

	No Dated, the 20
	Subject: In the matter of arbitration betweenand Union of India, regarding the work Agreement No
	Whereashas/have written to me vide his/their letter no
Claus first/	Dated
in te	The first Arbitrator and the second Arbitrator, to be appointed by the contractor, shall bint the Presiding Arbitrator within prescribed time from appointment of the second Arbitrator rms of the Arbitration Agreement copy of which is enclosed, failing which action under the tration Agreement shall be taken without further notice.
	Appointing Authority
Encl	osed: Certified copy of Arbitration Agreement (e.g. Clause 25 of GCC 7/8)
То	
1-	Shri(Arbitrator)
2-	M/sContractor, with reference to his/their letter nodatedThey are requested to intimate appointment the second Arbitrator in terms of the Arbitration Agreement within the prescribed time failing which action under the Arbitration Agreement shall be taken without .
Furth	er notice.
Сору	r to:
1.	Superintending Engineer/PM/CPMas applicable.
2.	Executive EngineerWith reference to his letter nodt
	ngements may please be made to defend the case effectively. Legal assistance of the Counsel/erintending Engineer (P) may be obtained where necessary.

immediately, if not already done.

Superintending Engineer/Executive Engineer should ensure that the bills of the Contractors are finalized

ANNEXURE - 42

(Refer SOP No. 5/31)

MODEL FORM OF LETTER OF APPOINTMENT OF SUBSTITUTE ARBITRATOR DUE TO TRANSFER OR VACATION OF OFFICE BY THE ARBITRATOR

CENTRAL PUBLIC WORKS DEPARTMENT

	No Dated, the 20
Sub	pject:
In th	ne matter of arbitration between :
	Claimant vs
	Respondent Arbitration case no of
 the arbi	Whereas Shri
Chi	ef Engineer
Cop	by to:
1.	Shriwith 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 Shriat the earliest.



ANNEXURE - 43

(Refer SOP No. 5/31)

SPECIMEN LETTER ASKING FOR UNDERTAKING FROM THE CONTRACTOR FOR ACCEPTANCE OF AWARD

То
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 President of India 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,
Executive Engineer For and on behalf of the President of India.

ANNEXURE - 43(A)

(Refer SOP No. 5/31)

QUARTERLY STATEMENT SHOWING POSITION OF PENDING ARBITRATION CASES (NUMBERS ONLY) FOR THE QUARTER ENDING

Name of Division	Name of Circle	Name of Zone

Part I

				Cleared during the	Total	Balance	
		quarter	the quarter	quarter		Over 3 months	Over 6 months
		1	2	3	4	5	6
(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



ANNEXURE - 44

(Refer SOP No. 5/33)

PROFORMA FOR SHOW CAUSE TO THE CONTRACTOR REGARDING COMPENSATION UN- DER CLAUSE 2

То
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 President of India, hereby give you 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 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,
()
Superintending Engineer

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.



ANNEXURE - 45

(Refer SOP No. 5/33)

PROFORMA FOR SHOW CAUSE TO THE CONTRACTOR REGARDING COMPENSATION UNDER CLAUSE 2 (IN CASE CONTRACT IS DETERMINED UNDER CLAUSE 3)

То
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
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 President of India, 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,
()
Superintending Engineer



ANNEXURE - 46 (Refer SOP No. 5/33)

SHOW CAUSE NOTICE UNDER CLAUSE 3 OF THE AGREEMENT

То
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 President of India, 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) thereunder of the said agreement and/or other clauses thereof, without further notice.
Yours faithfully
(Designation) For and on behalf of the President of India

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.

To

Dear Sir(s),

ANNEXURE TO SOPs

ANNEXURE - 47 (Refer SOP No. 5/33)

NOTICE ON FINAL ACTION UNDER CLAUSE 3 OF THE AGREEMENT

(Name & Address	of the contractor)	

- (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 any 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 joint 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.



ANNEXURE TO SOPs ANNEXURE - 47

This is without prejudice to Government's right to take action under any other clauses or subclauses of the agreement and to realize Government dues and losses and damages whatsoever under such clauses or sub-clauses.

Yours faithfully,

*Score out which is not applicable.

Engineer-in-charge

Executive Engineer

..... Division

For and on behalf of the President of India

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.

ANNEXURE - 48

(Refer SOP No. 7/1)

STATEMENT SHOWING THE QUARTERLY PROGRESS OF ORIGINAL WORKS FOR THE QUARTER ENDING......

Civil Works costing Rs. Five crore and above.

Electrical Works costing Rs. 100 lakhs and above.

Horticulture Works costing Rs. 10 lakhs and above.

1 2 3 4 5 6 7 8 9 10	11 12
	11 12

ANNEXURE - 49

(Refer SOP No. 7/1)

STATEMENT SHOWING THE QUARTERLY PROGRESS OF SUPPLY/PURCHASE CONTRACTS FOR THE QUARTER ENDING......

SI. no.	Name of the organization with location	Contract no.	Brief details of the materials required	Value of the contract	Mode of ten- dering	Sched- uled delivery period	Present status	Remarks
1	2	3	4	5	6	7	8	9
		3	4	2	0		0	D .

