

TENDER DOCUMENT

1	Name of work	:	Supply, installation, commissioning and testing of stand-alone type solar based minimum 28W LED street light for " Khuti Tola Village of Dhadhu Panchayat of Tandwa, District Chatra " consisting of all civil, structural, electrical and mechanical works and all other accessories and facilities required to make it complete in all respects, 04 Nos under CSR 2016-17
2	Tender Notice No. & Date	:	CMPDI/RI-III/E&M/Tender/28W LED street light / CSR 2016-17/529, Dt. 19.01.2017
3	Earnest Money Deposit	:	Rs132780/- (Rupees One Lakh Thirty Two Thousand Seven Hundred Eighty) pus Service tax as applicable
4	Completion period of work	:	60 (sixty) days.
5	Date & time of download of tender document	:	20 .01.2017 to 30.01.2017
5	Date & time of submission of tender	:	20.01.2017 from 10-00 AM and upto 3.00 PM on 31.01.2017
6	Date & time of opening of tender	:	At 3.30 PM on 31.01.2017
7	Tender Document issued to	:	_____ _____ _____ _____

Signature of Issuing Officer

Certified that this documents contains from page 1 to 67

PART : I (TECHNICAL / COMMERCIAL BID)



E&M DEPARTMENT
REGIONAL INSTITUTE-III
CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED
(A subsidiary of Coal India Limited)
Gondwana Place, Kanke Road, Ranchi : 834 008



गोन्दवाना प्लेस, कान्के रोड, राँची - 834 008, झारखंड (भारत)
Gondwana Place, Kanke Road, Ranchi - 834 008, Jharkhand (INDIA)
फोन/ Ph : +91 651 2231506 फैक्स/ Fax: +91 651 2231501
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cmpdi
A Mini-Ratna Company

सेन्ट्रल माईन प्लानिंग एण्ड डिजाइन इन्स्टीच्यूट लिमिटेड
(कोल इण्डिया लिमिटेड की अनुषंगी कम्पनी / भारत सरकार का एक लोक उपक्रम)
क्षेत्रीय संस्थान-3
Central Mine Planning & Design Institute Limited
(A Subsidiary of Coal India Limited / Govt. of India Public Sector Undertaking)
Corporate Identity Number (CIN): U14292JH1975GOI001223
Regional Institute-3

NOTICE INVITING TENDER

Sealed tenders, in two parts, are invited from experienced and eligible contractors for the following work to be executed at Khuti Tola Village of Dhadhu Panchayat of Tandwa, District Chatra of Jharkhand State:

Tender Notice no.	Name of work	Estimated Cost	Earnest Money	Cost of Tender Document	Completion Period
CMPDI/RI-III/ E&M/Tender/28W LED street light / CSR 2016-17/529 Dt. 19.01.2017	Supply, Installation, commissioning and Testing of stand-alone type Solar Based minimum 28W LED Street Light for " Khuti Tola Village of Dhadhu Panchayat of Tandwa, Chatra " consisting of all civil, structural, electrical and mechanical works and all other accessories and facilities required to make it complete in all respects, 04 Nos under CSR 2016-17	Rs. One Lakh Thirty Two Thousand Seven Hundred Eighty + Service Tax as applicable	Rs. 1328/-	NIL	60(sixty) Days

Tender documents can be obtained on request in writing from the office of HOD(E&M) RI-III, CMPDI, Gondwana Place, Kanke Road, Ranchi-834008. **Tender Documents will be available from 20.01.2017 to 30.01.2017. Submission of tender is from 10-00 AM on 20.01.2017 and upto 3-00 PM on 31.01.2017. Date and time of opening of tender is at 3-30 PM on 31.01.2017.**

Tender document can also be obtained by downloading from the website of CMPDI (<http://www.cmpdi.co.in>). For those who have downloaded the tender document from CMPDI's website, shall have to give the following declarations under their signature.

"This is to certify that I /we have downloaded this tender document from CMPDI's website and is being submitted without any tampering on any page. Further, we understand that in the event of any tampering being detected at any stage or at any time, then in that case CMPDI has got the right to reject/ terminate this offer /work and forfeit the EMD/ Security deposit submitted by us and blacklist our firm".

The intending bidder must submit the documentary evidence in support of their eligibility for taking up the work, along with their offer, failing which the tender will be rejected.

Tender should be submitted in sealed cover containing the following:

PART I

Complete set of the tender documents as sold, duly filled in and signed on all pages and at different places as required of the tender documents; Document confirming Legal Status of the bidder; Photocopy of Sales Tax Registration / TIN; Photocopy of PAN (Permanent Income Tax Account No.); Photocopy of valid Electrical Contractors Licence (if applicable); Documentary evidence of Work Experience; Service Tax Registration Certificate issued by Central Excise and Custom Department, Govt. of India. (If Applicable); Provident Fund Registration Certificate issued by Govt. Dept. of any Indian State (If Applicable); Document conforming that the bidder is having an office in the state of Jharkhand(copy of Tax return document with

office address or Banker's certificate confirming that the contractor is having an office in Jharkhand since last one year or more); Declaration by the bidder in their letter head that they shall use indigenously manufactured PV module and also shall use Lead Acid batteries and luminaires with LED lamps of reputed make having all India network, having branches at least in 15 states of India, Declaration confirming that bidder have not been banned or delisted by any Govt. or Quasi Govt. Agencies or PSU's and Power of Attorney duly attested by notary in case the tender is signed by an authorised representative of the tenderer.

PART II

Price Bid Only

Duly filled in sealed tenders in two parts should be submitted in the office of the HOD (E&M), RI-III CMPDI, Gondwana Place, Kanke Road, Ranchi from 10-00 AM on 20.01.2017 & upto 3-00 PM on 31.01.2017 and Part - I of the tenders shall be opened at 3.30 p.m. 31.01.2017 in presence of the attending tenderers or their authorised representatives. All the bidders requested to be present on the scheduled date and time of opening. However their absence will not stop opening. Late tender / incomplete tenders / telegraph tenders, tenders received through Post/ courier services shall not be accepted. Tenders must be submitted in the tender box within the stipulated date and time. Postal tender shall not be accepted.

In the event of the specified date for submission /opening of bids being declared a holiday the bids will be received /opened on the appointed time on the next working day.

Part-II will be Opened after qualifying in part-I in due course. The date and time of opening of Price bid or Part- II of the tender shall be communicated to technically qualified bidders in due course of time after consideration of (first Envelope) Part -I.

Work Experience:

- a) The intending bidder must have in its name having successfully completed similar works, as a prime contractor, during last 7 (seven) years ending last day of the month previous to the one in which bid application is invited (i.e. Dayth Month, 2016) should be any of the following :
1. Three similar completed works each costing not less than the amount equal to 40% of the estimated cost.
Or
 2. Two similar completed works each costing not less than the amount equal to 50% of the estimated cost.
Or
 3. One similar completed work costing not less than the amount equal to 80% of the estimated cost.

The definition of similar work shall be as follows:

Electrical works relating to Manufacturing and supply of LED light or PV module (for OEM) or supplying and installation of solar based street LED light (for authorized dealer or channel partner)

- b) Average annual financial turnover of Electrical works during the last 3 (three) years, ending 31st March of the previous financial year should be atleast 30% of the estimated cost.

Legal Status of the bidder:

Any one of the following documents:

1. Affidavit or any other document to prove proprietorship/individual status of the bidder.
2. Partnership deed containing name of partners.
3. Memorandum & Article of Association with certificate of incorporation containing name of bidder
4. Joint Venture agreement containing name of partners and lead partner, Power of Attorney to the Lead Partner and share of each partner.

The Earnest Money will have to be deposited in the form of Bank Draft from any nationalized/scheduled Bank payable to “**CMPDI Ltd. Regional Institute, Ranchi.**” The Earnest Money Deposit is to be deposited in a separate envelope altogether superscribing "Earnest Money Deposit" and not inside the envelope containing Part : I or Part-II and the same will be opened first.

CMPDI does not bind itself to accept the lowest tender and reserves the right to reject any or all the tenders without assigning any reason whatsoever.

(Sujata Pal)

विभागाध्यक्ष (वि. एवं यां.)

प्रतिलिपि:

1. The Regional Director, RI-III for kind information.
2. GM(E&M), CCL, Darbhanga House, Ranchi-834001- With a request to arrange display on Notice Board
3. HOD (TE), CCL, Darbhanga House, Ranchi-834001- With a request to arrange display on Notice Board.
4. HOD(TE), CMPDI(HQ), Gondwana Place, Kanke Road – With a request to arrange display on Notice Board.
5. S.O(E&M), NK Area, CCL, Distt: Ranchi -- With a request to arrange display on Notice Board
6. HOD(E&M), CMPDI, RI-I,II,IV,V,VI & VII - With a request to arrange display on Notice Board.
7. HOD(Exploration), RI-III
8. HOD(Finance), RI-III
9. HOD (P&A), RI- III - With a request to arrange to display on CMPDI, RI-III Notice Board.
10. Camp-In-Charge (Orla camp) - With a request to arrange display on Notice Board.
11. Camp-In-Charge (Hazaribagh camp) - With a request to arrange display on Notice Board.
12. Camp-In-Charge (Barkakana camp) - With a request to arrange display on Notice Board.
13. Cash Section, RI-III
14. Shri Satendra Singh, SM(C), Engineer-in-charge,
15. Office copy,O.S (E&M) Dept. RI-III

CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED
(A SUBSIDIARY OF COAL INDIA LTD)
REGIONAL INSTITUTE –III, GONDWANA PLACE, KANKE ROAD, RANCHI-834008

DETAILED TENDER NOTICE

1. Sealed tenders in prescribed forms and parts with the name of work superscribed as Supply, Installation, commissioning and Testing of stand-alone type Solar Based minimum 28W LED Street Light " Khuti Tola Village of Dhadhu Panchayat of Tandwa, Chatra " consisting of all civil, structural, electrical and mechanical works and all other accessories and facilities required to make it complete in all respects, 04 Nos under CSR 2016-17 are invited from bonafide and experienced contractors and will be received at the office of HOD (E&M),RI-III, CMPDI, Gondwana Place, Kanke Road, Ranchi from 10A.M on 20.01.2017 and upto 3.00 P.M. on 31.01.2017 and will be opened on same day at 3-30 PM in presence of the attending tenderers or their authorized representatives who wish to be present. Part-I will be opened on the above day and time.
- 2(a) Tenders should be submitted in the prescribed form in time. These forms together with the proposed contract document including specifications and tender drawings (if any) may be obtained from the above office during normal working hours from 20.01.2017 to 30.02.2017 free of cost against written application addressed to HOD (E&M),RI-III, CMPDI, Gondwana Place, Kanke Road, Ranchi, for issuing the same. General Specifications and description of the work is enclose with the tender document.
- 2(b) Any bid received after the dead line prescribed at Clause : 1 above due to any reason, whatsoever, will not be accepted. In the event of the specified date for the submission of the bids being declared a holiday by the employer, the bids will be received upto the time on the next working day.
- 2(c) Tenders thus submitted shall consist of the following :
 - i) Complete set of the tender documents as sold, duly filled in and signed on all pages and at different places as required of the tender documents including Part : I and Part : II of the tenders as per the tender notice, as applicable.
 - ii) Document confirming Legal Status of the bidder.
 - iii) Earnest Money Deposit (as specified hereinafter).
 - iv) Photocopy of Sales Tax Registration / TIN.
 - v) Photocopy of PAN (Permanent Income Tax Account No.).
 - vi) Photocopy of valid Electrical Contractors Licence.
 - vii) Documents confirming Work Experience
 - viii) Service Tax Registration Certificate issued by Central Excise and Custom Department, Govt. of India. (If Applicable)
 - ix) Provident Fund Registration Certificate issued by Govt. Dept. of any Indian State (If Applicable)
 - x) Document conforming that the bidder is having an office in the state of Jharkhand: Tax return document with office address or Banker's certificate confirming that the contractor is having an office in Jharkhand since last one year
 - xi) Declaration by the bidder in their letter head that they shall use indigenously manufactured PV module and also shall use Lead Acid batteries and luminaires with LED lamps of reputed make having all India network, having branches at least in 15 states of India
 - xii) Power of Attorney duly attested by notary in case the tender is signed by an authorised representative of the tenderer.
 - xiii) Declaration confirming that bidder have not been banned or delisted by any Govt. or Quasi Govt. Agencies or PSU's.

Full name & address of the tenderer shall be written on the bottom left hand corner of the sealed cover.

- 2(d) Documents submitted alongwith the tender shall be final. No further correspondence with regard to completeness of documents submitted shall be made. Supplementary documents shall not be accepted unless they are asked for by the company.
- 2(e) The tender document in which the tender is submitted by the tenderer shall become the property of the Company and the Company shall have no obligation to return the same to the tenderer.
- 2(f) The tender shall be submitted in two parts as indicated in the Notice Inviting Tenders. Part-I shall consist of any deviation from terms & conditions of the tender and additional terms & conditions and if asked for, technical/commercial bid and the credentials.

Part-II shall consist of the tender documents as sold to the tenderers duly filling in rates, amounts etc. both in figures & words i.e. **price bid**.

The Earnest Money Deposit is to be deposited in a separate envelope altogether superscribing "Earnest Money Deposit" and not inside the envelope containing Part : I or Part-II of the Bid.

Part : I & Part-II should also be put in two separate sealed envelopes superscribed as such. Thereafter, all the three envelopes should be submitted in a sealed envelope with appropriate superscription. Every page of tender documents shall be signed by the tenderer.

The date of opening of second envelope or Part-II of the tender shall be communicated to eligible tenderers in due course after consideration of technical/commercial bid i.e. **Part – I.**

- 2(g). Each bidder shall submit only one bid for one package. A bidder who submits or participates in more than one bid (other than as subcontractor or in case of alternatives that have been permitted or requested) will cause all the proposals with the bidders' participation to be disqualified.
3. Earnest Money should be deposited in a separate envelope in the form as indicated in the Notice Inviting Tenders (NIT) and Clause : 2 (f) above.
4. No tender shall be considered unless accompanied by the said Earnest Money.
5. The earnest money will be retained in the case of successful tenderer and refunded to the unsuccessful tenderers after opening of the price bid. Except L-1 bidder all other tenders will be treated as unsuccessful. The earnest money will not carry any interest. The earnest money deposited by the successful tenderer will be dealt with as provided elsewhere in the tender document.
- 6(a). ~~Site Investigation Report : The contractor, in preparing the bid, shall rely on the site investigation report referred to in the contract data, supplemented by any information available to the bidder.~~
- 6(b). Every tenderer is expected, before quoting his rates, to go through the requirements of quality of materials/workmanship under specification/requirements and conditions of contract and to inspect the site/area of the proposed work.

In case of item rate tender a schedule of quantities is enclosed with the tender document. The tenderer should quote specific rate for each item in the schedule and the rates shall be in rupees and paise. The rates shall be written both in words and figures and the unit in the words and the amount against each item totalled. In the event of any discrepancy between the description in words and figures, the description in words will prevail. The rates for the work should be inclusive of all incidentals, overheads, all taxes, Octroi, duties, leads, lifts, carriage, tools & plant etc. as required for execution and completion of the work. However, such duties, taxes, levies etc. which is notified after the last date of submission of tender/or any increase over the rate existing on the last date of submission of tender shall be reimbursed by the company on production of documentary evidence in support of payment actually made to the concerned. It shall be deemed that the tenderer has visited the site/area and got fully acquainted with the working conditions and other prevalent conditions and fluctuations thereto whether they actually visited the site/area or not and have taken all the above factors into account while quoting his rates.

- 6(c). **Tenderers should quote their rates excluding the impact of Service-Tax. Impact of applicable service tax shall be mentioned separately. Impact of service tax shall be considered for deciding lowest offer. Applicable Service Tax payable by the Tenderer / Service Provider will be reimbursed on production of documentary evidence towards payment of such Service Tax to the Government Exchequer.**

The Tenderer (Service Provider) will have to raise separate bill for claiming the reimbursable amount of Service Tax paid by him / them. Such bills should necessarily contain Contractor's Service Tax Registration Number with details of Range / Division / Commissionerate address with documentary evidence of payment of Service Tax to the Government Exchequer. Separate challans should have to be submitted for separate services with specific mention of the services rendered to the CMPDI.

In case of any default / delay in payment of Service Taxes, wrong claim of CENVAT credit etc. by the Contractor / Service Provider, the CMPDI would not be responsible and in no case any such claim of the Contractor / Service Provider will be entertained by the CMPDI.

- 7(a) Corrections where unavoidable, shall be made by crossing out and rewriting duly authenticated with full signature and date by the tenderer. Erasing or over-writing in the tender documents may disqualify the tender.
- 7(b) The tenders shall be submitted either in English or in Hindi.
- 7(c) Cost of Bidding : The bidder shall bear all costs associated with the preparation and submission of his bid and the employer will in no case be responsible and liable for those costs.
8. The tenderer shall closely study all specifications in detail which govern the rates for which he is tendering.

9. Sales Tax Clearance Certificate for the last financial year or the last assessment year, whichever is later or proof of filing the returns for the previous financial year should accompany the tender.
10. The work should be completed within **60 (sixty) days** from the expiry of ten (10) days from the issue of letter of acceptance of tender / work order or handing over the site / handing over reasonable number of working drawings for starting of work (if any) to the contractor ~~or the period of mobilisation allowed in the work order for starting the work in special circumstances~~, whichever is latest. The site may be handed over in phases.
11. On completion of the work all rubbish, debris, brick bats etc. shall be removed by the contractor (s) at his/their own expenses and the site cleaned and handed over to the company and he / they shall intimate officially of having completed the work as per contract.
12. The company does not bind itself to accept the lowest tender and reserves the right to reject any or all the tenders without assigning any reasons whatsoever and to split up the work between two or more tenderers or accept the tender in part and not in its entirety.
- 13.(a) The tenderer(s) will indicate the equipment/machinery/vehicles he/they is/are going to use on this job and also give adequate evidence of experience in doing similar works and financial capacity to complete the work in time.
- 13.(b) The tenderer(s) should also state what technical/supervisory personnel he/they will be employing for supervising the work.
- 14 (a) Legal Status of the bidder
Any one of the following document should be submitted in support of legal status of the bidder:
 - i. Affidavit or any other document to prove proprietorship/individual status of the bidder.
 - ii. Partnership deed containing name of partners.
 - iii. Memorandum & Article of Association with certificate of incorporation containing name of bidder
 - iv. Joint Venture agreement containing name of partners and lead partner, Power of Attorney to the Lead Partner and share of each partner).
- 14(b). Change in constitution of the contracting agencies :

Prior approval in writing of the company shall be obtained before any change is made in the constitution of the contracting agencies, otherwise it will be treated as a breach of contract.
15. Canvassing in connection with the tenders in any shape or form is strictly prohibited and tenders submitted by such tenderers who resort to canvassing shall be liable to rejection.
- 16(a). Every tenderer will have to submit a declaration in support of the authenticity of the credentials submitted by him along with the tender in the form of an "affidavit" as per the format provided at ANNEXURE : I. **(Applicable for works of estimated cost of over Rupees fifty lakhs).***
- 16(b). If the tenderer deliberately provides wrong information or submits false credentials in support of his qualifications, the company reserves the right to terminate / rescind the contract, forfeit the EMD and other dues of the contractor and to take any other action as deemed fit.*
*(Strike out whichever is not applicable).
- 16(c) Every tenderer will have to submit declaration confirming that bidder have not been banned or delisted by any Govt. or Quasi Govt. Agencies or PSU's(Applicable for works of estimated cost upto Rupees fifty lakhs)
17. An intending tenderer, after obtaining tender documents, having doubts as to the meaning of any part of the tender documents may submit to the official inviting tender, a written request for interpretation or clarification thereof. Any interpretation or clarification of the tender documents by formal addendum if issued by the official inviting tender, shall be final and valid and binding on the company and the tenderers.
18. On receipt of letter for acceptance of the tender issued by the company, the successful tenderer shall execute contract agreement /accept work order in the Company's prescribed form for the due fulfillment of the contract. Failure to enter into the required contract / accept the work order issued by the company with the specified period in the work order, shall entail cancellation of letter of acceptance of tender/work order and forfeiture of the earnest money. The written contract to be entered into between the contractor and the company / work order shall be the foundation of the right of both the parties and the contract

shall not be deemed to be executed until the agreement is signed /work order is accepted by both the parties i.e. contractor and the Company.

- 19(a). The validity period of the tenders shall be **120 days** from the date of opening of price bid or revised price bid/negotiated offer, if any

The tenderer shall not, during the said period or within the period extended by mutual consent, revoke or cancel his tender or alter the tender on any terms/conditions thereof without consent in writing of the company.

In case of the tenderer violates to abide by this, the Company will be entitled to forfeit the Earnest Money and reject the tender.

- 19(b). The company reserves the right to postpone the date of receipt and opening of tenders or to cancel the tenders without assigning any reason whatsoever.

20. The company reserves its right to allow Public Enterprises purchase preference facility as admissible under prevailing policy.

20. The earnest money shall stand forfeited if the conditions as stipulated **in the tender document** are not fulfilled by the tenderer without furnishing any reason for the same.