ANNEXURE - 50

(Refer SOP No. 7/1)

LIST OF DOCUMENTS CONSIDERED ESSENTIAL FOR INSPECTIONS BY CTE AND WHICH MAY BE CALLED FOR EXAMINATION OF A WORK

- (1). (a) Press Cuttings, including extended dates, if any
 - (i) For pre-qualification of architects/consultants.
 - (ii) For pre-qualifications of contractors.
 - (iii) Call of tenders.
 - (b) Register of sale of tenders,
 - (c) Register of opening of tender.
- (2) File giving reference to financial sanction and approval of competent administrative authority Preliminary estimate.
- (3) Copy of detailed estimate and its technical sanction by competent authority.
- (4) Approved N.I.T. (Notice Inviting Tenders) in Original.
- (5) Rejected tenders and comparative statements for :
 - (a) Selection of architects/consultants.
 - (b) Short-listing or pre-qualification of tenders.
 - (c) Other tenders.
- (6) Justification statement and corresponding notings in support of tenders/offers accepted.
- (7) Details of negotiations, if any, made before acceptance of tenders.
- (8) Original contracts with consultant/contractor.
- (9) Guarantee Bonds etc. towards security for work, machinery/mobilisation advance etc. including extension of validity.
- (10) Insurance policies for work, materials, equipment, men etc. including extension of validity.
- (11) Guarantees for water tightness, termite proofing etc.
- (12) Standard specifications.
- (13) Standard Schedule of Rates.
- (14) Drawings architectural and structural.
- (15) All connected Measurement Books, Level Books, field books and lead chart.
- (16) All Running Account Bills with all connected statements/vouchers etc.
- (17) Statement showing details of check of measurements by superior officers copies of orders laying down such requirements.



ANNEXURE TO SOPs ANNEXURE- 50

- (18) Materials at site accounts/dismantled materials record.
- (19) Site Order Books/Texts records/Log Books.
- (20) Details of extra/substituted items and of deviated quantities being executed/ considered for execution in the work along with analysis of rates.
- (21) Office correspondence files and inspection notes, if any, issued by inspecting officers.
- (22) Complaint records, if any.
- (23) Any other documents relevant to the works.



ANNEXURE - 51 (Refer SOP No. 7/1)

REGISTER OF OBSERVATION MEMOS RECEIVED FROM THE CHIEF TECHNICAL EXAMINER

SI. No.	No. & date of Observation Memo	Name of work	Name of contractor	Remarks regarding subsequent Agreement
1	2	3	4	5



ANNEXURE - 52

(Refer SOP No. 7/1)

REGISTER SHOWING OVER PAYMENT ASSESSED/POINTED OUT BY C.T.E. ORGANISATION AND SUBSEQUENT RECOVERIES EFFECTED

SI. no.	Reference no. and date	Name of work and agreement no.	Name of contractor	Amount of over payment assessed/ pointed out by CTE	Amount of over payment finally accepted by EE for recovery	Actual date of recovery of over- payment	
1	2	3	4	5	6	7	8
	-						

ANNEXURE - 53

LIST OF EQUIPMENT FOR FIELD TESTING LABORATORY

(Refer SOP No. 7/2)

A. For Building Work

- 1. Balances
 - (i) 7 kg. to 10 kg. capacity, semi-self indicating type accuracy 10 gm.
 - (ii) 500 gm. capacity, semi-self indicating type accuracy 1 gm.
 - (iii) Pan balance- 5 kg. capacity accuracy 10 gms.
- 2. Ovens-electrically operated, thermostatically controlled upto 110°C sensitivity 1°C.
- 3. Sieves: as per IS 460-1962.
 - (i) I.S. 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) I.S. 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.
- 4. Sieve shaker capable of 200 mm and 300 mm dia sieves, manually operated with timing switch assembly.
- 5. Equipment for slump test- Slump cone, steel plate, tamping rod, steel scale, scoop.
- 6. Dial gauges, 25 mm travel 0.01 mm/division least count 2nos.
- 7. 100 tonnes compression testing machine, electrical-cum manually operated.
- 8. Graduated measuring cylinders 200 ml capacity 3 Nos.
- 9. Enamel trays (for efflorescence test for bricks).
 - (i) $300 \text{ mm} \times 250 \text{ mm} \times 40 \text{ mm} 2 \text{ nos.}$
 - (ii) Circular plates of 250 mm dia 4 nos.

B. For Road Works

- Balances
 - (i) 7 kg to 10 kg capacity, semi-self indicating type accuracy 10 gm.
 - (ii) 500 gm capacity, semi-self indicating type, accuracy 1 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.



ANNEXURE TO SOPs ANNEXURE - 53

(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-III-1974.
- 10. Sand pouring cylinder with control funnel and tube complete as per IS 2720-Part XXVIII-1974.
- 11. Sampling tins with rods 100mm dia × 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.
- 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 (18inch) fall.
- 18. Distant reading thermometers.
- 19. Graduated cylinder 1000 ml. capacity.
- 20. Enamel tray.



ANNEXURE - 53 A (Refer SOP No. 7/2) FIELD TESTING INSTRUMENTS

- 1. Steel tapes 3 m
- 2. Vernier calipers
- 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
- 14. Plastic bags for taking samples
- 15. Moisture meter for timber
- 16. Earth resistance tests (for Electrical Divisions)
- 17. Meggar (for Electrical Divisions)



ANNEXURE - 54

(Refer SOP No. 7/2)

PROFORMA FOR MANDATORY TESTS TO BE ATTACHED WITH RUNNING BILLS

Sl.no.	Item	Quantities as per agreement	Frequency as per specifi- cation	No. of tests required	Upto date quantity	No. of tests required	No. of tests actually done	Remarks
1	2	3	4	5	6	7	8	9

Note: If the number is less than that required, then reasons shall be recorded.

Signature of Junior Engineer

Signature of Assistant Engineer

Signature of Executive Engineer

ANNEXURE - 55

(Refer SOP No. 7/2)

PROFORMA FOR QUALITY CONTROL INSPECTION BY CIRCLE OFFICE QA TEAM

PART - I

- 1. General
 - 1.1 Name of work.
 - 1.2 Division and Sub-Division.
 - 1.3 Inspecting officer.
 - 1.4 Assisted by.
 - 1.5 Date of present inspection.
 - 1.6 Referenc-e to memos of previous Inspection.
- 2. Particulars of work
 - 2.1 Estimated cost put to tender.
 - 2.2 Tendered amount.
 - 2.3 Agreement no.
 - 2.4 Name of contractor.
 - 2.5 Registration class of contractor.
 - 2.6 Date of start of work.
 - 2.7 Due date of completion.
 - 2.8. % age progress of work at the time of inspection
- 3. Routine Quality Control
 - 3.1 Quality control aids.
 - 3.1.1 Is field staff equipped with:
 - (a) Copy of agreement with relevant specifications (detailed as well as special).
 - (b) Copy of preliminary estimate, detailed estimate and measurements.
 - (c) Upto date architectural as well as structural drawings.
 - (d) Testing facilities with the help of necessary field instruments/equipments (List of equipments available at site including level, theodolite, etc. may be given).
- 4. Observations on compliance of Quality Control system after intensive inspection under following sub- heads:
 - 4.1 Earthwork.
 - 4.2 Concrete work.
 - 4.3 R.C.C. work.
 - 4.4 Brick work.



ANNEXURE TO SOPs ANNEXURE - 55

- 4.5 Stone work.
- 4.6 Steel work.
- 4.7 Flooring (including marble work, if any).
- 4.8 Roofing.
- 4.9 Finishing.
- 4.10 Miscellaneous.
- 4.11 Services, etc.
- 5. Quality and Testing of materials/Products
 - 5.1 Comment on:
 - 5.1.1 Testing facilities available with the Department at site.
 - 5.1.2 Testing facilities arranged with other Department/institution.
 - 5.1.3 Testing facilities further required to be arranged.
 - 5.2 Testing
 - 5.2.1 Are all mandatory tests being carried out at the frequency mentioned in CPWD Specifications?
 - 5.2.2 No. of tests failed and approximate quantity rejected.
 - 5.2.3 General observations on tests, viz. erratic results, consistently low or high results etc.
 - 5.2.4 Follow up action taken on unsatisfactory results, with lapses in prompt follow up action.
 - 5.2.5 Samples tested by Assistant Engineer (P) and their results (Samples should invariably be taken where material/product at site does not appear to conform to the latest test results.
 - 5.3 Is material/product of make borne on approved list of Department/ISI?
 - 5.3.1 Are tests carried out on materials/products (covered under 5.3) found satisfactory?
- 6. Comments on adequacy of resources employed by the contractor at site for timely completion of work.

PART - II TECHNICAL AUDIT

- General details of work.
 - 1.1 A/A & E/S amount for the work and corresponding provision available for this work in the sanction.
 - 1.2 Amount of detailed estimate.
 - 1.3 Item rate/percentage rate/lump sum tender.
 - 1.4 No. of tenders received and tendered amount (call of tender).
 - 1.5 Authority accepting the tender.
 - 1.6 Is the detailed estimate technically sanctioned on the basis of complete set of architectural and structural drawings?



ANNEXURE- 55 ANNEXURE TO SOPs

- 2. Deviation from plan/drawings.
 - 2.1 Deviations, if any.
 - 2.2 Reasons for deviation, financial implication and sanction of competent authority.
- 3. Deviation in quantities of items.
 - 3.1 Reasons for deviations.
 - 3.2 Sanction of competent authority for the deviation.
- 4. Extra and substituted items.
 - 4.1 Amount of items sanctioned so far.
 - 4.2 Sanction of competent authority.
 - 4.3 Any minus extra item paid? Detail the reasons.
- 5. Issue of materials.
 - 5.1 The theoretical consumption commensurate with the work executed and quantity lying at site.
 - 5.2 Check recovery memo from the last running bill/final bill and short recovery made, if any.
 - 5.3 Any material not stipulated issued?
 - 5.3.1 Sanction/approval of competent authority for such issue.
 - 5.3.2 Approval of rate under three rate formula.
- 6. Payment to contractor.
 - 6.1 Amount of last bill paid to the contractor.
 - 6.2 Normal frequency of payment.
 - 6.3 Test check of measurements by Assistant Engineer/Executive Engineer.
 - 6.4 Part rates paid/justification for the same.
 - 6.5 Advances to contractor.
 - 6.5.1 Checking up of secured advance, if any, with reference to materials lying at site.
 - 6.5.2 Reasonableness of advance for un measured work.
 - 6.5.3 Hypothecation of documents and safe custody of materials for which advances have been given.

PART - III PROGRESS MONITORING

- 1. System adopted at site for monitoring progress.
- 2. Percentages progress achieved vis-a-vis time given for completion.
 - 2.1 Steps taken to accelerate progress when shortfall is noticed.
- 3. Any extension of time required?
- 4. Co-ordination amongst various agencies involved in execution of work.
- 5. Constraints noticed in smooth progress of work and directions if any, received from Executive Engineer/Superintending Engineer/Chief Engineer to overcome them.



PART - IV RECOMMENDATION

- 1. Give specific recommendations for immediate attention of Superintending Engineer on:
 - 1.1 Improving quality control on specific items.
 - 1.2 Comments on items lagging behind for want of drawings, materials, decision etc.

То

SE

[Assistant Engineer (QA)]

PART - V DIRECTION OF SE ON THE REPORT

- 1. EE to improve quality of following items.
- 2. EE to issue notice to contractor for rectification of following defects at
- 3. EE to improve slow progress.
- 4. Directions, if any, for solving deadlocks/problems at site.
- 5. Further follow up action by AE(QA) on next inspection.