21. This detailed Tender Notice shall be deemed to be part of the Contract Agreement / Work Order.

22. No subletting of work as a whole by the contractor is permissible. Subletting of work in piece rated jobs is permissible with the prior approval of the department.

The Contract Agreement will specify major items of supply or services for which the contractor proposes to engage sub-contractor/sub-vendor. The contractor may from time to time propose any addition or deletion from any such list and will submit proposals in this regard to the Engineer-in-Charge/Designated Officer in charge for approval well in advance so as not to impede the progress of work. Such approval of the Engineer in Charge / Designated Officer in Charge will not relieve the contractor from any of his obligations, duties and responsibilities under the contract.

23. In case the contractor enters into any litigation such action should have to be taken in a court of law with jurisdiction of Ranchi court only

HOD (E&M)
CMPDI, RI-III, Gondwana Place
Ranchi -834008

INSTRUCTION TO THE BIDDERS

1. The Bidders are supposed to visit and examine the site of work at their own cost and risk and obtain all information that may be necessary for participating in the tender and entering into contract.
2. The Bidders are advised to study this document in detail and understand all provisions.
3. Place of submission of Tender Document : Office of the HOD (E&M), RI-III, Central Mine Planning and Design Institute Limited, Gondwana Place, Kanke Raod, Ranchi (Jharkhand) -834008
4. **On opening of Part-I of the tenders, the following shall only be checked for deciding eligibility for opening of Price Bids (Part-II) :**

(i) Earnest Money Deposit of **Rs1328/- (Rupees One Thousand Three Hundred Twenty Eight)** in the form of Demand Draft drawn on any nationalised / scheduled Bank payable to “**CMPDI LIMITED. REGIONAL INSTITUTE, Ranchi**” at “**Ranchi.**”

(ii) Banker's certificate pertaining to Earnest Money certifying that the DD/BC has been prepared from the account of the tenderer.

Tenderer must submit Certificate from the Bank issuing DD/BC in the following format :

*"Certified that the Demand Draft/Banker's Cheque No.dt.
amounting to Rs. has been issued by
..... (Name of the Bank & Branch) after debiting the amount from A/c. No.
..... held by being operated by Sri
..... Sealed & Signed on behalf of the Bank."*

(iii) (a) Documentary proof of satisfactory execution, in its name as prime contractor in Central/State Govt Deptt./Organisation, P.S.U's only, of having successfully completed similar works during last 7 (seven) years **ending 31st December, 2016** should be either of the following :

“Three similar completed works each costing not less than **40% of estimated cost**

or

Two similar completed works each costing not less than **50% of estimated cost**

or

One similar completed work costing not less than **80% of estimated cost.**”

The “similar nature of works” shall mean the electrical engineering works executed of predominantly the same nature as that of the tendered work i.e. electrical works relating to Manufacturing and supply of LED light or PV module (for OEM) or supplying and installation of solar based street LED light (for authorized dealer or channel partner)

Experience for those works only shall be considered for evaluation purposes, which match eligibility requirement stipulated above, on or before the last day of the month previous to one in which tender has been invited (publication date of NIT). The experience of incomplete/ongoing works as on last date of eligibility period will not be considered for evaluation.

In all the above cases, while considering the value of completed works, the full value of completed work be considered whether or not the date of commencement is within the said 7(seven) years period.

The cost of previous completed works shall be given a simple weightage of 5% to bring them at current price level, while evaluating the qualification requirement of the bidder. Such weightage shall be considered after end date of completion. Updating will be considered for full or part of the year(total no. of days/365) i.e considering 365 days in a year , till the last day of the month previous to the one in which bid has been invited. i.e. **31st December, 2016.**

In case the bidder is not a prime contractor but a sub-contractor, the bidder's experience as sub-contractor will be taken into account, against suitable document that the contract in support of qualification is a sub-contract in compliance with the provision

of such sub-contracts in the original contract awarded to prime contractor .The document may be issued by owner/Govt. department on behalf of the owner.

(iv) Average annual financial turnover of electrical works during the last 3 (three) years, ending 31st March of the previous financial year should be at least 30% of the estimated cost.

The turnover figures shall be taken from the P&L Statement from Chartered Accountant or completion/ payment certificate issued by the employer.

(v) Photocopy of Permanent Income Tax Account Number (PAN).

vi) Photocopy of Sales Tax Registration/TIN.

vii) Photocopy of Service Tax Registration.

viii) Affidavit regarding genuineness of the papers submitted and information furnished and non-relation in Central Mine Planning And Design Institute, Gondwana Place, Kanke Road, Ranchi duly authenticated by Notary as per format given hereinafter on a non-judicial stamp paper of Rs. 10/- (Five) As provided in the formats ANNEXTURE-I (if applicable).

ix) Any one of the following document submitted in support of legal status of the bidder.

a. Affidavit or any other document to prove proprietorship/individual status of the bidder.

b. Partnership deed containing name of partners.

c. Memorandum & Article of Association with certificate of incorporation containing name of bidder

d. Joint Venture agreement containing name of partners and lead partner, Power of Attorney to the Lead Partner and share of each partner).

x) Power of Attorney duly attested by notary of the person signing the Tenders, if Partner / Proprietor of the firm not signing the Tenders.

xi) The bidders would give a declaration that they have not been banned or delisted by any Govt. or Quasi Govt. Agencies or PSU's.

xii) The tenderers are required to be registered under CMPF/EPF scheme and their employees should be covered under EPF/CMPF scheme. They should furnish such proof alongwith PART-I of the tender. (If Applicable)

xiii) Tenderers should have valid electrical contractor's licence issued by Govt. Licensing Board. In case of partnership firm, the licence shall be valid for the partnership firm. The tenderer shall submit attested photocopy of complete licence showing name of firm, contractor's name and address of the firm. The proof of validity of the licence for the proprietorship firm or partnership firm or limited company shall be provided by the tenderer.

xiv) Documentary evidence confirming that the bidder is having its office in the state of Jharkhand at least since last one year. In support of the this eligibility criteria the bidders should submit following information:

1) Full office address of the bidder at Jharkhand.

2) Tax return document with office address or Banker's certificate confirming that the bidder is having an office in Jharkhand since last one year.

xv) Declaration by the bidder in their letter head that they shall use indigenously manufactured PV module and also shall use Lead Acid batteries and luminaires with LED lamps of reputed make having all India network, having branches at least in 15 states of India

5. Tenders shall be rejected outright without any reference if the documents submitted by the tenderers alongwith their tender fail to prove eligibility in terms of above criteria. **Documents submitted alongwith the tenders shall be final and no supplementary document shall be accepted.**

6. In Price Part, the **overall lowest** tenderer shall be considered for award of the work. Being lowest in any part of the tender shall be of no consequence and such tenderers shall not have any claim for award of part work.

7. Tenders submitted shall become property of the company. Un-opened price bids of the ineligible tenderers shall be destroyed.

8. If the rate quoted by the Contractor for item rate/percentage rate is un-workable (below more than 15%) in comparison to justified rate prepared by the department / owner, the difference between 85% of the owner's justified price and quoted price in cost between the two will be deposited by the contractor in advance as Guarantee. This will be called as Additional Performance

Security. The additional Performance Security will be released after successful progress of the work and in the manner as stated elsewhere in the document.

9. The Company shall be at liberty to deduct/appropriate from the security deposit such sums as are due and payable by the contractor to the company as may be determined in terms of the contract and the amount appropriated from the security deposit shall have to be restored by further deduction from the contractor's subsequent on-account running bills, if any.
10. Deviations sought by the bidders, whether they are technical or commercial deviations, must only be given in the schedules prescribed for them. Any willful attempt by the bidders to camouflage the deviations by giving them in the covering letter or in any other documents than the prescribed schedules may render the bid itself as non-responsive.

Process For Evaluation of Tenders

- (i) Tender Document shall be issued to intending bidders on request and production of cost of Tender document as stipulated in NIT.
- (ii) Tenders shall be submitted in two Parts as stipulated in NIT in the tender box placed in the office of the HOD(E&M),RI-III CMPDI , Kanke Road, Ranchi or as specified in NIT within the scheduled date and time.
- (iii) Part-I of the tenders will be opened in presence of attending bidders by duly constituted committee. The Part-II (Price bid) of all the bidders alongwith the workable/justified value of the work duly approved by the competent authority shall be sealed in a separate cover which would be kept in safe custody in the office of the HOD(E&M),RI-III CMPDI , Ranchi.
- (iv) Part-I of the tenders shall be evaluated on scrutiny of Papers/Documents submitted by the tenderers along with the tenders strictly in terms of eligibility criteria as mentioned vide clause no. 4 of "instruction to the bidders" of NIT. The bidders who fail to fulfill eligibility criteria shall not be entitled for opening of their Part : II i.e. **price bid**.

Bidders should also note that documents submitted along with the tender shall be final. No further correspondence with regard to completeness of documents submitted shall be made. Supplementary documents shall not be accepted unless they are asked for by the company.

- (v) Part-II (**Price bid**) of those bidders who fulfil the eligibility criteria of **Part-I of the tender shall only be opened** on scheduled date and time with intimation to the eligible bidders. Tenders submitted shall be the property of the company. The company shall have no obligation to return the un-opened Price Bids to the in-eligible tenderers.
- (vi) The overall lowest tenderer shall be considered for award of the work (including applicable service tax). Being lowest in any Part of the tender shall be of no consequence and such tenders shall not have any claim for award of Part work.

Evaluation of lowest offered value shall be compared with the workable rate / justified value already prepared by the technical representatives of HOD(E&M),RI-III CMPDI, Ranchi in line with the CIL CIVIL ENGINEERING MANUAL.

Additional performance security shall be applicable if the bid price is below 15% of the justified price, finalized by the owner. The amount of such additional performance security shall be the difference between 85% of the owner's justified price and quoted price.

Additional performance security shall be deposited in the form of Bank draft in favour of "**CMPDI Ltd. REGIONAL INSTITUTE,RANCHI**" payable at Ranchi before execution of contract agreement.

Additional performance security shall be furnished by bidder along with normal performance security.Failure to submit such additional performance security may result into termination of the contract.

This additional performance security will not carry any interest and shall be and shall be released in the following manner:

- i) 30% of Additional performance security will be released after 60% of the total work is completed.
- ii) 50% of Additional performance security will be released after 80% of the total work is completed.
- iii) 100% of Additional performance security will be released after total work is completed.

In case the offered value is more than the workable/justified value and beyond the provision of the CIL CIVIL ENGINEERING MANUAL, if deems fit, attempts shall be made by the Tender Committee to reduce the value through negotiation with the lowest bidder and liable to be cancelled if the quoted value is beyond provisions in Civil Engineering Manual.

- (vii) After observing the above formalities TCR would be processed, as the case may be, as per the guide lines of "*CIL CIVIL ENGINEERING MANUAL.*"

GENERAL TERMS AND CONDITIONS

1. Definitions

i) The word "Employer" or "Company" or "Owner" wherever occurs in the conditions, means the Central Mine Planning & Design Institute Limited, represented at Head Quarters of the Company by the CMD or his authorized representatives or any other officer specially deputed for the purpose who will employ the contractor.

ii) The word "Principal Employer" wherever occurs, means the officer nominated by the Company to function on its behalf.

iii) The word "Contractor/ Contractors" wherever occurs means the successful bidder /bidders who has/have deposited the necessary Earnest money and has/have been given written intimation about the acceptance of tender and shall include legal representative of such individual or persons composing a firm or a company or the successors and permitted assignees of such individual, firm or Company, as the case may be and any constitutional, or otherwise change of which shall have prior approval of the employer.

iv) "Site" means the land and places including any building and erection thereon, over, under, in or through which the Permanent works or Temporary works designed by the Engineer-in-Charge are to be executed and any other lands and places provided by the Employer for working space or any other purpose as may be specifically designated in the Contract as forming part of the site.

v) The term "Sub-Contractor" as employed herein, includes those having a direct contract with Contractor either on piece rate, item rate, time rate or any other basis and it includes one who furnishes work to a special design according to the plans or specifications of this work but does not include one who merely supplies materials.

vi) "Accepting Authority" shall mean the management of the company and includes an authorized representative of the company or any other person or body of persons empowered on its behalf by the company.

vii) "Engineer-in-charge" shall mean the officer nominated by the company in the Civil Engineering cadre/ discipline who is competent to direct supervisors and authorised to be in charge of the works for the purpose of this contract. The Engineer-in-Charge /Designated Officer in Charge, who is of an appropriate seniority, will be responsible for supervising and administering the contract, certifying payments due to the contractor, valuing variations to the contract, awarding extension of time and valuing compensation events. The Engineer-in-Charge /Designated Officer in Charge may further appoint his representatives i.e. another person/Project Manager or any other competent person and notify to the contractor who is directly responsible for supervising the work being executed at the site, on his behalf under their Delegation of Powers of the company. However, overall responsibility, as far as the contract is concerned, will be that of the Engineer-in-Charge/Designated Officer in Charge.

viii) The "Contract" shall mean the notice inviting tender, the tender as accepted by the Company, the work order issued to the contractor, and the formal contract agreement executed between the company and the contractor together with the documents referred to therein including general terms and conditions, special conditions, if any, scope of work, frozen terms & conditions/technical parameters/scope of work and revised offer, if any, specifications, drawings, including those to be submitted during progress of work, schedule of quantities with rates and amounts.

ix) A "Day" shall mean a day of 24 hours from midnight to midnight.

x) The "Work" shall mean the works required to be executed in accordance with the contract/work order or parts thereof as the case may be and shall include all extra or additional, altered or substituted works or any work of emergent nature, which in the opinion of the Engineer-in-charge, become necessary during the progress of the works to obviate any risk or accident or failure or become necessary for security.

xi) "Schedule of Rates" referred to in this conditions shall mean the standard schedule of rates prescribed by the company and the amendments issued from time to time.

xii) "Contract amount" shall mean:

a) in the case of turnkey / lump sum contracts the total sum for which tender is accepted by the company.

b) in the case of other types of contracts the total sum arrived at based on the individual rate(s) / percentage rate(s) quoted by the tenderer for the various items shown in the Schedule of Quantities" of the tender document as accepted by the Company with or without any alteration as the case may be.

xiii) "Written notice" shall mean a notice or communication in writing and shall be deemed to have been duly served if delivered in person to the individual or to a member of the contractors firm or to an office of the company for whom it is intended, or if delivered at or sent by registered mail / e-mail to the last business address known to him who gives the notice.

xiv) "The constructional plant" means all appliances, tools, plants or machinery of whatsoever nature required in or about the execution, completion or maintenance of the works but does not include materials or other things intended to form part of the permanent work.

xv) "Letter of Acceptance of Tender" means letter giving intimation to the tenderer that his tender has been accepted in accordance with the provisions contained in that letter.

xvi) "Department" means the E&M Department of Coal India Limited or any of its subsidiary companies/units represented by the appropriate authority.

xvii) "Act of insolvency" means as it is designed by Presidency Town Insolvency Act or Provincial Insolvency Act or any act amending such originals.

xviii) The words indicating the singular only also include the plural and vice-versa where the context so requires.

xix) "Drawings"/"Plans" shall mean all:

- a. drawings furnished by the owner with the bid document , if any, as a basis for proposals,
- b. working drawings furnished by the Owner after issue of letter of acceptance of the tender to start the work,
- c. subsequent working drawings furnished by the owner in phases during progress of the work, and
- d. drawings, if any, submitted by the contractor as per provision of the contract and duly approved by the owner.

xx) "Codes" shall mean the following, including the latest amendments, and/or replacements, if any:

- a. Bureau of Indian Standards relevant to the works under the contract and their specifications.
- b. Indian Electricity Act and Rules and Regulations made there under.
- c. Indian Mines Act and Rules and Regulations made there under.
- d. Any other Act, rule and regulations applicable for employment of labour, safety provisions, payment of provident fund and compensation, insurance etc.

2. Contract Documents and Miscellaneous Provisions :

The following documents shall constitute the contract documents :

i) Articles of Agreement.

ii) Letter of Acceptance of Bid/ Work Order indicating deviation, if any, from the conditions of contract incorporated in the tender document issued to the bidder.

iii) Notice Inviting Tender and Instructions to Bidders.

iv) Conditions of Contract including General Terms & Conditions of contract, Additional Terms & Conditions, Special Terms & Conditions, and Commercial Terms & Conditions etc.- as applicable.

v) Frozen terms & conditions / technical parameters and revised offer, if any.

vi) Specifications/ scope of Work, if any.

vii) Schedule of quantities (or Bill of Quantities) along with accepted rate.

viii) Contract drawings and work programme.

ix) Safety Code etc. forming part of the tender,

x) Integrity Pact (If applicable).

2.1 The contractor shall enter into and execute contract agreement in the prescribed form. The cost of the stamp papers for the contract agreement shall be borne by the contractor. Two sets of contract document/agreements shall be prepared and signed by both the parties. One of the sets shall be stamped "Original" and the other "Duplicate". The duplicate copy will be supplied to the contractor free of cost and the original is to be retained by the company.

For additional copy, cost to be charged. All additional copies should be certified by the Engineer-in-Charge.

The contractor shall keep copy of these documents on the site/place of work in proper manner so that these are available for inspection at all reasonable times by the Engineer-in-charge, his representatives or any other officials authorized by the company for the purpose.

2.2 The contract document shall not be used by the contractor for any purpose other than this contract and the contractor shall ensure that all persons employed for this contract strictly adhere to this and maintain secrecy, as required of such documents.

2.3 The local Court, where the subject work is to be executed shall have exclusive jurisdiction in all matter arising under this contract.

2.4 The Contract Agreement will specify major items of supply or services for which the contractor proposes to engage sub-contractor/sub-vendor. The contractor may from time to time propose any addition or deletion from any such list and will submit proposals in this regard to the Engineer-in-Charge / Designated Officer in charge for approval well in advance so as not to impede the progress of work. Such approval of the Engineer-in-Charge / Designated Officer in Charge will not relieve the contractor from any of his obligations, duties and responsibilities under the contract.

2.5 Acceptance of Offer :

"Letter of Acceptance"- is an acceptance of offer by the company. The tenderer should acknowledge the receipt of the order within 10 days of mailing of LOA and any delay in acknowledging the receipt will be treated as a breach of contract and compensation for the loss caused by such breach will be declared by the company by forfeiting EMD.

3. Discrepancies in contract documents & Adjustments thereof

The documents forming part of the contract are to be treated as mutually explanatory of one another and in case of discrepancy between schedule of quantity, the specifications and/or drawing, the following order of preference shall be observed;

a) Description in Bill of Quantities of work.

- b) Particular specification and special conditions, if any
- c) Drawings.
- d) General specifications.
- e) BIS Specifications.

3.1 In the event of varying or conflicting provision in any of the document(s) forming part of the contract, the Accepting Authority's decision/clarification shall hold good with regard to the intention of the document or contract as the case may be.

3.2 Any error in description, quantity or rate in Bill of Quantities or any omission there from, shall not vitiate the contract or release the contractor from discharging his obligations under the contract including execution of work according to the Drawings and Specifications forming part of the particular contract document.

4.00 Security Deposit:

4.1 Security Deposit shall consist of two parts;

- a) Performance Security to be submitted at award of work and
- b) Retention Money to be recovered from running bills.

The security deposit shall bear no interest.

4.2 Performance Security should be 5% of contract amount and should be submitted within 28 days of issuance of LOA by the successful bidder in any of the form given below :

- A Bank Guarantee in the form given in the bid document from any Scheduled bank. The BG issued by outstation bank shall be operative at its local branch at Ranchi or branch at Ranchi. Bank Guarantee against Performance Security shall be applicable if the amount of Performance Security exceeds Rs. 5.0 lakhs.
- Govt. Securities, FDR or any other form of deposit stipulated by the owner and duly pledged in favour of owner.
- Demand Draft drawn in favour of “**CMPDI Ltd. REGIONAL INSTITUTE, RANCHI**” on any Scheduled Bank payable at its Branch at Ranchi.

The Earnest Money/ Bid Security deposited in the form of Bank Guarantee shall be discharged when the Bidder has signed the Agreement and furnished the required Performance Security/ 1st part of security deposit.

The bid security deposited in the form of Demand draft/ cash may be adjusted against the Performance security (1st part of security deposit) at bidder's option.

If performance security is provided by the successful bidder in the form of bank guarantee it shall be issued either –

- (a) at Bidder's option by a Scheduled Bank , or
- (b) by a foreign bank located in India and acceptable to the employer.

The validity of the Bank Guarantee shall be for a period of one year or ninety days beyond the period of contract /extended contract period (if any), whichever is more.

Failure of the successful bidder to comply with the requirement as above shall constitute sufficient ground for cancellation of the award of work and forfeiture of the bid security/ earnest money.

In addition to the above penal measures, the bidder will not be allowed to participate in the re tendering process. The bidder may also be debarred from participating in future tenders in the subsidiary for a minimum period of 12 Months.

4.3 5% Performance Security should be refunded within 14 days of the issue of defect liability certificate (taking over certificate with a list of defects).

4.4 All running on account bills shall be paid at 95% (ninety five percent) of work value. The balance 5% shall be treated as retention money and will be second part of security deposit.