To

AE (QA)

[Superintending Engineer]

Annexure - VI Quarterly Statement Of Works

SI. No.	Name of work	Est. cost (in lakhs) Rs.	Tender cost (in lakhs) Rs.	%age above / below estimat- ed cost	Agree- ment No.	Agency	Date of commen-cement	Stipulated date of completion	Physical progress of work	Name of Engineer incharge with add- ress	Remarks
1	2	3	4	5	6	7	8	9	10	11	12



ANNEXURE - 56

(Refer SOP No. 7/2)

PROFORMA FOR PREPARING OBSERVATIONS BY CORE WING/REGIONAL QA UNITS

- 1.0 Particulars of work
 - 1.1 (a) Name of work:
 - (b) Description/scope of work:
 - 1.2 (a) Sub-Division and name of Assistant Engineer:
 - (b) Division and name of Executive Engineer:
 - (c) Circle and name of Superintending Engineer:
 - (d) Zone and name of Chief Engineer:
 - 1.3 Agency/contractor:
 - (a) Name:
 - (b) Registration class:
 - 1.4 Agreement no:
 - 1.5 Stipulated date of start:
 - 1.6 Stipulated time and date of completion:
 - 1.7 (a) Estimated cost put to tender:
 - (b) Schedule of rates applicable:
 - 1.8 Accepted tendered cost with overall percentage:
 - 1.9 Percentage progress at the time of inspection vis-a-vis expected as per contract and reasons for delay, if any:
 - 1.10 Inspecting officer:

(Name & Designation)

1.11 Officers and contractor present during inspection:

(Name & Designation)

1.12 Date of inspection and number:

- 2.0 Quality Control aids:
 - 2.1 Is site equipped with:
 - (a) Copy of agreement:
 - (b) CPWD Specifications/along with (upto date) correction slips:
 - (c) List of ISI marked/approved materials to be used:
 - (d) Guard File containing Inspection Reports of CTE/QCTA/AE(QC)/CE/SE etc.
 - (e) Testing facilities to check conformance to acceptance criteria:
 - (f) QACW Circulars on Quality Control.
 - 2.2 Is field laboratory existing and well equipped?



- 3.0 Departmental procedure aspects:
 - 3.1 Maintenance of Inspection Register
 - 3.2 Highlights of inspections by CE, SE, AE(P) requiring compliance
 - 3.3 Are Test Registers maintained in standard forms?
 - 3.4 Are Test Registers reviewed by EE/SE with dates?
 - 3.5 Cement Register:
 - (a) Is Cement store checked by AE/EE periodically as stipulated?
 - (b) Comment on cement stock with reference to Cement Register:
 - 3.6 Site Order Book and Schedule of defects:
 - (a) Is Site Order Book properly maintained?
 - (b) Is the Site Order Book reviewed by EE and SE? (Mention details)
 - (c) Have timely notices been issued to the contractor with the Schedule of defects/damages and date of compliance?

In case of failure to rectify defects/damages whether action under clause 14/17 initiated?

- 4.0 Process control aspects:
 - 4.1 Is soil investigation done? (give brief details)
 - 4.2 Suitability of water for construction:
 - (a) What is the source of water?
 - (b) Has water been tested and approved by Engineer-in-charge before construction?
 - (c) Has water been tested subsequently (i.e. after every 3 months) and found fit for use in works?
 - 4.3 Are 10% (25% for concrete) of all samples for testing taken in presence of EE
 - 4.4 Are all mandatory tests carried out at stipulated frequency?
 - 4.5 Are materials approved by Engineer-in-charge?

If so, are samples available at site?

- 4.6 Are sample units/items completed and approved by EE before start of mass finishing work?
- 4.7 Specific control on RCC work like centering/shuttering, proportioning with boxes: mixing by full bag capacity hopper fed mixer: control of slump: placing/compaction with vibrator:
- 4.8 Any other particular comments on adequacy of process control:
- 5.0 Site inspection for observations and comments on Quality Control system in place:

5.1

Sub-head of work in progress	Whether in progress (If so, tick mark)	Whether inspected (If so, tick mark)	Location
(a) Earth work			



ANNEXURE- 56 ANNEXURE TO SOPs

(b)	Concrete work		
(c)	RCC work		
(d)	Brick work		
(e)	Stone work		
(f)	Marble work		
(g)	Wood work		
(h)	Steel work		
(i)	Flooring		
(j)	Roofing		
(k)	Finishing		
(I)	Internal Services		

- 5.2 Observations on floor slope (especially in Bath, WC, Kitchen, Terrace, Balcony etc.)
- 5.3 Observations on QC for dampness/leakages prevention.If dampness/leakage noticed, then state locations and probable reasons.
- 5.4 Samples collected by QC Core/Cell
- 6.0 Observations on site material QC aspects.

(Keeping in view the requirements of contract specifications: BIS marked/CPWD approved products etc.)

(Attach separate sheet, if required)

- 7.0 Observations on workmanship QC aspects. (Attach separate sheet, if required).
- 8.0 Test audit of RA bill:

(Indicate RA bill no., gross amount, Vr. no. and date)

- 8.1 Deviation in Quantities
 - (a) Whether deviation in quantities noticed?
 - (b) If so, the reason there of and whether prior approval of competent authority has been obtained before allowing deviations?
 - (c) Whether revised T/S is required due to these deviation? If yes, the action taken.
- 8.2 Items not conforming to specifications:
 - (a) Whether notice was issued as specified in contract?
 - (b) Whether approval in principle was obtained from competent authority before acceptance of sub- standard work?
- 8.3 Extra/substituted items
 - (a) Are justification of item in remark column of El/SI proper?
 - (b) Whether prior approval of competent authority for execution of El/SI has been obtained before execution?
 - (c) Whether sanction of competent authority issued?



- 8.4 Part Rates whether rates held back are adequate?
- 8.5 Comments on secured advance paid with reference to materials lying at site.
- 8.6 Test Check by AE/EE
 - (a) Critical item:
 - (b) Hidden items:
 - (c) Extent (whether satisfactory?)
- 8.7 Any other observation?

[The observation made about quality of material and workmanship relate to only what could be randomly seen at locations specified. Executive Engineer and supervisory staff shall thoroughly inspect the entire work for such defects as observed as well as for other defects and take suitable remedial measures properly. The Executive Engineer shall be responsible for accepting any defective work that went unnoticed but pointed out during such inspection.]

- 8.8 Progress of Work and Programme Chart
 - (a) Whether progress of work is as per stipulated milestone/approved revised milestone? If no action taken by EE.
 - (b) Whether contractor has submitted the programme to complete various activities of work within stipulated date of completion as per contract condition duly accepted by EE?
 - (c) Whether monthly progress report submitted by contactor as per programme submitted has been certified by JE/AE and reviewed by EE/SE?
 - (d) Any notice under clause 3 (a), (b) or (c) for inordinate delays has been issued or not. If yes, the action taken by EE



ANNEXURE - 57 (Refer SOP No. 8/3) SAMPLE OF PRESS NOTICE FOR E-AUCTION

CENTRAL PUBLIC WORKS DEPARTMENT

Notice for e-auction

The Executive Engineer......Division, CPWD,...... invites on behalf of the President of India bids for e-auction of surplus/unserviceable materials. Reserve Price: Rs......Earnest Money: Rs.....Last date and time of submission of earnest money and online request to allow participation in e-auction:...... For details, please visit tenderwizard.com/cpwd or eprocure.gov.in.



ANNEXURE - 58 (Refer SOP No. 8/3) NOTICE FOR E-AUCTION

1. The Assistant Engineer / Executive Engineer Sub Division/Division, CPWD Invites on behalf of the President of India online bids on www.tenderwizard.com/cpwd for auction of unserviceable/dismantled materials on as-is-where-is-basis.

Description of materials	Reserve price	Earnest money	Last date and time of submission of EMD and request to allow participation in e-auction	Time and date of start of e- auction	Closing time of e- auction*
1	2	3	4	5	6
Give description of materials or attach a list of materials to be auctioned.					



ANNEXURE - 59 (Refer SOP No. 8/3) SAMPLE OF BID ACCEPTANCE LETTER

(To be sent by e-mail and speed post)

F . No	: Dated :
То	
(Name	e and address of the bidder)
Subjed	ct : e-auction of materials of reserve price Rs held on
Dear S	Sir,
1.	Your highest bid of Rs received in the e-auction held on has been accepted on behalf of the President of India.
2.	You are requested to pay the balance of sale value amounting to Rs in the form of demand draft or pay order or banker's cheque drawn in favour of Executive Engineer within 10 days of the date of issue of this letter. Please note that if you fail to deposit the aforesaid amount within this period, the earnest money and the bid security deposited by you shall be forfeited, and you shall not be allowed to participate in re-auction.
3.	You are requested to remove the auctioned materials within 3 working days from the date of payment of balance sale value, either in your presence or in the presence of an agent duly authorized by you in writing in this behalf. You will leave the storage place of the materials neat and clean.
4.	Please note that if you fall to remove the materials within 3 working days as specified above, the balance materials lying at the site will be confiscated by this office.
5.	Please also note that you would acquire lien on the auctioned materials after the payment of full bid money, and you will be responsible for any damage by way of pilferage, fire, or any natural calamity, and no claim on this account shall be entertained.
	Yours faithfully,
	Executive Engineer
	Division, CPWD,
	For and on behalf of President of India



ANNEXURE- 60 (Refer SOP No. 8/3) RECORD OF DEPARTMENTAL AUCTION

Name of Division	
Name of Sub-Division	on

S. no.	Date of auction	Authority forsale (no. & date of sanctioned survey report, if any)	Particulars of articles	Weight or quantity	Reserve price	Name & address of the Bidder I,II,III, IV,V,VI	Amount of bid	Amount deposited by bidder cash receipt no. and date	Remarks
1	2	3	4	5	6	7	8	9	10

ANNEXURE- 61 (Refer SOP No. 8/5)

- (1) Assessment/Re-assessment of fair rent relating to private buildings taken on lease by the Central Government Departments.
- (2) Authority to issue rent reasonableness certificate.
 - (1) Reasonable rent is 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 is 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 is 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 is inclusive of Municipal Taxes but element of Municipal Taxes is 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 is remain effective for, is decided by hiring department and hence no such period is indicated in the Certificate.
 - (6) In case the figure as per method (ii) referred to in Para (1) above is lower, only this figure is intimated as reasonable rent. However, if the figure as per method (ii) works out to be higher, both the figures is 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 is for the hiring department to see if the rent as assessed by CPWD 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 is issued strictly as per modified model formats, given in the enclosed Annexure-62A & 6 B.
 - (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 is 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, is not entertain the request for revision of rent. It is for the hiring department to settle the same right in the beginning as to how subsequent changes is dealt with.
 - (10) All rent assessment cases is dealt by a Hiring Committee associating a representative of Hiring Department, if the latter is so willing. Jurisdiction of a Hiring Committee is also include satellite and twin cities/towns.



REVISED GUIDELINES

- (1) The reasonable rent is relevant to a date (referred to hereafter as date of assessment') as specified by the Hiring department. The relevant date in respect of reassessment of rent is the date of receipt of request of the owner or the date from which the revision is due after expiry of existing lease agreement, whichever is later and the rent is assessed according to the following two alternate methods-
 - (i) On the basis of recognized principles of valuation; and
 - (ii) On the basis of the prevailing market rent.
- (2) The hiring department while sending the proposal to CPWD for assessment of rent would also send the lowest three offers of rent received by them from the owners of the premised without disclosing the identity of owners. Owners are marked as A, B & C and their offers would be mentioned against them.
- (3) The assessment of reasonable rent according to the recognized principles of valuation which represents reasonable annual return on the property is done in accordance with the method prescribed as hereunder:-
 - (i) Workout the depreciation of the building (D) as on the date of assessment. First of all reproduction cost of the building (C) is worked out as on the date of assessment, based on the ruling cost of building construction in the locality. The depreciated cost is accordingly be calculated taking the end residual value of the building as 6% of its reproduction cost and assuming a straight line variation of depreciation depending on the age of the building (A) as on the date of assessment and its total serviceable life (A+R), where 'R' is residual life of building as on the date of assessment, which is worked out with due care and keeping in view the type of structure and specifications adopted in its construction. In other words,

 $D = 0.94 \times CxA$

A+R

(ii) Work out the land area appurtenant to the building (La) by taking into account the local byelaws for permissible ground coverage and accordingly work out the surplus land area (Ls) as L-La, where; L=total land area. For example, if the permissible ground coverage as per local bye-laws is 'X'% and the plinth area of the building at ground floor (i.e. actual ground coverage) is 'Y'Sqm. La=Yx100/(x) Sqm, subject to the condition however that if 'La' works out to be more than 'L' which might be the case if actual plinth area at ground floor is more than what is permissible according to the local bye-laws, the same is restricted to 'L'. There would accordingly be no 'Ls' in such cases.