Retention Money may be refunded against equivalent Bank Guarantee, on written request of the contractor, on its accumulation to a minimum amount of Rs 5 lakhs subject to the condition that amount of any Bank Guarantee except last one, shall not be less Rs. 5 lakhs.

However, Bank Guarantee against retention money shall be with suitable validity based on nature of work which shall be 90 days beyond the defect liability period, but in no case less than the period of one year.

Bank Guarantee is to be submitted in the format prescribed by the company. Bank Guarantee shall be irrevocable and will be from Scheduled Banks as elaborated at Cl.4.2.

4.5 Retention Money should be refunded after issue of No Defect Certificate.

4.6 The Company shall be at liberty to deduct/appropriate from the security deposit such sums as are due and payable by the contractor to the company as may be determined in terms of the contract, and the amount appropriated from the security deposit shall have to be restored by further deduction from the contractors subsequent on account running bills, if any.

4.7 REFUND OF SECURITY DEPOSIT: The refund of security deposit shall be subject to company's right to deduct/appropriate its due against the contractor under this contract or under any other contract.

On completion of the entire work and issue of defect liability certificate (taking over certificate with a list of defects) by the Engineer-in-charge, one half of the security deposit remaining with the company

(Performance Security) shall be refunded as elaborated at Cl. No.4.3.

The other half (Retention Money) shall be refunded to the contractor after issue of No Defect Certificate by the Engineer-in-Charge on the expiry of Defect Liability Period of one year , subject to the following conditions:

a) Any defect/defects in the work, if detected after issue of defect liability certificate (Taking over certificate with list of defects) is/are rectified to the satisfaction of the Engineer-in-Charge within the said defect liability period of one year or on its due extension till completion of the rectification works as required.

b) In the case of building work or other work of similar nature, the refund shall be made on the expiry of the said six months period or at the end of one full monsoon period i.e. June to September, whichever is later in point of time and any defects such as leakages in roof, effloresces in walls, dampness, defects in drainage etc. should be rectified to the satisfaction of Engineer-in-Charge.

NB: In case of Maintenance contracts, that ends with successful completion of work, where question of Defect Liability Period does not arise (e.g. sweeping / cleaning, horticulture, tank cleaning, jungle cutting, grass cutting, surface dressing etc.), the performance security and retention money (second part of bid security) can be released simultaneously after completion of work and taking over by department.

4.8 Additional performance security: (applicable for item rate as well as percentage rate tenders):

Additional performance security shall be applicable if the bid price is below 15% of the justified price, finalized by the owner. The amount of such additional performance security shall be the difference between 85% of the owner's justified price and quoted price.

Justified price shall be finalized by the owner on the basis of prevalent market rate of materials and labour analysed as per standard analysis of rate of CPWD, and shall be binding on the bidder.

Additional performance security shall be furnished by bidder along with normal performance security.

Failure to submit such additional performance security may result into termination of the contract.

This additional performance security will not carry any interest and shall be released in the following manner:

- i) 30% of Additional performance security will be released after 60% of the total work is completed.
- ii) 50% of Additional performance security will be released after 80% of the total work is completed.
- iii) 100% of Additional performance security will be released after total work is completed.

Additional performance security may be furnished in the shape of BG or any of the forms as applicable for performance security.

4.9 Refund of Security Deposit regarding Specialized Item of Works (shall be applicable only when relevant item exists in the contract and shall be for 10% of value of such items in the contract or for 10% of value of contract with such specialized items only).

a) For some specialized items of work such as anti-termite treatment, waterproofing work, kiln seasoned and chemically treated wooden shutters, or any other item of work deemed as such 'specialized' by Engineer-in-Charge that are entrusted to specialized firms or contractors who associate specialized agencies, the contractor / firm executing the work should be asked to give a specific guarantee that they shall be responsible for removal of any defects cropping up in these works executed by them during the guarantee period. The form of the guarantee to be executed by the contractors shall be as enclosed.

b) 10% of the security (performance security and retention money) deposited / deducted from the bills of the contractors, relevant to the item(s), shall be refunded to him after expiry of Guarantee period. The security amount relevant to the item(s) of work, may be released after 12 months of completion of work against equivalent BG and furnishing Guarantee as at (a) above.

4.10 Refund of security deposit for contracts with supply installation and commissioning of equipment i.e with Mechanical & Electrical Works (shall be applicable only when relevant item exists in the contract)

For some specialized contracts like Pump house, Intake well etc. there may be Civil works as well as Mechanical and Electrical works. For such works 10% as security deposit (performance security and retention money)- deposited / deducted from the bills of the contractors shall be refunded to him after expiry of guarantee period, which will be one year from the date of commissioning of equipment/ completion of work and/or rectification of any defect which may be detected in the individual equipment for the whole system under the contract, whichever is later.

In addition, all types of manufacturers guarantee/warranty wherever applicable are to be issued/ revalidated in the name of the owner by the contractual agency and will be covered with relevant counter guarantee. Bank guarantees furnished against Performance Security and Retention Money shall be validated for a period 90 days beyond the guarantee period.

5. Deviations/Variations in Quantities and Pricing.

The quantities given in the "Schedule of Quantities" are based on estimates and are meant to indicate the extent of the work and to provide a uniform basis for tendering and any variation either by addition or omission shall not vitiate the contract.

5.1 The company through its Engineer-in-Charge or his representative shall, without radically changing the original scope and nature of the work, under contract, have power to make any alterations in or additions to or substitution of the original specifications, drawings, designs and instructions that may appear to be necessary or advisable during the progress of the work.

The contractor shall be bound to carry out the work(s) in accordance with the instructions given to him in writing by the Engineer-in-Charge or his representative on behalf of the company. Such altered or additional or substituted work, which shall form part of the original contract, shall be carried out by the contractor on the same terms and

conditions in all respects on which they agreed to do the main work and at the same rate/rates as are specified in the contract/ work-order.

5.2 The right is reserved to cancel any items of work included in the contract agreement or portion thereof in any stage of execution if found necessary to the work and such omission shall not be a waiver of any condition of the contract nor invalidate any of the provisions thereof.

5.3 If the additional, altered or substituted work includes any class of work for which rate/rates is/are not specified in the contract/work order, rates for such items shall be determined by the Engineer-in-Charge as follows:

a) In the case of percentage tenders, if the rate for the extra item of work executed is available in the company's approved SOR, it will be paid at the schedule rate plus or minus the accepted percentage as per contract.

However, if the extra item is not available in company's approved SOR, then the rate for such extra item(s) shall be dealt as at (c) below.

b) In case of item rate tenders, the rate for extra item shall be derived from the rate for similar item or near similar item / class of work available in the agreement schedule of work or by analysis of rates as at below and the lower rate out of the above two shall be considered.

In case of composite item rate tenders, where two or more schedule of quantities for similar item description may form part of the contract, the applicable rates shall be taken from the Schedule of Quantities of that particular part in which the deviation is involved, failing that at the lowest applicable rate for the similar item of work in the other schedule of quantities.

For derivation of rates based on analysis, the same shall be done by analysis on prevalent market rate of materials and labour based on standard norms of analysis of rate of C.P.W.D.

c) In the case of extra item(s) that are completely new, and are in addition to the items contained in the contract, the contractor may within 15 days of receipt of order or occurrence of the item(s) claim rates, supported by proper analysis. The Engineer-in-Charge shall determine the rate(s) by analysis based on prevalent market rate of material and labour and on standard norms of analysis of rate of CPWD.

d) In case of combined tender with partly item rate for non-schedule items & partly percentage tenders for SOR items, the rate for extra item shall be derived as at (b) & (c) above in case of non-schedule items rates and in case of percentage rates for SOR items the rate for extra item shall be derived as at (a) above.

In case of any difference between the contractor and the Engineer-In Charge as to the fixation of rates, the matter shall be referred to the accepting authority of the company i.e. GM(E&M) of the company or Staff Officer/HOD(E&M) for the work awarded at Company Hqrs. level and Area level/Regional Institute respectively, whose decision shall be final and binding on the contractor.

5.4 Alteration in the quantities shall not be considered as a change in the condition of the contract nor invalidate any of the provision thereof provided that a deviation estimate / revised estimate / supplementary agreement for the item(s) involved is made. Such approval shall be from appropriate authority.

5.5 Payment for such deviated items [additional/ altered / substituted items of work of the agreement schedule] shall be made in the contractors running on account bills, till the revised estimate / deviation estimate regularizing these items are sanctioned by the competent authority of the company, at the provisional rates and shall not exceed :

a) 75% of the rate recommended by the Engineer-in-Charge to the accepting authority of the company i.e. GM(E&M) of the company or SO/HOD(E&M) of the Area/Regional Institute, if the rate is directly available in the SOR of the company/ if the rate is derived from available rate of BOQ.

b) 50% of the rate recommended by the Engineer-in-Charge to the accepting authority of the company, i.e. GM(E&M) of the company or SO/HOD(E&M) of the Area/Regional Institute, if it is analysed item rates based on prevalent market rates of materials and labour following CPWD norms.

Total payment for such extra items of work shall not exceed 10% of work order / agreement value / approved deviation estimate value. Also total payment including extra items of work shall not exceed the work order / agreement / approved deviation estimate value.

5.6 PROVISIONS FOR DEALING WITH VARIATIONS IN RESPECT OF ABNORMALLY HIGH RATE AND ABNORMALLY LOW RATE ITEMS.

The abnormally high rate items are those whose quoted rates are more than 20% of the justified rates decided by the owner.

The abnormally low rate items are those whose quoted rates are less than 20% of the justified rates decided by the owner.

In case of Item Rate Tenders, the revision of rates for (i) abnormally high rate items and (ii) abnormally low rate items, shall become operative under the following circumstances:-

For increase in quantity of more than 25% in respect of works executed below plinth level and 10% in respect of works executed above plinth level.

Quantity variation beyond the limit mentioned above shall be dealt by arriving at new rate based on prevalent market rate of materials and labour analysed as per standard analysis of rate of CPWD. Payment of extra quantity over the permitted quantity as explained above would be made on the basis of the new analysed rate.

The variation in quantity of abnormally low rate items for item rate tenders shall not be permitted below 25% for the items below plinth level and below 10% for the items above plinth level of the agreement schedule quantity, but in exceptional cases with written consent of Engineer-in-Charge arising out of technical necessity.

The above provisions shall be applicable for item rate tenders only and not applicable for percentage rate tenders for works based on standard schedule of rates of the company.

For the purpose of operation, the following works shall be treated as works related to foundation, unless otherwise defined in the contract.

- a) For Buildings: All works up to 1.2 metres above ground level or up to floor 1 level whichever is lower.
- b) For abutments, piers and well steining : All works up to 1.2m above the bed level.
- c) For retaining walls, wing walls, compound walls, chimneys, overhead reservoirs / tanks and other elevated structures: all works up to 1.2 metres above the ground level.
- d) For reservoirs / tanks (other than overhead reservoirs / tanks): All works up to 1.2 metres above the ground level.
- e) For basement : all works up to 1.2m above ground level or up to floor 1 level whichever is lower.

For Roads, all items of excavation and filling including treatment of sub base

5.7 The time of completion of the originally contracted work shall be extended by the company in the event of any deviation resulting in additional cost over the awarded value, if requested by the contractor as follows:-

(i) In the proportion which the additional cost of the altered, additional or substituted work (in value) bears to the original tendered value plus.

(ii) 25% of the time calculated in (i) above or such further additional time as may be considered reasonable by the Engineer-in-Charge.

5.8 The company through its Engineer-in-Charge or his representative, on behalf of the company, shall have power to omit any part of the work in case of non-availability of a portion of the site or for any other reason and the contractor shall be bound to carry out the rest of the work in accordance with the instructions given by the Engineer-in-Charge. No claim from the Contractor shall be entertained/ accepted on these grounds.

5.9 In the event of any deviation being ordered which in the opinion of the contractor changes radically the original scope/nature of the contract, the contractor shall under no circumstances suspend the work, either original or altered or substituted, and the dispute/disagreement as to the nature of deviation and the rate/rates to be paid for such deviations shall be resolved separately with the company as per the procedures/ norms laid down hereafter.

6. Time for Completion of Contract, Extension thereof, Defaults and Compensation for Delay

Time is the essence of the contract and as such all works shall be completed within the time stipulated in the contract/ work order. The work shall, throughout the stipulated period of contract, be carried out with all due diligence on the part of the contractor.

Immediately after the contract is concluded i.e. LOA / Work Order is issued, the Engineer-in-Charge and the contractor shall agree upon a detailed time and progress chart prepared based on BAR CHART/ PERT CPM techniques on the basis of a construction schedule submitted by the contractor at the time of executing contract showing the order in which the work is proposed to be carried out within the time specified in the LOA /work order.

For the purpose of this detailed time and progress chart, the work shall be deemed to have commenced on the expiry of 10* (ten) days from the issue of Letter of Acceptance of Tender or 7(seven) days after handing over the site of work or handing over reasonable number of working drawings to the contractor or the period of mobilization allowed in the work order for starting the work in special circumstances, whichever is later.

* For Specialized Works/ High Value Works (above Rs. 5 crores), the period shall be 30 days.

6.1 If the contractor, without reasonable cause or valid reasons, commits default in commencing the work within the aforesaid time limit, the company shall, without prejudice to any other right or remedy, be at liberty, by giving 15 day's notice in writing to the contractor to commence the work, failing which to forfeit the Earnest Money deposited by him and to rescind the Letter of Acceptance of Tender/Work Order and also to debar the contractor to take part in the future re-tender.

The Company may debar such defaulting Contractors from participating in future Tenders for a minimum period of 12(twelve) months.

6.2 If the contractor fails to complete the work and clear the site on or before the date of completion or extended date of completion, he shall without prejudice to any other right or remedy available under the law to the company on account of such breach, pay as compensation (Liquidated Damages):

i) @ half percent ($\frac{1}{2}$ %) of the contract amount/Revised Contract amount whichever is less, per week of delay.

OR

ii) $\frac{1}{2}$ % of the contract-value of group of items/ revised completion value of group of items whichever is less, per week of delay, for which a separate period of completion is originally given.

The aggregate of such compensation/ compensations shall not exceed:

i) 10% (ten) percent of the total amount of the contract/ Revised contract amount, whichever is less.

OR

ii) 10% of the contract-value of group of items/ revised completion value of group of items whichever is less, for which a separate period of completion is originally given.

The amount of compensation may be adjusted or set off against any sum payable to the contractor under this or any other contract with the company.

6.2.1 The company, if satisfied, that the works can be completed by the contractor within a reasonable time after the specified time of completion, may allow further extension of time at its discretion with or without the levy of L.D. In the event of extension granted being with L.D, the company will be entitled without prejudice to any other right or remedy available in that behalf, to recover from the contractor as agreed damages equivalent to half percent of the contract value of the works for each week or part of the week subject to a ceiling as described at Cl.6.2.

6.2.2 The company, if not satisfied that the works can be completed by the contractor, and in the event of failure on the part of the contractor to complete work within further extension of time allowed as aforesaid, shall be entitled, without prejudice to any other right, or remedy available in that behalf, to rescind the contract.

6.2.3 The company, if not satisfied with the progress of the contract and in the event of failure of the contractor to recoup the delays in the mutually agreed time frame, shall be entitled to terminate the contract.

6.2.4 In the event of such termination of the contract as described in clauses 6.2.2 or 6.2.3 or both, the company, shall be entitled to impose penalty/LD as deliberated at Clause 10. Additionally the contractor shall be debarred from participating in the future tenders for a minimum period of 12 months.

6.3 The company may at its sole discretion, waive the payment of compensation on request received from the contractor indicating valid and acceptable reasons if the entire work is completed within the date as specified in the contract/work order or as validly extended date without stipulating any compensation for delay.

6.4 Extension of date of completion: On occurrences of any events causing delay as stated here-under, the contractor shall intimate immediately in writing to the Engineer-in-Charge.

a) Force Majeure:

i) Natural phenomena like unprecedented flood and draught, earthquakes & epidemics.

ii) Political upheaval, civil commotion, strikes, lockouts, acts of any Govt. (domestic/foreign) including but not limited to war, proprieties, and quarantine embargoes.

The successful bidder/ contractor will advise in the event of his having to resort to this clause by a registered letter duly certified by the local chamber of commerce or statutory authorities, the beginning and end of the cause of delay, within fifteen days of the occurrence and cessation of such Force Majeure condition.

In the event of delay due to Force Majeure for more than one month the contract may be terminated at the discretion of the company. Termination under such circumstances will be without any liability on either side.

For delays arising out of Force Majeure, the bidder / contractor will not claim extension in completion date for a period exceeding the period of delay attributable to the clauses of Force Majeure and neither company nor bidder / contractor shall be liable to pay extra cost (like increase in rates, remobilization advance, idle charges for labour and materials etc.) provided it is mutually established that Force majeure conditions did actually exists.

b) Serious loss or damage by fire and abnormally bad weather.

c) Non-availability of stores which are the responsibility of the company to supply as per contract.

d) Non-availability of working drawings in time, which are to be made available by the company as per contract during progress of the work.

e) Delay on the part of the contractors or tradesmen engaged by the company not forming part of the contract, holding up further progress of the work.

f) Non-availability or breakdown of tools and plant to be made available or made available by the company.

g) The execution of any modified or additional items of work or excess quantity of work.

h) Any other causes which, at the sole discretion of the company, is beyond the control of the contractor.

6.4.1 A HINDRANCE REGISTER (refer Page 54) shall be maintained by both department and the contractor at site to record the various hindrances, as stated above, encountered during the course of execution.

Hindrance register will be signed by both the parties. The contractor may also record his observations in the Hindrance Register. In case the contractor has a different opinion for hindrance and a dispute arises then the matter would be referred to the EI(E&M) and or the next higher authority whose decision would be final & binding on the contractor & the decision to be communicated within 15 days.

6.4.2 The contractor shall request the company in writing for extension of time within 15 days of happening of such event causing delay stating also, the period for which extension is required. The company may, considering the genuinity of the request, give a reasonable extension of time for completion of the work. Such extension shall be communicated to the contractor in writing by the company through the Engineer-in- Charge within 1(one) month of the date of receipt of such request.

6.4.3 The opinion of the Engineer-in-charge, whether the grounds shown for the extension of time are or are not reasonable, is final. If the Engineer-in-charge is of the opinion that the grounds shown by the contractor are not reasonable and declines to the grant of extension to time, the contractor cannot challenge the soundness of the opinion.

The opinion of the Engineer-in-charge that the period of extension granted by him is proper or necessary is not, however, final. If the contractor feels that the period of extension granted is inadequate he can appeal to the GM(E&M)/ CM(E&M) of the company for consideration on the question whether the period of extension is or is not proper or necessary.

6.4.4 Provisional extension of time may also be granted by the Engineer-in-Charge during the course of execution, on written request for extension of time within 15(fifteen) days of happening of such events as stated above, reserving the company's right to impose/ waive penalty at the time of granting final extension of time as per contract agreement.

6.4.5 When the period fixed for the completion of the contract is about to expire, the question of extension of the contract may be considered at the instance of the Contractor or the Department or of both. The extension will have to be by party's agreement, express or implied.

In case the contractor does not apply for grant of extension of time within 15(fifteen) days of the hindrance occurring in execution of the work and the department wants to continue with the work beyond the stipulated date of completion for reason of the work having been unavoidably hindered, the Engineer-incharge can grant extension of time even in the absence of application from the contractor.

Such extension of time granted by the Engineer-in-Charge is valid provided the contractor accepts the same either expressly or implied by his actions before and subsequent to the date of completion. Such extension of time shall be without prejudice to Company's right to levy compensation under the relevant clause of the contract.

The contractor shall however use his best efforts to prevent or make good the delay by putting his endeavors constantly as may be reasonably required of him to the satisfaction of the Engineer-in Charge.

7. Material Supply & other facilities :

The contractor shall at his own expense, provide all materials required for the work, unless otherwise specified, and the rates quoted by the contractor shall be for finished work inclusive of all materials required for completion of the work as specified in the contract.

* The company may, of its own or at the request of the contractor, supply such materials as may be Specified, if available, at rate/rates to be fixed by the Engineer-in-charge.

~~7.1 For the materials which the company has agreed to supply for the contract, the contractor shall give in writing of his requirements in accordance with the agreed phased programme to the Engineer in charge sufficiently in advance. The value of materials so supplied shall be set off or deducted from the payment to be made for the items of work in which such materials have been consumed, or from any sum then due or to become due to the contractor thereafter.~~

~~7.2* The company will supply steel both reinforcement and structural and cement at the following rates inclusive of all taxes. The contractor shall bear all the cost for transportation; handling and storage from the issuing store of the company to contractor's work site store.~~

i) Reinforcement Steel *:-

a) M.S. Round : Rs.

b) Tor Steel : Rs.

c) Structural Steel : Rs.

ii) Cement * : Rs.

[* delete whichever is not applicable]

(Clause 7.2 is not applicable for this tender)

~~7.3 If the steel is issued by the department, the wastage of steel shall be the barest minimum. The wastage allowed from theoretical quantity will be upto a maximum of 5% to cover the wastage due to cutting into pieces, bending and other factors. No cut pieces or scrap less than 2 mtr. in length will be taken by the department. Efforts should be made to use the cut pieces of 2 mtr. or above length as far as possible.~~

~~— If the wastage of steel is more than the permissible variation mentioned above the cost of excess wastage made by the contractor shall be recovered at double the issue rates indicated above, or 115% of prevailing market rate including sales tax and general tax during the period of work, whichever is more.~~

~~— No allowances shall be entertained on account of Rolling Margin for the steel either issued by the department or procured by the contractor.~~

~~7.4 If the cement is issued by the department, the variation of 5% will be permitted over the theoretical consumption of cement for value of work up to Rs.10.00 lakhs and 3% for value of work above Rs.10.00 lakhs. In the event of cement consumed is more/less than specified above, the recovery for the quantity of cement consumed in excess or less than the specified quantity shall be made at double the issue rate or 115% of prevailing market rate including sales tax and general tax during the period of work, whichever is more.~~

~~7.5 In case the department is not able to supply cement/steel as per the provisions of the contract, the Engineer in Charge may allow, with the approval of GM/HOD(E&M) of the company, the contractor in writing for procurement of cement/ steel from the approved sources and the extra on this account including transport charges, if any, over the issue rate shall be reimbursed to the contractor on production of authentic documents. Transportation of cement/ steel from the place of purchase to the site of work and proper storage of cement/steel at site shall be contractor's responsibility. He should maintain proper account of cement/steel issued/procured by him and should allow inspection of his godown and his cement/steel account by the concerned Engineer in charge or any other authorized officers of the company. Contractor should draw materials from the company on the basis of actual requirement as assessed by the Engineer in Charge on "as and when required" basis.~~

~~7.6 Recovery of cost of materials issued on sale A/c will be made as per actual consumption basis but the Engineer in Charge will have the discretion for making full recovery while processing a particular bill or asking for the return of the balance materials if the work is not progressing satisfactorily.~~

~~The contractor shall keep accurate record of materials issued by the company, maintain proper account for the materials received and consumed in the work and shall be open to check by the Engineer in Charge or his authorized representative. The contractor shall ensure that such materials are consumed for the contract works only and the Register for the aforesaid account shall be signed both by the representatives of Engineer In Charge and the contractor.~~

~~7.7 All materials, tools and plants brought to site by the contractor including the materials supplied by the company shall be deemed to be held in lien by the company and the contractor shall not have the right to remove the same from the site, without the written permission of the Engineer in Charge. The company shall not however be liable for any loss, theft or damage due to fire or other cause during this period of lien, the responsibility for which shall lie entirely on the contractor.~~

~~7.8 The contractor shall bear the cost of loading, transportation to site, unloading, storing under cover as required etc. as may be necessary for the use and keeping the materials in good condition.~~

~~7.9 Any surplus materials issued by the company, remaining after completion or termination of the contract, shall be returned by the contractor at his cost to the place of issue and the Engineer in Charge shall accept the same at the rate not exceeding the rate at which these were originally issued taking into consideration the deterioration or damage, if any, that may have been caused during the custody of the contractor. In the event, the contractor fails to return the surplus materials out of those supplied by the company, the Engineer in Charge may, in addition to any other liability which the contractor would incur in this regard, by giving notice in writing require the contractor to pay the amount at double the issue rate for such unreturned surplus materials or 115% of the prevailing market rate including Sales Tax & General Tax during the period of work, whichever is more.~~

~~7.10 On completion or on termination of the contract and on complete recovery of secured advance paid by the company, if any, in respect of materials brought to site, the contractor with due permission of the Engineer in Charge shall be entitled to remove at his expenses all surplus materials originally supplied by him and upon such removal, the same shall become the property of the contractor.~~

~~7.11 All charges on account of octroi, terminal or sales tax and other duties on materials obtained for the works from any source (excluding materials supplied by the company) shall be borne by the contractor.~~

~~7.12 The contractor shall arrange necessary electricity at his own cost for the work and his own establishment. However, if available and feasible the company may arrange electricity at one point near the work site and necessary recovery of cost of energy consumed will be made at rates prescribed by the company from time to time. Energy meter for this purpose shall be provided by the contractor.~~

~~7.13 The contractor shall arrange necessary water for the work and his own establishment and nothing extra will be paid for the same. Such water used by the contractor shall be fit for construction purposes. However, if available and feasible the company may arrange water, at the written request of the contractor, to the extent possible, at one point near the work site for which recovery @ 1% of the contract value of work done will be made from the contractor's bills. The contractor shall make his own arrangement of water connection and laying of pipe lines from main source of supply. Department do not guarantee to maintain uninterrupted supply of water. No claim of damage or refund of water charges will be entertained on account of such break down.~~

~~7.14 Explosives, detonators and other inflammable materials shall not be used in the execution of the work at site by the contractor without prior written permission of the Engineer-in-Charge. Transportation and storage of such materials shall be done in specified manner in accordance with the law in force. The contractor shall also obtain license under such laws for, transportation, storage, use and all other operations, connected with the handling of the same.~~

8. Quality Assurance - Materials and Workmanship

The contractor shall carry out and complete the work in every respect in accordance with the contract and shall ensure that the work conforms strictly to the drawings, specifications, (as enclosed or in absence of enclosed specifications current CPWD/BIS specifications) instructions of the Engineer-in-Charge. The Engineer-in-Charge may issue, from time to time, further drawings, detailed instructions/ directions in writing to the contractor. All such drawings, instructions/directions shall be consistent with the contract documents and should be reasonably inferable there from, along with clarifications/ explanations thereof, if necessary. However, the contractor will be solely responsible for design and erection of all temporary structures required in connection with the work.

8.1 For Quality Assurances of all the Civil Engineering Works the norms/ guidelines laid down by the company herein and elsewhere will form part of the contract for the purpose of quality of works.

8.2 The contractor shall be responsible for correct and complete execution of the work in a workman like manner with the materials as per specification which shall be subject to the approval of the company. All work under execution in pursuance of the contract shall be open to inspection and supervision by the Engineer-in-Charge or by his authorized representative or any other official of higher rank or any other person authorized by the company in his behalf & the contractor shall allow the same.

8.3 All materials to be provided by the contractor shall be in conformity with the specifications/schedule of work as per the contract and the contractor shall furnish proof, if so required by the Engineer-in-Charge to his satisfaction that the materials do so comply.

8.4 The contractor shall immediately after the award of work draw up a schedule giving dates for submission of samples as required or necessary as per the specification for approval of Engineer-in-Charge who shall approve, if found acceptable, promptly so that there is no delay in the progress of the work of the contractor or of the work of any of the sub-contractor.

On receipt of samples as per schedule, the Engineer-in-Charge shall arrange to examine/test with reasonable promptness ensuring conformity of the samples with the required specification and complying with the requirements as per contract documents keeping in view that the work shall be in accordance with the samples approved by him. The contractor shall be bound to furnish fresh sample, if disapproved by the Engineer-in-Charge, for his approval. The contractor shall not start bringing materials at the site unless the respective samples are approved. Materials conforming to approved samples shall only be brought to site. However, Engineer-in-Charge's approval for any sample, design / drawings (permanent / temporary structures) shall not alter contractor's full responsibility whatsoever for the performance and safety of the executed job.

Samples are to be supplied by the contractor at his own cost. The cost involved in tests shall be borne by the contractor. If any test is ordered by the Engineer-in-Charge which is to be carried out by any independent person or agency at any place other than the site even then the cost of materials and testing charge etc. shall be borne by the contractor. If the test shows that the materials are not in accordance with the specifications, the said materials shall not be used in the work and removed from the site at contractors cost.

8.5 The company, through the Engineer-in-Charge, shall have full powers to reject any materials or work due to a defect therein for not conforming to the required specification, or for materials not being of the required quality and standard or for reasons of poor workmanship or for not being in accordance with the sample approved by him. The contractor shall forthwith remedy the defect/replace the materials at his expense and no further work shall be done pending such rectification/replacement of materials, if so instructed by the Engineer-in-Charge.

In case of default on the part of the contractor, the Engineer-in-Charge shall be at liberty to procure the proper materials for replacement and/or to carry out the rectifications in any manner considered advisable under the circumstances and the entire cost & delay for such procurement/rectification shall be borne by the contractor.

8.6 The Engineer-in-Charge shall be entitled to have tests carried out for any materials, according to the standard practice followed for such tests, other than those for which satisfactory proof has already been furnished by the contractor who shall provide at his expense all facilities which the Engineer-in-Charge may require for the purpose. All such expenses born by the contractor are not to be paid separately by the employer and shall be assumed covered in accepted prices.

The cost of any other tests, if so required by the Engineer-in-Charge, shall be borne by the company. However if the test shows the workmanship or materials not to be in accordance with the provision of the contract or the instruction of Engineer-in-Charge the cost shall be borne by the contractor. .

8.7 Access to the works: The Engineer-in-charge and any person authorized by the company shall at all times have access to the works and to all workshops and places where work is being prepared or from where materials,

manufactured articles are being obtained for the works and the contractor shall afford every facility for and every assistance in or in obtaining the right to such access.

8.8 Inspection of works: i) No work shall be covered up or put out of view without the approval of the Engineer-in-charge or the Engineer-in-charge's representative or any other officer nominated by the company for the purpose and the contractor shall afford full opportunity for the EI(E&M) or EI(E&M)'s representative or any other officer nominated by the company for the purpose to examine and measure any work which is about to be covered up or put out of view and to examine foundations before permanent work is placed thereon. the contractor shall give due notice to the Engineer-in-charge's representative whenever any such work or foundations is ready or about to be ready for examination and the Engineer-in-charge's representative shall, without unreasonable delay, unless he considers it unnecessary and advises the contractor accordingly, attend for the purpose of examining and measuring such work or foundations.

ii) The contractor shall uncover any part or parts of the works or making openings in or through the same as the Engineer-in-Charge may from time to time direct and shall reinstate and make good such part or parts to the satisfaction of Engineer-in-charge.

If any such part or parts have been covered up or put out of view after compliance with the requirement of sub-clause above and are found to be executed in accordance with the contract, the expenses of uncovering, making openings in or through and making good the same shall be borne by the Employer, but in any other cases all costs shall be borne by the contractor.

8.9 Removal of Improper Work and Materials:

i) The Engineer-in-charge shall during the progress of the works have power to order in writing from time to time:

a) The removal from the site, of any materials which in the opinion of Engineer-in-charge, are not in accordance with the contract/ work order/ approved sample.

b) The substitution with proper and suitable materials.

c) The removal and proper re-execution, notwithstanding any previous test thereof or interim payment there from, of any work which in respect of materials or workmanship is not in accordance with the contract.

ii) In case of default on the part of the contractor in carrying out such order, the Engineer-in -charge shall be entitled to employ and pay other agency to carry out the same and all expenses consequent thereon shall be recoverable from the contractor or may be deducted from any amount due or which may become due to the contractor.

8.10 Devaluation of Work : In lieu of rejecting work done or materials supplied not in conformity with the contract/work order/approved samples, the Engineer-in-charge or any other officer nominated by the company for the purpose may allow such work or materials to remain, provided the Engineer-in-Charge/the officer nominated by the company is satisfied with the quality of any materials, or the strength and structural safety of the work, and in that case shall make such deduction for the difference in value, as in his opinion may be reasonable.

8.11 Final Inspection of Work: The Engineer-in-charge and any other officer nominated by the company for the purpose shall make final inspection of all work included in the contract/work order, or any portion thereof, or any completed structure forming part of the work of the contract, as soon as practicable after notification by the contractor that the work is completed and ready for acceptance. If the work is not acceptable to the Engineer-in-charge at the time of such inspection, he shall inform the contractor in writing as to the particular defects to be remedied before final acceptance can be made.

8.12 Defects appearing after acceptance: Any defects which may appear within the defect liability period and arising, in the opinion of the Engineer-in-charge, from lack of conformance with the drawings and specifications, shall, if so required by the Engineer-in-charge in writing, be remedied by the contractor at his own cost within the time stipulated by the Engineer-in-charge. If the contractor fails to comply, the Engineer-in-charge may employ other persons to remedy the defects and recover the cost thereof from the dues of the contractor.

8.13 Site Order Book : A Site Order Book is a Register duly certified by the Engineer-in-charge regarding number of pages it contains, each page being numbered, name of work, name of contractor, reference of contract/ work order and the aforesaid certificate should be recorded on its first page.

Site Order Books shall be maintained on the sites of works and should never be removed there from under any circumstances. It shall be the property of the company. The Engineer-in-Charge or his authorized representative shall duly record his observations regarding any work which needs action on the part of the contractor like, improvement in the quality of work, failure to adhere to the scheduled programme etc. as per contract/work order. The contractor shall promptly sign the site order book and note the orders given therein by the EIC or his representative and comply with them. The compliance shall be reported by the contractor in writing to EIC in time so that it can be checked.

The Site Order Book will be consulted by the Engineer-in-Charge at the time of making both running on account and final bills of the contractor. A certificate to this effect should be given in the Measurement books by the Engineer-in-Charge or his representative.

8.14 Samples and Testing of Materials: All the materials to be procured by the contractor and to be used in work shall be approved by the Engineer-in-Charge in advance, and shall pass the tests and analysis required by him, which will be as specified in the specifications of the items concerned and or as specified by BIS or the IRC / MORTH standard specifications acceptable to the Engineer-in-Charge. The method of sampling and testing shall be as per the relevant BIS, IRC/ MORTH and other relevant standards and practices. Minor minerals like sand, stone chips etc. shall be conforming to relevant BIS standards. All bought out items including Cement and Steel shall be procured from such manufacturers who hold valid license conforming to relevant BIS standards for manufacturing of such items.

8.15 Storage of Materials: Materials shall be so stored as to ensure the preservation of the quality and fitness for the work. When considered necessary by the Engineer-in-charge, they shall be placed on wooden platforms or other hard, clean surfaces and not directly on the ground.

Materials shall be placed under cover when so directed and the contractor shall erect and maintain at his own cost temporary weather-proof sheds at the work site for the purpose. Stored materials shall be so located as to facilitate prompt inspection. All stored materials shall be inspected at the time of use in the work, even though they may have been inspected and approved before being placed in storage or during storage.

8.16 Defective Materials: All materials not conforming to the requirements of the specifications shall be considered as defective, and all such materials, whether in place or not shall be rejected. They shall be removed immediately by the contractor at his expenses and replaced with acceptable material.

No rejected material, the defects of which have been subsequently corrected, shall be used on the work until approval in writing has been given by the Engineer-in-Charge. Upon failure on the part of the contractor to comply with any instruction of the Engineer-in-charge made under the provisions of this article within the time stipulated by the Engineer-in-charge, the Engineer-in-charge shall have authority to remove and replace defective material and recover the cost of removal and replacement from the contractor.

Further all such defective material lying at site not removed and replaced within 30 days after issue of notice by the Engineer-in-charge, if the Engineer-in-charge so decides shall dispose off such material in any manner without any further written notice to the contractor.

9. Measurement and Payments

Except where any general or detailed description of the work in the Bill of Quantities or specifications of the contract/ work order provides otherwise, measurement of work done shall be taken in accordance with the relevant standard method of measurement published by the Bureau of Indian Standards (BIS) and if not covered by the above, other relevant Standards/practices shall be followed as per instructions of the Engineer-in-Charge.

9.1 All items of work carried out by the contractor in accordance with the provision of the contract having a financial value shall be entered in the Measurement Book as prescribed by the company so that a complete record of the

measurements is available for all the works executed under the contract and the value of the work executed can be ascertained and determined there from. Measurements of completed work / portion of completed work shall be recorded only in the Measurement Books.

9.2 Measurement shall be taken jointly by the Engineer-in-Charge or his authorized representative and by the contractor or his authorized representative.

9.3 Before taking measurements of any work, the Engineer-in-Charge or the person deputed by him for the purpose shall intimate the contractor to attend or to send his representative to attend the measurement. Every measurement thus taken shall be signed and dated by both the parties on the site on completion of the measurement. If the contractor objects to any measurements, a note to that effect shall be made in the Measurement Book / Log Book and signed and dated by both the parties.

9.4 The measurement of the portion of work/items of work objected to, shall be re-measured by the Engineer-in-Charge himself or the authority nominated by the company for the purpose in the presence of the contractor or his authorized representative and recorded in the M.B. which shall be signed and dated by both the parties. Measurements so recorded shall be final and binding upon the contractor and no claim whatsoever shall thereafter be entertained.

In case the contractor or his authorized representative does not attend to the joint measurements at the prefixed date and time after due notice, the measurements taken by the Engineer-in-Charge or his representative shall be final and binding on the contractor.

Measurement of the extra items of work or excess quantities of work duly authorized in writing by the Engineer-in-Charge shall also be taken and recorded in the M.B. based on the existing items in the SOR of the company and if such items do not exist in the company's SOR, the description of the work shall be as per actual execution. Payment for such extra items will be based on the rates to be derived as described in the relevant clauses of the contract/ work-order.

9.5 No work shall be covered up or put out of view without the approval by the Engineer-in-Charge and recording of measurements and check measurement thereof duly accepted by the contractor. The contractor shall provide full opportunity to the Engineer-in-Charge or his representative to examine and measure all works to be covered up and to examine the foundations before covering up.

The contractor shall also give notice to Engineer-in-Charge whenever such works or foundations are ready for examination and the Engineer-in-Charge shall without unreasonable delay arrange to inspect and to record the measurements, if the work is acceptable and advise the contractor regarding covering of such works or foundations.

9.6 In case of items which are claimed by the contractor but are not admissible according to the department, measurements of such items, will be taken for record purposes only and without prejudice so that in case it is subsequently decided by the department to admit the contractor's claims, there should be no difficulty in determining the quantities of such work. A suitable remark should, however, be made against such measurements to guard against payment in the ordinary way.

9.7 Payments: The running on account payments may be made once in a month or at intervals stipulated in the work order/ contract agreement.

9.7.01 Running on account bill/bills for the work executed/ materials supplied in accordance with the work order/ contract shall be prepared on the basis of detailed measurements recorded as described hereinbefore and processed for payments.

9.7.02 Payment of on account bill shall be made on the Engineer-in-Charge's certifying the sum to which the contractor is considered entitled by way of interim payment for the following :

a) The work executed as covered by the bill/bills after deducting the amount already paid, the security deposit and such other amounts as may be deductible or recoverable in terms of the work order/ contract.

b) (i) Payment for excess quantity of work done with the written instructions of the Engineer-in-Charge for items already appearing in the bill of quantities of work with approved rates, will be made along with the on account bills only up to 10% of the quantity provided in the agreement subject to overall value of work not exceeding the agreement value.

(ii) The GM(E&M) of the company and / or the Staff Officer/HOD(E&M) of the Area/regional Institute may authorize interim payment for excess work done up to 20 % of the quantity of work provided in the Bill of Quantity of the work awarded from Company level and Area level respectively subject to overall value of work done does not exceed the contract value. This however, shall not be applicable for High Value Items.

c) Extra items of work executed will be paid on specific written authorization of GM(E&M) of the company or Staff Officer/HOD (E&M) of the Area provided that the value of such extra items of work when added together is not more than 10% of the contract value and the total gross payment including excess quantity does not exceed the contract value.

Balance amount on account of excess quantity and extra items of work executed shall be paid after the deviation estimate / revised estimate regularizing the extra items and excess quantities of work is sanctioned by the competent authority of the company with the concurrence of the Finance Department of the company.

d) On the Engineer-in-Charge's certificate of completion in respect of the work covered by the contract / final measurements of the work certified by the Engineer In Charge or his representative.

9.7.03 The measurements shall be entered in the M.B for the work done up to the date of completion and evaluated based on the approved rates for the items in the contract agreement/sanctioned revised estimate. In case of extra items of work, the rates shall be derived as stated in the relevant clause of the contract.

The payments shall be released against the final bill subject to all deductions which may be made on account of materials supplied, water supply for construction, supply of electricity and any other dues payable by the contractor to the company, and further subject to the contractor having given to the Engineer-in-Charge a no claim certificate.

The contractor shall indemnify the company against proof of depositing royalty on account of minor minerals used in the work before the final bill is processed for payments. The final payment to be made will also be subject to Clause-4.6 & 4.7 of the General Terms & Conditions of the contract.

9.7.04 Any certificate given by the Engineer-in-Charge for the purpose of payment of interim bill/bills shall not of itself be conclusive evidence that any work/materials to which it relate is/are in accordance with the contract and may be modified or corrected by the Engineer-in-Charge by any subsequent certificate or by the final certificate.

9.7.05 The company reserve the right to recover/enforce recovery of any overpayments detected after the payment as a result of post payment audit or technical examination or by any other means, notwithstanding the fact that the amount of disputed claims, if any, of the contractor exceeds the amount of such overpayment and irrespective of the facts whether such disputed claims of the contractor are the subject matter of arbitration or not.

The amount of such overpayments shall be recovered from subsequent bills under the contract, failing that from contractor's claim under any other contract with the company or from the contractor's security deposit or the contractor shall pay the amount of over payment on demand. In case of contractor's non-payment on such demand, the same should be realised from the contractor's dues, if any, with Coal India Limited or any of its subsidiaries.