In case, no local byelaws exist in the locality, comparison is made with the general practice in the locality.

(iii) Ascertain the prevailing land rate in the locality.

Wherever land rates are available with Appropriate Authority or Valuation Cell of Income Tax Department, which could be considered as applicable to the localities in question, the same is considered as prevailing land rate. In case the relevant land rates are not available with the Appropriate Authority or Valuation Cell, rates as notified by Revenue authority is adopted. Preferably authenticated documents or if the same are not made



ANNEXURE- 61 ANNEXURE TO SOPs

- available by the concerned authorities, at least reference of such documents is kept on record in support of the land rate considered as prevailing in the locality.
- (iv) Workout the cost of land area appurtenant to the building and that of the surplus land area as discussed in Para 3(ii) above, separately.
 - While working out cost of surplus land, care is taken that only that portion of the surplus land is taken into account which enhances utility of the property by way of improved access or parking facilities or any other such utilization, subject to the condition that the hiring department have made specific mention in their requisition that apart from the building, they also propose to take on lease the usable surplus land is indicated clearly in the rent reasonableness certificate.
- (v) Add the cost of the appurtenant land area to the depreciated cost of the building to find out the net value of the property. If the building as a whole is not proposed to be hired, the net value of the property is reduced accordingly keeping in view the built up area of the premises to be hired and total built-up area. Care is taken that if the areas of common utilities, such as staircase, toilets, corridors etc. are being or is used by more than one user on a particular floor or in a particular wing, only proportionate built up area of such common utilities is considered in working out the built-up area of the premised to be hired.
- (vi) Where the buildings or a part of the same as proposed to be hired have been acquired by the owner as ready built property/space, in which the cost of purchase is inclusive of the cost of land and thus represents the composite capital cost of the properties, the net value of the property is worked out as follows:-
 - (a) If authenticated information is available regarding acquisition and purchase price of the ready-built property proposed to be hired, the same is considered as net value of the property with due correction factor for appreciation/depreciation in its market value during the intervening period, i.e from the date of its acquisition to the date of assessment.
 - (b) In case the information as above is not available, composite capital cost i.e. net value of the property is worked out by comparing the same with the authenticated cost of similar properties/space preferably of those acquired by Govt. departments (Central/State) or Public Sector Undertakings (Central/State) in the vicinity or in the similar locality. If there are no such properties available for comparison, cost of similar properties/space purchased by Public Sector Banks/Private parties may also be considered for comparison subject to the condition that if the sale/purchase of such properties was within the purview of Appropriate Authority, the cost of acquisition is taken as what had been mentioned in the sale clearance issued by Appropriate Authority. The cost as ascertained in these cases too is modified by applying correction factor for appreciation/depreciation as described in Para (a) above. While comparing the cost as referred to above, due care is also be taken to ascertain whether the properties under assessment and the one considered for comparison are nearly similar in terms of the location, distance from air/rail/bus terminal, access/approach facilities, set-backs, parking facilities, general environment, specifications and other common utilities in the building like lifts, toilets etc., and if the same are not on equal footing, a careful assessment is made for suitable addition or subtraction, as the case is. No adjustment is however, be made for under or over utilization of the FAR in either case.



- (c) If the information as mentioned in Para 3(vi) (a) or (b) above is not available, the net value of the property is worked out by following the same procedure as given in Para 3(i) to (v) above.
- (d) In addition to working out the net value of the property in the manner as laid down in Para 3(vi) (a)/(b) above, depreciated cost of the building portion (i.e. excluding land) is also be worked out as per method laid down in Para 3(i) above for the purpose of calculating the Sinking Fund Element as described in Para 3(x) (c) below.
- (vii) The annual rate of return on the net value of the property referred to in Para 3(v)/(vi) above, is worked out as follows:-
 - (a) In case of State Capitals as well as other cities/towns which qualify for city Compensatory Allowance 8% for non-residential use of the property and 7% for residential use.
 - (b) In case of other places-7% for non-residential use of the property and 6% for residential use.
- (viii) For the surplus land within the compound of the property which would offer improved access and/or parking facilities etc. and to the extent the same is proposed to be taken on lease along with building, the annual rate of return on the cost of the said surplus land is taken as 7% in case of places mentioned in Para (vii)(a) and 6% in case of places mentioned in Para(vii) (b) above, both for non-residential and residential use of the property.
- (ix) The net annual returns on the property including surplus land, if any, is worked out by addition of the returns as worked out in Para (vii)(a)/(b) and that in Para (viii) above.
- (x) The following factors is further be added to the figure as arrived at in Para 3(ix) above to workout the gross annual return .i.e. reasonable rent per annum.
 - (a) Municipal tax (house/property tax) as per actual. If actual figures are not available, municipal taxes is assessed based on the rateable value of the property in accordance with the relevant local/municipal byelaws. If the building as a whole is not proposed to be hired, the Municipal Tax is carefully worked out on prorata basis. The Municipal Tax component as assessed and considered in the certificate is clearly indicated in the rent reasonableness certificate to enable the hiring department to decide on the manner in which the municipal tax is paid (refer model formats for rent reasonableness certificate at **Annexure 62 A & 62 B**).
 - (b) Maintenance and repairs at the rate of 12% of the annual return on the property as arrived at in Para 3(vii) (a)(b) above. If any statutory provision exists in the areas binding the landlord to defray certain minimum expenses on maintenance and repairs, the same is duly accounted for.



ANNEXURE- 61 ANNEXURE TO SOPs

(c) Provision for sinking fund, to be ascertained by reference to standard sinking fund tables or alternatively to be calculated as per standard formula given below:-

Sinking fund co-efficient (k) = $\frac{0.06}{(1+0.06)^{r}-1}$

Where, r = assessed residual life of the building in years as referred to in Para 3(i) above.

Annual provision for sinking fund = $(k) \times (D)$

Where, $\mathbf{k} = \text{sinking fund co-efficient as above}$

D = Depreciation of the building referred to in Para 3(i) and (vi) (d) above.

- (x) The following factors is further be added to the figure as arrived at in Para 3(ix) above to workout the gross annual return .i.e. reasonable rent per annum.
- (4) The rent based on the prevailing market rent is ascertained by making inquiries preferably in respect of rented properties/spaces, which have been taken on lease by Government Departments (Central/State) of Public Sector Undertakings (Central/State) in a comparable locality. If there are no such properties available for comparison, similar property/space hired by Public Sector Banks/Private body may also be considered for comparison. The properties is compared on the basis of various parameters as mentioned in the second part of Para 3(vi)(b) above and if the same are not comparable a careful assessment is made for suitable addition or subtraction as the case is. It is also be ensured that the factors for which landlord is responsible, like maintenance and repairs and municipal taxes in such cases as also the other relevant facilities, such as, benefit of usable surplus land are on an even keel and if it is not so suitable adjustments is made accordingly. No adjustment is however be made for under or over utilization of FAR in either case.
- (5) After working out the rents according to the two alternate methods as described in Para 3 & 4 above, the reasonable rent is intimated to the hiring department as under:-
 - (i) If the rent based on the prevailing market rent is lower, only the rent based on the prevailing market rent is taken as reasonable rent and so intimated as per model format enclosed at **Annexure-62 A.**
 - (ii) In case the rent based on the prevailing market rent happens to be higher, both the figures is intimated as range reasonable rent (as per model format enclosed at **Annexure- 62 B)**, leaving the final decision to the hiring department to negotiate and settle the rent keeping this range in view.
 - (iii) There is some exceptional situations (like in a very small town/Kasba) where there is no rented building to be considered as basis for working out the prevailing market rent. In such cases the market rent may by worked out taking into consideration the rent prevailing in the nearby town and by giving due weight-age (plus or minus) for relative importance of the town where the building is situated to that of the town adopted as basis for comparison.
 - (iv) As the data collected and adopted for assessment of rent are relevant to a particular date and these are likely to undergo changes subsequently, the existing practice (although not so prescribed by this Directorate in the earlier guidelines issued on 24.6.99) of



- adding a clause in the Rent reasonableness Certificate that the rent as certified hold good for 3/5 years or so, is not correct and is stopped forthwith.
- (v) The rent is expressed in terms of per unit built up area or carpet area Monthly rent may also be shown.
- (6) Re-assessment of rent of the existing leased building/space is treated as fresh assessment and is done according to the same method as discussed in the preceding paras. Necessity for re-assessment/ revision of rent, whether during the currency of the Lease Agreement or after its expiry is however be examined and decided by the Hiring Department with due regard to the terms and conditions of existing lease agreement and any other relevant instructions issued by the competent authority. The effective date of revision of rent is 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.
- (7) It is for the Hiring Department to see if the rent as assessed/reassessed by the Hiring Committee is to be restricted to any particular limit in view of the terms and conditions of existing lease agreement or due to any other relevant instructions issued by competent authority to this effect.
- (8) As prescribed in Para 3(x)(a), the Municipal Tax component as accounted for in the rent is clearly indicated in the Rent Reasonableness Certificate. In view of the same, no request is entertained by Hiring Committee for re-assessment of rent on account of subsequent increase or decease in municipal tax, if any. It is accordingly be for the hiring department to settle it right in the beginning by a mutual agreement with the owner as to how such subsequent increase or decease in municipal tax, if any, is dealt with.
- (9) The rent assessment is done by a Hiring Committee with the composition as given below and the jurisdiction of the Committee for a particular City/Town is also include satellite and twin cities/towns, if any, as illustrated in the sub-Para (iv) below.
 - (i) DELHI: The committee is headed by EE (LF), office of CE(NDZ)I, CPWD, Nirman Bhawan with an Assistant Director of Estate from Directorate of Estate and AFA(E), Finance Division, Ministry of Urban Development, Nirman Bhawan as members and certificate of reasonable rent is accordingly be issued by EE (LF).
 - (ii) Other Cities/Towns where there is a Civil Circle:- the committee is headed by the Superintending Engineer, with the local Assistant Estate Manager of the Directorate of Estate and an Engineer in Charge (Civil) co-opted by the Superintending Engineer as members and Certificate of reasonable rent is accordingly be issued by the Superintending Engineer.
 - (a) In case there is no officer of the Directorate of Estate at the station, the Executive Engineer/Assistant Engineer doing the estate function is co-opted as a member. In case, there is no such estate function involved, the Superintending Engineer is co-opt an Engineer in Charge or Assistant Engineer as the second member.
 - (b) In case there are more than one Civil Circle at the same station, the concerned Chief Engineer is nominate one of the Superintending Engineer to head the committee.
 - (iii) All other areas: The Hiring Committee is headed by a Engineer in Charge (Civil Division) under whose jurisdiction the building proposed to be hired stands. He/she will



ANNEXURE- 61 ANNEXURE TO SOPs

- co-opt one Assistant Engineer (Civil) and one Junior Engineer(Civil) in the committee. If there are more than one Civil Division at the same station, the Superintending Engineer concerned is nominate one of the Engineer in Charges to head the Committee.
- (iv) As already mentioned above regarding jurisdiction of a Hiring Committee in the matter of satellite and twin cities/towns, the jurisdiction of Hiring Committee for Delhi is include Ghaziabad, NOIDA, Greater NOIDA, Faridabad, Gurgaon. Similarly, Jurisdiction of Hiring Committee for Mumbai, Kolkata and Hyderabad is include Navi Mumbai, 24 Paragana and Secundrabad respectively and so on. If there is any doubt in regard to similar cases relating to other cities/towns, the concerned CE(C) is competent to take a decision.
- (10) If the Hiring Departments are willing, a representative to be nominated by them is associated in Market survey/enquiries for collecting relevant data. The head of the Hiring Committee is accordingly make a reference to the Hiring Department before undertaking this exercise.
- (11) The rent calculations is an internal record of the Hiring Committee and is not be furnished to the Hiring Department.