9.7.06 The contractors are required to execute all works satisfactorily and according to the specifications laid down in the contract/ work order. If certain items of work, executed by the contractor, are below specifications, the contractor should re-do them according to the specifications and instructions of EIC and if the contractor fails to rectify the defect within the time and in the manner specified by the EIC, the work shall be got re-done or rectified by the department at the risk and cost of the contractor. Engineer-in-Charge may accept such work of below specifications provided the department is satisfied with the quality of such works and the strength/ structural safety of such works. In that case Engineer-in-Charge shall make such deductions for the difference in value, as in his opinion is

reasonable and is approved by the accepting authority of the company i.e. GM/HoD(E&M) of the company in this case or any other officer nominated by GM/HoD(E&M) for the purpose.

9.7.07 Payment Stage: The payment stage involved will be as under,

- i. Signature of Subordinate Engineer(E&M)/ EA(E&M)/ Sr. Overseer(E&M) / Overseer(E&M)/ Authorised person in MB' s both in pages recording measurements, abstract of bill & the duly filled in bill form.
- ii. Signature of Sr. Officer(E&M)/ Asstt. Manager(E&M) with appropriate check measurements in the MB's and the bill form.
- iii. Signature of Dy. Manager(E&M)/ Manager(E&M) with appropriate check measurements in MB's and the bill form.
- iv. Signature of Engineer-in-Charge as per definition as at clause 1(vii) of the General Terms and Conditions, as a token of acceptance for payment of the bill. The EI(E&M) may sign in the abstract of the bill in the MB & the bill form. In between stage iii) and iv) accountal checking may be made by the concerned Accounts Officer/ Accountant.

(In case of non-availability of officials as above, company may authorize suitable executives for the works outlined at (i) to (iii). Further for check measurement also company may authorize Executives based on availability.

9.7.08 Secured Advance (Not for this tender): Secured advance can be paid for items of materials required for execution of the work and covered under categories A & B and supplied by the contractor at work site, supported by necessary vouchers, challans, test certificates etc. after execution of indemnity bond as per prescribed Form of the company on non-judicial stamp paper of prescribed value.

This advance shall be recovered in four equal installments or as per consumption whichever is higher. Engineer-in-Charge shall recover at his discretion all or any part of secured advance paid, if in his opinion the work is not progressing satisfactorily or the security of these materials at site is not adequately taken care of by the contractor. Secured advance shall be payable for contracts of value above Rs.50.00 lakhs only.

Secured advance for structural steel sections, reinforcement steel and cement, collected at site, will be paid up to 75% of the corresponding stock yard prices of SAIL for the corresponding steel items and Govt. approved/ D.G.S.D. prices for cement, if the same exist.

In case of non-availability of Govt. approved prices of cement & steel and for the materials falling under Category - A and B the secured advance will be paid at the basic rate available in the approved schedule of rates of the company plus or minus the overall percentage on which the work was awarded, provided such rate is not more than 60% of the quoted rate of the contractor for the actual work.

At any point of time the outstanding recoverable secured advance shall not be more than 10% of the contract value.

Items against which secured advance can be granted:

Category-A

Civil:

1. Bricks.
2. Stone and brick aggregate.
3. Stones.
4. Finished products of brass, iron and steel such as doors & windows frames, wire mesh, gate, GI Sheets.
5. Pre-cast R.C.C. products such as pipes, jali, water storage tanks etc.
6. Doors & Window fittings.
7. Pipes and sanitary fittings of CI, SCI & HCI

Electrical :

1. Steel conduits
2. G.I. Pipes
3. I.C. Boards
4. Switchgears (Air circuit breakers and Air break switches)
5. C.I. Boxes.
6. A.C.S.R. Conductors
7. A.C. Plant & Machinery
8. Pumps
9. Generating sets (without oil)

Items against which secured advance can be granted:

Category- B**Civil:**

1. Glazed tiles, terrazzo tiles and similar articles.
2. Marble slabs.
3. Asbestos cements products.
4. Finished timber products such as doors, windows, flush doors, particle boards (subject to mandatory test being satisfactory) etc.
5. Bitumen in sealed drums.
6. Bitumen felt.
7. Polythene pipes and fittings and tanks.
8. Sanitary fittings and pipes of S.W., porcelain and chinaware materials
9. Laminated / Safety, one way vision, and bullet proof glasses.
10. Chemical required for anti-termite treatment (in sealed drums).
11. Paints, varnishes, distempers, pigment, spirits etc.

Electrical:

1. Transformers
2. Oil-filled switch gears.
3. L.T. &H.T. Cables
4. Fans
5. Storage and Dry Batteries
6. Insulation tapes.
7. Epoxy cable compounds.
8. Electric light fittings.
9. Wooden battens, casing & capping and wooden boards.
10. Flexible wires.
11. PVC materials.
12. Oil and lubricants.
13. Rubber materials.
14. Glass wool, thermocole & other insulating materials.
15. Porcelain H.T. and L.T. insulators.

In addition to indemnity bond, for materials listed under Category-B, the contractor shall be required to provide necessary insurance cover of equivalent value of materials.

Items against which no secured advance shall be granted:

Civil:

1. Glass products other than those indicated in Category-B.
2. Sand and moorum
3. Chemical compounds other than those indicated in Category-B.

Electrical:

1. Glass gloves and shades
2. Bulbs and tubes
3. Petrol and diesel
4. Freon and other refrigeration gases.

9.8 Income tax deduction @ 2% (Two percent) of the gross value of each bill or at the rate as amended from time to time, shall be made unless exempted by the competent authority of the Income Tax Department

Sales tax on works contract and Building and Construction Workers Cess (as applicable in States) shall be payable by the contractor. If, however, the company is asked to make deduction from the contractor's bills, the same shall be done and a certificate to this effect shall be issued to the contractor for dealing with the State Govt. and the company does not take any responsibility to do anything further in this regard.

9.9 No interest shall be payable on the amounts withheld, under the terms of the Contract Agreement/Workorder.

10 Termination, Cancellation, Suspension and Foreclosure of Contract

The company shall, in addition to other remedial steps to be taken as provided in the conditions of contract be entitled to cancel the contract in full or in part, and whether the date of completion has or has not elapsed, by notice in writing if the contractor:-

a) makes default in proceeding with the works with due diligence and continues to do so even after a notice in writing from the Engineer-in-Charge, then on the expiry of the period as specified in the notice

Or

b) commits default/breach in complying with any of the terms and conditions of the contract and does not remedy it or fails to take effective steps for the remedy to the satisfaction of the Engineer-in-Charge, then on the expiry of the period as may be specified by the Engineer-in-Charge in a notice in writing.

Or

c) obtains a contract with the company as a result of ring tendering or other non-bonafide methods of competitive tendering

Or

d) shall offer or give or agree to give any person in the service of the company or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for act/acts of favour in relation to the obtaining or execution of this or any other contract for his company.

Or

e) fails to complete the work or items of work with individual dates of completion, on or before the date/dates of completion or as extended by the company, then on the expiry of the period as may be specified by the Engineer-in-Charge in a notice in writing.

Or

f) transfers, sublets, assigns the entire work or any portion thereof without the prior approval in writing from the Engineer-in-Charge. The Engineer-in-Charge may by giving a written notice, cancel the whole contract or portion of it in default.

10.1 The contract shall also stand terminated under any of the following circumstances:

a) If the contractor being an individual in the case of proprietary concern or in the case of a partnership firm any of its partners is declared insolvent under the provisions of Insolvency Act for the time being in force, or makes any

conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors amounting to proceedings for liquidation or composition under any Insolvency Act.

b) In the case of the contractor being a company, its affairs are under liquidation either by a resolution passed by the contractors company or by an order of court, not being a voluntary liquidation proceedings for the purpose of amalgamation or reorganization, or a receiver or manager is appointed by the court on the application by the debenture holders of the contractor's company, if any.

c) If the contractor shall suffer an execution being levied on his/their goods, estates and allow it to be continued for a period of 21 (twenty-one) days.

d) On the death of the contractor being a proprietary concern or of any of the partners in the case of a partnership concern and the company is not satisfied that the legal representative of the deceased proprietor or the other surviving partners of the partnership concern are capable of carrying out and completing the contract. The decision of the company in this respect shall be final and binding which is to be intimated in writing to the legal representative or to the partnership concern.

10.2 On cancellation of the contract or on termination of the contract, the Engineer-in-charge shall have powers:

a. To take possession of the site, any materials, constructional plant, equipment, stores etc. thereon and carry out balance work through any means or through any other agency.

b. To give the contractor or his representative of the work 7 (seven) days notice in writing for taking final measurement for the works executed till the date of cancellation or termination of the contract. The Engineer-in-Charge shall fix the time for taking such final measurement and intimate the contractor in writing. The final measurement shall be carried out at the said appointed time notwithstanding whether the contractor is present or not. Any claim as regards measurement which the contractor is to make shall be made in writing within 7 (seven) days of taking final measurement by Engineer-In-charge as aforesaid and if no such claim is received, the contractor shall be deemed to have waived all claims regarding above measurements and any claim made thereafter shall not be entertained.

c. After giving notice to the contractor to measure up the work of the contractor and to take such whole or the balance or part thereof, as shall be unexecuted out of his hands and to give it to another contractor or take up departmentally, to complete the work. The contractor whose contract is terminated shall not be allowed to participate in future bidding for period of minimum twelve months.

In such an event, the contractor shall be liable for loss/damage suffered by the employer because of action under this clause and to compensate for this loss or damage, the employer shall be entitled to recover higher of the following:

i) Forfeiture of security deposit comprising of performance guarantee and retention money and additional performance security, if any, at the disposal of the employer.

Or

ii) 20% of value of incomplete work. The value of the incomplete work shall be calculated for the items and quantities remaining incomplete (as per provision of agreement) at the agreement rates including price variation as applicable on the date, when notice in writing for termination of work was issued to the contractor.

The amount to be recovered from the contractor as determined above, shall, without prejudice to any other right or remedy available to the employer as per law or as per agreement, will be recovered from any money due to the contractor on any account or under any other contract and in the event of any shortfall, the contractor shall be liable to pay the same within 30 days. In case of failure to pay the same the amount shall be debt payable.

In the event of above course being adopted by the Engineer-in-charge, the contractor shall have no claim to compensation for any loss sustained by him by reasons of his having purchased materials, equipment or entered into agreement or made advances on any account or with a view to the execution of work or performance of the contract. And in case action is taken under any of provision aforesaid, the contractor shall not be entitled to recover or to be paid any sum for any work thereof or actually performed under this contract unless and until the engineer-in-charge

has certified in writing the performance of such work and value payable in respect thereof and he shall only be entitled to be paid the value so certified.

The need for determination of the amount of recovery of any extra cost/expenditure or of any loss/damage suffered by the company shall not however arise in the case of termination of the contract for death/demise of the contractor as stated in 10.1(d).

10.3 Suspension of Work:

Suspension of work – The Company shall have power to suspend the work. The contractor shall on receipt of the order in writing of Engineer-in-charge (whose decision shall be final and binding on the contractor), suspend the progress of work or any part thereof for such time in such manner as the Engineer-in-Charge may consider necessary so as not to cause any damage, or endanger the safety thereof for any of the following reasons:

- a) on account of any default on the part of the contractor, or
- b) for proper execution of the works, or part thereof, for reasons other than the default of the contractor or,
- c) for safety of the works, or part thereof.

The contractor shall, during such suspension properly protect and ensure the works to the extent necessary and carry out the instruction of the Engineer-in-charge. If the suspension is ordered for reasons (b) & (c), the contractor shall be entitled to an extension of time equal to the period of every such suspension plus 25%. This shall also be applicable for completion of the item or group of items of the work for which a separate period of completion as specified in the contract and of which the suspended work forms a part.

The contractor shall carry out the instructions given in this respect by the Engineer-In Charge & if such suspension exceeds 45 (forty five) days, the contractor will be compensated on mutually agreed terms.

10.4 Foreclosure of contract:

If at any time after acceptance of the tender the company decides to abandon or reduce the scope of work for any reason whatsoever the company, through its Engineer-in-Charge, shall give notice in writing to that effect to the contractor and contractor shall act accordingly in the matter. In the event of abandonment, the contractor shall have no claim to any payment of compensation or otherwise whatsoever, other than those mentioned below:-

- a) to pay reasonable amount assessed and certified by the Engineer-in-Charge of the expenditure incurred, if any, by the contractor on preliminary works at site e.g. temporary access roads, temporary construction for labour and staff quarters, office accommodation, storage of materials, water storage tanks and water supply for the work including supply to labour/ staff quarters, office etc.
- b) to pay the contractor at the contract rates full amount for works executed and measured at site up to the date of such abandonment.
- c) to pay for the materials brought to site or to be delivered at site, which the contractor is legally liable to pay, for the purpose of consumption in works carried out or were to be carried out but for the foreclosure, including the cost of purchase and transportation and cost of delivery of such materials. The materials to be taken over by the company should be in good condition and the company may allow at its discretion the contractor to retain the materials in full or in part if so desired by him and to be transported by the contractor from site to his place at his own cost with due permission of the EIC.
- d) to take back the materials issued by the company but remaining unused, if any, in the work on the date of abandonment/reduction in the work, at the original issue price less allowance for any deterioration or damage caused while in custody of the contractor.
- e) to pay for the transportation of tools and plants of the contractor from site to contractor's place or to any other destination, whichever is less.

10.4.01 The contractor shall, if required by the Engineer-in-Charge, furnish to him books of accounts, papers, relevant documents as may be necessary to enable the Engineer-in-Charge to assess the amounts payable in terms of clauses 10.4(a) (c) & (e) of the contract. The contractor shall not have any claim for compensation for abandonment of the work, other than those as specified above.

11. Carrying out Part Work at Risk & Cost of Contractor.

If the progress of the work or of any portion of the work is unsatisfactory, the Engineer-in-Charge, after giving the contractor 15 days' notice in writing, without cancelling or terminating the contract, shall be entitled to employ another Agency for executing the job or to carry out the work departmentally or contractually through tendering / limited tendering process, either wholly or partly, debiting the contractor with cost involved in engaging another Agency or with the cost of labour and the prices of materials, as the case may be. The certificate to be issued by the Engineer-in-Charge for the cost of the work so done shall be final and conclusive and the extra cost, if any, shall be borne by the contractor. However, when this clause is invoked, penalty will not be applicable other than on account of delayed completion.

The value of the work taken away shall be calculated for the items and quantities taken away at the agreement rates including price variation as applicable on the date, when notice in writing for taking away part work was issued to the contractor. The contractor, from whom part work is being taken out, shall not be allowed to participate in the tendering process if any.

If the expenses incurred by the department is less than the amount payable to the contractor at his agreement rates, the difference shall not be payable to the contractor.

In the event of above course being adopted by the Engineer-in-Charge, the contractor shall have no claim to compensation for any loss sustained by him by reasons of his having purchased or procured any materials or entered into any engagements or made any advance on any account or with a view to the execution of the work or the performance of the contract.

12. Completion Certificate / Defect Liability Certificate

Except in cases where the contract provides for "Performance Test" before issue of Defect Liability certificate, in which case the issue of Defect Liability certificate shall be in accordance with the procedure specified therein, the contractor shall give notice of completion of work, as soon as the work is completed, to the Engineer-in-Charge. The Engineer-in-Charge and or any other Officer, nominated for the purpose by the company, shall within 30 (thirty) days from the receipt thereof, inspect the work and ascertain the defects/deficiencies, if any, to be rectified by the contractor as also the items, if any, for which payment shall be made at reduced rate.

If the defects, according to the Engineer-in-Charge are of a major nature and the rectification of which is necessary for the satisfactory performance of the contract, he shall intimate in writing the defects and instruct the contractor to rectify the defects/remove deficiencies within the period and in the manner to be specified therein. In such cases Defect Liability Certificate will be issued by the EIC after the above rectifications are carried out/ deficiencies are removed by the contractor to the satisfaction of EIC.

In the event there are no defects or the defects/ deficiencies are of a minor nature and the Engineer-in-Charge is satisfied that the contractor has already made arrangements for rectification, or in the event of contractor's failure to rectify the defects for any reason whatsoever, the defects can be rectified by the company departmentally or by other means and the 50% of the security deposit of the contractor shall be sufficient to cover the cost thereof, he shall issue the Defect Liability Certificate (Taking Over Certificate with list of defects) indicating the date of completion of the work, defects to be rectified, if any, and the items, if any, for which payment shall be made at reduced rate indicating reasons there for and with necessary instructions to the contractor to clear the site/place of work or all debris/ waste materials, scaffoldings, sheds, surplus materials etc. making it clean.

12.1 In cases where separate period of completion for certain items or groups of items are specified in the contract, separate Defect Liability certificate for such items or groups of items may be issued by the Engineer-in-Charge after completion of such items on receipt of notice from the contractor only in the event the work is completed satisfactorily in every respect.

Refund of security deposit and payment of final bill shall, however, be made on completion of the entire contract work, but not on completion of such items of work.

12.2 Before the date fixed for completion of work, the work as well as the site of work are to be made clean after removal of rubbish, scaffolding, surplus materials, temporary structures etc.

12.3 In case of contractor's failure to clear the site, the EI(E&M) shall have right to get the work done. The cost thereof shall be recovered from the final bill of the contractor.

13. Additional Responsibilities of the Contractor(s)

The cost on account of the "Additional Responsibilities of the Contractors" under this clause is deemed to be included in the tendered rates.

i) The company reserves the rights to let other contractors also work in connection with the Project and the contractor/contractors shall co-operate in the works for the introduction and stores and materials and execution of his/their works.

ii) The contractor/contractors shall keep on the work site during the progress a competent and experienced Resident Engineer exclusively for the work and necessary assistants who shall represent the contractor(s). The contractor shall employ, on the site in connection with the execution and maintenance of the work, technical and managerial staff as mentioned below.

Sl.No.	Value of Work	Manpower Requirement
1.	More than 10 Crores	One Resident Engineer (Degree Holder), One Engineer (Degree Holder), Two Engineers (Diploma Holder)
2.	5 Crores to 10 Crores	One Resident Engineer (Degree Holder), Two Engineers (Diploma Holder)
3.	2 Crores to 5 Crores	One Resident Engineer (Diploma Holder), One Engineer (Diploma Holder)
4.	50 lakhs to 2 crores	One Resident Engineer (Graduate/ Diploma Holder)

For works below Rs. 50 lakhs, the deployment of manpower shall be as assessed by Engineer.

The contractor shall intimate the Engineer-in-Charge in writing the names, qualifications, experience and full postal address of each and every technical personnel employed at site by him.

The contractor(s) shall not be allowed to execute the work unless he/they engage the required technical staff as assessed by Engineer-in-charge or as specifically mentioned in the bid. The delay on this account, if any, shall be the contractor's responsibility.

Important instructions shall be confirmed to the contractor(s) in writing. If the contractor/contractors in course of the works finds/find any discrepancy between the drawing, forming part of the contract documents and the physical conditions of the locality or any errors or omissions in drawings except those prepared by himself / themselves and not approved by the Engineer-in-Charge. It shall be his/their duty to immediately inform the Engineer-in-Charge in writing and the Engineer-in-Charge shall verify the same. Any work done after such discovery and without intimation as indicated above will be done at the risk of the contractor/contractors.

iii) The contractor / contractors shall employ only competent, skillful and orderly men to do the work. The Engineer-in-Charge shall have the right to ask the contractor/ contractors to remove from the work site any men of the contractor/contractors who in his opinion is undesirable and the contractor/contractors will have to remove him within 3 (three) hours of such orders.

The contractor shall employ apprentices in the execution of the contract work as required under Apprentices Act.

The contractor shall further be responsible for making arrangements at his own cost, or accommodation and social needs of the staff and workers under his employment.

iv) Precautions shall be exercised at all times by the contractor(s) for the protection of persons (including employees) and property. The safety required or recommended by all applicable laws, codes, statutes and regulations shall be observed by the contractor(s). In case of accidents, the contractor(s) shall be responsible for compliance with all the requirements imposed by the Workmen's Compensation Act or any other similar laws in force and the contractor shall indemnify the company against any claim on this account.

All scaffoldings, ladders and such other structures which the workmen are likely to use shall be examined by the Engineer-in-Charge or his authorized representative whenever they want and the structure must be strong, durable, and safe and of such design as required by Engineer-in-Charge.

In no case any structure condemned by the Engineer-in-Charge or his authorized representatives shall be kept on the work and such structure must be pulled down within three hours of such condemnation and any certificate or instructions, however, shall in no way absolve the contractor/contractors from his/their responsibility, as an employer, as the company shall in no way be responsible for any claim.

The contractor / contractors shall at all times exercises reasonable precautions for the safety of employees in the performance of his/their contract and shall comply with all applicable provisions of the safety laws drawn up by the State Govt. or Central Govt. or Municipalities and other authorities in India. The contractor/contractors shall comply with the provision of the safety hand book as approved and amended from time to time by the Government of India.

v) The contractor / contractors shall familiarize themselves with and be governed by all laws and rules of India and Local statutes and orders and regulations applicable to his/ their work.

vi) The contractor shall maintain all records as per the provision made in the various statutes including Contract Labour (Regulation & Abolition) Act, 1970 and the Contract Labour (Regulation & Abolition) Central Rules, 1971, Minimum Wages Act, Workmen Compensation Act etc. and latest amendment thereof. Such records maintained by the contractor shall be opened for inspection by the Engineer-in-Charge or by the nominated representative of the Principal Employer.

vii) The contractor/ contractors shall provide facilities for the sanitary necessities of all persons employed on the work shall be constructed and maintained in the number, manner and place approved or ordered by the Engineer-in-Charge. The contractor/ contractors shall vigorously prohibit committing of nuisance at any other place. Cost of all works under this item shall be covered by the contractor/contractor's tendered rates.

viii) The contractor/contractors shall furnish to the Engineer-in-Charge or his authorized representative with work reports from time to time regarding the contractor / contractors organization and the progress made by him / them in the execution of the work as per the contract.

ix) All duties, taxes (excluding Service Tax only) and other levies, octroi, royalty, building and construction workers cess (as applicable in States), whether local, municipal, provincial or central pertaining to the contract payable by the Contractor under the Contract (during the entire period of contract), or for any other cause as applicable on the last date of submission of Bid, shall be included in the rates, prices and the total Bid Price submitted by the Bidder. All investments, operating expenses, incidentals, overheads, lifts, carriages, tools and plants etc. as may be attendant upon execution and completion of works shall also be included in the rates, prices and total Bid price submitted by the bidder.

However, such duties, taxes, levies etc. which is notified after the last date of submission of Bid and/or any increase over the rate existing on the last date of submission of Bid shall be reimbursed by the company on production of documentary evidence in support of payment actually made to the concerned authorities.

Similarly if there is any decrease in such duties, taxes and levies the same shall become recoverable from the contractor. The details of such duties, taxes and other levies along with rates shall be declared by the bidder in the Price bid.

The item wise rate quoted shall be exclusive of service tax (share of service provider). Service tax (share of service provider) will be paid extra, if payable. Payment of service tax (share of service provider) by the service availer (i.e. CIL/Subsidiary), to the service provider would be made only on the latter submitting a Bill/invoice in accordance with the provision of relevant service tax rules. CENVAT credit is to be availed by paying authority as per rule. Payment/deposit of service tax (share of service provider) is the responsibility of the service provider.

The rates and prices quoted by the Bidder shall be fixed for the duration of the contract and shall not be subject to variations on any account except to the extent variations allowed as per the conditions of the contract of the bidding document.

The company reserves the right to deduct/ withhold any amount towards taxes, levies, etc. and to deal with such amount in terms of the provisions of the Statute or in terms of the direction of any statutory authority and the company shall only provide with certificate towards such deduction and shall not be responsible for any reason whatsoever.

In case of collection of minor minerals in area (both virgin and non-virgin), acquired by the Company under the Coal Act, the contractor will have to produce a royalty clearance certificate from the District Authorities before full and final payment.

x) The contractor / contractors shall make his / their own arrangement for all materials, tools, staff and labourer required for the contract, which shall include cost of lead, lift, loading, unloading, railway freight, recruiting expenses and any other charges for the completion of the work to entire satisfaction of the company.

xi) The contractor / contractors shall make their own arrangement for carriage of all materials to the work site at his/their own cost.

xii) The work shall not be sublet to any other party, unless approved by Engineer-in-Charge, in writing. Prior permission is required to be taken from the owner for engagement of sub-contractor in part work/ piece rated work.

xiii) a) No fruit trees or valuable plants or trees with trunk diameter exceeding 150mm shall be pulled, destroyed or damaged by the contractor/contractors or any of his/their employees without the prior permission of the company, failing which the cost of such trees or plants shall be deducted from the contractor/contractors dues at the rate to be decided by the company. The rates quoted are supposed to include clearance of shrubs and jungles and removal of such trees up to 150 mm dia., as will be permitted by the Engineer-in-Charge in writing.

b) Anything of historical or other interest or of significant value unexpectedly discovered on the site is the property of the employer. The Contractor is to notify the Nodal Officer or his nominee of such discoveries and carry out the Nodal Officer or his nominee's instructions for dealing with him.

xiv) The contractor / contractors shall not pay less than the minimum wages to the labourer engaged by him/them as per Minimum Wages Act or such other legislation or award of the minimum wage fixed by the respective State Govt. or Central Govt. as may be in force. The contractor / contractors shall make necessary payments of the provident fund for the workmen employed by him for the work as per the laws prevailing under provisions of CMPF and allied scheme and Miscellaneous Provisions Act, 1948 or Employees Provident Fund and Miscellaneous Provisions Act 1952 as the case may be.

xv) All accounts shall be maintained properly and the company shall have the right of access and inspection of all such books of accounts etc., relating to payment of labourer including payment of provident fund considered necessary and the company may arrange for witnessing the payment to the labourer by its representatives.

xvi) The contractor shall in additions to any indemnity provided by the relevant clauses of the agreement or by law, indemnify and keep indemnified for the following:

a) The company or any agent or employee of the company against any action, claim or proceeding relating to infringement or use of any patent or design right and shall pay any royalties or other charges which may be payable in respect of any article or material included in the contract.

However, the amount so paid shall be reimbursed by the company in the event such infringement has taken place in complying with the specific directions issued by the company or the use of such article or material was the result of any drawing and/or specifications issued by the company after submission of tender by the contractor. The contractor must notify immediately after any claim being made or any action brought against the company, or any agent or employee of company in respect of any such matter.

b) The company against all claims, damages or compensation under the provisions of payment of Wages Act, 1938, Minimum Wages Act, 1948, Employer's Liability Act, 1938, The Workmen's Compensation Act, 1923, Industrial Dispute Act, 1947, Mines Act as applicable, Employees State Insurance Act 1948 and Maternity Benefit Act, 1961, Acts regulating P.F. or any modification thereof or any other law relating thereto and rules made there under from time to time, as may be applicable to the contract which may arise out of or in consequence of the construction or maintenance or performance of the work under the contract and also against costs, charges and expenses of any suit, action or proceedings arising out of any accident or injury.

c) The company against all losses and claims for injuries or damages to any third party or to any property belonging to any third party which may arise out of or in consequence of the construction or maintenance or performance of the work under the contract and against all claims/demands proceedings/damages, cost charges and expenses whatsoever in respect of or in relation thereto.

xvii) The contractor is under obligation to hand over to the company the vacant possession of the completed building structures failing which the Engineer-in-Charge can impose a levy upon the contractor upto 5% of the total contract value for the delay in handing over the vacant possession of the completed works after giving a 15 (fifteen) days notice to the contractor.

xviii) **Insurance** - The contractor shall take full responsibility to take all precautions to prevent loss or damage to the works or part thereof for any reasons whatsoever (except for reasons which are beyond control of the contractor or act of God, e.g. flood, riots, war, earthquake, etc.) and shall at his own cost repair and make good the loss/damage to the work so that on completion, the work shall be in good order and condition and in conformity with the requirements of the contract and instructions of the Engineer-incharge.

The contractor/contractors shall take following insurance policies during the full contract period at his own cost:

a). In the case of construction works, without limiting the obligations and responsibilities under the contract, the contractor shall take insurance policy for the works and for all materials at site so that the value of the works executed and the materials at site up to date are sufficiently covered against risk of loss/damage to the extent as permissible under the law of insurance. The contractor shall arrange insurance in joint names of the company and the contractor. All premiums and other insurance charges of the said insurance policy shall be borne by the contractor.

The terms of the insurance policy shall be such that all insurance claims and compensations payable by the insurers, shall be paid to the Employer and the same shall be released to the contractor in installments as may be certified by the Engineer-in-charge for the purpose of rebuilding or replacement or repair of the works and/or goods destroyed or damaged for which payment was received from the insurers. Policies and certificates for insurance shall be delivered by the contractor to the EI(E&M) for his approval before the starting date. Alterations to the terms of insurance shall not be made without the approval of EI(E&M).

b). Where any company building or part thereof is used, rented or leased by the contractor for the purpose of storing or using materials of combustible nature, the contractor shall take separate insurance policy for the entire building and the policy shall be deposited with the company.

c) The contractor shall at all times during the tenure of the contract indemnify the company against all claims, damages or compensation under the provision of the Workmen's Compensation Act and shall take insurance policy

covering all risk, claims, damages, or compensation payable under the Workmen's Compensation Act or under any other law relating thereto.

d) The contractor shall ensure that the insurance policy/ policies is/are kept alive till full expiry of the contract by timely payment of premiums and it/they shall not be cancelled without the approval of the company and a provision is made to this effect in all policies, and similar insurance policies are also taken by his sub-contractors if any. The cost of premium shall be borne by the contractor and it shall be deemed to have been included in the tendered rate.

e) In the event of contractor's failure to effect or to keep in force the insurance referred to above or any other insurance which the contractor is required to effect under the terms of the contract, the company may effect and keep in force any such insurance and pay such premium/premiums as may be necessary for that purpose from time to time and recover the amount thus paid from any moneys due to the contractor.

THE CLAUSE 13(xviii) SHALL BE APPLICABLE FOR WORKS OF ESTIMATED VALUE OF OVER Rs.50 LAKHS.

xix) **Setting Out:** The contractor shall be responsible for the contract and proper setting out of the works and correctness of the position, reduced levels, dimensions and alignment of all parts of the work including marking out the correct lay out in reference to the permanent bench mark and reference points. Only one permanent bench mark and basic reference lines shall be marked and shown to the contractor as basic data.

The contractor shall have all necessary instruments, appliances and labour in connection therewith. If at any time during the progress of work any error is detected in respect of the position, levels, dimensions or alignment of any part of the work, the contractor on being required to do so by the Engineer-in-Charge or his representative shall at the expenses of the contractor rectify such errors to the satisfaction of Engineer-in-Charge unless such error is due to incorrect data supplied by the Engineer-in-Charge.

xx) On receipt of Letter of Acceptance of Tender / Work Order the contractor shall forthwith Register and obtain License from the competent authority under the Contract Labour (Regulation & Abolition) Act 1970, the Contract Labour (Regulation & Abolition) Central Rules, 1971 and submit certified copies of the same to the Engineer-in-Charge and the Principal Employer.

xxi) The contractor shall be registered with the concerned State Govt. and the Central Govt. in respect of Sales Tax Act and the certificate having details of Registration No., period of validity etc. should be submitted to the Engineer-in-Charge.

xxii) The contractor shall, in connection with works, provide and maintain, at his own cost, all lights, security guards, fencing when and where necessary as required by the Engineer-in-Charge for the purpose of protection of the works, materials at site, safety of workmen and convenience of the public.

xxiii) All materials (e.g. stone, moorum and other materials) obtained in the course of execution of the work during excavation and dismantling etc. shall be the property of the company and the same may be issued to the contractors, if required for use in the works at the rates to be fixed by the Engineer-in-Charge.

xxiv) Unless otherwise specifically provided for, dewatering of excavation pits, working areas etc. shall be the contractor's responsibility and is to be carried out at his own cost as per instructions of EIC. The rates quoted by the contractor shall be deemed to include the dewatering costs.

xxv) Approval by the Nodal Officer/Engineer-in-Charge or his nominee: The contractor shall submit specifications and drawings showing the proposed temporary work to the Nodal Officer/Engineer-in-Charge or his nominee, who is to approve them if they comply with the specifications and drawings.

The contractor shall be responsible for design of Temporary Works.

The Nodal Officer/Engineer-in-charge or his nominee's approval shall not alter the contractor's responsibility for design of the Temporary Works.

14. Defects Liability Period:

In addition to the defect/s to be rectified by the contractor as per terms of the contract/ work order, the contractor shall be responsible to make good and remedy at his own expense the defect/s mentioned hereunder within such period as may be stipulated by the Engineer-in-Charge in writing:

a) Any defect/defects in the work detected by the Engineer-in-Charge within a period of 6 (six) months from the date of issue of Defect Liability certificate / completion certificate.

b) In the case of building works or other works of similar nature any defect in the work detected by the Engineer-in-Charge within a period of 6 (six) months from the date of issue of Defect Liability certificate/ completion certificate or before the expiry of one full monsoon period i.e. June to September whichever is later in point of time.

14.1 A programme shall be drawn by the contractor and the Engineer-in-Charge for carrying out the defects by the contractor detected within the defect liability period and if the contractor fails to adhere to this programme, the Engineer-in-Charge shall be at liberty to procure proper materials and carry out the rectifications in any manner considered advisable under the circumstances and the cost of such procurement of materials and rectification work shall be chargeable to the contractor and recoverable from any of the pending dues of the contractors.

The defect liability period can be extended by the company on getting request from the contractor only for valid reasons.

There will be no defect liability period for works like Grass Cutting, Jungle Cutting, Surface Dressing & any other work of similar nature to be decided by the Engineer-in-Charge.

15. Operating and Maintenance Manual:

If "as built" drawings and/or Operating and Maintenance Manual are required the contractor shall supply them by the dates as per instruction of the Engineer-in-charge.

If the contractor does not supply the drawings and/or Manual by the dates as stated above, or they do not receive the Nodal Officer or his nominee's approval, the Nodal Officer or his nominee shall withhold the amount as stated in the agreement.

16. Settlement of Disputes.

It is incumbent upon the contractor to avoid litigation and disputes during the course of execution.

However, if such disputes take place between the contractor and the department, effort shall be made first to settle the disputes at the company level.

The contractor should make request in writing to the Engineer-in-charge for settlement of such disputes/ claims within 30 (thirty) days of arising of the cause of dispute/ claim failing which no disputes/ claims of the contractor shall be entertained by the company.

Effort shall be made to resolve the dispute in two stages

In first stage dispute shall be referred to GM/HOD(E&M). If difference still persist the dispute shall be referred to a committee constituted by the owner. The committee shall have one member of the rank of Director of the company who shall be chairman of the committee.

If differences still persist, the settlement of the dispute shall be resolved in the following manner:

Disputes relating to the commercial contracts with Central Public Sector Enterprises / Govt. Departments (except Railways, Income Tax, Customs & excise duties)/ State Public Sector Enterprises shall be referred by either party for Arbitration to the PMA (Permanent Machinery of Arbitration) in the department of Public Enterprises.

In case of parties other than Govt. Agencies, the redressal of the dispute may be sought in the Court of Law.

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ADDITIONAL TERMS AND CONDITIONS (Not applicable for this tender)

The following additional terms and conditions are also acceptable to the company. The tenderers are requested not to quote any further additional conditions in the tender.

1. Mobilization Advance

- i) No mobilization advance is payable for works whose estimated value is less than Rs.100.00 lakhs.
- ii) In the case of turnkey work whose estimated value is more than Rs.100 lakhs a maximum of 10 % of the total contract value of work will be paid as mobilization advance subject to submission of Bank Guarantee equal to 110% of the advance amount. The mobilization advance shall be paid in two installments.
- iii) In case of other civil works valued more than Rs.100 lakhs mobilization advance will be paid upto 5% of the contract value subject to submission of Bank Guarantee equal to 110% of the advance amount. The mobilization advance shall be paid in two installments.
- iv) However, such mobilization advance will carry interest on the basis of CIL's borrowing rate under cash credit arrangement as varying from time to time.
- v) The mobilization advance shall be recovered from the bills of the contractor from the 2nd running account bill onwards @ 20% of the advance amount paid and full recovery would be ensured before or with the Final Bill.
- vi) The value of Bank Guarantee may be reduced to the extent such advance is recovered by the company subject to the conditions that the value of Bank Guarantee amount at any time is more than the recoverable outstanding advance. Bank Guarantee shall be irrevocable and from a Scheduled- Bank acceptable to the Company.

2. Application of Price Variation Clause.

If the prices of materials (not being the materials supplied at fixed issue rates by the company) and wages of labour required for execution of the work increase or decrease, the contractor shall be compensated for such increase or recoveries will be made from the bills for such decrease as per provisions detailed hereafter:

- a) The amount of the contract shall accordingly be varied subject to the condition that such compensation for escalation/ de-escalation in price shall be available only for the work done during the stipulated period of the contract including such period for which the contract is validly extended under the provisions of the contract without any penal action. The Price Variation Clause shall not be applicable for works of capital nature, for which stipulated period of completion is six months or less. For regular maintenance/Service contract, price variation shall not be applicable where stipulated period of completion is twelve months or less.
- b) The base date for working out such escalation/de-escalation shall be the last date on which the bids (inclusive of price part) or revised price bids (inclusive of revised offer) were stipulated to be received.
- c) The compensation for escalation or recoveries to be made shall be worked out at quarterly intervals and shall be with respect to the cost of work done during the previous three months. The first such payment will be made at the end of three months after the month (excluding) in which the tender was accepted and thereafter at three months' interval.
- d) Job specific modification in the formulae of price variation given in the following para(s) can be done with the approval of the CMD of the company

2.1 Escalation/ De-escalation for Labour: The amount paid to the contractor for the work done shall be adjusted for increase or decrease in the cost of labour and the cost shall be calculated quarterly in accordance with the following formula :

$$VL = W \times A/100 \times (L-Lo)/Lo$$

Where :

VL= Variation in labour cost i.e., increase or decrease in the amount in rupees to be paid or recovered.

W = Value of work done during the period under reckoning to which the escalation/de-escalation relates as indicated in clause-2.4 of the Additional Terms & Conditions of the contract.

A = Component of labour expressed as percentage of the total value of the work adopted from the Table-1.

Lo = Minimum wages for unskilled workers payable as per the Minimum Wages Act / Rules of the State or Central Govt., whichever is more, applicable to the place of work as on the last date stipulated for receipt of the bids (inclusive of price part) or revised price bids whichever is later.

L = Revised minimum wages of unskilled worker corresponding to Lo during the period to which the escalation/de-escalation relates.

2.2 Escalation /De-escalation on Materials: The amount to be paid to the contractor for the work done will be adjusted for increase or decrease in the cost of materials and the cost shall be calculated quarterly in accordance with the following formula :

$$V_m = W \times B/100 \times (M-M_o)/M_o$$

Where :

V_m= Variation in the material cost i.e. increase or decrease in the amount in rupees to be paid or recovered.

W = Cost of work done during the period under reckoning to which the escalation / de-escalation relates as indicated in clause-2.4 of the Additional Terms & Conditions of the contract.

B = Component of material expressed as percentage of the total value of the work adopted from the Table -1.

M = Average All India Wholesale Price Index for all commodities for the period to which escalation/de-escalation relates as published by the RBI Bulletin, Ministry of Industry & Commerce, Govt. of India.

M_o = All India Wholesale Price Index for all commodities as published by the RBI Bulletin, Ministry of Industry & Commerce, Govt. of India, relating to the last date on which the bids (inclusive of price part) or revised price bids whichever is later were stipulated to be received.

2.3 Escalation/ De-escalation on POL : The amount to be paid to the contractor for the work done shall be adjusted for the increase or decrease in the cost of POL and the cost shall be calculated quarterly in accordance with the formula given below :

$$V_f = W \times C/100 \times (F-F_o)/F_o$$

Where :

V_f = Variation in the cost of fuel, oil and lubricants increase or decrease in the rupees to be paid or recovered.

W = Value of work done during the period under reckoning to which the escalation/ de-escalation relates as indicated in clause 2.4 of the Additional terms & Conditions of the contract.

C =Component of POL expressed as percentage of the total cost of the work taken from Table -1.

F = Average Index Number for wholesale price for the group of 'Fuel, Power, Light & Lubricants' as published by the Economic Adviser, Ministry of Industry, Govt. of India for the period to which the escalation/de-escalation relates.

Fo = Index number of wholesale price for the group, Fuel, Power, light & lubricants as published by the Economic Adviser, Ministry of Industry, Govt. of India prevalent on the last date of receipt of bids (inclusive of Price Part) or revised price bids whichever is later.

2.4 While calculating the value of "W" the following may be noted : The cost on which the escalation will be payable shall be reckoned as 85 % of the cost of work as per the bills to which escalation relates, and from this amount the value of materials supplied or services rendered at the prescribed charges under the relevant provisions of the contract, and proposed to be recovered in the particular bill, shall be deducted before the amount of compensation for escalation or de-escalation is worked out. In the case of materials brought to site for which any secured advance is included in the bill, the full value of such materials as assessed by the Engineer-in-Charge (and not the reduced amount for which secured advance has been paid) shall be included in the cost of work done for operation of this clause. Similarly, when such materials are incorporated in the work and the secured advance is deducted from the bill, the full assessed value of the materials originally considered for operation of this clause should be deducted from the cost of the work shown in the bill, running or final. Further the cost of work shall not include any work for which payment is made at prevailing market rates.

2.5 In the event the price of materials and/ or wages of labour required for execution of the work decreases, there shall be downward adjustment of the cost of work so that such price of materials and/or wages of labour shall be deductible from the cost of work under this contract and in this regard the formulae herein before stated under this clause shall mutatis/mutandis apply. No such adjustment for the increase / decrease in material price and/ or wages of labour before mentioned would be made in case of contracts related to capital works, in which the stipulated period of completion of the work is six (6) months or less. However for Maintenance works any adjustment for the increase or decrease in material price or wages of labour would be made only when the stipulated period of completion of the work is twelve (12) months or less.