ANNEXURE- 62A

(Refer SOP No. 8/5)

MODEL FORMAT FOR ISSUE OF RENT REASONABLENESS CERTIFICATE IF RENT ACCORDING TO THE PREVAILING MARKET RENT IS LESS THAN THAT AS PER RECOGNISED PRINCIPLES OF VALUATION.

Certified that	t reasonable rent of Premises with description as
	proposed to be hired by/ already under tenancy of
(*)	
. ,	(name of the hiring Department) has been assessed as per guidelines issued by
	General of Works, CPWD vide No.8/1/2002-W.II(DGW)Pt. Dated 24.5.2004 the rent as mworks out to Rs(in words
per sq.ft. per	month of built up area. the monthly rent will be Rs(in)
words)

- 2. It shall be the responsibility of hiring department to see if the rent assessed as above is to restricted to any particular limit in view of the terms and conditions of the existing lease assessment or any other relevant instructions issued by the competent authority to this effect.(**).
- 3. The rent as indicated above is inclusive of (i) Surplus usable land in the campus surplus............Sqm. approx to be utilized exclusively by the Hiring Department for parking purposes etc.(***) (ii) Regular repairs and maintenance of the premised; (iii) Municipal Tax (House/ Property Tax), but exclusive of Water & Electricity charges payable to body which shall be borne by the Hiring Department.
- 4. The Municipal Tax component included in the rent as indicated above is.....(in words.....)per month. It will be for the Hiring Department to settle the terms of payment of the rent to the owner with or without Municipal Tax by following any of the following alternatives:-
 - (a) Pay only net rent first and reimburse municipal tax to the owner separately on submission of proof of actual payment.
 - (b) Pay only net rent to the owner and pay municipal tax directly to the local body. (c) Pay composite rent.

As municipal tax component of the rent has already been spelt out above, no request shall be entertained by Hiring Committee for re-assessment of rent on account of subsequent increase/ decrease in municipal tax, if any. It shall accordingly be for the hiring department to settle it in the beginning by a mutual agreement as to how such subsequent increase or decrease in municipal tax, if any shall be dealt with.

- * Strike out which is not applicable.
- ** Not relevant if it is not a case of periodical re-assessment/revision of rent
- *** Strike out if the rent does not include element of surplus land.



ANNEXURE- 62B

(Refer SOP No. 8/5)

MODEL FORMAT FOR ISSUE OF RENT REASONABLENESS CERTIFICATE IF RENT ACCORDING TO THE PREVAILING MARKET RENT IS MORE THAN AS PER RECOGNISED PRINCIPLES OF VALUATION

	that reasonable rent of the premises with description asand proposed to be hired by/already under
	of (*)has been (Name of the hiring Department)
assessed	as per guidelines issued by
	te General of Works, CPWD, vide No.8/1/2002-W.II (DGW) Pt. Dated 24.5.2004 and the rent as fromworks out to as under:-
(i)	According to the recognized principle of valuation (i.e. on the basis of the present value of the property) Rs
(ii)	According to the prevailing market rent Rs
	The two figures of rents as above shall be considered as a range of reasonable rent and it shall be for the hiring department to negotiate and settle the rent, keeping in view this range.
2.	It shall be the responsibility of the hiring department to see if the rent assessed as above is to be restricted to any particular limit in view of the terms and conditions of the existing lease agreement or any other relevant instructions issued by the competent authority to this effect.(**).
3.	Both the figures of rent as indicated above are inclusive of (i) Surplus usable land measuringsqm.approx in the campus to be utilized exclusively by the Hiring Department for parking purposes etc.(***) (ii) Regular repairs and maintenance of the premises; (iii) Municipal Tax (House/Property Tax), but exclusive of water & Electricity charges payable to local body which shall be borne by the Hiring Department.
4.	The Municipal Tax component included in the rents as indicated above is Rs(in words) per month. It shall be for the Hiring Department to settle the terms of payment of the rent to the owner with or without Municipal Tax by any of the following alternatives:-
	(a) Pay only net rent first and reimburse municipal tax to the owner separately on submission of proof of actual payment.



composite rent.

(b) Pay only net rent to the owner and pay municipal tax directly to the local body. (c) Pay

5. As municipal tax component of the rent has already been spelt out above, no request shall be entertained by Hiring Committee for re-assessment of rent on account of subsequent increase or decrease in municipal tax, if any. It shall accordingly be for the hiring department to settle it right in the beginning by a mutual agreement as to how such subsequent increase or decrease in municipal tax, if any, shall be dealt with.

- * Strike out which is not applicable.
- ** Not relevant if it is not a case of periodical re-assessment/revision of rent
- *** Strike out if the rent does not include element of surplus land.



260

ANNEXURE- 63

(Refer SOP No. 8/8)

PROFORMA FOR WEEDING OUT AND DESTRUCTION OF OLD AGREEMENTS

(1)	Division	(4)	Executive Engineer
(2)	Circle	(5)	Superintending Engineer
(3)	Zone	(6)	Chief Engineer

no. of -ment work no. Start of com- cost pletion pletion (slipu- ted) al) Amount	6 above/ Vr. no.& date below of final bill final bill any Remarks any
	10 11 12 13 14 15











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