2.6 Application of Price Variation Clause during extended period of Contracts.

The Price Variation Clause as stated above will be applied for extended time frame of a contract by following the principle stated as under:

i) Normally, if and when it is understood that a contract is not going to be completed within the scheduled time period, the contract is kept operative by extending the time of completion provisionally. During this provisional extended period the operation of the Price Variation Clause will remain suspended.

ii) If and when it is decided at the end of the successful completion of the work that the delay was due to causes not attributable to the contractor, then the Price Variation Clause will be revived and applied as if the scheduled date of completion has been shifted to the approved extended date.

iii) If it is decided at the end of successful completion of the work that the delay was due to the fault of the contractor then the Price Variation Clause will not be revived and no further payment will be made to the contractor on this account. Additionally the Clause related to Compensation for delay will be applied.

No payment will be made by applying "FROZEN INDICES "under any circumstances.

Table – 1

Value of A, B & C in the escalation formula in the additional terms & conditions for Civil Works :

	Particulars	A% (Labour Component)	B% (Material Component)	C% (POL Component)	Remarks
	For building works	25	75	NIL	
	For Road works	15	80	05	
	For external sewerage, External water supply, and external electrification	10	90	NIL	

	For external water supply, external sanitary and external electrification (through labour rate contract)	75	25	NIL	
	For steel structural works	15	85	NIL	
	For steel structural works with Deptt. free supply of rolled steel Sections (through labour rate contract)	75	25	NIL	
	For Coal Handling Plant Civil Works	25	75	NIL	
	For under-ground civil works such as Incline Drivage, Shaft Sinking etc	35	65	NIL	
	For only labour oriented works of maintenance nature	100	NIL	NIL	

For all other works not listed above, the component of labour, material and POL of the total cost of work shall be as specifically indicated in the tender document.

TECHNICAL STANDARDS TO BE FOLLOWED

Technical Standards to be followed

Civil Engineering Works

Latest CPWD specification shall be adopted. Presently CPWD specifications 2009 Vol. I & II is in vogue which may be followed. These specifications cover all type of Building Works. The specifications are available as a printed document issued by CPWD and also in soft copy PDF format in CPD website.

Electrical Engineering Works

Latest CPWD specification shall be adopted. Presently the following are in vogue:

Part No.	Description Year Of Issue	Year Of Issue
I	Internal	2013
III	Lifts And Escalators	2003
V	Wet Riser And Sprinklers System	2006
VI	Heating, Ventilation And Air Conditioning Works	2005

*Roads And Bridges

Standard specifications issued by ministry of surface transport may be followed. Presently MORTH Specifications on roads and bridges 2013 is available. These specifications cover exhaustively various roads and bridge works. (Applicable for important and major roads.)

*Delete if not applicable

NOTE- The strike out lines are not applicable for this tender.

ADDITIONAL SAFETY MEASURES TO BE TAKEN BY THE CONTRACTORS

Safety Code

- i) Suitable scaffolds should be provided for workmen for all works that can not safely be done from the ground or from solid construction except such short period work as can be done safely from ladders. When a ladder is used, an extra mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well, suitable footholds, shall be provided on the ladder and the ladder shall be given a inclination not steeper 1/4 to 1 (1/4 horizontal and 1 vertical).
- ii) Scaffolding or staging more than 12' above the ground or floor swing or suspended from over head support or erected with stationary support shall have a guard fail properly attached, braced or otherwise secured at least 3' high above the floor or platform of such scaffolding or staging and ends thereof with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be fastened as to prevent if from swaying from the building or structure.
- iii) Working platform gangways and stairways should be so constructed that they should not sag and if the height of the platform of the Gangway or the Stairway is more than 12' above ground level or floor level they should be closely binded and should have adequate with and should be suitably fenced, as described as (ii) above.
- iv) Every opening in the floor of a building or in working platform be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be 3'0".
- v) Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be provided securely fixed. No portable single ladder shall be over 30' in length while the width between side rails in running ladder shall in no case be less than 11.5 for ladder upto and including 10' length. For longer ladder this width should be increased at least 1/4% for each additional foot of length. Uniform step spacing shall not exceed 12%. Adequate precautions shall be taken to prevent danger from electrical equipment. No material on any of the sites of works shall be taken to cause danger from electrical equipment. No materials on any of the sites of works shall be so soaked or placed as to cause danger or inconvenience to any person or the public. The contractor shall also provide all necessary fencing light to protect the public from accident and shall be bound to bear the expenses of defence of every suit; action or other proceedings at all they may be brought by any person for injury sustaining owing to neglect to the above precautions and to pay damage and cost which may be awarded in any such suit, action or proceedings to any such person or which may with the consent of the contractor be paid to compromise any claim by any such person.
- vi) **Excavation and Trenching :** All trenching four feet or more in depth, shall at all times be supplied with at least on ladder for each 100' in length or fraction there of ladder shall be extended from bottom of the trench to at least 3' above the surface or the ground. The side of the trenches which are 5' or more in depth shall be stopped back to give suitable slope, or securely held by timber bracing, so as to avoid the danger of slides collapse. The excavated materials shall not be placed within 5' or more in depth shall be stopped back to give suitable slope, or securely held by timber bracing, so as to avoid the danger of slides collapse. The excavated materials shall not be placed within 5' of the edge of the trench or half of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances undermining or undercutting shall be done.
- vii) **Demolition :**Before any demolition work is commenced and also during the process of the work:
 - a) All road and open areas adjacent to the work site shall either be closed or suitably protected.
 - b) No electric cable or apparatus which is liable to be a source of danger or a cable or apparatus used by the operator shall remain electrically charged.
 - c) All possible steps shall be taken to prevent danger to persons employed from risk of life from explosion, or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to tender it unsafe.
- viii) All necessary personal safety equipment as considered adequate by the Engineer-in-charge should be kept available for the use of the persons employer on the site and maintained in a condition suitable for immediate use and the contractor should take adequate steps to ensure proper use of equipment by those concerned.
 - a) Workers employed for mixing asphalt, materials, cement and lime mortars shall be provided with protective footwear and protective gloves.
 - b) Those engaged in white washing and mixing or stacking of cement bags or any materials which is injurious to the eyes shall be provided with protective goggles.
 - c) Those engaged in welding works shall be provided with welders glass.

- d) Stone breakers shall be provided with protective goggles and protective clothing, and seated at sufficiently safe intervals.
- e) When workers are employed in sewers and manholes, which are in use the contractor shall ensure that the manhole covers are opened and are ventilated at least for an hour before the workers asked to get into the manholes, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to the public.
- f) The contractors shall not employ men below the age 18 years and women on the work of painting with products containing lead in any form whenever man above the age of 18 are employed for the work of lead painting the following precautions should be taken:
 - ix) **Painting :**
 - a. No paints containing lead or lead products should be used except in the form of paste or ready made paint.
 - b. Suitable face masks should be supplied for use to the workers when paint is applied in the form of spray or a surface having lead paint dry rubbed and scrapped.
 - c. Overalls shall be supplied by the contractors to the workmen and adequate facilities shall be provided to enable the working painters to wash during the process of work.
- x) When the work is done near any place where there is a risk of drowning necessary equipment should provided and kept ready. Prompt rescue of any person in danger and adequate provision should be made for prompt first-aid treatment of all injuries like to be sustained during the course of the work.
- xi) Use of hoisting machines and tackles including their attachment, uncharge and supports shall conform to the following standard or conditions.
 - a) Those shall be of good mechanical construction, sound materials and adequate strength and free from Patent defect and shall be kept in good working order.
 - b) Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength and free from patent defects.
 - c) Every crane driver or hoisting appliance operator shall be properly qualified and no person under an age 21 years should be incharge of any hoisting machine including scaffold and one who gives signals to operator.
 - d) In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block used in hoisting or lowering or means of suspension, the safe working load shall be ascertained by adequate means. Every hoisting machine and all referred to above shall be plainly marked with safe working load. In case of a hoisting machine having a variable safe working load, each safe working load and the conditions under which it is applicable shall be clearly indicated beyond the safe working load except for the purpose of testing.
 - e) In case of departmental machines, the safe working load shall be modified by the Electrical Engineer. As regards contractors, machine, the contractor shall notify the safe working load of the machine to the Engineer Incharge whenever he brings any machinery to sit of work and get it verified by the Electrical Engineer concerned.
 - f) Gearing, Transmission, Electric wiring and other dangerous parts of housing appliance should be provided with efficient safeguard. Hoisting appliances should be provided with such means as shall reduce risk of a accidental descent of the load. Adequate precautions should be taken to reduce to the minimum risk or any part of suspended load becoming accidentally displaced.
 - g) When workers are employed on electrical installation which are already energised, insulating mats, wearing apron such as gloves, sleeves, and boots as may be necessary should be provided. The workers should not wear any rings, watches, and carry keys or other materials which are good conductors of electricity.
- xii) All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffolds, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities shall be provided at or near places of work.
- xiii) These safety provision shall be brought to the notice of all concerned by display on a Notice Board at a prominent place at the work spot. The persons responsible for compliance of the safety code shall be named there by the contractor.

- xiv) To insure effective enforcement of the rules and regulations relating to Safety Precautions, the arrangements made by the contractor shall be open to inspections by the Labour Officer, Engineer Incharge of the department or their representative.
- xv) Notwithstanding the above clause from (i) to (xiv) there is nothing in these to exempt the contractor from operation of any other Act or Rule in force in Republic of India.

COMPLIANCE OF LABOUR LAWS

1. Labour

- 1.1 The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, their payment, housing, feeding and transport.
The Contractor shall, if required by the Engineer, deliver to the Engineer a return in detail, in such form and at such intervals as the Engineer may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by contractor on the site and such information respecting contractor's equipment as the Engineer may require.
- 1.2 The work has to be carried out through regular employees as far as possible and the Wages thereof are to be made in their bank accounts

2. Compliance with Labour Regulations

- 2.1 During continuance of the contract, the contractor and his sub contractors shall abide at all times by all existing labour enactments and rules made thereunder, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law, including rules, regulations, bye laws that may be passed or notification that may be issued under any labour law in further either by the State or Central Government or the local authority. Salient features of some of the major labour laws that are applicable to construction industry are given below. The contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made thereunder, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications bye laws/acts/rules/regulations/including amendments, if any on the part of the contractor, the Engineer/Employer shall have the right to deduct any money due to the Contractor including his amount of performance security. The Employer/Engineer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer.

The employees of the contractor and the sub-contractor in no case shall be treated as the employees of the Employer at any point of time.

2.2 SALIENT FEATURES OF SOME MAJOR LABOUR LAWS APPLICABLE TO ESTABLISHMENT ENGAGED IN BUILDING AND OTHER CONSTRUCTION / CIVIL WORKS.

- a) **Workmen Compensation Act, 1923 :-** The act provides for compensation in case of injury by accident arising out of and during the course of employment.
- b) **Payment of Gratuity Act, 1972 :-** Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed 5 years service or more or on death the rate of 15 days' wages for every completed year of service. The Act is applicable to all establishments employing 10 or more employees.
- c) **Employees PF and Miscellaneous Provisions Act, 1952 :-** The Act provides for monthly contributions by the employer and workers @10% or 8.33% or as applicable. The benefits payable under the Act are :
- i. Pension or family pension on retirement or death as the case may be.
 - ii. Deposit linked Insurance on the death in harness of the worker.
 - iii. Payment of PF accumulated on retirement/death etc.
- d) **Maternity Benefit Act, 1951 :-** The Act provides for leave and some other benefits to women employees in case of confinement or miscarriage etc.
- e) **Contract Labour (Regulation & Abolition) Act, 1970 :-** The Act provides for certain welfare measures to be provided by the contractor to contract labour and in case the contractor fails to provide, the same are required to be provided by the Principal Employer by Law. The Principal Employer is required to take Certificate of Registration and the contractor is required to take license from the designated Officer. The Act is applicable to the establishments or contractor of Principal Employer if they employ 20 or more contract labour.
- f) **Minimum Wages Act, 1948 :-** The Employer is supposed to pay not less than the Minimum Wages fixed by appropriate Government as per provisions of the Act if the employment is a scheduled employment. Construction of Buildings, Roads, Runways are scheduled employment.

- g) **Payment of Wages Act, 1936** :- It lays as to by what date the wages are to be paid, when it will be paid and what deductions can be made from the wages of the workers.
- h) **Equal Remuneration Act, 1979** :- The Act provides for payment of equal wages for work of equal nature of Male and Female workers and for not making discrimination against Female employee in the matters of transfers, training and promotion etc.
- i) **Payment of Bonus Act, 1965** :- The Act is applicable to all establishments employing 20 or more workmen. The Act provides for payments of annual bonus subject to a minimum of 8.33% of wages and maximum of 20% of wages to employees drawing Rs. 3500/- per month or less. The bonus to be paid to the employee getting Rs. 2500/- per month to about upto Rs. 3500/- per month, shall be worked out by taking wages as Rs. 2500/- per month only. The Act does not apply to certain establishments. Some of the State Governments are exempted for five years in certain circumstances. Some of the State Governments have reduced the employment size from 20 to 10 for the purpose of applicability of the Act.
- j) **Industrial Disputes Act, 1947** :- The Act lays down the machinery and procedure for resolution of Industrial disputes, in what situations a strike or lock-out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.
- k) **Industrial Employment (Standing Orders) Act, 1946** :- It is applicable to all establishments employing 100 or more workmen (employment size reduced by some of the State and Central Government to 50). The Act provides for laying shown rules governing the conditions of employment by the Employer on matters provided in the Act and get the same certified by the designated Authority.
- l) **Trade Union Act, 1926** :- The Act lays down the procedure for registration of trade unions of workmen and employees. The Trade Unions registered under the Act have been given certain immunities from civil and criminal liabilities.
- m) **Child Labour (Prohibition & Regulation) Act, 1986** :- The Act prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulations of employment of children in all other occupations and processes. Employment of Child Labour is prohibited in Building Industry.
- n) **Inter-State Migrant Workmen's (Regulation of Employment & Conditions of Service) Act, 1997** :- The Act is applicable to an establishment which employs 5 or more inter-state migrant workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another state). The Inter-State migrant workmen, in an establishment to which this Act becomes applicable, are required to be provided, certain facilities such as Housing, Medical-Aid, Travelling expenses from home upto the establishment and back etc.
- o) **The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 and the Cess Act of 1996** :- All the establishments who carry on any building or other construction work and employs 10 or more workers are covered under this Act. All such establishments are required to pay cess at the rate not exceeding 2% of the cost of construction as may be modified by the Government. The employer of the establishment is required to provide safety measures at the Building or construction work and other welfare measures, such as canteens, First-Aid facilities, Ambulance, Housing accommodation for workers near the work place etc. The Employer to whom the Act applies has to obtain a registration certificate from the Registering Officer appointed by the Government.
- p) **Factories Act, 1948** :- The Act lays down the procedure for approval at plans before setting up a factory, health and safety provisions, welfare provisions, working houses, annual earned leave and rendering information regarding accidents or dangerous occurrences to designated authorities. It is applicable to premises employing 10 persons or more with aid of power or 20 or more persons without the aid of power engaged in manufacturing process.

SAMPLE REGISTER

1. Name of Work : _____

2. Contract Agreement No. : _____

Sl.No.	Brief Particular of Sample Material Applicable	make / Source	Reference of BIS Code if applicable	Requirement of relevant IS in brief where applicable	Details of test carried out indicating source	Date of presentation of sample to client Engineer	Date of approval of sample by client engineer	Rejection if any, with reasons	Sign of client Engineer
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)

SITE ORDER BOOK

1. Name of Work : _____

2. Contract Agreement No. : _____

Sl. No	Date	Brief Particular of Instruction / order of Client Engineer	Action taken by Contractor	Date of Compliance of Instruction of Engineer	Verification of Compliance by Client	Remarks
(1)		(2)	(3)	(4)	(5)	(7)

HINDERANCE REGISTER

1. Name of Work : _____

2. Contract Agreement No. : _____

3. Date of Commencement : _____

4. Stipulated Date of Completion : _____

5. Extended Date of Completion, if applicable : _____

Sl. No	Nature of Hinderance	Activity of Work affected	Effect of Hinderance on employment of labour and T&P etc	Date of notification of hinderance by contractor	Signature of contractor's representative	Date of removal of hinderance	Sign of client Engineer	Period of Hinderance
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

FORMATS

ANNEXURE - I

AFFIDAVIT

(NON JUDICIAL STAMP PAPER OF ` 10/-)

PROFORMA FOR UNDERTAKING TO BE SUBMITTED BY BIDDER/S (ON BIDDER'S LETTER HEAD) FOR GENUINENESS OF THE INFORMATION FURNISHED IN SUPPORT OF HIS ELIGIBILITY :

FORMAT OF UNDERTAKING

I / We,, Proprietor/Partner/Legal Attorney/Director/
Accredited Representative of M/S., solemnly declare that:

1. I/We am/are submitting Bid for the work.....against NIT No/Tender ID..... Dated..... and I/we offer to execute the work in accordance with all the terms, conditions and provisions of the bid.
2. Myself/Our Partners/Directors don't has/have any relative as employee of..... (Name of the Company).
3. All information furnished by us in respect of fulfillment of eligibility criteria and qualification information of this Bid is complete, correct and true.
4. All copy of documents, credentials and documents submitted along with this Bid are genuine, authentic, true and valid.
5. I/ We hereby authorize department to seek references / clarifications from our Bankers.
6. *I/We have submitted particulars of existing Sales Tax / VAT registration, if applicable. We also undertake that Certificate of Registration with appropriate Sales Tax / VAT Authority where the work will be executed shall be arranged before any payment is made to us.
7. We hereby undertake that we shall register and obtain license from the competent authority under the contract labour (Regulation & Abolition Act) as relevant, if applicable.
8. *I/We hereby confirm that we have registration with CMPF / EPF Authorities. We shall make necessary payments as required under law.

Or

*I/We hereby undertake that we shall take appropriate steps for registration as relevant under CMPF / EPF authorities, if applicable. We shall make necessary payments as required under law.

9. *I/We have not been banned or delisted by any Govt., or Quasi Govt. Agencies or PSUs(In case of JV, all partners are covered).

Or

*I / Wehave been banned by the organization named “.....” for a period of..... year/s, effective from to.....(in case of JV, name(s) of the JV Partner(s)).

10. If any information and document submitted is found to be false/ incorrect at any time, department may cancel my/our Bid and action as deemed fit may be taken against me/us, including termination of the contract, forfeiture of all dues including Earnest Money and banning/ delisting of our firm and all partners of the firm etc.

Signature of the Tenderer

Dated-----

Seal of Notary

ANNEXURE - II

MANDATE FORM FOR ELECTRONIC FUND TRANSFER / INTERNET BANKING PAYMENT

To

RI-III, Central Mine Planning & Design Institute Limited,
CMPDI Campus, Gondwana Place, Kanke Road, Ranchi - 834031.

Sub. : Authorization for release of payment due from **RI-III, Central Mine Planning & Design Institute Limited, CMPDI Campus, Gondwana Place, Kanke Road, Ranchi – 834031** through Electronic Fund transfer / Internet Banking.
(SBI-NET)

Ref. : Order No. _____ Date _____ and / or Tender / Enquiry / Letter
No. _____ Date _____

(Please fill in the information in CAPITAL LETTERS, Please TICK wherever it is applicable).

1. Name of the Party : _____

2. Address of the Party : _____

City _____ PIN Code _____

E- Mail Id _____

Permanent Account Number _____

3. Particulars of Bank

Bank Name		Branch Name	
Branch Place		Branch City	
Code		Branch Code	
MICR No.			
(9 Digits code number appearing on the MICR Band of the cheque supplied by the Bank. Please attach Xerox copy of a cheque of your bank for ensuring accuracy of the bank name, branch name and code number)			
RTGS CODE			
Account Type	Savings	Current	Cash Credit
Account Number (as appearing in the Cheque Book)			

4. Date from which the mandate should be effective.

I hereby declare that the particulars given above are correct and complete. If any transaction is delayed or not effected for reasons of incomplete or incorrect information. I shall not hold Central Mine Planning & Design Institute Limited responsible. I also undertake to advise any change in the particulars of my account to facilitate updating of records for purpose of credit of amount through SBI Net.

Place:

Date:

Signature of the party / Authorized Signatory.

Certified that the particulars furnished above are correct as per our records.

Banker's Stamp :

Date :

(Signature of the Authorized official from the Banks)

PROFORMA FOR EXECUTION OF AGREEMENT

AGREEMENT NO. _____ DT. _____

This Agreement is made on this _____ day of _____ 20..... between the Regional Institute – III, Central Mine Planning and Design Institute Limited, a Company Registered under the Indian Companies Act, 1956 having its Registered Office at Gondwana Place, Kanke Road, Ranchi (hereinafter called the Company which expression shall, unless repugnant to the subject or context, include its successors and assignees) of the one part and (Name of the contractor) carrying on business as a (Partnership / proprietorship / Ltd. Co. etc.) firm under the name and style _____ (hereinafter called the "said Contractor" which expression shall, unless the context requires otherwise include them and their respective heirs, executors, administrators and legal representatives) of the other part.

And whereas the Company invited tender for the work _____ against Tender Notice No. _____.

And whereas the said contractor / firm submitted tender for the said work and deposited a sum of Rs. _____ as Earnest Money and whereas the tender of the said contract has been accepted by the company for execution of the said works.

NOW THIS AGREEMENT WITNESS AND IT IS HEREBY AGREED AS FOLLOWS :-

- 1) In this agreement words and expressions shall have the same meaning as are respectively assigned to them in the tender papers hereinafter referred to.
- 2) The following documents which are annexure to this agreement should be deemed to form and be read and construed as part of this agreement viz.
 - i) Annexure-A Tender Notice (Page to)
 - Schedule-A General terms & conditions. Special conditions and General technical specifications (page to)
 - iii) Schedule-B The probable Quantities and Amount (Page to)
 - iv) Schedule-C Negotiation letters –
 - iv) Schedule-D Letter of Acceptance / Work Order (Page to)
- 3) In consideration for the payment of the sum of Rs. (W/O value; both in words and figures) or such other sum as may be arrived at under the clause of the specification relating to Payment by item's measurements at unit prices by the Company, the said Contractor shall, subject to the terms & conditions contained herein execute and complete the work as described and to the extent of probable quantities as indicated in Schedule B with such variations by way of alteration, addition to or reduction from the said works.
- 4) The company has converted a sum of Rs.....only, from the amount of Rs.....deposited by the said contractor as Earnest Money, into "Initial Security Deposit" of 1% of the awarded work value. The excess / balance amount of earnest money shall be adjusted in the RA Bills(s).
- 5) The said contractor hereby covenants with the company that the Company shall retain a sum of Rs.....or such sum as may be arrived at based on the executed value of the work, as security deposit for the fulfillment of the contract to the satisfaction of the Company.

IN WITNESS WHEREOF THE parties herein have set their hands and seals the date and year above written :

1. Partner Signature

2. Partner Signature

On behalf of M/s.....
The Contractor, as one of the constituted attorney,

In the presence of –

1. Name : Signature

Address :

Occupation :

Signed by Sri on behalf of
(name of Company) in presence of : Signature

1. Name : Signature

2. Address :

**BANK GUARANTEE PROFORMA FOR
EARNEST MONEY DEPOSIT/BID SECURITY**
(TO BE STAMPED IN ACCORDANCE WITH STAMP ACT)

(TO BE ISSUED BY ANY NATIONALISED/ SCHEDULED BANK
AUTHORISED BY RBI TO ISSUE A BANK GUARANTEE)

To :

**RI-III, Central Mine Planning & Design Institute Limited,
CMPDI Campus, Gondwana Place, Kanke Road, Ranchi – 834031**

WHEREAS _____ [name and address of Bidder] (hereinafter called "the Bidder") shall be submitting its Bid dated _____ [date of the Bid] for the work. _____ [name of the work] (hereinafter called "the Bid").

KNOW ALL MEN by these present that we, _____ [name of the bank] of _____ [name of the country] _____ having our registered office at [address of the bank] (hereinafter called "the bank"), are bound unto the **RI-III, Central Mine Planning & Design Institute Limited, CMPDI Campus, Gondwana Place, Kanke Road, Ranchi - 834031** (hereinafter called "the Employer") for the sum of [amount of the Guarantee in words and figures] for which payment well and truly to be made to the said Employer the Bank binds itself, his successors and assigns by these presents.

SEALED with the Common Seal of the said bank this _____ day of _____ 20__.

THE CONDITION of this obligation are :

1. If the Bidder withdraws its Bid during the period of Bid Validity specified by the Employer on the bid form ; or
2. If the Bidder withdraws having been notified of the acceptance of its bid by the Employer during the period of Bid Validity :
 - (a) Fails or refuses to execute the Contract Agreement when required ; or
 - (b) Fails or refuses to furnish the Performance Security (if any) in accordance with the Bid conditions.

We, _____ [name of the bank] undertake to pay to the Employer up to the above amount upon receipt of its first written demand, without the Employer having to substantiate its demand, provided that in its demand the Employer will note that the amount claimed by it is due to it owing the occurrence of 1 or both of the 2 (a) or (b) specifying the occurred condition or conditions.

This guarantee will remain in full force up to and including the date _____ and any demand in respect thereof should reach the Bank not later than the date of expiry of this guarantee.

For and on behalf of the Bank

Signature _____
Name _____
Designation _____
Common Seal of Bank _____

ANNEXURE - V

BANK GUARANTEE PROFORMA FOR PERFORMANCE SECURITY / GUARANTEE

(TO BE STAMPED IN ACCORDANCE WITH STAMP ACT)

(TO BE ISSUED BY ANY NATIONALISED/ SCHEDULED BANK)

AUTHORISED BY RBI TO ISSUE A BANK GUARANTEE)

To

RI-III, Central Mine Planning & Design Institute Limited,

CMPDI Campus, Gondwana Place, Kanke Road, Ranchi – 834031

In consideration of **RI-III, Central Mine Planning & Design Institute Limited,**

CMPDI Campus, Gondwana Place, Kanke Road, Ranchi - 834031 (hereinafter called to as the “Employer” which expression shall unless repugnant to the context or meaning thereof, include all successors, administrators and assigns) having awarded to _____ [Name & Address of the Contractor] (hereinafter called to as “Contractor” which expression shall unless repugnant to the context of meaning thereof include its successors, administrators, executors and assigns) the work _____ [Name of the Work] by issue of Letter of Award No. _____ [Work Order / Letter of Intent No.] and the same having been unequivocally accepted by the Contractor resulting into a Contract Agreement dated _____ valued at _____ [value of Work Order] (hereinafter called ‘the Contract’) and the Employer having agreed to accept Performance Bank Guarantee of ____ [indicate figure]% of the Contract Sum _____ [amount in figures and words] from a Nationalized / Scheduled Bank for due performance of the work executed by the Contractor as per the terms & conditions contained in the said Contract.

We, _____ [name of the Bank], of _____ [address of the Bank] (hereinafter called to as “Bank” which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) do hereby guarantee and undertake to pay the Employer immediately on demand and or, all money payable by the Contractor to the extent of _____ [amount of guarantee in figures and words], at any time from _____ to _____ without any demur, reservation, recourse, contest or protest and/or without any reference to the Contractor. Any such demand made by the Employer on the Bank shall be conclusive and binding notwithstanding any difference between the Employer and the Contractor or any dispute pending before any Court, Tribunal, Arbitrator or any other authority. We agree that the Guarantee herein contained shall be irrecoverable and shall continue to be enforceable as per the terms & conditions contained in the said Contract.

The Employer shall have the fullest liberty without affecting in any way the liability of the Bank under this Guarantee, from time to time, to extend the validity of time of Performance of the Contract by the Contractor. The Employer shall have the fullest liberty without affecting this Guarantee, to postpone, from time to time, the exercise of any powers vested in them or of any right which they might have against the Contractor, and to exercise the same at any time in any manner, and either to enforce or to forebear or to enforce any covenants contained or implied in the Contract, between the Employer and the Contractor or any other course or remedy or security available to the Employer. The Bank shall not be released of its obligations under these presents by any exercise by the Employer of its liberty with reference to matter aforesaid or any of them or by reason of any other act of forbearance or other acts of omission or commission on the part of the Employer or any other indulgence shown by the Employer or by any other matter or thing whatsoever which under law would, but for this provision, have the effect of relieving the Bank. The Bank also agrees that the Employer at its option shall be entitled to enforce this Guarantee against the Bank as a Principal Debtor in first instance, without proceeding against the Contractor and notwithstanding any security or other Guarantee that the Employer may have in relation to the Contractor’s liabilities.

Dated this _____ day of _____ at _____

For and on behalf of the Bank

Signature _____

Name _____

Designation _____

Common Seal of Bank _____

SCOPE OF WORK & TECHNICAL SPECIFICATION

A. SCOPE OF WORK

The scope of work covers supply, installation and testing of solar based LED street light at different drilling camps of CMPDI. It covers

- Supply of solar based minimum 28W LED Street light with 5.6 meter(above ground) pole, PV module, battery and all other necessary accessories required for the successful commissioning of the system.
- All the civil work with materials required for installation of street light including excavation, RCC work for making pedestal.
- All the mechanical work with materials required for installation and successful commissioning of street light.
- All the electrical work with materials required for installation and successful commissioning of street light including wiring earthing etc.
- Testing and measuring the lumen of street light after successful completion of work.
- Meeting all the statutory requirement for the work.
- Distance between two poles shall be approximately 20 meter for pole height of 5.6 m (above ground). Distance between two poles may be changed as per site condition.
- As the drilling camps may be geographically at remote location, it shall be the responsibility of the bidder to visit the site or know the conditions of the camp, material transport route or any other relevant information regarding sites.
- The works contract taxes or other taxes that varies from state to state shall be paid on actual basis on producing documentary evidence. The bidder should quote the taxes in detail with tax structure for different states. (If applicable)
- Any other items, which are not specifically included in the scope of works but are essential for the successful operation of the system shall be provided by the bidder.
- Location and address of site where solar based LED street light shall be Installed.

Village: Khuti Tola Village of Dhadhu Panchayat of Tandwa

Distt: Chatra

State: Jharkhand

B. TECHNICAL SPECIFICATIONS

LED BASED SOLAR STREET LIGHTING SYSTEM

A stand-alone solar photovoltaic street lighting system (SLS) is an outdoor lighting unit used for illuminating a street or an open area. The Solar Street Lighting System consists of solar photovoltaic (SPV) module, a luminaire, storage battery, control electronics, inter-connecting wires/cables, module mounting pole including hardware and battery box. The luminaire is based on Light Emitting Diode (LED), a solid state device which emits light when electric current passes through it. The luminaire is mounted on the pole at a suitable angle to maximize illumination on the ground. The PV module is placed at the top of the pole at an angle facing south so that it receives solar radiation throughout the day, without any shadow falling on it. A battery is placed in a box attached to the pole.

Electricity generated by the PV module charges the battery during the day time which powers the luminaire from dusk to dawn. The system lights at dusk and switches off at dawn automatically.

PERFORMANCE SPECIFICATIONS

PV Module	Minimum 120 Wp under STC
Battery	Lead acid Tubular Flooded or Tubular GEL / VRLA 12 V battery will have a suitable capacity to meet the 3 days autonomy or 42 working hours for complete battery life
Light Source	Light Emitting Diode (W-LED)
Wattages of LED Light	Minimum 28 Watt
Watt of each LED	1 to 1.2W
Protection Index	IP 65
Lumen	Minimum 2300
Mounting of light	Minimum 5.6 meter (above ground) pole mounted
Pole material	GI
Electronics Efficiency	Minimum 85% total
Duty Cycle	Dusk to dawn
Autonomy	3 days or Minimum 42 operating hours per permissible discharge

TECHNICAL DETAILS

PV MODULE

- (i) Indigenously manufactured PV module should be used.
- (ii) The PV module should have crystalline silicon solar cells and must have a certificate of testing conforming to IEC 61215 Edition II / BIS 14286 from an NABL or IECQ accredited Laboratory.
- (iii) The power output of the module(s) under STC should be a minimum of 120 Wp

- (iv) **The module efficiency should not be less than 12 %.**
- (v) The terminal box on the module should have a provision for opening it for replacing the cable, if required.
- (vi) There should be a Name Plate fixed inside the module, visible from the front side, which will give:
 - a. Name of the Manufacturer or Distinctive Logo.
 - b. Model Number
 - c. Serial Number
 - d. Year of manufacture
 - e. Technical specifications
- (vii) **A distinctive serial number starting with NSM will be engraved on the frame of the module or screen printed on the tedlar sheet of the module.**

*The load voltage and Voc conditions of the PV modules are not applicable for the system having MPPT based charge controller

BATTERY

- i. Lead Acid, tubular positive plate flooded electrolyte or Gel / VRLA Type.
- ii. The 12 V battery will have a suitable capacity to meet the 3 days autonomy or 42 working hours for complete battery life.
- iii. 75 % of the rated capacity of the battery should be between fully charged and load cut off conditions.
- iv. Battery should conform to the latest BIS/ International standards.
- v. Capacity of the batteries to be used shall not be less than 100AH.
- vi. Batteries should be of reputed make having all India network (At least having branches in 15 states of India). Like Exide, Amaron etc.

BATTERY CHARGE CONTROLLER

- i. This units should be designed for charge regulation of storage battery and safe guard the battery against over charge and deep discharging.
- ii. A reverse blocking diode should be provided to prevent discharge of battery during rainy season and night.
- iii. The charge controller should reconnect the load when battery gets fully charged. The difference in these two voltage set point should be neither too small nor too large to avoid relay chattering.

LIGHT SOURCE

- i. The light source will be LED of colour suitable for street light.
- ii. The colour temperature of LED used in the system should be in the range of 5500 degree K–6500 degree K.
- iii. LEDs should not emit ultraviolet light.
- iv. The light output from the LED light source should not be less than the specified output.
- v. The lamps should be housed in a luminaire suitable for outdoor use with IP 65 protection index.
- vi. The luminaires with LED lamps shall be of reputed make having all India network (At least having branches in 15 states in India). Like Philips, Bajaj, Crompton Greaves, Havells etc.

ELECTRONICS

- i. The total electronic efficiency should be at least 85%.
- ii. Electronics should operate at 12 V and should have temperature compensation for proper charging of the battery throughout the year.
- iii. No Load current consumption should be less than 20 mA.
- iv. The PV module itself should be used to sense the ambient light level for switching ON and OFF the lamp.
- v. The PCB containing the electronics should be capable of solder free installation and replacement.
- vi. Necessary lengths of wires/cables, switches suitable for DC use and fuses should be provided.
- vii. The electric cable used shall be minimum 32/.20 (1 mm²) twin core circular FRPVC sheathed flexible copper cables.

ELECTRONIC PROTECTIONS

- i. Adequate protection is to be incorporated under “No Load” conditions e.g. when the lamp is removed and the system is switched ON.
- ii. The system should have protection against battery overcharge and deep discharge conditions.
- iii. Fuse should be provided to protect against short circuit conditions.
- iv. Protection for reverse flow of current through the PV module(s) should be provided.
- v. Electronics should have temperature compensation for proper charging of the battery throughout the year.
- vi. Adequate protection should be provided against battery reverse polarity.

MECHANICAL COMPONENTS

- i. A corrosion resistant metallic frame structure should be fixed on the pole to hold the SPV module.
- ii. The frame structure should have provision to adjust its angle of inclination to the horizontal between 0 and 45, so that the module can be oriented at the specified tilt angle.
- iii. The pole should be made of minimum 3 mm thick sheet of Galvanised Iron (GI) and pole should be of minimum 65 mm Nominal Bore. **The strength of the pole should be adequate enough to withstand the air thrust in the area.**
- iv. The height of the pole should be 5.6 metres above the ground level, after fixing and final installation.
- v. The pole should have the provision to hold the luminaire and the Base Plate to fix the pole on RCC pedestal provided with foundation bolts.
- vi. The lamp housing should be water proof (IP 65) and should be painted with a corrosion resistant paint.
- vii. A vented, acid proof and corrosion resistant metallic box with a locking arrangement for outdoor use should be provided for housing the battery. The battery box should be made of suitable polymer or 20 SWG, MS sheet. The box shall be properly painted after chemical cleaning and primer coating.

INDICATORS

The system should have two indicators, green and red.

The green indicator should indicate the charging under progress and should glow only when the charging is taking place. It should stop glowing when the battery is fully charged.

Red indicator should indicate the battery “Load Cut Off” condition.

QUALITY AND WARRANTY

- i. **The street lighting system (including the battery) will be warranted for a period of five years from the date of supply.**
- ii. **The PV module(s) will be warranted for a minimum period of 25 years from the date of supply.** The PV modules must be warranted for their output peak watt capacity, which should not be less than 90% at the end of Ten (10) years and 80% at the end of Twenty five (25) years.
- iii. The Warranty Card to be supplied with the system must contain the details of the system.
- iv. For a period of first 5 years, there shall be regular half yearly checking up and replacement of any component or sub-component of the system for proper operation of the system.
- v. The scope of works also includes repairing / replacement of parts, free of cost within a period of first 5 years, to make the system functional whenever a complaint is lodged by user. The contractor shall attend the same within 7 working days.
- vi. If the contractor fails to repair / replace the defective parts, free of cost within 7 working days then the same will be done through any other outside agency without any further intimation to the contractor and the cost for the same shall be recovered from the contractor.
- vii. All the components / materials to be used in the system shall be of best of its kind and ISI mark wherever applicable.

OPERATION AND MAINTENANCE MANUAL

An Operation, Instruction and Maintenance Manual, in English and the local language, should be provided with the Solar Street Lighting System. The following minimum details must be provided in the Manual:

- Basic principles of Photovoltaics.
- A small write-up (with a block diagram) on Solar Street Lighting System - its components, PV module, battery, electronics and luminaire and expected performance.
- Type, Model number, Voltage & capacity of the battery, used in the system.
- About Charging and Significance of indicators.
- Clear instructions about erection of pole and mounting of PV module (s) and lamp housing assembly on the pole.
- Clear instructions on regular maintenance and trouble shooting of the Solar Street Lighting System.
- DO's and DONT's.
- Name and address of the contact person for repair and maintenance, in case of non-functionality of the solar street lighting

Specification for pedestal:

Making RCC M-20 pedestal of minimum size 450mmx450mmx1000mm for fixing GI pole with all materials including excavation. Minimum 900mm RCC work shall be below ground. RCC pedestal should be provided with reinforcement along with stirrups as per design requirement. Necessary anchor bolts shall also be grouted in the pedestal for fixing the baseplate of the pole. The foundation should be adequate enough to withstand the wind pressure in the area.

Adequate space should be provided behind PV module/array for allowing unobstructed air flow for passive cooling.

SPECIAL TERMS AND CONDITIONS FOR THIS WORK

1. No part payment shall be made. Payment shall be made after completion of work.
2. The Defect Liability period in this case shall be one year after successful completion of the work.
3.
 - a) Contractor shall submit an additional performance bank guarantee of 10 % of the work value for a period of four years starting immediately after defect Liability period.
 - b) Performance security shall be refunded to the contractor after defect Liability period only after receiving said addition performance bank guarantee.
 - c) Additional performance bank guarantee will be refunded to the contractor after completion of warrantee period (first 5 years of operation) and within 14 days of issue of certificate of successful completion of warranty period.
 - a) Employer shall issue a compliance certificate after successful completion of 5 years of warranty period.
4. In case any complaint during first five year of operation, if the contractor fails to repair / replace the defective parts, free of cost within 4 working days, then the same will be done through any other outside agency without any further intimation to the contractor and the cost for the same shall be recovered from the contractor.

TENDER DOCUMENT

1	Name of work	:	Supply, installation, commissioning and testing of stand-alone type solar based minimum 28W LED street light for " Khuti Tola Village of Dhadhu Panchayat of Tandwa, District Chatra " consisting of all civil, structural, electrical and mechanical works and all other accessories and facilities required to make it complete in all respects, 04 Nos under CSR 2016-17
2	Tender Notice No. & Date	:	CMPDI/RI-III/E&M/Tender/28W LED street light / CSR 2016-17/529 Dt. 19.01.2017
3	Earnest Money Deposit	:	Rs132780/- (Rupees One Lakh Thirty Two Thousand Seven Hundred Eighty) pus Service tax as applicable
4	Completion period of work	:	60 (sixty) days.
5	Date & time of download of tender document	:	20 .01.2017 to 30.01.2017
5	Date & time of submission of tender	:	20.01.2017 from 10-00 AM and upto 3.00 PM on 31.01.2017
6	Date & time of opening of tender	:	At 3.30 PM on 31.01.2017
7	Tender Document issued to	:	_____ _____ _____ _____

Signature of Issuing Officer

Certified that this documents contains from page 1 to 2

PART : II (PRICE BID)



E&M DEPARTMENT
REGIONAL INSTITUTE-III
CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED
(A subsidiary of Coal India Limited)
Gondwana Place, Kanke Road, Ranchi : 834 008

FORMAT FOR PRICE BID

For supply, installation, commissioning and testing of stand-alone type solar based minimum 28W LED street light for " Khuti Tola Village of Dhadhu Panchayat of Tandwa, Chatra " consisting of all civil, structural, electrical and mechanical works and all other accessories and facilities required to make it complete in all respects, 04 Nos under CSR 2016-17.

Sl. No.	Item Description	Unit	Unit Price	Quantity	Amount in Rs.
1.00	Supply of minimum 28 W stand-alone type solar based LED street light complete with 5.6m (above ground) GI pole, PV module, Battery and other accessories required as per A. Scope of work & B. Technical specification enclosed. (price including all taxes).	Nos.		04	
2.00	Installation, testing and commissioning of minimum 28 W stand-alone type solar based LED street light including making of RCC pedestal as per specification of the tender document, fixing of pole on the pedestal, mounting of light fittings, PV module, Battery and other accessories, making electrical connections including supply of all other required materials for making the work complete in all respect as per A. Scope of work & B. Technical specification enclosed. (Price excluding Service Tax but inclusive of any other tax applicable)	Nos.		04	
3.00	Total Impact Of Service Tax				
	SUB TOTAL (1.00+2.00)				
	TOTAL (1.00 + 2.00+3.00)				